# FAPRI 1999 U.S. AGRICULTURAL OUTLOOK

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### **Contents**

Figures	iv
Tables	v
Abbreviations and Acronyms	viii
Overview of the 1999 U.S. Outlook	1
Baseline Assumptions and Price Projections	5
Macroeconomic Assumptions	10
U.S. and World Policy Assumptions	12
World Trade	19
World Wheat Trade	22
World Coarse Grain Trade	24
World Soybean and Soybean Products Trade	29
World Rapeseed and Rapeseed Products Trade	34
World Sunflower Seed and Products Trade	37
World Palm Oil Complex Trade	40
World Peanuts Trade	42
World Rice Trade	44
World Cotton Trade	46
World Sugar Trade	48
World Beef and Veal Trade	50
World Pork Trade	52
World Poultry Trade	54
World Dairy Products Trade	56
U.S. Crops	59
U.S. Wheat	64
U.S. Corn	66
U.S. Sorghum	68
U.S. Barley	
U.S. Oats	72
U.S. Peanuts	
U.S. Soybeans and Soybean Products	
U.S. Rice	
U.S. Upland Cotton	
U.S. Sugar and High-Fructose Corn Syrup	

U.S. Livestock and Dairy	. 91
U.S. Beef	. 98
U.S. Pork	100
U.S. Poultry	102
U.S. Dairy	106
State-Level Dairy Supply	
U.S. Dairy Products	112
U.S. Aggregate Measures	
U.S. Land Use	122
U.S. Agricultural Exports	
U.S. Consumer Price Indexes for Food	136
U.S. Consumer Food Expenditures	138
U.S. Government Costs	140
U.S. Cash Receipts from Farm Marketings	142
U.S. Farm Production Expenses	144
U.S. Net Farm Income	146
Crop Insurance	148
Figures	
Real GDP Growth Rates	6
Measures of U.S. Inflation	
U.S. Prime Interest Rate	
Crude Oil, Average Refiner's Acquisition Costs	
Conservation Reserve Program	
AMTA Payments, Includes 1998 Spending Package	
U.S. Crop Loan Rates	
CCC Purchase Prices for Dairy Products	
CCC Fulchase Frices for Daily Froducts	9
World Crop Area	20
World Grain Stock-to-Use Ratio Versus Price	
World Meat Production	
World Dairy Product Output	
World Burly 110ddet Output	. 21
U.S. Crop Planted Area	. 60
U.S. Wheat Domestic Use	
U.S. Corn: Food and Industrial Use	
U.S. Soybean Utilization	
·	
U.S. Crop Exports	. 61
U.S. Crop Exports U.S. Crop Prices	. 61 . 62
1 1	. 61 . 62 . 62
U.S. Crop Prices	. 61 . 62 . 62 . 63

11 S. Cottle and Colver	02
U.S. Cattle and Calves	
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	97
U.S. Land Use	18
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 1	
Crop Insurance Outlays, Fiscal Year	
Crop hisurance Outrays, Piscar rear	41
Tables	
	11
Domestic and International Economic Projections	
Domestic and International Economic Projections	13
Domestic and International Economic Projections	13 14
Domestic and International Economic Projections  U.S. Program Provisions  Agricultural Policy Assumptions for Crops  Agricultural Policy Assumptions for Livestock	13 14 15
Domestic and International Economic Projections  U.S. Program Provisions  Agricultural Policy Assumptions for Crops  Agricultural Policy Assumptions for Livestock  Policy Prices and World Prices by Commodity	13 14 15 16
Domestic and International Economic Projections	13 14 15 16
Domestic and International Economic Projections  U.S. Program Provisions  Agricultural Policy Assumptions for Crops  Agricultural Policy Assumptions for Livestock  Policy Prices and World Prices by Commodity  Wheat Trade  Corn Trade	13 14 15 16 23 26
Domestic and International Economic Projections	13 14 15 16 23 26
Domestic and International Economic Projections  U.S. Program Provisions  Agricultural Policy Assumptions for Crops  Agricultural Policy Assumptions for Livestock  Policy Prices and World Prices by Commodity  Wheat Trade  Corn Trade	13 14 15 16 23 26 27
Domestic and International Economic Projections  U.S. Program Provisions  Agricultural Policy Assumptions for Crops  Agricultural Policy Assumptions for Livestock  Policy Prices and World Prices by Commodity  Wheat Trade  Corn Trade  Barley Trade	13 14 15 16 23 26 27 28
Domestic and International Economic Projections  U.S. Program Provisions  Agricultural Policy Assumptions for Crops  Agricultural Policy Assumptions for Livestock  Policy Prices and World Prices by Commodity  Wheat Trade  Corn Trade  Barley Trade  Sorghum Trade	13 14 15 16 23 26 27 28 31
Domestic and International Economic Projections U.S. Program Provisions Agricultural Policy Assumptions for Crops Agricultural Policy Assumptions for Livestock Policy Prices and World Prices by Commodity  Wheat Trade Corn Trade Barley Trade Sorghum Trade Soybean Trade	13 14 15 16 23 26 27 28 31 32
Domestic and International Economic Projections U.S. Program Provisions Agricultural Policy Assumptions for Crops Agricultural Policy Assumptions for Livestock Policy Prices and World Prices by Commodity  Wheat Trade Corn Trade Barley Trade Sorghum Trade Soybean Trade Soybean Meal Trade Soybean Oil Trade	13 14 15 16 23 26 27 28 31 32 33
Domestic and International Economic Projections U.S. Program Provisions Agricultural Policy Assumptions for Crops Agricultural Policy Assumptions for Livestock Policy Prices and World Prices by Commodity  Wheat Trade Corn Trade Barley Trade Sorghum Trade Soybean Trade Soybean Meal Trade	13 14 15 16 23 26 27 28 31 32 33 35
Domestic and International Economic Projections U.S. Program Provisions Agricultural Policy Assumptions for Crops Agricultural Policy Assumptions for Livestock Policy Prices and World Prices by Commodity  Wheat Trade Corn Trade Barley Trade Sorghum Trade Soybean Trade Soybean Meal Trade Soybean Oil Trade Rapeseed Trade	13 14 15 16 23 26 27 28 31 32 33 35 35
Domestic and International Economic Projections U.S. Program Provisions Agricultural Policy Assumptions for Crops Agricultural Policy Assumptions for Livestock Policy Prices and World Prices by Commodity  Wheat Trade Corn Trade Barley Trade Sorghum Trade Soybean Trade Soybean Meal Trade Soybean Oil Trade Rapeseed Trade Rapeseed Meal Trade Rapeseed Meal Trade	13 14 15 16 23 26 27 28 31 32 33 35 35 36
Domestic and International Economic Projections U.S. Program Provisions Agricultural Policy Assumptions for Crops Agricultural Policy Assumptions for Livestock Policy Prices and World Prices by Commodity  Wheat Trade Corn Trade Barley Trade Sorghum Trade Soybean Trade Soybean Meal Trade Soybean Meal Trade Rapeseed Trade Rapeseed Meal Trade Rapeseed Oil Trade Rapeseed Oil Trade	13 14 15 16 23 26 27 28 31 32 33 35 35 36 38

World Palm Trade	. 41
World Peanut Trade	. 43
Rice Trade	. 45
All-Cotton Trade	. 47
Sugar Trade	. 49
Beef and Veal Trade	. 51
Pork Trade	. 53
Broiler Meat Trade	. 55
Dairy Product Trade	. 57
U.S. Wheat Supply and Utilization	. 65
U.S. Corn Supply and Utilization	. 67
U.S. Sorghum Supply and Utilization	. 69
U.S. Barley Supply and Utilization	. 71
U.S. Oat Supply and Utilization	. 73
U.S. Hay Supply and Utilization	. 75
U.S. Peanut Supply and Utilization	. 77
U.S. Soybean Supply and Utilization	. 79
U.S. Soybean Meal Supply and Utilization	. 80
U.S. Soybean Oil Supply and Utilization	. 81
U.S. Rice Supply and Utilization	
U.S. Upland Cotton Supply and Utilization	. 85
U.S. Cottonseed Supply and Utilization	. 86
U.S. Cottonseed Meal Supply and Utilization	. 87
U.S. Cottonseed Oil Supply and Utilization	. 87
U.S. Sugar Crop Production	. 89
U.S. Sugar Supply and Utilization	
U.S. High-Fructose Corn Syrup Supply and Utilization	. 90
U.S. Beef Supply and Utilization	. 99
U.S. Pork Supply and Utilization	101
U.S. Broiler Supply and Utilization	103
U.S. Turkey Supply and Utilization	
U.S. Egg Supply and Utilization	105
U.S. Milk Supply and Utilization	107
U.S. Dairy Cows by State	
U.S. Milk Production by State	
State Level All Milk Prices	
U.S. Total Cheese Supply and Utilization	
U.S. Butter Supply and Utilization	
U.S. Nonfat Dry Milk Supply and Utilization	
• 11 •	
U.S. Planted and Idled Area	123
	125

U.S. Corn Production	126
U.S. Sorghum Production	127
U.S. Barley Production	128
U.S. Oat Production	129
U.S. Hay Production	130
U.S. Soybean Production	
U.S. Rice Production	132
U.S. Upland Cotton Production	133
Quantity of U.S. Agricultural Exports, Fiscal Year	135
Value of U.S. Agricultural Exports, Fiscal Year	135
Consumer Price Indexes for Food	137
Average Annual Per Capita Expenditures of Urban U.S. Households	139
CCC Net Expenditures, by Program	141
CCC Net Expenditures, by Function	141
U.S. Cash Receipts from Farming	143
U.S. Farm Production Expenses	
U.S. Farm Income Statistics	147
Crop Insurance	149

### **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.

ARP Acreage Reduction Program
APEC Asia Pacific Economic Cooperation
ASEAN Association of South East Asian Nations

CAP Common Agricultural Policy
CBO Congressional Budget Office
CCC Commodity Credit Corporation

CEE Central Eastern Europe
CIF Cost, Insurance, and Freight

COP Cereals, Oilseeds, and Protein Crops

CPI Consumer Price Index

CRP Conservation Reserve Program

CSF classic swine fever cwt hundredweight

DEIP Dairy Export Incentive Program
EEP Export Enhancement Program

EU European Union
ECU European currency unit

FACTA-90 Food, Agriculture, Conservation, and Trade Act of 1990 FAIR Act Federal Agriculture Improvement and Reform Act of 1996

FAPRI Food and Agricultural Policy Research Institute

FMD foot-and-mouth disease

FOB freight on board FOR Farmer-Owned Reserve FSU Former Soviet Union

GATT General Agreement on Tariffs and Trade

GRIP Gross Revenue Insurance Plan

GDP gross domestic product

ha hectare

HFCS high-fructose corn syrup HRW hard red winter (wheat)

MERCOSUR The Common Market of the Southern Cone of South America

MGA maximum guaranteed area MGQ maximum guaranteed quantity

mha million hectares mmt million metric tons

mt metric ton

NAFTA North American Free Trade Agreement

NFA net flexed area
NFD nonfat dry milk
PLD Paid Land Diversion

PROCAMPO Mexican direct income support program rBST recombinant bovine somatotropin

ROW Rest of World tmt thousand metric tons TRQ tariff rate quota

WGTA Western Grain Transportation Act

WTO World Trade Organization

### Overview of the 1999 U.S. Outlook

The Food and Agricultural Policy Research Institute (FAPRI) develops a long-term outlook for world agriculture each year. In July or August of each year, the FAPRI analysts complete work on models that will be used for the outlook. Each fall, the FAPRI consortium of universities meets to discuss important assumptions that will be a part of the outlook. Macroeconomic assumptions and policy assumptions are agreed upon at that time. A preliminary baseline is then done in November and is published in the FAPRI Rainbow Book.

That baseline is reviewed in January of each year. FAPRI invites more than 100 respondents to analyze the preliminary baseline. The review involves experts from both the public and private sector and takes two days to complete. Subsequent to the review, the FAPRI consortium meets again to create the final baseline in late January. Once Congress comes back into session in March, FAPRI leaders travel to Washington. A briefing is then given to the House, Senate, and USDA, followed by a general release to commodity groups and the press.

The outlook contained in this document therefore, is the result of six months of work by hundreds of people. FAPRI projections for world agriculture can be used for policy analysis; however, it is not a forecast. Actual conditions over the next 10 years may be substantially different from the baseline. The baseline is a plausible outlook that is conditioned by the assumptions used to create it. FAPRI receives macroeconomic projections from the WEFA group, DRI McGraw-Hill, and the United Nations Project Link.

In general, the outlook for economic growth is modest, as short-term difficulties temper the long-run optimism. For the next two to three years, the world economy will still be adjusting to the Asian financial crisis, and the devaluation of the Russian Ruble and Brazilian Real. The projections indicate that it will be 2001 before developing economies approach historical growth rates. With the exception of Japan, developed economies are expected to show only a modest

slowdown in growth. The U.S. economy is a bright spot in the world economy. Inflation rates, as measured by the Consumer Price Index (CPI), have steadily declined during the 1990s. After remaining flat in 1997, the overall Producer Price Index (PPI) fell by 2 percent in 1998. A further decline is expected in 1999. Substantial inflation is not a part of the current projections. The prime interest rate averaged just over 8 percent in 1998. Rates are expected to range between 7.5 and 8 percent from 1999 through 2008.

FAPRI assumes that current agricultural policies in the United States and abroad remain in place during the baseline period. This simplifying assumption is appropriate for a baseline against which alternative polices will be tested. The 1996 Federal Agricultural Improvement and Reform (FAIR) Act, for example, remains in effect throughout the baseline. After the FAIR Act expires in 2002, the assumption is that support will continue at the 2002 levels. For European policy, this baseline assumes no changes to the European Union's (EU) Common Agricultural Policy (CAP). Though changes to CAP were being offered while the baseline was made, none were yet accepted or implemented by the EU.

Assumptions regarding technology are critical in determining the supply and demand outlook for agriculture. In general, FAPRI assumes that the future rate of technological growth is in line with the recent history. For example, crop yields grow at the same rate as recent trends. Because the baseline assumes "normal" weather, no year-to-year fluctuations are included. Another technology assumption is for livestock: Dairy and livestock production per animal measures are assumed to continue at historical rates. For a baseline that alternative technologies may be scored against, the assumption of continued historical growth rates is appropriate.

### The Outlook for the Near Term

Lower world economic activity has led to a fall in demand for agricultural products from the United States. This, coupled with increases in world supplies, has depressed market prices for most commodities (dairy being the exception) and led to substantial increases in government costs associated with the farm program. This situation is likely to continue for the next two to three years, barring some weather problem here or elsewhere around the world.

The pork sector went through the sharpest decline in prices of any commodity last year as slaughter capacity constraints, together with large supplies, generated some of the lowest real prices for hogs on record. Some recovery in hog prices is expected for 1999, but many producers will continue to face severe financial pressure from the large losses incurred in recent months.

Crop cash receipts compared to 1996 levels were down nearly \$8 billion in 1998 and are expected to drop a further \$3 billion in 1999. For the next two to three years, the crops sector is expected to be under some pressure. When compared to other crops, the soybean loan rate appears to be high enough to attract acreage in 1999, which will likely keep soybean supplies fairly high and prices low in the year to come. Corn prices will struggle to remain above \$2.00 per bushel, and wheat prices are likely to get back to the \$3.00 per bushel rate with next year's crop. Cotton prices are not expected to average more than \$0.55 per pound until the 2001/02 crop year.

Livestock cash receipts also dipped in 1998, mainly due to the major decline in hog cash receipts. For the next few years, livestock cash receipts are expected to recover and move to or above record 1997 levels by 2000 or 2001. Pork prices should recover somewhat in 1999 and then move up again in 2000, averaging \$42.50 per hundredweight (cwt) in 2000. Cattle prices dipped slightly in 1998, but are expected to recover in 1999 and continue to improve for the next several years. Milk prices set record levels in 1998 and are showing extreme volatility in the early part of 1999. The Basic Formula Price dropped \$6.00 per cwt in February 1999, relative to January levels. Expect the dairy sector to be a major source of discussion in 1999.

Government costs are expected to rise by \$7 billion in fiscal year 1999 compared to 1998 levels. This increase is due to higher loan deficiency payments, disaster payments, and additional contract payments provided

under last year's legislation. Loan deficiency payments are expected to rise further in 2000, in response to lower soybean prices and potential cotton exposure. In the absence of new legislation, government outlays should dip to \$10.6 billion in 2000, and average \$6.3 to \$6.5 billion from 2002 through the end of the analysis.

Farm income has declined by 18 percent from 1996 levels. Without the increase in government payments in 1998, farm income would have likely dropped an additional \$2 billion. Some recovery is expected in 2000, but in general, farm income is expected to remain in the \$45 to \$47 billion range for much of the coming decade.

In the longer run, the world economy is expected to show signs of recovery. With growing incomes, consumption patterns of meats are expected to return to growth rates similar to that observed in the mid 1990s. Consequently, the United States export demand for feed grains, meats, oilseeds, and their products should again grow, providing support to many of these markets. This should provide upward price pressure to the feed grain and oilseed sector, with wheat prices also showing signs of strength. Cotton prices should also begin to recover, with farm prices getting above \$0.60 per pound by the 2003/04 crop year.

### Major Causes of Uncertainty Around the Baseline

World weather is the first major cause for concern. While stock levels of many commodities have increased significantly in the last two years, any weather problems that translate to a drop in supplies will likely tighten the market and bring prices up quickly. This production decline will likely have a similar effect if it occurs in the United States, Europe, South America, or China. The effects of tighter supplies will likely show a larger price increase effect than the price decrease associated with a large crop.

Changing world economic conditions could also impact the baseline. The WEFA Group, Project Link, and other sources generate the macroeconomic conditions assumed in the baseline. In general, they expect the global economic situation to stabilize in 1999 and begin to show signs of recovery in 2000. Behavior in Japan is critical to this assumption. Should the recovery not develop, the projection would obviously weaken.

Conversely, if the recovery would gain strength, the demand situation could tighten even more.

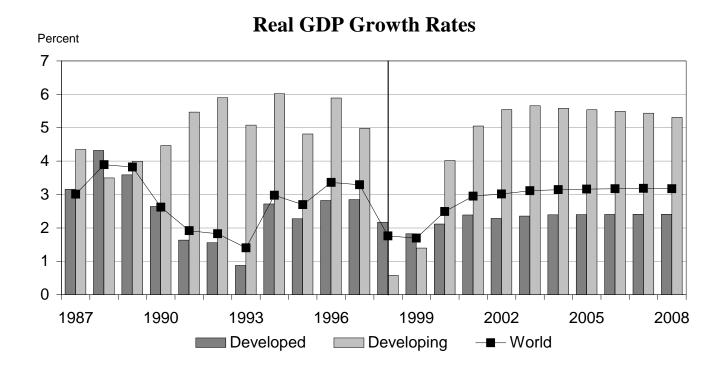
The U.S. pork sector is undergoing major adjustments since last fall's price drop. Several expansion plans are being placed on hold, and many producers will likely exit the industry in the next few months. While the breeding herd is projected to decline to 6.38 million head in December 1999, it is possible that the decline could be even sharper, leading to higher prices in 2000.

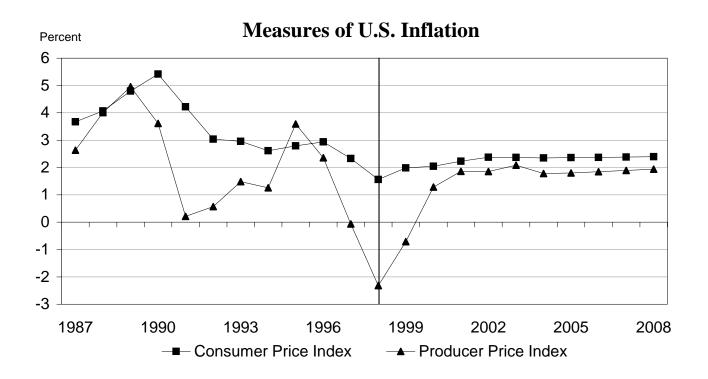
Farmers and ranchers may have used cash reserves in dealing with the current situation. The pork, grains, and oilseeds sectors saw fairly good prices in 1996 and 1997. During those years, some cash reserves could have been accumulated or debt paid off. For the most

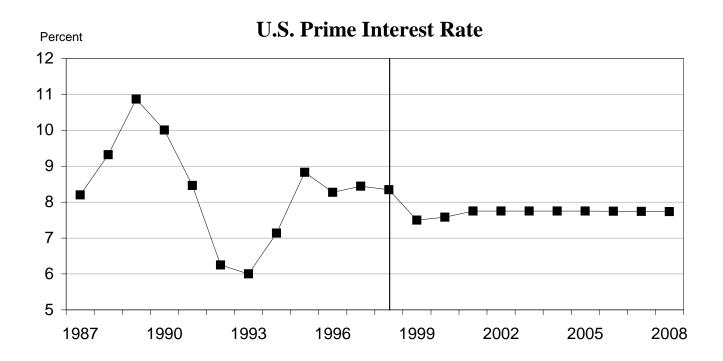
part, that was not the case in 1998. Many of these earlier reserves have likely been used in the last 12 months. Prices remaining at the level suggested in this baseline will likely generate some pressure in the next two years.

While current policies are assumed in this baseline, the European Union is in the midst of developing reforms to the Common Agricultural Policy. While the reforms under discussion at the current time are not expected to significantly impact their export levels in the near term, they could have significant effects on wheat trade in the years to come. The exact provisions of the final agreement will be important.

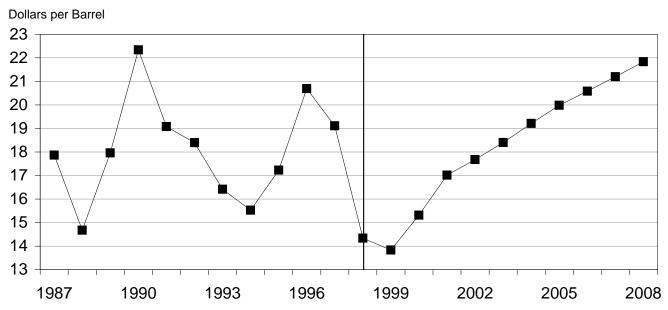
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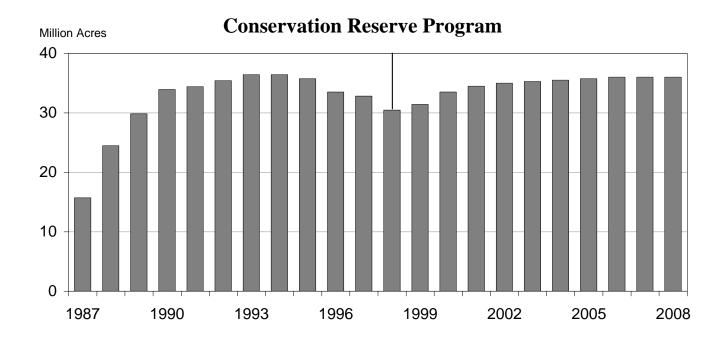


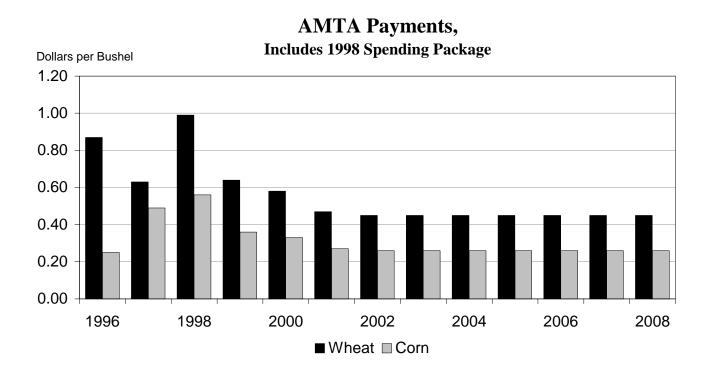


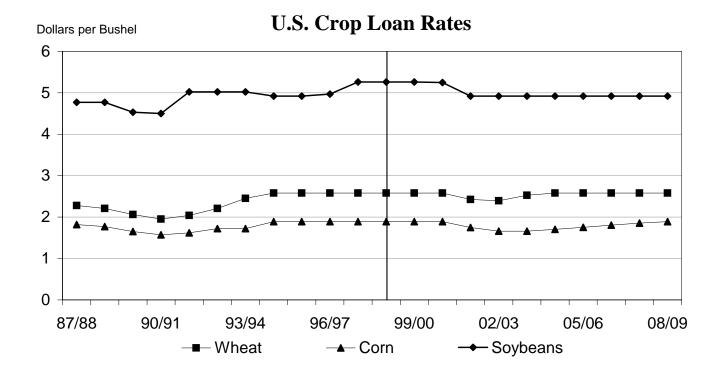


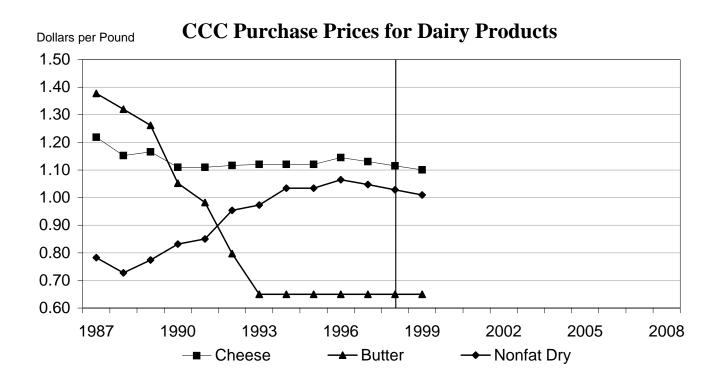
# **Crude Oil, Average Refiner's Acquisition Costs**











### **Macroeconomic Assumptions**

The rate of world economic growth of real GDP is projected to slowdown to 1 percent in 1999 because of negative growth in many Asian and Latin American countries and slower growth in developed countries. As countries recover from crisis, world real GDP growth rate is projected to bounce back to more than 3 percent by 2003, and remain at that level.

The U.S. economy is expected to slow in the short run because of the financial crisis in Asia and Latin America. The strength of the U.S. dollar relative to Asian and Latin American currencies is further weakening U.S. export competitiveness and reducing GDP growth to 2.1 percent in 1999. Currency devaluation in Asia and Latin America will continue over the next two to three years, with the notable exceptions of South Korea and Thailand. Currencies in Europe, Japan, and Canada are expected to strengthen against the U.S. dollar over the 10-year horizon. In the long run, U.S. GDP growth recovers to 2.3 percent as Asia begins to recover. U.S. inflation rates are expected to remain low over the next 10 years, with cheap imports disciplining U.S. prices.

Japan is projected to have negative real GDP growth for 1999. South Korea, is emerging from its financial crisis, and is projected to have 1 percent growth in 1999. In addition to countries directly affected by recent crisis, other major countries such as China, India, and Taiwan area also projected to slowdown significantly in 1999 but without recession.

After 1999, Asian countries are projected to recover to close to the pre-crisis levels by 2003. Chinese real GDP

growth rate is projected to increase from 4.3 percent in 1999 to 7.9 percent by 2002 and then slowly decline, reaching 6.9 percent by 2009. Other Asian countries exhibit similar recovery patterns.

Major Latin American countries (Brazil, Argentina, and Venezuela) will have negative income growth in 1999. The Brazilian economy is affected by its own financial problems, huge government debt, and also its strong ties with Asian economies. Slowdown in Brazil, the largest economy in Latin America, is also projected to impact Argentina because of its dependence on the Brazilian market. Over the long run, Latin American countries recover more vigorously and grow at a stronger rate. For example, Brazil will grow at a rate of around 4.5 percent, and Argentina is projected to grow at a rate close to 6 percent annually.

Many African countries have been spared from the recent slowdown because of their isolation from the rest of world in terms of trade. Many African countries are projected to have strong growth in the next decade. For example, Egypt and South Africa are projected to grow at 5.7 and 3.1 percent, respectively, for most of the projection period.

Many oil exporting countries such as Iran, Saudi Arabia, and Venezuela have also been hit hard in 1998 because of low oil prices. The projected low oil price for 1999 is keeping the economic growth in these countries at very low levels. Over the long run, the real GDP growth in these countries is projected to rise as oil prices recover.

# **Domestic and International Economic Projections**

	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
United States											
Real GDP *	3.7	2.3	1.7	2.2	(Percer 2.2	ntage Cha 2.3	nge) 2.4	2.4	2.3	2.3	2.3
Real Cons. Expenditure *	4.8	2.8	2.1	2.4	2.2	2.2	2.2	2.2	2.2	2.1	2.1
CPI, All Urban Consumers *	1.6	2.0	2.0	2.2	2.4	2.4	2.3	2.4	2.4	2.4	2.4
PPI, All Commodities *	-2.3	-0.7	1.3	1.9	1.9	2.1	1.8	1.8	1.8	1.9	1.9
Unemployment Rate	4.5	4.6	4.7	4.7	5.0	5.0	4.9	4.8	5.0	5.1	5.0
3-Month Treasury Bill Rate	4.7	4.0	4.4	4.5	4.5	4.5	4.5	4.5	4.5	4.4	4.3
Moody's AAA Corp. Rate	6.5	6.4	6.7	6.7	6.6	6.6	6.6	6.5	6.4	6.4	6.4
Avg. Hourly Earnings Food and Kindred Products *	2.9	2.5	2.8	3.4	3.0	2.6	3.0	2.9	2.8	2.7	2.7
	2.9	2.0	2.0	5.4				2.9	2.0	2.1	2.1
Federal Budget Deficit Unified Budget Basis	-88.8	-88.9	-55.2	-41.6	-39.3	U.S. Dolla -16.2	-1.6	17.9	53.9	79.1	92.7
Current Account Deficit	224.4	276.3	296.7	306.1	301.2	282.5	263.0	240.1	214.4	188.2	162.3
					,	llars per B	,				
Refiners Cost of Oil	14.3	13.8	15.3	17.0	17.7	18.4	19.2	20.0	20.6	21.2	21.8
International Real GDP *					(D	-4 Ob					
Argentina	4.9	-1.5	3.1	5.7	(Percer 5.4	ntage Cha 5.6	nge) 6.0	6.1	6.0	5.9	5.7
Brazil	0.2	-2.0	2.4	4.0	5.2	4.8	4.7	4.7	4.7	5.0	4.4
Canada	3.0	2.2	2.0	3.8	3.7	3.6	3.5	3.4	3.3	3.3	3.3
Australia	4.0	2.4	2.9	1.7	1.8	2.0	2.1	2.2	2.3	2.4	2.5
Thailand	-8.5	-2.3	4.8	6.6	7.7	7.3	6.6	6.4	6.2	6.0	5.8
Japan	-3.6	-3.2	-0.4	0.9	1.8	3.0	3.2	2.5	2.5	2.6	2.4
European Union	2.7	2.4	2.6	2.6	2.5	2.5	2.5	2.5	2.5	2.5	2.5
South Korea	-6.7	1.0	4.2	6.1	6.7	6.6	6.1	6.0	5.9	5.9	5.8
Taiwan	3.8	1.0	4.4	4.7	5.6	5.7	5.9	5.7	5.6	5.5	5.5
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	8.3	18.3	10.9	2.5	4.0	3.9	3.0	2.8	2.8	2.8	2.5
Canada	10.3	-0.8	-0.3	-0.3	-0.3	-0.3	-0.3	-0.3	-0.3	-0.3	-0.3
Australia	19.0	-3.5	-2.5	-1.0	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Thailand	48.6	1.2	-3.5	-2.7	-0.6	0.5	0.5	0.5	0.5	0.4	0.3
Japan	10.9	-4.6	-1.6	-2.4	-1.9	-2.3	-2.3	-2.2	-2.1	-2.0	-2.5
European Union	2.5	-4.2	-1.8	-1.0	-0.5	-0.2	-0.3	-0.2	-0.2	-0.2	-0.2
South Korea	56.8	3.5	-10.3	-4.7	2.6	2.2	2.1	1.8	1.6	1.4	1.3
Taiwan	20.0	10.9	4.5	-4.5	-5.7	-2.6	-2.3	-2.1	-2.0	-1.9	-1.8

\* Percentage change from preceding year.

Source: The WEFA Group, First Quarter 1999; Project Link, November 1998; and Standard & Poor's DRI Projections after 2003 are FAPRI estimates.

## U.S. and World Policy Assumptions

FAPRI projections incorporate provisions of the FAIR Act of 1996, which are assumed to be extended indefinitely. The projections also incorporate requirements of both NAFTA and GATT.

Contract payments and marketing loan rates for food grains, feed grains, oilseeds, and cotton are calculated according to the formulas set forth in the FAIR Act. The loan rate for sugar cane is set at \$0.18 per pound of raw sugar, and the rate for sugar beets is set at \$0.23 per pound on a refined sugar basis. As mandated by the FAIR Act, the loan rate for peanuts is fixed at \$0.305 per pound.

As legislated by the FAIR Act, U.S. dairy policy will undergo a number changes in the coming years. These include the phasing down of milk support price from \$10.20 per cwt in 1997 to \$9.90 per cwt in 1999, with corresponding reductions in support prices for butter, cheese, and nonfat dry milk. It also includes the elimination of government purchases of dairy products beginning in 2000 and the elimination of producer assessments. In addition DEIP exports will be maintained at WTO maximum levels throughout the period. The baseline does not assume policy changes associated with reform of the federal milk marketing order system.

CRP is continued in the current FAPRI projections, with some contracts allowed to expire, other contracts re-enrolled, and new contracts allowed by the Secretary of Agriculture. After a decline in 1998, the ability to write new contracts pushes the total number of acres upwards, exceeding 36 million acres by the end of the baseline period.

The FAIR Act legislates maximum spending under the Export Enhancement Program (EEP) and the Market Access Program (MAP). MAP is assumed to operate at the maximum allowed level of \$90 million per year, and

EEP is not assumed to be used during the projection period. The baseline also incorporates the provisions of the emergency spending package passed by Congress in 1998, as direct payments and disaster assistance affect farm income in both 1998 and 1999.

The proposed Agenda 2000 and the EU enlargement are not included in this baseline. Set-aside, already announced as 10 percent in 1999/00, is assumed to increase to 15 percent by 2008/09 in response to growing intervention stock. Cereal intervention prices and compensatory payments are assumed to remain at 119 and 54 ECUs per mt, respectively. Similarly, the beef support price and pig meat basic prices are assumed to remain at 3,475 and 1,509 ECUs per mt, respectively.

Japan is assumed to comply with import access commitments according to GATT requirements. No tariffication of rice trade is included in the baseline. Continued tariff reduction for beef is in place. Similarly, South Korea is assumed to comply with its import access commitments

The baseline assumes no new accession to the WTO during the projection period, including the case of the FSU, China, or Taiwan.

Unilateral liberalization has been incorporated for a number of countries. Examples include the elimination of the wheat and corn board, and wheat import liberalization in South Africa; import liberalization for wheat in Morocco and Indonesia; and import and export liberalization for crops in India (flour millers are allowed to import wheat, and feed manufacturers are allowed to import corn).

In the FSU, the transformation of market economies is assumed to continue. Price liberalization is assumed to proceed during the next several years.

**U.S. Program Provisions** 

	98/99	99/00	00/01	01/02	02/03	03/04	04/05	05/06	06/07	07/08	08/09				
Contract Payments					(U.S. Do	llars per B	Sushel)								
Corn	0.56	0.36	0.33	0.27	0.26	0.26	0.26	0.26	0.26	0.26	0.26				
Sorghum	0.67	0.44	0.40	0.32	0.31	0.31	0.31	0.31	0.31	0.31	0.31				
Barley	0.42	0.27	0.25	0.20	0.19	0.19	0.19	0.19	0.19	0.19	0.19				
Oats	0.05	0.03	0.03	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02				
Wheat	0.99	0.64	0.58	0.47	0.45	0.45	0.45	0.45	0.45	0.45	0.45				
		(U.S. Dollars per Hundredweight)													
Rice	4.35	2.82	2.60	2.11	2.04	2.04	2.04	2.04	2.04	2.04	2.04				
					(U.S. Do	llars per F	ound)								
Cotton	0.122	0.079	0.071	0.057	0.055	0.055	0.055	0.055	0.055	0.055	0.055				
Loan Rates		(U.S. Dollars per Bushel) 1.89 1.89 1.89 1.75 1.66 1.66 1.70 1.75 1.80 1.85 1.89													
Corn	1.89	1.89	1.89	1.75				1.75	1.80	1.85	1.89				
Sorghum	1.74	1.74	1.74	1.61	1.53	1.53	1.57	1.61	1.66	1.70	1.74				
Barley	1.56	1.56	1.56	1.44	1.37	1.37	1.41	1.45	1.49	1.53	1.56				
Oats	1.11	1.11	1.11	1.03	0.97	0.97	1.00	1.03	1.06	1.09	1.11				
Soybeans	5.26	5.26	5.25	4.92	4.92	4.92	4.92	4.92	4.92	4.92	4.92				
Wheat	2.58	2.58	2.58	2.43	2.39	2.53	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. Dollars per Pound)														
Cotton	0.519	0.519	0.519	0.516	0.500	0.500	0.500	0.500	0.511	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	s)								
Conservation Reserve	30.5	31.4	33.5	34.5	35.0	35.3	35.5	35.8	36.0	36.0	36.0				
	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008				
Milk Support Price	10.05	9.90	0.00	(U 0.00	.S. Dollars	per Hund 0.00	redweight) 0.00	0.00	0.00	0.00	0.00				

# **Agricultural Policy Assumptions for Crops**

	98/99	99/00	00/01	01/02	02/03	03/04	04/05	05/06	06/07	07/08	08/09
European Union											
Policy Prices					(ECUs	per Metric	Ton)				
Cereal Intervention	119.2	119.2	119.2	119.2	119.2	119.2	119.2	119.2	119.2	119.2	119.2
Rice Intervention	316.0	298.0	298.0	298.0	298.0	298.0	298.0	298.0	298.0	298.0	298.0
Oilseed Reference Price	196.0	196.0	196.0	196.0	196.0	196.0	196.0	196.0	196.0	196.0	196.0
White Sugar Intervention	632.0	632.0	632.0	632.0	632.0	632.0	632.0	632.0	632.0	632.0	632.0
Raw Sugar Intervention	467.0	467.0	467.0	467.0	467.0	467.0	467.0	467.0	467.0	467.0	467.0
A Beet Minimum	46.0	46.0	46.0	46.0	46.0	46.0	46.0	46.0	46.0	46.0	46.0
B Beet Minimum	32.0	32.0	32.0	32.0	32.0	32.0	32.0	32.0	32.0	32.0	32.0
Grains Compensatory Payment	54.3	54.3	54.3	54.3	54.3	54.3	54.3	54.3	54.3	54.3	54.3
Subsidized Export Limits					•	n Metric To	•				
Wheat	19.2	18.0	16.8	15.6	14.4	14.4	14.4	14.4	14.4	14.4	14.4
Coarse Grains	13.1	12.6	12.0	11.4	10.8	10.8	10.8	10.8	10.8	10.8	10.8
Production Aid					(ECUs	per Hect	are)				
Oilseeds	468	468	468	468	468	468	468	468	468	468	468
					(Thous	and Hecta	ares)				
Oilseed Base Area	5,482	5,482	5,482	5,482	5,482	5,482	5,482	5,482	5,482	5,482	5,482
Set-aside Rate *					(	Percent)					
Grains, Protein Crops	5	10	10	10	12	12	12	15	15	15	15
Oilseeds	10	10	10	10	10	10	10	10	10	10	10
Japan											
Policy Prices					housand `	•					
Wheat Purchase	149.3	149.3	149.3	149.3	149.3	149.3	149.3	149.3	149.3	149.3	149.3
Wheat Resale (Dom. Prod.)	41.8	41.8	41.8	41.8	41.8	41.8	41.8	41.8	41.8	41.8	41.8
Barley Purchase	130.8	130.8	130.8	130.8	130.8	130.8	130.8	130.8	130.8	130.8	130.8
Barley Resale (Dom. Prod.)	35.3	35.3	35.3	35.3	35.3	35.3	35.3	35.3	35.3	35.3	35.3
Rice Purchase	263.4	258.8	258.8	258.8	258.8	258.8	258.8	258.8	258.8	258.8	258.8
Rice Resale (Dom. Prod.)	294.1	294.1	294.1	294.1	294.1	294.1	294.1	294.1	294.1	294.1	294.1
Min. Import Access Commitment					•	nd Metric					
Rice	607	683	758	758	758	758	758	758	758	758	758
South Korea											
Min. Import Access Commitment											
Rice	125	103	103	128	154	180	205	205	205	205	205
Corn	6,100	6,100	6,100	6,100	6,100	6,100	6,100	6,100	6,100	6,100	6,100
United States				,	O D-II-		···				
Policy Prices	74	7.4	7.4	,	U.S. Dolla	•		00	74	70	74
Corn Loan	74	74 05	74	69	65	65	67	69	71	73	74
Wheat Loan	95 72	95 72	95 72	89	88	93	95 65	95 67	95 69	95 70	95
Barley Loan Rice Loan	143	143	143	66 143	63 143	63 143	65 143	67 143	68 143	70 143	72 143
Cotton Loan	1,144	1,144	1,144	1,138	1,102	1,102	1,102	1,102	1,127	1,144	1,144
Soybean Loan	1,144	1,144	1,144	1,136	1,102	1,102	181	1,102	1,127	181	1,144
Cane Loan	397	397	397	397	397	397	397	397	397	397	397
Export Enhancement Program							scal Year)				
Program Expenditure	0	0	0	0	0	0 (Dollars, F	0	0	0	0	0
Wheat	0	0	0	0	0	0	0	0	0	0	0
Barley	0	0	0	0	0	0	0	0	0	0	0
•						on Hectare					
Conservation Reserve Program	12.3	12.7	13.6	14.0	14.2	14.3	14.4	14.5	14.6	14.6	14.6

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

# **Agricultural Policy Assumptions for Livestock**

	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
European Union											
Policy Prices					(ECUs	per Metri	c Ton)				
Beef Intervention	3,475	3,475	3,475	3,475	3,475	3,475	3,475	3,475	3,475	3,475	3,475
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					(Thous	and Metric	Tons)				
Beef	350	350	350	350	350	350	350	350	350	350	350
GATT Maximum Subsidized Exports											
Beef	948	885	822	822	822	822	822	822	822	822	822
Pork	483	463	444	444	444	444	444	444	444	444	444
Poultry	345	316	286	286	286	286	286	286	286	286	286
,					/A 4:11:		- \				
Mills Delivery Overtor F 15	117 150	117 150	117 150	117 150		on Metric T		117,450	117 150	117 150	117 150
Milk Delivery Quota: E-15	117,450	117,450	117,450	117,450	117,450	117,450	117,450	117,450	117,450	117,450	117,450
					(ECU	per Metric	Ton)				
Target Price for Milk	307	307	307	307	307	307	307	307	307	307	307
Intervention Price for Butter	3,282	3,282	3,282	3,282	3,282	3,282	3,282	3,282	3,282	3,282	3,282
Intervention Price for SMP	2,055	2,055	2,055	2,055	2,055	2,055	2,055	2,055	2,055	2,055	2,055
SMP Feed Subsidy	75	75	75	75	75	75	75	75	75	75	75
GATT Maximum											
Subsidized Exports					,	and Metric	: Tons)				
Butter	444	426	408	399	399	399	399	399	399	399	399
SMP	304	292	279	273	273	273	273	273	273	273	273
Cheese	374	353	332	321	321	321	321	321	321	321	321
Other Milk Products	1,072	1,026	981	958	958	958	958	958	958	958	958
Canada					(Canadia	an Cents p	er Liter)				
Target Price for Industrial Milk	56	57	57	57	58	58	59	60	61	63	64
					(Canadia	an Dollars	per Kg)				
Support Price, Butter	5	5	5	5	5	5	5	6	6	6	6
Support Price, NFD	4	5	5	5	5	5	5	5	5	6	6

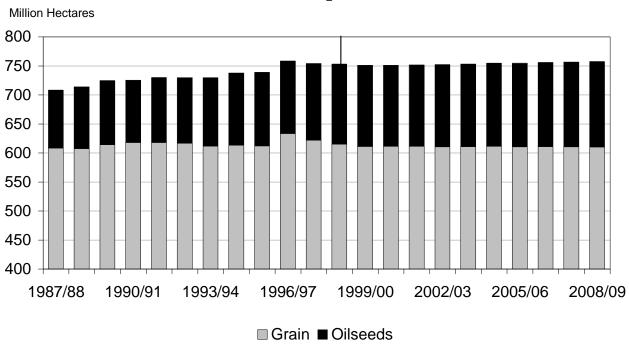
# **Policy Prices and World Prices, by Commodity**

