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AGRICULTURAL SITUATION AND OUTLOOK

Department of Agricultural Economics New York State College of Agriculture and Life Sciences A Statutory College of the State University Cornell University, Ithaca, New York 14853-7801

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This publication contains information pertaining to the general economic situation and New York agriculture. It is prepared primarily for use of professional agricultural workers in New York State. USDA reports provide current reference material pertaining to the nation's agricultural situation.

"Current Economic Situation" is a two-page monthly release that carries the latest figures for selected economic indicators and highlights current developments. This release is a supplement to the Economic Handbook and is available to anyone requesting to be on the mailing list by writing to the Department of Agricultural Economics, Cornell University, 445 Warren Hall, Ithaca, New York 14853-7801.



GROSS PRIVATE DOMESTIC INVESTMENT

	Gross	Gross		sidential	Changes
	private investment	Residential fixed	Structures	Durables equipment	in business inventories
			- billions of cu	rrent dollars -	
1982	447	105	143	223	-24
1983	502	152	124	233	-7
1984	665	181	141	275	68
985	643	189	153	290	11
986	659	217	139	296	7
1987	700	226	134	311	28
1988	747	232	140	348	26
1989	771	231	146	366	28
990	741	222	147	377	-5
991	(670)	(200)	(135)	(370)	(-35)

One of the closely watched indicators of economic turnaround is private investment. In the first two quarters of 1991, gross private domestic investment fell back by more than 10 percent reflecting strong concerns about surplus capacity in urban and suburban real estate and changing needs for plant and equipment in defense and aerospace. Inventories have been kept to minimum levels during 1991. New investment in residential and commercial properties continues slow despite attractive interest rates. An important upswing in investment should occur in 1992 if real rates of economic growth return to customary levels.



COMMON STOCK PRICES AND YIELDS New York Stock Exchange, 1983-1991

While the economic recession held sway during the last quarter of 1990 and the first two quarters of 1991, the stock market dipped briefly and then returned to earlier levels and resumed a general upward trend interspersed with more traditional ups and downs. As interest rates on savings fell, individuals looked for alternative places to receive higher rates of return and some turned in this direction. Profits before taxes are highly variable depending on the industry. Overall, they have fallen by about 10 percent with the auto industry suffering substantial losses, but other industries, like food processing and drugs, recording steady gains.

	Profits BEFORE taxes	Profits AFTER taxes
	- billio	ons -
1983	\$208	\$130
1984	240	146
1985	224	128
1986	222	115
1987	275	148
1988	317	181
1989	308	173
1990	305	173
1991 I (rate	282	166
II (rate) 279	161



INDUSTRIAL PRODUCTION

One of the more useful indicators of change in the economy is the monthly index of industrial production prepared by the Federal Reserve System. The monthly record of the downward turn of this important part of the economy is provided below. There was a steady decline from September 1990 to the low point in March 1991. Upward progress was steady until August and has since shown little change in either direction, a point of concern to many.

	Month	Index of Industrial Production		Month	Index of Industrial Production
1990	September	110.6	1991	April	105.5
	October	109.9		May	106.4
	November	108.3		June	107.3
	December	107.2		July	108.0
				August	108.2
1991	January	106.6		September	108.2
	February	105.7		October	108.2
	March	105.0			

The important differences among the major industrial sectors is indicated in the individual charts. The big downturn for defense and space equipment is compensated for in part by positive trends for consumer goods, utilities and business equipment. Capacity utilization is a good general indicator of economic health and has a long way to go to return to the levels of 1989 and 1990.



EMPLOYMENT AND THE LABOR FORCE

Civilian employment reached a peak in mid-1990 and has drifted downward from 117.9 million to 116.5 million at the end of the third quarter of 1991. An increase in civilian employment is expected in the first two quarters of 1992 associated with real rates of growth in the economy. Productivity has increased as firms have reduced their employment rolls. Until there is greater evidence of consumer confidence in terms of a backlog of orders or increasing sales, employment will grow slowly.

Labor force participation rates continue high even though there was a recession that lasted for more than three quarters. The ratio of employment to eligible population as calculated by BLS is as follows:

	Percent		Percent
1982	57.8	1987	61.5
1983	57.9	1988	62.3
1984	59.5	1989	63.0
1985	60.1	1990	62.7
1986	60.7	1991	(61.5)

With relatively small numbers of new entrants to the labor force, rates of unemployment have been lower than they were in the recession of 1982-83. This will also help bring more of the unemployed back into productive jobs during 1992.

				Producer Prices	
	Consumer	Price Index	All	All	All
	All		finished	intermediate	crude
Year	items	Foods	goods	goods	materials
	(1982-8	4 = 100)		(1982 = 100)	
1981	90.9	93.6	96.1	98.6	103.0
1982	96.5	97.4	100.0	100.0	100.0
1983	99.6	99.4	101.6	100.6	101.3
1984	103.9	103.2	103.7	103.1	103.5
1985	107.6	105.6	104.7	102.7	95.8
1986	109.6	109.0	103.2	99.1	87.7
1987	113.6	113.5	105.4	101.5	93.7
1988	118.3	118.2	108.0	107.1	96.0
1989	124.0	125.1	113.6	112.0	103.1
1990	130.7	132.4	119.2	114.5	108.9
1991	(136.0)	(136.3)	(121.5)	(114.6)	(102.0)

CONSUMER AND PRODUCER PRICES

Sources: Department of Commerce; Council of Economic Advisers.

Rates of inflation have slowed at the same time as economic growth. The Consumer Price Index in the second half of 1991 has increased at an annual rate of about 2.0%. The Producer Price Index for finished goods is 2% above year earlier levels which suggests that consumer prices should hold relatively steady for the next 6 months. Clearly, unusual weather can always affect food and energy prices at short notice, particularly in the winter months.

Anyone concerned with inflation should be interested in the index numbers for the major groups of commodities and materials covered by the Producer Price Index. The recession has particularly hit the markets for raw materials where prices have fallen sharply since January 1991. Prices for intermediate goods have held quite steady since mid-1991, another good sign for the industrial sector.

Major components of the Consumer Price Index are listed below with weights as of December 1990. Housing with all of its separate components, transportation and food continue to account for 77% of the total:

Component	December 1990 weight (percent)	September 1991 $(1982-84 = 100)$	% change from September 1990 (percent)
Housing	41.4	133.5	3.2
Transportation	17.8	124.0	2.7
Food	17.7	136.2	2.2
Apparel	6.1	130.4	4.5
Medical care	6.4	178.9	8.4
All other	10.6		
Total	100.0	137.2	3.8







Personal savings as a percent of disposable income decreased slightly in 1991 compared to 1989 and 1990. Rates of savings in the United States are somewhat below those of many industrialized countries. For the first time in a number of years, consumer installment credit is being reduced as loans are being paid off faster than debt is extended. The slump in the auto industry is reflected in the forecast for total auto loans as of December 1991, now the smallest percentage of the total in ten years.

	Personal consumption expenditures ¹	Total credit outstanding	Auto loans	Auto loans as percent of total
		- billions -		(percent)
December 1982	\$2051	\$326	\$126	39
December 1984	2431	443	174	39
December 1985	2629	518	210	41
December 1986	2797	573	247	43
December 1987	3009	610	266	44
December 1988	3238	664	284	43
December 1989	3450	719	291	41
December 1990	3657	735	285	39
December 1991	(3800)	(725)	(265)	(37)

CONSUMER INSTALLMENT CREDIT

¹ Annual totals.



FEDERAL FINANCE The Federal Deficit and Debt

The size of the federal deficit commands the attention of increasing numbers of people throughout the country. Outlays continue to exceed receipts despite Gramm-Rudman and a commitment to practice budget discipline in a time of recession and minimum economic growth. The Off Budget items such as the Savings and Loan bailout are particularly difficult to control. Both OMB in the Executive Branch and the Congressional Budget Office agree that the deficit in 1992 will be close to \$350 billion. Getting this problem under control in the 1990s, remains one of our highest priorities.

		Government		
Fiscal year	Receipts	Outlays	Deficit	Gross federal debt
		- billions -		billions
1975	\$ 279	\$ 332	-53	\$ 544
1980	517	591	-74	909
1985	734	946	-212	1817
1986	769	990	-221	2120
1987	854	1004	-150	2346
1988	909	1064	-155	2601
1989	991	1144	-153	2866
1990	1031	1252	-220	3206
1991 est. (OMB)	(1069)	(1351)	(-282)	(3578)
1992 est. (OMB)	(1146)	(1494)	(-348)	(4048)



Progress has been made in reducing the size of the trade deficit in 1991, but imports continue to exceed exports in every quarter. The balance on current accounts moved into the positive range in the spring of 1991 when payments were made to help finance the Gulf War but will return to a deficit position in the third and fourth quarters. If the gap in the merchandise trade balance can be reduced further in 1992, the positive balance obtained from services rendered and from overseas investment income could bring this deficit down to more manageable proportions. The positive agricultural trade balance is expected to approximate \$15 billion in fiscal 1991.

	Net balance (billions)				
Year	Goods and Services	Current Account			
1980	\$ 9.1	\$ 6.9			
1982	3.9	-5.9			
1984	-86.4	-99.0			
1986	-129.4	-145.4			
1987	-145.5	-160.2			
1988	-111.3	-126.2			
1989	-90.8	-106.3			
1990	-69.8	-92.1			
1991	(-45.0)	(-30.0)			



PRICES RECEIVED AND PAID BY FARMERS

	Prices Received				
Year	Crops	Livestock	All commodities	Prices paid	Ratio
			(1977 = 100)		
1982	121	145	133	159	84
1983	128	141	135	161	84
1984	138	146	142	164	87
1985	120	136	128	162	79
1986	107	138	123	159	77
1987	106	146	127	162	78
1988	126	150	138	170	81
1989	134	160	147	177	83
1990	128	170	150	184	82
1991	(134)	(162)	(148)	(189)	(78)

Prices paid by farmers increased by about three percent during 1991, at about the same rate as increases in the general price level. Prices received by farmers increased by 4.7 percent for crops and fell by nearly five percent for livestock. Thus, livestock farmers, particularly dairymen, faced narrower margins throughout most of 1991. Crop prices were up compared to 1990 because of weather-related reductions in output. Stocks of grains are reduced compared to 1990, thus, there is potential for greater variability in prices during the first half of 1992. Some increase in the ratio of prices received to prices paid can be anticipated again in 1992 as prices paid should hold nearly steady while prices received increase modestly.



		United States			
Year	Gross farm income	Production expenses	Net farm income	net farm income	
		- billions -		millions	
1982	164	140	24	389	
1983	153	138	15	173	
1984	170	144	26	367	
1985	163	132	31	423	
1986	157	126	31	532	
1987	169	128	41	666	
1988	174	132	42	630	
1989	189	140	48	883	
1990	194	144	50	938	
1991	(191)	(148)	(43)	(600)	

Both gross and net farm income are expected to be somewhat reduced in 1991 from the levels obtained in 1990. Overall, prices received are a little lower and crop output is down. Net farm income is expected to be down by at least 10 percent compared to 1990. Anticipating that prices paid will hold relatively steady in 1992, net farm income should increase from 1991 levels.

Estimates of net farm income in New York are provided by the USDA and the New York Agricultural Statistics Service. Net farm income reached the highest level in 10 years in 1990. No official estimate for 1991 has been made, but it should more nearly approximate the levels in 1986-88 in a range around \$600 million as compared to the \$938 million of 1990. Modest crop production and low milk prices indicate such reductions are likely. Net incomes in 1992 should improve a bit from 1991 levels as prices received increase.

CARRYOVE	R STOCKS OF WHEAT AND COI	RN
AS PERC	ENT OF PRODUCTION IN U.S.	

Year	ar Production Endir		Stocks as percent of production	Farm price per bushel		
Wheat:	- million	bushels -	percent			
1984-85	2595	1425	55	3.39		
1985-86	2424	1905	79	3.08		
1986-87	2091	1821	87	2.42		
1987-88	2108	1261	60	2.57		
1988-89	1812	702	38	3.72		
1989-90	2037	536	26	3.72		
1990-91	2736	866	32	2.61		
1991-92	(1981)	(531)	(27)	(2.90)		
Corn:						
1984-85	7674	1648	21	2.63		
1985-86	8875	4040	46	2.23		
1986-87	8226	4882	59	1.50		
1987-88	7131	4259	60	1.94		
1988-89	4929	1930	39	2.54		
1989-90	7525	1344	18	2.36		
1990-91	7933	1521	19	2.30		
1991-92	- million bushels - 2595 1425 2424 1905 2091 1821 2108 1261 1812 702 2037 536 2736 866 (1981) (531) 7674 1648 8875 4040 8226 4882 7131 4259 4929 1930 7525 1344 7933 1521 (7479) (1202)		(16)	(2.45)		

Source: USDA.

Carryover stocks of wheat in the U.S. are forecast to reach relatively low levels by Spring 1992. Some volatility in market prices should be expected if grains begin to move to the USSR and other overseas markets. Stocks of corn are also expected to be low at the end of the 1991-92 crop year so that grain prices could continue low if cash demand overseas remains slow. They could also change quickly if funds are made available to meet latent overseas demand.

Production Year	Production	Utilization	Exports	Ending Stocks	Stocks as percent of use
		- million me	tric tons -		percent
1982-83	1548	1505	200	351	23
1985-86	1662	1594	205	430	27
1986-87	1684	1655	212	459	28
1987-88	1606	1665	222	401	24
1988-89	1562	1658	231	312	18
1989-90	1685	1700	231	300	18
1990-91	1780	1744	220	336	19
1991-92	(1695)	(1715)	(220)	(316)	(18)

WORLD PRODUCTION AND USE OF GRAINS USDA Estimates, 1982-91

World production of grains decreased by five percent in 1991 pulling stocks down again to 1988 levels. International prices remain low despite relatively short supplies because the U.S. and the EC continue to compete vigorously for the limited cash markets with export subsidies. If the GATT negotiations are successful at the end of 1991 or early in 1992, this ruinous competition could subside and normal market forces return to determine prices.

Year	Target price	Effective loan rate	Market price	Deficiency payment	Setaside requirement
		- dollars pe	r bushel -		percent
Wheat:		dona po			Poroette
1986-87	4.38	2.40	2.42	1.98	22.5
1987-88	4.38	2.28	2.57	1.81	27.5
1988-89	4.23	2.21	3.72	.69	27.5
1989-90	4.10	2.06	3.72	.32	10
1990-91	4.00	1.95	2.61	1.28	5
1991-92	4.00	(2.04)	(2.90)	(1.47)	15
1992-93	(4.00)	()	()		(5)
Corn:					
1986-87	3.03	1.92	1.50	1.11	17.5
1987-88	3.03	1.82	1.94	1.09	20
1988-89	2.93	1.77	2.54	.36	20
1989-90	2.84	1.65	2.36	.58	10
1990-91	2.75	1.57	2.30	.53	10
1991-92	2.75	1.62	(2.45)	(.58)	7.5
1992-93	(2.75)			NET TZ	(5)

FARM PROGRAMS AND PRICE SUPPORTS United States, 1986-87 to 1992-93

The new omnibus legislation, enacted in October 1990, required a substantial number of operating rules and decisions, particularly from ASCS, with respect to the conduct of new or revised programs. The basic system from 1985 was retained so that major efforts were directed toward establishing the "flexibility" conditions associated with the 15 percent of acreage in program crops that could be switched without penalty to another crop (corn to soybeans). All producers signing up for these programs had to meet the setaside requirement (15 percent of program acres for wheat and 7.5 percent for corn in 1991). Maximum payment acres in 1991 were 77.5 percent of base for corn and 70 percent of base for wheat. Normal flex acres, which made up 15 percent of base, were not eligible for deficiency payments.

Because stocks of both wheat and corn are anticipated to be well below historical levels, the setaside requirements for both wheat and feed grains in 1992 are five percent of base acres. The "flex" options will be available again in 1992. In 1991, farm program participation was similar to or slightly increased over previous years. Farmers "flexed" 7.5 million out of 170 million base acres in the various crop signups. Leading states exercising this option were North Dakota, Texas and Iowa.

United States consumers spent \$441 billion for foods originating on U.S. farms in 1990. About 61 percent of those expenditures were in retail grocery stores on food for at home use. The remaining 39 percent represented the retail value of food served by public eating places, hospitals, schools and other institutions. About 24 percent of the \$441 billion (\$106 billion) went back to farmers. The remaining \$335 billion was the marketing bill (see Figure 1). These percentages have remained fairly constant for the past few years.

The marketing bill, the difference between what consumers spent on food and the farm value of the food, rose 4.7 percent in 1990, mainly due to higher prices of most inputs and the greater use of some inputs, particularly labor. Much of the increased cost to the consumer is reflected by the increased value added to foods. Microwavable, shelf stable, convenience packaging, and hot prepared foods are examples of value-added food that the consumer is willing to pay more for.

FIGURE 1

Distribution of food expenditures

Marketing bill was three-fourths of 1990 food expenditures.



consumers for consumption both at home and away from home.

Source: USDA, ERS, Agricultural Economic Report Number 656

Higher labor costs accounted for about 47 percent of last year's increase in the marketing bill, about the same proportion as in 1989. Much of the remaining increase in the marketing bill occurred in food packaging materials and other costs, including advertising and promotion, taxes and insurance, and professional services.

Small increases in transportation and energy costs and greater industry efforts to control labor and other costs have slowed the rise of the marketing bill in recent years. Nevertheless, marketing costs continued to be the most persistent source of rising consumer food expenditures.

What the Marketing Bill Bought

Costs of the basic functions performed by the food industry -- processing, wholesaling, transporting and retailing -- are different for food purchased in food stores than for meals and snacks purchased away from home (see Figure 2). These shares have remained fairly constant over time.

FIGURE 2

Marketing functions of the food dollar

Processing costs are the largest marketing function for food eaten at home.



