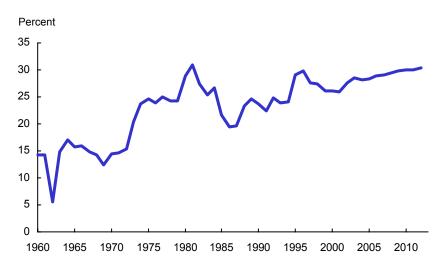
U.S. Agricultural Sector Aggregate Indicators Farm Income, Food Prices, and U.S. Trade Value

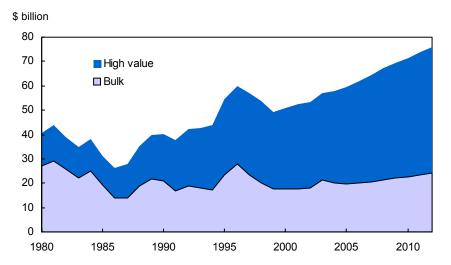
Long run developments for the farm sector reflect strengthening domestic and international economic growth which support gains in consumption, trade, and prices. While export competition and a strong U.S. dollar are projected to continue, improving world economic growth, particularly in developing countries, provides a foundation for gains in global trade and U.S. agricultural exports. The results are rising market prices and farm income as well as improvement in the financial condition of the agricultural sector. Consumer food prices are projected to continue a long-term trend of rising more slowly than the general rate of inflation.





Export revenues account for an increasing share of total U.S. farm cash receipts. With the productivity of U.S. agriculture growing faster than domestic demand, farmers rely increasingly on export market growth.

U.S. agricultural export value: bulk and high value

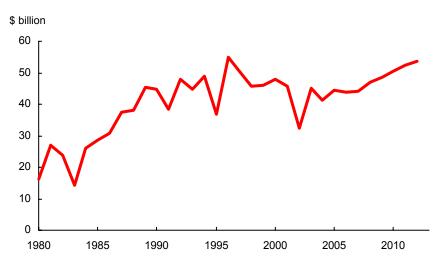


Bulk commodities include wheat, rice, feed grains, soybeans, cotton, and tobacco. HVP's includes semi-processed and processed grains and oilseeds, animals and products, horticultural products, and sugar and tropical products.

U.S. agricultural export value is projected to grow an average of 3.6 percent annually from about \$53 billion in fiscal year 2002 to \$76 billion in 2012. High-value product (HVP) exports continue to grow, accounting for more than two-thirds of total U.S. exports.

- Strengthening world economic growth, particularly in developing countries, provides a foundation for gains in trade and U.S. agricultural exports. However, competition in global markets remains strong.
- Much of the growth in HVP exports is for horticultural products and animal products.
- After declining from near-term high levels, growth in the value of bulk product exports (grains, oilseeds, cotton, and tobacco) reflects expected price increases and some gain in bulk volume.
- U.S. agricultural exports rise more than imports, with the agricultural trade surplus rising to \$21 billion in fiscal year 2012.

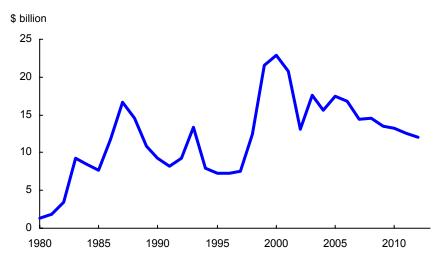
Net farm income



Income projections for the next decade average near \$47 billion, compared to about \$46 billion in the 1990s. Net farm income increases to over \$53 billion at the end of the baseline.

- Net farm income was relatively low in 2002. Large supplies and low prices for meat
 animals and dairy products reduced livestock receipts. Government payments to farmers
 declined as relatively high prices for many crops reduced marketing loan benefits and
 limited counter-cyclical payments, while some payments were shifted into 2003 as the
 2002 Farm Act was implemented. Additionally, emergency assistance payments were
 lower than in 1999-2001.
- Net farm income generally rises through the projections. Longer run gains reflect strengthening domestic demand and exports, which lead to improvements in financial conditions of the sector.