	98/99	99/00	00/01	01/02	02/03	03/04	04/05	05/06	06/07	07/08	08/09
Wheat				(U.S. Do	ollars per M	letric Ton,	Marketing	Year)			
EU Intervention	140	142	143	143	144	144	144	144	145	145	145
FOB U.S. Gulf	121	135	142	146	150	155	159	163	164	165	167
Canadian Thunder Bay	132	148	156	161	165	171	175	180	181	183	185
Australian Wheat Board	120	134	141	145	149	154	157	161	162	164	165
Barley											
EU Intervention	140	142	143	143	144	144	144	144	145	145	145
FOB U.S. Pacific Northwest	108	110	111	113	116	119	121	123	124	126	129
Corn											
EU Intervention	140	142	143	143	144	144	144	144	145	145	145
FOB U.S. Gulf	94	97	99	101	104	107	109	111	113	115	118
Rice											
FOB Bangkok 5% Parboiled	295	295	297	302	305	311	314	320	323	326	330
Soybeans											
U.S. Loan Rate	193	193	193	181	181	181	181	181	181	181	181
FOB U.S. Gulf	213	203	207	212	215	216	220	222	226	227	232
Rapeseed											
EU Oilseeds Reference	303	290	319	313	310	331	342	337	439	440	407
Cash Vancouver	253	235	238	242	245	246	250	251	255	256	256
Cotton											
Cotlook A Index	1,278	1,231	1,218	1,280	1,356	1,419	1,471	1,521	1,565	1,604	1,632

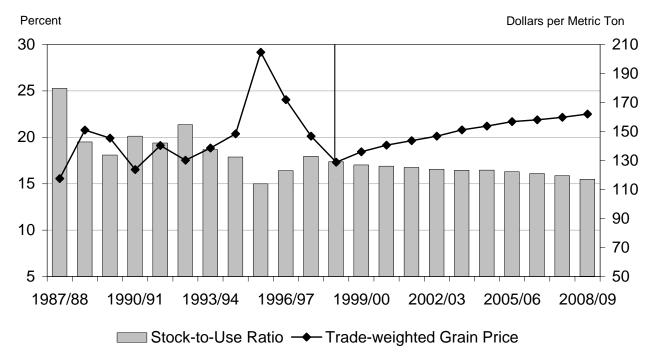
# **Policy Prices and World Prices, by Commodity (continued)**

	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
Beef					(U.S. Doll	ars per Me	etric Ton)				
EU Intervention Japanese Wholesale	3,853	4,021	4,095	4,137	4,157	4,166	4,178	4,187	4,195	4,203	4,212
Dairy beef	6,485	6,259	6,561	6,865	7,142	7,346	7,697	7,905	8,128	8,484	8,983
Wagyu beef	14,466	14,777	14,711	15,021	15,248	15,475	16,066	16,299	16,651	17,230	18,099
Nebraska Direct	,	,	,	.0,02.	.0,2.0	.0, 0	.0,000	.0,200	. 0,00	,200	.0,000
Fed Steer Price	1,355	1,449	1,528	1,605	1,665	1,644	1,613	1,563	1,530	1,569	1,644
U.S. Retail	6,107	6,261	6,415	6,570	6,680	6,680	6,680	6,614	6,614	6,658	6,790
Pork											
EU Basic	1,674	1,747	1,779	1,797	1,806	1,810	1,816	1,819	1,823	1,826	1,830
Japanese Wholesale	3,441	3,637	3,879	4,025	4,122	4,034	4,435	4,602	4,673	4,721	5,039
U.S. Barrows, Gilts	700	781	937	980	958	805	922	994	938	864	920
U.S. Retail	5,049	5,071	5,247	5,335	5,313	5,181	5,247	5,313	5,291	5,181	5,203
Broilers											
EU Producer	1,369	1,331	1,359	1,405	1,444	1,481	1,519	1,555	1,593	1,633	1,672
Japanese Wholesale	2,001	1,937	1,961	2,057	2,128	2,207	2,292	2,359	2,426	2,512	2,625
U.S. 12-City Wholesale	1,391	1,310	1,242	1,258	1,252	1,256	1,253	1,248	1,240	1,239	1,254
U.S. Retail	3,401	3,321	3,284	3,278	3,311	3,356	3,384	3,399	3,395	3,403	3,446
Butter											
EU Intervention	3,639	3,798	3,868	3,907	3,926	3,934	3,946	3,954	3,962	3,970	3,978
U.S. CCC Purchase	1,433	1,433	0	0	0	0	0	0	0	0	0
U.S. Wholesale	3,926	3,254	2,934	2,751	2,711	2,763	2,809	2,783	2,814	2,855	2,899
FOB Northern Europe	1,853	1,798	1,761	1,778	1,801	1,826	1,848	1,875	1,886	1,882	1,875
Canadian Support	3,531	3,608	3,623	3,637	3,651	3,665	3,680	3,694	3,708	3,723	3,737
Canadian Retail	4,201	4,294	4,311	4,328	4,345	4,362	4,379	4,397	4,414	4,431	4,449
Australian Export	1,571	1,516	1,479	1,496	1,519	1,544	1,566	1,594	1,604	1,600	1,593
Nonfat Dry Milk	0.070	0.070	0.400	0.440	0.450	0.404	0.474	0.470	0.404	0.400	0.404
EU Intervention	2,278	2,378	2,422	2,446	2,459	2,464	2,471	2,476	2,481	2,486	2,491
U.S. CCC Purchase	2,266	2,225	0	1.056	1 003	0	0	1 000	1 006	0	0
U.S. Wholesale	2,407	2,258	1,976	1,956	1,983	2,000	2,002	1,988	1,996	2,026	2,064
FOB Northern Europe Canadian Support	1,453	1,260	1,289	1,413	1,460	1,486	1,518	1,540	1,568	1,604	1,640 3,832
Canadian Retail	2,901 6,601	2,987 6,845	3,070 7,097	3,157 7,356	3,245 7,622	3,337 7,896	3,430 8,177	3,527 8,467	3,626 8,765	3,727 9,072	9,388
Australian Export	1,560	1,367	1,396	1,520	1,567	1,593	1,625	1,647	1,675	1,711	1,747
•	1,000	1,007	1,000	1,020	1,001	1,000	1,020	1,011	1,070	.,	.,, .,
Cheese U.S. CCC Purchase	2,459	0.406	0	0	0	0	0	0	0	0	0
		2,426						2,933			
U.S. Wholesale	3,397 2,225	2,980	2,920	2,921 2,436	2,936	2,948	2,942	,	2,922 2,471	2,906	2,888 2,488
FOB Northern Europe Canadian Wholesale	5,290	2,316 5,475	2,351 5,581	2,430 5,714	2,443 5,848	2,448 5,983	2,463 6,177	2,469 6,383	6,593	2,485 6,809	7,032
Canadian Retail	7,985	8,264	8,424	8,623	8,825	9,029	9,320	9,629	9,945	10,270	10,604
Australian Export	2,473	2,564	2,599	2,684	2,691	2,696	2,711	2,717	2,719	2,733	2,736
•	_,	_,	_,	_,	_,	_,,	_,	_,	_,	_,	_,
Milk EU Target	340	355	362	365	367	368	369	370	370	371	372
U.S. Support	222	218	0	0	0	0	0	0	0	0	0
U.S. Farm	313	270	265	265	266	268	267	266	265	263	261
Canadian Target, Industrial	37	38	38	38	38	39	40	41	41	42	43
Canadian Fluid Milk, Ontario	40	36 42	36 42	30 42	36 43	39 43	40 44	45	46	42 47	43 48
Australian Industrial Milk	15	16	16	17	43 17	43 17	17	17	17	18	18
Australian Fluid Milk	33	33	34	35	35	35	36	36	36	36	36
		00	٠.			00	00	00			

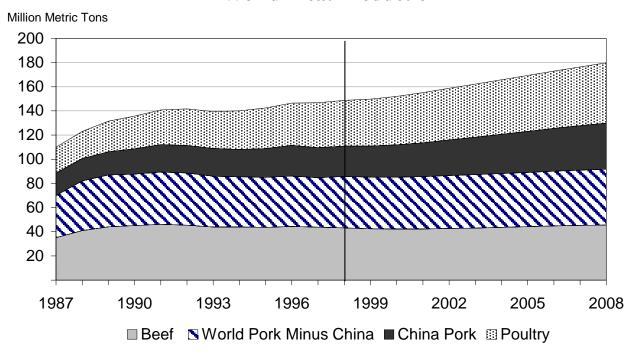
# **World Crop Area**



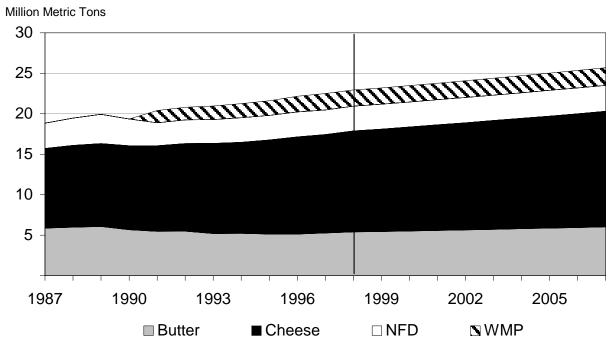
# World Grain Stock-to-Use Ratio Versus Price



# **World Meat Production**



# **World Dairy Product Output**



### **World Wheat Trade**

World wheat production primarily grows through yield growth, increasing from 584 to 661 mmt throughout the projected years, an increase of more than 13 percent. Consumption is projected to grow neck-and-neck with production, adding little or nothing to the stock. During the baseline period, world wheat stock-to-use ratio declines from 21 to 19 percent and thus, raises price by more than 39 percent.

Slowdown in world economic growth induces a decline in wheat trade in 1999/00, which will grow slowly thereafter as the economies recover. By 2008/09 wheat trade is projected to increase by 19 percent.

Most of the growth in wheat trade will come from developing countries where economic growth and urbanization increase wheat consumption. Asia is expected to be the fastest developing market in the long run, with imports increasing by more than 27 percent.

Over the next decade, Chinese imports increase by 2 to 3 mmt in the next few years and then stay flat for the remaining period.

India, with rising per capita consumption in non-traditional wheat consuming regions and import liberalization, will be a consistent wheat buyer in the international markets. Indian wheat imports are projected to increase by more than 1 mmt during the projection period.

Income growth in high income East Asia has made them increasingly dependent on imported wheat to meet consumption. Imports of this region are projected to be stagnant in the next two years as economic growth recovers. Over the long run, wheat imports are projected to increase by more than 1 mmt.

Behind Asia, North African and Middle Eastern regions are likely to be the second growth market for wheat in the next decade, with imports increasing by 22 percent.

Similarly, Latin America is also projected to expand its imports by more than 15 percent. Brazil and Mexico, accounting for more than 50 percent of the region's imports, are likely to expand their imports by 13 percent and 30 percent, respectively, over the next decade.

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 of their surplus wheat. The lower wheat price is likely to constrain the EU subsidized exports at the GATT maximum level until 2005/06. Between 2006 and 2008, the EU expands its wheat exports from 13.3 to 20.6 mmt, as world price exceeds the EU domestic price.

After 1999, U.S. exports strengthen until 2005/06, reaching above 30 mmt and then remaining flat for the last three years.

# **Wheat Trade**

	98/99	99/00	00/01	01/02	02/03	03/04	04/05	05/06	06/07	07/08	08/09
Net Exporters					(Millio	n Metric T	ons)				
Argentina	5.98	6.27	6.48	6.72	6.94	7.15	7.37	7.59	7.80	7.99	8.19
Australia	13.97	14.95	14.70	14.41	14.38	14.61	14.99	15.42	15.85	16.24	16.55
Canada	15.30	15.54	15.66	15.88	16.15	16.49	16.83	17.18	17.52	17.68	17.85
Czech Republic	0.05	0.12	0.21	0.27	0.31	0.31	0.30	0.26	0.21	0.19	0.15
Hungary	1.18	1.38	1.47	1.51	1.52	1.51	1.50	1.50	1.50	1.52	1.55
European Union	15.24	14.72	13.29	13.29	13.29	13.29	13.29	13.29	15.16	17.40	20.62
Ukraine	1.05	0.19	0.58	0.86	1.22	1.23	1.31	1.30	1.25	1.20	0.98
Total Non-U.S.	52.77	53.16	53.37	54.27	55.42	56.22	57.13	57.94	60.43	62.96	66.11
United States	27.37	25.90	27.03	28.26	28.68	29.01	29.56	30.25	30.08	29.83	29.48
Trade Share	34.2%	32.8%	33.6%	34.2%	34.1%	34.0%	34.1%	34.3%	33.2%	32.2%	30.8%
Total Net Exports	80.14	79.06	80.40	82.53	84.10	85.23	86.69	88.19	90.51	92.79	95.59
Net Importers											
Japan	5.80	5.80	5.79	5.80	5.81	5.84	5.87	5.89	5.93	5.97	6.01
Russia	3.70	0.39	-0.98	-1.33	-1.60	-1.62	-1.54	-1.39	-1.13	-0.74	-0.20
Other Former Soviet Union	1.03	1.06	1.43	1.77	1.49	1.56	1.63	1.70	1.80	1.93	2.09
Other Western Europe	0.49	0.50	0.50	0.51	0.52	0.52	0.53	0.54	0.56	0.57	0.59
Other Eastern Europe	-0.15	0.45	0.21	0.16	0.17	0.19	0.22	0.23	0.28	0.31	0.37
Poland	0.20	0.38	0.31	0.22	0.21	0.19	0.16	0.13	0.12	0.12	0.13
Developing	69.08	70.48	72.16	74.07	75.89	76.93	78.28	79.69	81.82	83.89	86.41
China	1.00	0.98	1.55	2.17	2.81	2.57	2.28	1.88	1.71	1.63	1.74
High-Income East Asia	5.81	5.79	5.84	5.94	6.05	6.16	6.28	6.41	6.56	6.72	6.88
India	1.65	1.26	1.36	1.42	1.38	1.36	1.43	1.54	1.94	2.32	2.71
Pakistan	2.20	2.66	2.68	2.78	2.79	2.77	2.75	2.81	2.92	3.14	3.38
Other Asia	10.82	11.25	11.14	11.20	11.40	11.69	12.10	12.54	12.95	13.38	13.96
Brazil	5.86	5.96	6.03	6.10	6.15	6.22	6.29	6.38	6.48	6.57	6.66
Mexico	2.25	2.26	2.32	2.38	2.47	2.58	2.69	2.81	2.95	3.10	3.26
Other Latin America	8.19	8.02	8.15	8.27	8.41	8.56	8.71	8.87	9.05	9.25	9.46
Algeria	4.60	4.38	4.38	4.38	4.39	4.41	4.43	4.46	4.49	4.53	4.56
Egypt	7.20	7.44	7.43	7.44	7.47	7.51	7.57	7.65	7.74	7.85	7.98
Iran	3.50	3.44	3.56	3.60	3.69	3.81	3.95	4.11	4.28	4.47	4.66
Morocco	1.47	1.52	1.63	1.78	1.84	1.91	1.98	2.07	2.16	2.27	2.38
Tunisia	0.85	0.87	0.89	0.93	0.98	1.03	1.09	1.16	1.23	1.31	1.40
Other Africa/Middle East	13.18	14.12	14.67	15.13	15.49	15.79	16.10	16.39	16.73	16.71	16.71
Rest of World	0.51	0.53	0.54	0.55	0.57	0.58	0.60	0.62	0.64	0.66	0.68
Residual	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Net Imports	80.14	79.06	80.40	82.53	84.10	85.23	86.69	88.19	90.51	92.79	95.59
Wheat Prices					(U.S. Dolla	ars per Me	tric Ton)				
U.S. FOB Gulf	120.54	134.69	141.93	145.98	149.92	155.20	158.66	162.80	163.71	165.32	167.11
Canadian Thunder Bay	132.12	148.19	156.43	161.02	165.49	171.48	175.40	180.10	181.12	182.94	184.96
Australian Wheat Board	119.97	133.80	140.88	144.81	148.63	153.76	157.11	161.13	162.00	163.56	165.29
CIF Rotterdam	142.10	158.60	167.05	171.77	176.36	182.52	186.55	191.39	192.45	194.33	196.41

### **World Coarse Grain Trade**

World coarse grain area has declined more than 5 percent since its peak in 1996/97, and it is projected to decline slightly in the next decade, with a decrease in barley area partially offset by an increase in corn area.

Even with declining area, world coarse grain production expands from 789 to 899 mmt, entirely through yield growth. Consumption is also expected to rise with the recovery of Asian economies, increasing coarse grain prices by more than 24 percent.

World coarse grain trade is projected to be sluggish in the next two years, primarily because of slowdown in world economic growth. However, coarse grain trade is likely to expand by more than 32 percent over the next decade.

Among coarse grains, corn increases by more than 36 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 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 corn imports by Far East Asian countries, such as Thailand, Indonesia, Malaysia, and Philippines, by more than 40 percent. As these countries recover from the crisis, it is projected that corn imports will increase close to the pre-crisis level by the end of the projection period.

India and China have potential to import significant amounts of corn in the next decade. In the last decade, China has been able to remain a large net exporter of corn in most years. Considering the slowdown in Chinese economic growth in the short run and possible devaluation, China is projected to remain a net exporter of corn until 2002/03, but at a declining rate. However, domestic consumption is likely to outpace production in the second half of the projection period, leaving the country in a net importer position. By 2008/09, China is projected to import more than 5 mmt of corn.

The Latin American region is the second largest growth market for corn in the next decade. Corn imports in the region are projected to increase by more than 13 percent. Mexico is the largest importer of corn in the region and has been importing well above TRQ levels since its implementation under NAFTA. Growing feed use is likely to expand corn imports from 4.15 mmt in 1998/99 to 4.3 mmt in 2001/02. However, Mexico's corn imports are projected to decline to 3.8 mmt in 2002/03 because of lower feed utilization. Decline in feed utilization comes from the poultry sector, which is assumed to be liberalized as a part of the NAFTA agreement, negatively affecting the domestic poultry industry.

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 decline next year in response to weak corn prices, reducing its exports by more than 13 mmt. Over the baseline period, production mostly grows through yield growth, expanding corn exports from 7.67 mmt in 1999/00 to 9.3 mmt in 2008/09.

South African corn imports are projected to double in 1998/99 because of higher production resulting from large area and favorable weather. Assuming normal weather next year, corn exports decline to 1.6 mmt. For the rest of the period, South African corn exports increase slowly and reach 1.85 mmt by 2008/09.

The U.S. corn area is projected to expand by 1 mha during the baseline period in response to declining bean-to-corn price ratio. U.S. exports expand from 42.5 to 60.3 mmt, accounting for most of the increased import demand. The U.S. market share increases from 77 to 81 percent by 2008/09.

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 to 3.3 mmt, whereas Saudi Arabia increases its barley imports from 5 to 5.9 mmt. The EU supplies most of the expanded barley markets, 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 falling livestock production. Similarly, Mexican sorghum import increases from 2.8 to 3.86 mmt during the projection period. On the export side, the United States and Argentina supply most of the market.

# **Corn Trade**

	98/99	99/00	00/01	01/02	02/03	03/04	04/05	05/06	06/07	07/08	08/09
Net Exporters					(Millio	n Metric T	ons)				
Argentina	9.00	7.67	7.62	7.70	7.86	8.08	8.34	8.60	8.85	9.08	9.30
Hungary	0.79	0.64	0.67	0.73	0.82	0.89	0.96	1.03	1.10	1.15	1.18
Other Eastern Europe	0.95	1.05	1.43	1.57	1.70	1.76	1.70	1.67	1.59	1.54	1.54
South Africa	1.75	1.60	1.55	1.55	1.60	1.66	1.69	1.74	1.76	1.79	1.84
Ukraine	0.05	0.02	0.06	0.12	0.14	0.14	0.15	0.16	0.18	0.19	0.22
Total Non-U.S.	12.59	10.99	11.31	11.65	12.08	12.49	12.82	13.16	13.46	13.74	14.07
United States	42.46	44.04	45.18	47.27	48.85	50.02	51.41	53.47	55.60	57.64	60.27
Trade Share	77.1%	80.0%	80.0%	80.2%	80.2%	80.0%	80.0%	80.3%	80.5%	80.7%	81.1%
Total Net Exports	55.05	55.02	56.50	58.92	60.93	62.51	64.23	66.63	69.07	71.38	74.35
Net Importers											
Canada	0.50	0.60	0.59	0.63	0.69	0.73	0.80	0.87	0.96	1.05	1.15
European Union	1.54	1.62	1.57	1.18	1.28	1.10	0.83	1.15	1.17	1.18	1.19
Czech Republic	0.00	0.01	0.00	0.00	0.00	0.00	0.01	0.01	0.02	0.03	0.04
Poland	0.25	0.33	0.34	0.35	0.35	0.36	0.36	0.36	0.37	0.38	0.40
Israel	0.50	0.55	0.56	0.57	0.58	0.58	0.59	0.59	0.59	0.59	0.60
Japan	15.50	15.39	15.26	15.14	14.96	14.83	14.53	14.33	14.20	14.10	13.97
Russia	0.65	0.71	0.54	0.46	0.41	0.38	0.40	0.41	0.43	0.45	0.49
Other Former Soviet Union	0.22	0.09	0.10	0.16	0.21	0.26	0.29	0.31	0.32	0.33	0.35
Developing	34.77	34.53	36.30	39.16	41.15	42.95	45.08	47.25	49.64	51.89	54.80
Algeria	1.00	1.03	1.07	1.09	1.12	1.15	1.18	1.21	1.24	1.27	1.30
Egypt	3.25	3.28	3.43	3.57	3.70	3.84	3.99	4.14	4.33	4.52	4.73
Other Africa	2.60	2.31	2.66	2.89	3.04	3.14	3.29	3.42	3.56	3.70	3.87
Other Middle East	4.97	5.09	5.11	5.14	5.16	5.18	5.20	5.23	5.26	5.28	5.30
Brazil	0.90	0.53	0.35	0.35	0.33	0.35	0.36	0.38	0.41	0.58	0.91
Mexico	4.15	4.17	4.22	4.30	3.78	3.73	3.71	3.68	3.71	3.77	3.91
Other Latin America	7.46	7.50	7.78	8.02	8.22	8.40	8.58	8.78	8.98	9.17	9.36
China	-3.50	-3.75	-3.42	-2.10	-0.91	-0.15	0.91	1.98	3.11	4.01	5.29
Indonesia	-0.25	-0.28	-0.19	-0.07	0.06	0.18	0.30	0.43	0.56	0.67	0.79
Malaysia	2.30	2.24	2.22	2.26	2.30	2.35	2.42	2.50	2.58	2.65	2.73
South Korea	6.50	6.91	6.86	6.94	7.09	7.23	7.30	7.39	7.52	7.64	7.70
Taiwan	4.50	4.54	4.74	4.97	5.10	5.16	5.27	5.41	5.53	5.62	5.70
Thailand	0.05	0.11	0.19	0.30	0.38	0.46	0.53	0.59	0.66	0.73	0.81
Philippines	0.35	0.34	0.39	0.46	0.52	0.58	0.63	0.67	0.73	0.79	0.85
India	0.04	0.06	0.42	0.59	0.78	0.87	0.92	0.91	0.95	0.94	0.98
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	-0.02	0.01	0.02	0.03	0.03	0.03	0.03	0.02	0.01	-0.01
Other Asia	0.45	0.46	0.47	0.48	0.49	0.50	0.51	0.52	0.53	0.54	0.55
Rest of World Residual	0.18 1.00	0.20 1.00	0.23 1.00	0.25 1.00	0.27 1.00	0.29 1.00	0.31 1.00	0.33 1.00	0.35 1.00	0.37 1.00	0.38 1.00
Total Net Imports	55.05	55.02	56.50	58.92	60.93	62.51	64.23	66.63	69.07	71.38	74.35
Coarse Grain Prices					(U.S. Dolla	ars per Me	tric Ton)				
Corn (FOB Gulf)	93.80	96.54	99.05	100.80	103.61	106.83	108.85	111.32	112.96	114.90	117.95
Sorghum (FOB Gulf)	86.05	93.04	95.73	98.38	101.53	104.69	106.76	109.00	110.80	112.95	116.34
Barley (Portland)	108.16	109.71	111.49	112.83	116.04	118.79	120.69	122.57	124.06	125.88	128.69
Daney (Fortiand)	100.10	103.71	111.49	112.03	110.04	110.79	120.09	122.01	124.00	123.00	120.09

# **Barley Trade**

	98/99	99/00	00/01	01/02	02/03	03/04	04/05	05/06	06/07	07/08	08/09
Net Exporters					(Millio	n Metric T	ons)				
Argentina	0.14	0.11	0.12	0.12	0.12	0.13	0.13	0.13	0.14	0.14	0.15
Australia	2.55	2.53	2.43	2.41	2.40	2.39	2.37	2.36	2.35	2.35	2.37
Canada	1.59	1.18	1.04	1.00	1.04	1.11	1.18	1.27	1.37	1.47	1.58
European Union	8.02	8.59	8.65	8.72	8.77	8.82	8.87	8.85	9.05	9.12	9.36
Russia	-0.35	0.36	0.65	0.89	1.10	1.20	1.28	1.22	1.07	1.01	0.92
Ukraine	0.50	0.29	0.32	0.38	0.43	0.43	0.43	0.42	0.42	0.56	0.66
Total Non-U.S.	12.45	13.07	13.22	13.52	13.87	14.08	14.26	14.25	14.40	14.65	15.04
United States	-0.15	-0.05	0.01	0.05	0.07	0.12	0.15	0.20	0.23	0.26	0.30
Trade Share	-1.2%	-0.4%	0.1%	0.4%	0.5%	0.8%	1.0%	1.4%	1.6%	1.7%	1.9%
Total Net Exports	12.30	13.02	13.22	13.58	13.94	14.20	14.41	14.45	14.63	14.91	15.33
Net Importers											
Czech Republic	0.08	0.12	0.05	-0.01	-0.07	-0.10	-0.11	-0.11	-0.09	-0.04	0.02
Hungary	-0.04	-0.11	-0.09	-0.10	-0.12	-0.15	-0.18	-0.21	-0.24	-0.28	-0.32
Poland	0.10	0.31	0.36	0.37	0.34	0.33	0.33	0.33	0.34	0.36	0.40
Other Eastern Europe	-0.27	0.05	0.03	-0.02	-0.09	-0.13	-0.16	-0.16	-0.18	-0.18	-0.17
Israel	0.40	0.45	0.46	0.47	0.48	0.49	0.50	0.51	0.52	0.53	0.54
Japan	1.40	1.36	1.33	1.32	1.31	1.31	1.26	1.24	1.23	1.22	1.19
Other Former Soviet Union	0.48	0.95	0.78	0.80	0.82	0.86	0.89	0.92	0.93	0.93	0.93
Developing	8.92	9.71	9.80	10.00	10.27	10.45	10.68	10.94	11.20	11.63	12.03
Algeria	0.10	0.08	0.09	0.09	0.09	0.10	0.10	0.10	0.11	0.11	0.12
Other Africa	1.15	1.18	1.20	1.23	1.26	1.28	1.31	1.34	1.38	1.41	1.45
Saudi Arabia	5.00	5.14	5.23	5.30	5.36	5.40	5.44	5.47	5.49	5.68	5.82
Other Middle East	-0.13	0.29	0.20	0.15	0.24	0.22	0.23	0.26	0.26	0.27	0.28
Brazil	0.20	0.21	0.22	0.23	0.24	0.25	0.27	0.28	0.30	0.31	0.33
Mexico	0.10	0.05	0.06	0.06	0.06	0.06	0.07	0.07	0.07	0.07	0.08
Other Latin America	0.25	0.25	0.25	0.26	0.26	0.26	0.27	0.28	0.28	0.29	0.30
China	2.00	2.24	2.28	2.39	2.47	2.56	2.68	2.81	2.96	3.12	3.29
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	0.21	0.22	0.23	0.24	0.25	0.27
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	0.44	0.53	0.62	0.72	0.81	0.91	1.02	1.14	1.26	1.38
Residual	0.86	-0.27	-0.02	0.12	0.26	0.32	0.29	-0.03	-0.21	-0.51	-0.67
Total Net Imports	12.30	13.02	13.22	13.58	13.94	14.20	14.41	14.45	14.63	14.91	15.33
Coarse Grain Prices					(U.S. Dolla	ars per Me	tric Ton)				
Corn (FOB Gulf)	93.80	96.54	99.05	100.80	103.61	106.83	108.85	111.32	112.96	114.90	117.95
Sorghum (FOB Gulf)	86.05	93.04	95.73	98.38	101.53	104.69	106.76	109.00	110.80	112.95	116.34
Barley (Portland)	108.16	109.71	111.49	112.83	116.04	118.79	120.69	122.57	124.06	125.88	128.69

# **Sorghum Trade**

	98/99	99/00	00/01	01/02	02/03	03/04	04/05	05/06	06/07	07/08	08/09
Net Exporters					(Millio	n Metric T	ons)				
Argentina	1.00	0.86	0.78	0.76	0.80	0.86	0.92	0.98	1.02	1.08	1.13
Australia	0.25	0.24	0.25	0.25	0.26	0.27	0.27	0.28	0.28	0.28	0.29
Total Non-U.S.	1.25	1.10	1.03	1.01	1.06	1.13	1.20	1.25	1.30	1.36	1.42
United States	4.85	5.43	5.66	5.79	5.80	5.86	5.87	5.91	6.02	6.06	6.11
Trade Share	79.5%	83.2%	84.7%	85.1%	84.5%	83.8%	83.1%	82.5%	82.2%	81.7%	81.2%
Total Net Exports	6.10	6.53	6.68	6.80	6.86	6.99	7.06	7.17	7.32	7.42	7.53
Net Importers											
Israel	0.20	0.23	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.26
Japan	2.70	2.55	2.48	2.43	2.37	2.35	2.20	2.13	2.07	2.01	1.90
Developing	2.70	3.09	3.17	3.26	3.30	3.38	3.52	3.60	3.71	3.78	3.95
Mexico	2.70	3.05	3.13	3.21	3.25	3.33	3.46	3.53	3.64	3.70	3.86
South Africa	0.00	0.04	0.04	0.05	0.05	0.06	0.06	0.07	0.07	0.08	0.09
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	0.35	0.49	0.63	0.70	0.77	0.85	0.93	1.03	1.13	1.22	1.27
Residual	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.16
Total Net Imports	6.10	6.53	6.68	6.80	6.86	6.99	7.06	7.17	7.32	7.42	7.53
Coarse Grain Prices					(U.S. Dolla	ars per Me	etric Ton)				
Corn (FOB Gulf)	93.80	96.54	99.05	100.80	103.61	106.83	108.85	111.32	112.96	114.90	117.95
Sorghum (FOB Gulf)	86.05	93.04	95.73	98.38	101.53	104.69	106.76	109.00	110.80	112.95	116.34
Barley (Portland)	108.16	109.71	111.49	112.83	116.04	118.79	120.69	122.57	124.06	125.88	128.69

### World Soybean and Soybean Products Trade

World soybean markets have been in turmoil this year, with soybean prices falling by 16.8 percent from a year ago and by 26.3 percent from two years ago.

Decreasing prices next year will stimulate world demand for soybean and reduce acreage in relatively more export-oriented markets such as Argentina. Acreage increases projected in Brazil and the United States will be sufficient to cover any supply shortfalls. Prices are expected to strengthen during the rest of the projection period.

World soybean area increased to a record 70.6 mha during 1998/99. Nearly half of the increase in soybean area occurred in the United States (0.7 mha) and the rest in India (0.5 mha) and other countries. Chinese area under soybean (as well as yields) declined substantially this year due to devastating floods in key growing regions. Total soybean area in the South American countries remained constant at last year's level.

Overall, soybean area is projected to increase by 6.78 percent, to more than 75.4 mha by 2008/09, with an associated increase of nearly 28 mmt in soybean production. The increase in soybean crush is expected to increase meal production by about 23 mmt and oil production by about 5 mmt (each by about 22 percent) over the projection period.

Soybean area in the United States will increase next year, driven by the attractive loan rates, before trending down as the corn-to-soybean price ratio decreases in later years. The United States is, and is projected to remain, the largest soybean exporter.

South American soybean area is expected to grow further next year as early estimates for 1999/00 indicate another record crop year. It is projected that this area will increase by nearly 2.32 mha in the coming decade. Soybean exports from Brazil are expected to reach 8.1 mmt by 2008/09. Brazil and Argentina will continue to remain the top soy meal exporters, with exports reaching 13.1 mmt and 13.6 mmt, respectively, by the end of the projection period. Argentina is projected to remain,

by far, the largest soy oil exporter, with exports increasing from 2.2 mmt in the current year to more than 2.8 mmt by the end of the period.

Although the world soybean trade decreased slightly in 1998/99 from a year ago, it represents an increase of about 6 percent over 1996/97 trade levels. (The total trade had increased by almost 4.25 mmt between 1996/97 and 1997/98.) The 0.84 mmt decrease in the European Union's soybean imports in 1998/99, compared to the previous year, was more than compensated by a nearly 0.9 mmt increase in Chinese soybean imports.

Although the oilseeds area in the European Union is bound by the Blair House Agreement to a maximum of 5.482 mha, some member states do report over-planting when relative prices tend to favor oilseeds over other crops. Overall, the EU oilseeds area overshot Blair House limits by 8.35 percent in 1998/99. This trend might continue while the relative oilseeds prices remain sufficiently lucrative.

India is expected to remain the fourth largest exporter of soymeal and to strengthen this position during the projection period, precluding the United States to increase its share of the global trade in soy meal. Total soybean acreage in India is projected to grow to more than 7.5 mha by the end of the projections. Although the Indian government recently uplifted the restrictions on oilseeds imports, its implementation is yet to take place. This policy shift may be beneficial for U.S. soybean exporters in the coming years.

Chinese soybean imports reached record highs during the current year, mainly due to devastating floods in major soybean producing regions of China. As supply returns to normal next year, soybean import requirements are expected to decrease. Total soybean and soybean meal imports closely follow the developments in the Chinese livestock sector, which, in turn, reflects changes in macroeconomic assumptions.

Japan imports a large quantity of soybeans for its domestic crushing industry. Its total bean imports are

projected to increase to more than 4.85 mmt by 2008/09, while its long-term meal imports are expected to decline from 800 tmt in the current year to about 608 tmt by the end of the period, reflecting the downtrend in the Japanese livestock sector.

Like Japan, 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 this recent crisis, its soybean imports are projected to grow (from the current low level of 2.4 mmt) by only 300 tmt over the next 10 years.

Slow economic recovery in Former Soviet Union countries is expected to restrain their import demand for both soybeans and soybean meal. Their total soybean and meal imports are projected to grow by only 280 tmt by the year 2008/09.

South Korean bean and meal demand is also projected to grow at a slower rate, with bean imports increasing by 87 tmt and meal imports by 540 tmt by the end of the period. Mexican soybean imports are projected to grow by about 815 tmt during this period.

Total soybean trade is projected to increase by more than 8 mmt (23 percent) between 1998/99 and 2008/09.

Trade in soy meal and soy oil is also projected to grow by similar percentages during the next 10 years.

The European Union is expected to remain, by far, the largest soybean and soybean meal importer in the world, with combined imports projected to reach nearly 30 mmt by the year 2008/09.

Soybean meal prices plummeted 23.3 percent compared to 1997/98 and 48.3 percent compared to 1996/97 levels. Stagnating soy meal demand and record crush caused this free fall in prices. However, toward the latter part of the year, relatively weaker soy meal prices resulted in large imports from countries like the European Union, where meal manufacturers reported substituting meal in feed rations in place of higher priced grains.

Soy oil had been the only redeeming factor as prices strengthened in the later part of the year (a drop of only 4.9 percent from last year, but an increase of 9.3 percent above 1996/97). The shortfall in palm oil supply caused palm oil prices to be relatively higher and led importers to substitute soy oil for palm oil.

Chinese soy oil imports are projected to grow rather rapidly during the later projection years, as per capita incomes grow at a relatively faster rate.

# Soybean Trade

	98/99	99/00	00/01	01/02	02/03	03/04	04/05	05/06	06/07	07/08	08/09
Net Exporters					(Thousa	and Metric	Tons)				
Argentina	2,450	2,368	2,456	2,554	2,635	2,701	2,790	2,861	2,950	3,015	3,115
Brazil	7,450	7,257	7,094	7,197	7,300	7,431	7,543	7,690	7,814	7,958	8,123
Canada	450	450	487	517	528	521	544	544	568	562	540
Paraguay	2,400	2,409	2,445	2,495	2,546	2,598	2,651	2,701	2,753	2,802	2,854
Total Non-U.S.	12,750	12,485	12,483	12,762	13,009	13,252	13,528	13,796	14,085	14,337	14,632
United States	22,017	25,828	26,127	26,181	26,426	26,671	26,862	27,188	27,433	27,842	28,168
Trade Share	63.3%	67.4%	67.7%	67.2%	67.0%	66.8%	66.5%	66.3%	66.1%	66.0%	65.8%
Total Net Exports	34,765	38,323	38,601	38,939	39,426	39,930	40,390	40,980	41,531	42,170	42,795
Net Importers											
Eastern Europe	148	152	168	187	208	230	251	274	296	319	342
European Union	15,278	15,879	15,982	16,011	16,105	16,199	16,267	16,407	16,508	16,678	16,816
Former Soviet Union	412	428	451	473	493	512	530	547	562	575	588
Russia	115	123	141	158	175	191	206	221	235	249	262
Ukraine	20	19	23	28	32	35	38	40	42	43	44
Other Former Soviet Union	277	286	287	287	287	286	286	285	284	283	282
Japan	4,700	4,767	4,764	4,770	4,784	4,798	4,807	4,819	4,830	4,842	4,854
Developing	10,690	10,810	10,960	11,261	11,560	11,835	12,082	12,343	12,588	12,843	13,090
China	3,420	3,349	3,346	3,504	3,678	3,834	3,976	4,140	4,296	4,463	4,616
India	0	0	0	0	0	0	0	0	0	0	0
Mexico	3,470	3,632	3,751	3,851	3,937	4,011	4,076	4,134	4,188	4,238	4,285
South Korea	1,400	1,423	1,432	1,435	1,436	1,444	1,450	1,458	1,467	1,473	1,487
Taiwan	2,400	2,405	2,431	2,470	2,509	2,546	2,580	2,611	2,638	2,668	2,701
Rest of World	4,449	4,789	4,777	4,738	4,777	4,856	4,952	5,090	5,248	5,413	5,606
Residual	-912	1,500	1,500	1,500	1,500	1,500	1,500	1,500	1,500	1,500	1,500
Total Net Imports	34,765	38,323	38,601	38,939	39,426	39,930	40,390	40,980	41,531	42,170	42,795
Soybean Prices					(U.S. Dolla	ars per Me	etric Ton)				
FOB Gulf	212.74	203.45	207.17	211.76	214.84	216.40	220.16	222.18	225.97	227.49	232.28
CIF Rotterdam	230.00	214.54	218.19	222.71	225.72	227.26	230.96	232.94	236.67	238.16	242.86

### Soybean Meal Trade

	98/99	99/00	00/01	01/02	02/03	03/04	04/05	05/06	06/07	07/08	08/09
Net Exporters					(Thousa	and Metric	Tons)				
Argentina	10,872	11,276	11,540	11,792	12,054	12,322	12,570	12,839	13,092	13,369	13,633
Brazil	10,625	11,527	11,291	11,479	11,619	11,878	12,077	12,298	12,531	12,792	13,055
India	2,950	3,214	3,363	3,510	3,663	3,814	3,967	4,118	4,268	4,414	4,563
Paraguay	390	414	430	445	465	484	503	526	547	573	596
Total Non-U.S.	24,837	26,431	26,625	27,227	27,801	28,498	29,116	29,781	30,438	31,149	31,846
United States	7,442	7,246	7,226	7,155	7,251	7,272	7,473	7,681	7,971	8,302	8,548
Trade Share	23.1%	21.5%	21.3%	20.8%	20.7%	20.3%	20.4%	20.5%	20.8%	21.0%	21.2%
Total Net Exports	32,279	33,677	33,851	34,382	35,052	35,770	36,589	37,462	38,409	39,451	40,394
Net Importers											
Canada	485	470	541	587	627	634	593	573	579	585	550
Eastern Europe	2,070	2,096	2,142	2,178	2,210	2,240	2,272	2,305	2,339	2,374	2,410
European Union	12,849	12,336	12,406	12,494	12,483	12,580	12,656	12,715	12,792	12,920	12,963
Former Soviet Union	687	745	759	729	703	700	723	749	774	797	798
Russia	307	291	270	272	271	273	287	302	320	341	361
Ukraine	115	145	149	145	143	145	147	149	152	157	151
Other Former Soviet Union	265	309	340	312	288	283	289	298	302	299	285
Japan	800	877	855	832	797	752	728	698	665	640	608
Developing	5,482	5,602	5,637	6,158	6,814	7,366	8,028	8,745	9,449	10,199	11,000
China	4,390	4,450	4,485	4,966	5,570	6,183	6,799	7,445	8,086	8,724	9,396
Mexico	232	224	194	183	184	59	49	62	80	110	152
South Korea	850	925	945	988	1,032	1,088	1,139	1,193	1,234	1,310	1,389
Taiwan	10	2	12	21	28	35	41	45	49	56	63
Rest of World	10,521	10,801	10,762	10,655	10,669	10,747	10,839	10,927	11,062	11,187	11,316
Residual	-614	750	750	750	750	750	750	750	750	750	750
Total Net Imports	32,279	33,677	33,851	34,382	35,052	35,770	36,589	37,462	38,409	39,451	40,394
Soybean Meal Prices					(U.S. Dolla	ars per Me	etric Ton)				
FOB Decatur 44%	148.49	145.67	152.20	159.14	165.86	170.15	175.07	179.27	183.63	185.62	191.04
CIF Rotterdam	148.00	147.90	154.26	161.01	167.54	171.72	176.51	180.60	184.84	186.78	192.05

# Soybean Oil Trade

	98/99	99/00	00/01	01/02	02/03	03/04	04/05	05/06	06/07	07/08	08/09
Net Exporters					(Thousa	and Metric	Tons)				
Argentina	2,228	2,319	2,376	2,429	2,485	2,542	2,596	2,654	2,709	2,770	2,824
Brazil	1,175	1,488	1,417	1,452	1,478	1,533	1,577	1,626	1,677	1,734	1,791
European Union	973	1,058	1,091	1,097	1,111	1,125	1,139	1,161	1,178	1,203	1,231
Paraguay	98	109	112	117	123	129	134	141	148	156	163
Total Non-U.S.	4,474	4,974	4,995	5,095	5,197	5,328	5,446	5,582	5,713	5,862	6,010
United States	1,197	1,066	1,069	1,054	1,083	1,104	1,153	1,207	1,279	1,365	1,466
Trade Share	21.1%	17.6%	17.6%	17.1%	17.2%	17.2%	17.5%	17.8%	18.3%	18.9%	19.6%
Total Net Exports	5,671	6,040	6,064	6,149	6,280	6,432	6,598	6,789	6,991	7,228	7,476
Net Importers											
Canada	-20	-23	-24	-25	-25	-26	-27	-28	-29	-30	-31
Eastern Europe	107	120	120	121	121	123	124	125	126	127	128
Former Soviet Union	110	132	135	138	142	145	149	153	157	161	165
Russia	70	89	92	96	99	103	106	110	113	117	121
Ukraine	40	43	42	42	42	43	43	43	43	44	44
Other Former Soviet Union	0	0	0	0	0	0	0	0	0	0	0
Japan	6	26	26	28	30	31	33	34	36	38	39
Developing	2,134	2,229	2,306	2,421	2,578	2,751	2,937	3,150	3,375	3,633	3,905
China	1,700	1,803	1,858	1,959	2,096	2,246	2,405	2,588	2,780	2,985	3,204
India	250	204	209	217	226	233	240	247	255	264	275
Mexico	90	75	72	74	81	91	103	117	133	151	170
South Korea	74	96	101	110	119	128	137	146	156	167	177
Taiwan	20	51	65	60	56	52	52	51	52	66	80
Rest of World	3,520	3,707	3,712	3,736	3,764	3,799	3,832	3,865	3,897	3,929	3,959
Residual	-187	-150	-210	-270	-330	-390	-450	-510	-570	-630	-690
Total Net Imports	5,671	6,040	6,064	6,149	6,280	6,432	6,598	6,789	6,991	7,228	7,476
Soybean Oil Prices					(U.S. Dolla	ars per Me	etric Ton)				
FOB Decatur	541.58	540.41	538.81	530.64	519.66	510.21	509.36	506.61	510.85	516.55	526.07
FOB Rotterdam	571.00	566.25	564.46	555.36	543.13	532.62	531.67	528.61	533.33	539.68	550.27

### World Rapeseed and Rapeseed Products Trade

World trade in rapeseed/canola surged by almost 300,000 mt over the 1998/99 level. Lower prices next year are projected to increase import demand for all countries except China, as it recovers from this year's supply shock. Long-term trade in rapeseed is expected to remain around 3.5 mmt.

World rapeseed area is projected to grow relatively slow to about 2.18 mha by 2008/09. Consequently, rapeseed production and crush are expected to grow by about 7.3 mmt each over the projection period.

Relatively lucrative rapeseed prices led to an increase of more than half-a-million hectares in Canadian canola area. The increase will continue with an overall projected increase of 6.16 percent over the entire projection period.

Rapeseed area in the EU increased this year by about 0.305 mha over the previous year, despite ensuing penalties for overshooting Blair House limits on total oilseeds area. Major growth was reported in Italy and the United Kingdom. Due to relative price advantage, another large overshoot is expected in EU area next year.

Rapeseed area in India declined slightly under increased competition from wheat and rice crops in the Northern Plains region. Nonetheless, the rapeseed area is expected to grow by nearly 300,000 hectares in the coming decade.