Source: USDA, ERS, Agricultural Economic Report Number 656

The Food Dollar

Another way of looking at the distribution of the marketing bill is to consider what part of the consumer food dollar goes to each input (see Figure 3). Labor is the largest part of the marketing bill, amounting to 35 percent of food expenditures. Food containers and packaging materials, the second largest food marketing cost, are about 8 percent of total food expenditures. Before tax profits, while still just 3 percent of food expenditures, saw the greatest increase of any market cost component at 19.5 percent in 1990. Surprisingly, corporate before tax profits increased the least of all the major marketing cost components since 1980, 42.4 percent versus 82.9 percent for the total marketing bill.

Farm Value

The farm value of foods in the market basket averaged 5.8 percent higher in 1990, a smaller increase than 1989s 6.7 percent. Driving the 1990 increase in farm value were higher prices for livestock and fresh fruit (see Table 1).

		TABLE 1	l			
Item	1985	1986	1987	1988	1989	1990 <u>2</u> /
			Annual perc	entage char	ige	
Market basket:						
Retail price	1.2	2.1	5.0	4.4	7.0	7.1
Farm value	-7.1	-1.4	2.3	3.8	6.5	5.8
Farm-to-retail spread	5.6	3.9	6.1	4.7	7.2	7.7
Meat products:						
Retail price	9	3.1	7.5	2.4	4.0	10.1
Farm value	-8.2	3.3	7.3	-1.6	3.8	12.9
Farm-to-retail spread	6.4	2.9	7.7	5.8	4.2	7.8
Dairy products:						
Retail price	1.9	.1	2.5	2.4	6.7	9.4
Farm value	-4.1	-2.8	.8	-2.9	9.3	2.9
Farm-to-retail spread	7.1	2.5	3.7	6.1	4.9	14.0
Poultry:						
Retail price	-1.0	7.5	-1.4	7.2	9.9	2
Farm value	-6.0	8.7	-18.5	17.5	6.3	-8.1
Farm-to-retail spread	5.4	6.3	18.4	-1.1	13.3	6.9
Eggs:						
Retail price	-16.6	6.8	-5.9	2.3	26.6	4.7
Farm value	-22.2	7.8	-16.9	2	41.3	.4
Farm-to-retail spread	-6.5	5.6	11.2	5.0	10.6	10.9
Cereal and bakery products:						
Retail price	3.8	2.8	3.5	6.4	8.4	5.7
Farm value	-8.4	-19.1	-7.0	30.6	9.8	-11.0
Farm-to-retail spread	5.5	5.4	4.5	4.4	8.3	7.4
Fresh fruit:						
Retail price	11.1	1.7	12.6	7.2	6.4	12.8
Farm value	-2.6	-6.3	9.7	2.3	-6.8	18.0
Farm-to-retail spread	18.0	5.0	13.8	8.9	10.9	11.4
Fresh vegetables:						
Retail price	-4.3	4.1	12.9	6.3	10.7	5.6
Farm value	-14.0	-3.3	24.4	-3.5	16.9	.7
Farm-to-retail spread	6	7.3	8.3	10.7	8.3	7.6
Processed fruit and vegetables:						
Retail price	2.6	-1.6	3.5	7.9	6.3	6.1
Farm value	10.2	-13.8	9.5	23.0	-2.6	10.2
Farm-to-retail spread	.3	2.6	1.8	3.2	9.7	4.6
Fats and oils:						
Retail price	2.2	-2.2	1.5	4.6	7.1	4.3
Farm value	-16.1	-27.0	-2.8	38.5	-7.2	12.0
Farm-to-retail spread	10.4	6.3	2.6	-3.0	11.8	2.2
Other prepared food:						
Retail price	3.3	2.6	4.2	3.7	6.4	4.5
Farm value	-6.7	4.7	2.3	4.8	9.6	1.9
Farm-to-retail spread	4.9	2.3	4.5	3.5	5.9	4.9

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MARKETING COSTS

1/ Changes in retail prices are from the Consumer Price Index published by the U.S. Department of Labor, Bureau of Labor Statistics. The farm value is based on prices farmers received for commodities equivalent to food at retail. The spread between the retail price and farm value represents charges for processing and marketing. 2/ Preliminary.

Source: USDA, ERS, Agricultural Economic Report Number 656

FIGURE 3



Includes food eaten at home and away from home. Other costs include property taxes and insurance, accounting and professional services, promotion, bad debts, and many miscellaneous items.

FIGURE 4

Food price components

Rise in food prices was mainly due to widening price spread.

1980-100



Retail prices based on the CPI for food eaten at home. Farm value based on prices received by farmers. Price spread represents processing and distributing charges.

Source: USDA, ERS, Agricultural Economic Report Number 656

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TABLE 2

MARKETING FUNCTION COMPONENTS OF CONSUMER EXPENDITURES

Expenditures and components	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990 <u>1</u> /
					Bill	ion dol	lars				
Expenditures at											
foodstores	180.1	194.0	196.7	204.6	213.1	220.8	226.0	230.2	242.1	255.5	267.9
Farm value	65.9	65.4	64.1	66.5	69.5	66.6	67.6	67.5	72.5	77.9	79.8
Marketing bill	114.2	128.6	132.6	138.1	143.6	154.2	158.4	162.7	169.6	177.6	188.1
Processing cost Intercity	53.9	60.1	60.9	62.2	64.1	69.5	70.2	72.1	75.6	79.2	83.9
transportation cost	10.5	11.6	11.9	12.3	12.8	13.3	13.4	14.0	13.8	14.3	15.0
Wholesaling cost	15.7	17.7	20.0	20.5	21.5	22.3	22.5	23.2	24.3	25.3	26.8
Retailing cost	34.1	39.2	39.8	43.1	45.2	49.1	52.3	53.4	55.9	58.8	62.4
Expenditures for eating											
away from home	84.3	93.7	102.2	110.4	118.9	124.6	133.6	145.3	156.7	163.9	172.9
Farm value	15.8	16.3	17.3	18.8	20.3	19.8	21.2	22.9	24.3	25.9	26.8
Marketing bill	68.5	77.4	84.9	91.6	98.6	104.8	112.4	122.4	132.4	138.0	146.1
Processing cost Intercity	12.4	13.6	14.7	15.6	16.7	18.9	20.8	21.8	24.1	24.6	26.4
transportation cost	2.5	2.7	3.0	3.1	3.2	3.3	3.4	3.6	3.9	4.3	4.6
Wholesaling cost	4.7	5.3	5.9	6.6	7.1	7.5	8.0	8.6	9.5	9.9	10.5
Foodservice cost	48.9	55.8	61.3	66.3	71.6	75.1	80.2	88.4	94.9	99.2	104.6

1/ Preliminary. Data for 1989 have been revised.

Source: USDA, ERS, Agricultural Economic Report Number 656

Farm-to-Retail Price Spread

The farm-to-retail price spread for the market basket of foods averaged 7.7 percent higher in 1990, the largest increase in the past six years (see Table 1). The hours of labor used in food retailing have been increased to provide greater service and more prepared foods. Development of new products, such as microwavable foods, has increased use of packaging materials. Increased spending on advertising and promotion of branded foods has also added to costs.

Marketing Function Cost Components

Taking a look at changes in the functional components of marketing costs for food at home reveals that the largest increase in 1990 was in retailing, +6.1 percent (see Table 2). Since 1980, the retail value of food at home has increased 49 percent while the farm value of those foods has increased just 21 percent. The retailing (+83 percent) and wholesaling (+71 percent) components of the marketing system have increased at greater rates than processing and transportation, reflecting a shift toward fresh prepared foods being processed in stores or in distribution centers as customers continually demand more fresh and ready to eat foods.

On the food-away-from-home side, consumer expenditures increased 5.5 percent in 1990. Since 1980, consumer expenditures for food-away-from-home have increased 105 percent while the farm value of food-away-from-home increased 70 percent. While food-away-from-home consumer expenditures increased more than twice as fast as food-at-home expenditures over the last decade, it is interesting to note that the farm value of food-away-from-home expenditures increased more than three times as fast as the farm value of food-away-from-home expenditures. The marketing bill increased more than the farm value for foods consumed both at-home and away-from-home. But the increase in farm value for food-at-home is less than three-tenths the increase in marketing costs while, for food-away-from-home, the increase in farm value is more than six-tenths the increase in marketing costs.

Summary

During the period 1980-1990, retail prices of the items in the market basket of food rose 52 percent, while the farm value of these items rose only 16 percent. This is reflected in the farm-to-retail price spread for this period which rose 71 percent (see Figure 4). Increases in the farm-to-retail spread usually were close to the general inflation rate on a year-to-year basis, reflecting the link between the inputs of the food industry and the economy.

The farm value of all food represented 24 percent of consumer expenditures for farm foods in 1990, unchanged from the previous three years. For food eaten away from home, farm value was 16 percent of expenditures, compared with about 30 percent for farm foods purchased in food stores for at-home consumption.

Item	1970	1975	1980	1985	1988	1989	1990					
	1.1.1.1	5646	billio	n dollars		t 1		i.				
Assets												
Real Estate	225	421	850	657	687	693	703					
Livestock	24	29	61	46	62	66	69					
Machinery	34	63	87	89	87	90	92					
Crops & Supplies ^a	8	21	33	24	26	26	25					
Household	10	14	19	28	37	42	46					
Financial Assets	16	18	20	25	33	33	33					
Coop. Invest.	7	13	19	24	25	26	28					
Total	324	579	1089	893	957	976	. 996					
Liabilities and Equit	1											
RE Debt	31	50	98	106	83	81	78					
NonRE Debt ^b	22	41	81	82	66	65	67					
Total	53	91	179	188	149	146	145					
Owner Equity	_271	488	910	_705	808	830	851					
Total	324	579	1089	893	957	976	996					
% Equity	84	84	84	79	84	85	85					

United States Farm Balance Sheet Current Dollars, December 31 - t- - 1.2 -

Changes in Structure, U.S. Farm Balance Sheet **Current Dollars**, December 31

Item	1970	1975	1980	1985	1988	1989	1990
		مونيان هي. راجز آماد	perce	ent of total		12.34	
Assets							
Real Estate	69	73	78	74	72	71	71
Livestock	7	5	6	5	6	7	7
Machinery	10	11	8	10	9	9	9
All Othera	14	11	_8	_ 11	13	13	13
Total	100	100	100	100	100	100	100
Liabilities							
RE Debt	58	55	55	56	56	55	54
NonRE Debtb	42	45	45	44	44	45	46
Total	100	100	100	100	100	100	100

a Excludes crops under CCC loan.b Excludes CCC loans.

Source: Economic Research Service, USDA.

Including Farm Households										
Item	1970	1975	1980	1985	1988	1989	1990			
			b	illion dolla	urs					
Real Estate										
Farm Credit System	7.1	16.0	36.2	44.6	30.3	28.5	26.9			
Individuals & Others	11.4	17.3	30.2	27.2	18.0	16.7	16.0			
Commercial Banks	3.8	6.3	8.6	11.4	15.4	17.0	17.2			
Farmers Home Admin.	2.4	3.4	8.2	10.4	9.6	8.7	8.1			
Insurance Companies	5.6	6.7	12.9	11.8	9.6	9.6	10.2			
CCC - Storage		2	1,4		<u>a</u>	<u>a</u>	a			
Total	30.5	49.9	97.5	105.7	82.9	80.5	78.4			
Nonreal Estateb										
Commercial Banks	11.1	20.2	31.6	35.5	29.8	30.8	32.9			
Farmers Home Admin.	.8	1.8	11.4	16.7	14.7	12.3	10.7			
Merchants & Dealers	4.9	8.5	17.7	15.4	12.0	12.5	13.0			
Farm Credit System	5.5	11.1	20.5	14.6	9.1	9.9	10.1			
Total	22.3	41.6	81.2	82.2	65.5	65.5	66.7			

Distribution of United States Farm Debt by Lender Current Dollars, December 31

United States Farm Debt Market Share by Lender Current Dollars, December 31

Item	1970	1975	1980	1985	1988	1989	1990				
	percent of total										
Farm Credit System	24	30	32	32	27	26	25				
Commercial Banks	28	29	23	25	30	33	35				
Farmers Home Adm.	6	6	11	14	16	14	13				
Ins. Companies	11	7	7	6	7	7	7				
Indiv. & Merchants Total ^b	$\frac{31}{100}$	$\frac{28}{100}$	$\frac{27}{100}$	$\frac{23}{100}$	$\frac{20}{100}$	$\frac{20}{100}$	$\frac{20}{100}$				

a Less than .05 billion. b Excludes CCC crop loans.

Source: ERS, USDA.

New York Farm Balance Sheet Current Dollars, December 31 Including Farm Households

Item	1970	1975	1980	1985	1988	1989	1990	
			1	nillion doll	ars		107.0	
Assets								
Real Estate	3157	5862	7266	7671	8957	8753	8815	
Livestock	536	653	1527	983	1158	1291	1259	
Machinery	859	1410	2124	1997	1941	1902	1979	
Crops & Supplies ^a	212	396	579	516	520	518	601	
Household	289	306	313	521	642	1545	819	
Financial Assets	342	353	378	471	600	568	584	
Coop. Investments	186	313	455	493	472	493	538	
Total	5581	9293	12642	12652	14290	15070	14595	
Liabilities & Equity								
Real Estate Debt	430	758	1217	1225	1014	1117	971	
Nonreal Estate Debt ^b	435	787	1661	1561	1234	1246	1342	
Total Debt	865	1545	2878	2786	2248	2363	2313	
Equity	4716	7748	9764	9866	12042	12707	12282	
Total	5581	9293	12642	12652	14290	15070	14595	
% Equity	85	83	77	78	84	83	84	

Changes in Structure, New York Farm Balance Sheet Current Dollars, December 31

1970	1975	1980	1985	1988	1989	1990	
		pe	ercent of to	tal			1
57	63	57	60	60	58	60	
10	7	12	8	7	8	9	
15	15	17	16	13	13	14	
18	15	_14	16	20	21	17	
100	100	100	100	100	100	100	
50	49	42	44	45	47	42	
50	51	58	56	55	53	58	
100	100	100	100	100	100	100	
	$ \begin{array}{r} 57 \\ 10 \\ 15 \\ \underline{18} \\ 100 \\ 50 \\ \underline{50} \\ 100 \\ 100 \\ \end{array} $	$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$				

a Excludes crops under CCC loan.

^b Excludes CCC loans. All FmHA Emergency Loans are classified as nonreal estate. Total includes some nonreal estate loans made by New York City institutions to businesses outside New York State.

Source: ERS, USDA.

New York Farm Debt by Lender Current Dollars, December 31 Includes Farm Households

and the second se	and the second se		and the second se				and the second se
	1970	1975	1980	1985	1988	1989	1990
H PAR			n	nillion dolla	rs		1
Real Estate							
Farm Credit System	120	315	432	489	430	462	435
Individuals & Others	174	257	439	396	262	247	233
Commercial Banks	85	121	126	96	111	220	125
Farmers Home Admin.	42	55	170	209	190	177	168
Insurance Companies	9	9	31	29	21	11	10
CCC - Storage	a	1	19	6	a	a	0
Total	430	758	1217	1225	1014	1117	971
Nonreal Estate							
Commercial Banks	164	281	665	629	428	402	439
Farmers Home Admin.	29	42	323	326	282	264	249
Farm Credit System	145	293	341	344	321	369	433
Merchants & Dealers	96	171	_332	_262	_203	212	221
Total	435	787	1661	1561	1234	1246	1342

New York State Farm Debt Market Share by Lender Current Dollars, December 31

Lender	1970	1975	1980	1985	1988	1989	1990
1077 P. 1077 1 21	7.27		percent	t of total fa	rm debt	21	
Commercial Banks	29	26	28	26	24	26	24
Farm Credit System	31	39	27	30	33	35	38
Farmers Home Admin.	8	6	17	19	21	19	18
Insurance Companies	1	1	1	1	1	1	а
Indiv. & Merchants	31	_28	_27	_24	21	_19	_20
Total	100	100	100	100	100	100	100

a Less than .5.

Source: ERS, USDA.

\$15.0°

Nonaccrual Farm Loans Farm Credit System, December 31

Year	Total System	Springfield Dist	rict
	percent of I	loan volume	1999 - 19
1984 ^a	2.3	1.1	
1985 ^a	7.7	.8	
1986 ^a	12.9	2.4	1682
1987 ^a	11.1	1.1	
1988	8.0	0.6	
1989	6.3	0.4	
1990	6.3	1.5 ^b	

a Weighted average for PCA and FLB's for 1984-87.

b Primarily due to implementation of more conservative standards.

Source: Annual FCA and Quarterly FCCA Reports.

Nonaccrual Farm Nonreal Estate Loans Commercial Banks, December 31

CUMS ONC PACE ALLER C	BUT DE LETTER E LETTER SELLET E VEL
Year	United States
	-percent of loan volume-
1984	4.1
1985	6.1
1986	5.9
1987	4.2
1988	2.9
1989	1.9
1990	1.6
1991 (June 30)	1.6

Source: Agricultural Finance Databook. Reports of Condition and Income.

Delinquent^a Major Farm Program Loans Farmers Home Administration

	Fa_Own	ership	Oper Log	ating	Emer Loa	gency	Econ Emer	omic gency	Soil Wa	and ter
Date	U.S.	N.Y.	U.S.	N.Y.	U.S.	N.Y.	U.S.	N.Y.	U.S.	N.Y.
			1.5	p	ercent of	loan volu	ime			
9/30/86	5	5	16	12	41	31	27	25	12	9
9/30/87	6	7	19	14	45	34	31	34	14	10
9/30/88	8	9	25	19	57	38	42	45	20	12
9/30/89	9	10	26	20	60	41	44	51	23	13
9/30/90	7	9	23	17	60	37	42	50	18	10
9/30/91	7	9	24	16	61	38	42	51	18	11

^a Delinquent loans is a more encompassing definition then nonaccrual. As of 06/30/91 total delinquent loans were 3.3 percent for commercial banks and total nonperforming loans for the total Farm Credit System were 9.1 percent.

Source: FmHA Report Code 616.