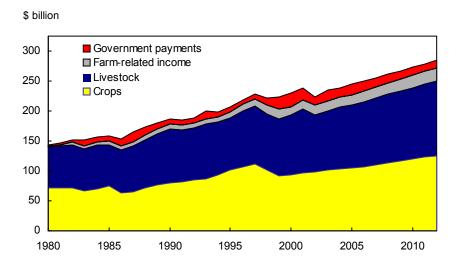
Direct government payments



Government payments generally decline through the projections, largely due to rising market prices for program commodities which reduce marketing loan benefits and counter-cyclical payments.

- Direct government payments are projected to fall from over \$17 billion in 2003 to \$12 billion in 2012.
- In the longer run, government payments largely reflect direct payments under the 2002 Farm Act, payments for the Conservation Reserve Program, and financial assistance for other conservation programs.
- Some variability in government payments occurs in the early years of the projections. Marketing loan benefits and counter-cyclical payments are affected by market price movements for many program commodities, which fall from recent high levels before gradually rising through the remainder of the projections. Also, payments are shifted across calendar years early in the projections as different provisions of the 2002 Farm Act are implemented.

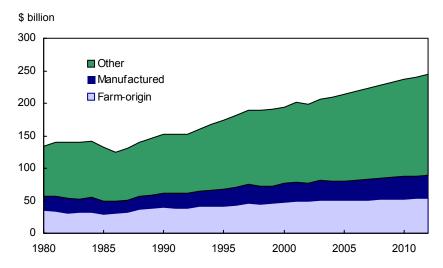
Gross cash income



Gross cash income gradually rises through the projections. Both crop and livestock receipts increase, reflecting growing domestic and export demands.

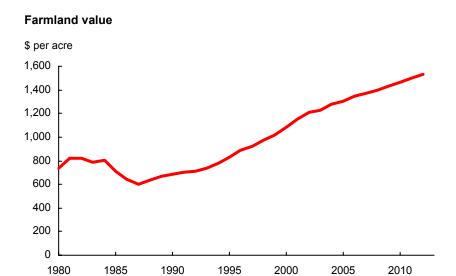
• The agriculture sector relies on the market for most of its income. The share of income provided by government payments declines through the projections. Government payments, which represented almost 10 percent of gross cash income in 2000, account for 4 to 5 percent at the end of the projections.

Farm production expenses



Production expenses increase modestly from 2003-12, at slightly less than the general inflation rate. These expenses are divided into three categories in the accompanying chart: farm-origin (seed, feed, and feeder livestock), manufactured (fuel, fertilizer, pesticides, and electricity), and other (labor, interest, and other expenses).

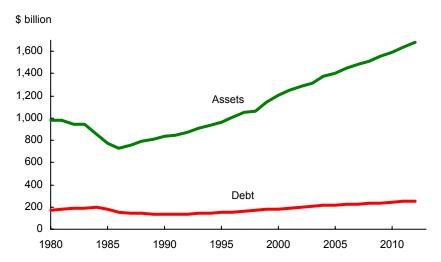
- The largest percentage increase is for the other expenses category, reflecting increases in labor expenses and interest costs. Labor expenses rise as sector output increases and wage rates rise. Projected increases in interest costs reflect higher interest rates as well as higher debt facilitated by rising farm incomes.
- Manufactured input expenses increase through the projections as oil prices rise and planted acreage expands.
- Cash operating margins are stable in the projections with cash expenses at 77-79 percent of gross cash income.



Strengthening farm income through the projections supports gains in farmland values.

• Increasing demand for land use from non-agricultural sources, such as housing and recreation, also affects farmland values.

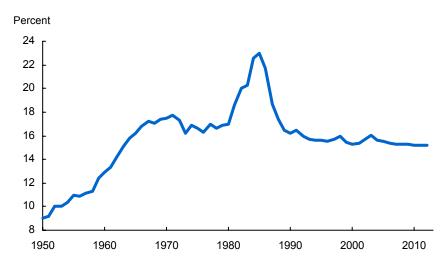
Farm assets and debt



Increasing farm incomes and relatively low interest rates through the baseline assist in asset accumulation and debt management.

• Farm debt moves up less rapidly than asset values in the projections, rising an average of about 2.4 percent a year compared with an increase of 2.7 percent annually for assets.

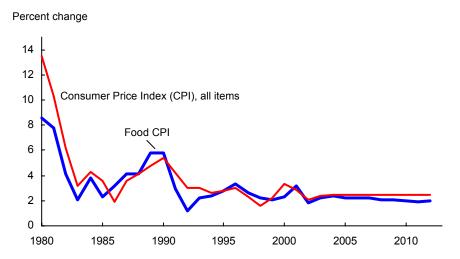
Debt-to-asset ratios



Increasing farm income and rising farm equity lead to improved financial conditions in the agricultural sector.