Although the Chinese rapeseed area harvested grew by 0.225 mha this year, the per hectare yields dropped from 1.48 mt in 1997/98 to 1.24 in 1998/99 due to devastating floods in key growing areas. To cover this fall in total production and to increase the utilization of domestic crush capacity toward self sufficiency in oil, China imported a record 1.5 mmt of rapeseed this year. This amount is expected to decrease as production recovers in coming years, while rape oil imports are projected to increase slowly by about 250,000 tons over the next 10 years.

Canola meal is imported from Canada primarily by the EU and Japan for its meal quality. Rape meal from the rapeseed varieties grown in countries like China and India is not suitable for animal consumption. Most of the rape meal is exported from India to the EU for industrial purposes. Total trade in meal increased by more than 136 percent between 1987/88 and 1998/99. A relatively slower growth of about 75 percent is projected between 1998/99 and 2008/09.

Rape oil is widely used as a cooking oil in China, India, and some other developing countries, and it is also used in several industrial products. Increasing incomes in these countries are expected to drive the demand for rape oil. Declining area in exporting countries, particularly the EU, and increases in domestic oil production in importing countries, are expected to restrict the trade in rape oil in coming years to between 1.7 and 1.8 mmt.

### **Rapeseed Trade**

	98/99	99/00	00/01	01/02	02/03	03/04	04/05	05/06	06/07	07/08	08/09
Net Exporters					(Thousa	and Metric	Tons)				
Canada	3,180	3,376	3,427	3,388	3,407	3,417	3,387	3,406	3,417	3,506	3,561
Total Net Exports	3,699	3,453	3,429	3,388	3,429	3,417	3,387	3,406	3,417	3,506	3,561
Net Importers											
China	1,500	216	271	278	282	293	310	314	324	326	340
European Union	-112	-77	-1	32	-23	158	243	300	391	507	596
India	0	0	0	0	0	0	0	0	0	0	0
Japan	2,100	2,155	2,062	2,158	2,169	2,181	2,196	2,209	2,224	2,239	2,255
Rest of World	-407	582	696	620	777	685	638	683	677	734	770
Residual	99	500	400	300	200	100	0	-100	-200	-300	-400
Total Net Imports	3,699	3,453	3,429	3,388	3,429	3,417	3,387	3,406	3,417	3,506	3,561
Rapeseed Prices					(U.S. Dolla	ars per Me	tric Ton)				
Cash Vancouver	253.24	234.85	238.14	242.13	244.85	246.34	249.62	251.47	254.75	256.19	256.41
CIF Hamburg	258.79	238.85	240.30	242.55	243.40	242.84	244.33	244.20	245.71	245.12	247.56

# **Rapeseed Meal Trade**

	98/99	99/00	00/01	01/02	02/03	03/04	04/05	05/06	06/07	07/08	08/09
Net Exporters					(Thousa	and Metric	Tons)				
Canada	1,500	1,551	1,574	1,597	1,645	1,692	1,740	1,787	1,835	1,882	1,989
China	-50	128	147	173	181	181	168	144	135	120	106
India	900	770	823	883	930	968	996	1,015	1,026	1,037	1,044
Total Net Exports	2,350	2,448	2,545	2,652	2,756	2,841	2,904	2,946	2,996	3,039	3,139
Net Importers											
European Union	626	595	710	762	764	934	1,046	1,044	1,123	1,240	1,263
Japan	120	106	78	68	64	65	64	63	63	65	65
Rest of World	1,574	1,647	1,681	1,772	1,902	1,843	1,819	1,888	1,884	1,833	1,936
Residual	30	100	75	50	25	0	-25	-50	-75	-100	-125
Total Net Imports	2,350	2,448	2,545	2,652	2,756	2,841	2,904	2,946	2,996	3,038	3,139
Rapeseed Meal Price					(U.S. Dolla	ars per Me	etric Ton)				
FOB Hamburg	110.00	99.65	104.36	109.33	114.16	117.43	121.10	124.30	127.61	129.40	133.39

### **Rapeseed Oil Trade**

	98/99	99/00	00/01	01/02	02/03	03/04	04/05	05/06	06/07	07/08	08/09
Net Exporters					(Thousa	and Metric	Tons)				
Canada	839	878	891	897	920	941	961	984	1,011	1,041	1,071
European Union	798	930	863	839	842	751	703	735	720	694	722
Total Net Exports	1,637	1,808	1,753	1,736	1,762	1,692	1,664	1,719	1,731	1,734	1,793
Net Importers											
China	430	517	441	393	376	385	410	461	528	615	687
India	30	75	68	57	57	59	61	65	71	75	78
Japan	5	4	4	3	4	4	4	3	3	3	3
Rest of World	1,033	1,011	1,116	1,233	1,350	1,343	1,364	1,439	1,453	1,442	1,499
Residual	139	200	125	50	-25	-100	-175	-250	-325	-400	-475
Total Net Imports	1,637	1,808	1,753	1,736	1,762	1,691	1,664	1,719	1,731	1,734	1,792
Rapeseed Oil Price					(U.S. Dolla	ars per Me	etric Ton)				
FOB Rotterdam	560.00	546.11	542.36	531.43	517.44	505.13	502.20	497.19	499.82	504.05	512.44

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

World area under sunflower is expected to grow by 8.27 percent, from 21.7 mha in 1998/99 to 23.5 mha in 2008/09. During the same period, total sunflower trade is expected to grow by another 826,000 mt, or 28.5 percent.

Argentine area under sunflowers responded positively to the world sunflower oil prices in 1998/99, when the total area grew from 3.25 mha in the previous year to 3.75 mha. This area is projected to grow by another 350,000 hectares over the next decade.

Another region for growth in the sunflower area planted is the Rest of the World, which includes Eastern Europe. In addition, farmers in countries like India are also warming up to this cash crop, and the total area might increase there as well in the coming years.

Argentina is, by far, the world's largest exporter of sunflower seed meal and oil, while the EU is the largest importer of sunflower seeds and meal. Russian imports of sunflower meal and oil are projected to continue their upward trend as the economy begins a positive growth path.

Sunflower oil consumption is also on the increase. Total consumption is expected to reach about 11.3 mmt by the end of the projection period. New markets are likely to emerge for sunflower oil, showing promise for extended growth in this sector. Countries like India and China hold the key to the ultimate outcome, as consumption in both these countries is steadily rising. In fact, Indian traders foresee sunflower oil demand increasing rapidly, primarily due to the domestic price advantage compared to palm oil.

### **Sunflower Seed Trade**

	98/99	99/00	00/01	01/02	02/03	03/04	04/05	05/06	06/07	07/08	08/09
Net Exporters					(Thousa	and Metric	Tons)				
Argentina	800	753	779	807	832	853	879	901	927	947	976
China	5	20	33	30	30	29	31	31	31	30	30
Russia	895	913	937	965	996	1,029	1,065	1,102	1,140	1,179	1,218
Ukraine	1,085	1,110	1,140	1,171	1,202	1,232	1,263	1,294	1,324	1,355	1,385
Other Former Soviet Union	108	107	102	96	94	95	96	100	100	103	109
Total Net Exports	2,893	2,903	2,992	3,068	3,153	3,238	3,333	3,426	3,521	3,614	3,719
Net Importers											
European Union	2,553	2,793	2,912	2,974	3,027	3,084	3,118	3,162	3,212	3,284	3,365
Rest of World	241	160	129	144	176	205	265	314	359	380	404
Residual	99	-50	-50	-50	-50	-50	-50	-50	-50	-50	-50
Total Net Imports	2,893	2,903	2,992	3,068	3,153	3,238	3,333	3,426	3,521	3,614	3,719
					(U.S. Dolla	ars per Me	etric Ton)				
CIF Lower Rhine Price	274.64	250.64	250.93	251.88	251.68	250.35	250.67	249.69	250.03	248.67	249.76

### **Sunflower Meal Trade**

	98/99	99/00	00/01	01/02	02/03	03/04	04/05	05/06	06/07	07/08	08/09
Net Exporters					(Thousa	nd Metric	Tons)				
Argentina	2,260	2,225	2,225	2,275	2,328	2,378	2,427	2,479	2,529	2,581	2,632
China	0	3	1	3	0	-1	-2	-1	1	1	0
Ukraine	25	30	36	42	47	53	58	64	70	75	81
Total Net Exports	2,285	2,259	2,262	2,319	2,376	2,430	2,483	2,542	2,599	2,657	2,713
Net Importers											
European Union	2,031	1,993	1,993	2,023	2,055	2,123	2,176	2,238	2,293	2,363	2,402
Russia	8	17	13	-11	-30	-25	-30	-35	-39	-48	-48
Other Former Soviet Union	44	54	58	53	49	49	50	52	54	54	51
Rest of World	186	170	173	229	275	258	262	261	266	262	283
Residual	16	25	25	25	25	25	25	25	25	25	25
Total Net Imports	2,285	2,259	2,262	2,319	2,376	2,430	2,483	2,542	2,599	2,657	2,713
					(U.S. Dolla	ars per Me	tric Ton)				
CIF Rotterdam Price	83.00	84.32	87.51	90.91	94.19	96.29	98.70	100.76	102.89	103.86	106.51

### **Sunflower Oil Trade**

	98/99	99/00	00/01	01/02	02/03	03/04	04/05	05/06	06/07	07/08	08/09
Net Exporters					(Thousa	and Metric	Tons)				
Argentina	1,734	1,731	1,723	1,763	1,805	1,843	1,878	1,916	1,952	1,990	2,026
China	0	0	0	0	0	0	0	0	0	0	0
European Union	248	216	239	234	220	204	198	186	187	195	219
Ukraine	-9	-19	-42	-42	-48	-42	-36	-24	-19	6	42
Total Net Exports	1,973	1,927	1,920	1,956	1,978	2,005	2,040	2,078	2,120	2,190	2,286
Net Importers											
Russia	348	375	384	392	400	408	416	424	433	439	445
Other Former Soviet Union	94	89	110	129	142	152	162	170	177	167	155
Rest of World	1,745	1,713	1,676	1,685	1,685	1,695	1,712	1,734	1,760	1,834	1,935
Residual	-215	-250	-250	-250	-250	-250	-250	-250	-250	-250	-250
Total Net Imports	1,973	1,927	1,920	1,956	1,978	2,005	2,040	2,077	2,119	2,190	2,286
					(U.S. Dolla	ars per Me	etric Ton)				
FOB NW Europe Price	608.95	583.81	579.28	566.40	549.96	535.47	531.89	525.89	528.78	533.52	543.10

### **World Palm Oil Complex Trade**

While planting of palm trees is on the rise by traditional producers such as Malaysia and Indonesia, the palm oil market will also be affected by the increased emphasis on palm production in major importing countries such as India.

The EU accounts for almost all world trade in palm kernel meal and is expected to import 733 tmt more meal by the end of the period. Its palm oil imports are expected to increase by more than 660 tmt by 2008/09.

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.

During 1997/98, Malaysian and Indonesian palm oil production declined by 6 to 7 percent. Although production is slightly higher in 1998/99, palm oil was still selling at a premium over other vegetable oils. This resulted in some substitution away from palm oil by major importing countries.

A steady increase in palm oil production is projected for Malaysia and Indonesia from about 14.3 mmt at present to about 18.6 mmt by 2008/09. Palm oil consumption is expected to drive this surge, mainly from countries like China and India, whose demand for palm oil is projected to increase the total trade by about 2.5 mmt by the end of the period.

### **World Palm Trade**

	98/99	99/00	00/01	01/02	02/03	03/04	04/05	05/06	06/07	07/08	08/09
Palm Oil											
Net Exporters						and Metric	,				
Malaysia	7,345	7,289	7,634	7,673	7,814	7,865	7,996	8,089	8,223	8,331	8,443
Indonesia	2,450	2,737	2,789	3,145	3,296	3,346	3,430	3,524	3,639	3,744	3,744
Total Net Exports	9,795	10,026	10,423	10,818	11,110	11,211	11,426	11,613	11,862	12,075	12,187
Net Importers											
China	1,250	1,288	1,330	1,331	1,363	1,423	1,495	1,552	1,610	1,656	1,706
European Union	1,835	1,864	1,952	2,022	2,089	2,154	2,215	2,277	2,331	2,384	2,444
Rest of World	5,225	5,373	5,690	6,065	6,309	6,334	6,466	6,584	6,771	6,934	6,986
Residual	1,485	1,500	1,450	1,400	1,350	1,300	1,250	1,200	1,150	1,100	1,050
Total Net Imports	9,795	10,026	10,423	10,818	11,110	11,211	11,426	11,613	11,862	12,075	12,187
Palm Kernel Meal Net Exporters											
Malaysia	1,376	1,352	1,402	1,403	1,441	1,456	1,486	1,505	1,533	1,555	1,580
Indonesia	745	785	833	930	981	1,014	1,051	1,090	1,126	1,156	1,190
Rest of World	99	86	113	118	122	123	125	126	127	126	127
Total Net Exports	2,220	2,223	2,348	2,451	2,544	2,593	2,662	2,721	2,786	2,836	2,897
Net Importers	98/99	99/00	00/01	01/02	02/03	03/04	04/05	05/06	06/07	07/08	08/09
European Union	2,220	2,223	2,348	2,451	2,544	2,593	2,662	2,721	2,786	2,836	2,897
Residual	0	0	0	0	0	0	0	0	0	0	0
Total Net Imports	2,220	2,223	2,348	2,451	2,544	2,593	2,662	2,721	2,786	2,836	2,897
Palm Kernel Oil											
Net Exporters											
Malaysia	440	410	439	509	406	395	398	387	387	382	667
Indonesia	516	547	594	673	709	730	755	779	805	829	845
Total Net Exports	956	957	1,033	1,182	1,115	1,125	1,153	1,166	1,193	1,210	1,511
Net Importers											
European Union	496	497	500	505	511	518	525	533	540	547	554
Rest of World	381	360	438	587	520	527	553	563	588	603	902
Residual	70	100	95	90	85	80	75	70	65	60	55
Total Net Imports	947	957	1,033	1,182	1,115	1,125	1,153	1,166	1,193	1,210	1,511
CIF Rotterdam Prices					(U.S. Dolla	ars per Me	etric Ton)				
Palm Oil	640.00	575.87	553.92	538.98	523.17	509.31	505.78	499.98	505.07	511.93	518.18
Palm Kernel Oil	623.00	577.68	575.04	561.61	543.69	528.41	527.04	522.61	529.44	538.65	537.65
Palm Kernel Meal	65.00	66.37	70.01	73.86	77.56	79.92	82.62	84.91	87.29	88.37	90.51

#### **World Peanut Trade**

World area under peanuts is projected to grow by another 325 thousand hectares in the coming decade, increasing the total production to 28.1 mmt by 2008/09. One distinguishing 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), while only about 10 percent of other oilseeds are directly used as food. In addition, most of the production is either consumed or processed domestically, and only a small fraction is traded globally (about 6 to 7 percent of total production).

China is the largest peanut producer in the world, with 10.2 mmt from 3.8 million hectares in 1998/99. As increases are projected in both Chinese peanut area, as well as productivity, total peanut production is projected to increase by another 1.7 mmt by the end of the projection period to 11.9 mmt.

India ranks first in world harvested peanut area. However, due to extremely low productivity (about 1 mt per hectare, compared to about 3 mt per hectare in China), total output is only about 8 mmt per year.

The European Union is, by far, the largest importer of all peanut products and is expected to remain so over the projection period.

About 45 percent of Chinese peanut output is used in direct food consumption, while most of the rest is crushed for oil and meal. Subsequent to increases in crush amounts over the projection years, Chinese total meal and oil production is expected to increase by 19 percent and 21.2 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. Although India exports small amounts of both peanuts and peanut meal, there are no imports of peanut oil. This is primarily due to the high premium on peanut oil in world markets, inducing the government to import the cheaper oils (like sunflower, soybean, or palm) instead.

While consumption of most of the other oils is increasing globally, per capita consumption of peanut oil is mostly stagnant or even showing a slight decline. This can mostly be attributed to the relatively higher levels of saturated fat in the composition of peanut oil, compared to other vegetable oils such as soybean or sunflower.

### **World Peanut Trade**

	98/99	99/00	00/01	01/02	02/03	03/04	04/05	05/06	06/07	07/08	08/09
Peanut											
Net Exporters						nd Metric 1	ons)				
China	270	279	274	271	269	267	268	269	272	274	278
India	180	185	189	194	199	204	209	214	219	225	230
United States	271	310	309	310	308	309	304	303	301	300	298
Total Net Exports	721	773	772	775	775	780	781	787	793	799	807
Net Importers											
European Union	514	506	505	505	505	505	505	505	505	505	505
Rest of World	191	217	218	220	220	224	226	231	238	243	252
Residual	16	50	50	50	50	50	50	50	50	50	50
Total Net Imports	721	773	772	775	775	780	781	787	793	799	807
Peanut Meal											
Net Exporters											
China	0	4	5	5	4	3	3	3	4	5	6
India	250	269	261	254	246	239	231	224	216	209	201
United States	18	16	16	14	16	17	16	17	17	17	18
Total Net Exports	268	288	283	272	271	274	276	279	283	286	290
Net Importers											
European Union	216	220	217	214	211	209	207	205	203	202	199
Rest of World	43	43	51	53	60	65	69	74	80	85	91
Residual	9	25	15	5	-5	-15	-25	-35	-45	-55	-65
Total Net Imports	268	288	283	272	271	274	276	279	283	286	290
Peanut Oil											
Net Exporters											
United States	5	5	5	5	5	5	4	4	4	4	4
Rest of World	154	160	161	165	170	174	175	177	177	177	175
Total Net Exports	159	165	167	170	174	178	180	182	182	181	179
Net Importers											
China	41	1	5	6	7	7	8	12	17	21	27
European Union	131	144	142	143	148	152	151	150	145	140	132
Residual	9	20	20	20	20	20	20	20	20	20	20
Total Net Imports	159	165	167	170	174	178	180	182	182	181	179

#### World Rice Trade

Although consumption is projected to increase by a significant amount, world rice trade is expected to increase by only 3 mmt, suggesting thinness of the world rice market, where less than 5 percent trade is unlikely to change in the future.

Thailand rice production growth and declining per capita consumption enables Thailand to expand its exports by more than 1 mmt in the next decade.

Vietnam, India, and Pakistan also expand their rice exports during the projection period. In the last decade Vietnam has transformed itself from an importer to the second largest exporter, and exports will increase to 4.63 mmt in the next 10 years.

Indian rice exports are expected to grow from 1.94 mmt in a 1999/00 to 3.12 mmt in 2008/09

Per capita rice consumption in Pakistan is flat; most of the additional production will find its way through the export market, increasing its exports to 2.25 mmt.

Other Asian exporters include China, Taiwan, and Myanmar, which account for a small proportion of total Asian exports.

Strong growth in U.S. domestic uses from steadily rising per capita consumption and slow production growth cause exports to fall by 0.5 mmt between 1999 and 2008.

In the future, under MERCOSUR Argentina and Uruguay continue to export to Brazil.

Production returns to a more normal level this year in Indonesia, and imports are projected to decline to 2 mmt. Demand arising from rising per capita consumption and higher population growth is likely to outpace domestic supply, requiring Indonesia to increase its imports by more than 50 percent in the next 10 years.

Under GATT minimum-access commitments, Japan and South Korea have agreed to import 0.758 mmt of rice by 2001, and must import 0.205 mmt by 2004. With declining per capita consumption, Japan and South Korea will have to reduce domestic production to accommodate imported rice.

**Rice Trade** 

	98/99	99/00	00/01	01/02	02/03	03/04	04/05	05/06	06/07	07/08	08/09
Net Exporters					(Millio	n Metric T	ons)				
Argentina	0.60	0.64	0.66	0.68	0.69	0.71	0.73	0.75	0.77	0.79	0.80
China	0.95	0.58	0.96	1.24	1.19	1.11	1.12	1.03	0.91	0.82	0.72
India	2.85	2.12	1.94	2.09	2.29	2.39	2.44	2.57	2.80	2.97	3.12
Myanmar (Burma)	0.10	0.13	0.15	0.15	0.14	0.11	0.09	0.06	0.06	0.06	0.09
Pakistan	2.00	2.04	2.08	2.10	2.12	2.14	2.16	2.19	2.21	2.23	2.25
Taiwan	0.04	0.07	0.10	0.11	0.12	0.12	0.11	0.09	0.06	0.04	0.01
Thailand	5.50	5.86	5.88	5.95	6.03	6.12	6.22	6.31	6.40	6.50	6.59
Uruguay	0.70	0.74	0.77	0.80	0.83	0.87	0.90	0.94	0.99	1.04	1.09
Vietnam	3.50	3.32	3.46	3.59	3.74	3.88	4.03	4.18	4.33	4.48	4.63
Total Non-U.S.	16.20	15.43	15.90	16.61	17.03	17.34	17.70	18.03	18.47	18.89	19.30
United States	2.54	2.88	2.80	2.74	2.69	2.64	2.60	2.54	2.49	2.43	2.38
Trade Share	31.2%	31.2%	31.2%	31.2%	31.2%	31.2%	31.2%	31.2%	31.2%	31.2%	31.2%
Total Net Exports	18.74	18.31	18.70	19.34	19.72	19.98	20.30	20.57	20.96	21.32	21.68
Net Importers											
Brazil	1.00	1.05	0.90	0.80	0.84	0.92	1.00	1.11	1.24	1.38	1.53
European Union	0.22	0.26	0.26	0.27	0.29	0.30	0.32	0.35	0.38	0.41	0.44
Indonesia	2.00	2.33	2.46	2.66	2.69	2.69	2.75	2.85	3.01	3.12	3.16
Japan	0.30	0.68	0.76	0.76	0.76	0.76	0.76	0.76	0.66	0.56	0.56
Phillippines	1.50	1.33	1.47	1.62	1.76	1.82	1.87	1.89	1.96	2.03	2.08
Saudi Arabia	0.75	0.79	0.81	0.83	0.85	0.87	0.90	0.92	0.95	0.97	1.00
South Korea	0.13	0.10	0.10	0.13	0.15	0.18	0.21	0.21	0.21	0.21	0.21
Rest of World	11.23	11.77	11.94	12.28	12.39	12.44	12.51	12.48	12.57	12.65	12.69
Residual	1.62	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Net Imports	18.74	18.31	18.70	19.34	19.72	19.98	20.30	20.57	20.96	21.32	21.68
Rice Prices					(U.S. Dolla	ars per Me	etric Ton)				
FOB Bangkok 5% Parboiled	295.00	294.85	297.38	301.97	304.93	311.44	314.11	319.67	322.97	325.58	329.84
FOB U.S. Houston	384.93	367.73	370.60	376.33	379.64	388.23	390.88	398.60	401.90	405.65	410.94

#### World All-Cotton Trade

Net cotton trade fell considerably in 1998/99 to 3.73 mmt due to China's reduced imports and the continued economic difficulties in the rest of Asia.

The United States saw its share of world net trade fall by almost half as U.S. net exports fell from 1.63 mmt in 1997/98 to 0.86 mmt in 1998/99, one of the lowest numbers in recent times.

World cotton prices are down substantially from the 1997/98 level with the A-Index averaging \$1,278 per metric ton, a \$313 per metric ton reduction from just one year ago. Prices will modestly decline through 2000 and begin to rebound gradually in 2001/02.

Net exports by Africa continue to grow in 1998/99, reaching 961 tmt as a result of increased production from strong yields and record harvested area. Net exports will increase to 988 tmt by 2008/09.

A continued increase in Australian area and production, coupled with low domestic mill use, strengthens Australia's role in the world cotton market. Net exports reach 945 tmt by 2008/09.

Weaker cotton prices are expected to reduce cotton area in 1999. In the long run, India is expected to remain a net exporter, reaching a trade surplus of 100 tmt of cotton by 2008/09.

Reduced beginning stocks will limit supplies, in Pakistan, which will be a net importer of cotton in 1998/99. With limited growth in production, it is projected that Pakistan will remain a small net importer for most of the period.

Turkish domestic consumption and imports are projected to be down sharply from the 1997/98 levels. Economic problems in major export markets have hurt the Turkish textile industry. In the long run, growth in domestic use is expected to return, along with increased imports.

Continued strength in Brazilian area and improving yields have led to a small increase in production, reaching 392 tmt in 1998/99. Increases have led Brazilian production to a decrease in imports to 315 tmt in 1998/99. Production will fail to keep pace with domestic use and imports reach 458 tmt by 2008/09.

China changed its net trade position from importing 507 tmt in 1997/98 to exporting 26 tmt in 1998/99. In the long run, cotton will continue to lose area to feed grains and oilseeds, limiting production. As a result, China will return to a net importer in 1999/00.

Other Asian countries will continue to rely on other markets to meet its raw cotton needs. Net imports show modest growth over the period as consumption expands. Net imports are expected to expand from 1.07 mmt in 1998/99 to 1.15 mmt in 2008/09.

**All-Cotton Trade** 

	98/99	99/00	00/01	01/02	02/03	03/04	04/05	05/06	06/07	07/08	08/09
Net Exporters					(Thousa	and Metric	Tons)				
Africa	961	978	971	954	954	960	965	971	975	982	988
Argentina	217	229	227	226	228	232	237	241	244	246	248
Australia	653	719	757	776	797	819	841	863	884	905	925
India	59	112	84	93	100	100	101	104	104	104	100
Other Former Soviet Union	245	232	228	223	222	223	225	227	228	229	230
Other Latin America	-160	-168	-174	-181	-186	-188	-189	-190	-191	-193	-196
Other Middle East	238	221	214	212	213	215	215	216	216	216	216
Pakistan	-21	-15	-17	-16	-13	-9	-6	-3	-1	0	38
Turkey	-152	-158	-175	-187	-188	-190	-192	-197	-202	-208	-216
Uzbekistan	826	843	835	825	822	823	824	824	824	824	824
Total Non-U.S.	2,866	2,994	2,950	2,925	2,950	2,986	3,022	3,056	3,081	3,105	3,157
United States	859	1,106	1,258	1,338	1,310	1,266	1,215	1,181	1,166	1,168	1,159
Total Net Exports	3,726	4,100	4,208	4,264	4,260	4,253	4,237	4,236	4,248	4,273	4,315
U.S. Trade Share of Net	23.1%	27.0%	29.9%	31.4%	30.8%	29.8%	28.7%	27.9%	27.5%	27.3%	26.9%
Net Importers											
Brazil	315	366	387	396	405	412	420	427	435	446	458
Canada	66	67	68	69	70	71	72	73	74	75	76
China	-26	283	353	385	370	351	321	308	302	304	318
Eastern Europe	284	295	296	292	291	292	293	295	297	299	303
European Union	748	713	695	693	692	692	693	696	700	705	711
Japan	282	266	254	244	236	232	227	220	213	208	201
Mexico	283	321	354	385	403	412	419	425	431	435	439
Other Asia	1,068	1,080	1,097	1,104	1,107	1,112	1,117	1,123	1,129	1,136	1,145
Other Western Europe	33	33	33	32	32	31	31	30	30	29	29
Russia	184	176	172	169	167	166	167	170	174	179	185
South Korea	278	282	283	279	274	268	263	258	253	248	243
Taiwan	271	268	265	264	264	263	262	261	260	259	258
Residual	-60	-50	-50	-50	-50	-50	-50	-50	-50	-50	-50
Total Net Imports	3,726	4,100	4,208	4,264	4,260	4,253	4,237	4,236	4,248	4,273	4,315
Cotton Prices											
Cotlook A Index *					(U.S. Dolla	ars per Me	tric Ton)				
CIF Northern Europe	1,278	1,231	1,218	1,280	1,356	1,419	1,471	1,521	1,565	1,604	1,632
U.S. Farm Price	1,378	1,201	1,170	1,218	1,278	1,327	1,368	1,406	1,441	1,471	1,493

<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 will decrease raw sugar price in 1998/99 by more than 35 percent. Sugar price is expected to rise steadily over the projection period, rising by approximately 50 percent, but still below the 1997/98 level. During the projection period, sugar trade is projected to increase by more than 4 mmt.

Brazilian sugar exports are projected to increase by 1 mmt between 1999/00 and 2008/09.

Although Australian sugar consumption is projected to rise slowly in the future, production will still exceed consumption, making Australia a larger exporter with exports rising from 4.4 to 5.3 mmt.

El Nino is also projected to adversely affect this year's Thai production, inducing further decline in exports. Assuming normal weather during the remaining projection period, raw sugar exports will increase by 0.7 mmt.

For the projection period, Cuban sugar exports are projected to reverse its downward trend and increase by more than 0.5 mmt.

Canadian domestic demand will be largely met from imported raw sugar, rising by 0.25 mmt during the projection period.

Transition economies, particularly the FSU, account for a large share of world sugar imports, where most of the growing demand will be met by additional imports, increasing from 5.1 to 5.75 mmt.

Both China and India are projected to be small importers of sugar during the projection period.

Japanese sugar imports are projected to continue to decline in the future because of declining per capita consumption and slower population growth.

South Korea appears to be expanding their imports throughout the next decade to meet rising domestic consumption.

Despite its mandatory sugar planting policy, Indonesia will be a growing sugar importer in the next decade. Imports are projected to grow from 1.2 mmt in 1999/00 to 1.55 mmt in 2008/09.

# Sugar Trade

	98/99	99/00	00/01	01/02	02/03	03/04	04/05	05/06	06/07	07/08	08/09
Net Exporters					(Thousa	and Metric	Tons)				
Australia	4,418	4,591	4,644	4,723	4,816	4,916	5,021	5,100	5,169	5,235	5,299
Brazil	7,460	6,984	6,834	6,976	7,116	7,265	7,419	7,585	7,710	7,891	8,094
Cuba	2,500	2,551	2,615	2,664	2,721	2,768	2,825	2,886	2,953	3,020	3,089
European Union	3,768	3,584	3,753	3,822	3,837	3,828	3,831	3,837	3,845	3,854	3,867
India	-340	-550	-553	-582	-612	-644	-672	-604	-574	-543	-528
Mexico	970	985	952	932	921	915	915	920	931	943	960
South Africa	1,400	1,418	1,440	1,464	1,489	1,517	1,548	1,582	1,620	1,661	1,706
Thailand	2,600	3,198	3,348	3,447	3,517	3,580	3,640	3,702	3,766	3,834	3,905
Total Net Exports	23,116	23,310	23,586	24,029	24,417	24,789	25,199	25,613	25,993	26,439	26,919
Net Importers											
Algeria	920	938	948	958	968	978	987	997	1,006	1,014	1,022
Canada	1,195	1,205	1,222	1,246	1,273	1,301	1,330	1,358	1,385	1,411	1,436
China	530	394	505	516	516	520	566	629	666	732	819
Eastern Europe	477	553	473	458	458	460	460	460	453	448	442
Egypt	600	692	688	679	675	675	677	683	688	707	727
Former Soviet Union	5,115	5,047	5,134	5,206	5,250	5,300	5,369	5,451	5,543	5,644	5,750
Indonesia	1,600	1,226	1,274	1,339	1,417	1,466	1,494	1,517	1,529	1,535	1,541
Japan	1,563	1,517	1,481	1,455	1,429	1,380	1,323	1,271	1,226	1,172	1,121
South Korea	1,200	1,264	1,285	1,312	1,343	1,374	1,405	1,435	1,461	1,486	1,509
Rest of World	4,261	4,589	4,753	4,881	4,970	5,059	5,255	5,459	5,622	5,805	5,978
Total Non-U.S.	21,304	21,478	21,820	22,136	22,413	22,662	23,042	23,368	23,655	24,000	24,376
United States	1,812	1,833	1,766	1,892	2,004	2,126	2,157	2,244	2,338	2,439	2,544
Trade Share	7.8%	7.9%	7.5%	7.9%	8.2%	8.6%	8.6%	8.8%	9.0%	9.2%	9.4%
Total Net Imports	23,116	23,310	23,586	24,029	24,417	24,789	25,199	25,613	25,993	26,439	26,919
Sugar Prices					(U.S. Dolla	ars per Me	etric Ton)				
FOB Caribbean Price	165	177	191	199	206	211	216	221	229	237	246
New York Spot	485	475	482	486	488	491	492	494	496	498	500

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

The U.S. share of beef exports by modeled countries swells from 20.3 percent in 1998 to 35.0 percent in 2007. With the exception of Argentina and Canada, the shares of other major beef exporters decline.

Increased meat packing capacity in Canada reduces the number of slaughter cattle exported to the United States, leading to a 15 percent rise in the Canadian supply of beef for export.

Beef consumption in Mexico will outgrow production prompting an average increase in beef imports of 15 tmt each year.

FMD-free status is expected to increase Argentina's export demand, contributing to the incentives for producers to expand production and exports annually, by 1.4 and 3.7 percent, respectively.

WTO constraints on EU subsidized beef exports limit the share of excess supply that can be absorbed by exports; therefore, beef stocks rise more than 200 tmt each year, reaching 1.8 mmt by 2008.

EU beef exports are greatly affected by the Russian crisis. EU beef export levels fall 5 to 6 percent below the subsidized export limit in 1998 and 1999.

Russian imports continue to decline through 2000.

Korean beef imports are expected to fall short of their minimum access commitments.

Australian cattle exports will slowly recover to pre-Asian crisis levels by the end of the projection period.

### **Beef and Veal Trade**

	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
Net Exporters					(Thousa	ınd Metric	Tons)				
Argentina	240	310	353	392	428	452	461	447	439	435	440
Australia	1,187	1,188	1,172	1,156	1,148	1,137	1,133	1,135	1,139	1,145	1,149
Brazil	245	271	280	278	278	273	267	262	258	260	265
Canada	135	126	123	147	178	204	215	222	231	247	254
China - Mainland	43	48	57	50	42	32	25	18	13	11	10
Czech Republic	15	18	21	23	22	20	17	14	12	10	10
European Union *	491	446	426	427	429	428	427	426	425	426	428
Hungary	7	7	7	7	7	7	6	6	6	5	5
New Zealand	508	508	507	508	514	521	530	539	548	559	569
Poland	35	31	23	13	7	-5	-10	-14	-16	-15	-13
Thailand	0	0	0	0	0	0	0	0	0	0	0
Ukraine	48	33	19	10	9	6	-1	-7	-10	-10	-10
United States	-205	-249	-194	-124	-37	103	245	426	578	600	543
Total Net Exports	2,748	2,737	2,795	2,886	3,024	3,176	3,316	3,473	3,622	3,674	3,650
Net Importers											
China - Hong Kong	52	51	51	53	54	55	58	60	62	63	64
Indonesia	1	1	1	1	1	1	1	1	1	1	1
Japan	964	928	904	901	907	954	1,019	1,088	1,149	1,172	1,188
Mexico	171	235	262	276	287	300	308	314	320	319	325
Other Eastern Europe	44	45	47	48	50	51	51	50	47	39	32
Other Former Soviet Union	-57	-27	33	63	76	80	83	96	103	102	84
Philippines	65	61	64	62	63	67	72	78	84	87	90
Russia	491	418	416	470	522	580	627	668	710	740	758
South Korea	125	168	184	200	263	296	308	320	324	328	329
Taiwan	76	74	75	78	81	85	90	95	100	104	107
Rest of World	816	784	758	735	721	707	699	704	722	718	673
Total Net Imports	2,748	2,737	2,795	2,886	3,024	3,176	3,316	3,473	3,622	3,674	3,650
Nebraska Direct					(U.S. Dolla	ars per Me	tric Ton)				
Fed Steer Price	1,355	1,449	1,528	1,605	1,665	1,644	1,613	1,563	1,530	1,569	1,644

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

#### **World Pork Trade**

World pork output is projected to reach 84.3 mmt by 2008, an increase of 24.5 percent over 1998 levels. Nearly 80 percent of the total increase in world pork output is projected to occur in China.

World pork trade is projected to grow 36 percent in the next decade. Low-cost feed and capital inputs, coupled with high productivity, enable the United States to capture 76 percent of the growth in international markets. The U.S. share of total pork trade increases from 12 percent in 1998 to 32.6 percent in 2008.

New meat packing facilities in Canada siphon hogs away from live hog exports to the United States, decreasing Canadian live trade by 62 percent in the next 10 years. Consequently, Canadian pork exports increase as much as 17 percent above 1998 levels.

Total EU production increased 5 percent, causing the average producer price to drop 28 percent. EU pork production is expected to continue to grow at 0.5 percent annually during the next decade.

In 1998, 56 percent of the EU's pork exports were unsubsidized. As WTO limitations reduce subsidized exports, unsubsidized shipments grow slightly, enabling EU pork exports to remain near 1.1 mmt.

Polish pork exports dropped 15.5 percent in 1998. Economic recovery in Russia and other NIS boost the demand for Polish pork, keeping export levels in the new millennium above the 1997 high of 284 tmt.

Russian pork imports will drop an additional 45 tmt by 2000. Although Russian pork imports resume growing in the next century, they do not exceed 350 tmt.

Japanese pork imports will decline an additional 6.4 percent in the next two years. However, when economic growth in Japan resumes, pork imports increase 5 percent annually for the remainder of the projection period.

Hong Kong pork imports rise to 337 tmt by 2008; however, between 100 and 150 tmt will most likely be unofficially transshipped into Mainland China.

### **Pork Trade**

	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
Net Exporters					(Thousa	nd Metric	Tons)				
Australia	6	11	17	17	` 15	9	12	13	11	8	9
Brazil	77	106	134	136	129	106	117	123	113	100	103
Canada	340	328	358	425	435	387	370	369	367	343	333
China - Mainland	87	77	93	88	78	59	63	63	53	43	42
Czech Republic	10	17	26	27	24	15	18	18	15	11	13
European Union	1,040	1,059	1,082	1,082	1,068	1,016	1,047	1,061	1,040	1,012	1,023
Hungary	18	34	44	46	44	34	37	37	33	28	29
Poland	220	248	293	306	299	271	280	284	275	264	270
Taiwan	-11	-10	-5	15	25	40	50	50	50	50	50
Thailand	0	0	0	0	0	0	0	0	0	0	0
Ukraine	5	11	13	5	3	-3	1	2	0	-4	-3
United States	244	324	379	423	539	584	626	701	780	836	902
Total Net Exports	2,036	2,208	2,433	2,571	2,660	2,517	2,620	2,722	2,737	2,691	2,771
Net Imports											
Argentina	66	63	60	60	61	64	63	62	64	66	65
China - Hong Kong	213	210	184	195	219	264	256	259	282	308	312
Indonesia	0	0	0	0	0	0	0	0	0	0	0
Japan	735	719	686	705	748	841	846	843	910	989	1,020
Mexico	40	32	24	24	31	50	45	43	52	63	64
New Zealand	8	7	6	5	6	7	6	5	6	6	6
Other Eastern Europe	116	113	111	108	106	109	102	94	90	87	83
Other Former Soviet Union	-26	-18	9	8	8	15	14	10	10	14	10
Philippines	7	4	4	4	5	7	5	5	6	8	7
Russia	343	307	298	309	324	343	337	332	338	348	347
South Korea	-40	-51	-37	-36	-37	-17	-24	-26	-17	-5	-7
Rest of World	573	823	1,088	1,188	1,190	834	970	1,094	996	809	863
Total Net Imports	2,036	2,208	2,433	2,571	2,660	2,517	2,620	2,722	2,737	2,691	2,771
Iowa-Southern Minnesota				(	(U.S. Dolla	ars per Me	tric Ton)				
Barrow and Gilt Price	700	781	937	980	958	805	922	994	938	864	920

### **World Poultry Trade**

Over the next 10 years, world poultry production will grow briskly at 2.8 percent each year, and poultry exports increase 3.4 percent annually.

Broiler trade increases 40 percent from 1998 to 2008 for a total change of more than 1.3 mmt.

More than 55 percent of growth in net imports occurs in China and Japan, with additional imports by each country in excess of 335 tmt by 2008.

U.S. exporters capture most of the increase in world broiler imports over the next decade, and Brazil secures an additional 164 tmt of exports.

The complete liberalization of Mexico's broiler sector under NAFTA prompts net imports to nearly double in 2003. Mexican net imports of broiler meat continue to increase 5.3 percent annually until 2008.

Brazilian broiler exports expand an average of 16 tmt annually.

EU broiler consumption outpaces production, putting upward pressure on domestic prices and causing EU broiler exports to decline 1.7 percent annually.

Economic recovery, with Russian poultry imports rise 2.2 percent annually after the year 2000.

Depreciation of the Thai Baht strengthens Thailand's broiler exports in 1998 and 1999. In the long run, domestic consumption in Thailand reduces its exportable surplus of broiler meat and puts upward pressure on prices.

### **Broiler Meat Trade**

	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
Net Exporters					(Thousa	nd Metric	Tons)				
Australia	10	10	8	8	. 8	7	<sup>'</sup> 7	6	6	6	6
Brazil	570	617	630	643	654	669	682	696	709	719	734
European Union	542	529	500	492	479	471	460	450	439	430	426
Hungary	68	72	66	64	60	57	53	50	47	45	44
Other Former Soviet Union	19	23	14	12	8	6	12	11	9	7	6
Thailand	240	231	217	214	210	206	203	199	196	193	192
United States	2,024	1,987	2,270	2,365	2,522	2,779	2,936	3,077	3,228	3,362	3,451
Total Net Exports	3,473	3,469	3,706	3,797	3,941	4,194	4,353	4,491	4,634	4,762	4,858
Net Importers											
Argentina	35	33	37	38	40	42	44	46	48	50	51
Canada	20	21	25	24	26	28	30	31	32	33	34
China - Mainland	340	388	404	448	503	552	594	641	688	732	770
China - Hong Kong	219	258	275	286	296	305	314	323	332	339	346
Czech Republic	0	0	1	2	3	4	5	6	6	7	7
Indonesia	0	1	2	2	2	3	3	3	3	4	4
Japan	492	519	560	585	619	651	690	723	758	794	829
Mexico	128	124	137	140	146	290	315	332	349	364	375
Other Eastern Europe	24	22	23	22	22	21	21	21	21	20	20
Poland	44	36	42	44	47	49	51	54	55	56	55
Russia	751	684	714	740	765	782	797	810	824	838	850
Saudi Arabia	256	268	277	271	269	266	263	261	259	257	254
South Korea	12	21	34	40	44	50	57	65	74	83	91
Ukraine	25	25	27	27	28	28	28	29	29	29	30
Rest of World	1,126	1,070	1,147	1,128	1,131	1,126	1,140	1,145	1,155	1,158	1,143
Total Net Imports	3,473	3,469	3,706	3,797	3,941	4,194	4,353	4,491	4,634	4,762	4,858
				(	U.S. Dolla	ars per Me	tric Ton)				
U.S. 12-City Price	1,391	1,310	1,242	1,258	1,252	1,256	1,253	1,248	1,240	1,239	1,254

# **World Dairy Trade**

Milk production in modeled countries increases 12.7 percent in the next decade, with India, the United States, Brazil, and China accounting for 31.5 mmt of the 45.8 mmt increase.

Cheese and butter production increase 1.6 and 1.3 percent, respectively, each year. Production of whole milk powder and nonfat dry milk grows at roughly half the rate of butter.

International prices for butter, WMP, and NFD are projected to decline between 5 and 12 percent over the next three years, as a consequence of weak import demand in Russia, Japan, and Brazil.

The FOB Northern European price for cheese, conversely, rises 5.7 percent over the same period due to strong demand in the United States and Japan and declining exports from the European Union.

The rising popularity of fast food restaurants and western-style foods in Asia is expected to increase the demand for imported cheese in the region from Australia and New Zealand.

The United States switched from being a small net exporter of butter in 1997 to a net importer of 16 tmt in

1998. The United States is projected to remain a small net importer of butter until 2004.

The weak economic situation in Russia will reduce world imports by 10 tmt in 1999. The resumption of stronger global economic growth by the end of the century prompts a modest 11.5 percent increase in world butter trade from 2000 to 2008. Exporters in Australia, New Zealand, and the European Union satisfy most of the growth in butter imports.

Rising incomes in Mexico and Brazil are expected to stimulate greater demand for all dairy products in these countries, which will be met by domestic production.

Demand for imported dry milk remains stable in Asia. In the long run, rising demand for NFD in Mexico and Asia outpaces domestic production, causing imports and international prices to creep upward.

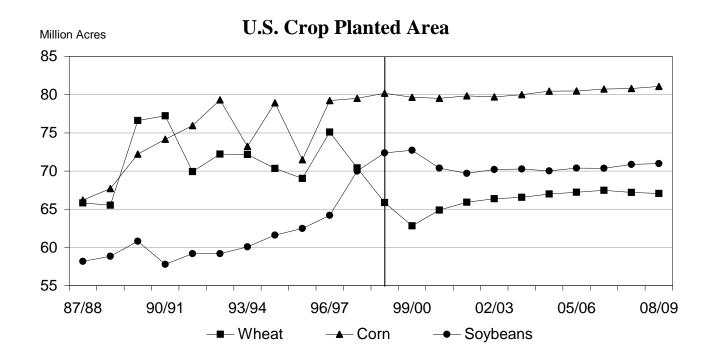
Whole milk powder trade is projected to grow a modest 4.5 percent over the next decade. Argentina, Australia, and New Zealand are able to supply the increase in WMP exports.