Annual Long Term Interest Rates 16 -14 Corporate Aaa Bonds (Moody's) 12 10 Percent a 6 4 U.S. Gov't Bonds 10 Year Constant Maturities 2 -0+ +++ ++ 4 + 1955 1960 1965 1970 1975 1980 1985 1990



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FINANCE



During the past year short term interest rates have declined about two and one-half percent. Since most of the decline occurred late in the year, average rates for 1991 will be about one and one-half percentage points below 1990. General short term money rates are now at their lowest point since 1977. Although the prime rate reached the 7.5 percent level in 1986, other short term rates are now lower than they were at that time. During the last few years commercial banks have been under earnings pressure and have maintained a larger premium between short term treasury rates and prime.

Long term rates have been more resistant to decline. Rates have declined only about one-half percent during the past year and 1991 rates will average only about one-half percent below 1990. Long term rates are more strongly influenced by inflation expectations. Current rates of around 8 percent are consistent with an inflation rate of 5 to 6 percent and a real (excluding inflation) rate of 2 to 3 percent. Recent inflation has been in the 4 to 5 percent range. If investors became convinced that the current inflation rates would be continued, some further decline in long term rates could occur.

1992 may be the year for farmers to seriously consider moving some credit to fixed rates. Short term rates are expected to bottom out in the first half of 1992 as the recovery becomes less sluggish. Long term rates could bottom out later in the year if inflation remains under control. The largest declines will likely occur in the shorter end of long term rates, resulting in quite favorable 3 to 7 year rates. Many lenders will likely be able to offer favorable 5 to 7 year fixed rates to farmers. Some lenders may be able to take advantage of the Farmer Mac secondary market for farm mortgages since it appears increasingly likely that Farmer Mac will get started in 1992. With rates at their current levels, the probability that rates will increase significantly during the next few years is much greater than the likelihood that they will continue to decline or stay at their current levels.

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COOPERATIVES

U.S. Situation

The most complete data available on U.S. agricultural cooperatives is collected through an annual survey of marketing, farm supply and selected service cooperatives conducted by the Agricultural Cooperative Service (ACS), USDA. Results of the most recent survey are summarized in Table 1.

Table 1. United States Agricultural Cooperative Numbers, Business Volume, and Net Income 1989-90

Major Business <u>Activity</u>	<u>Number</u> 1989 1990		N <u>Vol</u> 1989	Net <u>Volume</u> 1989 1990		Net <u>Income</u> 1989 1990	
<u> </u>			(\$ billion)		(\$ million)		
Marketing	2,550	2,519	52.6	57.8	942.8	823.3	
Supply	1,803	1,717	16.5	17.1	781.2	525.6	
Service	446	427	2.0	2.3	126.6	97.9	
TOTAL	4,799	4,663	71.1	77.2	1,850.6	1,446.8	

Source: <u>Farmer Cooperative Statistics, 1989</u>, Service Report No. 29, USDA, ACS, Washington, DC. (December, 1990) and preliminary 1990 statistics.

The number of cooperatives in the United States has continued to decline to a total of 4,663 in 1990, a net decrease of 136 associations. This is primarily due to the consolidation and merger of local marketing and supply cooperatives in the mid-west. Total net business volume which excludes intercooperative business amounted to \$77.2 billion, up 8.5 percent from 1989. Total net income for 1990 was \$1.45 billion, down \$403.8 million or 21.8 percent.

Preliminary data for 1990 shows combined assets for all cooperatives totaled \$30.0 billion, a 1.3 percent increase from 1989. Member equity totaled \$13.4 billion, up slightly. Total liabilities were \$16.6 billion in 1990 up 1.8 percent from the previous year.

New York State Situation

Data for agricultural cooperatives headquartered in New York State were obtained from the ACS survey cited previously. State level data is collected every other year. The most current statistics available are for 1987 and 1989. Table 2 summarizes cooperative numbers and business volume for New York State.

Major Business Activity H	Num eadquarte	ber red in State	Gros	is Ime
	1987	1989	1987	1989
			(\$ mil	lion)
Marketing:				
Dairy Fruit & Veg. Grains Livestock Other ²	64 7 NA ¹ 4 <u>NA</u> ¹	57 7 NA ¹ 4 <u>NA</u> 1	1,097.9 182.0 30.5 59.3 <u>114.6</u>	962.1 223.8 27.1 58.9 16.0
TOTAL MARKETING ³	80	72	1,484.3	1,287.9
Supply:				
Building Materials Containers & Packagi Farm Chemicals Farm Machinery & Equ Feed Fertilizer Meats & Groceries Petroleum Seed Misc. Supplies	ng ip.		35.8 4.0 60.9 38.2 237.9 76.2 .2 476.9 28.0 <u>167.1</u>	21.3 3.2 50.9 34.1 263.7 68.2 2.7 519.6 27.3 189.5
TOTAL SUPPLYING	86	91	1,125.2	1,180.5
SERVICES	4	4	24.3	26.1
TOTAL ³	170	168	2,633.8	2,494.5

Table 2. New York State Agricultural Cooperative Numbers and Business Volume by Major Business Activity, 1987-89

Source: <u>Farmer Cooperative Statistics, 1988</u>, and <u>Farmer Cooperative</u> <u>Statistics, 1989</u>, Service Report No. 29, USDA, ACS, Washington, DC. (December, 1990).

Not available to avoid disclosure of individual cooperative data.

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Other includes wool, poultry, dry bean and miscellaneous products.

Totals may not add due to inclusion of cooperatives listed under not available and some cooperatives conducting two or more activities.

The number of agricultural cooperatives in New York State in 1989 showed a net decrease of 2 cooperatives with a decline in dairy cooperatives and an increase in the number of supply cooperatives. Gross business volume declined by \$141 million, a decrease of 5.3 percent from 1987. Supply and service cooperative volume increased while marketing cooperative volume decreased. Dairy cooperatives and other product marketing cooperatives showed declining volume over the two year period. The sale of processing plants by a major dairy cooperative in the state contributed to the drop in dairy volume.

New York Cooperative Performance

Major agricultural cooperatives operating in New York had mixed results in 1991. Some were impacted by the general economic slowdown, while others were effected by the drop in milk prices.

Sales by all the major dairy cooperatives decreased in 1991 compared to 1990. The decrease was primarily due to lower milk prices. Net income varied, depending on the nature of the cooperative's operations. The performance of those organizations whose primary function is bargaining was about the same in 1991 as in 1990. Cooperatives with fluid milk operations improved their net income, due to lower raw milk costs. Cooperatives with cheese and/or butter-powder manufacturing, experienced losses, due to inventory write-downs. Inventory write-downs of the magnitude experienced are something new for the dairy industry. Write-downs were experienced by both cooperatives and investor oriented and firms impacted dairy firms throughout the U.S.

Despite the decrease in milk prices cooperatives continued to pay voluntary competitive premiums in an effort to keep member milk checks as high as possible. This was a conscious strategy and one dairy cooperatives are likely to continue in 1992.

One major bright spot among all Northeast dairy cooperatives is that membership numbers and volume remained strong throughout the year, despite a continued decrease in dairy farm numbers. This was due to the payment of competitive premiums, and lack of or decline in alternative market outlets for farmers. In addition, the role of small local bargaining cooperatives decreased in importance as the attractive premiums they were able to command in the past evaporated in varying degrees.

During the year the Regional Cooperative Marketing Agency (RCMA) spearheaded over order pricing through creation of a marketing order authorized under the Rogers-Allen Act. When amendments to the order were proposed and voted on this fall, the vote failed by a narrow margin and canceled the marketing order. The board and executive committee of RCMA are currently evaluating the situation in order to determine the organization's strategy for the future.

Dairy service cooperatives, those providing artificial insemination and herd improvement records, increased sales volume and net income. Unit volume decreased during the early part of 1991 compared to the year earlier, as dairy farmers attempted to reduce expenses in reaction to lower milk prices. However, autumn unit volume had stabilized.

One of the dairy service cooperatives has a major international sales effort. International sales in 1991 were down slightly due to changes in European Community import regulations. Now that the organization has adapted its operation to the new regulations, it is expecting a healthy increase in EC sales for 1992.

Another major dairy service cooperative offers forage testing services. This operation experienced significant growth in late 1991, and sales are expected to remain strong in 1992. Operations of both dairy service cooperatives are effected by the health of the Northeast dairy industry which is directly correlated to the price of milk.

The major supply cooperative in the state experienced slightly lower sales and its first loss ever. Although its equity position was reduced somewhat, it continues to maintain a strong financial condition. While operating income decreased in all its four major business segments, poor earnings are primarily due to lower earnings in the agricultural supply division. This in turn was attributed to reduced sales caused by lower milk prices. Cost cutting programs have been instituted and the organization is making every attempt to return to profitability in 1992.

Major New York fruit and vegetable cooperatives manufacture and market consumer products themselves or in conjunction with a partner. These organizations were impacted by the weak consumer economy.

The major grape cooperative reported increased sales and strong earnings. However, payments per ton to growers were slightly lower than last year's record payments. The 1991 grape harvest set an all time record in terms of volume. However, increased demand and low inventory carryover were sufficient for the crop not to be considered burdensome. The 1992 results will likely be influenced by the trend in consumer spending.

The major fruit and vegetable processing cooperative in the state is in partnership with a company that processes and markets consumer products using the cooperative's commodities. Combined sales were about the same in 1991 as they were in 1990, but net income decreased significantly. This is attributed to "an industry-wide oversupply" of vegetables. While earnings were lower, total payments to growers for commodities delivered were higher.

Outlook

The 1992 outlook for the major New York agricultural cooperatives will depend on two major factors. Dairy marketing and service cooperatives as well as supply cooperatives will be effected by the price of milk. Continued low prices and lack of alternative markets may result in improved performance for dairy marketing cooperatives. On the other hand, low milk prices could have a negative impact on the sales and net income of dairy service and supply cooperatives.

The second factor impacting New York cooperatives is the state of the general economy. Those organizations marketing consumer products could find the economic slowdown having a negative impact on sales and net income. However, all cooperatives are aware of the current weak economy and are adopting cost cutting efforts to improve efficiency and minimize the impact of these factors.

1989-91 <u>a</u> /										
	Acre	s Harve	sted	Yie	Yield Per Acre			Production		
Crop	1989	1990	1991	1989	1990	1991	1989	1990	1991	
United States	(million)		(bu.)		(n	illion	bu.)	
Corn grain Sorghum,	64.8 11.2	67.0 9.1	68.7 9.7	116.2 55.4	118.5 62.9	108.9 59.4	7,527 618	7,933 571	7,486 578	
Oats	6.9	5.9	4.8	54.3	60.1	50.6	374	357	243	
Barley Wheat Soybeans	8.3 62.2 59.5	7.5 69.4 56.5	8.4 57.7 58.6	48.6 32.7 32.3	55.9 39.5 34.0	55.2 34.3 33.5	404 2,037 1,924	419 2,739 1,922	464 1,981 1,962	
<u>New York</u>	(t	housand)	(bu.)			(thousand bu.)			
Corn grain Oats Wheat	570 155 130	620 135 145	690 100 110	93 59 45	98 61 49	92 50 49	53,010 9,145 5,850	60,760 8,235 7,105	63,480 5,000 5,390	
					(tons))	(t	housand	tons)	
Corn silage All hay Alfalfa <u>b</u> /	550 2,080 840	580 1,980 860	NA 1,950 760	13 2.18 2.45	15 2.21 2.55	NA 2.19 2.50	7,150 4,538 2,058	8,700 4,377 2,193	NA 4,280 1,900	

CROP PRODUCTION United States and New York 1989-91 a/

Source: USDA Crop Production and New York Crop Reporting Service.

<u>a</u>/ All 1991 data are preliminary and subject to revision. Estimates for the United States are as of November 1, 1991. New York estimates are as of October 1991, except for corn which is November 1991.

 \underline{b} / Includes alfalfa mixtures.

Grain production in the United States in 1991 is projected to be below yearearlier levels. Corn for grain production of 7.5 billion bushels is 6 percent below the 1990 crop and is the smallest crop since 1988. Sorghum production is slightly above the 1990 level.

The production of oats is down 32 percent from the 1990 level. Barley production is up 11 percent from last year. Total feed grain production is down 5 percent from the 1990 level.

The soybean crop is about 2 percent above the 1990 crop. Wheat production of two billion bushels is down 28 percent from the 1990 crop.

The New York corn for grain crop is forecast at 63 million bushels, up 4 percent from 1990. New York corn yield is expected to be 92 bushels per acre, down from 98 in 1990. Wheat production is down 24 percent from 1990. The production of oats is estimated to be down 39 percent from 1990. Hay production is down 2 percent from the 1990 level. GRAIN AND FEED

Item	1988/89	1989/90	1990/91 (Prelim.)	1991/92 (Proj.)
Supply		CORN (mi]	lion bushels)
Beginning Stocks (Sept. 1)	4.259	1.930	1.344	1.521
Production	4,929	7,525	7,933	7,486
Imports	3	2	3	2
Total	9,191	9,458	9,281	9,009
Disappearance				
Feed and Residual	3,987	4,455	4,710	4,800
Food, Ind. and Seed	1,245	1,290	1,325	1,350
Total Domestic	5,232	5,745	6,035	6,150
Exports	2,028	2,369	1,725	1,575
Total	7,260	8,113	7,760	7,725
Ending Stocks (Aug. 30)	1,930	1,344	1,521	1,284
Season average farm price	\$2.54	\$2.36	\$2.28	\$2.15-2.55
Supply	FE	ED GRAINS a/	(million metr	ic tons)
Beginning Stocks	133.6	65.9	45.5	47.7
Production	149.3	221.0	230.4	218.5
Imports	1.2	1.3	1.4	1.4
Total	284.2	288.2	277.4	267.6
Disappearance				
Feed and Residual	119.6	134.3	138.5	140.1
Food, Ind. and Seed	37.5	38.7	39.8	40.3
Total Domestic	157.1	173.0	178.3	180.4
Exports	61.1	69.7	51.4	46.9
Total	218.3	242.7	229.7	227.3
Ending Stocks	65.9	45.5	47.7	40.3

CORN AND FEED GRAIN BALANCE SHEETS

Source: Agricultural Supply and Demand Estimates, USDA, November 12, 1991.

<u>a</u>/ Marketing year beginning September 1 for corn and sorghum, June 1 for barley and oats.

The fall 1991 corn supply of 9.0 billion bushels is down 3 percent from the 1990 level and much smaller than the levels of 1985-87. Feed use is projected to increase 2 percent. Exports are projected to decrease 9 percent from 1990/91 levels and be the smallest since the 1986/87 marketing year. Total utilization is expected to be slightly below the 1990/91 level. Projected carryover in the fall of 1992 of 1.3 billion bushels is 16 percent below the fall 1991 carryover and the smallest since 1985.

Feedgrain supplies are dominated by corn, so changes in supply and demand are similar. The total supply of feedgrains is 4 percent below last year. Domestic feed use in the 1991/92 marketing year is projected to increase about 1 percent. Exports are projected to decrease 9 percent. Carryover stocks at the end of the 1991/92 marketing year are projected to be 40 million metric tons, down 16 percent from the 1991 level and the lowest since 1985.

GRAIN	AND	FEED
Street & Lot and the second se		and the second se

			1990/91	1991/92
Item	1988/89	1989/90	(Prelim.)	(Proj.)
Supply		WHEAT (m	illion bushels	;)
Beginning Stocks (June 1)	1,261	702	536	866
Production	1,812	2,037	2,736	1,981
Imports	23	23	37	39
Total	3,096	2,762	3,309	2,886
Disappearance				
Food	715	753	796	800
Seed	103	100	90	97
Feed and Residual	157	139	489	350
Total domestic	975	992	1,376	1,247
Exports	1,419	1,233	1,068	1,125
Total	2,394	2,225	2,444	2,372
Ending Stocks (May 31)	702	536	866	514
Season average farm price	\$3.72	\$3.72	\$2.61	\$2.75-2.95
Supply		- SOYBEANS	(million bushe	ls)
Beginning Stocks (Sept. 1)	302	182	239	329
Production	1,549	1,924	1,926	1,962
Imports	4	3	2	5
Total	1,855	2,109	2,167	2,296
Disappearance				
Crushings	1,058	1,146	1,180	1,235
Exports	527	623	560	650
Seed, Feed	59	57	55	53
Residual	29	44	43	43
Total	1,673	1,870	1,838	1,981
Ending Stocks (Aug. 30)	182	239	329	315
Season average farm price	\$7.42	\$5.69	\$5.75	\$5.00-6.00

WHEAT AND SOYBEAN BALANCE SHEETS

Source: Agricultural Supply and Demand Estimates, USDA, November 12, 1991.

The 1991 United States wheat supply of 2.9 billion bushels is 13 percent below the 1990 level. Domestic food use is projected to increase slightly. Feed use is projected to drop 28 percent. Exports are projected to increase 5 percent. Carryover on May 31, 1992 is projected to be 514 million bushels, down 41 percent from the 1991 level. If realized, this will be the smallest wheat carryover in decades.

The total soybean supply is 2.3 billion bushels, up 6 percent from 1990 and the largest supply since 1987. Crushings are projected to be up 5 percent and exports to increase 16 percent from year-earlier levels. Carryover in the fall of 1992 is projected to be about 315 million bushels, 4 percent below the 1991 carryover.


Source: USDA Agricultural Prices.

Soybean prices declined from around the \$6.00 level in mid-1990 to less than \$5.50 in July 1991. After increasing due to the drought, they fell again in the fall of 1991. The October 1991 average price received by U.S. farmers was \$5.33, \$0.54 per bushel below the level of October 1990. USDA's projection for the season average price of 1991 crop soybeans is \$5.00 to \$6.00, with a mid point \$0.25 below the average price for the 1990 crop.

Wheat prices declined quite steadily from the fall of 1989 to the fall of 1990. Prices have strengthened during 1991 due to lower production. The October 1991 price received by U.S. farmers was \$3.08, \$0.65 above the year-earlier price. The New York price of \$3.04 was \$0.52 above the October 1990 level.