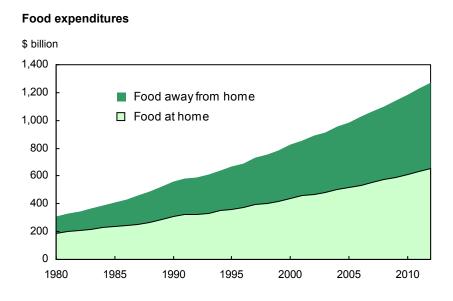
• Debt-to-asset ratios decline over the next few years and then remain near 15 percent, compared with over 20 percent in the mid-1980s.

Food inflation



Retail food prices continue a long-term trend of increasing less than the general inflation rate.

 Among foods purchased for consumption at home, price increases are generally strongest for more highly processed foods such as cereals and bakery products. For these foods, prices are related more to processing and marketing costs than to farm-level prices and, therefore, rise at a rate near the general inflation rate.



Expenditures for meals prepared away from home account for a growing share of food spending, reaching about 49 percent of total food expenditures by 2012.

• Increases in away-from-home food spending, which contains a large service component, are held down by competition in the fast-food and food-service industries.

Table 29. Farm receipts, expenses, and incomes in nominal dollars

	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
	Billion dollars											
Cash receipts:												
Crops	96.4	97.6	101.6	103.4	104.3	106.7	110.0	113.2	116.3	119.3	122.6	125.7
Livestock and products	106.4	95.9	98.9	102.4	105.1	107.9	111.4	114.3	117.3	119.8	122.4	125.1
All commodities	202.8	193.5	200.5	205.8	209.4	214.6	221.3	227.6	233.7	239.0	245.0	250.8
Farm-related income	14.9	15.9	16.9	17.4	17.8	18.3	18.8	19.3	19.8	20.3	20.9	21.4
Government payments	20.7	13.1	17.6	15.6	17.5	16.8	14.4	14.5	13.5	13.2	12.6	12.0
Gross cash income	238.5	222.5	234.9	238.8	244.6	249.6	254.5	261.4	267.0	272.6	278.4	284.2
Cash expenses	178.8	176.2	183.6	187.1	190.1	195.3	199.7	204.0	208.1	211.7	215.7	220.2
Net cash income	59.7	46.3	51.3	51.7	54.5	54.4	54.8	57.4	58.9	60.8	62.7	64.0
Value of inventory change	-3.2	-2.8	4.7	0.5	1.0	0.3	0.3	0.6	0.8	0.8	0.8	0.8
Non-money income	11.2	11.2	11.4	11.7	12.0	12.3	12.6	12.8	13.1	13.3	13.6	13.8
Gross farm income	246.5	230.9	251.0	251.0	257.7	262.3	267.4	274.8	280.8	286.7	292.8	298.9
Noncash expenses	16.0	16.1	16.2	16.3	16.5	16.7	16.9	17.1	17.3	17.5	17.7	17.9
Operator dwelling expenses	6.0	6.2	6.3	6.4	6.5	6.5	6.6	6.7	6.8	6.9	7.0	7.1
Total production expenses	200.8	198.5	206.0	209.9	213.1	218.5	223.3	227.9	232.2	236.2	240.4	245.3
Net farm income	45.7	32.4	44.9	41.2	44.5	43.8	44.1	46.9	48.6	50.5	52.4	53.6
Farm assets	1,251.0	1,288.5	1,309.3	1,371.7	1,401.0	1,447.2	1,483.1	1,515.3	1,558.1	1,596.2	1,637.8	1,679.4
Farm debt	192.0	201.9	209.7	213.9	218.1	222.5	227.0	231.9	237.5	243.2	249.3	255.5
Farm equity	1,059.0	1,086.6	1,099.7	1,157.9	1,182.9	1,224.7	1,256.1	1,283.3	1,320.6	1,353.0	1,388.5	1,423.9
	Percent											
Debt/equity ratio	18.1	18.6	19.1	18.5	18.4	18.2	18.1	18.1	18.0	18.0	18.0	17.9
Debt/assets ratio	15.3	15.7	16.0	15.6	15.6	15.4	15.3	15.3	15.2	15.2	15.2	15.2