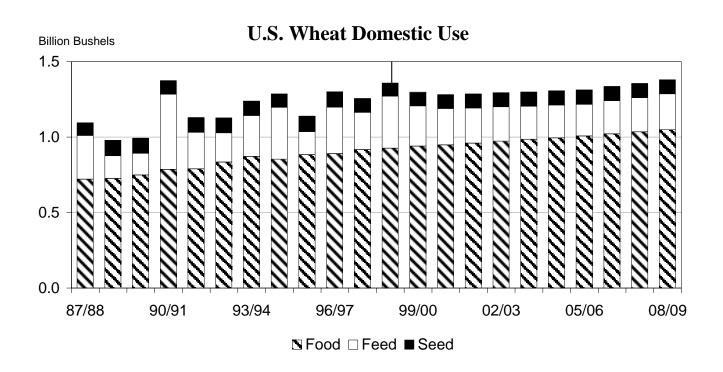
# **Dairy Product Trade**

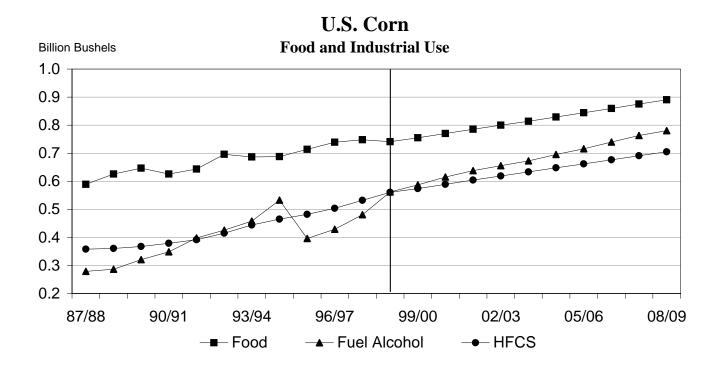
	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
Butter											
Net Exporters						nd Metric	Tons)				
Argentina	0	5	7	8	9	10	10	11	11	11	11
Australia	99	104	104	105	108	111	114	117	120	124	127
Canada	9	11	11	10	9	8	8	8	8	8	8
European Union	114	80	115	121	125	128	130	132	133	134	135
New Zealand	315	322	327	331	335	337	340	342	345	348	351
Poland	2	3	0	0	1	2	3	5	5	5	5
Ukraine	55	54	51	51	53	53	54	54	54	53	52
United States	-16	-8	-9	-5	-5	-3	0	0	2	4	5
Total Net Exports	578	571	606	621	635	646	659	669	678	687	694
Net Importers											
Brazil	6	4	5	4	3	2	2	2	3	4	5
Egypt	40	41	41	42	43	44	44	45	46	47	48
India	2	5	4	3	3	7	9	12	14	12	12
Japan	1	0	0	1	3	6	8	9	10	10	10
Mexico	15	14	17	16	16	16	16	16	17	18	18
Romania	2	2	3	3	3	3	3	4	4	4	4
Russia	193	175	189	199	207	213	219	225	228	227	223
Switzerland	4	7	6	6	6	6	6	6	6	6	6
Rest of World	316	324	340	348	351	351	352	351	354	361	370
Total Net Imports	578	571	606	621	635	646	659	669	678	687	694
Cheese											
Net Exporters											
Argentina	15	21	28	32	35	37	40	41	41	42	43
Australia	118	121	130	137	140	144	149	154	158	163	168
European Union	330	316	304	304	305	307	310	311	313	316	318
New Zealand	231	216	237	244	252	260	270	280	290	302	313
Poland	15	15	12	13	15	23	27	32	34	35	37
Switzerland	38	32	35	35	34	34	34	34	34	35	35
Total Net Exports	747	721	746	765	781	805	830	852	870	893	914
Net Importers											
Brazil	21	15	20	17	13	12	11	13	15	18	20
Canada	2	2	2	2	2	2	2	2	2	2	2
Egypt	13	13	12	10	9	9	9	9	10	11	13
Japan	180	192	196	204	214	225	238	251	264	278	292
Mexico	30	28	30	30	32	35	37	39	42	44	46
Romania	0	1	3	2	4	4	3	4	4	4	5
Russia	247	230	243	259	268	276	285	288	285	286	282
Ukraine	2	2	4	7	5	7	7	6	5	6	4
United States	114	115	117	117	117	117	118	118	118	119	119
Rest of World	138	123	120	117	117	118	120	122	125	126	128
Total Net Imports	747	721	746	765	781	805	830	852	870	893	914

### **Dairy Product Trade (continued)**

Nonfat Dry Milk   Net Exporters   Chapter		1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
Augentina 144 200 23 277 29 30 31 32 23 33 33 34 Australia 194 195 200 207 216 225 233 242 251 260 269 Canada 24 25 25 25 22 20 18 17 17 17 16 15 15 14 European Union 208 186 194 195 194 198 185 185 182 181 179 177 India 5 8 8 10 11 111 10 10 10 9 9 9 9 New Zealand 197 211 225 237 248 257 266 275 284 293 302 Poland 84 95 94 91 94 99 100 106 109 1112 115 Switzerland 7 4 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	Nonfat Dry Milk											
Australia	Net Exporters					(Thousa	nd Metric	Tons)				
Canada	Argentina	14	20	23	27	29	30	31	32	33	33	34
European Union	Australia	194	195	200	207	216	225	233	242	251	260	269
India												
New Zealand	•											
Polanci												
Switzerland         7         4         2 <t< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></t<>												
Ulrianine   S												
United States												
Total Net Exports 839 859 881 873 887 904 920 940 959 976 995  Net Importers  Brazil 47 41 46 43 42 43 44 47 49 53 56 13pan 65 62 61 65 69 74 78 81 83 84 86 Mexico 130 132 134 130 131 134 137 141 145 150 154 Romania 10 10 10 10 10 10 10 10 10 10 10 10 10			· ·									
Net Importers Brazil	United States	101	111	107	79	68	68	68	68	68	67	67
Brazil         47         41         46         43         42         43         44         47         49         53         56           Japan         65         62         61         65         69         74         78         81         83         84         86           Mexico         130         132         134         130         131         134         137         141         145         150         154           Romania         10         10         10         10         10         10         10         10         10         10         11         11           Russia         37         5         3         4         4         6         7         7         8         11         14           Rest of World         559         617         637         632         632         638         645         663         669         675           Total Net Imports         848         867         891         884         888         905         921         940         958         978         996           White Exporters         45         493         488         488 <th< td=""><td>Total Net Exports</td><td>839</td><td>859</td><td>881</td><td>873</td><td>887</td><td>904</td><td>920</td><td>940</td><td>959</td><td>976</td><td>995</td></th<>	Total Net Exports	839	859	881	873	887	904	920	940	959	976	995
Japan	Net Importers											
Mexico         130         132         134         130         131         134         137         141         145         150         154           Romania         10         10         10         10         10         10         10         10         10         11         11         11         Romania         10         10         10         10         10         10         10         11         11         11         Romania         137         5         3         4         4         6         7         7         8         11         11         14         Rest of World         559         617         637         632         632         638         645         663         669         675           Total Net Imports         848         867         891         884         888         905         921         940         958         978         996           Whole Milk Powder           Net Exportes         848         867         891         884         888         905         921         940         958         978         996           Argentina         79         93         97         100         10	Brazil	47	41	46	43	42	43	44	47	49	53	56
Romania   10   10   10   10   10   10   10   1												
Russia 37 5 3 4 4 4 6 7 7 7 8 11 14   Rest of World 559 617 637 632 632 638 645 654 663 669 675    Total Net Imports 848 867 891 884 888 905 921 940 958 978 996    Whole Milk Powder   Net Exporters   Argentina 79 93 97 100 102 105 108 110 112 115 117   Australia 107 111 117 122 129 134 139 144 149 155 161   European Union 519 483 450 438 436 434 432 429 427 425 422   New Zealand 359 336 362 367 370 375 381 388 396 404 412    Total Net Exports    Net Importers   Brazil 122 99 95 94 96 100 102 105 108 1,001 1,004 1,009 1,112    Net Importers   Brazil 122 99 95 94 96 100 102 1,007 1,0												
Rest of World         559         617         637         632         632         638         645         654         663         669         675           Total Net Imports         848         867         891         884         888         905         921         940         958         978         996           Whole Milk Powder           Net Exporters         Argentina         79         93         97         100         102         105         108         110         112         115         117           Australia         107         111         117         122         129         134         139         144         149         155         161           European Union         519         483         450         438         436         434         432         429         427         425         422           New Zealand         359         336         362         367         370         375         381         388         396         404         412           Total Net Exports         1,064         1,023         1,026         1,027         1,037         1,048         1,060         1,071         1,084												
Total Net Imports         848         867         891         884         888         905         921         940         958         978         996           Whole Milk Powder           Net Exporters           Argentina         79         93         97         100         102         105         108         110         112         115         117           Australia         107         111         117         122         129         134         139         144         149         155         161           European Union         519         483         450         438         436         434         432         429         427         425         422           New Zealand         359         336         362         367         370         375         381         388         396         404         412           Total Net Exports         1,064         1,023         1,026         1,027         1,037         1,048         1,060         1,071         1,084         1,099         1,112           Net Importers         Brazil         122         99         95         94         96         100         102         105 </td <td></td>												
Whole Milk Powder           Net Exporters         Argentina         79         93         97         100         102         105         108         110         112         115         117           Australia         107         111         117         122         129         134         139         144         149         155         161           European Union         519         483         450         438         436         434         432         429         427         425         422           New Zealand         359         336         362         367         370         375         381         388         396         404         412           Total Net Exports         1,064         1,023         1,026         1,027         1,037         1,048         1,060         1,071         1,084         1,099         1,112           Net Importers           Brazil         122         99         95         94         96         100         102         105         108         111         114           Rest of World         942         925 <td< td=""><td>Rest of World</td><td>559</td><td>617</td><td>637</td><td>632</td><td>632</td><td>638</td><td>645</td><td>654</td><td>663</td><td>669</td><td>675</td></td<>	Rest of World	559	617	637	632	632	638	645	654	663	669	675
Net Exporters         Argentina         79         93         97         100         102         105         108         110         112         115         117           Australia         107         111         117         122         129         134         139         144         149         155         161           European Union         519         483         450         438         436         434         432         429         427         425         422           New Zealand         359         336         362         367         370         375         381         388         396         404         412           Total Net Exports         1,064         1,023         1,026         1,027         1,037         1,048         1,060         1,071         1,084         1,099         1,112           Net Importers         Brazil         122         99         95         94         96         100         102         105         108         111         114           Rest of World         942         925         931         933         941         949         957         966         976         987         998	Total Net Imports	848	867	891	884	888	905	921	940	958	978	996
Argentina       79       93       97       100       102       105       108       110       112       115       117         Australia       107       111       117       122       129       134       139       144       149       155       161         European Union       519       483       450       438       436       434       432       429       427       425       422         New Zealand       359       336       362       367       370       375       381       388       396       404       412         Total Net Exports       1,064       1,023       1,026       1,027       1,037       1,048       1,060       1,071       1,084       1,099       1,112         Net Importers         Brazil       122       99       95       94       96       100       102       105       108       111       114         Rest of World       942       925       931       933       941       949       957       966       976       987       998         Total Net Imports       1,064       1,024       1,026       1,027       1,037	Whole Milk Powder											
Australia 107 111 117 122 129 134 139 144 149 155 161 European Union 519 483 450 438 436 434 432 429 427 425 422 New Zealand 359 336 362 367 370 375 381 388 396 404 412  Total Net Exports 1,064 1,023 1,026 1,027 1,037 1,048 1,060 1,071 1,084 1,099 1,112  Net Importers Brazil 122 99 95 94 96 100 102 105 108 111 114 Rest of World 942 925 931 933 941 949 957 966 976 987 998  Total Net Importes 1,064 1,024 1,026 1,027 1,037 1,049 1,059 1,071 1,084 1,098 1,112  FOB Price, Northern Europe (U.S. Dollars per Metric Ton)  Butter 1,853 1,798 1,761 1,778 1,801 1,826 1,848 1,875 1,886 1,882 1,875 Cheese 2,225 2,316 2,351 2,436 2,443 2,448 2,463 2,469 2,471 2,485 2,488 Nonfat Dry Milk 1,453 1,260 1,289 1,413 1,460 1,486 1,518 1,540 1,568 1,604 1,640	Net Exporters											
European Union 519 483 450 438 436 434 432 429 427 425 422 New Zealand 359 336 362 367 370 375 381 388 396 404 412  Total Net Exports 1,064 1,023 1,026 1,027 1,037 1,048 1,060 1,071 1,084 1,099 1,112  Net Importers Brazil 122 99 95 94 96 100 102 105 108 111 114 Rest of World 942 925 931 933 941 949 957 966 976 987 998  Total Net Importers 1,064 1,024 1,026 1,027 1,037 1,049 1,059 1,071 1,084 1,098 1,112  FOB Price, Northern Europe (U.S. Dollars per Metric Ton)  Butter 1,853 1,798 1,761 1,778 1,801 1,826 1,848 1,875 1,886 1,882 1,875 Cheese 2,225 2,316 2,351 2,436 2,443 2,448 2,463 2,469 2,471 2,485 2,488 Nonfat Dry Milk 1,453 1,260 1,289 1,413 1,460 1,486 1,518 1,540 1,568 1,604 1,640	•											
New Zealand         359         336         362         367         370         375         381         388         396         404         412           Total Net Exports         1,064         1,023         1,026         1,027         1,037         1,048         1,060         1,071         1,084         1,099         1,112           Net Importers         Brazil         122         99         95         94         96         100         102         105         108         111         114           Rest of World         942         925         931         933         941         949         957         966         976         987         998           Total Net Imports         1,064         1,024         1,026         1,027         1,037         1,049         1,059         1,071         1,084         1,098         1,112           FOB Price, Northern Europe           Butter         1,853         1,798         1,761         1,778         1,801         1,826         1,848         1,875         1,886         1,882         1,875           Cheese         2,225         2,316         2,351         2,436         2,443         2,448         2,463												
Total Net Exports 1,064 1,023 1,026 1,027 1,037 1,048 1,060 1,071 1,084 1,099 1,112  Net Importers Brazil 122 99 95 94 96 100 102 105 108 111 114 Rest of World 942 925 931 933 941 949 957 966 976 987 998  Total Net Imports 1,064 1,024 1,026 1,027 1,037 1,049 1,059 1,071 1,084 1,098 1,112  FOB Price, Northern Europe Butter 1,853 1,798 1,761 1,778 1,801 1,826 1,848 1,875 1,886 1,882 1,875 Cheese 2,225 2,316 2,351 2,436 2,443 2,448 2,463 2,469 2,471 2,485 2,488 Nonfat Dry Milk 1,453 1,260 1,289 1,413 1,460 1,486 1,518 1,540 1,568 1,604 1,640	•											
Net Importers           Brazil         122         99         95         94         96         100         102         105         108         111         114           Rest of World         942         925         931         933         941         949         957         966         976         987         998           Total Net Imports         1,064         1,024         1,026         1,027         1,037         1,049         1,059         1,071         1,084         1,098         1,112           FOB Price, Northern Europe           Butter         1,853         1,798         1,761         1,778         1,801         1,826         1,848         1,875         1,886         1,882         1,875           Cheese         2,225         2,316         2,351         2,436         2,443         2,448         2,463         2,469         2,471         2,485         2,488           Nonfat Dry Milk         1,453         1,260         1,289         1,413         1,460         1,486         1,518         1,540         1,568         1,604         1,640	New Zealand	359	336	362	367	370	375	381	388	396	404	412
Brazil         122         99         95         94         96         100         102         105         108         111         114           Rest of World         942         925         931         933         941         949         957         966         976         987         998           FOB Price, Northern Europe         (U.S. Dollars per Metric Ton)           Butter         1,853         1,798         1,761         1,778         1,801         1,826         1,848         1,875         1,886         1,882         1,875           Cheese         2,225         2,316         2,351         2,436         2,443         2,448         2,463         2,469         2,471         2,485         2,488           Nonfat Dry Milk         1,453         1,260         1,289         1,413         1,460         1,486         1,518         1,540         1,568         1,604         1,640	Total Net Exports	1,064	1,023	1,026	1,027	1,037	1,048	1,060	1,071	1,084	1,099	1,112
Rest of World         942         925         931         933         941         949         957         966         976         987         998           Total Net Imports         1,064         1,024         1,026         1,027         1,037         1,049         1,059         1,071         1,084         1,098         1,112           FOB Price, Northern Europe           Butter         1,853         1,798         1,761         1,778         1,801         1,826         1,848         1,875         1,886         1,882         1,875           Cheese         2,225         2,316         2,351         2,436         2,443         2,448         2,463         2,469         2,471         2,485         2,488           Nonfat Dry Milk         1,453         1,260         1,289         1,413         1,460         1,486         1,518         1,540         1,568         1,604         1,640	Net Importers											
Total Net Imports 1,064 1,024 1,026 1,027 1,037 1,049 1,059 1,071 1,084 1,098 1,112  FOB Price, Northern Europe  Butter 1,853 1,798 1,761 1,778 1,801 1,826 1,848 1,875 1,886 1,882 1,875 Cheese 2,225 2,316 2,351 2,436 2,443 2,448 2,463 2,469 2,471 2,485 2,488 Nonfat Dry Milk 1,453 1,260 1,289 1,413 1,460 1,486 1,518 1,540 1,568 1,604 1,640	Brazil	122	99	95	94	96	100	102	105	108	111	114
FOB Price, Northern Europe  Butter 1,853 1,798 1,761 1,778 1,801 1,801 1,826 1,848 1,875 1,886 1,882 1,875 Cheese 2,225 2,316 2,351 2,436 2,443 2,448 2,463 2,469 2,471 2,485 2,488 Nonfat Dry Milk 1,453 1,260 1,289 1,413 1,460 1,486 1,518 1,540 1,568 1,604 1,640	Rest of World	942	925	931	933	941	949	957	966	976	987	998
Butter       1,853       1,798       1,761       1,778       1,801       1,826       1,848       1,875       1,886       1,882       1,875         Cheese       2,225       2,316       2,351       2,436       2,443       2,448       2,463       2,469       2,471       2,485       2,488         Nonfat Dry Milk       1,453       1,260       1,289       1,413       1,460       1,486       1,518       1,540       1,568       1,604       1,640	Total Net Imports	1,064	1,024	1,026	1,027	1,037	1,049	1,059	1,071	1,084	1,098	1,112
Butter       1,853       1,798       1,761       1,778       1,801       1,826       1,848       1,875       1,886       1,882       1,875         Cheese       2,225       2,316       2,351       2,436       2,443       2,448       2,463       2,469       2,471       2,485       2,488         Nonfat Dry Milk       1,453       1,260       1,289       1,413       1,460       1,486       1,518       1,540       1,568       1,604       1,640	FOB Price. Northern Europe					(U.S. Dolla	ars per Me	tric Ton)				
Cheese       2,225       2,316       2,351       2,436       2,443       2,448       2,463       2,469       2,471       2,485       2,488         Nonfat Dry Milk       1,453       1,260       1,289       1,413       1,460       1,486       1,518       1,540       1,568       1,604       1,640	•	1.853	1.798	1.761		•	•	,	1.875	1.886	1.882	1.875
Nonfat Dry Milk 1,453 1,260 1,289 1,413 1,460 1,486 1,518 1,540 1,568 1,604 1,640						,	,	,		,		,
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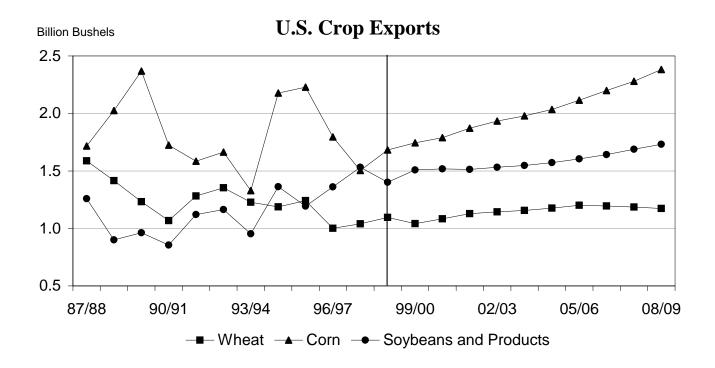


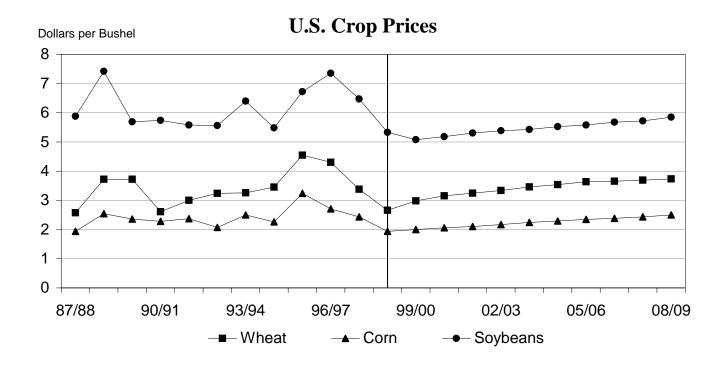


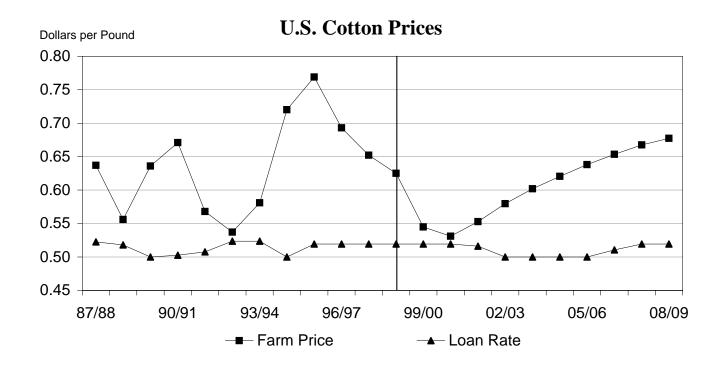


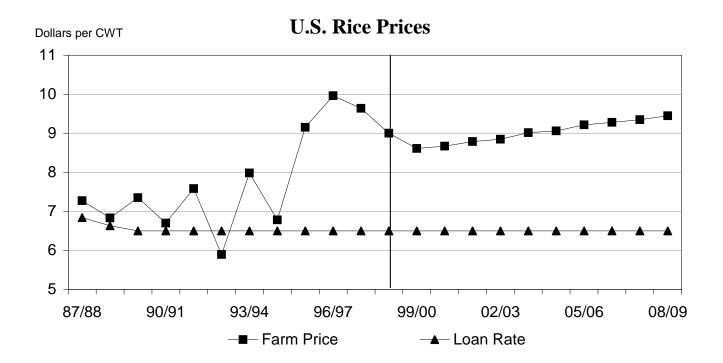












#### U.S. Wheat

Wheat planted area fell to 65.9 million acre in 1998/99. A further decline, down to 62.8 million acres, is expected for the 1999/00 crop. By 2008/09, wheat area planted is projected to grow to 67.1 million acres. Relative returns favor oilseeds and feedgrains, pushing area out of wheat and into crops such as soybeans, canola, and corn.

Wheat area enrolled in the Conservation Reserve Program 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. New enrollment starts with the 1999/00 marketing year. By the final year of the baseline, wheat CRP area is 11.2 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 are projected to decrease to 38.5 bushels per acre and then increase to 41.1 bushels per acre by 2008/09.

Record yields and increased beginning stocks pushed 1998 wheat supplies sharply higher. Total all-wheat production hit 2.55 billion bushels. Available supply for the crop year totaled more than 3.3 billion bushels. Domestic use, plus exports for the year, is forecasted at 2.4 billion bushels. Assuming trend yields, lower production will occur in 1999 due to substantial declines in area.

Wheat feed and residual use is projected to increase to 346 million bushels in 1998/99. An ample supply of feed wheat keeps wheat in feed rations. Feed use falls in the last half of the baseline as wheat prices increase.

Feed use bottoms at 211 million bushels in the 2005/06 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 2005 crop year.

U.S. wheat exports in 1997/98 increased to 1.04 billion bushels and are projected to increase further in 1998/99 to 1.096 billion bushels. Action by the European Union impacts wheat exports greatly during the baseline. Exports build to 1.2 billion bushels by 2005. After that increase, exports by the EU dampen U.S. trade.

Ending stocks of wheat for 1998/99 increase to 909 million bushels. Stocks decline in each year of the baseline, hitting 642 million bushels at the end of the 2008 crop year.

Increased supplies and weak exports pressured prices dramatically lower in 1998. The large production in 1997 and 1998 caused a decrease in the lofty price levels seen just four years ago. The season-average farm price for 1998/99 is projected to be \$2.66 per bushel. Prices are projected to strengthen in 1999/00 due to reduced area.

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 1998/99, market net returns stand at \$46.15 per acre. By the end of the baseline, wheat returns rise to \$72.92 per acre.

U.S. Wheat Supply and Utilization

	98/99	99/00	00/01	01/02	02/03	03/04	04/05	05/06	06/07	07/08	08/09
Area					(Mi	Ilion Acres	s)				
Contract Area	78.4	78.9	78.8	78.7	78.6	78.6	78.6	78.6	78.6	78.6	78.6
CRP Idled	9.5	9.8	10.4	10.7	10.9	11.0	11.0	11.1	11.2	11.2	11.2
Planted Area	65.9	62.8	64.9	65.9	66.4	66.6	67.0	67.2	67.5	67.2	67.1
Harvested Area	59.0	55.8	57.7	58.6	59.0	59.2	59.5	59.7	60.0	59.7	59.6
Yield					(Bush	nels per A	cre)				
Actual	43.2	38.5	38.8	39.1	39.4	39.7	40.0	40.3	40.6	40.8	41.1
Program	34.7	34.7	34.7	34.7	34.7	34.7	34.7	34.7	34.7	34.7	34.7
					(Mill	ion Bushe	els)				
Supply	3,363	3,148	3,138	3,157	3,160	3,161	3,179	3,193	3,201	3,198	3,196
Beginning Stocks	722	909	808	773	742	720	706	695	678	669	655
Production	2,550	2,149	2,241	2,294	2,328	2,351	2,383	2,407	2,433	2,439	2,450
Imports	90	90	90	90	90	90	90	90	90	90	90
Domestic Use	1,358	1,299	1,283	1,286	1,295	1,299	1,307	1,313	1,336	1,356	1,381
Feed, Residual	346	268	242	233	229	219	217	210	220	226	237
Seed	87	91	93	94	94	95	95	96	95	95	95
Food, Other	926	940	948	960	972	985	995	1,007	1,021	1,035	1,049
Exports	1,096	1,042	1,083	1,128	1,144	1,156	1,176	1,201	1,195	1,186	1,173
Total Use	2,454	2,340	2,366	2,415	2,439	2,455	2,484	2,515	2,532	2,543	2,554
Ending Stocks	909	808	773	742	720	706	695	678	669	655	642
FOR, Special Program	0	0	0	0	0	0	0	0	0	0	0
CCC Inventory	95	95	95	95	95	95	95	95	95	95	95
9-Month Loan	200	144	125	98	88	92	93	86	87	86	85
"Free" Stocks	614	569	552	549	537	519	508	497	487	474	462
Prices and Returns					(U	.S. Dollars	s)				
Farm Price/bu.	2.66	2.98	3.15	3.25	3.34	3.46	3.54	3.64	3.66	3.69	3.74
Loan Rate/bu.	2.58	2.58	2.58	2.43	2.39	2.53	2.58	2.58	2.58	2.58	2.58
Contract Payment/bu.	0.99	0.64	0.58	0.47	0.45	0.45	0.45	0.45	0.45	0.45	0.45
Contract Payment/a.	29.11	18.79	17.10	13.78	13.38	13.39	13.39	13.39	13.40	13.40	13.40
FOB Gulf Price/mt	120.54	134.69	141.93	145.98	149.92	155.20	158.66	162.80	163.71	165.32	167.11
Variable Expenses/a.	76.04	74.69	76.16	77.75	78.63	79.69	80.81	81.91	83.07	84.25	85.45
Market Net Returns/a.	46.15	44.79	50.93	53.98	57.69	62.47	65.55	69.34	70.04	71.40	72.92

### U.S. Corn

U.S. corn farmers increased planted area to 80.2 million acres in 1998/99. Corn area is expected to fall in spring 1999 to 79.7 million acres. Corn is expected to gain from worldwide food demand during the baseline; by the 2008/09 crop year, FAPRI projects 81.1 million acres will be planted to corn. Corn's share of planted area in the United States rises during the baseline.

Corn area enrolled in the Conservation Reserve Program 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. By the final year of the baseline, corn CRP area stands at 3.6 million acres.

The national average corn yield rose to 134.4 bushels per acre in 1998/99. Assuming normal weather, corn yields come back down to the trendline level in 1999/00 of 129.9 bushels per acre. 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 1.7 bushels per acre per year.

Higher feed use is projected for the 1998/99 marketing year at 5.697 billion bushels. Feed usage should increase in 1999/00 to 5.812 billion bushels. Steady growth in several livestock categories and stable crop prices cause feed usage to rise during the baseline period, reaching 6.178 billion bushels in 2008/09.

Corn used for fuel alcohol production is projected to require 780 million bushels by 2008/09, up from the projected 1998/99 number of 562 million bushels.

Federal tax exemptions for ethanol are assumed to continue at the current level of \$0.54 per gallon. Growth in other domestic uses of corn, such as high fructose corn syrup, is modest.

U.S. corn exports in 1998/99 are projected to increase to 1.682 billion bushels. The previous year's decline was in response to the currency devaluation in Asia. Projected exports rise markedly throughout the remainder of the baseline. By the last year, U.S. corn exports are more than 2.3 billion bushels.

Corn ending stocks for the 1998/99 marketing year are projected to recover to 1.816 million bushels, an increase from the 1997/98 level of 1.308 million bushels. With a return to normal weather, ending stocks fall, slowly reaching 1.5 billion bushels by 2008/09. 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 rebuilding stocks in 1998/99 pressured corn prices. The farm price is projected to average \$1.94 per bushel. For 1999/00, the farm price is expected to rise to \$2.00 per bushel.

Market transition payments average \$0.28 per bushel during the baseline. On a per acre basis, the payments average \$24.21 during the baseline period. Market net returns over variable costs are projected to rise modestly during the baseline. The increases in yield offset higher production costs in each year. As prices strengthen, the returns rise.

U.S. Corn Supply and Utilization

	98/99	99/00	00/01	01/02	02/03	03/04	04/05	05/06	06/07	07/08	08/09
Area					(Mi	Ilion Acres	s)				
Contract Area	81.8	82.1	82.0	82.0	82.0	82.0	82.0	82.0	81.9	81.9	81.9
CRP Idled	3.1	3.1	3.3	3.4	3.5	3.5	3.5	3.6	3.6	3.6	3.6
Planted Area	80.2	79.7	79.5	79.8	79.7	80.0	80.5	80.5	80.7	80.8	81.1
Harvested Area	72.6	73.2	73.2	73.5	73.5	73.8	74.3	74.4	74.6	74.8	75.1
Yield					(Busl	nels per A	cre)				
Actual	134.4	129.9	131.7	133.5	135.3	137.0	138.7	140.4	142.1	143.8	145.5
Program	102.8	102.8	102.8	102.8	102.8	102.8	102.8	102.8	102.8	102.8	102.8
					`	ion Bushe	,				
Supply	11,079	11,337	11,492	11,627	11,672	11,768	11,910	12,040	12,185	12,327	12,489
Beginning Stocks	1,308	1,816	1,845	1,803	1,724	1,646	1,597	1,587	1,568	1,566	1,558
Production	9,761	9,512	9,637	9,814	9,938	10,112	10,303	10,443	10,607	10,751	10,921
Imports	10	10	10	10	10	10	10	10	10	10	10
Domestic Use	7,582	7,749	7,900	8,031	8,093	8,191	8,289	8,357	8,420	8,490	8,575
Feed, Residual	5,697	5,812	5,905	5,983	5,998	6,050	6,096	6,114	6,123	6,139	6,178
Fuel Alcohol	562	587	615	638	656	673	695	716	740	763	780
HFCS	561	574	589	604	619	633	648	662	677	691	705
Seed	20	20	20	20	20	21	21	21	21	21	21
Food, Other	741	755	770	785	800	814	829	844	860	875	890
Exports	1,682	1,744	1,789	1,871	1,933	1,979	2,034	2,115	2,199	2,279	2,383
Total Use	9,263	9,493	9,689	9,902	10,026	10,170	10,323	10,472	10,619	10,769	10,957
Ending Stocks	1,816	1,845	1,803	1,724	1,646	1,597	1,587	1,568	1,566	1,558	1,532
FOR, Special Program	0	0	0	0	0	0	0	0	0	0	0
CCC Inventory	5	5	5	5	5	5	5	5	5	5	5
9-Month Loan	343	362	332	247	194	177	183	186	197	205	202
"Free" Stocks	1,467	1,477	1,465	1,473	1,447	1,415	1,399	1,377	1,364	1,349	1,325
Prices and Returns					(U	S. Dollars	s)				
Farm Price/bu.	1.94	2.00	2.06	2.10	2.17	2.24	2.29	2.35	2.39	2.43	2.50
Loan Rate/bu.	1.89	1.89	1.89	1.75	1.66	1.66	1.70	1.75	1.80	1.85	1.89
Contract Payment/bu.	0.56	0.36	0.33	0.27	0.26	0.26	0.26	0.26	0.26	0.26	0.26
Contract Payment/a.	49.04	31.72	28.91	23.28	22.60	22.60	22.60	22.60	22.61	22.61	22.61
FOB Gulf Price/mt	93.80	96.54	99.05	100.80	103.61	106.83	108.85	111.32	112.96	114.90	117.95
Variable Expenses/a.	169.93	167.70	170.84	174.47	176.86	179.58	182.40	185.21	188.11	191.05	194.02
Market Net Returns/a.	97.19	92.45	100.65	106.10	116.38	127.71	135.20	144.49	150.98	158.60	169.97

# U.S. Sorghum

Reduced area in the Central Plains states pushed total sorghum planted area lower in 1998, down to 9.6 million acres. Sorghum planted area rises to 10.0 million acres by 2008/09 as feedgrain demand pulls prices higher.

Sorghum area enrolled in the Conservation Reserve Program 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. By the final year of the baseline, sorghum CRP area stands at 2.5 million acres.

The U.S. average sorghum yield decreased to 66.3 bushels per acre in 1998/99. Sorghum yield is projected to reach 72.3 bushels per acre by 2008/09. Genetic improvement increases average sorghum yield 0.54 bushels per acre per year, an annual growth rate of 0.8 percent per year.

Sorghum feed use is projected to be 275 million bushels in 1998/99. The falling prices of alternative feeds explain the decline relative to the previous year. Feed use of sorghum rises during the baseline as animal numbers increase. In the last year of the baseline period, sorghum feed use totals 378 million bushels.

Exports of U.S. sorghum in 1998/99 are projected to be 191 million bushels. The volume of exports grows in

each year of the baseline, reaching 242 million bushels by 2008/09. Worldwide demand for feedgrains pulls the sorghum export figure higher.

Sorghum ending stocks decreased in 1998/99 to 57 million bushels, up from 49 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 low at about 50 million bushels.

Despite smaller production in 1998/99, season-average sorghum farm prices fell to \$1.70 per bushel. Prices are projected to increase in 1999/00 as demand rebuilds. Sorghum prices will maintain a fairly constant relationship to corn prices, rising to \$2.38 per bushel by 2008/09.

Market net returns over variable costs fell to \$32.95 per acre in 1998/99 due to lower prices. 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 2008/09 marketing year, market returns hit \$74.03. Wheat returns are competitive with this, as are cotton returns when adjusted for risk.

U.S. Sorghum Supply and Utilization

	98/99	99/00	00/01	01/02	02/03	03/04	04/05	05/06	06/07	07/08	08/09
Area					(Mi	llion Acres	s)				
Contract Area	13.5	13.6	13.6	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5
CRP Idled	2.2	2.2	2.3	2.4	2.4	2.4	2.4	2.5	2.5	2.5	2.5
Planted Area	9.6	9.9	9.7	9.7	9.7	9.8	9.9	9.9	9.9	9.9	10.0
Harvested Area	7.8	8.9	8.8	8.8	8.9	9.0	9.0	9.0	9.0	9.1	9.1
Yield					(Bush	els per Ad	cre)				
Actual	66.3	67.5	68.1	68.7	69.2	69.8	70.3	70.8	71.3	71.8	72.3
Program	57.3	57.3	57.3	57.3	57.3	57.3	57.3	57.3	57.3	57.3	57.3
					(Milli	on Bushe	ls)				
Supply	569	660	670	672	675	680	684	688	692	697	705
Beginning Stocks	49	57	69	65	59	53	50	48	46	44	43
Production	520	603	602	607	616	626	635	640	646	653	662
Imports	0	0	0	0	0	0	0	0	0	0	0
Domestic Use	321	378	382	386	393	399	405	410	410	416	425
Feed, Residual	275	332	337	341	348	354	360	365	365	371	379
Food, Seed, Ind.	45	45	45	45	45	45	45	45	45	45	45
Exports	191	214	223	228	228	231	231	233	237	239	241
Total Use	512	591	605	614	621	630	636	642	647	655	665
Ending Stocks	57	69	65	59	53	50	48	46	44	43	39
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	9	14	12	7	4	4	4	4	4	5	4
"Free" Stocks	48	55	53	52	49	46	44	42	40	38	35
Prices and Returns					(U.	S. Dollars	)				
Farm Price/bu.	1.70	1.86	1.92	1.98	2.05	2.12	2.17	2.22	2.26	2.30	2.38
Loan Rate/bu.	1.74	1.74	1.74	1.61	1.53	1.53	1.57	1.61	1.66	1.70	1.74
Contract Payment/bu.	0.67	0.44	0.40	0.32	0.31	0.31	0.31	0.31	0.31	0.31	0.31
Contract Payment/a.	32.77	21.19	19.33	15.58	15.13	15.13	15.13	15.14	15.14	15.14	15.14
FOB Gulf Price/mt	86.05	93.04	95.73	98.38	101.53	104.69	106.76	109.00	110.80	112.95	116.34
Variable Expenses/a.	88.12	86.66	88.24	89.82	90.80	91.98	93.18	94.35	95.58	96.83	98.08
Market Net Returns/a.	32.95	38.77	42.47	46.04	50.99	55.83	59.03	62.51	65.30	68.64	74.03

# U.S. Barley

Barley planted area is projected to fall for the 1999/00 season to 6.2 million acres. By marketing year 2008/09, barley planted area is projected to decline to 6.1 million acres. Barley loses some of its share of total U.S. crop land, continuing an ongoing trend. Land formerly devoted to barley production is planted to other crops, including soybeans and corn.

Barley CRP falls from 2.6 million acres in 1997/98 to 2.5 million acres in 1998/99. 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 3.1 million acres.

U.S. barley yield in 1998/99 was 58.9 bushels per acre. Barley yields go up slowly during the baseline period, reaching 66.5 bushels per acre by 2008/09. This assumes an annual growth rate of 0.8 percent.

Barley imports are projected be 30 million bushels in 1998/99. Import levels are not expected to increase above that level during the baseline.

Total domestic use for barley is projected to be relatively stable. Feed use, currently at 185 million bushels, will increase as prices for other feedgrains go up. By 2008/09, barley feed use hits 188 million bushels. Barley food uses will grow only modestly, from 172 million bushels in 1998/99, to 178 million bushels in 2008/09.

U.S. barley exports soared in 1997/98 to 74 million bushels, the highest amount since 1992/93. Export sales were boosted by a lack of malt-quality barley in the world market and increased trade of feed barley. Exports decline in 1998/99 to 28 million bushels due to replenished world supplies. Barley exports grow slowly during the rest of the baseline. The European Union increases its exports of barley during the baseline.

Barley ending stocks in 1997/98 stood at 119 million bushels, down from the previous year's level of 109 million bushels. The projection for 1998/99 is 117 million bushels. Stocks are projected to remain less than 120 million bushels during the baseline period.

The 1998/99 U.S. season-average barley farm price is projected at \$1.96 per bushel, down from \$2.38 per bushel in the prior year. Barley prices rise thereafter. Barley prices maintain a fairly constant relationship to other feedgrain prices. As corn prices rise in the end of the baseline, barley prices are pulled upward. By 2008/09, barley prices are projected to reach \$2.39 per bushel.

Market net returns over variable costs shrunk to \$50.47 per acre in 1997/98 due to lower prices, and fell again in 1998/99 to \$30.74. Yield increases more than offset cost-of-production increases through the remainder of the baseline, resulting in higher market net returns. Barley returns reach \$63.45 per acre in 2008/09.

U.S. Barley Supply and Utilization

	98/99	99/00	00/01	01/02	02/03	03/04	04/05	05/06	06/07	07/08	08/09
Area					(Mi	llion Acres	s)				
Contract Area	11.1	11.2	11.2	11.2	11.1	11.1	11.1	11.1	11.1	11.1	11.1
CRP Idled	2.5	2.7	2.9	2.9	3.0	3.0	3.0	3.0	3.1	3.1	3.1
Planted Area	6.3	6.2	6.0	6.1	6.0	6.1	6.1	6.1	6.1	6.1	6.1
Harvested Area	6.0	5.8	5.7	5.7	5.7	5.7	5.7	5.7	5.7	5.7	5.8
Yield					(Bush	nels per A	cre)				
Actual	58.9	61.6	62.3	62.6	63.2	63.8	64.3	64.9	65.4	66.0	66.5
Program	47.2	47.2	47.2	47.2	47.2	47.2	47.2	47.2	47.2	47.2	47.2
					(Milli	ion Bushe	ls)				
Supply	502	503	507	509	505	507	508	510	512	516	521
Beginning Stocks	119	117	124	121	117	112	110	109	109	108	108
Production	352	356	353	358	359	365	368	371	373	378	383
Imports	30	30	30	30	30	30	30	30	30	30	30
Domestic Use	357	346	350	355	355	356	357	358	358	362	366
Feed, Residual	185	173	176	181	181	181	181	181	181	184	188
Food, Seed, Ind.	172	173	174	174	174	175	175	176	177	178	178
Exports	28	33	35	37	38	40	42	44	46	47	49
Total Use	385	379	385	392	393	397	399	402	404	409	415
Ending Stocks	117	124	121	117	112	110	109	109	108	108	106
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	23	25	23	18	14	13	14	14	15	16	16
"Free" Stocks	94	99	98	99	98	97	96	94	93	92	91
Prices and Returns					(U.	S. Dollars	5)				
Farm Price/bu.	1.96	1.99	2.03	2.06	2.13	2.18	2.22	2.26	2.29	2.33	2.39
Loan Rate/bu.	1.56	1.56	1.56	1.44	1.37	1.37	1.41	1.45	1.49	1.53	1.56
Contract Payment/bu.	0.42	0.27	0.25	0.20	0.19	0.19	0.19	0.19	0.19	0.19	0.19
Contract Payment/ac.	16.96	10.87	9.92	8.00	7.77	7.77	7.78	7.78	7.79	7.79	7.79
Portland/mt	108.16	109.71	111.49	112.83	116.04	118.79	120.69	122.57	124.06	125.88	128.69
Variable Expenses/a.	88.93	86.93	88.43	90.14	91.16	92.43	93.74	95.00	96.34	97.69	99.08
Market Net Returns/a.	30.74	40.02	42.07	42.80	47.18	50.71	53.11	55.58	57.47	59.78	63.45

### U.S. Oats

Oats area planted decreased in 1998/99, down to 4.9 million acres. Planted area is projected to decrease again in 1999/00 because of lower prices. In the longer term, oats continue to lose area to other feedgrains and oilseeds. In the last year of the baseline, oats planted area has fallen to 4.3 million acres.

Harvested area in 1998/99 was unchanged from a year ago at 2.8 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 have fallen to 2.4 million acres. Oat CRP area in 1998 stood at 1.2 million acres. Oats gain to 1.3 million acres by the last year of the baseline

Oat yields increased to 60.4 bushels per acre harvested in 1998/99. Yields show little growth in the baseline. Trend yield generates an annual increase of 0.3 bushels per acre, just over 0.5 percent.

Net imports of oats are projected to fall to 98 million bushels in 1999/00. Oat exports are projected to be 2 million bushels per year. Net imports remain between 96 and 97 million bushels over the baseline period.

Oat feed use is projected to be 165 million bushels in 1998/99 and then decrease as oat prices increase. At the

end of the baseline, oat feed use will have fallen to 149 million bushels. This feed use path couples with slowly growing food use to produce flat 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 is approximately 100 million bushels.

Oat ending stocks are projected to climb to 80 million bushels for the 1998/99 marketing year, weighing heavily on prices. Stocks decline during the baseline, down to 60 million bushels by the last year.

Oat prices are projected weaker in 1998/99 due to weak overall commodity prices, falling to \$1.07 per bushel. As prices of other feedgrains rise during the baseline, oat prices are pulled along reaching \$1.48 per bushel in 2008/09. Oat contract payments average \$0.02 per bushel during the baseline.

Market net returns over variable costs in 1998/99 are projected at \$43.59 per acre, the lowest since 1991. 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 2008/09, per acre net returns for oats rise to \$56.41.