The projected season average price for the 1991 U.S. wheat crop is \$2.75 to \$2.95. The mid point is \$0.21 above the average price received by farmers for the 1990 crop.

Corn prices have fluctuated around the \$2.35 level since late 1990. The U.S. average price received by farmers in October 1991 was \$2.29, \$0.10 above the year-earlier level. The New York price in mid October was \$2.42 per bushel, \$0.28 below the average level for the entire month of October 1990.

The mid November USDA projection of the season average price received by U.S. farmers for the 1991 corn crop was \$2.15 to \$2.55 per bushel. The mid point is \$0.07 above the season average price for the 1990 crop.

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Source: USDA Feed Situation and Feedstuffs.

Prices for soybean oil meal (50%, Decatur) generally increased during 1991 from less than \$170 in January to over \$200 in September, but declined slightly in October. October 1991 prices were about \$10 above year-earlier levels. Prices are likely to rise seasonally and be slightly above year-earlier levels during the winter and spring of 1992.

Prices for byproducts such as middlings continue to fluctuate widely and are not closely related to the prices of the grains from which they are derived. Prices of these byproducts in the fall of 1991 were above year-earlier levels.



Source: USDA Agricultural Prices and New York Crop Reporting Service.

Feed prices declined during the first half of 1991 but then increased in the fall of 1991. In October 1991, prices for 18% dairy feed were about \$8 per ton below the prices of a year earlier. Layer feed prices were the same as the levels of a year earlier. In October 1991, prices of 44% soybean meal were about \$10 per ton above levels of a year earlier.

		1991		5	1992	
Month	18% Dairy	44% <u>SOM</u>	Layer feed	18% Dairy	44% <u>SOM</u>	Layer feed
Jan.	183	254	190			
Apr.	182	254	186	7	()	-
July	177	252	182	. <u></u>		
Oct.	179	270	192			

Only quarterly data are available after February 1986, and those data are for New York and New England combined.

Layer feed and 18% dairy prices in the first half of 1992 are likely to be close to the levels of the first half of 1991. Soybean meal prices in the first half of 1992 are likely to be about the same as they were a year earlier.

HIGHLIGHTS OF THE 1990 FRUIT OUTLOOK

The total production of the six tree and vine crops which are important to New York's agricultural economy was projected to increase by one percent nationally. The national production of apples and peaches were forecast to increase compared with last year's production, while decreased production was forecast for grapes, tart cherries, pears, and sweet cherries. The national production of apples was forecast at 241 million bushels, up four percent from 1990. Grape production was expected to total 5,387 thousand tons, a decrease of five percent from last year.

In New York, apple production is indicated to be 24 million bushels, two percent above the 1990 output, while grape production of 190,000 tons is expected, 32 percent above last year and the largest crop since 1984. Total production of the six major fruit and vine crops of 730 thousand tons is projected for the State, nine percent above the previous year.

The utilized value of the major fruit crops for the last 10 years is shown below. The value of production reached \$180 million* in 1990. In 1991, the value of production may exceed \$190 million.

*The value of the fresh apple crop is based on the "packinghouse door equivalent" return for apples starting in 1985 rather than "as sold".



VALUE OF PRODUCTION OF MAJOR FRUIT CROPS, 1981-1990 -40-

		New	York		United States					
Fruit	1988	1989	1990	1991*	1988	1989	1990	1991*		
				thou	sand tons					
Apples	455	480	495	505	4,564	4,981	4,848	5,064		
Grapes	157	152	144	190	6,034	5,931	5,660	5,387		
Tart Cherries	11	16	8	11	118	132	104	80		
Pears	17	17	15	15	861	917	964	882		
Peaches	7	6	7	8	1,307	1,167	1,103	1,273		
Sweet Cherries	1	1	1	1	186	193	157	138		
Major Fruit Crops	648	672	670	730	13,070	13,321	12,636	12,824		

COMMERCIAL NON-CITRUS FRUIT PRODUCTION, NEW YORK AND UNITED STATES

*indicated

AVERAGE FARM PRICES OF NON-CITRUS FRUITS, NEW YORK AND UNITED STATES

		New	York		United			
Fruit	1987	1988	1989	1990	1987	1988	1989	1990
				dollars	per ton			
Apples								
Fresh	274	306	296	356	254	348	278	418
Processed	114	143	133	150	79	123	107	139
All sales	184	216	208	258	172	254	208	300
Grapes	228	254	277	286	259	266	314	294
Tart Cherries	190	450	302	416	156	374	290	362
Pears	259	235	223	253	198	274	277	274
Peaches	430	544	588	552	276	312	326	346
Sweet Cherries	727	820	783	743	748	788	713	896

VALUE OF UTILIZED PRODUCTION NON-CITRUS FRUITS, NEW YORK AND UNITED STATES

	New York					United States				
Fruit	1987	1988	1989	1990	1987	1988	1989	1990		
				million	dollar	s				
Apples										
Fresh	52.1	62.0	65.1	92.6	711	911	815	1,160		
Processed	28.5	36.2	34.6	35.3	192	236	217	285		
All Sales*	80.6	98.3	100.0	127.8	903	1,150	1,024	1,149		
Grapes	40.5	39.6	42.1	41.2	1,359	1,607	1,863	1,662		
Tart Cherries	2.3	4.8	3.4	2.8	22	44	35	37		
Pears	3.8	4.1	3.6	3.7	185	235	254	264		
Peaches	3.0	3.7	3.6	3.8	308	382	361	365		
Sweet Cherries	0.9	1.0	0.9	0.5	159	145	136	119		
Total New York's M	ajor									
Fruit Crops	131.1	151.8	153.6	179.8	2,936	3,563	3,673	3,596		
	•									

*May not add from total of fresh and processed due to rounding errors.

				1991 Compared	1991 Com-
	5-Year		1991	to USDA	pared to
	Average		USDA	5-Year Average	1990
States/Regions	1986-90*	1990*	Estimate**	(% Change)	(% Change)
Maine	1,971	2,095	1,881	-4.6	-10.2
New Hampshire	1,171	1,143	1,071	-8.5	-6.3
Vermont	1,076	1,024	1,143	6.2	11.6
Massachusetts	2,105	2,024	1,857	-11.8	-8.2
Rhode Island	133	143	119	-10.5	-16.7
Connecticut	890	786	643	-27.8	-18.2
New York	22,095	23,571	24,048	8.8	2.0
New Jersey	1,681	1,429	2,381	41.6	66.6
Pennsylvania	11,286	10,714	12,143	7.6	13.3
Delaware	495	405	595	20.3	47.0
Maryland	1,195	786	1,786	49.4	127.2
Virginia	9,052	5,000	10,000	10.5	100.0
West Virginia	4,238	3,571	4,524	6.7	26.7
North Carolina	6,238	5,476	7,619	22.1	39.1
South Carolina	. 867	810	1,071	23.6	32.3
Georgia	762	524	833	9.4	59.0
Total East	65,255	59,501	71,714	9.9	20.5
Ohio	2,762	2,857	2,857	3.4	0.0
Indiana	1,362	1,357	1,429	4.9	5.3
Illinois	2,043	1,429	1,881	-7.9	31.6
Michigan	20,381	17,857	20,238	-0.7	13.3
Wisconsin	1,338	1,143	1,452	8.5	27.1
Minnesota	524	476	548	4.5	15.0
Iowa	219	226	226	3.3	0.1
Missouri	1,152	976	881	-23.5	-9.7
Kansas	229	190	262	14.4	37.8
Kentucky	290	214	476	64.2	122.5
Tennessee	269	202	321	19.5	59.1
Arkansas	214	286	262	22.4	-8.4
Total Central	30,783	27,213	30,833	0.2	13.3
Total East & Central	96,038	86,714	102,548	6.8	18.3
Colorado	1,490	833	1,786	19.8	114.4
New Mexico	193	162	60	-69.2	-63.3
Utah	1,057	571	1,071	1.4	87.6
Idaho	3,367	3,929	3,095	-8.1	-21.2
Washington	104,095	114,286	109,524	5.2	-4.2
Oregon	3,857	4,286	2,738	-29.0	-36.1
California	15,476	18,571	19,048	23.1	2.6
Arizona	N.A.	1,524	1,262	N.A.	-17.2
Total West	129,535	144,162	138,583	7.0	-3.9
TOTAL U.S.	225,573	230,876	241,131	6.9	4.4

APPLE PRODUCTION, UNITED STATES, 1986-1990, FIVE-YEAR AVERAGE PRODUCTION, AND 1991 FORECAST, 1,000 42-POUND BUSHELS

*1990 and 5-year averages are NASS, USDA data revised as of July 1, 1991. **NASS, USDA, Crop Production, 1 October 1991.

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Of the projected 24.0 million bushel crop for 1991, a 7.6 million bushel crop is indicated for eastern New York and a 16.4 million bushel crop is indicated for western New York. The indicated production in eastern New York is nine percent below 1990 while the crop in western New York is expected to be eight percent above last year. The total crop is two percent above 1990, and nine percent above the average of the past five years.

Lower production in 1986-1988 occurred due to (1) three consecutive years of poor weather conditions, especially in western New York, and (2) orchard removal. Even though production has not been high in recent years, the potential productive capacity has increased due to plantings of higher density, more productive systems which are currently nonbearing or in early bearing years, but will have an impact on production in future years.

Cold storage holding patterns, shown on the following page, indicate that eastern New York is the primary fresh fruit production area in New York. However, western New York is becoming more important as a fresh fruit producer, as indicated in the increased emphasis on controlled atmosphere storage. Cold storage holdings, including CA holdings, are well above the normal pattern for recent years. Compared with the most recent five-year average holdings, eastern New York is 10 percent above the five-year average, while western New York is 16 percent above the average of 1986-1990.









SOURCES: New York Agricultural Statistics, 1990-1991 and Apples in Cold Storage No. 983-7-91.



AVERAGE ANNUAL PRICES RECEIVED BY NEW YORK GROWERS FOR APPLES, 1981-1990

SOURCE: New York Agricultural Statistics, 1990-1991.

Over the past 10 years, prices for processed apples have been fairly constant, while fresh apple prices have more pronounced fluctuations due to particular supply and demand conditions in a given year. (Note: Beginning in 1985, the price of fresh apples was reported based on a packinghouse door equivalent rather than "as sold". Therefore, the 1985-90 prices are not directly comparable to the fresh prices prior to 1985.)

In October 1991, the average price of fresh apples sold in New York averaged 20 percent above a year. Prices of McIntosh apples in November were \$8-11 per box for bagged apples and \$16-18 for boxes of cell packed apples. Prices last year for McIntosh were about \$10 for bagged apples and \$14-16 for cell packs. Prices are generally one to two dollars per box higher than a year ago in both western New York and eastern New York. In western New York, grower returns will be somewhat lower due to lower packouts. In the Hudson Valley, packouts have been better than last year, implying improved grower returns. Movement has been strong, and export demand for New York apples has been exceptionally good this fall.

Processed apple prices were similar to a year ago. Major processors were paying \$7.25-10.00 per hundredweight for 2-3/4" and up; \$8-10 per hundredweight for 2-1/2" - 2-3/4"; and \$5.50 for juice apples compared with \$4.00-4.50 in 1990. As the harvest season progressed, prices for processing apples advanced, and apples were stored in expectation of still higher prices later in the season. The price for juice apples reached \$7.00 per hundredweight by December 1, and may reach \$8-10 during the season.

Grapes

The value of utilized production for grapes in New York increased rapidly during the 1960's and early 1970's, reaching a peak of \$45.9 million in 1978. For several years after 1978, the value was generally declining and reached a low of \$25.9 million in 1985. In the past four seasons, the State's industry has recovered, fueled by a lower-valued dollar which increased the prices of competing imports of wine and juice; and new product development, promotion, and development of export markets in the grape juice sector. These positive factors have been somewhat offset by the continued erosion of sales of wine coolers (down four percent in 1990) and non-premium table wine.

Final results for the 1991 season will be mixed, with the grape juice sector continuing strong, while the large winery sector continues to be plagued by sluggish or declining demand for wine coolers and lower-priced table wines. However, with a much larger crop (32 percent above last year), continuing strong demand for juice grapes, and excellent juice and wine quality from the 1991 harvest, the utilized value of the 1991 crop should exceed the record value of \$45.9 million realized in 1978.



VALUE OF UTILIZED PRODUCTION OF GRAPES, 1981-1990

SOURCE: New York Agricultural Statistics, 1990-1991.

With strong demand for juice and nonfermented products and the use of Concords in wine coolers and other fermented products, Concords have continued to account for about 70 percent of New York's grape production.

Total production of grapes in 1991 is expected to total 190 thousand tons, the largest crop in New York since 1984. The Concord crop is projected at 130 thousand tons, an increase of 31 percent from 1990.



Wine

Changes have occurred in the market for wine which have serious implications for New York's growers. These are shown in the next chart.

- The total consumption of <u>all wine</u> declined during the last four years. Growth in recent years had been attributable to the wine cooler segment. The U.S. wine market decreased 2.8 percent in 1990.
- 2) <u>Table wine</u> consumption decreased in six of the last seven years. California has managed to hold its volume, while imports and wine produced in "other states" have generally shown declining shares. [Note: New York makes up about one-half of the volume of "other states".] After a modest one-half percent increase in 1988, table wine consumption again decreased 2.8 percent in 1989 and 1.5 percent in 1990.
- 3) In 1988, <u>wine cooler</u> consumption decreased after several years of spectacular growth. "Other states", again primarily New York, had been a strong beneficiary of the growth in the cooler market. In 1989, wine cooler consumption was down 17 percent but in 1990 the decline slowed to about four percent. The wine cooler market will probably stabilize now with a small annual decline from its current base of utilization of 86 million gallons of wine.

Considered together, these three trends have spelled a decreased demand for New York grapes used for nonpremium wines.



WINE ENTERING DISTRIBUTION CHANNELS IN THE U.S., BY TYPE, 1981-1990

FRUIT

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CHANGING	STRUCTURE	AND	TRENDS	IN	GRAPE	FARMING	IN	NEW	YORK,	1970-1990

Item	1970	1975	1980	1985	1990
Number of farms	2,058	2,153	1,968	1,524	1,095
Acres of grapes	36,879	42,653	41,979	38,226	32,846
Average acres/farm	17.9	19.8	21.3	25.1	30.0
Bearing acres (approx.)	35,000	39,500	41,000	37,000	32,500**
Five-year average prod.	138,400	148,800	167,000	175,000	160,800
Average yield/acre (tons)	4.0	3.8	4.1	4.7	4.9
Leading varieties (acres):					
1) Concord	26,715	27,568	26,643	22,963	21,006
2) Catawba	2,597	3,477	3,673	3,089	2,102
3) Niagara	1,662	2,355	2,249	2,134	2,055
4) Aurora	1,033	1,727	1,803	1,864	1,389
5) Chardonnay	*	107	163	808	983
6) Delaware	1,938	2,051	1,883	1,499	841
7) Elvira	335	538	623	589	466
8) Seyval Blanc	*	187	368	721	441
9) Riesling	*	123	143	429	404
10) de Chaunac	*	899	859	674	353

*No grapes of these varieties were planted in 1970, or a few acres were included in a miscellaneous category. **Estimated by author.

SOURCES: New York Vineyard Survey, 1990.

New	Yor	Agricu	ltural	Stat.	istics,	vari	ous	years.
Frui	t -	Non-Cit:	rus Re	vised	Estima	tes,	1964	4-1970.
John	son,	Fruits	and N	uts B	earing	Acrea	ge,	1947-1983.

GRAPES: NEW YORK GROWN, RECEIVED BY WINERIES AND PROCESSING PLANTS, 1986-90

Variety	1986	1987	1988	1989	1990
2 18 11 - 12			tons		
Concord	107,326	122,688	108,278	100,150	97,551
Catawba	12,262	12,939	11,740	7,887	9,855
Niagara	9,663	10,243	8,262	11,962	9,188
Elvira	3,880	3,496	2,518	4,227	3,662
Delaware	5,562	4,722	3,879	3,237	2,741
Dutchess	792	587	658	571	461
Aurore	7,794	8,189	6,359	8,538	6,754
de Chaunac	2,911	2,664	1,949	2,484	2,010
Baco Noir	1,419	1,148	801	1,202	1,141
Seyval Blanc	1,514	1,278	1,259	1,185	1,311
Cayuga White	N.A.	784	1,124	1,311	895
Rougeon	692	788	800	586	783
Vitis Vin. (all)	1,960	1,637	1,863	1,946	2,064
Other varieties	3,825	2,337	2,610	2,714	2,584
Total, all varieties	159,600	173,500	152,100	148,000	141,000

SOURCE: New York Agricultural Statistics, 1990-1991.

GRAPES: PRICES PAID FOR NEW YORK GROWN GRAPES PROCESSED, 1986-90

Variety	1986	1987	1988	1989	1990
American Varieties					
Catawba	205	233	211	234	225
Concord	198	208	245	268*	287*
Delaware	225	266	234	255	222
Dutchess	259	275	259	265	214
Elvira	210	216	204	210	208
Niagara	187	195	225	258*	262*
French American Hybrids					
Aurore	236	244	232	237	220
Baco Noir	289	283	273	256	251
Cayuga White	N.A.	272	281	347	272
de Chaunac	167	192	183	203	203
Rougeon	245	241	187	215	201
Seyval Blanc	283	289	270	325	259
Vitis Vinifera					
All varieties	925	1,008	990	1,131	1,050
Average of all varieties	194	222	248	272	282

*Preliminary estimates of future payments by cooperatives have been included based upon historical data.

SOURCE: Fruit, New York Crop Reporting Service, 975-2-88, 975-2-89, 975-2-90, and 975-2-91.

Concords are the predominant variety grown and processed in New York. There were 97,551 tons of Concords from New York processed in 1990 reflecting a small crop. Over the past five years, Concords have comprised 69 percent of total tonnage utilized. The second leading variety is Catawba with 7.1 percent of tonnage followed by Niagara with 6.9 percent.