Table 30. Farm receipts, expenses, and incomes in 1996 dollars

	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	
	Billion 1996 dollars 1												
Cash receipts:													
Crops	88.1	88.2	90.2	90.0	88.8	88.7	89.2	89.6	89.8	89.8	90.1	90.1	
Livestock and products	97.3	86.6	87.8	89.0	89.5	89.7	90.3	90.5	90.5	90.2	90.0	89.7	
All commodities	185.4	174.8	178.0	179.0	178.3	178.4	179.5	180.0	180.3	180.0	180.0	179.8	
Farm-related income	13.7	14.3	15.0	15.1	15.1	15.2	15.2	15.3	15.3	15.3	15.3	15.4	
Government payments	18.9	11.9	15.6	13.6	14.9	13.9	11.7	11.5	10.4	9.9	9.2	8.6	
Gross cash income	218.0	201.0	208.6	207.7	208.4	207.5	206.4	206.8	206.0	205.3	204.6	203.7	
Cash expenses	163.4	159.2	163.0	162.7	162.0	162.3	162.0	161.4	160.6	159.4	158.5	157.9	
Net cash income	54.6	41.8	45.6	44.9	46.4	45.2	44.4	45.4	45.4	45.8	46.1	45.9	
Value of inventory change	-2.9	-2.6	4.1	0.4	0.8	0.3	0.3	0.5	0.6	0.6	0.6	0.6	
Non-money income	10.2	10.2	10.1	10.2	10.3	10.3	10.2	10.1	10.1	10.0	10.0	9.9	
Gross farm income	225.3	208.6	222.9	218.3	219.5	218.1	216.9	217.4	216.7	215.9	215.1	214.2	
Noncash expenses	14.6	14.5	14.4	14.2	14.1	13.9	13.7	13.5	13.3	13.2	13.0	12.8	
Operator dwelling expenses	5.5	5.6	5.6	5.6	5.5	5.4	5.4	5.3	5.3	5.2	5.2	5.1	
Total production expenses	183.5	179.3	183.0	182.5	181.5	181.7	181.1	180.3	179.2	177.8	176.7	175.8	
Net farm income	41.8	29.3	39.9	35.8	37.9	36.4	35.8	37.1	37.5	38.0	38.5	38.4	
Farm assets	1,143.3	1,163.9	1,162.8	1,192.8	1,193.4	1,203.0	1,202.8	1,198.8	1,202.2	1,201.9	1,203.4	1,203.9	
Farm debt	175.5	182.4	186.2	186.0	185.8	185.0	184.1	183.5	183.3	183.1	183.2	183.2	
Farm equity	967.8	981.6	976.6	1,006.8	1,007.6	1,018.1	1,018.7	1,015.3	1,019.0	1,018.8	1,020.2	1,020.7	

^{1/} Nominal dollar values divided by the GDP chain-type price index.