U.S. Oat Supply and Utilization

	98/99	99/00	00/01	01/02	02/03	03/04	04/05	05/06	06/07	07/08	08/09
Area					(Mil	lion Acres	)				
Contract Area	6.7	6.9	6.9	6.9	6.9	6.9	6.9	6.9	6.9	6.9	6.9
CRP Idled	1.2	1.2	1.2	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3
Planted Area	4.9	4.6	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.3
Harvested Area	2.8	2.6	2.5	2.5	2.5	2.5	2.5	2.5	2.4	2.4	2.4
Yield					(Bush	els per Ac	re)				
Actual	60.4	59.9	60.3	60.6	61.0	61.3	61.6	62.0	62.3	62.6	62.9
Program	50.8	50.8	50.8	50.8	50.8	50.8	50.8	50.8	50.8	50.8	50.8
					(Milli	on Bushel	s)				
Supply	341	334	322	317	316	315	314	313	312	312	311
Beginning Stocks	74	80	72	67	64	63	62	62	61	60	60
Production	167	156	150	150	152	153	153	153	152	153	152
Imports	100	98	100	99	99	99	99	99	99	99	99
Domestic Use	259	260	253	250	250	251	251	250	250	250	250
Feed, Residual	165	165	157	154	153	153	152	151	150	150	149
Food, Seed, Ind.	95	95	96	96	97	98	98	99	100	100	101
Exports	2	2	2	2	2	2	2	2	2	2	2
Total Use	261	262	255	252	252	253	253	252	252	252	252
Ending Stocks	80	72	67	64	63	62	62	61	60	60	60
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	71	66	63	62	61	61	60	59	59	59
Prices and Returns					(U.	S. Dollars	)				
Farm Price/bu.	1.07	1.12	1.22	1.27	1.31	1.36	1.39	1.42	1.44	1.45	1.48
Loan Rate/bu.	1.11	1.11	1.11	1.03	0.97	0.97	1.00	1.03	1.06	1.09	1.11
Contract Payment/bu.	0.05	0.03	0.03	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02
Contract Payment/a.	1.99	1.30	1.11	0.89	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Variable Expenses/a.	57.42	56.15	57.11	58.07	58.64	59.36	60.11	60.83	61.61	62.39	63.18
Market Net Returns/a.	43.59	43.80	46.13	48.49	50.41	52.35	53.36	54.64	55.22	55.53	56.41

# U.S. Hay

Hay area harvested fell to 60.0 million acres in 1998/99. The beef cycle and beef prices play an important part in determining hay area harvested. As beef cow numbers change in the next four years, hay area declines during most years of the baseline. Area harvested bottoms in 2003/04 at 59.9 million acres and rises to 60.3 million acres by 2008/09.

Hay yields rose in 1998/99 to 2.52 tons per acre. Yields are projected to increase at a rate of less than 1 percent per year. This assumes normal weather.

Hay disappearance is projected to decrease in 1998/99 to 146.8 million tons. Use increases to 154 million tons in 1999/00 and then shows modest growth every year of the baseline. In the last year of the projections period, hay domestic use has risen to 161.3 million tons.

Hay ending stocks in 1998/99 rose to 21.9 million tons. Ending stocks remain near 22 million tons throughout the baseline.

The U.S. average all-hay price rose to \$102.50 per ton in 1997/98, but is projected to fall for 1998/99, to a season-average farm price of \$86.21 per ton.

The U.S. average alfalfa hay price rose to \$111.58 per ton in 1997/98. For the 1998/99 crop year, alfalfa prices are expected to fall to \$95.55 per ton. The alfalfa hay price averages more than \$4.80 higher than all-hay prices.

U.S. Hay Supply and Utilization

	98/99	99/00	00/01	01/02	02/03	03/04	04/05	05/06	06/07	07/08	08/09
					(Mil	lion Acres	)				
Area	60.0	60.4	60.1	60.0	59.9	59.9	60.0	60.0	60.1	60.2	60.3
					(Tor	s per Acre	e)				
Yield	2.52	2.56	2.58	2.59	2.60	2.62	2.63	2.64	2.65	2.67	2.68
					(Mi	llion Tons)	)				
Supply	168.8	176.8	177.6	178.2	178.9	179.6	180.3	181.1	181.8	182.5	183.3
Production	151.3	154.9	154.8	155.3	156.0	156.7	157.6	158.6	159.6	160.5	161.3
Beginning Stocks	17.4	21.9	22.8	22.9	23.0	22.9	22.7	22.5	22.2	22.0	22.0
Disappearance	146.8	154.0	154.7	155.3	156.0	156.9	157.8	158.8	159.8	160.6	161.3
Ending Stocks	21.9	22.8	22.9	23.0	22.9	22.7	22.5	22.2	22.0	22.0	22.0
Prices					(U.	S. Dollars	)				
All-Hay (crop year)	86.21	83.95	83.91	84.00	84.33	85.21	86.15	87.25	88.16	88.53	88.64
Alfalfa (calendar year)	95.55	89.12	88.00	88.04	88.33	89.13	90.24	91.50	92.69	93.40	93.66

# U.S. Peanuts

The U.S. quota poundage increased to 2.334 billion pounds for the 1998/99 crop year. Increases in domestic food use during the baseline period cause the quota to grow 10 million pounds per year.

Planted area is projected to shrink to 1.46 million acres in 1999/00 as producers respond to weaker price signals. As prices recover and the quota expands, area is projected to recover to 1.52 million acres by the end of the baseline.

The U.S. average peanut yield rose to 2,683 pounds per acre for the 1998/99 crop, a record yield. Using the assumption of trend yields, peanut yields are

projected to grow from 2,538 pounds in 1999 to 2,583 pounds by 2008.

Domestic use of peanuts is projected to grow from 3.24 billion pounds in 1999/00 to 3.39 billion pounds in 2008/09. Food use of peanuts contributes the majority of the growth. However, the growth only keeps pace with the growth in population.

Increased supplies pressured the farm price of peanuts down to \$0.25 per pound in 1998/99. As supplies shrink, prices are expected to strengthen in 1999/00. Modest improvement in prices is expected over the projection period.

U.S. Peanut Supply and Utilization

	98/99	99/00	00/01	01/02	02/03	03/04	04/05	05/06	06/07	07/08	08/09
Program					(Mil	lion Pound	ds)				
Quota Poundage	2,334	2,360	2,370	2,380	2,390	2,400	2,410	2,420	2,430	2,440	2,450
Area					(M	lillion Acre	e)				
Planted Area	1,511	1,460	1,498	1,514	1,51S	1,520	1,511	1,516	1,517	1,518	1,520
Harvested Area	1,466	1,441	1,478	1,494	1,494	1,499	1,490	1,495	1,496	1,498	1,500
					(Pou	nds per A	cre)				
Yield	2,683	2,538	2,538	2,542	2,548	2,553	2,560	2,566	2,571	2,577	2,583
					(Mil	lion Pound	ds)				
Supply	4,931	4,771	4,764	4,793	4,804	4,820	4,813	4,825	4,834	4,844	4,855
Beginning Stocks	848	950	848	831	833	828	833	825	823	820	816
Production	3,931	3,656	3,752	3,797	3,807	3,827	3,816	3,836	3,847	3,860	3,874
Imports	152	165	165	165	165	165	165	165	165	165	165
Domestic Use	3,231	3,241	3,252	3,276	3,298	3,307	3,318	3,334	3,350	3,368	3,385
Food	2,135	2,199	2,213	2,231	2,253	2,251	2,263	2,276	2,289	2,304	2,318
Crush	775	732	729	735	736	746	745	748	751	754	756
Seed, Feed, & Residual	321	310	310	310	310	310	310	310	310	310	310
Exports	750	683	682	684	678	680	671	669	665	661	657
Total Use	3,981	3,924	3,934	3,960	3,977	3,987	3,989	4,003	4,015	4,028	4,041
Ending Stocks	950	848	831	833	828	833	825	823	820	816	814
Prices and Returns					(U	.S. Dollars	s)				
Season Avg. Price/lb.	0.250	0.266	0.273	0.274	0.276	0.273	0.276	0.276	0.278	0.279	0.280
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	401.58	396.29	403.72	412.31	417.95	424.38	431.05	437.67	444.53	451.48	458.50
Average Net Returns/a	269.11	277.59	290.20	283.51	285.82	272.81	274.34	271.32	269.22	267.11	264.49

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

Soybean planted area rose in 1998/99 to 72.4 million acres. Despite lower prices, soybean planted area is expected to expand in 1999 as net returns per acre still compare favorably with competing crops. Longer term, soybean plantings range between 70 and 71 million acres.

Soybean area enrolled in the Conservation Reserve Program totaled 3.5 million acres for the 1997/98 marketing year. As contracts expired in calendar year 1998, total soybean enrollment fell to 2.8 million acres. By the final year of the baseline, soybean CRP area is again at 3.5 million acres.

Soybean yields remained at 38.9 bushels per acre for 1998/99. Assuming average rainfall and temperatures during the baseline period, soybean yields grow to 44.5 bushels per acre by 2008/09. This is a growth rate of almost 1.5 percent per year.

Production in 1998/99 came in at 2.757 billion bushels, a new record. The high area and high yield combined to give the large crop. Production is projected to increase to 2.805 billion bushels in 1999/00. In 2008/09, the United States is expected to produce 3.111 billion bushels.

High product demand and ample supplies of soybeans caused crush use to rise to 1.597 billion bushels in 1997/98, 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 1.927 billion bushels by the last year of the baseline. For the 1998/99 marketing year, crush is projected to be 1.593 billion bushels. Over the baseline, crush expands at an average annual rate of 1.8 percent.

Soybean oil domestic use increased in 1997/98 exceeding 15.2 billion pounds. For the coming marketing year,

domestic use is projected at almost 15.9 billion pounds. With slow growth assumed for many competing fats and oils, domestic use continues to increase though 2008/09, topping 18.3 billion pounds.

Domestic soybean meal use rose in 1997/98 to 28.8 million tons and rose again in 1998/99 to 29.55 million tons. Increases in livestock numbers during the projection period keep soybean meal uses rising during the baseline period. Meal domestic use rises above 36 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 954 million bushels. In the final year of the baseline, exports are projected to be 1,040 million bushels.

The soybeans season—average farm price moved sharply lower in 1998, on the heels of large crops in the United States and South America. The 1999/00 price is projected to be lower at \$5.08 per bushel. The potential for LDPs continues. Assuming trend yields, soybean prices are expected to average below the loan rate in 1999 and 2000. The soybean loan rate is projected to be lowered by \$0.01 for the 2000/01 crop year, and lowered further in the 2001/02 crop year, down to the minimum of \$4.92 per bushel.

Soybean net returns over variable costs 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 other crops in the Midwest.

U.S. Soybean Supply and Utilization

	98/99	99/00	00/01	01/02	02/03	03/04	04/05	05/06	06/07	07/08	08/09
Area					(Mi	illion Acres	s)				
CRP Idled	2.8	3.0	3.2	3.3	3.4	3.4	3.4	3.5	3.5	3.5	3.5
Planted Area	72.4	72.7	70.4	69.7	70.2	70.3	70.0	70.4	70.4	70.9	71.0
Harvested Area	70.8	71.7	69.4	68.7	69.2	69.3	69.0	69.4	69.3	69.8	69.9
					,	hels per A	,				
Yield	38.9	39.1	39.8	40.5	41.0	41.6	42.2	42.8	43.4	43.9	44.5
					`	ion Bushe	,				
Supply	2,963	3,217	3,244	3,252	3,289	3,326	3,354	3,399	3,434	3,483	3,524
Beginning Stocks	200	407	480	467	446	439	434	425	420	411	408
Production	2,757	2,805	2,759	2,779	2,838	2,882	2,915	2,969	3,008	3,066	3,111
Imports	6	5	5	5	5	5	5	5	5	5	5
Domestic Use	1,741	1,783	1,812	1,839	1,874	1,906	1,938	1,974	2,009	2,047	2,086
Crush	1,593	1,635	1,665	1,691	1,725	1,755	1,785	1,820	1,853	1,889	1,927
Seed, Residual	148	148	147	148	150	151	153	154	156	158	159
Exports	815	954	965	967	976	985	992	1,004	1,013	1,028	1,040
Total Use	2,556	2,737	2,776	2,806	2,850	2,891	2,930	2,978	3,022	3,075	3,126
Ending Stocks	407	480	467	446	439	434	425	420	411	408	398
CCC Inventory	0	0	0	0	0	0	0	0	0	0	0
9-Month Loan	81	110	97	63	60	58	54	53	49	49	45
"Free" Stocks	325	370	371	383	379	376	371	368	362	359	353
Prices and Returns					(U	.S. Dollars	s)				
Farm Price/bu.	5.33	5.08	5.18	5.30	5.39	5.43	5.53	5.58	5.68	5.72	5.85
Loan Rate/bu.	5.26	5.26	5.25	4.92	4.92	4.92	4.92	4.92	4.92	4.92	4.92
FOB Gulf Price/mt	212.74	203.45	207.17	211.76	214.84	216.40	220.16	222.18	225.97	227.49	232.28
Bean/Corn Ratio	2.75	2.54	2.51	2.52	2.48	2.42	2.41	2.38	2.38	2.35	2.34
Variable Expenses/a.	93.55	92.77	94.32	96.19	97.65	99.24	100.83	102.42	104.05	105.70	107.40
Market Net Returns/a.	121.61	123.06	124.66	118.39	123.22	126.59	132.62	136.36	142.37	145.45	152.60
48% Meal Price/ton	143.58	141.75	147.90	154.43	160.75	164.79	169.42	173.38	177.48	179.35	184.45
Oil Price/cwt	24.57	24.51	24.44	24.07	23.57	23.14	23.10	22.98	23.17	23.43	23.86
Crushing Margin/bu.	0.65	0.70	0.74	0.75	0.77	0.78	0.79	0.82	0.85	0.89	0.94

U.S. Soybean Meal Supply and Utilization

	98/99	99/00	00/01	01/02	02/03	03/04	04/05	05/06	06/07	07/08	08/09
					(The	usand To	ns)				
Supply	38,031	39,110	39,817	40,428	41,224	41,937	42,648	43,484	44,260	45,123	46,021
Beginning Stocks	218	227	220	216	214	209	206	204	203	202	204
Production	37,763	38,833	39,547	40,162	40,960	41,678	42,392	43,230	44,007	44,871	45,767
Imports	50	50	50	50	50	50	50	50	50	50	50
Domestic Use	29,551	30,852	31,586	32,277	32,972	33,665	34,156	34,765	35,222	35,718	36,346
Exports	8,253	8,038	8,015	7,937	8,043	8,066	8,287	8,517	8,837	9,201	9,472
Total Use	37,804	38,890	39,601	40,214	41,016	41,731	42,443	43,282	44,058	44,919	45,819
Ending Stocks	227	220	216	214	209	206	204	203	202	204	202
Prices, 48% Protein	(U.S. Dollars)										
Decatur/ton	143.58	141.75	147.90	154.43	160.75	164.79	169.42	173.38	177.48	179.35	184.45
Decatur/mt	158.27	156.25	163.03	170.23	177.19	181.65	186.76	191.11	195.63	197.70	203.32

U.S. Soybean Oil Supply and Utilization

	98/99	99/00	00/01	01/02	02/03	03/04	04/05	05/06	06/07	07/08	08/09
					(Mil	lion Pound	ds)				
Supply	19,489	19,640	19,975	20,334	20,813	21,264	, 21,701	22,174	22,624	23,094	23,572
Beginning Stocks	1,382	1,351	1,342	1,404	1,499	1,603	1,696	1,765	1,840	1,894	1,939
Production	18,049	18,239	18,583	18,880	19,264	19,611	19,955	20,359	20,734	21,151	21,583
Imports	58	50	50	50	50	50	50	50	50	50	50
Domestic Use	15,443	15,898	16,165	16,461	16,773	17,083	17,345	17,623	17,862	18,095	18,307
Exports	2,696	2,400	2,406	2,374	2,437	2,485	2,591	2,711	2,869	3,060	3,283
Total Use	18,138	18,298	18,571	18,835	19,210	19,568	19,936	20,335	20,730	21,155	21,590
Ending Stocks	1,351	1,342	1,404	1,499	1,603	1,696	1,765	1,840	1,894	1,939	1,982
Prices	(U.S. Dollars)										
Decatur/cwt	24.57	24.51	24.44	24.07	23.57	23.14	23.10	22.98	23.17	23.43	23.86
Decatur/mt	541.57	540.41	538.81	530.64	519.65	510.21	509.36	506.61	510.85	516.55	526.06

# U.S. Rice

U.S. rice planted area expanded to 3.35 million acres in 1998/99, up from 3.13 million acres in 1997/98. Lower returns for competing crops push more acres into rice in 1999/00. Total planted area is projected to rise to 3.45 million acres. Consequently, prices for the 1999 crop year fall. Rice area falls during the baseline to 3.28 million acres.

Rice yields fell in 1998/99 to 5,669 pounds per acre. Yields are projected to show growth throughout the projection period, reaching 6,323 pounds per acre in 2008/09. The decrease in planted area aids this growth.

Assuming trend yields, increased area will push 1999 rice production above 200 million cwt, breaking the record set in 1994. Production is projected to reach 205 million cwt by the end of the baseline.

Imports are expected to continue to increase over the projection period. For the 1998/99 marketing year, 9 million hundredweight are expected to be imported. By 2008/09, 14.1 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 flat on a per capita basis. Increases in domestic use exceed the growth in production, limiting U.S. exports.

Ending stocks of rice for 1998/99 are projected to increase to 29 million cwt. Stock levels and stocks-to-use remain near their present values during the baseline.

The U.S. average farm price is projected to decrease to \$9.00 per cwt for marketing year 1998/99 due to larger supplies. Prices weaken to \$8.61 per cwt by 1999/00 as production increases again. Longer term, rice prices increase, reaching \$9.45 by the end of the projection period.

Weak market prices have pushed net returns lower the last two years. Market net returns over variable production costs increase during the baseline as prices increase. Despite these rising returns, rice loses area to other uses. Other crops gain an edge, because returns of competing crops are believed to be higher in most rice growing areas. By the last year of the baseline, rice net returns reach \$156 per acre. Assuming some softening in prices, net returns will decline, but remain relatively competitive with other crops.

U.S. Rice Supply and Utilization

	98/99	99/00	00/01	01/02	02/03	03/04	04/05	05/06	06/07	07/08	08/09
Area					(Mi	Ilion Acres	s)				
Contract Area	4.16	4.16	4.16	4.16	4.16	4.16	4.16	4.16	4.16	4.16	4.16
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	3.35	3.45	3.39	3.36	3.36	3.34	3.34	3.32	3.31	3.29	3.28
Harvested Area	3.32	3.42	3.36	3.34	3.33	3.31	3.31	3.29	3.28	3.26	3.25
Yield					(Pou	nds per A	cre)				
Actual	5,669	5,949	5,988	6,031	6,073	6,118	6,155	6,200	6,239	6,283	6,323
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	224.8	242.4	243.0	244.0	245.9	246.9	248.8	249.6	251.1	252.2	253.6
Beginning Stocks	27.7	29.0	32.0	32.2	32.3	32.7	32.7	33.2	33.1	33.5	33.8
Production	188.1	203.7	200.9	201.2	202.4	202.5	204.0	203.8	204.8	205.0	205.6
Imports	9.0	9.6	10.2	10.7	11.2	11.7	12.2	12.6	13.2	13.7	14.1
Domestic Use	108.9	112.6	115.0	117.2	119.5	121.6	123.8	126.0	128.2	130.3	132.5
Food	83.5	86.7	88.9	91.1	93.3	95.4	97.5	99.6	101.7	103.8	105.8
Seed	4.5	4.4	4.4	4.4	4.3	4.3	4.3	4.3	4.2	4.2	4.2
Brewing	15.4	15.6	15.7	15.8	15.9	15.9	16.0	16.1	16.2	16.3	16.4
Residual	5.5	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
Exports	86.9	97.8	95.9	94.5	93.6	92.6	91.8	90.5	89.4	88.0	87.0
Total Use	195.8	210.4	210.9	211.7	213.1	214.2	215.6	216.5	217.6	218.4	219.5
Ending Stocks	29.0	32.0	32.2	32.3	32.7	32.7	33.2	33.1	33.5	33.8	34.1
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	29.0	32.0	32.2	32.3	32.7	32.7	33.2	33.1	33.5	33.8	34.1
Prices and Returns					(U	.S. Dollars	s)				
Season Avg. Price/cwt	9.00	8.61	8.67	8.79	8.85	9.02	9.06	9.22	9.28	9.35	9.45
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
Contract Payment/cwt	4.35	2.82	2.60	2.11	2.04	2.04	2.04	2.04	2.04	2.04	2.04
Contract Payment/a.	177.97	115.46	106.57	86.19	83.71	83.71	83.71	83.71	83.71	83.71	83.71
FOB Houston/cwt	17.46	16.68	16.81	17.07	17.22	17.61	17.73	18.08	18.23	18.40	18.64
Adjusted World Price/cwt	8.00	7.37	7.42	7.54	7.60	7.77	7.81	7.97	8.03	8.10	8.20
Variable Expenses/a	388.50	386.01	391.99	398.59	403.85	409.32	415.30	421.28	427.73	434.26	441.16
Market Net Returns/a.	121.73	126.21	127.12	131.42	133.45	142.34	142.39	150.11	151.10	153.06	156.14

# **U.S. Upland Cotton**

Farmers seeded 13.09 million acres to cotton in 1998. For the 1999/00 marketing year, planted area is expected to rise to 13.21 million acres planted due to weaker competition from other crops. Longer term, cotton area declines as returns lag behind corn and soybeans. Planted area is expected to decline, reaching 11.99 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 612 pounds per acre in 1998. Poor yields in the west 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 708 pounds per acre.

U.S. imports of upland cotton totaled 0.35 million bales during the 1998/99 crop year. The level of imports is projected to be lower, at 0.30 million bales, for 1999/00 and then fall further to 0.05 million bales during the rest of the baseline.

Increased textile imports pressured mill use lower in 1998. Modest growth is projected over the baseline. Mill use in 1999/00 is projected to recover to 10.64 million bales. As consumer demand remains strong, mill use should continue to increase throughout the projection period. In 2008/09, projected mill use is 12.02 million bales. This implies a slight per capita increase.

Weaker global demand and the absence of Step 2 payments limit cotton exports. For the 1998/99 crop year, only 3.97 million bales of upland cotton are projected to be exported. Longer term, increase competition from African countries and Australia limit U.S. exports of cotton. Exports are projected to be 4.93 million bales by 2008/09.

Reflecting weaker demand and an increase in stocks, cotton prices are projected to average sharply lower in 1999 and 2000. A lower AWP will lead to significant loan deficiency payments over the 1999 to 2001 period.

U.S. Upland Cotton Supply and Utilization

	98/99	99/00	00/01	01/02	02/03	03/04	04/05	05/06	06/07	07/08	08/09
Area					(M	illion Acre	s)				
Contract Area	16.26	16.33	16.31	16.30	16.29	16.29	16.29	16.28	16.28	16.28	16.28
CRP Idled	1.24	1.27	1.36	1.41	1.43	1.44	1.45	1.46	1.47	1.47	1.47
Planted Area	13.09	13.21	12.71	12.44	12.16	12.06	11.94	11.87	11.89	11.95	11.99
Harvested Area	10.49	12.54	12.08	11.83	11.56	11.46	11.35	11.29	11.30	11.36	11.40
Yield					(Pou	nds per A	cre)				
Actual	612	660	667	672	676	681	686	691	697	702	708
Program	608	608	608	608	608	608	608	608	608	608	608
					(M	illion Bale:	s)				
Supply	17.54	20.88	22.13	22.35	21.87	21.40	20.98	20.68	20.55	20.55	20.58
Beginning Stocks	3.82	3.33	5.24	5.75	5.53	5.08	4.70	4.37	4.09	3.88	3.72
Production	13.37	17.25	16.79	16.55	16.29	16.28	16.23	16.26	16.41	16.62	16.81
Imports	0.35	0.30	0.10	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05
Domestic Use											
Mill Use	10.22	10.64	10.89	11.02	11.13	11.25	11.39	11.54	11.69	11.85	12.02
Exports	3.97	4.99	5.48	5.79	5.65	5.45	5.20	5.04	4.97	4.97	4.93
Total Use	14.18	15.63	16.37	16.81	16.78	16.70	16.59	16.58	16.66	16.82	16.95
Unaccounted	-0.02	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01
Ending Stocks	3.33	5.24	5.75	5.53	5.08	4.70	4.37	4.09	3.88	3.72	3.62
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	3.33	5.24	5.75	5.53	5.08	4.70	4.37	4.09	3.88	3.72	3.62
Prices and Returns					(U	.S. Dollars	s)				
Season Avg. Price/lb.	0.625	0.545	0.531	0.553	0.580	0.602	0.620	0.638	0.654	0.667	0.677
Calendar Avg. Price/lb.	0.660	0.577	0.537	0.546	0.571	0.595	0.615	0.633	0.649	0.664	0.675
Loan Rate/lb.	0.519	0.519	0.519	0.516	0.500	0.500	0.500	0.500	0.511	0.519	0.519
Contract Payment/lb.	0.122	0.079	0.071	0.057	0.055	0.055	0.055	0.055	0.055	0.055	0.055
Contract Payment/a.	63.08	40.72	36.59	29.48	28.61	28.62	28.62	28.63	28.63	28.63	28.63
Cotlook A Index/lb.	0.580	0.558	0.552	0.580	0.615	0.644	0.667	0.690	0.710	0.728	0.740
Adjusted World Price/lb.	0.440	0.423	0.418	0.442	0.472	0.497	0.518	0.538	0.555	0.571	0.582
Variable Expenses/a.	327.28	330.06	335.50	342.55	348.30	354.13	360.39	366.61	373.07	379.62	386.28
Market Net Returns/a.	179.93	164.42	156.47	149.38	135.09	132.09	129.71	134.62	144.00	151.92	158.17

U.S. Cottonseed Supply and Utilization

	98/99	99/00	00/01	01/02	02/03	03/04	04/05	05/06	06/07	07/08	08/09		
	(Thousand Tons)												
Supply	5,945	7,073	7,037	7,091	6,989	6,981	6,963	6,973	7,030	7,114	7,186		
Beginning Stocks	563	200	350	500	500	500	500	500	500	500	500		
Production	5,182	6,773	6,587	6,491	6,389	6,381	6,363	6,373	6,430	6,514	6,586		
Imports	200	100	100	100	100	100	100	100	100	100	100		
Domestic Use	5,670	6,598	6,412	6,466	6,364	6,356	6,338	6,348	6,405	6,489	6,561		
Crush	2,663	3,533	3,390	3,316	3,247	3,239	3,238	3,247	3,291	3,345	3,404		
Other	3,007	3,065	3,022	3,150	3,117	3,117	3,100	3,100	3,114	3,144	3,157		
Exports	75	125	125	125	125	125	125	125	125	125	125		
Total Use	5,745	6,723	6,537	6,591	6,489	6,481	6,463	6,473	6,530	6,614	6,686		
Ending Stocks	200	350	500	500	500	500	500	500	500	500	500		
Prices and Returns					(U	.S. Dollars	;)						
Farm Price/ton	127.27	105.91	103.26	102.31	102.64	102.97	105.18	106.45	108.49	109.47	112.74		
Meal Price/ton	109.67	106.13	112.93	119.31	125.57	129.09	133.21	136.51	139.54	140.44	144.20		
Oil Price/cwt	33.04	30.05	27.99	26.60	25.58	25.12	25.08	24.95	25.15	25.42	25.87		
Crushing Margin/ton	27.96	38.14	37.25	36.64	35.86	35.66	35.17	34.96	34.92	35.21	35.08		

U.S. Cottonseed Meal Supply and Utilization

	98/99	99/00	00/01	01/02	02/03	03/04	04/05	05/06	06/07	07/08	08/09		
	(Thousand Tons)												
Supply	1,288	1,614	1,572	1,536	1,502	1,497	1,495	1,499	1,518	1,542	1,570		
Beginning Stocks	88	22	44	42	39	37	36	35	35	35	36		
Production	1,200	1,592	1,528	1,494	1,463	1,460	1,459	1,463	1,483	1,508	1,534		
Imports	0	0	0	0	0	0	0	0	0	0	0		
Domestic Use	1,256	1,520	1,430	1,397	1,366	1,361	1,360	1,364	1,383	1,407	1,434		
Exports	10	50	100	100	100	100	100	100	100	100	100		
Total Use	1,266	1,570	1,530	1,497	1,466	1,461	1,460	1,464	1,483	1,507	1,534		
Ending Stocks	22	44	42	39	37	36	35	35	35	36	36		
Prices	(U.S. Dollars)												
Memphis/ton	109.67	106.13	112.93	119.31	125.57	129.09	133.21	136.51	139.54	140.44	144.20		
Memphis/mt	120.89	116.99	124.48	131.51	138.41	142.30	146.83	150.47	153.81	154.81	158.95		

# U.S. Cottonseed Oil Supply and Utilization

	98/99	99/00	00/01	01/02	02/03	03/04	04/05	05/06	06/07	07/08	08/09		
	(Million Pounds)												
Supply	998	1,177	1,150	1,127	1,105	1,103	1,103	1,106	1,120	1,138	1,157		
Beginning Stocks	79	45	64	65	65	65	65	65	66	66	66		
Production	853	1,132	1,086	1,062	1,040	1,037	1,037	1,040	1,054	1,071	1,090		
Imports	66	0	0	0	0	0	0	0	0	0	0		
Domestic Use	853	912	886	862	840	837	837	840	854	871	890		
Exports	100	200	200	200	200	200	200	200	200	200	200		
Total Use	953	1,112	1,086	1,062	1,040	1,037	1,037	1,040	1,054	1,071	1,090		
Ending Stocks	45	64	65	65	65	65	65	66	66	66	67		
Prices					(U	.S. Dollars	s)						
Valley Points/cwt	33.04	30.05	27.99	26.60	25.58	25.12	25.08	24.95	25.15	25.42	25.87		
Valley Points/mt	728.39	662.40	616.99	586.43	563.90	553.84	552.96	550.00	554.40	560.30	570.30		

# U.S. Sugar and High-Fructose Corn Syrup

With weaker prices of competing crops, sugar beet harvested area is expected to increase to almost 1.5 million acres in 1999. Cane area should also show a modest increase. After 1999, beet area is projected to remain relatively stable with modest expansion in cane area expected.

With growth in domestic use expected to exceed production, additional imports will be required. Total imports for 1999 are projected at 2.2 million tons. By 2008, imports are projected to rise to 3 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 million tons in 1999 to 11 million tons in 2008.

Ending stocks are expected to reach 19 percent of domestic use by the end of fiscal year 1999 due to increased production. Stocks show a gradual decline thereafter, falling to 15 percent of disappearance by 2008.

Raw sugar prices are expected to average \$0.215 per pound in 1999. Some recovery is expected in the long run, but in general prices range between \$0.22 and \$0.23 per pound.

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

	98/99	99/00	00/01	01/02	02/03	03/04	04/05	05/06	06/07	07/08	08/09
Sugar Beets											
Harv. Area (1,000 a.)	1,456	1,495	1,492	1,493	1,494	1,497	1,498	1,500	1,502	1,505	1,510
Yield (tons/a.)	22.43	20.81	20.83	20.86	20.89	20.91	20.94	20.97	20.99	21.02	21.04
Prod. (1,000 tons)	32,660	31,108	31,091	31,137	31,215	31,298	31,364	31,442	31,519	31,641	31,765
Sugarcane											
Harv. Area (1,000 a.)	935	941	945	949	952	955	958	961	964	967	969
Yield (tons/a.)	33.39	33.25	33.25	33.26	33.26	33.27	33.27	33.27	33.28	33.28	33.29
Prod. (1,000 tons)	31,199	31,294	31,427	31,555	31,668	31,776	31,878	31,976	32,072	32,168	32,264

# U.S. Sugar Supply and Utilization

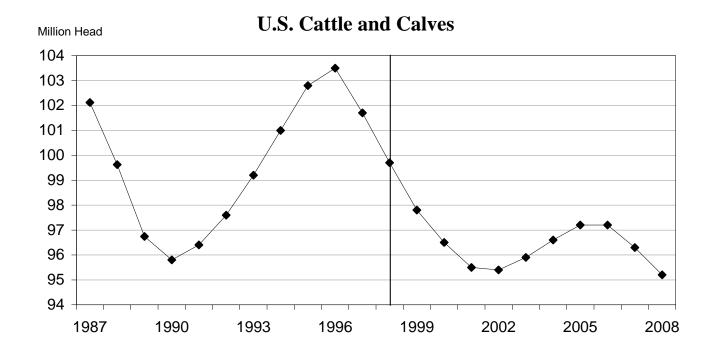
	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008		
	(Thousand Short Tons, Raw Value, Fiscal Year)												
Supply	11,684	12,124	12,080	12,142	12,242	12,379	12,426	12,535	12,655	12,784	12,924		
Beginning Stocks	1,488	1,679	1,914	1,819	1,770	1,744	1,727	1,714	1,704	1,694	1,685		
Production	8,020	8,250	8,044	8,062	8,088	8,117	8,146	8,172	8,199	8,227	8,260		
Imports	2,176	2,195	2,122	2,261	2,384	2,519	2,553	2,649	2,752	2,863	2,979		
Quota	1,742	1,750	1,677	1,816	1,939	2,074	2,108	2,204	2,307	2,418	2,534		
Non-Quota	434	445	445	445	445	445	445	445	445	445	445		
Utilization	10,007	10,210	10,262	10,371	10,498	10,653	10,711	10,831	10,961	11,099	11,248		
Disappearance	9,828	10,035	10,087	10,196	10,323	10,478	10,536	10,656	10,786	10,924	11,073		
Exports	179	175	175	175	175	175	175	175	175	175	175		
Error Adjustment	-2	0	0	0	0	0	0	0	0	0	0		
Ending Stocks	1,679	1,914	1,819	1,770	1,744	1,727	1,714	1,704	1,694	1,685	1,676		
Prices				(U.S	S. Cents p	er Pound,	Fiscal Yea	ar)					
N.Y. Spot Raw Sugar	22.01	21.54	21.87	22.03	22.15	22.26	22.32	22.40	22.48	22.57	22.66		
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		

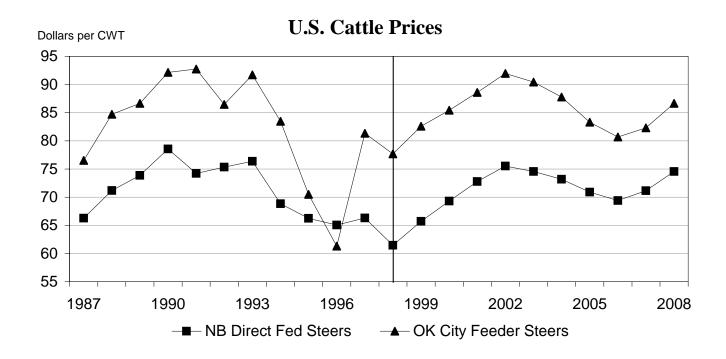
U.S. High-Fructose Corn Syrup Supply and Utilization

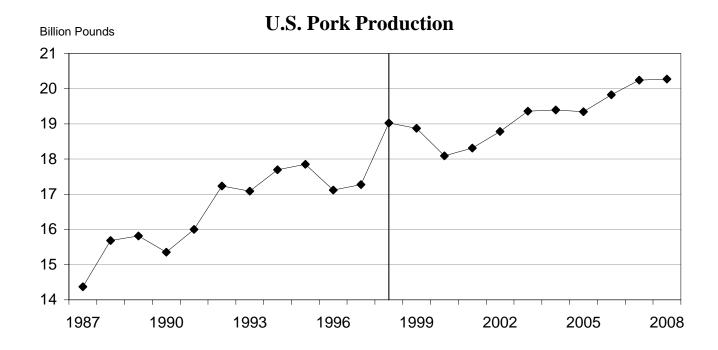
1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008			
(Thousand Short Tons, Raw Value, Calendar Year)													
9,147	9,565	9,818	10,089	10,354	10,612	10,869	11,127	11,383	11,640	11,894			
9,017	9,435	9,688	9,959	10,224	10,482	10,739	10,997	11,253	11,510	11,764			
130	130	130	130	130	130	130	130	130	130	130			
9,147	9,565	9,818	10,089	10,354	10,612	10,869	11,127	11,383	11,640	11,894			
8,897	9,310	9,558	9,824	10,084	10,337	10,589	10,842	11,093	11,345	11,594			
250	255	260	265	270	275	280	285	290	295	300			
	9,147 9,017 130 9,147 8,897	9,147 9,565 9,017 9,435 130 130 9,147 9,565 8,897 9,310	9,147 9,565 9,818 9,017 9,435 9,688 130 130 130 9,147 9,565 9,818 8,897 9,310 9,558	(Thousand 9,147 9,565 9,818 10,089 9,017 9,435 9,688 9,959 130 130 130 130 9,147 9,565 9,818 10,089 8,897 9,310 9,558 9,824	(Thousand Short Ton 9,147 9,565 9,818 10,089 10,354 9,017 9,435 9,688 9,959 10,224 130 130 130 130 130 130 9,147 9,565 9,818 10,089 10,354 8,897 9,310 9,558 9,824 10,084	(Thousand Short Tons, Raw Va 9,147 9,565 9,818 10,089 10,354 10,612 9,017 9,435 9,688 9,959 10,224 10,482 130 130 130 130 130 130 9,147 9,565 9,818 10,089 10,354 10,612 8,897 9,310 9,558 9,824 10,084 10,337	(Thousand Short Tons, Raw Value, Caler 9,147 9,565 9,818 10,089 10,354 10,612 10,869 9,017 9,435 9,688 9,959 10,224 10,482 10,739 130 130 130 130 130 130 130 130 130 9,147 9,565 9,818 10,089 10,354 10,612 10,869 8,897 9,310 9,558 9,824 10,084 10,337 10,589	(Thousand Short Tons, Raw Value, Calendar Year) 9,147 9,565 9,818 10,089 10,354 10,612 10,869 11,127 9,017 9,435 9,688 9,959 10,224 10,482 10,739 10,997 130 130 130 130 130 130 130 130 130  9,147 9,565 9,818 10,089 10,354 10,612 10,869 11,127 8,897 9,310 9,558 9,824 10,084 10,337 10,589 10,842	(Thousand Short Tons, Raw Value, Calendar Year) 9,147 9,565 9,818 10,089 10,354 10,612 10,869 11,127 11,383 9,017 9,435 9,688 9,959 10,224 10,482 10,739 10,997 11,253 130 130 130 130 130 130 130 130 130 130  9,147 9,565 9,818 10,089 10,354 10,612 10,869 11,127 11,383 8,897 9,310 9,558 9,824 10,084 10,337 10,589 10,842 11,093	(Thousand Short Tons, Raw Value, Calendar Year)  9,147 9,565 9,818 10,089 10,354 10,612 10,869 11,127 11,383 11,640  9,017 9,435 9,688 9,959 10,224 10,482 10,739 10,997 11,253 11,510  130 130 130 130 130 130 130 130 130 130			

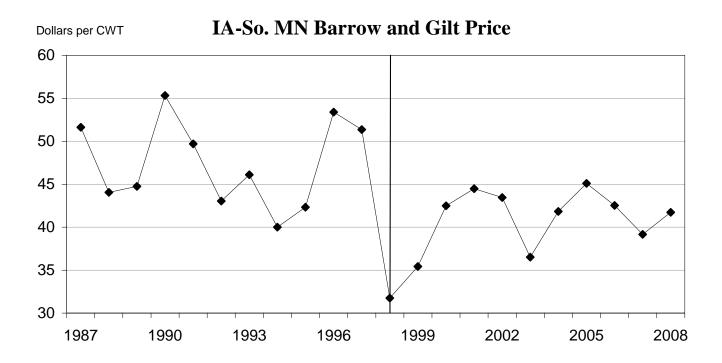
# U.S. LIVESTOCK

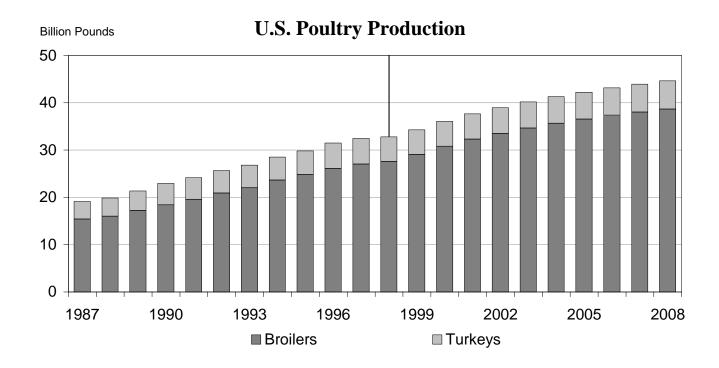
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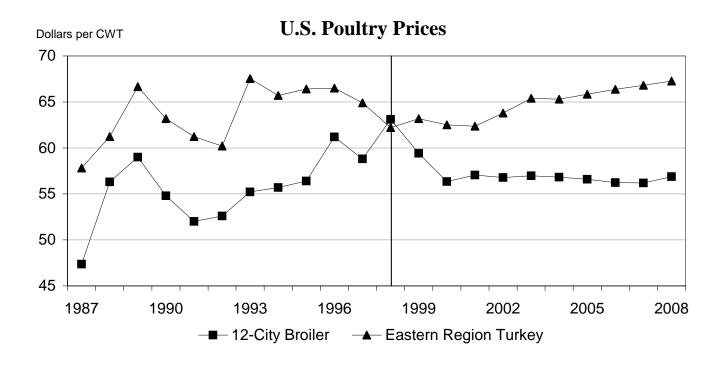


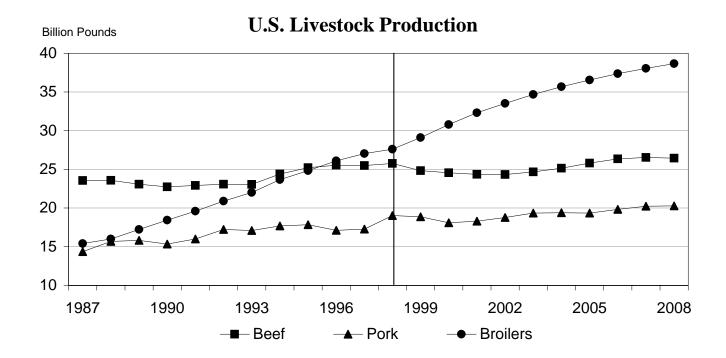


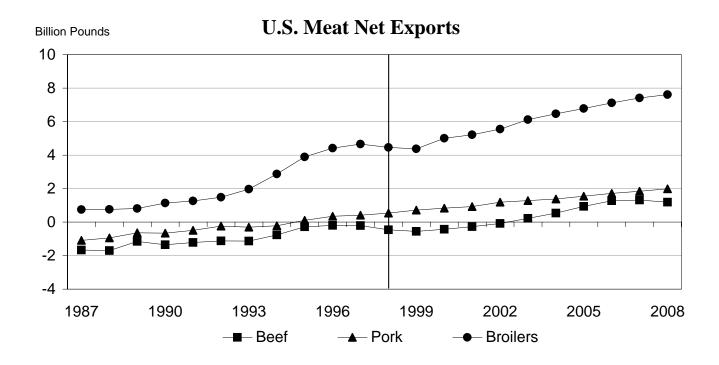


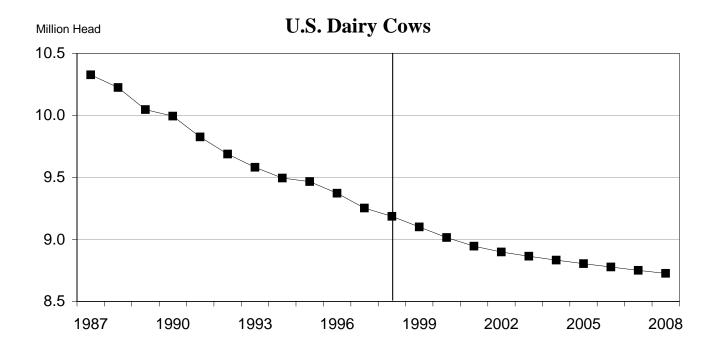


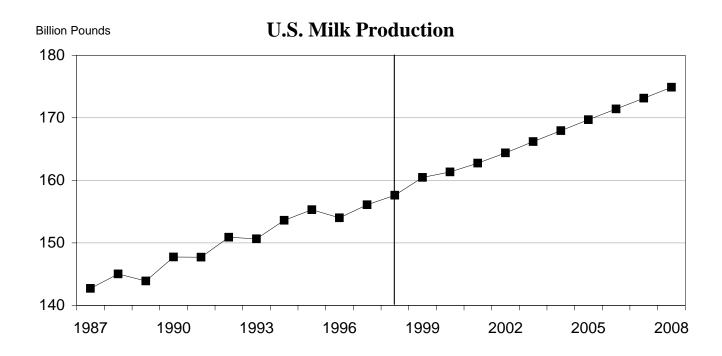


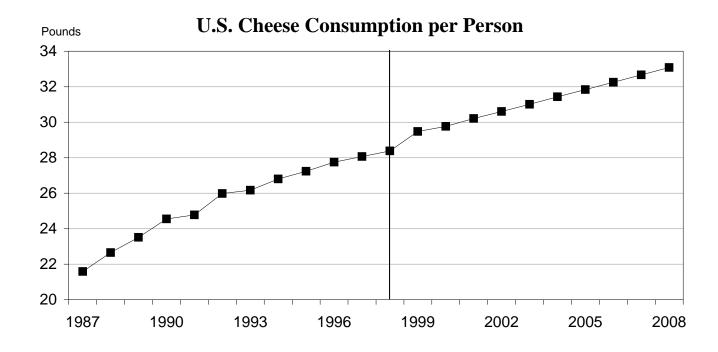


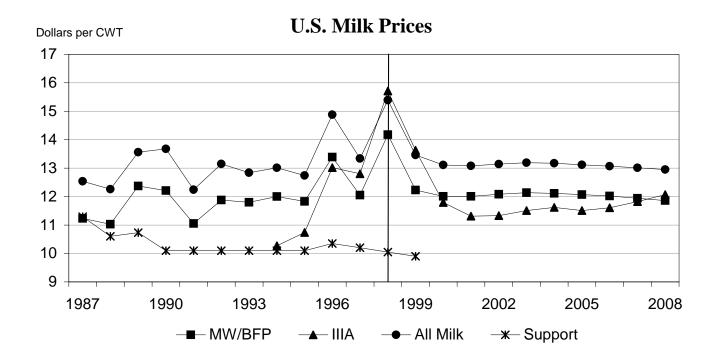












# U.S. Beef

For 1999, the liquidation phase continues as January 1 cattle and calf inventories fell to 97.8 million head. Declining numbers are expected to continue through 2002 with inventories reaching a low of 95.4 million head. Stronger price signals encourage expansion after 2002 with a peak of 97.2 million in 2006. This peak is 6 million below the most recent high in 1996.