Prices for most American and French-American hybrid varieties rebounded in 1986 from a disastrous 1985 season of low prices and low production. Prices for grapes used for juice (mainly Concord and Niagara, as well as some Catawba) have continued to improve. Varieties used mainly in non-premium table wine, such as Delaware and Dutchess, while higher than in 1985, have declined in recent years. Most French-American hybrid prices increased in 1989, but declined significantly in 1990. The prices of grapes for fresh use, wine, and juice are shown below. In the early 1980's, the price of grapes utilized for wine generally exceeded the price of grapes utilized for juice by \$100 or more per ton. In the most recent three years, the price for grapes utilized in juice exceeded the price of that utilized for wine.

In 1991, juice grapes were again in strong demand, although prices were somewhat lower because of the large crop. National Grape Cooperative, Inc., which processes over 25 percent of New York's total grape crop, paid a harvest cash advance of \$90 compared with \$105 per ton last year. The cooperative reported net proceeds per ton in fiscal year 1991 of \$300, slightly below last year's record earnings. The price for most varieties, whether used for juice, bulk wine, or premium wine, fell in 1991. Native varieties which are not typically used for juice (Catawba, Delaware, Dutchess) continued on a downward price trend. Prices for red hybrids again increased, while white hybrids (especially Aurore and Seyval Blanc) were in excess supply. Prices paid for vinifera varieties were generally lower this fall. According to Dave Peterson, Finger Lakes Grape Specialist, many vinifera growers underestimated their crops with the result that they were left with excess grapes at harvest. These grapes sold for \$400-600, well below the normal range of \$800-1,300 per ton for vinifera.



AVERAGE PRICE FOR GRAPES IN NEW YORK UTILIZED

1992 DAIRY OUTLOOK

<u>Overview</u>

POSITIVE FACTORS

- Higher Federal Order Milk Prices first half up an average of 80¢ to \$1.00/cwt over first half of 1991
- Continued Strong Cull Cow and Dairy Replacement Prices
- Stable to Slightly Higher Feed Costs
- Relatively Low CCC Inventories of Cheese and NFDM
- Lower Interest Rates

NEGATIVE FACTORS

- Minimum 11.25 cents/cwt Refundable Assessment probably 13¢/cwt
- Slow Growth Economy
- Relatively Tight Credit Markets
- Short Forage Supply in Some Areas

UNCERTAINTIES

- Milk Production in Major Producing Regions
- Commercial Demand for Dairy Products
- M-W Replacement

		Year						
Item	1989	1990	1991	1992	90-91	91-92		
Number of milk cows (thousand head)	776	768	757	749	-1.4	-1.1		
Milk per cow (lbs.)	14,267	14,456	14,720	14,950	+1.8	+1.6		
Total milk production (million lbs.)	11,071	11,102	11,143	11,198	+0.4	+0.5		
Blended milk price (\$/cwt.)ª	13.10	13.44	11.76	12.15	-12.5	+3.3		
Index of prices paid by dairy farmers	168	170	173	175	+1.8	+1.2		

NEW YORK DAIRY SITUATION AND OUTLOOK 1989, 1990, Preliminary 1991, and Projected 1992

^a New York-New Jersey blend price, 201-210 mile zone, 3.5 percent fat, this price excludes any premiums or assessments. The effective blend price after milk price assessments is \$13.10 for 1989; \$13.43 for 1990; and \$11.71 for 1991, assuming no refund.

	100/.0	1095	1096	1097	10000	1090	1000b	10010	1007d e
	1904	1905	1900	1907	1900	1909	1990		1992
Supply		<u>.</u>							
Cow Numbers (thous.)	10793	10981	10773	10327	10262	10126ª	10127ª	10034	9943
Production/Cow (1bs.)	12541	13024	13285	13819	14145	14244	14646ª	14820	15131
				(1	illion p	pounds)			
Production	135.4	143.0	143.1	142.7	145.2	144.2ª	148.3ª	148.7	150.4
Farm Use	2.9	2.4	2.4	2.3	2.2	2.1ª	2.1	2.0	2.0
Marketings	132.5	140.6	140.7	140.4	143.0	142.1	146.2	146.7	148.4
Beginning Commercial Stocks	5.2	4.9	4.6	4.2	4.6	4.3	4.1	5.1	4.7
Imports	2.7	2.8	2.8	2.5	2.4	2.5	2.7	2.5	2.6
TOTAL SUPPLY	140.4	148.3	148.1	147.1	150.0	148.9	153.0	154.3	155.7
Utilization									
Commercial Disappearance ^a	126.9	130.5	133.3	135.7	136.6	135.4	138.9	140.1	142.6
Ending Commercial Stocks	4.9	4.6	4.2	4.6	4.3	4.1	5.1	4.7	4.4
Net Government Removals ^a	8.7	13.3	10.8	6.8	9,1	9.4	9.0	9.5	8.8
TOTAL USE	140.4	148.3	148.1	147.1	150.0	148.9	153.0	154.3	155.7

Table 1 U.S. Milk Supply and Utilization 1984-1992

Source: Dairy Situation and Outlook, Milk Production, and Dairy Market News, U.S. Department of Agriculture.

a Revised.

b Preliminary.

^c Based on preliminary USDA data and Cornell estimates. ^d Projected by Andrew Novakovic.

e Leap year.

The U.S. Dairy Situation and Outlook

Milk Supplies

Sharply lower milk prices beginning at the end of 1990 made projections of 1991 milk production the subject of a great deal of speculation a year ago. Early in 1991 analysts were divided, with some projecting extreme reductions in farm and cow numbers and others projecting gains of as much as 2 billion pounds in national milk production. As we approach the end of 1991, it is now clear that neither of the more extreme forecasts were accurate. Dairy farmers have been more resilient than the "bears" thought, but by the same token lower prices have taken a greater toll than the "bulls" projected.

As shown in Table 1, national milk production will total about 148.7 billion pounds for the year, less than a 0.3% increase over 1990. Other than the years when the Milk Diversion or Dairy Termination Programs were in effect, this is the smallest annual increase in milk production since 1978.

The increase in production per cow of 1.2% is estimated to be almost offset by a 0.9% decline in the national dairy herd. Milk yields usually increase about 100 pounds per year more than the 174 pound increase estimated in 1991. Thus, it would appear that at least part of the reaction to lower milk prices involved cutting back on feeding. Declines in cow numbers probably represent approximately normal declines in farm numbers as well as farmers who sold some cows to maintain a positive cash flow.

Compared to year earlier levels, national milk production was strongest during the first quarter of the year, when they were up 2%. Milk production was flat in the second quarter and declined about 0.9% in the third quarter, but it appears that production will be about level in the fourth quarter. Given that fourth quarter 1990 milk production was strong, sharply above 1989 levels, this raises concerns that production will be strong enough in early 1992 to again depress prices close to the support level.

None of the major producing states had a particularly strong year and some of the Midwestern states had notably poor years. California led the major states with a projected increase of about 2.1%, a third or more lower than its historical growth rate. Growth in Pennsylvania was comparable to California. In large part, this reflects a rebound from an unusually poor year in 1990; it is also notable that Pennsylvania's growth is largely due to better than average gains in production per cow, despite serious drought conditions in the western part of the state. With Minnesota declining in milk production by over 2%, this year Pennsylvania moves to the number four spot among milk producing states. Iowa experienced a decline in milk production of almost 4%, and Wisconsin was down about 1%. Although Iowa production has been sharply up in recent years, this decline is consistent with Iowa's erratic growth record. Far more significant is Wisconsin's decline. This is in sharp contrast with Wisconsin's history of steady growth at about the national average rate. It is probably true that Wisconsin's smaller farms found it more difficult to cope with low prices than the larger farms in other parts of the U.S. Farm size by itself is no perfect indicator though, as the only other state in the top ten to experience a decline was Texas, which decreased almost 2%. This is a substantial amount for a state that had been booming only a few years earlier. New York production grew at the same rate as the

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national average. New England states, led by Vermont, are projected to increase about 1% for the year.

Low milk prices in the first half of 1992 should continue to constrain production growth; however, on average, it is expected that 1992 will be less financially difficult. Our forecast, as shown in Table 1, is for milk production to exceed 150 billion pounds in 1992, with about a 2% increase in production per cow and a 1% decline in cow numbers.¹ Prices will be very sensitive to changes in production over the course of the year. If production falters significantly early in the year, prices could move more substantially in the early summer. In this sort of market, producers who can weather the storms can end the year with positive returns; however there will be others who do not survive the spring.

Milk Utilization

Commercial disappearance of all milk in the U.S. ended last year, 1990, on a sour note. With 1991 getting off to a poor start, USDA estimates through August indicate that commercial disappearance is off 0.4% compared to the first eight months of 1990. It appears that total sales will be showing signs of recovery by year end. Commercial disappearance was up 2.1% during the summer months, and year over year gains should be better by comparison to the poor showing of the last half of 1990. As shown in Table 1, we project that commercial disappearance for the year will be up a modest 0.9%.

Based on USDA's August data, increases in commercial disappearance are led by some products that have historically been down, including fluid milk, butter, and ice cream. The largest growth item among the major products has been frozen yogurt, which is up 20% for the year. Contrary to typical trends, cheese sales have been lackluster this year, with cheddar types down 2% and other types up only 1% in total. Possibly this weak showing for cheese and stronger showing for some other traditional products is reflecting that the recession induces more people to eat more meals at home.

Higher retail price inflation and a deepening recession are likely factors explaining poor sales in late 1990 and early 1991. Although the recession is still a factor, retail price inflation has moderated substantially for dairy products; in fact, on average, retail prices are lower today than they were a year ago.

For 1992, we project commercial disappearance to be up about two billion pounds, for an increase of 1.5% (on a daily average basis).¹ The ability of the country to pull itself out of the recession will impact dairy product sales. Our forecast assumes that the situation will at least be improved, if not totally turned around.

Readers will note from Table 1 that USDA has revised its commercial disappearance estimates. This revision is due to an update of how it estimates milk equivalent net removals of butter, nonfat dry milk, and cheese under the price support program. Because commercial disappearance is calcu-

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¹ Because 1992 is a leap year, all annual totals are about 0.3% higher than they would be on a daily average basis.

lated as the residual of all sources of supply less net government removals and changes in commercial stocks, the revised net removal numbers cause changes in commercial disappearance as well. In general, by adding a new, albeit small, weighting factor to nonfat dry milk, milk equivalent net removals are now higher and commercial disappearance is correspondingly lower.

The Dairy Price Support Program

As indicated above, although there is no change in the actual quantities of butter, cheese, and nonfat dry milk purchased, USDA has recalculated its estimates of how much milk is represented by the sum of these product quantities. Using its old method, milk equivalent net removals were about constant from 1988 to 1991. With the new method, net removals were largely unaffected in 1988 and 1990, but are about half a billion pounds higher in 1989 and 1991. In both years, the increase reflects sales of cheese and nonfat dry milk, which were almost non-existent in the other years. Some of the increase in cheese sales represents cheese purchased at market prices for use in federal food assistance programs; such purchases are <u>not</u> included in the milk equivalent calculation. Regardless, sales of cheese under the price support program are unquestionably up for the year, but virtually all of this occurred during the first six months. We project net removals to be somewhat lower in 1992. Of course, this hinges on our projection that moderate, average price changes will benefit commercial sales more than production.

Milk Prices

As shown in Table 2, U.S. farm prices in 1991 are estimated to average \$1.58 per cwt lower than in 1990, the first year since 1986 that the average milk price was lower that the year before. As a result of seven months of prices below \$11.00 per cwt, the benchmark M-W price (at 3.5% fat test) is estimated to average \$11.05 per cwt for the year, down \$1.16 from 1990.

In 1991, the butterfat differential calculation was changed. One element of the change was to use an alternative wholesale butter price in the differential formula. In the past we have carried the so-called Chicago wholesale price. With the change in the formula, we have decided to substitute a similar but different price taken from the Chicago Mercantile Exchange. Using this new price, which tends to be somewhat lower than the other price series, the wholesale price of grade A butter is estimated to average about 98¢ for 1991; basically equal to the CCC purchase price and a slight drop from 1990. Although wholesale butter prices typically strengthen during the summer months, when demand for ice cream is strongest, the "seasonal" increase this year was unusually large and late. The price peaked sharply in September and held until late November. Retail prices have remained reasonably stable, and preliminary estimates indicate a decline in the annual average retail price.

Unlike last year's unusual and large fluctuations in wholesale prices for cheese, this year's activity was more stable and has followed more normal patterns. In May, the National Cheese Exchange price for cheese began to rise from \$1.15 to its seasonal peak of \$1.35 in October. Our estimate of \$1.20 for the year is about 11¢ lower than last year. Retail prices of cheese have been only sporadically available from federal government sources; so this year we have begun to report the consumer price index for cheese. The consumer price index shows the average retail price of all dairy products dropping 5%, the first drop in seven years. Cheese prices are estimated to have increased 1.4%, while whole milk prices out-paced the all products average at nearly 5%. This is in sharp contrast to the substantial increases in 1990, and probably is in part a correction to an overreaction last year. Retail prices for all foods are estimated to increase nearly 4%, and the average rate of inflation for all consumer prices approaches 6%. Thus, dairy product price inflation is once again well below that of other food products and the general inflation rate.

Dairy Policy in 1991 and Beyond

There was a lot of noise but not much action on the dairy policy front in 1991. Despite the fact that 1991 was one of the most difficult years for dairy farmers in quite some time, Congress and the Administration could not agree that it was time for a change. Although some members of Congress worked to find a way to get higher prices for producers, the Administration held a hard line on increases in the support price. For that matter it is doubtful that a majority of Congress was ready to approve new legislation anyway. Legislation did come to a vote in the Senate just before Thanksgiving and was narrowly defeated. A similar proposal never got as far as a vote in the House. Prospects for new price support legislation in 1992 are extremely dim, election year politics and poor prices in the spring notwithstanding.

Although nothing was scheduled to change in 1991, the 1990 farm bill did call for a variety of action related to federal milk marketing orders. Late in 1991 the Secretary did announce a recommended decision on the national federal order hearing conducted during the fall of 1990. The decision, which will be up for approval by dairy farmers in 1992, does not make the major changes sought by some farmers in the upper Midwest and feared by most farmers elsewhere. However, the Secretary has opened the door for further changes by inviting additional comments from the public which could lead to more hearings. At a minimum, the dairy industry will face a new national hearing to come up with a replacement of the M-W price as the basic price mover in federal orders. USDA would like to replace the M-W this summer; however, it may be somewhat later in the year before all the steps in the process of amending federal orders can be completed. One way or another, it is almost a sure bet that the dairy industry will have to get used to a new method for setting basic prices under federal orders in 1992. Further changes to federal orders may be discussed in 1992, but it is unlikely that any other changes would be implemented until later, if at all.

One of the few concrete things that will definitely happen is that farmers who marketed less milk in 1991 will be able to apply for a refund of their 5¢ 1991 assessment in early 1992, and for all of 1992 they will be paying a new, higher assessment. As of January 1, 1992, farmers will pay 11¼¢ on each hundredweight they market and this will increase slightly on or about April 1. The increase in April will reflect the value of 1991 refunds, which, by law, must be recouped in 1992. Our estimate is that the new assessment, which will be in effect for the remainder of 1992, will be 13¢ to 14¢. Assessments paid in 1992 will be refunded in 1993 if producers can demonstrate that their 1992 marketings are less than what they sold in 1991. Farmers should see their local ASCS office for details.

	1984	1985	1986	<u>1987</u>	1988	1989	19 <u>90</u> ª	1991 ^b
Farm Milk (\$/cwt.):								
All Milk (ave. fat)	13,46	12.76	12.51	12.54	12.26	13.56	13.73	12.15
M-W (3.5%)	12,29	11.48	11.30	11.23	11.03	12.37	12.21	11.05
Support (3.5%)	12.31	11.69	11.31	11.00	10.33	10.47	9.89	9.92
Milk Price:Concentrate Value	1.65	1.74	1.79	1.84	1.58	1.65	1.72	1.56
Assessment	.50	.13	.37	.19	.03	.00	.01	.05
Cheddar Cheese, Blocks (\$/1b.):								
CCC Purchase	1.348	1.279	1.250	1.219	1.1525	5 1.166	1.111	1.110
Wholesale, National Cheese Exchange	1.341	1.248	1.260	1.213	1.210	1.350	1.315	1.204
Butter (\$/lb.): CCC Purchase, Grade A or higher,								
Chicago	1.433	1.415	1.398	1,373	1.320	1.263	1.017	.983
Wholesale, Gr. A, Chicago Merc. Ex.	1.477	1.402	1.437	1.393	1,316	1,269	1.006	.983
Retail, Grade AA, sticks (1 lb.)	2.107	2.121	2.151	2.170	2.158	2.133	1.992	1.927
Nonfat Dry Milk,								
Extra Grade, Unfortified (\$/1b.):	.910	.843	,808	.783	.728	.774	.831	.850
Wholesale, Central States	.909	.841	.806	.793	,802	1,055	1.006	.942
Retail Price Indices (1982-84=100.0):								
Whole Milk	100.7	102.3	101.7	103.6	106.0	114.3	126.7	122.1
Cheese	101.3	103.2	103.5	105.9	109.2	117.6	131.2	132.6
All Dairy Products	101.3	103.2	103.3	105.9	108.3	115.6	126.5	124.8
All Food	103.2	105.6	109.0	113.5	118.2	125.1	132.4	136.3
All Consumer Prices	103.9	107.6	109.6	113.6	118.3	124.0	130.7	136.0

Table 2 National Farm Prices for Milk; CCC Purchase, Wholesale, and Retail Prices for Cheddar Cheese, Butter, and Nonfat Dry Milk; and Selected Retail Price Indices

1984-1991

Source: Dairy Situation and Outlook, Dairy Market News, and Federal Milk Order Market Summaries,

U.S. Department of Agriculture.

^a Revised.

^b Estimated by Andrew Novakovic from federal data for part of the year.