Table 31. Consumer food price indexes and food expenditures baseline

CPI category	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Consumer price indexes:						19	82-84=10	0					
All food	167.8	173.1	176.2	180.0	184.3	188.3	192.3	196.5	200.7	205.0	209.1	213.3	217.6
Food away from home	169.0	173.9	178.3	181.8	185.4	189.1	192.9	196.8	200.7	204.7	208.8	213.0	217.2
Food at home	167.9	173.4	175.6	179.6	184.4	188.5	192.7	197.1	201.5	205.9	210.2	214.3	218.6
Meats	150.7	159.3	160.4	162.9	166.6	169.4	172.1	174.8	176.7	178.8	179.9	180.7	181.9
Beef and veal	148.1	160.5	160.5	164.0	170.0	174.0	177.4	180.9	182.9	184.6	185.3	185.1	185.4
Pork	156.5	162.4	161.7	163.0	164.0	165.0	166.4	168.1	169.5	171.9	172.9	174.2	175.9
Other meats	152.0	156.4	162.0	163.0	165.2	167.4	169.8	172.2	174.7	177.4	179.8	182.2	184.9
Poultry	159.8	164.9	167.2	170.0	177.7	179.1	183.0	187.0	189.2	191.4	192.9	193.9	195.6
Fish and seafood	190.4	191.1	188.1	190.8	195.6	200.5	205.5	210.6	215.9	221.3	226.8	232.5	238.3
Eggs	131.9	136.4	137.8	137.0	140.6	143.7	147.7	151.6	156.7	162.8	168.9	174.1	179.1
Dairy products	160.7	167.1	168.5	170.7	178.0	183.6	188.3	193.5	199.5	205.4	210.8	215.8	221.1
Fats and oils	147.4	155.7	155.6	158.8	163.6	168.0	172.3	176.8	181.5	186.3	191.1	195.8	200.6
Fruits and vegetables	204.6	212.2	220.5	227.0	232.9	239.0	245.1	251.2	257.7	263.8	270.2	276.6	283.6
Sugar and sweets	154.0	155.7	159.0	165.2	166.7	168.5	171.6	174.8	178.0	181.2	184.6	188.0	191.4
Cereals and bakery products	188.3	193.8	198.2	203.7	206.6	210.4	215.1	220.2	225.7	231.4	237.3	243.2	249.1
Nonalcoholic beverages	137.8	139.2	139.1	142.0	145.0	148.0	151.1	154.3	157.5	160.8	164.2	167.6	171.1
Other foods	172.2	176.0	177.2	181.3	185.6	190.0	194.6	199.3	204.1	209.0	214.0	219.1	224.3
Food expenditures:	Billion dollars												
All food	824.8	857.3	888.6	914.6	951.8	986.8	1,023.2	1,061.4	1,100.5	1,140.8	1,181.8	1,224.3	1,268.7
Food at home	437.9	457.0	470.2	479.6	499.5	516.4	534.0	552.5	571.3	590.5	609.5	629.0	649.8
Food away from home	386.9	400.3	418.4	435.0	452.3	470.4	489.2	508.9	529.2	550.3	572.3	595.3	618.9

Table 32. Changes in consumer food prices, baseline

CPI category	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
							Percent						
All food	2.3	3.2	1.8	2.2	2.4	2.2	2.1	2.2	2.1	2.1	2.0	2.0	2.0
Food away from home	2.4	2.9	2.5	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Food at home	2.3	3.3	1.3	2.3	2.7	2.2	2.2	2.3	2.2	2.2	2.1	2.0	2.0
Meats	5.9	5.7	0.7	1.6	2.3	1.7	1.6	1.6	1.1	1.2	0.6	0.4	0.7
Beef and veal	6.4	8.4	0.0	2.2	3.7	2.4	2.0	2.0	1.1	0.9	0.4	-0.1	0.2
Pork	7.3	3.8	-0.4	0.8	0.6	0.6	8.0	1.0	0.8	1.4	0.6	0.8	1.0
Other meats	2.6	2.9	3.6	0.6	1.3	1.3	1.4	1.4	1.5	1.5	1.4	1.3	1.5
Poultry	1.2	3.2	1.4	1.7	4.5	8.0	2.2	2.2	1.2	1.2	8.0	0.5	0.9
Fish and seafood	2.8	0.4	-1.6	1.4	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5
Eggs	3.0	3.4	1.0	-0.6	2.6	2.2	2.8	2.6	3.4	3.9	3.7	3.1	2.9
Dairy products	0.7	4.0	8.0	1.3	4.3	3.1	2.6	2.8	3.1	3.0	2.6	2.4	2.5
Fats and oils	-0.6	5.6	-0.1	2.1	3.0	2.7	2.6	2.6	2.7	2.6	2.6	2.5	2.5
Fruits and vegetables	0.7	3.7	3.9	2.9	2.6	2.6	2.6	2.5	2.6	2.4	2.4	2.4	2.5
Sugar and sweets	1.1	1.1	2.1	3.9	0.9	1.1	1.8	1.9	1.8	1.8	1.9	1.8	1.8
Cereals and bakery products	1.8	2.9	2.3	2.8	1.4	1.8	2.2	2.4	2.5	2.5	2.5	2.5	2.4
Nonalcoholic beverages	2.6	1.0	-0.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1
Other foods	2.0	2.2	0.7	2.3	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4