The cow herd is projected to bottom in 2001 at 32.5 million head, down 500 thousand from the 1999 level. Longer term, the herd size recovers, reaching a peak of 33.5 million in 2006.

Despite lower slaughter numbers, beef production increased in 1998 as slaughter weights rose. For 1999, production is expected to fall to 24.8 billion pounds, down 900 million from the previous year. Production declines to 24.3 billion pounds by 2002 before recovering to 26.5 billion pounds at the end of the projection period.

Domestic beef consumption parallels the production cycle with a continual decline from 1998 levels of 26.3 billion pounds to 24.4 billion pounds in 2002. On a per capita basis, beef consumption generally declines throughout the baseline, reaching a low of 59.9 pounds in 2008.

Exports are expected to provide the only optimism for beef demand. However, the growth in U.S. exports will be modest in 1999, as demand from many Asian countries remains limited. With imports into the United States projected to remain relatively stable and exports growing, the United States is projected to be a net exporter of beef by 2003. Total exports are projected to reach 4 billion pounds by the end of the period.

Increased production and weak export demand were the primary factors leading to a \$5 decline in the Nebraska direct 1,100-1,300 pound fed-steer price in 1998. As production falls in 1999, fed-steer prices are projected to rise to \$65.71 per cwt. As the cattle industry continues to contract, prices strengthen, peaking at \$75.52 in 2002. Nebraska fed-steer prices range between \$69 and \$75 per cwt after 2002.

The Oklahoma City 600-700 pound feeder-steer price is projected to increase to \$82.59 per cwt in 1999. Movements in the feeder-steer price parallel fed-steer prices; however, the margin narrows in the latter years with higher feed costs and larger slaughter numbers.

Retail beef prices generally move with fed-steer prices, but the percentage changes are usually smaller. From 1999 to 2008, retail prices rise much less than the projected general inflation rate. Further weakening in beef demand is evident as both real prices and per capita consumption decline over the projection period.

U.S. Beef Supply and Utilization

	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008		
	(Million Head)												
Cattle and Calves (Jan. 1)	99.7	97.8	96.5	95.5	95.4	95.9	96.6	97.2	97.2	96.3	95.2		
Beef Cows (Jan. 1)	33.9	33.0	32.6	32.5	32.7	32.9	33.2	33.5	33.5	33.4	33.1		
Total Cattle Slaughter	35.7	34.7	34.4	33.9	33.7	33.9	34.3	35.0	35.6	35.5	35.0		
	(Million Pounds)												
Supply	28,848	28,025	27,862	27,655	27,576	27,836	28,228	28,865	29,468	29,691	29,641		
Beginning Stocks	465	400	387	385	384	385	390	394	400	403	403		
Imports	2,611	2,790	2,910	2,910	2,860	2,779	2,698	2,671	2,721	2,760	2,793		
Production	25,772	24,835	24,565	24,360	24,332	24,672	25,140	25,800	26,347	26,529	26,446		
Disappearance	28,448	27,638	27,477	27,271	27,191	27,446	27,834	28,465	29,066	29,289	29,241		
Domestic Use	26,290	25,396	24,995	24,635	24,413	24,440	24,596	24,855	25,070	25,207	25,251		
Exports	2,158	2,242	2,482	2,636	2,778	3,006	3,238	3,610	3,996	4,082	3,990		
Ending Stocks	400	387	385	384	385	390	394	400	403	403	400		
Per Capita Consumption						(Pounds)							
Carcass Weight	97.3	93.3	91.1	89.0	87.5	86.9	86.7	87.0	87.0	86.8	86.2		
Retail Weight	68.1	64.8	63.3	61.9	60.8	60.4	60.3	60.4	60.5	60.3	59.9		
Change	1.8%	-4.8%	-2.4%	-2.2%	-1.7%	-0.7%	-0.2%	0.2%	0.1%	-0.3%	-0.6%		
Prices													
1100-1300 lb.	24.42	0==1		•	.S. Dollars	•	•	,	00.40				
Nebraska Direct Steers	61.48	65.71	69.30	72.78	75.52	74.56	73.18	70.91	69.42	71.17	74.57		
Change 600-700 lb.	-7.3%	6.9%	5.5%	5.0%	3.8%	-1.3%	-1.8%	-3.1%	-2.1%	2.5%	4.8%		
Oklahoma City Feeder Steers	77.70	82.59	85.45	88.60	91.98	90.44	87.78	83.30	80.70	82.31	86.67		
Change	-4.5%	6.3%	3.5%	3.7%	3.8%	-1.7%	-2.9%	-5.1%	-3.1%	2.0%	5.3%		
Utility Cows, Sioux Falls	36.19	38.59	40.37	41.97	43.08	41.86	40.27	37.83	36.38	37.33	39.87		
Change	5.6%	6.6%	4.6%	4.0%	2.6%	-2.8%	-3.8%	-6.1%	-3.9%	2.6%	6.8%		
					(U.S. Do	ollars per f	Pound)						
Beef Retail	2.77	2.84	2.91	2.98	3.03	3.03	3.03	3.00	3.00	3.02	3.08		
Change	-0.9%	2.6%	2.5%	2.4%	1.7%	0.1%	-0.2%	-0.8%	-0.1%	0.8%	2.0%		
Net Returns					,	ollars per	,						
Cow - Calf	-127.93	-102.25	-93.64	-84.83	-75.15	-88.80	-107.07	-133.89	-151.99	-149.23	-133.49		

### U.S. Pork

Record low hog prices in 1998 have led to substantial economic hardships in the pork industry. As a result, the breeding herd fell to 6.67 million head on December 1, 1998. With only modest improvement in prices, the herd is projected to contract further, reaching 6.38 million head by December 1999. Stronger prices will allow some recovery longer term, but breeding inventories never reach the level seen in 1997.

The larger breeding herd in 1997 led to additional animals slaughtered in 1998, with total slaughter reaching 101 million head. As the industry contracts, slaughter declines to 95.4 million head by 2000, but then generally increases thereafter.

Pork production topped 19 billion pounds in 1998. For 1999, only a modest decline is expected as production is pegged at 18.9 billion pounds. Larger declines are expected for 2000 as hog slaughter falls. After 2000, production generally increases, reaching 20.3 billion pounds by 2008. The growth in production suggests that there will be a need for additional processing capacity longer term.

Domestic consumption of pork follows closely with production. On a per capita basis, consumption is

projected to fall to 51.9 pounds in 1999, down from 52.8 pounds a year earlier. Reduced supplies and higher prices are projected to reduce consumption to 48.8 pounds in 2000. Thereafter, consumption remains relatively flat on a per capita basis.

International markets have represented a growing source of demand for U.S. pork in recent years. For 1999, exports are projected at 1.4 billion pounds. Steady growth is projected over the baseline with exports reaching 2.5 billion pounds by 2008.

Capacity constraints in the processing sector pressured Iowa-Southern Minnesota 230-250 pound barrow and gilt prices below \$10 per cwt at the end of 1998. For the year, prices averaged \$31.74, a decline of 38 percent from 1997. Lower production will allow prices to recover in 1999 with an annual average of \$35.41 per cwt. After 1999, prices move opposite of the production cycle and range between \$36 and \$45 per cwt.

Despite the substantial decline in farmgate prices, retail prices fell by only 0.9 percent in 1998. For the projection period, retail prices remain relatively stable, ranging between \$2.30 and \$2.42 per pound.

U.S. Pork Supply and Utilization

	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
Hogs on Farms					(M	illion Head	d)				
Market (Dec. 1)	55.5	52.8	53.9	54.5	55.5	57.0	56.8	56.7	56.4	56.7	57.4
Breeding (Dec. 1)	6.67	6.38	6.45	6.47	6.58	6.63	6.55	6.52	6.65	6.76	6.68
Total Hog Slaughter	101.0	100.0	95.4	96.2	98.3	101.0	100.8	100.1	102.2	104.0	103.7
					(Mil	lion Pound	ds)				
Supply	20,125	20,074	19,180	19,369	19,782	20,402	20,469	20,373	20,818	21,276	21,326
Beginning Stocks	408	500	440	426	451	465	486	476	475	496	509
Imports	695	700	650	630	549	578	589	551	513	535	544
Production	19,022	18,874	18,090	18,312	18,782	19,359	19,394	19,346	19,829	20,245	20,274
Disappearance	19,625	19,634	18,753	18,918	19,317	19,916	19,993	19,897	20,322	20,767	20,820
Domestic Use	18,393	18,219	17,268	17,356	17,579	18,051	18,024	17,800	18,088	18,389	18,287
Exports	1,232	1,415	1,485	1,562	1,738	1,865	1,969	2,097	2,234	2,379	2,533
Ending Stocks	500	440	426	451	465	486	476	475	496	509	506
Per Capita Consumption											
Carcass Weight	68.1	66.9	62.9	62.7	63.0	64.2	63.6	62.3	62.8	63.3	62.4
Retail Weight	52.8	51.9	48.8	48.6	48.9	49.8	49.3	48.3	48.7	49.1	48.4
Change	8.4%	-1.7%	-6.0%	-0.3%	0.5%	1.9%	-0.9%	-2.0%	0.8%	0.8%	-1.4%
Prices											
230-250 lb., Barrows and Gilts				(U	.S. Dollars	s per Hund	dredweight	i)			
Iowa-Southern Minnesota	31.74	35.41	42.49	44.47	43.44	36.52	41.82	45.09	42.53	39.17	41.72
Change	-38.2%	11.6%	20.0%	4.7%	-2.3%	-15.9%	14.5%	7.8%	-5.7%	-7.9%	6.5%
6 Market Sows	24.28	28.02	33.05	34.14	33.89	31.39	34.68	36.89	35.82	34.88	36.24
Change	-45.5%	15.4%	17.9%	3.3%	-0.7%	-7.4%	10.5%	6.4%	-2.9%	-2.6%	3.9%
					(U.S. Do	ollars per F	Pound)				
Pork Retail	2.29	2.30	2.38	2.42	2.41	2.35	2.38	2.41	2.40	2.35	2.36
Change	-0.9%	0.3%	3.5%	1.4%	-0.1%	-2.6%	1.2%	1.4%	-0.4%	-2.1%	0.4%
Net Returns				(U	.S. Dollars	s per Hund	dredweight	:)			
Farrow - Finish	-4.88	-0.28	5.87	6.89	5.11	-2.42	1.74	4.09	0.91	-2.95	-1.25

# **U.S. Poultry**

Disease problems in the broiler flock limited growth in production to 2.1 percent in 1998. Assuming those problems do not persist, production is expected to expand by 5.4 percent in 1999. With average growth of 3.2 percent over the projection period, production reaches 38 billion pounds by 2007.

In the face of lower prices, turkey production fell by 4.4 percent in 1998. For 1999, production is expected to increase by less than 1 percent. Thereafter, turkey production expands at an annual rate of 1.6 percent, substantially slower than what was observed in the early 1990s.

Domestic consumption of broilers is projected to continue to show steady growth, although at slower rates than what was observed in recent history. On a per capita basis, consumption expands from 78.7 pounds in 1999 to 92.1 pounds in 2008. The outlook for turkey consumption is less optimistic with per capita disappearance having been flat for several years. This trend is projected to continue over the baseline.

The export market has turned into an important source of demand for U.S. broilers. After strong growth during the early 1990s, the current economic turmoil in Russia has limited exports in 1998 and 1999. Growth is projected to return in 2000 and continue as exports reach 7.6 billion pounds by 2008.

With a limited increase in production, wholesale broiler prices rose 7.3 percent in 1998. Prices are projected to fall to \$0.594 per pound in 1999 as supplies recover. Additional price weakness is expected in 2000 with prices averaging \$0.564 per pound. Eastern Region turkey prices are projected to range between \$0.62 and \$0.63 per pound through 2001, with some strengthening longer term.

Egg production is projected to climb to 6.8 billion dozen in 1999 due to a larger number of hens and further technological advancements. Over the baseline, production is expected to grow at annual rate of 0.9 percent.

Total egg disappearance mirrors production; however, the individual demand categories exhibit very different trends. Shell egg disappearance is projected to remain relatively stable, while breaking eggs account for the growth in demand.

In 1999, the wholesale egg price is projected to decline to \$0.726 per dozen with a retail price of \$0.988 per dozen. Wholesale prices are expected to remain stable throughout the baseline with modest growth occurring in retail prices.

U.S. Broiler Supply and Utilization

	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
					(Mil	lion Pound	ds)				
Supply	28,220	29,797	31,540	33,124	34,356	35,536	36,579	37,484	38,322	39,027	39,663
Beginning Stocks	607	700	757	806	840	864	907	943	971	991	1,006
Production	27,613	29,097	30,784	32,317	33,516	34,672	35,672	36,540	37,351	38,036	38,657
Disappearance	27,525	29,040	30,734	32,284	33,492	34,628	35,636	36,513	37,331	38,021	38,646
Domestic Use	23,059	24,660	25,730	27,070	27,933	28,502	29,164	29,730	30,215	30,609	31,037
Exports	4,466	4,380	5,004	5,214	5,559	6,126	6,472	6,783	7,116	7,412	7,609
Ending Stocks	700	757	806	840	864	907	943	971	991	1,006	1,017
Per Capita Consumption						(Pounds)					
Retail Weight	85.4	90.6	93.7	97.8	100.1	101.3	102.8	104.0	104.9	105.4	106.0
Retail Weight less Pet Food	74.2	78.7	81.4	84.9	86.9	88.0	89.3	90.3	91.1	91.5	92.1
Change	2.1%	6.0%	3.5%	4.3%	2.4%	1.2%	1.5%	1.1%	0.8%	0.5%	0.6%
Prices					(U.S. C	ents per F	ound)				
12-City Wholesale	63.10	59.42	56.35	57.06	56.79	56.97	56.83	56.59	56.23	56.20	56.88
Change	7.3%	-5.8%	-5.2%	1.2%	-0.5%	0.3%	-0.3%	-0.4%	-0.6%	-0.1%	1.2%
Broiler Retail	154.28	150.62	148.96	148.69	150.18	152.23	153.50	154.17	154.01	154.37	156.30
Change	1.8%	-2.4%	-1.1%	-0.2%	1.0%	1.4%	0.8%	0.4%	-0.1%	0.2%	1.2%
Net Returns	13.61	11.84	8.31	8.34	7.43	6.91	6.11	5.27	4.31	3.73	3.85

**U.S. Turkey Supply and Utilization** 

	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
					(Mil	lion Pound	ds)				
Supply	5,589	5,482	5,542	5,624	5,704	5,792	5,888	5,984	6,079	6,181	6,287
Beginning Stocks	415	275	256	262	263	263	267	273	276	280	285
Production	5,174	5,207	5,286	5,363	5,441	5,529	5,621	5,711	5,803	5,901	6,003
Disappearance	5,314	5,226	5,280	5,361	5,441	5,526	5,614	5,708	5,799	5,896	5,998
Domestic Use	4,886	4,796	4,789	4,849	4,895	4,924	4,979	5,042	5,101	5,169	5,251
Exports	428	430	491	512	546	601	635	666	699	728	747
Ending Stocks	275	256	262	263	263	267	273	276	280	285	289
						(Pounds)					
Per Capita Consumption	18.1	17.6	17.4	17.5	17.5	17.5	17.6	17.6	17.7	17.8	17.9
Change	2.8%	-2.7%	-1.0%	0.4%	0.1%	-0.2%	0.3%	0.5%	0.4%	0.5%	0.8%
Prices					(U.S. C	ents per F	ound)				
Eastern Region Wholesale	62.20	63.19	62.51	62.37	63.79	65.40	65.29	65.84	66.37	66.81	67.27
Change	-4.2%	1.6%	-1.1%	-0.2%	2.3%	2.5%	-0.2%	0.0%	0.8%	0.7%	0.7%
Retail	99.85	102.28	101.29	101.16	103.85	106.35	105.76	106.36	106.89	107.26	107.64
Change	-5.0%	2.4%	-1.0%	-0.1%	2.7%	2.4%	-0.6%	0.6%	0.5%	0.3%	0.4%
Net Returns	-1.18	3.35	2.31	1.47	2.22	3.09	2.33	2.30	2.25	2.22	2.19

U.S. Egg Supply and Utilization

	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
					(Mil	llion Dozer	n)				
Supply	6,644	6,809	6,923	6,997	7,061	7,121	7,177	7,230	7,284	7,340	7,395
Beginning Stocks	7	5	5	5	5	5	5	5	5	5	5
Production	6,631	6,800	6,914	6,988	7,052	7,112	7,168	7,221	7,275	7,331	7,386
Imports	6	4	4	4	4	4	4	4	4	4	4
Disappearance	6,639	6,804	6,918	6,992	7,056	7,116	7,172	7,225	7,279	7,335	7,390
Civilian Disappearance	2.000	2.050	2.000	2.057	2.040	2.020	2.000	2.040	2 000	2 000	2 005
Shell Egg	3,926	3,950	3,966	3,957	3,948	3,936	3,928	3,918	3,909	3,902	3,895
Breaking Egg	1,565	1,631	1,683	1,727	1,772	1,818	1,861	1,906	1,955	2,006	2,059
Hatching Egg	922	980	1,024	1,060	1,086	1,109	1,128	1,143	1,154	1,163	1,171
Exports	226	243	245	248	250	253	255	258	261	263	266
Ending Stock	5	5	5	5	5	5	5	5	5	5	5
Per Capita Consumption						(Eggs)					
Shell Egg	174.6	174.1	173.4	171.6	169.8	167.9	166.2	164.5	162.8	161.2	159.6
Change	0.4%	-0.3%	-0.5%	-1.0%	-1.0%	-1.1%	-1.0%	-1.1%	-1.0%	-1.0%	-1.0%
Breaking Egg	69.6	71.9	73.6	74.9	76.2	77.5	78.7	80.0	81.4	82.9	84.4
Change	6.0%	3.3%	2.4%	1.7%	1.8%	1.8%	1.5%	1.6%	1.7%	1.8%	1.8%
Total	244.1	246.0	246.9	246.4	246.0	245.4	245.0	244.5	244.2	244.1	244.0
Prices					(U.S. C	ents per D	lozen)				
N.Y. Grade A Lg. Wholesale	76.09	72.56	70.79	71.70	72.42	73.60	73.43	73.89	73.72	73.09	72.14
Change	-6.3%	-4.6%	-2.4%	1.3%	1.0%	1.6%	-0.2%	0.6%	-0.2%	-0.8%	-1.3%
Shell Egg Retail	102.64	98.77	97.19	98.53	99.68	101.36	101.56	102.42	102.64	102.39	101.81
Change	-3.0%	-3.8%	-1.6%	1.4%	1.2%	1.7%	0.2%	0.9%	0.2%	-0.2%	-0.6%
Net Returns	9.61	9.49	7.36	7.69	7.87	8.40	7.66	7.63	6.98	5.97	4.60

## U.S. Dairy

Milk production is projected to surpass 160 billion pounds in 1999 after the modest increase experienced in 1998. The annual growth in milk production is projected to average 1 percent over the baseline.

The growth in production comes as productivity gains more than offsets the decline in cow numbers. Per cow production is projected to grow from 17.6 thousand pounds in 1999 to 20 thousand pounds in 2008. The decline in cow numbers will continue throughout the baseline, although at a slower rate than what has been observed in recent years. Total cow numbers are projected to decline to 9.1 million head in 1999. By 2008, the herd is expected to contract to 8.7 million.

Total utilization of milk for 1998 stood at 157.7 billion pounds. Use is projected to steadily grow to 175

billion pounds by 2008. Manufactured uses of milk account for the vast majority of growth in total utilization. Fluid use does expand in total, but at a slower rate than the growth in population.

Strong butter prices pushed milk prices substantially higher in 1999. For 1999, the all-milk price is projected to average \$13.46 per cwt, a decline of nearly \$2 from the 1998 level. All-milk prices are expected to average \$13.08 per cwt over the 2000 to 2008 period.

As legislated in the 1996 Farm Bill, the dairy support prices are eliminated beginning in 2000. All government activity after 1999 is associated with the Dairy Export Incentive Program (DEIP). The baseline does not incorporate a reduction in the number of federal milk marketing orders.

# U.S. Milk Supply and Utilization

	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
				(1	Million Pou	ınds Milk I	Equivalent	)			
Supply	157,747	160,596	161,476	162,887	164,546	166,342	168,094	169,829	171,561	173,296	175,039
Milk Production	157,604	160,453	161,333	162,744	164,403	166,199	167,951	169,686	171,418	173,153	174,896
Per Cow (Pounds)	17,159	17,633	17,897	18,192	18,476	18,750	19,013	19,273	19,531	19,787	20,043
No. Cows (1,000)	9,185	9,100	9,015	8,946	8,898	8,864	8,833	8,804	8,777	8,751	8,726
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	157,748	160,596	161,476	162,887	164,546	166,342	168,094	169,829	171,561	173,296	175,039
On-Farm Use	1,339	1,294	1,254	1,223	1,204	1,191	1,180	1,168	1,159	1,151	1,145
Fed to Calves	1,129	1,108	1,090	1,075	1,065	1,058	1,051	1,045	1,039	1,034	1,029
Farm-churned Butter	210	186	164	147	138	133	128	123	120	117	116
Fluid Product Use	56,590	57,328	57,727	58,090	58,409	58,768	59,077	59,354	59,633	59,913	60,187
Whole Milk Per Capita (lb.)	73	73	73	72	71	70	69	68	67	66	65
Lowfat Milk Per Capita (lb.)	135	136	136	136	137	137	138	138	138	139	139
Manufactured Use	93,239	95,894	96,816	98,295	99,653	101,103	102,557	104,026	105,489	106,952	108,427
Creamery Butter	23,296	23,529	23,329	23,402	23,442	23,513	23,558	23,616	23,648	23,645	23,636
Whey Cream	5,053	5,280	5,385	5,525	5,656	5,791	5,929	6,068	6,208	6,351	6,497
Net Creamery Butter	18,243	18,249	17,944	17,877	17,786	17,722	17,629	17,548	17,440	17,293	17,140
Cheese	57,827	60,073	61,170	62,632	64,000	65,415	66,861	68,308	69,775	71,276	72,796
Evaporated and Condensed	1,483	1,689	1,666	1,615	1,552	1,496	1,447	1,399	1,353	1,310	1,269
Frozen Dairy Products	14,085	14,268	14,404	14,523	14,650	14,788	14,922	15,055	15,189	15,323	15,456
Other Manufactured Products	1,600	1,616	1,632	1,648	1,665	1,681	1,698	1,715	1,732	1,750	1,767
Residual	6,580	6,080	5,680	5,280	5,280	5,280	5,280	5,280	5,280	5,280	5,280
Removals (TMSB)	2,116	2,044	1,320	1,408	1,408	1,464	1,464	1,464	1,464	1,464	1,464
Butter	9	88	88	176	176	220	237	237	264	281	281
Cheese	58	48	39	39	39	39	39	39	39	39	39
Nonfat Dry Milk	1,980	1,839	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	14.18	12.23	12.01	12.01	12.08	12.14	12.11	12.07	12.02	11.94	11.86
Manufacturing Grade	14.31	12.42	12.19	12.19	12.27	12.32	12.29	12.25	12.20	12.12	12.04
III-A Milk Price	15.71	13.63	11.79	11.31	11.33	11.51	11.62	11.51	11.61	11.82	12.07
Fluid Grade	15.41	13.56	13.23	13.23	13.30	13.36	13.33	13.29	13.24	13.16	13.08
All Milk	15.39	13.46	13.11	13.08	13.14	13.19	13.17	13.12	13.07	13.01	12.95
Support Price	10.05	9.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

## **State-level Dairy Supply**

In 1998, California surpassed Wisconsin as the leading state in terms of dairy cow numbers. Further expansion of the California herd is expected over the baseline, but at a slower rate than what has occurred in recent years. The herd is expected to grow from 1.44 million head in 1998 to 1.66 million head in 2008. In contrast, Wisconsin is projected to lose 100 thousand dairy cows during 1998 to 2008 period.

Growth in dairy cows is generally concentrated in several states in the western United States Dairy cow numbers in Idaho are projected to grow from 292 thousand in 1998 to 398 thousand in 2008. New Mexico is also expected to continue to expand invento-

ries with the herd growing from 216 thousand in 1998 to 331 thousand in 2008.

Although herd sizes in California and Wisconsin were approximately the same in 1998, total milk production differed substantially due to differences in productivity. The differences in productivity provide some indication as to the likely shifts in milk production.

By 2008, California is projected to account for 21 percent of U.S. production, up from 17.4 percent in 1998. Idaho and New Mexico also expand their shares of total milk production.

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

	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
					(Tho	usand Hea	ad)				
Alabama	28	26	24	24	24	24	24	24	24	24	24
Alaska	1	1	1	1	1	1	1	1	1	1	1
Arizona	130	132	134	136	137	139	141	142	144	146	147
Arkansas	52	51	50	48	47	46	45	44	43	42	41
California	1,440	1,477	1,509	1,537	1,563	1,586	1,605	1,622	1,636	1,648	1,657
Colorado	83	81	79	78	77	76	75	75	74	74	74
Connecticut	30	31	31	31	31	31	31	31	31	31	30
Delaware	11	11	12	12	12	12	12	12	13	13	13
Florida	159	157	155	153	152	151	149	148	147	146	145
Georgia	94	90	87	85	82	80	79	77	76	75	74
Hawaii	9	9	9	9	8	8	8	8	7	7	7
Idaho	292	312	329	343	356	366	375	383	389	394	398
Illinois	128	122	118	115	112	110	109	107	106	105	105
Indiana	137	137	136	135	133	132	130	129	127	125	123
Iowa	225	220	214	210	207	204	202	200	197	195	193
Kansas	81	80	79	78	78	78	78	78	79	79	79
Kentucky	138	128	119	111	104	97	92	87	83	80	77
Louisiana	60	55	52	50	48	47	46	44	44	43	42
Maine	42	42	42	42	43	43	43	43	43	43	44
Maryland	86	86	85	85	85	85	85	86	86	86	86
Massachusetts	25	25	24	24	23	23	23	22	22	22	22
Michigan	299	291	283	276	269	264	259	254	250	246	243
Minnesota	551	530	511	494	483	474	468	462	458	456	454
	42	39	37	35	34	32	32	31	30	29	29
Mississippi	169	160	152	145	138		127	122	118	114	111
Missouri	18		17		150	132	15	14	116	114	
Montana		17		16		15					14
Nebraska	70	71	71	72	72	72	72 27	72	72	72 27	72
Nevada	26	26	26	26	26	26	27	27	27	27	28
New Hampshire	20	19	19	18	18	18	17	17	17	16	16
New Jersey	19	18	16	15	14	13	12	11	11	10	10
New Mexico	216	232	248	262	274	286	297	306	315	323	331
New York	700	699	697	696	695	694	693	692	691	690	689
North Carolina	76	73	70	67	64	61	58	55	53	50	48
North Dakota	51	45	40	36	32	28	25	22	19	17	15
Ohio	260	250	242	235	230	226	223	220	217	214	212
Oklahoma	90	89	88	87	86	85	85	84	84	84	83
Oregon	88	86	84	82	80	79	78	76	75	74	74
Pennsylvania	624	618	612	607	604	602	600	598	597	596	595
Rhode Island	2	2	2	2	2	2	2	2	2	2	2
South Carolina	24	22	21	21	20	20	20	20	19	19	19
South Dakota	102	98	94	90	86	83	79	76	73	71	68
Tennessee	105	97	88	80	73	66	60	55	50	46	42
Texas	364	353	344	336	331	328	324	321	317	313	309
Utah	90	88	87	85	85	85	85	85	85	85	85
Vermont	161	162	161	161	160	160	160	160	160	159	159
Virginia	123	120	118	115	113	110	108	106	104	102	100
Washington	250	249	249	249	250	250	251	251	252	253	254
West Virginia	18	17	17	16	16	15	15	14	14	13	12
Wisconsin	1,368	1,346	1,327	1,312	1,301	1,293	1,286	1,281	1,276	1,273	1,270
Wyoming	6	6	5	5	5	4	4	4	4	4	4
United States	9,185	9,100	9,015	8,946	8,898	8,864	8,833	8,804	8,777	8,751	8,726

**U.S. Milk Production by State** 

	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
					(Mi	llion Pound	ds)				
Alabama	388	368	355	353	364	373	380	385	389	392	394
Alaska	14	15	15	15	15	15	15	15	16	16	16
Arizona	2,685	2,753	2,814	2,881	2,952	3,024	3,094	3,163	3,233	3,303	3,373
Arkansas	683	678	668	659	651	642	634	625	617	608	599
California	27,485	29,564	30,550	31,532	32,461	33,329	34,119	34,853	35,533	36,160	36,741
Colorado	1,686	1,676	1,659	1,652	1,651	1,657	1,664	1,673	1,684	1,699	1,716
Connecticut	525	546	552	561	570	577	583	588	591	594	595
Delaware	173	185	194	202	208	213	217	221	225	228	231
Florida	2,343	2,429	2,425	2,427	2,434	2,443	2,450	2,458	2,465	2,473	2,481
Georgia	1,436	1,404	1,365	1,331	1,303	1,278	1,257	1,239	1,224	1,212	1,204
Hawaii	128	131	132	131	129	127	124	121	117	112	107
Idaho	5,773	6,307	6,736	7,135	7,501	7,837	8,141	8,416	8,669	8,902	9,119
Illinois	2,193	2,143	2,098	2,072	2,059	2,055	2,056	2,060	2,068	2,078	2,089
Indiana	2,241	2,266	2,279	2,293	2,304	2,311	2,313	2,311	2,306	2,296	2,284
Iowa	3,707	3,668	3,616	3,590	3,582	3,581	3,581	3,579	3,577	3,575	3,573
Kansas	1,288	1,297	1,297	1,308	1,326	1,348	1,370	1,394	1,417	1,442	1,467
Kentucky	1,703	1,622	1,530	1,448	1,376	1,312	1,257	1,210	1,171	1,140	1,117
Louisiana	743	705	673	655	641	630	620	613	607	603	600
Maine	669	695	703	715	727	739	751	763	775	787	799
Maryland	1,396	1,417	1,425	1,437	1,452	1,469	1,486	1,503	1,522	1,541	1,560
Massachusetts	426	432	424	421	419	420	422	425	429	434	440
Michigan	5,374	5,341	5,265	5,204	5,154	5,114	5,081	5,055	5,036	5,023	5,016
Minnesota	9,254	9,112	8,914	8,781	8,710	8,693	8,700	8,729	8,779	8,849	8,939
Mississippi	580	543	522	507	496	487	480	475	470	467	464
Missouri	2,324	2,224	2,122	2,034	1,956	1,886	1,822	1,765	1,716	1,673	1,638
Montana	2,324	2,224	2,122	2,034	260	256	253	250	249	247	246
Nebraska	1,112	1,143	1,165	1,188	1,211	1,232	1,251	1,269	1,285	1,300	1,315
	502	508	513	521	530	540	551	561	572	584	595
Nevada											
New Hampshire	321	325	319	315	313	311	308	306	304	302	300
New Jersey	292	273	253	236	220	207	196	186	178	172	168
New Mexico	4,350	4,786	5,163	5,531	5,880	6,212	6,527	6,826	7,111	7,385	7,647
New York	11,699	11,957	12,093	12,241	12,386	12,533	12,677	12,819	12,960	13,100	13,241
North Carolina	1,253	1,225	1,184	1,143	1,102	1,062	1,021	981	941	902	863
North Dakota	694	631	569	511	459	412	368	327	291	258	230
Ohio	4,428	4,345	4,251	4,185	4,141	4,112	4,092	4,077	4,066	4,058	4,052
Oklahoma	1,221	1,223	1,214	1,211	1,210	1,211	1,214	1,216	1,220	1,224	1,228
Oregon	1,629	1,614	1,582	1,557	1,539	1,524	1,511	1,499	1,489	1,482	1,476
Pennsylvania	10,953	11,074	11,122	11,202	11,298	11,408	11,525	11,646	11,774	11,906	12,044
Rhode Island	31	32	31	32	32	32	32	32	32	32	32
South Carolina	374	355	341	335	337	338	339	339	338	337	336
South Dakota	1,439	1,412	1,370	1,333	1,298	1,265	1,234	1,203	1,174	1,146	1,120
Tennessee	1,516	1,410	1,297	1,193	1,099	1,013	932	858	789	726	669
Texas	5,609	5,501	5,394	5,330	5,298	5,298	5,291	5,277	5,261	5,240	5,217
Utah	1,517	1,499	1,477	1,468	1,469	1,475	1,482	1,491	1,501	1,513	1,526
Vermont	2,684	2,768	2,792	2,830	2,870	2,910	2,949	2,987	3,024	3,060	3,097
Virginia	1,847	1,831	1,809	1,791	1,776	1,761	1,746	1,732	1,718	1,703	1,690
Washington	5,332	5,404	5,448	5,505	5,568	5,636	5,705	5,774	5,847	5,925	6,006
West Virginia	278	277	273	268	263	258	252	245	239	231	224
Wisconsin	22,932	22,981	23,001	23,142	23,341	23,572	23,820	24,085	24,364	24,657	24,959
Wyoming	80	75	70	66	63	61	60	59	57	56	56
United States	157,604	160,453	161,333	162,744	164,403	166,199	167,951	169,686	171,419	173,154	174,897

## **State Level All Milk Prices**

	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
					(Dollars pe	er Hundred	dweight)				
Alabama	16.64	14.69	14.40	14.39	14.46	14.52	14.50	14.45	14.41	14.34	14.27
Alaska	20.35	20.40	20.45	20.50	20.55	20.60	20.65	20.70	20.75	20.80	20.85
Arizona	14.76	12.79	12.39	12.34	12.40	12.46	12.44	12.39	12.35	12.30	12.25
Arkansas	15.86	13.91	13.62	13.61	13.68	13.74	13.71	13.67	13.63	13.56	13.49
California	14.99	13.04	12.82	12.82	12.89	12.95	12.92	12.88	12.83	12.75	12.67
Colorado	15.08	13.12	12.76	12.72	12.79	12.86	12.84	12.79	12.76	12.71	12.65
Connecticut	16.14	15.11	13.97	13.94	14.01	14.07	14.05	14.00	13.97	13.91	13.84
Delaware	15.85	13.89	13.57	13.54	13.61	13.67	13.65	13.61	13.57	13.51	13.45
Florida	18.18	16.23	16.00	16.00	16.06	16.12	16.09	16.05	16.01	15.93	15.85
Georgia	16.43	14.48	14.23	14.22	14.29	14.35	14.32	14.28	14.23	14.16	14.09
Hawaii	25.76	26.81	27.88	28.96	30.05	31.15	32.26	33.39	34.52	35.66	36.82
Idaho	14.52	12.54	11.96	11.86	11.92	12.00	12.00	11.94	11.93	11.92	11.91
Illinois	14.86	12.91	12.63	12.62	12.69	12.75	12.72	12.68	12.64	12.57	12.50
Indiana	14.84	12.89	12.65	12.65	12.72	12.78	12.75	12.71	12.66	12.59	12.51
Iowa	14.70	12.74	12.38	12.35	12.41	12.48	12.46	12.41	12.38	12.33	12.27
Kansas	14.78	12.82	12.51	12.49	12.55	12.62	12.59	12.55	12.51	12.45	12.38
Kentucky	15.54	13.59	13.32	13.31	13.38	13.44	13.41	13.37	13.32	13.26	13.18
Louisiana	16.30	14.35	14.06	14.05	14.12	14.18	14.15	14.11	14.07	14.00	13.93
Maine	16.27	15.23	14.09	14.07	14.14	14.20	14.18	14.13	14.09	14.03	13.97
Maryland	15.81	13.85	13.53	13.51	13.57	13.64	13.62	13.57	13.53	13.47	13.41
Massachusetts	16.24	15.21	14.07	14.04	14.11	14.17	14.15	14.10	14.07	14.01	13.94
Michigan	15.38	13.43	13.18	13.17	13.24	13.30	13.27	13.23	13.19	13.12	13.04
Minnesota	15.59	13.63	13.32	13.30	13.37	13.43	13.41	13.36	13.32	13.26	13.20
Mississippi	16.33	14.37	14.09	14.07	14.14	14.20	14.18	14.13	14.09	14.03	13.95
Missouri	15.45	13.50	13.21	13.20	13.27	13.33	13.30	13.26	13.22	13.15	13.08
Montana	15.38	13.24	12.62	12.51	12.57	12.66	12.66	12.60	12.58	12.57	12.56
Nebraska	14.71	12.75	12.41	12.39	12.45	12.52	12.50	12.45	12.41	12.36	12.30
Nevada	14.07	12.10	11.66	11.60	11.67	11.74	11.73	11.68	11.65	11.61	11.57
New Hampshire	16.37	15.33	14.19	14.17	14.24	14.30	14.28	14.23	14.19	14.13	14.07
New Jersey	15.79	13.83	13.49	13.46	13.52	13.59	13.57	13.52	13.49	13.43	13.37
New Mexico	14.60	12.63	12.14	12.07	12.13	12.20	12.20	12.14	12.12	12.09	12.06
New York	15.32	13.36	13.01	12.98	13.05	13.11	13.09	13.05	13.01	12.96	12.90
North Carolina	17.08	15.13	14.89	14.89	14.96	15.01	14.99	14.94	14.90	14.82	14.74
North Dakota	14.15	12.20	11.88	11.86	11.93	11.99	11.97	11.92	11.88	11.82	11.76
Ohio	15.33	13.38	13.13	13.12	13.19	13.25	13.22	13.18	13.14	13.06	12.98
Oklahoma	15.55	13.59	13.13	13.12	13.19	13.32	13.31	13.16	13.14	13.19	13.13
	15.54	13.57	12.99	12.89	12.95	13.04	13.04	12.98	12.96	12.95	12.94
Oregon Pennsylvania	15.98	14.02	13.68	13.65	13.71	13.77	13.75	13.70	13.66	13.60	13.53
Rhode Island	16.24	15.21	14.07	14.04	14.11	14.17	14.15	14.10	14.07	14.01	13.94
South Carolina	16.49	14.54	14.07	14.04	14.11	14.17	14.13	14.10	14.07	14.01	14.16
	15.09		12.82								
South Dakota	15.09	13.14 13.97	13.71	12.80 13.70	12.87 13.77	12.93 13.83	12.91 13.80	12.87 13.76	12.83 13.71	12.77 13.64	12.70 13.57
Tennessee											
Texas	15.66	13.70	13.36	13.33	13.39	13.46	13.44	13.39	13.36	13.30	13.24
Utah	14.46	12.50	12.11	12.07	12.13	12.20	12.18	12.13	12.10	12.06	12.00
Vermont	16.07	15.03	13.89	13.87	13.94	14.00	13.98	13.93	13.89	13.83	13.77
Virginia	15.88	13.93	13.69	13.69	13.76	13.81	13.79	13.74	13.70	13.62	13.54
Washington	15.45	13.47	12.90	12.80	12.86	12.95	12.95	12.89	12.87	12.86	12.85
West Virginia	15.53	13.58	13.33	13.32	13.39	13.45	13.42	13.38	13.34	13.26	13.18
Wisconsin	15.54	13.58	13.28	13.26	13.33	13.39	13.37	13.32	13.28	13.22	13.15
Wyoming	13.81	11.85	11.51	11.49	11.55	11.62	11.60	11.55	11.51	11.46	11.40
United States	15.39	13.46	13.11	13.08	13.14	13.19	13.17	13.12	13.07	13.01	12.95

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

The U.S. dairy sector is dependent on the performance of domestic cheese demand. To meet the growing demand, cheese production is projected to grow from 7.8 billion pounds in 1999 to 9.6 billion pounds by 2008, an annual growth rate of 2.2 percent.

Per capita cheese consumption is projected to grow by another 3.6 pounds during 1999 to 2008 period. The growth is expected to remain in line with what has been observed in recent years.

Wholesale cheese prices averaged \$1.54 per pound in 1998. Additional supplies are expected to pressure prices lower in 1999, with an annual average price projected at \$1.35 per pound. After 1999, prices range between \$1.31 and \$1.34 per pound.

For 1998, wholesale butter prices averaged \$1.78 per pound, a 53 percent increase from the previous year. Butter prices are expected to fall in 1999 but still remain high, relative to the levels observed in the early

1990s. Longer term, butter prices range between \$1.23 and \$1.32 per pound.

Per capita consumption of butter is expected to continue to decline over the baseline period. Consumption is projected at 3.5 pounds per person by 2008, down from 3.9 pounds in 1998.

Domestic use of nonfat dry milk is projected to increase in total, but remain flat on a per capita basis. The United States is not expected to be a commercial exporter of nonfat dry milk over the baseline period. However, the baseline assumes that the United States will use the DEIP at WTO maximum levels. This translates into shipments of 159 million pounds.

After averaging \$1.09 per pound in 1998, the whole-sale price of nonfat dry milk is projected to fall to \$1.02 per pound in 1999. Further weakening is expected in 2000 with prices averaging \$0.91 per pound for the 2000 to 2008 period.