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Markets	1985	1986	1987	1988	1989	1990ª	1991 ^b
New York-New Jersey	16521	15876	14731	13954	13570	13261	12742
New England	6669	5891	5412	5182	4934	4893	4850
Middle Atlantic	6712	6586	6406	6196	5741	5509	5454
E. Ohio-W. Pennsylvania	6103	5885	5605	5478	5175	4889	4682
Western New York	1211	1161	1088	997	919	853	840
Regional Total	36897	35399	33242	31807	30339	29405	28568

Number of Producers Delivering Milk Northeast Federal and State Marketing Orders* 1985-1991

Source: Annual Federal Milk Order Market Statistics and Annual Statistical Reports for State Orders,

*Simple average for 12 months. ^aRevised.

^bProjected.

Producer numbers in northeast Federal and State order markets declined by 837, or 2.8 percent in 1991 following a 3.1 percent drop in 1990.

For the period from 1985 to 1991, producer numbers in the northeast orders have declined by 8329 or 23 percent, resulting in an average annual attrition rate of 3.8 percent over the period.

The most recent year-to-year decline in producer numbers is lower than expected, given the sharply lower milk price that prevailed during the first half of 1991.

A further decline of 3 to 4 percent in producer numbers is expected in these markets in 1992.

Markets	1985	1986	1987	1988	1989	1990ª	1991 ^b
			(1	nillion p	oounds)		
New York-New Jersey	11689	11729	11339	11222	11096	11125	11062
New England	5399	5341	5173	5118	4975	5114	5296
Middle Atlantic	6239	6412	6281	6199	5908	5899	6218
E. Ohio-W. Pennsylvania	3866	3884	3842	3920	3687	3547	3490
Western New York	1305	1334	1304	1283	1207	1199	1134
Regional Total	28406	28603	27838	27742	26897	26884	27203

Receipts of Milk from Producers by Regulated Handlers, Million Pounds Northeast Federal and State Marketing Orders 1985-1991

Source: Annual Federal Milk Order Market Statistics and Annual Statistical Reports for State Orders,

^aRevised.

^bProjected.

Total receipts of milk from northeast milk producers increased modestly in 1991 following a year of stable production in 1990. Producer receipts for the four federal and one state order markets were up 1.2 percent or 319 million pounds.

Although producer receipts increased overall for the region, there was considerable variation between markets. Receipts increased 3.6 percent in the New England market and 5.4 percent in the Middle Atlantic order, while declining fractionally in New York-New Jersey, and registering substantial declines in E. Ohio-W. Pennsylvania and Western New York. Receipts in the E. Ohio-W. Pennsylvania order continued to be affected by the shift of a major processing plant into a neighboring order outside of the region. Receipts in that market would have increased for the year if that plant had continued to be pooled in the E. Ohio-W. Pennsylvania order.

In 1992, receipts in the five orders are expected to be stable to somewhat lower, based on winter feed supply shortages in some areas and a smaller milking herd.

		1985-	1991				
Markets	1985	1986	1987	1988	1989	1990ª	1991 ^k
			(1	million p	pounds)		
New York-New Jersey	4662	4665	4606	4607	4587	4487	4477
New England	2793	2814	2813	2815	2811	2810	2760
Middle Atlantic	2869	2986	3152	3084	3109	3131	3159
E. Ohio-W. Pennsylvania	2033	1985	2023	2052	2033	1927	1869
Western New York	443	437	427	495	513	501	494
Regional Total	12800	12887	13021	13053	13053	12856	12759

Producer Milk Used in Class I by Regulated Handlers, Million Pounds Northeast Federal and State Marketing Orders 1985-1991

Source: Annual Federal Milk Order Market Statistics and Annual Statistical Reports for State Orders.

aRevised.

^bProjected.

Fluid milk sales in the Northeast order markets were down 0.8 percent or 97 million pounds in 1991 following a 1.5 percent decline the previous year.

Class I fluid sales in the E. Ohio-W. Pennsylvania Federal Order were down 3 percent due to the shift of a major processing plant to an adjoining order. Fluid sales stabilized in the New York-New Jersey market in 1991 following a 2 percent drop the previous year which was partially attributed to adverse media coverage. Class I sales were 1.8 and 1.4 percent lower, respectively, in the New England and Western New York orders.

Fluid sales are expected to increase modestly in 1992 as a result of lower retail prices and an improving economy.

Producer	Milk	Used	in	Class	Ι	as	Per	centag	e of	E A1	1 P	roducer	Milk	Received
				b	y I	Regi	lat	ed Har	dlei	S				
		North	neas	st Fee	ler	al	and	State	Mar	ket	ing	Orders		
							1985	-1991						

Markets	1985	1986	1987	1988	1989	1990ª.	1991 ^b
				(perce	nt)		
New York-New Jersey	40	40	41	41	41	40	41
New England	52	53	54	55	56	55	52
Middle Atlantic	46	47	50	50	53	53	51
E. Ohio-W. Pennsylvania	53	51	53	52	55	54	54
Western New York	37	35	36	39	42	42	42

Source: Annual Federal Milk Order Market Statistics and Annual Statistical Reports for State Orders.

^aRevised.

^bProjected.

The factors that affect Class I fluid utilization include the volume of fluid milk sales and the total receipts of milk in a market.

Fluid utilization was generally stable in three of five Northeast order markets for 1991. Lower fluid sales and increased producer receipts caused fluid utilization to drop three percentage points in the New England Order, while a five percent increase in receipts for the Middle Atlantic Order caused fluid utilization to drop by 2 percentage points.

Class I fluid utilization is expected to remain stable to marginally higher in 1992.

				-	_		
Markets	1985	1986	1987	1988	1989	1990	1991
				(\$/cw	t)		
New York-New Jersey ¹	13.97	13.63	13.89	13.41	14.49	15.52	13.16
New England ²	14.00	13,62	13.86	13.38	14.46	15.49	13.23
Middle Atlantic ³	14.50	14.13	14.37	13.89	14.97	16.00	13.74
E. Ohio-W. Pennsylvania ³	13.67	13.20	13.34	12.86	13,94	14.97	12.71
Western New York ³	14.43	14.09	14.35	13.45	14.24	15.27	13,00

Minimum Class I Prices for 3.5% Milk Northeast Federal and State Marketing Orders 1985-1991

Source: Annual Federal Milk Order Market Statistics and Annual Statistical Reports for State Orders.

^aProjected.

¹201-210 mile zone.

²21st zone.

³Priced at major city in the marketing area.

Minimum Class I fluid milk prices in the northeast federal order markets declined an average of \$2.28 per hundredweight or a 15 percent increase over the previous two-year period.

Just as record high Minnesota-Wisconsin prices in November and December of 1989 had carried over to provide record high Class I prices in January and February of 1990, so the sharply lower Minnesota-Wisconsin prices in November and December of 1990 were responsible for record level price declines for the first quarter of 1991. Fluid milk prices averaged \$4.32 per cwt less during the first quarter of 1991 than for the same period in 1990.

Fluid milk prices in the northeast order markets during the first quarter of 1992 are expected to average \$1.30 per hundredweight above the first quarter of 1991. Due to uncertainties over which price mover will be used to replace the M-W sometime in 1992, price forecasts for the year are tenuous at best. Assuming that the new mover follows patterns similar to the M-W, fluid prices are expected to average 50 to 60 cents above 1991 levels.

Markets	1985	1986	1987	1988	1989	1990	<u>1991</u> ª
				(9/CWC)		
New York-New Jersey ¹	11.48	11,30	11.23	11.03	12.37	12.21	11.03*
New England ²	11.48	11.30	11.23	11.03	12.37	12,21	11,03*
Middle Atlantic ³	11.50	11.32	11.25	11.05	12.39	12.23	11.14*
E. Ohio-W. Pennsylvania ⁴	11.48	11.30	11.23	11.03	12.37	12.21	11.10
Western New York ³	11.43	11.25	11.18	10.98	12.32	12.16	11.04

Minimum Class II/III Prices for 3.5% Milk Northeast Federal and State Marketing Orders 1985-1991

Source: Annual Federal Milk Order Market Statistics and Annual Statistical Reports for State Orders.

*Class II price prior to April 1, 1991, Class III price effective April 1, 1991.

^aProjected.

¹201-210 mile zone.

²21st zone.

³Class II in a two-price system, priced at major city in the marketing area.

⁴Class III.

On April 1, 1992, the New York-New Jersey, New England, and Middle Atlantic federal marketing orders changed to a three-class price system. Under three-class pricing, Class I remains the fluid class, Class II includes "soft products" such as cottage cheese and sour cream and Class III includes the "hard products," butter, nonfat dry milk, and cheese.

The Class II (soft product) price that went into effect on April 1 for three northeast federal orders averaged \$11.49 per cwt for the nine-month period April-December, and averaged \$11.28 for twelve months in the E. Ohio-W. Pennsylvania order.

The Class II/III manufacturing milk price declined by approximately \$1.13/cwt, or 9.3 percent in 1991, following a 1.6 percent decline in 1990.

In 1992, the Class III manufacturing milk price is expected to increased by approximately 20 cents per cwt in the northeast order markets.

Markets	1985	<u>1</u> 986	1987	1988	1989	1990	<u>1991</u> ª
				(\$/cw	t)		
New York-New Jersey ¹	12.32	12.09	12.18	11.83	13,10	13.44	11.76
New England ²	12.67	12.43	12.56	12.20	13.45	13.95	12.06
Middle Atlantic ³	12.90	12,66	12.84	12.44	13,75	14.27	12.48
E. Ohio-W. Pennsylvania ³	12.69	12.32	12.37	11.97	13.24	13.84	11.98
Western New York ³	12.47	12.25	12.22	11.94	13.04	13.46	11.79

Minin	num Blen	d Pri	ices f	or 3.5%	Milk
Northeast	Federal	and	State	Marketi	ng Orders
		1985	-1991		

Source: Annual Federal Milk Order Market Statistics and Annual Statistical Reports for State Orders.

^aProjected.
¹201-210 mile zone.
²21st zone.
³Priced at major city in the marketing area.

Northeast order blend prices declined an average of 13 percent in 1991 following an increase of 3.2 percent in 1990.

Minimum blend prices in the five northeast orders ranged from a high of \$12.48 (f.o.b. city) in the Middle Atlantic Order to \$11.76 (201-210 mile zone) in the New York-New Jersey order. An equivalent city price for New York-New Jersey and New England would be 72 cents higher.

Sharply lower blend prices during the first half of the year were partially offset by the suspension of the seasonal pricing provisions in Orders 1, 2 and Western New York. This eliminated deductions of 20¢ in March, 30¢ in April, and 40¢ in May and June. The seasonal pricing provisions will be reinstated in 1992.

Emergency state pricing legislation throughout New York, New England, and Pennsylvania mandated over-order premiums between June and September that further enhanced farm prices to most producers, although in some instances the state premiums replaced existing industry premiums. The New York and New England premium expired in September-October, following a defeated referendum.

In 1992, blend prices for the northeast orders are expected to increase by between 35 and 50 cents per cwt, or 3 to 4 percent based on year-to-year increases for the first quarter and seasonal strength in the fall. Potential replacement of the Minnesota-Wisconsin price mover during the year make price forecasts for the second half of 1992 very tenuous.



N.Y.-N.J. Blend Price, 3.5% M.F., 201-210 Mile Zone, 1985-1991

Month	<u>1985</u>	<u>1986</u>	<u>1987</u>	<u>1988</u>	<u>1989</u>	<u>1990</u>	<u>1991</u>
January	\$13.34	\$11.92	\$12.76	\$12.03	\$12.95	\$15.17	\$11.11
February	13.13	11.84	12.42	11.80	12.55	14.22	10.99
March	12.64	11.50	11.92	11.29	11.95	13.45	10.90
April	12.19	11.31	11.55	10.92	11.59	12.75	10.81
May	11.78	11.25	11.30	10.71	11.42	12.83	10.84
June	11.47	11.27	11.35	10.66	11.62	13.25	11.04
July	11.93	11.86	11.96	11.31	12.38	14.02	11.59
August	12.27	12.46	12.44	12.03	13.29	14.43	12.04
September	12.37	12.79	12.75	12.50	14.00	14.27	12.45
October	12.40	13.05	12.80	12.94	14.67	13.10	13.01
November	12.30	13.05	12.69	13.18	15.28	12.52	13.14*
December	12.01	12.78	12.21	13.07	15.47	11.23	13.18*
Average	12.32	12.09	12.18	11.87	13.10	13.42	11.76*

*Projected

Source: Price Announcements, Office of the Administrator, New York-New Jersey Milk Marketing Area.

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Month	1989	1990	Difference
	(dolla	ars per hundredwe	eight)
October	13.10	13.01a	-0.09
November	12.52	13.14p	+0.62
December	11.23	13.18p	+1.95
Annual Average	13.44	11.76p	-1.68
	1991a	1992f	
January	11.11	12.88	+1.77
February	10.99	12.43	+1.44
March	10.90	11,83	+0.93
April	10.81	11.41	+0.60
May	10.84	11.02	+0.18
June	11.04	11.00	-0.04
Six Month Average	10.95	11.76	+0.81
Annual Average Blend Price	11.76p	12.15	+0.39
Annual Effective Price*	11.71	12.02	+0.31

MILK PRICE PROJECTIONS New York-New Jersey Blend Price, 3.5 Percent, 201-210 Mile Zone Last Quarter 1991 - First Half 1992

*=blend price less government assessment a=actual; p=projected; f=forecasted.

Assumptions Associated With These Projections

A support price of \$10.10 per hundredweight for 1992.

An average 13-cent per hundredweight budget reconciliation assessment for calendar year 1992.

National milk production up 0.5 to 1.0 percent.

Commercial sales up 1.0 to 1.5 percent.

CCC purchases between 6 and 7 billion pounds (milk equivalent, total solids), primarily in butter and nonfat dry milk.

No change in M-W until July 1992.

Forecast by W. C. Wasserman, 11/91





860

840

During 1991, monthly cow numbers have been below 1990 as well as the entire period from 1985 through 1990. Monthly cow numbers in New York increased during 1985, followed by a steady decline that began in January 1986 and continued uninterrupted through June 1987. Cow numbers stabilized the second half of 1987, declined through 1988 and stabilized again in 1989. In July 1991, the number of cows totaled 746,000, which was the lowest number for any month in New York since monthly records began in 1930. The number of cows in the State is projected to be stable through the remainder of the year.

The U.S. quarterly milk cow numbers have decreased in the first three quarters of 1991 compared to 1990. In the third quarter of 1991, the number of cows in the U.S. averaged 9,967,000. That is 152,000 head less than a year earlier. The Northeast1 comprised 18.5 percent of total U.S. milk cows or 1,844,500 head in the third quarter of 1991. This is 26,700 head less than a year earlier. The Northeast accounted for 18 percent of the 1990 to 1991 third quarter U.S. decrease in cow numbers.

¹Connecticut, Delaware, Maine, Maryland, Massachusetts, New Hampshire, New Jersey, New York, Pennsylvania, Rhode Island, and Vermont.





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SOURCE: New York Agricultural Statistics.

The average number of milk cows on New York farms for 1991 is estimated at 757,000 head, which is 1.4 percent lower than in 1990. The projected average number of cows for 1992 is 749,000, or down 1.0 percent from 1991.

Heifers on New York farms as a percent of cow numbers on January 1, 1991 increased 1.1 percentage points from 1990, to 41.5 percent. At 322,000 head, milk cow replacement heifers were at the fourth lowest level in 24 years.

Heifers on U.S. farms as a percent of cow numbers was 41.3 percent in January 1991, a 0.3 percentage point decrease from 1990. July 1991 U.S. heifers as a percent of cow numbers was 42.0 percent, 0.4 percentage points below July 1990.

	New York	New York	New York	Heifers as
	Milk Cows,	Milk Cows,	Heifers,	Percent of
Year	Annual Average	January	January	Cow Numbers
		thousand head		percent
1981	912	915	348	38.0
1982	919	920	403	43.8
1983	928	932	435	46.7
1984	904	925	420	45.4
1985	914	910	425	46.7
1986	894	925	388	41.9
1987	822	855	355	41.5
1988	794	816	290	35.5
1989	776	780	302	38.7
1990	768	790	319	40.4
19911	757	775	322	41.5
1992 ²	749	755		

¹Preliminary ²Projected SOURCE: New York Agricultural Statistics



Pounds of milk produced per cow in 1990 was up 1.3 percent from 1989. Milk per cow is expected to average 14,720 pounds in 1991, an increase of 1.8 percent over 1990. Milk production per cow has increased steadily since 1960 with the exception of 1973 and 1974, and small declines in 1982 and 1989.

Milk production per cow is projected to increase in 1992 by 1.6 percent. Based on strong third quarter 1991 milk production in spite of low forage supplies in some areas, milk per cow is projected to reach 14,950 pounds in 1992.

	N.Y. Milk	Mixed	New York	New York	U.S. Milk
	Production	Dairy Feed	Milk-Feed	All Hay,	Production
Year	Per Cow	16% Protein ¹	Price Ratio ¹	Baled ²	Per Cow
	pounds	\$/ton		\$/ton	pounds
1981	12,137	194	1.42	69.00	12,183
1982	12,075	177	1.56	77.00	12,306
1983	12,552	193	1.47	82.00	12,585
1984	12,658	194	1.37	81.50	12,503
1985	12,836	164	1.59	75.50	12,994
1986	13,107	163	1.56	70.50	13,260
1987	13,916	153	1.68	72.00	13,819
1988	14,413	181	1.39	75.50	14,145
1989 ³	14,267	189	1.50	75.50	14,244
1990 ³	14,456	177	1.68	79.50	14,642
19914	14,720	171	1.40		14,840
19925	14,950	174	1.43		15,120

¹1980-1985 is New York, 1986-1991 is Northeast. ²Season average, June through May. ³Revised ⁴Preliminary

⁵Projected





Total New York milk production in 1991 is estimated at 11,143 million pounds, up 0.4 percent from 1991. This increase is due to the 1.8 percent increase in production per cow, as cow numbers are down 1.4 percent.

Total milk production is projected to increase 0.5 percent in 1992 to 11,198 million pounds. This is a result of the factors discussed on the previous two pages in regard to cow numbers and production per cow.