Table 33. Summary of U.S. agricultural trade projections, fiscal years

	2000	2001	2002	2003 1/	2004	2005	2006	2007	2008	2009	2010	2011		2002-2012 growth rate
-							Billion d	ollars						Percent
Agricultural exports:														
Animals and products	11.7	12.4	11.9	12.4	13.4	14.0	14.6	15.3	16.0	16.6	17.2	17.7	18.2	4.3
Grains, feeds, and products	13.9	13.9	14.1	16.6	15.5	15.3	15.7	16.5	17.3	18.1	18.8	19.6	20.6	3.8
Oilseeds and products	8.6	8.8	9.7	9.6	9.9	10.2	10.8	11.3	11.9	12.3	12.5	12.8	13.1	3.0
Horticultural products	10.5	11.1	11.1	11.3	11.8	12.3	12.8	13.2	13.7	14.1	14.5	14.9	15.3	3.2
Tobacco, unmanufactured	1.2	1.2	1.1	1.2	1.2	1.2	1.1	1.1	1.1	1.1	1.0	1.0	0.9	-2.3
Cotton and linters	1.8	2.1	2.1	2.6	2.8	2.9	3.1	3.1	3.1	3.2	3.2	3.3	3.3	4.9
Other exports	3.0	3.3	3.2	3.3	3.5	3.6	3.8	3.9	4.1	4.2	4.3	4.4	4.6	3.8
Total agricultural exports	50.7	52.7	53.3	57.0	58.0	59.6	61.8	64.4	67.1	69.5	71.5	73.7	76.0	3.6
Bulk commodities exports	17.7	17.6	18.2	21.2	20.0	19.7	20.1	20.7	21.4	22.2	22.7	23.4	24.2	2.9
High-value product exports	33.0	35.1	35.1	35.8	38.0	39.8	41.7	43.7	45.7	47.3	48.8	50.3	51.8	4.0
High-value product share	65.0%	66.5%	65.9%	62.8%	65.5%	66.9%	67.5%	67.9%	68.1%	68.1%	68.2%	68.2%	68.1%	
Agricultural imports:														
Animals and products	8.1	9.0	9.1	9.3	9.7	10.1	10.1	10.1	10.2	10.3	10.4	10.5	10.7	1.6
Grains, feeds, and products	3.1	3.2	3.6	3.9	3.9	3.9	4.0	4.1	4.2	4.4	4.5	4.6	4.7	2.8
Oilseeds and products	1.9	1.7	1.7	1.8	2.1	2.0	2.0	2.0	2.1	2.1	2.2	2.3	2.4	3.5
Horticultural products	15.8	16.4	17.5	18.4	19.1	19.8	20.5	21.2	21.9	22.6	23.3	24.1	24.8	3.5
Tobacco, unmanufactured	0.7	0.6	0.7	8.0	8.0	0.9	0.8	8.0	0.9	0.9	0.9	1.0	1.0	2.9
Sugar and related products	1.5	1.6	1.7	1.8	1.9	2.0	2.0	2.1	2.1	2.2	2.2	2.3	2.3	3.1
Coffee, cocoa, and rubber	5.2	3.8	4.0	4.2	4.3	4.4	4.5	4.6	4.8	4.9	5.0	5.1	5.2	2.8
Other imports	2.6	2.6	2.6	2.7	2.9	3.0	3.1	3.2	3.2	3.3	3.4	3.5	3.6	3.1
Total agricultural imports	38.9	39.0	41.0	43.0	44.9	46.1	47.1	48.1	49.4	50.7	52.0	53.3	54.8	2.9
Net agricultural trade balance	11.8	13.7	12.3	14.0	13.2	13.4	14.7	16.3	17.7	18.8	19.6	20.4	21.2	5.6
	Million metric tons													
Agricultural exports (volume):														
Bulk commodity exports	115.5	111.9	113.6	112.2	112.8	115.2	117.8	120.4	121.9	124.5	127.4	130.0	131.9	1.5

^{1/} The projections were completed in November 2002 based on policy decisions and other information known at that time. For updates of the nearby year forecasts, see USDA's Outlook for U.S. Agricultural Trade report, published in February, May, August, and December.

Note: Other exports consists of seeds, sugar and tropical products, and beverages and preparations. Essential oils are included in horticultural products. Bulk commodities include wheat, rice, feed grains, soybeans, cotton, and tobacco. The high-value products (HVP's) export value is calculated as total exports less the bulk commodities. HVP's include semi-processed and processed grains and oilseeds, animals and products, horticultural products, and sugar and tropical products. Other imports includes seeds, beverages except beer and wine, and miscellaneous commodities.