U.S. Total Cheese Supply and Utilization

	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
					(Mill	ion Pound	s)				
Supply	8,281	8,647	8,797	8,991	9,172	9,360	9,552	9,745	9,940	10,139	10,341
Beginning Stocks	490	500	501	501	502	502	503	503	504	504	505
Production	7,460	7,810	7,952	8,142	8,320	8,504	8,692	8,880	9,071	9,266	9,463
Imports	331	337	344	347	351	354	358	362	365	369	373
Utilization	7,780	8,146	8,296	8,489	8,670	8,858	9,049	9,241	9,436	9,634	9,836
Foreign Use	119	122	125	128	131	134	137	140	143	146	149
Exports	80	83	86	89	92	95	98	101	104	107	110
Shipments	39	39	39	39	39	39	39	39	39	39	39
Domestic Use	7,661	8,024	8,170	8,361	8,539	8,724	8,912	9,101	9,292	9,488	9,686
Commercial	7,661	8,024	8,170	8,361	8,539	8,724	8,912	9,101	9,292	9,488	9,686
Government Donations	0	0	0	0	0	0	0	0	0	0	0
Ending Stocks	500	501	501	502	502	503	503	504	504	505	505
Commercial	500	501	501	502	502	503	503	504	504	505	505
Government	0	0	0	0	0	0	0	0	0	0	0
DEIP	6	5	4	4	4	4	4	4	4	4	4
					(	Pounds)					
Per Capita Consumption	28.4	29.5	29.8	30.2	30.6	31.0	31.4	31.8	32.2	32.7	33.1
Prices					(U.S. Ce	ents per P	ound)				
Wholesale 40 lb. Block	154.08	135.17	132.45	132.49	133.18	133.74	133.44	133.03	132.56	131.82	130.98
CCC Price	111.53	110.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
					(Dolla	rs per Pou	ınd)				
Retail	3.59	3.46	3.51	3.53	3.57	3.61	3.62	3.63	3.64	3.65	3.65

U.S. Butter Supply and Utilization

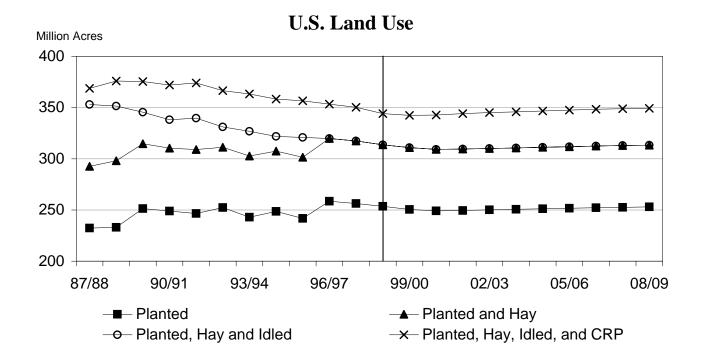
	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
					(Mill	ion Pound	s)				
Supply	1,107	1,106	1,101	1,107	1,113	1,116	1,118	1,120	1,121	1,121	1,121
Beginning Stocks	21	35	37	39	41	43	45	47	49	51	53
Production	1,040	1,041	1,032	1,035	1,037	1,040	1,042	1,045	1,046	1,046	1,046
Imports	46	30	31	33	34	32	30	28	26	24	22
Utilization	1,071	1,069	1,062	1,066	1,070	1,071	1,071	1,071	1,070	1,068	1,066
Total Foreign Use	12	14	14	23	24	28	31	31	33	34	35
Exports	10	12	12	21	22	26	29	29	31	32	33
Shipments	2	2	2	2	2	2	2	2	2	2	2
Domestic Use	1,059	1,055	1,048	1,043	1,046	1,043	1,040	1,040	1,037	1,034	1,031
Commercial	1,059	1,055	1,048	1,043	1,046	1,043	1,040	1,040	1,037	1,034	1,031
Government Donations	0	0	0	0	0	0	0	0	0	0	0
Ending Stocks	35	37	39	41	43	45	47	49	51	53	55
Commercial	35	37	39	41	43	45	47	49	51	53	55
Government	0	0	0	0	0	0	0	0	0	0	0
DEIP	1	10	10	20	20	25	27	27	30	32	32
					(	Pounds)					
Per Capita Consumption	3.92	3.88	3.82	3.77	3.75	3.71	3.67	3.64	3.60	3.56	3.52
Prices					(U.S. Ce	ents per P	ound)				
Wholesale	178.09	147.58	133.10	124.80	122.98	125.32	127.41	126.24	127.65	129.51	131.51
CCC Price	65.00	65.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
					(U.S. Do	ollars per F	ound)				
Retail	2.86	2.53	2.39	2.43	2.40	2.43	2.47	2.45	2.47	2.50	2.53

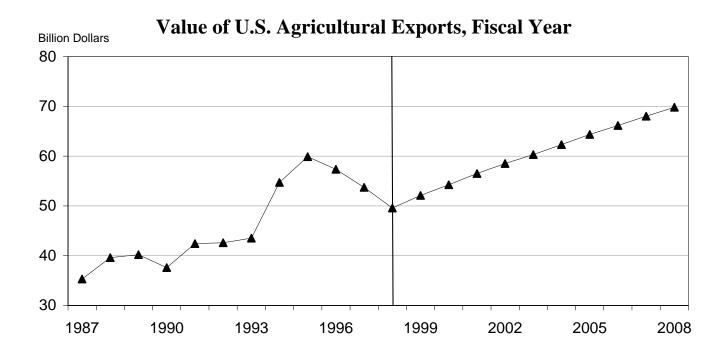
U.S. Nonfat Dry Milk Supply and Utilization

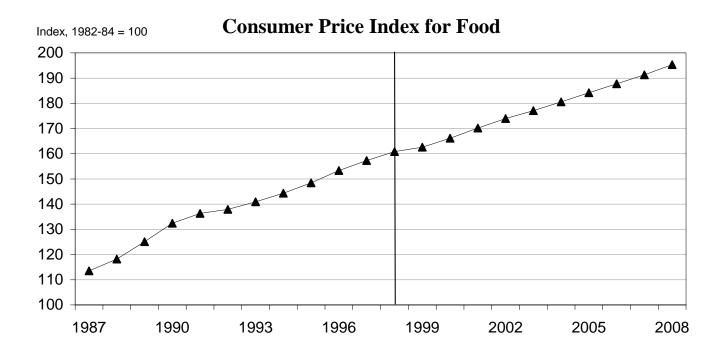
	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
					(Milli	ion Pound	s)				
Supply	1,243	1,350	1,355	1,276	1,233	1,232	1,228	1,226	1,222	1,214	1,206
Beginning Stocks	125	209	210	134	97	97	98	98	99	99	100
Production	1,114	1,135	1,133	1,130	1,125	1,122	1,118	1,114	1,109	1,100	1,091
Imports	4	6	12	12	12	12	13	14	14	15	16
Utilization	1,034	1,140	1,221	1,179	1,136	1,134	1,130	1,128	1,123	1,115	1,106
Foreign Use	227	251	248	187	164	164	164	164	164	164	164
Exports	226	250	247	186	163	163	163	163	163	163	163
Shipments	1	1	1	1	1	1	1	1	1	1	1
Domestic Use	803	885	969	988	968	966	962	960	955	947	938
Commercial	783	865	949	968	968	966	962	960	955	947	938
Government Donations	20	20	20	20	0	0	0	0	0	0	0
Feed and Waste	4	4	4	4	4	4	4	4	4	4	4
Ending Stocks	209	210	134	97	97	98	98	99	99	100	100
Commercial	95	96	96	97	97	98	98	99	99	100	100
Government	114	114	38	0	0	0	0	0	0	0	0
DEIP	168	190	159	159	159	159	159	159	159	159	159
					(	Pounds)					
Per Capita Consumption	2.90	3.18	3.46	3.50	3.47	3.43	3.39	3.36	3.31	3.26	3.20
Prices					(U.S. Ce	ents per P	ound)				
Wholesale	109.19	102.43	89.63	88.74	89.97	90.70	90.80	90.19	90.54	91.92	93.61
CCC Price	102.78	100.93	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

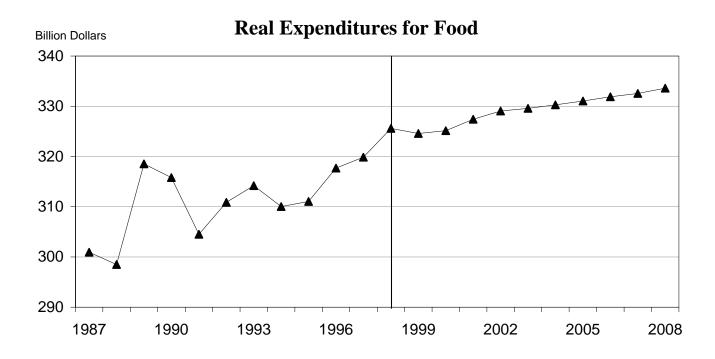
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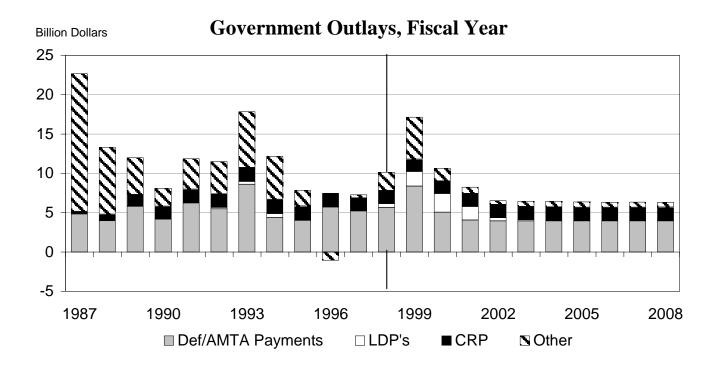
MEASURES

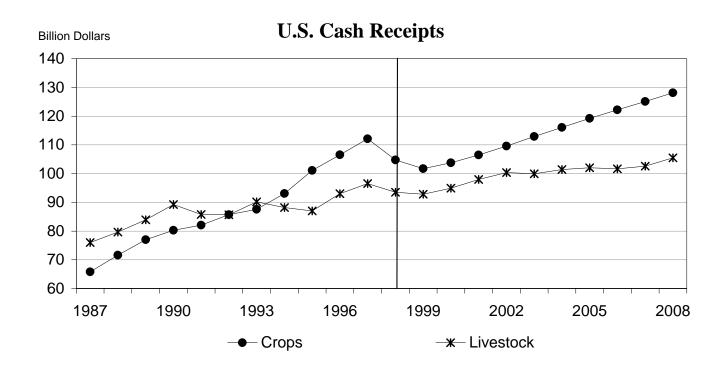


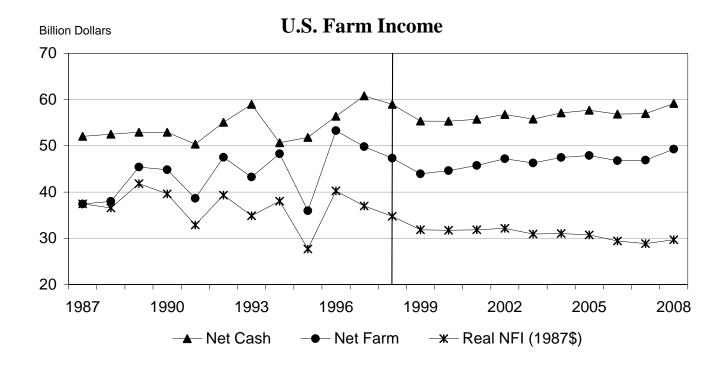


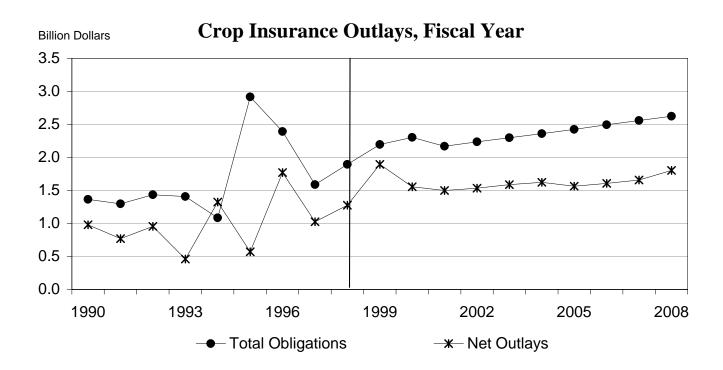












### U.S. Land Use

Under the provisions of the FAIR Act, CRP enrollment is capped at 36.4 million acres. Through 1998, CRP enrollment stood at 30.5 million acres.

CRP contracts began to expire in 1997/98, and total CRP area fell to 30.5 million acres by 1998/99, as some contracts are 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 1999/00. Area in the program reaches 36 million acres by 2006/07.

Given the price paths of program crops, the planting flexibility provisions of the FAIR Act allow feedgrain 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.

The 0-85 and 50-85 programs, formerly 0-92 and 50-92, were eliminated by the FAIR Act. A portion of the land idled under such program will remain unplanted and will receive payments for production flexibility contracts. Historically, these programs have idled more than 10 million acres of program crop area each year.

Total area planted to 15 principal crops decreased in 1997/98 due to lower prices for a few key commodities. Area fell again in 1998/99 by 1.8 million acres. For the 1999 crop year, planted area of the 15 crops is projected to total 259.6 million acres. The higher commodity prices in the last years of the baseline pull land back into production. By 2008/09, planted area reaches 262.1 million acres.

U.S. Planted and Idled Area

	98/99	99/00	00/01	01/02	02/03	03/04	04/05	05/06	06/07	07/08	08/09
					(Mi	Ilion Acres	)				
15-Crop Total Area	293.2	291.0	291.5	292.9	294.0	294.9	295.7	296.5	297.3	297.7	298.1
Planted	262.8	259.6	258.0	258.4	259.0	259.6	260.2	260.8	261.3	261.7	262.1
Annual Idled	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CRP	30.5	31.4	33.5	34.5	35.0	35.3	35.5	35.8	36.0	36.0	36.0
Wheat Total Area	75.3	72.6	75.3	76.7	77.3	77.5	78.0	78.3	78.7	78.4	78.3
Planted	65.9	62.8	64.9	65.9	66.4	66.6	67.0	67.2	67.5	67.2	67.1
Annual Idled	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CRP	9.5	9.8	10.4	10.7	10.9	11.0	11.0	11.1	11.2	11.2	11.2
Corn Total Area	83.3	82.8	82.9	83.3	83.2	83.5	84.0	84.1	84.3	84.4	84.7
Planted	80.2	79.7	79.5	79.8	79.7	80.0	80.5	80.5	80.7	80.8	81.1
Annual Idled	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CRP	3.1	3.1	3.3	3.4	3.5	3.5	3.5	3.6	3.6	3.6	3.6
Sorghum Total Area	11.8	12.1	12.0	12.1	12.2	12.3	12.3	12.4	12.4	12.4	12.5
Planted	9.6	9.9	9.7	9.7	9.7	9.8	9.9	9.9	9.9	9.9	10.0
Annual Idled	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CRP	2.2	2.2	2.3	2.4	2.4	2.4	2.4	2.5	2.5	2.5	2.5
Barley Total Area	8.9	8.8	8.9	9.0	9.0	9.1	9.1	9.1	9.1	9.2	9.2
Planted	6.3	6.2	6.0	6.1	6.0	6.1	6.1	6.1	6.1	6.1	6.1
Annual Idled	NA 0.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CRP	2.5	2.7	2.9	2.9	3.0	3.0	3.0	3.0	3.1	3.1	3.1
Oats Total Area	6.1	5.7	5.7	5.7	5.7	5.7	5.7	5.7	5.7	5.7	5.7
Planted	4.9	4.6	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.3
Annual Idled	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CRP	1.2	1.2	1.2	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3
Soybean Total Area	75.2	75.7	73.6	73.0	73.6	73.7	73.5	73.9	73.9	74.4	74.5
Planted	72.4	72.7	70.4	69.7	70.2	70.3	70.0	70.4	70.4	70.9	71.0
CRP	2.8	3.0	3.2	3.3	3.4	3.4	3.4	3.5	3.5	3.5	3.5
Cotton Total Area	14.3	14.5	14.1	13.8	13.6	13.5	13.4	13.3	13.4	13.4	13.5
Planted	13.1	13.2	12.7	12.4	12.2	12.1	11.9	11.9	11.9	12.0	12.0
Annual Idled	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CRP	1.2	1.3	1.4	1.4	1.4	1.4	1.4	1.5	1.5	1.5	1.5
Rice Total Area	3.4	3.5	3.4	3.4	3.4	3.4	3.4	3.3	3.3	3.3	3.3
Planted	3.3	3.5	3.4	3.4	3.4	3.3	3.3	3.3	3.3	3.3	3.3
Annual Idled CRP	NA 0.0	NA 0.0	NA 0.0	NA 0.0	NA 0.0	NA 0.0	NA 0.0	NA 0.0	NA 0.0	NA 0.0	NA 0.0
		0.0		0.0	0.0	0.0		0.0	0.0		
Sugar Harvested	2.4	2.4	2.4	2.4	2.4	2.5	2.5	2.5	2.5	2.5	2.5
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	6.9	7.0	7.0	7.0	7.1	7.1	7.1	7.1	7.2
Other CRP Area	8.0	8.2	8.8	9.0	9.1	9.2	9.2	9.3	9.4	9.4	9.4
Hay Harvested	60.0	60.4	60.1	60.0	59.9	59.9	60.0	60.0	60.1	60.2	60.3
15 Crops + Hay	353.3	351.4	351.6	352.9	354.0	354.8	355.7	356.6	357.4	357.9	358.3
Planted	322.8	319.9	318.1	318.4	319.0	319.5	320.2	320.8	321.4	321.9	322.3
Annual Idled	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CRP	30.5	31.4	33.5	34.5	35.0	35.3	35.5	35.8	36.0	36.0	36.0

<sup>\*</sup> Planted area of sunflowers, edible beans, and flaxseed. Harvested area for tobacco and rye.

**U.S.** Wheat Production

	98/99	99/00	00/01	01/02	02/03	03/04	04/05	05/06	06/07	07/08	08/09
					(Mil	lion Acres	)				
CRP Idled	9.45	9.76	10.42	10.74	10.89	10.97	11.04	11.12	11.19	11.19	11.19
Corn Belt	0.63	0.64	0.66	0.67	0.67	0.67	0.68	0.68	0.68	0.68	0.68
Central Plains	2.16	2.24	2.41	2.48	2.52	2.54	2.56	2.57	2.59	2.59	2.59
Delta States	0.22	0.21	0.23	0.23	0.24	0.24	0.24	0.24	0.24	0.24	0.24
Far West	0.87	0.93	1.00	1.04	1.05	1.06	1.07	1.07	1.08	1.08	1.08
Lake States	0.28	0.32	0.34	0.35	0.36	0.36	0.36	0.36	0.37	0.37	0.37
Northeast	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
Northern Plains	2.88	2.96	3.17	3.26	3.31	3.33	3.36	3.38	3.40	3.40	3.40
Southeast	0.38	0.35	0.37	0.38	0.38	0.38	0.39	0.39	0.39	0.39	0.39
Southern Plains	2.03	2.09	2.24	2.32	2.35	2.37	2.38	2.40	2.42	2.42	2.42
Planted Area	65.87	62.84	64.89	65.92	66.38	66.57	67.01	67.22	67.47	67.20	67.07
Corn Belt	4.54	3.70	4.07	4.21	4.24	4.26	4.31	4.32	4.35	4.30	4.27
Central Plains	15.41	14.65	15.19	15.37	15.39	15.39	15.44	15.44	15.47	15.38	15.32
Delta States	1.24	1.19	1.17	1.23	1.30	1.33	1.36	1.40	1.42	1.44	1.45
Far West	5.96	5.53	5.72	5.85	5.95	6.01	6.10	6.17	6.24	6.26	6.30
Lake States	2.76	2.75	2.86	2.95	2.98	3.00	3.03	3.05	3.08	3.07	3.07
Northeast	0.69	0.67	0.71	0.72	0.72	0.73	0.73	0.73	0.74	0.73	0.73
Northern Plains	19.13	18.60	19.01	19.20	19.25	19.24	19.31	19.32	19.36	19.26	19.20
Southeast	3.02	2.71	2.91	2.95	2.99	2.99	2.99	3.00	2.99	2.98	2.96
Southern Plains	13.12	13.04	13.25	13.44	13.56	13.62	13.72	13.78	13.83	13.79	13.77
Harvested Area	59.00	55.84	57.69	58.60	59.00	59.16	59.54	59.73	59.95	59.71	59.60
Corn Belt	4.29	3.46	3.81	3.94	3.97	3.98	4.04	4.05	4.07	4.02	4.00
Central Plains	14.51	13.78	14.24	14.40	14.42	14.41	14.46	14.46	14.48	14.40	14.35
Delta States	1.14	1.09	1.07	1.13	1.19	1.23	1.25	1.29	1.31	1.32	1.34
Far West	5.62	5.24	5.42	5.54	5.63	5.69	5.77	5.83	5.89	5.91	5.95
Lake States	2.69	2.67	2.77	2.85	2.88	2.90	2.94	2.95	2.98	2.97	2.97
Northeast	0.66	0.64	0.68	0.69	0.69	0.70	0.70	0.70	0.71	0.70	0.70
Northern Plains	18.39	17.73	18.13	18.31	18.36	18.35	18.42	18.43	18.46	18.37	18.31
Southeast	2.42	2.18	2.38	2.42	2.46	2.46	2.46	2.47	2.46	2.45	2.43
Southern Plains	9.27	9.05	9.19	9.32	9.40	9.44	9.51	9.55	9.58	9.56	9.55
Viala	40.0	20.5	20.0	20.4	•	els per Ac	•	40.0	40.0	40.0	44.4
Yield Corp Bolt	43.2	38.5	38.8	39.1	39.4	39.7	40.0	40.3	40.6	40.8	41.1
Corn Belt	52.7	52.4	52.7	53.1	53.4	53.8	54.1	54.5	54.8	55.2	55.5
Central Plains Delta States	47.0 49.7	35.6 47.0	35.8 47.6	36.0 48.2	36.1 48.8	36.3 49.4	36.5 50.0	36.7 50.5	36.9 51.1	37.2 51.7	37.4 52.2
Far West	67.9	68.5	69.0	69.5	70.1	70.6	71.1	71.7	72.2	72.7	73.2
Lake States	44.1	40.7	40.8	40.9	41.0	41.1	41.2	41.3	41.4	41.5	41.6
Northeast	51.4	57.4	58.3	59.2	60.0	60.9	61.7	62.5	63.3	64.1	64.8
Northern Plains	33.0	31.4	31.5	31.6	31.8	31.9	32.0	32.2	32.3	32.4	32.6
Southeast	41.7	48.6	49.4	50.2	51.0	51.8	52.6	53.4	54.2	54.9	55.6
Southern Plains	37.1	28.6	28.8	28.9	29.1	29.2	29.4	29.5	29.7	29.8	30.0
	07.1	20.0	20.0	20.0				20.0	20.1	20.0	00.0
Production	2,550	2,149	2,241	2,294	2,328	on Bushel 2,351	s) 2,383	2,407	2,433	2,439	2,450
Corn Belt	226	181	201	209	212	214	219	220	223	222	222
Central Plains	681	491	509	518	521	524	528	531	535	535	536
Delta States	57	51	51	55	58	61	63	65	67	68	70
Far West	382	359	374	385	394	402	410	418	425	430	435
Lake States	119	109	113	117	118	119	121	122	123	123	124
Northeast	34	37	40	41	42	42	43	44	45	45	46
Northern Plains	607	557	571	579	583	585	590	593	596	596	596
Southeast	101	106	118	121	126	128	130	132	133	134	135
Southern Plains	343	259	265	270	273	276	279	282	285	285	287

**U.S. Corn Production** 

	98/99	99/00	00/01	01/02	02/03	03/04	04/05	05/06	06/07	07/08	08/09
					(Mil	lion Acres	)				
CRP Idled	3.12	3.13	3.33	3.43	3.48	3.51	3.54	3.57	3.60	3.60	3.60
Corn Belt	1.48	1.46	1.56	1.61	1.64	1.65	1.67	1.69	1.70	1.70	1.70
Central Plains	0.34	0.34	0.36	0.37	0.38	0.38	0.38	0.38	0.39	0.39	0.39
Delta States	0.03	0.03	0.03	0.04	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	0.56	0.62	0.65	0.67	0.68	0.68	0.69	0.69	0.70	0.70	0.70
Northeast	0.04	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05
Northern Plains	0.30	0.29	0.31	0.31	0.32	0.32	0.32	0.33	0.33	0.33	0.33
Southeast	0.28	0.26	0.27	0.28	0.29	0.29	0.29	0.29	0.29	0.29	0.29
Southern Plains	0.08	0.08	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09
Planted Area	80.19	79.67	79.53	79.85	79.71	80.02	80.47	80.50	80.74	80.80	81.09
Corn Belt	35.10	35.30	35.66	35.84	35.69	35.78	35.97	35.90	35.97	35.87	35.92
Central Plains	12.98	12.95	12.63	12.62	12.61	12.65	12.70	12.72	12.76	12.81	12.87
Delta States	1.49	1.30	1.37	1.39	1.40	1.42	1.45	1.46	1.48	1.49	1.51
Far West	1.09	1.12	1.10	1.11	1.12	1.13	1.14	1.15	1.16	1.17	1.18
Lake States	13.30	13.12	13.10	13.18	13.17	13.23	13.31	13.33	13.38	13.40	13.45
Northeast	3.73	3.65	3.65	3.65	3.64	3.65	3.66	3.67	3.67	3.68	3.69
Northern Plains	5.03	5.06	4.86	4.86	4.87	4.90	4.93	4.96	4.98	5.03	5.07
Southeast	4.67	4.54	4.61	4.66	4.68	4.72	4.77	4.78	4.81	4.82	4.85
Southern Plains	2.81	2.63	2.55	2.54	2.54	2.54	2.54	2.54	2.53	2.54	2.55
Harvested Area	72.60	73.22	73.16	73.52	73.45	73.79	74.28	74.36	74.63	74.75	75.07
Corn Belt	34.04	34.34	34.71	34.91	34.78	34.88	35.09	35.04	35.12	35.05	35.12
Central Plains	12.47	12.37	12.06	12.06	12.04	12.09	12.13	12.15	12.19	12.24	12.29
Delta States	1.26	1.23	1.29	1.31	1.32	1.34	1.37	1.38	1.40	1.41	1.43
Far West	0.50	0.58	0.57	0.57	0.58	0.59	0.60	0.61	0.61	0.62	0.63
Lake States	11.75	11.54	11.55	11.64	11.66	11.73	11.83	11.87	11.94	11.98	12.05
Northeast	2.32	2.43	2.44	2.43	2.43	2.44	2.45	2.45	2.45	2.45	2.46
Northern Plains	4.45	4.42	4.24	4.25	4.27	4.31	4.34	4.37	4.40	4.45	4.50
Southeast	3.67	3.96	4.02	4.08	4.10	4.15	4.20	4.22	4.25	4.27	4.31
Southern Plains	2.16	2.35	2.28	2.27	2.27	2.27	2.27	2.27	2.27	2.27	2.28
						els per Ac					
Yield	134.4	129.9	131.7	133.5	135.3	137.0	138.7	140.4	142.1	143.8	145.5
Corn Belt	139.8	135.7	137.5	139.3	141.3	143.1	144.9	146.8	148.6	150.4	152.2
Central Plains	145.5	140.8	143.0	144.9	146.9	148.8	150.6	152.5	154.3	156.1	157.9
Delta States	86.2	114.4	116.4	118.4	120.3	122.2	124.0	125.9	127.7	129.4	131.2
Far West	166.9	175.1	177.2	179.2	181.1	183.0	184.9	186.7	188.5	190.2	192.0
Lake States	141.7	122.5	123.9	125.2	126.5	127.8	129.0	130.3	131.5	132.7	134.0
Northeast	109.4	113.7	115.0	116.3	117.6	118.9	120.1	121.4	122.6	123.8	125.0
Northern Plains	118.5	102.6	104.8	106.8	108.7	110.6	112.4	114.3	116.1	117.8	119.6
Southeast	88.4	109.6	112.0	114.2	116.5	118.8	121.0	123.2	125.4	127.6	129.8
Southern Plains	105.6	123.3	124.7	125.9	127.2	128.4	129.6	130.8	131.9	133.1	134.2
					(Milli	on Bushel	s)				
Production	9,761	9,512	9,637	9,814	9,938	10,112	10,303	10,443	10,607	10,751	10,921
Corn Belt	4,759	4,660	4,771	4,863	4,914	4,992	5,085	5,143	5,219	5,272	5,345
Central Plains	1,814	1,742	1,725	1,747	1,769	1,798	1,827	1,853	1,880	1,911	1,942
Delta States	108	140	150	155	159	164	170	174	178	182	187
Far West	83	102	101	103	105	108	111	113	116	119	122
Lake States	1,664	1,414	1,431	1,457	1,474	1,499	1,526	1,546	1,570	1,590	1,614
Northeast	254	276	280	283	286	290	294	297	301	304	308
Northern Plains	528	453	445	454	464	476	488	499	511	525	538
Southeast	324	434	451	466	478	493	509	521	534	545	560
					289	292	294	297	299		

**U.S. Sorghum Production** 

	98/99	99/00	00/01	01/02	02/03	03/04	04/05	05/06	06/07	07/08	08/09
					(Mil	lion Acres	)				
CRP Idled	2.18	2.21	2.33	2.39	2.42	2.44	2.45	2.46	2.48	2.48	2.48
Corn Belt	0.16	0.16	0.16	0.16	0.17	0.17	0.17	0.17	0.17	0.17	0.17
Central Plains	0.87	0.89	0.94	0.97	0.98	0.99	0.99	1.00	1.01	1.01	1.01
Delta States	0.11	0.11	0.12	0.12	0.12	0.12	0.12	0.12	0.13	0.13	0.13
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	0.09	0.08	0.08	0.08	0.09	0.09	0.09	0.09	0.09	0.09	0.09
Southeast	0.08	0.08	0.08	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09
Southern Plains	0.87	0.89	0.94	0.97	0.98	0.98	0.99	1.00	1.00	1.00	1.00
Planted Area	9.63	9.90	9.66	9.67	9.73	9.82	9.88	9.89	9.90	9.95	10.01
Corn Belt	0.44	0.49	0.51	0.51	0.52	0.52	0.52	0.52	0.52	0.52	0.53
Central Plains	4.40	4.55	4.32	4.31	4.31	4.34	4.35	4.34	4.33	4.33	4.35
Delta States	0.31	0.28	0.30	0.31	0.31	0.32	0.33	0.33	0.33	0.33	0.34
Northern Plains	0.20	0.19	0.18	0.18	0.18	0.18	0.18	0.19	0.19	0.19	0.19
Southeast	0.12	0.13	0.11	0.11	0.11	0.12	0.12	0.12	0.11	0.11	0.11
Southern Plains	0.20	4.26	4.23	4.25	4.30	4.34	4.38	4.40	4.42	4.45	4.49
Harvested Area	7.84	8.93	8.83	8.84	8.90	8.98	9.03	9.04	9.05	9.09	9.15
Corn Belt	0.43	0.46	0.48	0.48	0.49	0.49	0.50	0.49	0.50	0.50	0.50
Central Plains	4.20	4.12	4.03	4.01	4.02	4.04	4.05	4.04	4.03	4.04	4.05
Delta States	0.29	0.27	0.28	0.29	0.29	0.30	0.30	0.31	0.31	0.31	0.32
Northern Plains	0.14	0.12	0.11	0.11	0.11	0.12	0.12	0.12	0.12	0.12	0.12
Southeast	0.08	0.08	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07
Southern Plains	2.71	3.88	3.86	3.87	3.92	3.96	3.99	4.01	4.02	4.05	4.09
					(Bush	els per Ac	re)				
Yield	66.3	67.5	68.1	68.7	69.2	69.8	70.3	70.8	71.3	71.8	72.3
Corn Belt	80.7	86.4	87.0	87.6	88.2	88.8	89.3	89.9	90.4	90.9	91.4
Central Plains	78.8	75.7	76.6	77.4	78.2	79.0	79.7	80.5	81.2	82.0	82.7
Delta States	57.5	73.0	73.8	74.6	75.4	76.2	76.9	77.7	78.4	79.2	79.9
Northern Plains	71.0	57.8	58.9	60.0	61.2	62.3	63.4	64.4	65.5	66.6	67.7
Southeast	50.9	64.3	65.3	66.2	67.2	68.2	69.1	70.0	71.0	71.9	72.8
Southern Plains	45.9	56.5	56.8	57.1	57.4	57.8	58.1	58.4	58.7	59.0	59.3
					,	on Bushel	,				
Production	520	603	602	607	616	626	635	640	646	653	662
Corn Belt	34	40	42	42	43	44	44	44	45	45	46
Central Plains	331	312	309	311	314	319	323	325	328	331	335
Delta States	17	19	21	21	22	23	23	24	24	25	25
Northern Plains	10	7	7	7	7	7	7	8	8	8	8
Southeast	4	5	5	5	5	5	5	5	5	5	5
Southern Plains	124	219	219	221	225	229	232	234	236	239	243

**U.S. Barley Production** 

	98/99	99/00	00/01	01/02	02/03	03/04	04/05	05/06	06/07	07/08	08/09
					(Mil	lion Acres	)				
CRP Idled	2.52	2.67	2.85	2.94	2.98	3.01	3.03	3.05	3.07	3.07	3.07
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	0.19	0.20	0.21	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	0.60	0.63	0.68	0.70	0.71	0.72	0.72	0.73	0.73	0.73	0.73
Lake States	0.15	0.17	0.18	0.18	0.19	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	1.55	1.62	1.74	1.79	1.81	1.83	1.84	1.85	1.87	1.87	1.87
Southeast	0.02	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	0.03	0.04	0.04	0.04
Planted Area	6.34	6.15	6.04	6.09	6.05	6.09	6.10	6.10	6.08	6.11	6.15
Central Plains	0.11	0.10	0.10	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.10
Far West	1.79	1.75	1.75	1.72	1.71	1.73	1.73	1.74	1.73	1.74	1.76
Lake States	0.55	0.56	0.53	0.53	0.52	0.53	0.53	0.52	0.52	0.52	0.52
Northeast	0.18	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.18	0.18
Northern Plains	3.57	3.43	3.36	3.44	3.41	3.44	3.44	3.43	3.42	3.44	3.46
Southeast	0.13	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12
Southern Plains	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
Harvested Area	5.98	5.77	5.67	5.71	5.67	5.72	5.72	5.72	5.70	5.73	5.77
Central Plains	0.10	0.09	0.09	0.09	0.08	0.09	0.09	0.09	0.09	0.09	0.09
Far West	1.68	1.65	1.65	1.62	1.62	1.63	1.63	1.64	1.63	1.64	1.66
Lake States	0.51	0.51	0.49	0.49	0.48	0.48	0.48	0.48	0.48	0.48	0.48
Northeast	0.16	0.15	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.16
Northern Plains	3.43	3.25	3.19	3.26	3.23	3.25	3.25	3.25	3.24	3.26	3.28
Southeast	0.10	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	58.9	61.6	62.3	62.6	63.2	63.8	64.3	64.9	65.4	66.0	66.5
Central Plains	103.2	100.5	102.3	104.0	105.7	107.4	109.0	110.6	112.2	113.7	115.2
Far West	72.8	76.7	77.4	78.1	78.7	79.3	80.0	80.6	81.2	81.7	82.3
Lake States	54.4	58.1	58.4	58.7	59.0	59.3	59.6	59.9	60.2	60.5	60.8
Northeast	64.5	75.5	76.6	77.7	78.8	79.8	80.8	81.9	82.9	83.9	84.8
Northern Plains	51.2	52.2	52.8	53.2	53.7	54.2	54.6	55.1	55.6	56.0	56.5
Southeast	59.9	77.3	78.6	80.0	81.3	82.6	83.8	85.1	86.3	87.5	88.7
Southern Plains	45.0	40.0	40.1	40.2	40.3	40.4	40.5	40.6	40.7	40.8	40.9
					(Milli	on Bushel	s)				
Production	352	356	353	358	359	365	368	371	373	378	383
Central Plains	10	9	9	9	9	9	9	10	10	10	10
Far West	122	127	127	127	127	129	131	132	133	134	136
Lake States	28	30	29	29	28	29	29	29	29	29	29
Northeast	11	12	12	12	12	13	13	13	13	13	13
Northern Plains	176	170	168	173	174	176	178	179	180	182	185
Southeast	6	8	8	8	8	8	8	8	9	9	ç
Southern Plains	0	0	0	0	0	0	0	0	0	0	(

**U.S. Oat Production** 

	98/99	99/00	00/01	01/02	02/03	03/04	04/05	05/06	06/07	07/08	08/09
					(Mil	lion Acres	)				
CRP Idled	1.16	1.17	1.23	1.26	1.28	1.29	1.30	1.30	1.31	1.31	1.31
Corn Belt	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15
Central Plains	0.13	0.14	0.15	0.15	0.15	0.15	0.15	0.16	0.16	0.16	0.16
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	0.01	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02
Lake States	0.19	0.21	0.23	0.23	0.23	0.24	0.24	0.24	0.24	0.24	0.24
Northeast	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02
Northern Plains	0.56	0.54	0.58	0.60	0.60	0.61	0.61	0.62	0.62	0.62	0.62
Southeast Southern Plains	0.03 0.06	0.03 0.06	0.03	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 0.07
			0.06		0.06		0.06				
Planted Area	4.90	4.58	4.42	4.42	4.44	4.44	4.42	4.40	4.38	4.37	4.35
Corn Belt	0.56	0.52	0.51	0.52	0.53	0.53	0.53	0.52	0.52	0.51	0.50
Central Plains	0.37	0.32	0.29	0.29	0.29	0.29	0.29	0.29	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	0.55	0.54	0.54	0.54	0.54	0.54	0.54	0.54	0.54	0.54	0.54
Lake States	0.90	0.90	0.88	0.88	0.88	0.86	0.85	0.84	0.82	0.81	0.80
Northeast	0.35	0.33	0.33	0.33	0.33	0.33	0.33	0.33	0.33	0.32	0.32
Northern Plains	1.35	1.17	1.10	1.10	1.11	1.12	1.12	1.12	1.12	1.13	1.13
Southeast Southern Plains	0.17 0.66	0.14 0.64	0.13 0.62	0.13 0.62	0.13 0.62	0.13 0.62	0.13 0.62	0.13 0.62	0.13 0.62	0.13 0.62	0.13 0.62
Harvested Area	2.77	2.60	2.48	2.48	2.50	2.49	2.48	2.46	2.45	2.44	2.42
Corn Belt	0.40	0.37	0.36	0.37	0.37	0.37	0.37	0.37	0.37	0.36	0.36
Central Plains	0.18	0.17	0.15	0.15	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	0.12	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11
Lake States	0.72	0.67	0.66	0.66	0.66	0.64	0.63	0.62	0.61	0.59	0.58
Northeast Northern Plains	0.30 0.80	0.28 0.76	0.28 0.69	0.28 0.69	0.28 0.70	0.28 0.71	0.28 0.71	0.28 0.71	0.28 0.71	0.28 0.72	0.28 0.72
Southeast	0.09	0.78	0.08	0.08	0.70	0.71	0.71	0.71	0.71	0.72	0.72
Southern Plains	0.16	0.08	0.08	0.08	0.08	0.08	0.00	0.08	0.08	0.08	0.08
Council Figure	0.10	0.14	0.14	0.14				0.14	0.14	0.14	0.14
Wald	00.4	50.0	00.0	00.0		els per Ac	•	00.0	00.0	00.0	00.0
Yield	60.4	59.9	60.3	60.6	61.0	61.3	61.6	62.0	62.3	62.6	62.9
Corn Belt	58.9	64.6	64.7	64.8	64.9	65.0	65.2	65.3	65.4	65.5	65.5
Central Plains	54.3	57.7	58.4	59.1	59.7	60.4	61.0	61.6	62.3	62.9	63.5
Delta States Far West	80.0 84.9	78.5 84.8	79.2 85.6	79.8 86.3	80.5 86.9	81.1 87.6	81.8 88.3	82.4 88.9	83.1 89.5	83.7 90.1	84.3 90.8
Lake States	62.0	59.3	59.5	59.6	59.8	59.9	60.0	60.1	60.2	60.3	60.4
Northeast	57.6	60.4	60.5	60.6	60.6	60.7	60.7	60.8	60.8	60.9	61.0
Northern Plains	69.3	57.4	58.1	58.8	59.4	60.1	60.8	61.4	62.1	62.7	63.4
Southeast	50.9	60.1	60.4	60.6	60.9	61.1	61.4	61.6	61.8	62.1	62.3
Southern Plains	51.1	44.0	44.1	44.3	44.5	44.7	44.9	45.1	45.2	45.4	45.6
Production	167	156	150	150	(MIIII 152	on Bushel 153	s) 153	153	152	153	152
Corn Belt	23	24	24	24	24	24	24	24	24	24	24
Central Plains	23 10	10	9	9	9	9	9	9	9	9	9
Delta States	10	10	1	1	1	1	1	1	1	1	1
Far West	10	10	9	9	9	9	9	10	10	10	10
Lake States	44	40	39	39	39	39	38	37	37	36	35
Northeast	17	17	17	17	17	17	17	17	17	17	17
Northern Plains	56	43	40	40	42	42	43	44	44	45	46
Southeast	4	5	5	5	5	5	5	5	5	5	5
Southern Plains	8	6	6	6	6	6	6	6	6	6	6

**U.S. Hay Production** 

	98/99	99/00	00/01	01/02	02/03	03/04	04/05	05/06	06/07	07/08	08/09
					(Mil	lion Acres	)				
Harvested Area	60.02	60.40	60.12	60.00	59.93	59.91	<sup>′</sup> 59.96	60.03	60.14	60.23	60.26
Corn Belt	8.25	8.24	8.16	8.13	8.12	8.12	8.13	8.14	8.16	8.18	8.18
Central Plains	7.51	7.52	7.51	7.49	7.48	7.47	7.46	7.45	7.45	7.44	7.44
Delta States	2.30	2.34	2.30	2.30	2.30	2.31	2.32	2.32	2.33	2.34	2.34
Far West	6.16	6.24	6.15	6.12	6.11	6.11	6.10	6.10	6.10	6.09	6.09
Lake States	6.05	6.03	5.95	5.90	5.86	5.82	5.79	5.76	5.74	5.72	5.69
Northeast	4.80	4.70	4.60	4.56	4.55	4.54	4.54	4.54	4.54	4.55	4.55
Northern Plains	10.29	10.50	10.56	10.56	10.55	10.54	10.55	10.56	10.57	10.58	10.59
Southeast	8.02	8.19	8.10	8.06	8.06	8.08	8.11	8.16	8.21	8.26	8.29
Southern Plains	6.65	6.63	6.80	6.87	6.90	6.93	6.97	7.00	7.04	7.07	7.09
					(Tor	s per Acre	e)				
Yield	2.52	2.56	2.58	2.59	2.60	2.62	2.63	2.64	2.65	2.67	2.68
Corn Belt	2.79	2.68	2.69	2.70	2.71	2.71	2.72	2.73	2.74	2.75	2.76
Central Plains	2.70	2.54	2.56	2.58	2.61	2.63	2.65	2.67	2.69	2.71	2.74
Delta States	2.05	2.32	2.33	2.34	2.35	2.36	2.37	2.38	2.39	2.40	2.41
Far West	4.27	4.24	4.28	4.32	4.36	4.39	4.43	4.46	4.49	4.53	4.56
Lake States	2.82	2.88	2.88	2.88	2.88	2.88	2.88	2.88	2.88	2.88	2.88
Northeast	2.16	2.26	2.26	2.27	2.28	2.28	2.29	2.29	2.30	2.30	2.31
Northern Plains	1.93	1.89	1.90	1.91	1.92	1.93	1.94	1.94	1.95	1.96	1.97
Southeast	2.25	2.29	2.32	2.35	2.38	2.40	2.43	2.45	2.48	2.50	2.52
Southern Plains	1.77	2.30	2.30	2.30	2.30	2.30	2.30	2.31	2.31	2.31	2.31
					(Mi	llion Tons	)				
Production	151.3	154.9	154.8	155.3	156.0	156.7	157.6	158.6	159.6	160.5	161.3
Corn Belt	23.0	22.1	21.9	21.9	22.0	22.0	22.1	22.2	22.4	22.5	22.6
Central Plains	20.3	19.1	19.2	19.3	19.5	19.6	19.8	19.9	20.1	20.2	20.3
Delta States	4.7	5.4	5.4	5.4	5.4	5.5	5.5	5.5	5.6	5.6	5.6
Far West	26.3	26.5	26.3	26.4	26.6	26.8	27.0	27.2	27.4	27.6	27.8
Lake States	17.0	17.3	17.1	17.0	16.9	16.8	16.7	16.6	16.5	16.5	16.4
Northeast	10.4	10.6	10.4	10.4	10.3	10.3	10.4	10.4	10.4	10.5	10.5
Northern Plains	19.8	19.8	20.0	20.1	20.2	20.3	20.4	20.5	20.6	20.8	20.9
Southeast	18.0	18.8	18.8	18.9	19.2	19.4	19.7	20.0	20.3	20.6	20.9
Southern Plains	11.8	15.3	15.6	15.8	15.9	16.0	16.1	16.1	16.2	16.3	16.4