United States total milk production was 148,284 million pounds in 1990. It is estimated that 1991 production will be 148,700 million pounds, and 1992 production will be 149,600 pounds.

	Total Mi	lk Prod.	NY as %		Total Mil	k Prod.	NY as %
Year	New York	U.S.	of U.S.	Year	New York	U.S.	of U.S.
million pounds				million pounds			
1981	11,069	133,013	8.3	1987	11,439	142,709	8.0
1982	11,097	135,795	8.2	1988	11,444	145,152	7.9
1983	11,648	139,588	8.3	19891	11,071	144,239	7.7
1984	11,443	135,351	8.5	19901	11,102	148,284	7.5
1985	11,732	143,012	8.2	1991 ²	11,143	148,700	7.5
1986	11,718	143,124	8.2	1992 ³	11,198	149,600	7.5

¹ Revised	² Preliminary	³ Projected
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MILK COW PRICES, NEW YORK, ANNUAL AVERAGE,

Milk cow prices increased through the first three quarters of 1990 to \$1,160 per head in October and decreased to \$1,060 in December. In 1991, milk cow prices decreased in the first quarter, increased in the second quarter, and increased to \$1,050 per head in September. Monthly prices for milk cows averaged \$57 a head lower than a year earlier. Slaughter cow prices averaged \$1.25 per hundredweight lower than a year earlier. Calf prices averaged about \$8 per hundredweight higher in 1991 compared to 1990.

	Milk Cow	s, \$/Head	Slaughter	Cows, \$/Cwt	Calves,	\$/Cwt
Month	1990	1991	1990	1991	1990	1991
January	\$1,050	\$1,030	\$48.90	\$46.60	\$105.00	\$ 93.80
February	1,070	1,010	48.60	48.30	102.00	94.70
March	1,070	1,000	48.70	47.50	94.00	110.00
April	1,070	1,020	48.90	48.50	117.00	125.00
May	1,070	1,030	50.00	51.30	124.00	147.00
June	1,080	1,040	51.70	50.70	121.00	142.00
July	1,100	1,040	50.70	47.50	108.00	124.00
August	1,130	1,050	50.30	48.40	106.00	116.00
September	1,140	1,050	49.80	46.50	113.00	112.00
October	1,160	1,040	47.50	46.00	93.00	108.00
November	1,150		45.10		76.10	
December	1,060		46.70		83.20	


SOURCE: NYASS, New York Agricultural Statistics, 1990-1991

As the number of milk cow operations decreases, the average number of milk cows per operation increases as shown by the above chart. There were 6,000 less milk cow operations in 1990 than there were in 1980. The average number of milk cows per operation has increased by 11 cows, or 23 percent over the same period. On January 1, 1991, 43 percent of the total milk cows were in herds with 50-99 head, 38 percent were in herds with over 100 milk cows, and 19 percent were in herds with less than 50 head.

		MILK BY HER	COW OP	ERATIO	NS: 1990		INVE	M	ILK Y BY	COWS J HERD	ANUAR SIZE,	Y 1: 1982	-1991
		Number	c of Mi	1k Cow	s in He	rd		Nu	nber	of Mi	lk Co	ws in	Herd
					100				10-	30-	50-	100	
Year	1-9	10-29	30-49	50-99	plus	Total	Year	1-9	29	49	99	plus	Total
		numb	per of	operat	ions					thousa	nd he	ad	
1981	3,300	2,620	5,180	5,920	1,480	18,500	1982	8	52	211	405	244	920
1982	3,150	2,500	4,900	5,800	1,650	18,000	1983	9	52	205	410	256	932
1983	3,100	2,400	5,000	5,750	1,750	18,000	1984	7	48	208	398	264	925
1984	3,050	2,350	4,900	5,350	1,850	17,500	1985	8	48	203	369	282	910
1985	2,700	2,300	4,550	5,100	1,850	16,500	1986	8	49	196	371	301	925
1986	2,300	2,000	4,300	5,300	1,900	15,800	1987	5	37	168	355	290	855
1987	1,700	1,600	4,300	5,000	1,900	14,500	1988	3	29	171	332	281	816
1988	1,650	1,550	3,850	5,300	1,850	14,200	1989	3	27	144	335	271	780
1989	1,300	1,400	3,400	5,400	2,000	13,500	1990	3	27	126	334	300	790
1990	1,350	1,300	3,150	5,300	1,900	13,000	1991	3	25	120	330	297	775

Item	Weight	1986	1987	1988	1989	1990	19911	1992 ²	
	N. 1.							_	
Feed	.31	119	112	133	139	128	126	128	
Purchased animals	.03	156	173	188	198	227	214	215	
Fuel & energy	.05	184	176	184	193	220	222	225	
Fertilizer	.05	127	128	139	144	140	145	147	
Seed	.02	167	166	171	181	184	187	189	
Machinery	.18	185	189	198	208	217	227	232	
Building & fencing supplies	.08	136	137	138	141	144	146	146	
Farm services & rent	.08	150	146	147	158	166	172	172	
Agricultural chemicals	.01	127	124	127	132	139	150	155	
Interest rates	.07	140	125	126	141	135	125	118	
Farm wage rates	.09	183	195	209	221	235	250	260	
Property taxes	.03	181	175	181	186	190	203	210	
Prices Paid, Not Including Assessmen	t	149	149	159	168	170	173	175	

INDEX OF PRICES PAID BY NEW YORK DAIRY FARMERS (1977=100)

¹Preliminary ²Projected

SOURCE: New York Agricultural Statistics Service

The preliminary 1991 index of prices paid by New York dairy farmers is 173, a 1.8 percent increase from the 1990 index of 170. All component items in the index, except feed, purchased animals, interest rates, and property taxes increased in 1991. Agricultural chemicals showed the largest increase at eight percent, followed by farm wage rates with a six percent increase, and machinery with a five percent increase. The feed component decreased two percent. The index had been very stable from 1985 through 1987; but every component item increased in both 1988 and 1989.

The 1992 index of prices paid is projected at 175, up about 1.2 percent from 1991. Feed prices are expected to increase slightly in 1992 assuming a "normal" 1992 crop year. With stable to slightly higher milk prices, dairy cow prices are expected to be relatively stable in 1992. Interest rates are likely to be 0.50 to 0.75 percentage points lower in 1992. Farm services and rent are projected to be stable, and all other categories increasing one to four percent.

COMPARISON	OF	DAIRY	FARM	BUSINESS	DATA	BY	REGION	
395	5 Ne	w York	Dair	y Farms,	1990			

		W. Plain		Oneida-
	Plateau	& Cent.	Northern	Mohawk
Item	Region	Region	New York	Hudson Reg.
Number of farms	127	87	87	94
ACCRUAL EXPENSES				
Hired labor	\$ 20,457	\$ 78,076	\$ 19,607	\$ 23,357
Feed	65,305	143,476	57,591	67,814
Machinery	21,097	50,771	20,134	26,608
Livestock	28,309	60,579	23,557	37,352
Crops	13,303	34,312	10,991	15,431
Real estate	14,618	31,658	12,130	15,594
Other	28,235	57,400	30,427	31,220
Total Operating	\$191,324	\$456,272	\$174,437	\$217,376
Expansion livestock	1,852	10,381	2,617	2,513
Machinery depreciation	13,619	27,674	14,486	12,435
Building depreciation	6,478	18,836	4,905	7,034
Total Accrual Expenses	\$213,273	\$513,163	\$196,445	\$239,358
ACCRUAL RECEIPTS				
Milk sales	\$216 911	\$513 852	\$201 449	\$237 603
Livestock	23 637	60 269	20 235	23 013
Crops	23,037	17 244	20,255	5 201
All other	5,750	14 073	4,002	3,301
Total Accrual Receipts	\$250 255	14,073 ¢605 429	6000 504	\$270 010
iotai Accidai Receipts	\$250,255	\$005,450	9229,304	\$270,919
PROFITABILITY ANALYSIS				
Net farm income (w/o appreciation	\$36,982	\$92.275	\$33,139	\$31,561
Net farm income (w/appreciation)	\$43,023	\$113,784	\$37,583	\$39,519
Labor & management income	\$12,217	\$53,318	\$12,697	\$6,101
Number of operators	1.38	1.59	1 25	1 34
Labor & management income/operato	r \$8,853	\$33 533	\$10,158	\$4 553
Labor a management income/operato	1 90,000	400,000	Q10,150	941000
BUSINESS FACTORS				
Worker equivalent	2.84	5.11	2.85	2.97
Number of cows	86	184	81	89
Number of heifers	67	153	69	70
Acres of hav crops1	147	194	161	170
Acres of corn silage1	54	152	61	75
Total tillable acres	250	525	264	296
Pounds of milk sold	1.450.253	3.486.603	1.368.511	1.533.127
Pounds of milk sold/cow	16,902	18,943	16.864	17,169
Tons hay grop dry matter/acre	2 6	3 0	2 6	2 5
Tons corn silage/acre	14 7	14 4	14 7	14 0
Cows/worker	30	14.4	29	30
Pounds of milk sold/worker	510 995	692 001	100 600	515 202
2 grain & gongentyste of mill me	01010000	002,001	400,000	212,203
Food & grop ovporce/out	erhes 732	2/6 ¢E 00	206	203
Fortilizor & lime / rear	\$5.40 620 04	\$0.00	\$5.00	\$D.42
refutilizer a fime/crop acre	\$30.04	\$33.30	\$20.20	\$28.60
Machinery Cost/tillable acre	\$162	\$169	\$151	\$150

¹Average of all farms in the region, not only those producing the crop.



MILK	PRODUCTION	AND A	VERAC	SE CC	ST OF	PRODUCING	MILK
	FOUR	REGION	IS OF	NEW	YORK,	1990	

	Region ¹							
Item	1	2	3	4				
5								
MILK PRODUCTION ²		(millio	n pounds)					
1980	3,075.3	3,223.4	1,990.2	2,662.0				
1990	2,933.3	3,645.0	2,094.6	2,416.7				
Percent change	-4.6%	+13.1%	+5.2%	-9.2%				
COST OF PRODUCING MILK	(\$	per hundred	weight milk)					
Operating cost	\$11.02	\$10.76	\$10.88	\$12.17				
Total cost	16.01	14.38	15.78	16.96				
Average price received Return per cwt. to operator	14.96	14.74	14.72	15.50				
labor, mgmt. & capital	2.32	2.58	2.08	1.82				

¹See the map above for region descriptions. ²SOURCE: New York Agricultural Statistics Service, Milk-County Estimates.

TEN YEAR COMPARISON: SELECTED BUSINESS FACTORS New York Dairy Farms, 1981 to 1990

Item	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990
Number of farms	553	572	510	458	404	414	426	406	409	395
Cropping Program										
Total tillable ac	cres 257	262	272	280	280	288	305	302	316	325
Tillable acres re	ented 83	83	91	94	93	100	105	104	117	121
Hay crop acres	131	135	139	143	142	147	153	156	164	166
Corn silage acres	59	70	72	76	69	67	67	74	81	82
Hay crop,										
tons DM/acre	2.5	2.6	2.5	2.7	2.7	2.7	2.7	2.6	2.6	2.7
Corn silage,										
tons/acre	14.9	14.0	13.5	14.0	14.3	14.3	16.2	14.1	13.4	14.4
Fert. & lime exp.					2000	2.000	2012		2011	
/tillable acre	\$32	\$33	\$31	\$32	\$32	\$26	\$27	\$29	\$29	\$29
Machinery cost/co	w \$465	\$432	\$413	\$433	\$426	\$400	\$413	\$398	\$425	\$483
Dairy Analysis										
Number of cows	79	82	88	89	89	95	101	102	104	107
Number of heifers	59	67	72	76	73	77	79	82	83	87
Milk sold, cwt.	11.420	12,105	13,432	13 735	14 001	15 374	16 498	17 200	17 975	19.005
Milk sold/cow lh	a 14 456	14 762	15 264	15 433	15 679	16 237	16 351	16 882	17 259	17 720
Purchaged dairy	191741420	14/102	13/204	101400	10,015	10,201	10,001	10,002	11,233	11,120
food/out milk	\$3 51	\$3 27	\$3 11	62 29	\$2.04	¢2 10	¢2 21	\$2 71	\$2.00	CA 27
Pure grain & con	40.01	93.21	42.44	93.20	42.04	\$2.TO	22.21	\$2.1T	42.22	92.21
ag 9 milk recei	nta 268	248	258	218	228	218	248	209	279	288
Pure feed & crop	.pcb 200	4, 10	200	240	200	240	240	200	210	200
eve /out milk	¢1 67	\$4 52	\$4 62	¢4 52	¢1 12	\$4 00	¢4 11	¢1 60	¢1 02	¢5 21
exp./cwc. mirk	94.07	94.00	94.02	54.00	54.12	\$4.00	24.11	Q4+02	94.92	40.21
Capital Efficienc	Y									
Farm capital/cow	\$5,676	\$5,517	\$5,421	\$5,520	\$5,801	\$5,792	\$5,894	\$6,133	\$6,407	\$6,556
Real estate/cow	\$2,693	\$2,664	\$2,668	\$2,731	\$2,726	\$2,758	\$2,805	\$2,902	\$2,977	\$2,977
Mach. invest./cow	\$1,078	\$1,047	\$1,038	\$1,057	\$1,083	\$1,062	\$1,057	\$1,083	\$1,154	\$1,233
Capital turnover,	yrs. 2.4	2.5	2.4	2.3	2.5	2.3	2.2	2.2	2.1	2.1
Labor Efficiency										
Worker equivalent	2.75	2.83	3.00	3.08	3.17	3.17	3.19	3.17	3.30	3.37
Operator/manager	eg. 1.25	1.30	1.32	1.31	1.34	1.33	1.32	1.35	1.39	1.39
Milk sold/worker.	edt mine			1.01	2.01	1.00	2.02	1.00	2.007	
lbs.	415,273	427.739	447 733	445 942	442 125	497 555	516.728	542 708	544.598	563.349
Cows/worker	29	29	29	29	292/123	31	32	32	32	32
Labor cost/cow	\$335	\$352	\$344	\$366	\$387	\$385	\$400	\$426	\$469	\$541
Profitability & F	inancial	Analveie		,,			,,	,		
Labor & momt.	and to a contract of the second secon	MALLOTO								
income/oper.	\$-4.261	\$3,451	\$5.514	\$2,262	\$2,850	\$3,837	\$11,042	\$11,911	\$18,004	\$14.328
Farm net worth	\$301,975	\$306.589	\$322.001	\$336.210	\$325 664	\$348,909	\$398 209	\$426 123	\$468.848	\$471.322
Percent equity	648	638	629	619	638	629	659	669	689	668
rerection adartal	040	036	038	040	036	026	0.08	008	000	000

DAIRY

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			10215 000	ard rorn		00 1000				
Item	1981	1982	1983	1984	1985*	1986*	1987*	1988*	1989*	1990*
Cash Operating Expenses										
Hired labor	\$ 1.20	\$ 1.29	\$ 1.25	\$ 1.39	\$ 1.38	\$ 1.38	\$ 1.49	\$ 1.46	\$1.62	\$ 1.77
Purchased feed	3.62	3.40	3.59	3.46	3.09	3.15	3.26	3.73	4.02	4.28
Machinery repairs & rent	.81	.81	.77	.80	.78	.75	.88	.83	.92	1.06
Auto expenses (farm share)	.04	.04	.04	.03	.03	.04	.04	.04	.04	.05
Fuel, oil & grease	.62	.59	.49	.50	.48	.34	.35	.34	.33	.41
Replacement livestock	.23	.19	.16	.10	.10	.13	.13	.11	.17	.20
Breeding fees	.18	.19	.19	.20	.20	.19	.19	.18	.18	.19
Veterinary & medicine	.28	.29	.28	.29	.27	.28	.28	.28	.30	.32
Milk marketing	.40	.50	.93	1.03	.80	.84	.74	.52	.49	.53
Other dairy expenses	.49	.52	.54	.55	.53	.52	.53	.56	.60	.68
Lime & fertilizer	.72	.71	.63	.66	.63	.49	.50	.51	.50	.50
Seeds & plants	.23	.23	.21	.22	.23	.21	.21	.21	.22	.22
Spray & other crop expense	.21	.18	.19	.20	.22	.20	.19	.19	.21	.22
Land, building, fence repair	.22	.21	.18	.18	.17	.16	.20	.22	.27	.32
Taxes	.35	.34	.34	.33	.34	.33	.35	.35	.36	.37
Insurance	.23	.23	.21	.20	.22	.22	.22	.23	.23	.24
Telephone & elec. (farm share)	.32	.35	.36	.36	.37	.39	.38	.38	.39	.39
Interest paid	1.43	1.54	1.40	1.40	1.25	1.18	1.04	1.02	1.06	1.05
Misc. (including rent)	.41	.43	.44	.44	.40	.41	.45	.41	.43	.47
Total Operating Expenses	\$11.99	\$12.04	\$12.20	\$12.34	\$11.50	\$11.22	\$11.43	\$11.57	\$12.34	\$13.27
Less: Nonmilk cash receipts	1.58	1.47	1.49	1.74	1.58	1.52	1.84	1.86	1.75	1.75
Increase in feed & supplies	** .11	.03	.26	.18	.05	.01	.16	.16	.02	.26
Increase in livestock	.25	.35	.24	.16	.18	.12	.10	.08	.12	.15
OPERATING COST OF MILK PRODUCTION	\$10.05	\$10.19	\$10.21	\$10.26	\$ 9.69	\$ 9.57	\$ 9.33	\$ 9.47	\$10.45	\$11.11
Overhead Expenses										
Depreciation: mach. & bldgs.	\$ 1.56	\$ 1.60	\$ 1.56	\$ 1.65	\$ 1.64	\$ 1.54	\$ 1.43	\$ 1.31	\$ 1.31	\$ 1.35
Unpaid labor	.14	.14	.12	.12	.12	.13	.10	.11	.12	.19
Operator(s) labor***	.99	.93	.89	.87	.97	.86	.87	.95	.98	1.10
Operator(s) mgmt. (5% of cash rec	.) .76	.75	.76	.76	.72	.71	.74	.74	.81	.85
Interest on farm eq. cap. (5%)	1.32	1.27	1.20	1.22	1.16	1.10	1.15	1.19	1.24	1.24
Total Overhead Expenses	\$ 4.77	\$ 4.69	\$ 4.53	\$ 4.62	\$ 4.61	\$ 4.34	\$ 4.28	\$ 4.30	\$ 4.46	\$ 4.73
TOTAL COST OF MILK PRODUCTION	\$14.82	\$14.88	\$14.74	\$14.88	\$14.30	\$13.91	\$13.61	\$13.77	\$14.91	\$15.84
AVERAGE FARM PRICE OF MILK	\$13.66	\$13.56	\$13.64	\$13.49	\$12.90	\$12.65	\$12.89	\$13.03	\$14.53	\$14.93
Return per cwt. to operator labor	,									
capital, & management	\$1.91	\$1.63	\$1.75	\$1.46	\$1.45	\$1.41	\$2.04	\$2.14	\$2.65	\$2.28
Rate of return on farm eq. cap.	0.6%	-0.28	0.4%	-0.78	-1.0%	-0.78	1.9%	1.8%	3.3%	1.3%
	and the second second									

*Accrual receipts and expenses. **Increase in grown feeds, 1985-1989. ***1980-1984 = \$750/month, 1985 = \$800/month, 1986 = \$850/month, 1987 = \$900/month, 1988 = \$1,000/month, 1989 = \$1,050/month , 1990 = \$1,250/month of operator labor.