**U.S. Soybean Production** 

	98/99	99/00	00/01	01/02	02/03	03/04	04/05	05/06	06/07	07/08	08/09
					(Mil	llion Acres	)				
CRP Idled	2.82	2.97	3.20	3.31	3.38	3.41	3.44	3.48	3.51	3.51	3.51
Corn Belt	1.60	1.75	1.85	1.90	1.93	1.95	1.96	1.98	1.99	1.99	1.99
Central Plains	0.11	0.11	0.13	0.14	0.15	0.15	0.16	0.16	0.16	0.16	0.16
Delta States	0.36	0.37	0.40	0.41	0.42	0.42	0.42	0.43	0.43	0.43	0.43
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	0.36	0.41	0.44	0.45	0.46	0.46	0.47	0.47	0.48	0.48	0.48
Northeast	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04
Northern Plains	0.19	0.18	0.20	0.20	0.21	0.21	0.21	0.21	0.22	0.22	0.22
Southeast	0.11	0.07	0.11	0.12	0.13	0.14	0.14	0.14	0.15	0.15	0.15
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	72.38	72.72	70.39	69.71	70.20	70.27	70.02	70.39	70.36	70.86	70.98
Corn Belt	36.40	36.30	35.35	34.97	35.14	35.09	34.86	34.98	34.90	35.11	35.11
Central Plains	6.35	6.53	6.23	6.15	6.26	6.35	6.40	6.52	6.60	6.74	6.83
Delta States	6.80	6.67	6.39	6.47	6.58	6.64	6.67	6.74	6.76	6.81	6.84
Lake States	9.95	10.10	9.76	9.60	9.63	9.61	9.54	9.56	9.53	9.57	9.57
Northeast	1.31	1.30	1.24	1.23	1.23	1.23	1.21	1.21	1.20	1.21	1.20
Northern Plains	5.00	5.25	5.01	4.88	4.87	4.88	4.87	4.89	4.89	4.94	4.96
Southeast	5.66	5.68	5.54	5.56	5.62	5.62	5.61	5.63	5.62	5.62	5.61
Southern Plains	0.91	0.89	0.87	0.86	0.86	0.86	0.85	0.86	0.86	0.86	0.86
Harvested Area	70.81	71.67	69.38	68.71	69.19	69.26	69.00	69.37	69.34	69.83	69.95
Corn Belt	36.19	36.01	35.07	34.70	34.87	34.81	34.58	34.70	34.63	34.83	34.83
Central Plains	6.25	6.41	6.12	6.05	6.16	6.24	6.29	6.40	6.48	6.62	6.71
Delta States	6.47	6.53	6.26	6.34	6.44	6.50	6.53	6.60	6.62	6.67	6.70
Lake States	9.79	9.95	9.62	9.45	9.48	9.46	9.39	9.41	9.38	9.43	9.42
Northeast	1.18	1.28	1.22	1.21	1.21	1.21	1.19	1.19	1.18	1.18	1.18
Northern Plains	4.95	5.17	4.94	4.81	4.80	4.81	4.80	4.82	4.82	4.87	4.89
Southeast	5.38	5.48	5.35	5.36	5.42	5.43	5.42	5.44	5.43	5.43	5.41
Southern Plains	0.61	0.83	0.81	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80
					(Bush	els per Ac	re)				
Yield	38.9	39.1	39.8	40.5	41.0	41.6	42.2	42.8	43.4	43.9	44.5
Corn Belt	43.5	43.2	43.9	44.7	45.4	46.2	47.0	47.6	48.3	48.9	49.6
Central Plains	38.4	39.7	40.4	41.1	41.7	42.4	43.1	43.7	44.4	45.0	45.6
Delta States	24.0	30.4	30.8	31.1	31.4	31.7	32.0	32.2	32.5	32.8	33.0
Lake States	42.0	38.7	39.2	39.7	40.0	40.4	40.8	41.2	41.5	41.8	42.2
Northeast	34.1	35.2	35.7	36.1	36.5	36.9	37.4	37.8	38.2	38.6	39.0
Northern Plains	36.8	32.5	33.1	33.7	34.2	34.7	35.2	35.7	36.2	36.7	37.1
Southeast	26.6	31.7	32.5	33.2	33.8	34.5	35.2	35.8	36.5	37.2	37.8
Southern Plains	19.8	28.0	28.3	28.7	29.1	29.4	29.8	30.1	30.5	30.8	31.2
					(Milli	ion Bushel	s)				
Production	2,757	2,805	2,759	2,779	2,838	2,882	2,915	2,969	3,008	3,066	3,111
Corn Belt	1,573	1,556	1,538	1,553	1,583	1,607	1,624	1,652	1,674	1,705	1,729
Central Plains	240	255	247	248	257	265	271	280	288	298	306
Delta States	155	199	193	197	202	206	209	213	215	219	221
Lake States	411	385	377	375	380	382	383	387	390	394	397
Northeast	40	45	43	44	44	45	45	45	45	46	46
Northern Plains	182	168	163	162	164	167	169	172	175	178	182
Southeast	143	174	174	178	183	187	191	195	198	202	205
Southern Plains	12	23	23	23	23	23	24	24	24	25	25

**U.S. Rice Production** 

	98/99	99/00	00/01	01/02	02/03	03/04	04/05	05/06	06/07	07/08	08/09
					(Mil	lion Acres	)				
CRP Idled	0.013	0.013	0.013	0.014	0.014	0.014	0.014	0.014	0.014	0.014	0.014
Arkansas	0.007	0.007	0.007	0.007	0.007	0.008	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	0.004	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	0.002	0.003	0.003	0.003
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	3.345	3.455	3.385	3.365	3.362	3.339	3.343	3.315	3.311	3.291	3.279
Arkansas	1.540	1.600	1.591	1.583	1.579	1.567	1.569	1.553	1.550	1.536	1.529
California	0.480	0.495	0.467	0.462	0.465	0.463	0.464	0.463	0.465	0.469	0.471
Louisiana	0.625	0.640	0.635	0.631	0.630	0.626	0.627	0.621	0.619	0.614	0.612
Mississippi	0.270	0.290	0.276	0.275	0.275	0.273	0.273	0.271	0.271	0.269	0.268
Missouri	0.145	0.155	0.152	0.151	0.150	0.149	0.150	0.148	0.148	0.147	0.147
Texas	0.285	0.275	0.264	0.263	0.263	0.261	0.261	0.258	0.258	0.255	0.253
Harvested Area	3.317	3.424	3.355	3.335	3.333	3.310	3.314	3.287	3.283	3.263	3.252
Arkansas	1.525	1.585	1.577	1.568	1.565	1.553	1.555	1.540	1.536	1.523	1.516
California	0.478	0.493	0.465	0.461	0.463	0.461	0.462	0.461	0.463	0.467	0.469
Louisiana	0.620	0.636	0.631	0.628	0.627	0.622	0.623	0.617	0.616	0.611	0.608
Mississippi	0.268	0.288	0.274	0.273	0.272	0.270	0.271	0.269	0.269	0.267	0.265
Missouri	0.143	0.149	0.146	0.145	0.144	0.143	0.144	0.142	0.142	0.142	0.141
Texas	0.283	0.274	0.263	0.262	0.262	0.259	0.260	0.257	0.256	0.254	0.252
					,	nds per Ac	,				
Yield	5,669	5,949	5,988	6,031	6,073	6,118	6,155	6,200	6,239	6,283	6,323
Arkansas	5,798	5,797	5,854	5,910	5,962	6,018	6,065	6,120	6,169	6,221	6,270
California	6,841	8,276	8,395	8,459	8,507	8,562	8,611	8,661	8,705	8,743	8,782
Louisiana	4,533	4,723	4,749	4,774	4,798	4,822	4,844	4,868	4,890	4,914	4,936
Mississippi	5,800	5,870	5,916	5,955	5,993	6,030	6,066	6,102	6,136	6,171	6,205
Missouri	5,200	5,337	5,364	5,389	5,413	5,437	5,460	5,483	5,505	5,527	5,549
Texas	5,599	5,907	5,927	5,932	5,936	5,943	5,947	5,955	5,959	5,967	5,974
						Hundredwe					
Production	188.1	203.7	200.9	201.2	202.4	202.5	204.0	203.8	204.8	205.0	205.6
Arkansas	88.4	91.9	92.3	92.7	93.3	93.5	94.3	94.2	94.8	94.8	95.1
California	32.7	40.8	39.0	39.0	39.4	39.5	39.8	40.0	40.3	40.8	41.2
Louisiana	28.1	30.1	30.0	30.0	30.1	30.0	30.2	30.0	30.1	30.0	30.0
Mississippi	15.5	16.9	16.2	16.2	16.3	16.3	16.5	16.4	16.5	16.4	16.5
Missouri	7.4	7.9	7.8	7.8	7.8	7.8	7.8	7.8	7.8	7.8	7.8
Texas	15.8	16.2	15.6	15.5	15.5	15.4	15.4	15.3	15.3	15.2	15.0

**U.S. Upland Cotton Production** 

	98/99	99/00	00/01	01/02	02/03	03/04	04/05	05/06	06/07	07/08	08/09
					(Mil	lion Acres	)				
CRP Idled	1.24	1.27	1.36	1.41	1.43	1.44	1.45	1.46	1.47	1.47	1.47
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	0.07	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	1.13	1.16	1.24	1.29	1.30	1.31	1.32	1.33	1.34	1.34	1.34
Planted Area	13.09	13.21	12.71	12.44	12.16	12.06	11.94	11.87	11.89	11.95	11.99
Corn Belt	0.37	0.39	0.36	0.35	0.33	0.33	0.33	0.32	0.33	0.33	0.34
Central Plains	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02
Delta States	2.41	2.42	2.45	2.37	2.29	2.26	2.22	2.20	2.20	2.20	2.20
Far West	0.90	1.00	0.93	0.88	0.84	0.82	0.80	0.79	0.79	0.80	0.80
Southeast	3.53	3.64	3.48	3.45	3.39	3.37	3.35	3.34	3.34	3.36	3.38
Southern Plains	5.87	5.74	5.47	5.37	5.29	5.26	5.22	5.20	5.21	5.24	5.25
Harvested Area	10.49	12.54	12.08	11.83	11.56	11.46	11.35	11.29	11.30	11.36	11.40
Corn Belt	0.36	0.38	0.36	0.35	0.33	0.33	0.32	0.32	0.33	0.33	0.33
Central Plains	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02
Delta States	2.37	2.39	2.42	2.34	2.26	2.23	2.20	2.17	2.17	2.17	2.17
Far West	0.87	1.00	0.92	0.88	0.84	0.82	0.80	0.79	0.78	0.79	0.80
Southeast	3.40	3.57	3.41	3.38	3.33	3.31	3.28	3.27	3.28	3.30	3.32
Southern Plains	3.48	5.18	4.95	4.86	4.79	4.76	4.73	4.72	4.73	4.75	4.76
					(Pour	nds per Ac	re)				
Yield	612	660	667	672	676	681	686	691	697	702	708
Corn Belt	471	759	769	780	790	800	810	819	828	837	846
Central Plains	402	431	439	447	455	463	470	478	485	492	498
Delta States	673	781	786	793	800	806	811	817	822	827	832
Far West	957	1,231	1,239	1,247	1,253	1,259	1,265	1,270	1,275	1,280	1,285
Southeast	597	672	682	691	701	710	718	727	735	744	752
Southern Plains	515	480	485	489	493	497	501	505	508	511	515
						llion Bales					
Production	13.37	17.25	16.79	16.55	16.29	16.28	16.23	16.26	16.41	16.62	16.81
Corn Belt	0.35	0.61	0.58	0.56	0.54	0.54	0.54	0.55	0.56	0.57	0.58
Central Plains	0.01	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02
Delta States	3.32	3.89	3.96	3.87	3.76	3.74	3.71	3.69	3.72	3.74	3.77
Far West	1.73	2.55	2.38	2.27	2.19	2.15	2.10	2.08	2.08	2.12	2.14
Southeast	4.23	5.00	4.85	4.87	4.86	4.89	4.92	4.96	5.03	5.11	5.20
Southern Plains	3.73	5.18	5.00	4.96	4.92	4.94	4.94	4.96	5.00	5.06	5.10

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

- The value of U.S. agricultural exports reached a record level of \$60 billion in 1995/96 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 value of agricultural exports, projected to fall below \$50 billion in 1998/99, is likely to bottom out this year. Over the next 10 years, the value of agricultural exports are projected to increase by more than 40 percent, reaching \$70 billion by 2008/09.
- High-value products account for about 60 percent of the total increase in 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 60 percent during the projection period.
- The quantity of U.S. agricultural exports is projected to increase by more than 34 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 more than 30 percent in the next decade.
- Feed grain exports are expected to increase by 19 mmt, with corn accounting for a major share. Similarly, exports of oilseeds and oilseed products are projected to rise by more than 22 percent during the projection period.

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

	98/99	99/00	00/01	01/02	02/03	03/04	04/05	05/06	06/07	07/08	08/09
					(Thous	and Metric	: Tons)				
Animals and Animal Products	6,324	6,450	6,577	6,756	7,027	7,265	7,497	7,747	7,973	8,130	8,123
Grains and Feeds	92,086	94,427	97,398	100,926	103,187	105,216	107,587	110,470	112,862	114,987	117,785
Wheat (Unmilled and Flour)	26,866	26,258	27,441	28,416	28,809	29,211	29,809	30,198	29,984	29,687	29,425
Rice (Paddy Milled)	3,436	3,733	3,670	3,623	3,590	3,556	3,525	3,480	3,438	3,391	3,348
Feed Grains and Products	48,421	50,632	52,112	54,375	55,968	57,282	58,756	60,920	63,201	65,348	67,959
Other Grains and Feeds	13,362	13,804	14,176	14,512	14,820	15,166	15,497	15,872	16,238	16,562	17,053
Oilseeds and Products	33,933	37,519	37,784	37,755	38,132	38,446	38,893	39,498	40,141	40,969	41,667
Cotton (excl. Linters)	977	1,192	1,294	1,360	1,332	1,288	1,237	1,203	1,188	1,189	1,179
Other Products	8,040	8,353	8,647	8,974	9,240	9,485	9,760	10,079	10,368	10,652	10,917
Total	141,360	147,940	151,701	155,770	158,918	161,700	164,975	168,997	172,533	175,928	179,671

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

	98/99	99/00	00/01	01/02	02/03	03/04	04/05	05/06	06/07	07/08	08/09
	(Million U.S. Dollars)										
Bulk Commodities *	17,522	18,925	19,789	20,675	21,477	22,206	22,907	23,661	24,201	24,731	25,467
High-value Products †	32,059	33,199	34,463	35,844	37,051	38,126	39,433	40,715	41,966	43,285	44,362
Animals and Animal Products	10,646	11,253	11,867	12,573	13,171	13,737	14,475	15,157	15,737	16,350	16,624
Meat and Meat Products	4,383	4,785	5,142	5,479	5,690	5,890	6,271	6,561	6,693	6,836	7,131
Poultry and Poultry Products	2,650	2,757	2,837	3,014	3,246	3,440	3,608	3,782	3,948	4,097	4,233
Dairy Products	700	690	690	694	700	707	714	719	723	727	585
Hides and Skins	1,441	1,524	1,665	1,807	1,923	2,059	2,195	2,371	2,599	2,854	3,057
Other Animal Products	1,423	1,497	1,534	1,579	1,612	1,641	1,686	1,725	1,773	1,835	1,617
Grains and Feeds	12,637	13,447	14,155	14,908	15,576	16,204	16,763	17,388	17,764	18,162	18,686
Wheat (Unmilled and Flour)	3,234	3,541	3,912	4,253	4,514	4,729	4,927	5,114	5,105	5,101	5,108
Rice (Paddy Milled)	1,113	1,176	1,169	1,174	1,179	1,194	1,197	1,205	1,205	1,205	1,207
Coarse Grains	4,663	5,029	5,310	5,644	5,967	6,291	6,572	6,958	7,318	7,690	8,195
Corn	3,913	4,182	4,413	4,702	5,001	5,289	5,548	5,909	6,241	6,591	7,071
Other Feed Grains	750	846	897	942	966	1,002	1,024	1,049	1,076	1,100	1,124
Feeds and Fodders	3,628	3,701	3,763	3,837	3,915	3,990	4,068	4,110	4,136	4,167	4,176
Oilseeds and Products	9,212	9,732	9,946	10,102	10,328	10,478	10,759	11,025	11,381	11,712	12,157
Soybeans	4,885	5,478	5,634	5,767	5,901	6,001	6,144	6,273	6,437	6,569	6,781
Soybean Meal	1,562	1,508	1,536	1,555	1,609	1,635	1,705	1,774	1,865	1,953	2,042
Soybean Oil	913	830	833	818	828	833	866	902	959	1,029	1,118
Other Oilseeds and Products	1,852	1,917	1,943	1,962	1,990	2,009	2,043	2,076	2,120	2,161	2,216
Tobacco, unmanufactured	1,516	1,543	1,569	1,599	1,633	1,667	1,702	1,736	1,771	1,807	1,843
Cotton and Linters	1,536	1,696	1,808	1,955	1,981	1,970	1,934	1,920	1,931	1,963	1,967
Horticulture and Other Products	13,433	13,953	14,784	15,381	15,838	16,276	16,709	17,148	17,583	18,023	18,552
Total	49,581	52,124	54,251	56,519	58,528	60,331	62,341	64,376	66,167	68,017	69,829

<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. Consumer Price Indexes for Food**

The consumer price index (CPI) for food is projected to grow by 1.1 percent in 1999. This growth is much less than what was observed during the early 1990s, reflecting weaker commodity prices and low inflation in general. Stronger growth is projected beginning in 2000, but still at lower rates relative to recent history. Over the projection period, average growth is projected at 2.1 percent.

Lower grain prices limit the growth in the 1999 CPI for cereal and bakery products to 2.1 percent. Over the baseline, stronger growth returns, with an average growth rate of 2.7 percent.

The CPI for total meats is projected to increase by 1.6 percent in 1999. Declines in poultry prices serve to partially offset growth in beef, pork, and fish. Further declines in poultry are projected for 2000, again limiting

the increase in the total meats CPI. Over the baseline, meat prices are projected to grow at an average rate of 2.3 percent.

Lower prices of milk and dairy products push the dairy CPI lower by 3.9 percent in 1999. After 1999, modest growth returns, with an average rate of 1.3 percent for the 2000 to 2008 period. In terms of the products, cheese is projected to show the strongest growth, with an average rate of 1.5 percent.

The price index for fruits and vegetables will show steady growth of 1.6 percent over the baseline. Stronger growth for sugar and sweets is expected over the projection period. Declining prices of raw vegetable oils are projected to limit the growth in the fats and oils CPI to 0.5 percent.

## **Consumer Price Indexes for Food**

	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
					(198	32-84=100	))				
FOOD	160.8	162.6	166.2	170.2	174.0	177.1	180.6	184.2	187.7	191.3	195.4
Food at Home	161.1	162.7	166.2	170.2	174.0	177.0	180.5	184.0	187.5	191.0	195.1
Cereal and Bakery	181.1	184.8	190.9	197.9	202.8	206.7	212.4	218.4	224.3	230.0	235.7
Meat	147.1	149.5	153.5	158.1	162.6	165.3	168.6	172.0	175.0	178.0	182.9
Beef	136.5	142.2	147.9	153.5	158.0	159.9	161.3	161.6	163.1	166.1	171.3
Pork	148.5	151.1	159.2	165.7	169.6	169.0	175.2	181.8	185.0	185.3	190.1
Poult	157.2	152.8	148.7	148.5	154.0	160.0	162.3	166.6	171.0	175.8	180.9
Eggs	135.4	131.4	130.6	133.9	137.0	140.8	142.6	145.3	147.0	148.1	148.7
Fish	181.7	186.5	191.6	196.8	202.1	207.5	213.1	218.7	224.5	230.5	236.5
Dairy	150.8	145.0	146.3	148.6	151.2	153.8	155.8	157.7	159.6	161.4	163.1
Milk	150.7	142.9	143.4	145.9	148.5	151.0	153.2	155.2	157.3	159.2	161.1
Cheese	152.3	148.4	152.0	154.4	157.5	160.4	162.5	164.5	166.4	168.0	169.6
Ice Cream	155.5	149.5	149.5	151.5	153.6	155.7	157.3	158.9	160.5	161.9	163.3
Other Dairy (inc. butter)	182.2	181.9	182.7	184.5	186.0	187.8	189.5	191.0	192.7	194.4	196.1
Fruit and Vegetables	198.8	202.2	205.2	208.3	211.6	215.0	218.5	222.2	225.9	229.8	233.8
Other Food At Home	150.9	153.0	156.0	159.4	162.5	165.6	168.8	172.1	175.5	178.9	182.5
Sugar and Sweets	150.2	149.3	153.2	157.8	161.2	164.6	168.3	172.0	175.8	179.7	183.6
Fats and Oils	146.9	149.0	149.3	150.4	151.6	151.9	152.5	152.8	153.4	154.3	155.5
Other Prepared Items	165.4	169.6	174.0	178.6	183.3	188.1	193.0	198.0	203.2	208.5	213.9
Non-alc. Beverages	133.0	133.4	135.0	136.8	138.2	139.7	141.3	142.8	144.4	145.9	147.5
Food Away From Home	161.1	163.1	166.7	170.8	174.6	177.8	181.4	185.1	188.7	192.3	196.5

### **U.S. Consumer Food Expenditures**

Per capita expenditures for food are projected to increase to \$1,991 in 1999, an increase of 1.1 percent from the 1998 level. As basic commodity prices strengthen, food expenditures exhibit stronger growth beginning in 2000, with an average growth of 1.9 percent. Over the baseline, per capita expenditures increase by approximately \$300 per person.

Expenditures for food at home account for the majority of growth in total food expenditures. For 1999, expenditures for food at home are projected at \$1,206, up from \$1,190 in 1998. By 2008, the costs of food at home rise to \$1,477. Expenditures for food away from home grow from \$785 in 1999 to \$879 by 2008.

Expenditures for cereal and bakery products are projected to grow at an average rate of 3.2 percent over the baseline. Growth is more modest in the early years of the projection period as grain prices remain at low levels. Longer term, increased grain prices, coupled with increased consumption, push expenditures higher.

Per capita meat expenditures are projected to grow from \$303 in 1999 to \$365 in 2008, for an annual growth rate of 2.1 percent. Poultry expenditures show the strongest growth, driven by increased consumption. Expenditures for beef rise at a modest pace, as declining consumption partially offsets the increase in beef prices.

Lower milk prices for 1999 will lead to a modest decline in dairy expenditures relative to 1998. With stable milk prices projected over the baseline, expenditures on milk show only modest growth. The growth in dairy expenditures is driven in large part by consumption of dairy products, particularly cheese.

Annual growth in fruit and vegetable expenditures is projected at 1.7 percent over the baseline. Expenditures for sugar and sweets show stronger growth, with an average rate of 3.0 percent.

### Average Annual Per Capita Expenditures of Urban U.S. Households

	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
					(ILS Do	llars Per F	Person)				
FOOD	1,970	1,991	2,025	2,070	2,113	2,150	2,189	2,229	2,271	2,312	2,356
Food at Home	1,190	1,206	1,229	1,263	1,295	1,323	1,352	1,382	1,413	1,444	1,477
Cereal and Bakery	185	190	197	205	211	216	223	230	238	246	253
Meat	301	303	305	314	323	330	336	343	350	357	365
Beef	91	91	92	93	95	95	96	96	97	99	101
Pork	65	65	64	66	68	69	71	72	74	75	75
Poult	60	61	61	63	67	70	73	75	78	81	84
Eggs	13	12	12	12	13	13	13	13	13	13	13
Other Meat	73	75	77	79	82	83	85	87	88	90	93
Dairy	134	131	133	136	139	142	145	147	150	152	155
Milk	53	50	50	51	52	53	54	54	55	55	56
Other Dairy	81	81	82	84	87	89	91	93	95	97	99
Fruit and Vegetables	201	204	208	211	215	218	222	226	231	235	238
Other Food At Home	370	378	387	398	408	417	426	436	445	455	466
Sugar and Sweets	47	47	49	51	52	54	55	57	58	60	62
Fats and Oils	34	34	34	34	35	35	35	35	35	35	36
Misc.	164	165	168	172	175	177	180	184	187	190	193
Trips	21	22	23	23	24	25	26	27	28	28	29
Non-alc. Beverages	104	109	113	118	122	126	130	134	138	142	146
Food Away From Home	780	785	796	807	818	827	837	847	857	867	879

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

The \$5.9 billion emergency spending package passed in 1998, together with increased LDPs, will push net CCC outlays to \$17.1 billion in 1999. This represents a \$7 billion increase from the 1998 level and is the highest since 1993. Longer term, outlays decline to \$6.3 billion as payment levels under the FAIR Act are reduced.

Feedgrain program costs are projected to rise to \$5.6 billion in 1999 with the bulk of the increase due to the additional payments of the spending package. With no assumption of additional aid packages and lower LDPs, program outlays fall to \$3.4 billion in 2000. Costs average \$2.1 billion in the latter half of the baseline.

Outlays for wheat are projected at \$2.9 billion in 1999, an increase of \$700 million from the 1998 level. In addition to the higher direct payments to producers, government purchases of wheat for food aid also add to program costs. Longer term, outlays average \$1.1 billion.

Sagging soybean prices are expected to lead to additional outlays as LDPs are made. For 1999, soybean program costs are projected at \$760 million, up from \$140 million in the previous year. Outlays are expected to reach \$1.4 billion in 2000 as market prices remain at or below the loan rate. As prices recover, soybean program costs fall to \$0 longer term.

Heavy use of the Step II program helped push cotton outlays above \$1.1 billion in 1998. Cotton program costs are projected to grow to \$1.8 billion in 1999 due to higher LDPs and the additional payments made under the emergency spending package. Longer term, outlays for cotton range between \$400 and \$500 million.

Given projected rice prices, no LDPs are expected over the projection period. As a result, costs associated with the rice program are due primarily to AMTA payments. For 1999, outlays are projected to reach \$720 million and then decline to \$470 in 2000. As contract payments fall, rice outlays decline to \$340 million in 2002.

The \$200 million in dairy payments authorized in the 1998 emergency spending package help push dairy outlays to \$420 million in 1999. Costs fall dramatically in 2000 in the absence of the additional payments. In addition, product purchases fall as the dairy support program is phased out. Longer term, dairy outlays are associated with the Export Incentive Program, which averages approximately \$70 million annually.

Outlays associated with the CRP are projected to average \$1.6 billion in 1999 and 2000. As acreage enrolled in the CRP is assumed to expand to 36 million acres, outlays grow to \$1.76 billion by 2008.

## **CCC Net Expenditures, by Program**

	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
				(Bi	llion U.S. I	Dollars, Fi	scal Year)				
Feed Grains	3.35	5.56	3.37	2.43	2.06	2.09	2.12	2.13	2.13	2.14	2.13
Corn	2.87	4.79	2.91	2.10	1.77	1.80	1.83	1.84	1.84	1.84	1.84
Sorghum	0.30	0.48	0.27	0.21	0.20	0.20	0.20	0.20	0.20	0.20	0.20
Barley	0.17	0.25	0.17	0.12	0.09	0.08	0.09	0.09	0.09	0.09	0.09
Oats	0.02	0.03	0.02	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
Wheat	2.19	2.91	1.34	1.02	1.04	1.11	1.10	1.07	1.08	1.08	1.08
Soybeans	0.14	0.76	1.44	0.96	-0.05	-0.04	0.00	-0.01	0.00	0.00	0.00
Cotton	1.13	1.79	1.47	1.30	1.05	0.72	0.58	0.48	0.44	0.45	0.44
Rice	0.49	0.72	0.47	0.35	0.34	0.34	0.34	0.34	0.34	0.34	0.34
Sugar	-0.03	-0.05	-0.04	-0.04	-0.04	-0.04	-0.04	-0.04	-0.04	-0.04	-0.04
Dairy	0.29	0.42	0.12	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08
Export Programs	0.09	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08
Net Interest	0.08	0.11	0.10	0.08	0.05	0.06	0.06	0.05	0.06	0.06	0.06
Disaster Payments	0.03	2.28	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09
Conservation Reserve	1.69	1.58	1.63	1.66	1.67	1.68	1.70	1.72	1.74	1.75	1.76
Other Conservation Prog.	0.20	0.31	0.37	0.29	0.22	0.23	0.24	0.24	0.24	0.24	0.24
Other Net Costs	0.50	0.66	0.19	-0.07	-0.06	0.05	0.11	0.11	80.0	0.08	0.05
Net CCC Outlays	10.14	17.13	10.63	8.25	6.53	6.45	6.45	6.35	6.32	6.34	6.32
Conservation Reserve	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
<b>Total Government Costs</b>	10.14	17.13	10.63	8.25	6.53	6.45	6.45	6.35	6.32	6.34	6.32

## **CCC Net Expenditures, by Function**

	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
				(Bi	llion U.S. [	Dollars, Fis	scal Year)				
Deficiency Payments	0.47	1.85	2.37	1.72	0.42	0.17	0.08	0.02	0.00	0.00	0.00
Diversion Payments	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Producer Storage	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Conservation Programs	1.89	1.89	2.00	1.96	1.89	1.90	1.94	1.96	1.98	1.99	2.00
Disaster Payments	0.03	2.28	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09
Contract Payments	5.67	8.37	5.05	4.07	3.95	3.95	3.95	3.95	3.95	3.95	3.95
Direct Payments	8.05	14.38	9.51	7.83	6.35	6.11	6.06	6.01	6.02	6.03	6.03
Loans Made	6.14	7.24	7.61	7.30	6.32	5.84	5.75	5.76	5.81	5.93	6.07
Loans Repaid	5.42	6.70	6.97	7.00	6.27	5.75	5.70	5.76	5.82	5.94	6.07
Storage and Handling	0.03	0.04	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03
Net Dairy Purchases	0.15	0.09	0.03	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
Net Stock Outlays	0.90	0.67	0.70	0.33	0.10	0.12	0.09	0.04	0.03	0.04	0.04
Other Net Costs	1.19	2.07	0.42	0.08	0.08	0.22	0.31	0.30	0.27	0.28	0.25
Total Government Costs	10.14	17.13	10.63	8.25	6.53	6.45	6.45	6.35	6.32	6.34	6.32

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

Total receipts from farm marketings fell to \$198.3 billion in 1998, a decline of more than \$10 billion from the record level of 1997. The crops sector accounted for \$7 billion of the decline as commodity prices fell dramatically. Receipts are projected to fall further in 1999, with the crops sector again contributing the majority of the decline. Not until 2002 do receipts recover to the levels observed in 1997.

Weaker prices are projected to lower feedgrain cash receipts to \$22.2 billion in 1999, the lowest level since 1994. This also represents a \$5 billion decline from the levels observed in 1996 and 1997. As production and prices increase, receipts steadily increase after 2000, growing to \$28.2 billion by 2008.

Wheat prices averaging below \$3.00 per bushel are the driving force behind lower foodgrain receipts. For 1999, total foodgrain receipts are projected at \$8.2 billion. Stronger prices push receipts above \$9 billion by 2001. By 2008, receipts are projected to reach \$11 billion with the majority of the growth occurring in wheat.

Oilseed cash receipts reflect the substantial weakening in soybean prices for 1999 and 2000. Receipts are expected to range between \$15.5 and \$15.8 billion for the 1999 to 2001 period, down from \$19.9 billion in 1997. As prices show some recovery and production expands, receipts grow to \$19.4 billion in 2008, still below the record level observed in 1997.

Weak demand is expected to contribute to lower cotton prices over the next few years. As a result, cotton cash receipts average between \$500 and \$550 million through 2003. Only in the latter half of the projection period do receipts show some recovery as prices strengthen.

Cash receipts for red meats are projected to recover to \$45 billion in 1999 with higher prices for cattle and hogs. For hogs, the recovery comes on the heels of a year that saw the lowest cash receipts since 1977. Longer term, cattle receipts reflect the cattle cycle with peaks in 2002 and 2008. Hog receipts peak at just under \$12 billion in 2005.

Strong milk prices pushed 1998 dairy receipts to the record level of \$24.3 billion. As prices soften, receipts are projected to decline to \$21.6 billion in 1998. Further declines are expected in 2000 as lower prices more than offset increased production. Longer term, receipts are projected to grow \$22.7 billion.

Receipts for poultry and eggs are projected to fall in 1999 due to lower prices for broilers and eggs. After 1999, stable prices and increased production lead to increased cash receipts, with annual growth projected at 2.3 percent during the 2000 to 2008 period.

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

	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
Farm Marketings					(Billio	n U.S. Dol	lars)				
and CCC Loans	198.25	194.56	198.70	204.43	209.98	212.81	217.52	221.24	223.89	227.68	233.61
Crops	104.76	101.72	103.78	106.49	109.61	112.90	116.08	119.22	122.20	125.10	128.12
Feed Grains	24.00	22.22	22.55	23.14	23.77	24.55	25.37	26.10	26.79	27.43	28.17
Corn	17.86	16.37	16.62	17.16	17.71	18.37	19.08	19.70	20.29	20.83	21.48
Sorghum	1.17	1.15	1.23	1.26	1.30	1.34	1.38	1.42	1.45	1.48	1.53
Barley	0.67	0.62	0.63	0.64	0.66	0.69	0.71	0.73	0.74	0.76	0.79
Oats	0.09	0.09	0.09	0.10	0.10	0.10	0.10	0.10	0.11	0.11	0.11
Hay	4.21	3.99	3.98	3.99	4.01	4.05	4.09	4.15	4.20	4.24	4.27
Food Grains	8.70	8.16	8.68	9.10	9.45	9.84	10.17	10.51	10.70	10.84	11.00
Wheat	6.99	6.45	6.94	7.36	7.69	8.04	8.35	8.67	8.83	8.95	9.09
Rice	1.70	1.69	1.72	1.72	1.75	1.77	1.80	1.83	1.85	1.87	1.89
Rye	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02
Oilseeds	17.79	15.82	15.55	15.77	16.30	16.81	17.25	17.76	18.29	18.83	19.41
Cotton	5.30	5.08	5.08	5.08	5.22	5.40	5.55	5.70	5.87	6.06	6.22
Sugar	2.21	2.20	2.21	2.22	2.24	2.26	2.27	2.29	2.30	2.32	2.34
Other Crops *	46.76	48.25	49.72	51.18	52.62	54.05	55.46	56.86	58.25	59.62	60.98
Livestock and Products	93.49	92.84	94.92	97.93	100.37	99.92	101.44	102.02	101.69	102.58	105.49
Red Meats	42.88	45.03	47.52	49.27	50.63	48.92	49.69	49.59	48.70	49.05	51.20
Cattle, Calves	33.68	34.94	36.17	37.46	38.77	38.37	37.89	37.09	36.58	37.54	39.10
Hogs	8.66	9.54	10.80	11.27	11.30	10.00	11.25	11.95	11.57	10.96	11.55
Sheep, Lambs	0.54	0.55	0.55	0.55	0.55	0.55	0.55	0.55	0.55	0.55	0.55
Dairy Products	24.27	21.62	21.17	21.30	21.61	21.95	22.13	22.27	22.43	22.55	22.66
Poultry, Eggs	22.87	22.71	22.74	23.84	24.56	25.43	25.96	26.46	26.83	27.23	27.82
Broilers	15.25	15.13	15.18	16.11	16.61	17.22	17.66	18.01	18.26	18.58	19.09
Turkeys	2.63	2.69	2.70	2.74	2.85	2.97	3.02	3.10	3.17	3.25	3.33
Chicken Eggs	4.35	4.26	4.23	4.32	4.41	4.51	4.54	4.60	4.62	4.62	4.59
Other Poultry	0.64	0.63	0.63	0.67	0.69	0.72	0.74	0.76	0.77	0.78	0.80
Other Livestock †	3.47	3.47	3.49	3.52	3.57	3.61	3.65	3.70	3.73	3.76	3.81
Government Payments	12.81	10.98	8.83	6.96	6.09	5.96	5.93	5.91	5.93	5.94	5.94
Total Cash Receipts	211.06	205.54	207.53	211.39	216.08	218.77	223.44	227.15	229.82	233.61	239.56

<sup>\*</sup> Includes tobacco, vegetables and melons, fruits and tree nuts, and other crops.

<sup>†</sup> Includes horses, mules, and aquaculture.

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

Lower expenses for farm-origin inputs are a reflection of reduced feed expenses for the livestock sector. For 1999, expenses for farm-origin inputs are projected to fall to \$42.6 billion, with feed accounting for the decline. As crop prices recover and livestock production increases, feed expenses are projected to grow by \$6 billion over the baseline.

The decline in oil prices drove expenses for manufactured inputs lower in 1998. Further declines are expected in 1999, before recovering in 2000. After 2000, input price inflation causes manufactured input expenses to grow at an annual rate of 2 percent.

Interest expenses are projected to fall to \$13 billion in 1999 with declines in both short-term and real estate interests. Modest growth is projected over the baseline period with total interest expenses reaching \$13.9 billion in 2008. The increased expenses are driven by 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.

Increased labor costs are projected to push other operating expenses up to \$60.9 billion in 1999. 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 \$39.4 billion in 1999, a drop of \$400 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 top \$44 billion, with rent expenses contributing most of the growth.

Total production expenses are projected to fall to \$183.5 billion in 1999. This represents a \$2 billion decline from the 1998 level and is \$5 billion less than the peak observed in 1997. Increased production levels and higher input prices cause expenses to begin rising in 2000. After 2000, production expenses grow at an annual rate of 2 percent.

**U.S. Farm Production Expenses** 

	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
					(Billio	n U.S. Do	llars)				
Farm-Origin Inputs	43.86	42.55	42.96	44.06	45.41	46.46	47.24	47.79	48.57	49.64	50.82
Feed	23.91	22.39	22.46	23.09	23.85	24.82	25.64	26.42	27.24	27.84	28.25
Purchased Livestock	13.31	13.60	13.89	14.25	14.74	14.69	14.55	14.20	14.06	14.40	15.06
Seed	6.64	6.55	6.61	6.72	6.82	6.94	7.06	7.17	7.28	7.39	7.51
Manufactured Inputs	28.08	27.71	27.92	28.59	29.14	29.76	30.42	31.05	31.74	32.43	33.11
Fertilizer, Lime	10.57	10.40	10.54	10.79	10.94	11.13	11.34	11.53	11.74	11.94	12.16
Petroleum Fuel, Oils	5.69	5.54	5.61	5.78	5.89	6.02	6.15	6.29	6.43	6.57	6.71
Electricity	2.89	2.84	2.86	2.93	3.00	3.08	3.15	3.23	3.31	3.39	3.46
Pesticides	8.94	8.92	8.93	9.09	9.31	9.54	9.77	10.01	10.25	10.52	10.78
Interest Charges	13.36	12.99	13.27	13.39	13.39	13.54	13.63	13.70	13.79	13.86	13.91
Short-Term Interest	6.94	6.76	6.90	6.95	6.96	7.03	7.08	7.11	7.15	7.19	7.21
Real Estate Interest	6.42	6.23	6.37	6.43	6.43	6.51	6.56	6.59	6.64	6.67	6.70
Other Operating Exp. Repair, Operation	60.33	60.88	61.85	63.37	64.92	66.61	68.24	69.89	71.60	73.27	74.84
of Capital Items	10.28	10.19	10.30	10.48	10.65	10.84	11.03	11.22	11.41	11.59	11.75
Contract, Hired Labor Machine Hire	19.36	20.03	20.56	21.27	21.98	22.73	23.46	24.20	24.96	25.70	26.40
Custom Work Marketing, Storage,	4.73	4.70	4.73	4.80	4.85	4.90	4.95	5.01	5.07	5.13	5.19
and Transportation	7.09	7.20	7.32	7.45	7.55	7.67	7.80	7.93	8.07	8.21	8.34
Miscellaneous	18.88	18.75	18.94	19.38	19.89	20.47	21.00	21.53	22.09	22.64	23.15
Other Overhead Exp.	39.80	39.35	39.74	40.11	40.63	41.16	41.71	42.30	42.90	43.50	44.17
Capital Consumption	19.68	19.47	19.51	19.63	19.78	19.93	20.10	20.27	20.45	20.64	20.83
Property Taxes	6.99	7.09	7.14	7.25	7.35	7.45	7.56	7.69	7.85	8.00	8.15
Rent to Nonoperators	13.12	12.79	13.09	13.23	13.50	13.78	14.05	14.33	14.60	14.86	15.19
Production Expenses	185.43	183.47	185.74	189.52	193.49	197.53	201.24	204.72	208.61	212.69	216.83
Noncash Expenses	18.88	18.67	18.71	18.83	18.98	19.13	19.30	19.47	19.65	19.84	20.03
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	18.28	18.07	18.11	18.23	18.38	18.53	18.70	18.87	19.05	19.24	19.43
Op Dwelling Expenses	2.68	2.75	2.78	2.81	2.84	2.87	2.90	2.93	2.96	2.99	3.02
Cash Expenses	163.86	162.05	164.25	167.88	171.67	175.53	179.04	182.32	186.00	189.86	193.78

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

After peaking at \$220.5 billion in 1997, total farm receipts are projected to decline to \$206.4 billion in 1999. Crop receipts contribute the majority of the decline. Farm receipts expand to \$247 billion by 2008.

Increased LDPs will keep direct government payments at \$11 billion for 1999, a decline of \$1.8 billion from the 1998 level. Farm receipts and government payments combine to give gross cash income of \$217.4 billion in 1999. Gross income grows to \$252.9 billion by 2008, as higher farm receipts more than offset lower government 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 \$11.2 billion in 1999 to \$13.6 billion in 2008.

The value of inventory change is projected at -\$1.2 billion in 1999 due, in part, to reduced hog inventories. With trend yields and stable crop prices, the value of inventory change remains at relatively low levels throughout the baseline.

Net cash income is projected to decline to \$55.4 billion in 1999, as lower receipts more than offset lower cash expenses. Cash income remains flat through 2001, as higher receipts are offset by additional production expenses. Longer term, net cash income averages \$57 billion.

Accounting for the value of inventory change, non-money income, and total expenses, net farm income is projected to decline \$43.9 billion in 1999, a \$3.4 billion decline from the 1998 level. Lower production expenses soften the decline in net farm income as gross farm income falls by \$5.3 billion. Net farm income shows a modest increase over the baseline period as receipts grow slightly faster than expenses.

After accounting for inflation, real net farm income (in 1987 dollars) falls to \$31.9 billion in 1999, a decline of \$3 billion from the previous year. In general, real farm income declines over the projection period, reaching \$28.9 billion in 2007.

**U.S. Farm Income Statistics** 

	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
					(Billio	n U.S. Dol	lars)				
1. Farm Receipts	210.02	206.44	210.73	216.64	222.36	225.36	230.23	234.12	236.94	240.89	246.99
Crops	104.76	101.72	103.78	106.49	109.61	112.90	116.08	119.22	122.20	125.10	128.12
Livestock	93.49	92.84	94.92	97.93	100.37	99.92	101.44	102.02	101.69	102.58	105.49
Farm-Related *	11.77	11.88	12.03	12.22	12.38	12.54	12.72	12.88	13.05	13.21	13.37
2. Government Payments	12.81	10.98	8.83	6.96	6.09	5.96	5.93	5.91	5.93	5.94	5.94
3. Gross Cash Income (1 + 2)	222.83	217.42	219.56	223.60	228.45	231.32	236.16	240.03	242.87	246.83	252.93
4. Nonmoney Income	10.99	11.20	11.54	11.87	12.15	12.32	12.54	12.77	12.98	13.25	13.59
5. Value of Inventory											
Change	-1.08	-1.22	-0.70	-0.21	0.09	0.20	0.04	-0.18	-0.44	-0.50	-0.40
6. Gross Farm Income (3 + 4 + 5)	232.74	227.40	230.40	235.26	240.69	243.84	248.74	252.62	255.41	259.58	266.12
7. Cash Expenses †	163.86	162.05	164.25	167.88	171.67	175.53	179.04	182.32	186.00	189.86	193.78
8. Total Expenses	185.43	183.47	185.74	189.52	193.49	197.53	201.24	204.72	208.61	212.69	216.83
9. Net Cash Income (3 - 7)	58.97	55.37	55.30	55.73	56.79	55.79	57.12	57.72	56.86	56.96	59.15
10. Realized Net Farm Inc (3 + 4 - 8)	48.39	45.15	45.36	45.95	47.11	46.11	47.46	48.08	47.24	47.39	49.69
11. Net Farm Income (6 - 8)	47.32	43.93	44.65	45.74	47.21	46.30	47.50	47.91	46.79	46.88	49.29
Deflated (1987 \$) ‡	34.76	31.85	31.71	31.82	32.16	30.90	31.05	30.72	29.40	28.85	29.69

<sup>\*</sup> 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, 1987=1

#### **Crop Insurance**

Net acres insured increase from 182 million acres in 1998 to 196 million acres in 1999 due, in part, to the provisions of the Crop Loss Disaster Assistance Program. After 2000, net acres insured falls back to near 1998 levels but then steadily climbs to near 195 million acres by 2008.

The Crop Loss Disaster Assistance Program requires producers who did not have crop insurance in 1998 and receive assistance under the program to purchase crop insurance for 1999 and 2000. Most of the acreage increase in 1999 is in buy-up coverage due to the temporary increases in premium subsidies on buy-up coverage for 1999. Much of this increase reverts back to catastrophic coverage in 2000.

Total premiums rise from \$1.88 billion in 1998 to \$1.96 billion in 1999. This increase arises from growth in overall participation and, particularly, in buy-up participation. In 2000, total premium levels fall to \$1.82 billion due to decreases in buy-up participation and low crop prices. Total premiums then trend upward reaching \$2.22 billion in 2008.

The impact of the \$400 million for temporary premium subsidies from the Crop Loss Disaster Assistance Program is evident from the producer-paid premiums and premium subsidies for 1999. Premium subsidies exceed \$1.3 billion in 1999. Following 1999, the division of premium payments returns to the normal pattern. After 2000, 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 around one indicate "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 2008, the federal government's total financial obligation from crop insurance reaches \$2.62 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 jump from \$1.27 billion in 1998 to \$1.89 billion in 1999. Most of this increase can be attributed to the temporary premium subsidies. In 2000, net outlays for crop insurance decline to \$1.55 billion.

# **Crop Insurance**

	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
					(M	illion Acre	s)				
Eligible Acres	267.69	264.46	262.88	263.33	263.95	264.55	265.15	265.69	266.16	266.59	266.97
Net Acres Insured	181.80	196.12	195.87	181.48	183.61	185.79	187.99	190.15	192.29	193.50	194.70
Crop Insurance											
Participation Rate	67.92%	74.16%	74.51%	68.92%	69.56%	70.23%	70.90%	71.57%	72.25%	72.58%	72.93%
					(Bi	llion Dollai	rs)				
Total Premiums	1.88	1.96	1.82	1.84	1.90	1.95	2.01	2.06	2.12	2.16	2.22
Producer-Paid Premiums	0.93	0.62	0.90	0.95	0.98	1.01	1.04	1.07	1.10	1.12	1.15
Premium Subsidies	0.95	1.33	0.91	0.89	0.91	0.94	0.97	0.99	1.02	1.04	1.07
Total Indemnities	1.65	1.99	1.76	1.82	1.87	1.92	1.97	2.03	2.09	2.14	2.20
Loss Ratio	0.88	1.02	0.97	0.99	0.99	0.98	0.98	0.98	0.98	0.99	0.99
					(Billion D	ollars, Fisc	cal Year)				
Total Obligations	1.90	2.19	2.30	2.17	2.23	2.30	2.36	2.42	2.49	2.56	2.62
Net Outlays	1.27	1.89	1.55	1.50	1.53	1.59	1.62	1.56	1.61	1.66	1.80