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The prices dairy farmers pay for a given quantity of goods and services has a major influence on farm production costs. The astute manager will keep close watch on unit costs and utilize the most economical goods and services.

Year	Mixed Dairy Feed 16% Protein	Fertilizer, Urea, 45-46%N	Seed Corn, Hybrid*	Diesel Fuel	Tractor 50-59 PTO*	Wage Rate All Hired Farm Workers
	(\$/ton)	(\$/ton)	(\$/80,000 kernels)	(\$/gal)	(\$)	(\$/hr)
1980	179.60	259	52.50	1.030	13,400	3.12
1981	193.70	275	60.00	1.310	14,900	3.26
1982	176.60	278	63.70	1.240	16,000	3.26
1983	192.60	249	64.60	1.140	17,200	3.52
1984	194.30	250	70.20	1.140	17,400	3.60
1985	164.20	238	67.30	1.080	16,800	4.01***
1986	162.90	200**	65.60	0.840**	16,600	4.41***
1987	152.80**	190**	64.90	0.765**	16,700	4.60***
1988	180.80**	208**	64.20	0.810**	17,150	5.02***
1989	188.50**	227**	71.40	0.828**	17,350	5.25***
1990	176.75**	215**	69.90	1.080**	17,950	5.52***

PRICES PAID BY NEW YORK FARMERS FOR SELECTED ITEMS, 1980-1990

SOURCE: NYCRS, New York Agricultural Statistics. USDA, ASB, Agricultural Prices. *United States average. **Northeast region average. ***New York and New England combined.

The table above shows average prices of selected goods and services used on New York dairy farms. The chart below shows the ratio of prices received for milk and prices paid by New York dairy farmers as a percent change from 1977. The ratio has been on a downward trend since 1978 except for slight increases in 1985, 1987, 1989, and 1990.



RATIO OF PRICES RECEIVED FOR MILK AND PRICES PAID BY NEW YORK FARMERS, 1977-1990

Livestock Outlook for 1992

Livestock markets in 1991 have been characterized by large supplies and falling third and fourth quarter farm prices. Consumption, however, has not increased significantly since lower farm prices have not been passed on to the retail level until just recently. Per capita consumption of beef is forecast to decrease slightly, consumption of pork will increase slightly, and broiler consumption will increase over 5.5 percent in 1991. This increase in per capita broiler consumption at the expense of beef is consistent with historic trends. Broiler consumption surpassed beef consumption for the first time in 1990 and is expected to continue expansion in the future.

Beef and pork producers face stiff competition from the poultry markets. Consumers have developed preferences for leaner, healthier food products and poultry meats have been substituted for beef and pork in the processed meats markets. Much of this substitution has occurred because of technological advances in the meat processing industry and the relative cheapness of poultry as well as changes in consumer preferences.



Figure 1

The increasing price advantage of poultry is illustrated in Figure 1. The ratios of the primary market prices of beef and pork to broilers are plotted annually from 1960 to 1990 and monthly for 1991. These ratios indicate how many pounds of broiler meat can be purchased with one pound of beef or pork. The increasing ratios indicate that beef and pork have become relatively more expensive than broilers over the past thirty years. Consumers and meat

processors have, of course, purchased increasingly more poultry over this period in part because of its relative inexpensiveness. 1991 has seen the situation where red meat prices have fallen because of over-supply and stiff competition with poultry, particularly pork competing with poultry in the processed meat market.

The versatility of poultry meat in processed markets and perceived health attributes of poultry have increased demand for poultry, leading to increases in production. Trends in U.S. broiler, beef, and pork production since 1960 are illustrated in Figure 2. Broiler production has increased 300 percent since 1960 and is expected to continue to exert competitive pressure on the beef and pork industries in the future.



Beef Cattle

Beef production in 1991 is forecast to be about 23 billion pounds, relatively unchanged from 1990. 1992 production is also expected to be at about the same level. However, 1991 exhibited an increase in cattle on feed over previous years which has been alleviated somewhat in the fourth quarter of 1991. Cattle on feed have increased substantially on a year-over-year basis since 1990. Fourth quarter cattle on feed estimates, however, showed about a 7 percent decrease over fourth quarter 1990 (Figure 3). November's cattle report in indicated declines of about 9 percent from 1990's November level. However, fewer numbers of cattle on feed will not translate directly into higher prices later in 1992.



Figure 3

Several factors will lessen the impact that cattle on feed numbers have on prices this year. First, breeding and management advances have enabled the placing of cattle on feed at younger ages and keeping them to heavier weights while still maintaining traits desired by consumers and processors. Consequently, while there may be fewer cattle on feed, those cattle will be marketed at heavier weights (Figure 4). Second, October and November placements were down from 1990 levels. This is partly due to the late availability of good quality forage this year. Cattle were kept off of feed lots and on pasture for a longer period of time. Those cattle will still be available for market, but they are not showing as cattle on feed. Further, the early "megastorm" that hit the Midwest last month prompted cattle producers to market cattle earlier rather than continue production with inefficient gain. Fewer numbers on feed, then, ignore the added cattle that have already been put into marketing channels.

The outlook for 1992 shows cattle production at approximately the same levels as 1990 and 1991 with perhaps slight increases. Large inventories are expected to remain, but traditional market relationships will no longer be reliable indicators of price. Consumption of beef will most likely continue to decline on a per capita basis. However, new insights into healthy diets appear to endorse small quantities of lean beef for most people, perhaps dampening the effects of changes in consumer preferences.

The effects of the current economic recession are difficult to forecast. Consumers will likely consume less beef and substitute cheaper meats such as pork and chicken, particularly if there is no recovery through 1992. The beef industry will continue to face stiff price competition from both pork and chicken, resulting in softer beef prices. However, prices should be somewhat firmer for beef through the holiday season, a traditionally strong period for

F.I. Dressed Cattle Weight 1990 and 1991 730 720 1991 710 Pounds 700 1990 690 680 670 S 0 М 1 A N n Month

beef. Average prices in 1992 will be in the mid to high \$70s range per hundredweight.



New York prices for steers and heifers have been between \$10 and \$15 per hundredweight below Nebraska market prices (Figure 5). Slaughter cow prices have been another \$10-15 below that, being consistently in the high \$40s and very low \$50s over the last three years. A recent occurrence, however, is the convergence of the Nebraska price to the New York steer and heifer price over the past four or five months. It is uncertain whether this price relationship will continue into 1992. New York prices have been fairly steady over the past 15 months and may be exhibiting some downward price resistance. Slaughter cow prices have also historically peaked in the first quarter of the year. Firmer first quarter beef prices in 1992 should continue to support this pattern.

Hogs

Rapid expansion in the hog industry over the past two quarters has caused prices to fall over \$12 per hundredweight since July. Expansion in the hog industry is expected to continue well into 1992. 1991 production is expected to reach almost 16 billion pounds, and increase of almost 4 percent over 1990. Breeding stock increases in the third and fourth quarter of 1991 will result in even more pork on the market in 1992 (Figure 6). Almost all hog statistics (breeding inventory, slaughter, production, etc.) are expected to increase between 6 and 8 percent in 1992 with the exception of price.



Figure 5





Much of the expansion in the hog industry has occurred in North Carolina which is expected to increase production by 28 percent over 1990, primarily through contract hog production. New facilities are being built with modern equipment and technology and larger capacity which means that hog production will be profitable at lower market prices due to greater efficiencies in the production process. Hog production is going the way of broiler and turkey production in that fewer, larger, more integrated farms will be the trend. This trend is also appearing in other areas of the country.

Breeding and management advances have played a role in the hog industry as well as in the beef industry. Sows now wean more pigs per litter, which further amplifies the effects of increases in the breeding herd on the hog market. However, some analysts believe that increases in breeding efficiency will be offset during this expansion by the greater proportion of young sows in the breeding herd. Young sows will have smaller litters initially.

Hog prices are expected to be depressed through 1992. Prices in the low \$40s are expected during fourth quarter 1991. In fact, some prices in the high \$30s have already been reported. The price outlook for 1992 is similar, with strong possibilities of prices in the high \$30s through the summer. Hog prices have not been this low since first quarter 1989. The expansion is expected to level out by the end of next summer, however low grain prices may encourage additional expansion. Prices are expected to be low primarily because there is too much meat available. Pork is a direct competitor with poultry, both in the retail and processed meat markets, and the current holiday season has already seen competition between hams and turkeys in retail markets. Again, the current economic recession will also discourage consumers from purchasing more expensive cuts of meat.



The removal of import duties on Canadian pork will also have an impact on U.S. pork prices. Although the duty on live hogs from Canada has increased, competition from Canadian meats may soften retail and wholesale pork prices. Primary market hog prices will then also be weakened.

New York hog prices have closely tracked the 7-City hog price over the past five years (Figure 7). The New York price has averaged about \$3.70 below the 7-City price. Recently, however, there has been a slightly wider margin between the two prices. This margin should return to lower levels after the recent price volatility works its way through the marketing system.

Lamb

U.S. lamb production in 1991 is expected to be close to 1990's level of 358 million pounds. Production in 1992 is also expected to be at similar levels. Lamb prices at both the national level and in New York have exhibited a downward trend over the past five years. Average prices in San Angelo, Texas are expected to be about \$53 per hundredweight in both 1991 and 1992. New York prices will be similar (Figure 8). Wool prices are also depressed as a continued result of the removal of price supports for wool in Australia. The value of wool shorn this last spring in many cases did not pay for shearing costs.

Per capita consumption of lamb in 1990 was 1.5 pounds. This consumption level has been fairly steady or slightly decreasing over the past several years. Lamb producers face a market in which many consumers do not like lamb or choose to eat other, less expensive meats. Declines in lamb prices have not been passed on to the consumer and consumers tend to prefer the premium cuts of lamb, leaving little market for less desirable cuts.

To put lamb consumption levels in perspective, consider that the U.S. annually consumes 2.5 pounds of honeydew melons, 4.8 pounds of sweet potatoes, and 5.2 pounds of pickles per capita. Essentially, lamb has become a specialty food and must be marketed as one in order to be profitable. There are opportunities for direct marketing of lamb and wool to capture added returns. Lamb producers should also explore seasonal marketing of Easter lamb to take advantage of significant increases in demand and associated price premiums (Figure 8). Lamb producers cannot depend on traditional marketing channels to provide profitable returns.



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Figure 8

Situation and Outlook Summary - Poultry

After three very profitable years for the egg industry and nearly a solid decade of good times for the broiler industry both of these industries may experience lower returns in 1992. Profitability for the turkey industry should finally return after five years of poor performance and two years of very slow growth in production. The following are the smoothed wholesale net returns to the three industries over the last 18 quarters as provided by the USDA.



Egg Industry

Declining per capita consumption of eggs and increasing production per hen have brought about periodic downsizings of the national layer flock. This process has been accomplished by the forced retirement of a remarkable number of egg producers. During the 1980's over 80% of all the commercial egg producers in the country went out of business.

The year 1989 marked the end of a dramatic downsizing period which coincided with the beginning of an unusual "disease fear" period. Since 1989, egg production has been stable and profitable in part due to the reluctance of producers to expand given the great uncertainty presented by salmonella enteritidis. Without good knowledge about this disease and without the assurance of indemnification, producers were reluctant to commit new capital to the business. Nevertheless, large profits in the last three years have finally persuaded producers to expand regardless of disease risk. The resulting expansion of production in 1991 and 1992 is likely to bring down the profitability of eggs in 1992.

As can be seen on the following figure, the New York state flock has turned the corner after a long decline from over 10 million layers in the late 1960's to little over 3 million in 1990. During 1991, the flock size increased by 300,000 layers for the first significant increase in decades. New York production will expand another 5 to 10% in 1992 responding to new marketing opportunities.

POULTRY



Poultry Meat Industry

In marked contrast to the egg industry, the poultry meat industry has experienced rapid growth during the last 40 years. The broiler industry has grown exponentially at a 5% rate for over 30 years as is shown on the following graph. The turkey industry as well has experienced rapid growth in the last few decades. Even more impressive than the growth in poultry production has been the growth in value added by poultry processing. Total poultry value added by processing plants grew from \$ 2 billion to \$ 6 billion in the 1980's.



The exponential growth of Broiler production will someday slow down. No tree grows to the sky. The year 1992 could be a transition year to a slower growth rate of perhaps only 3% per year. The transition to a 3% growth rate will depress profitability for commodity type broiler meat products. In addition, falling consumer income could lower demand for the high profit, further processed items that have driven recent growth in the industry. Slower turkey production increases will finally lift returns after five years of low or no profitability for commodity turkey. New York is a very small participant in poultry meat production. Nevertheless, both broiler and turkey production rose during the 1980's. Long Island duck production fell during the 1980's but is now stabilizing. Broiler production will drop sharply in 1992 after the loss (to Pennsylvania) of all contracts with the only broiler processing plant in the state. Turkey production continues to grow.



NOTES

	1985	1986	1987	1988	1989	Five-Year Average 1990 ¹	(1986-1990)
			milli	ons of dol	lars		
Potatoes: Long Island	11.4	18.0	11.5	16.1	16.8	13.7	15.22
Upstate	28.2	41.3	36.1	44.9	40.9	44.8	41.60
Subtotal	39.6	59.3	47.6	61.0	57.7	58.5	56.82
Vegetables: Fresh Market Processing	135.6 37.6	167.4 26.5	168.4 30.9	166.3 23.7 ²	177.8 32.3	172.8 36.3	170.54 29.94
Subtotal	173.2	193.9	199.3	190.0	210.1	209.1	200.28
TOTAL	212.8	253.2	246.9	251.0	267.8	267.6	257.3

TABLE I....POTATOES AND VEGETABLES: NEW YORK STATE FARM VALUE OF PRODUCTION, 1985-1990.

¹ Preliminary.

² Includes tomatoes as of 1988.

Sources: <u>New York Agricultural Statistics 1990-1991</u>, New York State Agriculture and Markets, Division of Statistics, June 1991.

New York potato & vegetable producers endured significant changes in growing conditionsfrom too much water in 1990 to drought conditions in 1991. Depending on what type of product was grown, the weather effect was different. Growers of processing vegetables did relatively well in 1990--nearly \$6 million above the five-year average--but, fresh market vegetable growers had somewhat of an off year--about \$1.5 million above the five-year average and \$5 million below 1989. Table I above presents farm value of production figures for the past six years. Lower crop values for fresh market vegetables were primarily a function of low prices--particularly cabbage prices at \$5.50 to \$6.00 per 50 lbs. and onions at \$2.85 to \$3.00 per 50 lbs. Production was generally higher for most fresh market vegetables in 1990. Processing vegetable production was also generally up, but the increased production did not lead to lower prices. Long Island potato growers' 1990 production was \$3 million below 1989 and \$1.5 million above the five-year average. Conversely, Upstate producers' 1990 crop was \$4 million above 1989 and \$3 million above the five-year average. The state total farm value of potato and vegetable production was flat compared to 1989, but \$10 million above the fiveyear average.

Because of high temperatures at the beginning of the season, the state's 1991 vegetable crop ran two/three-weeks earlier than normal. Also, the warm dry growing season created excellent growing conditions where irrigation was available. Overall, yields were down, but prices were generally higher than in 1990. Direct marketing outlets such as farmers' markets, roadside stands, and greens' markets had plentiful and abundant supplies throughout the season. Wholesale market sales were generally lower than normal because of lower production. Some observations for the 1991 season are: --The strawberry crop was excellent--particularly in the Hudson Valley, Oswego, and Madison Counties. The crop was one to three-weeks early and the harvest season was short. The was the best season in terms of farm value.

--Long Island vegetable production had very favorable growing conditions during most of the season, but late season winds and heavy rain created significant damage. Many growers irrigated and yields were higher than normal for crops not damaged in the late season winds and heavy rains.

--The fresh market snap bean crop had good yields and harvested acreage was near normal levels.

--The fresh market tomato crop was early, of good quality, and with heavy yields reported. Production is up for both fresh and processing tomatoes. This was the third season of continued growth for processing tomato crop value.

--The state's pumpkin crop was three weeks early with excellent color and yields.

--The sweet corn crop was early--some available for July 4th in Albany Co.-- and of excellent quality--particularly in Montgomery Co. Overall production was most likely down from 1990. Prices were good at the beginning of the season.

--The onion crop was 35% lower than during 1990--primarily because of very dry muck soils throughout most of the growing season. A relatively larger portion of the onion crop was graded and sold at harvest rather than put in long term storage. Prices were much better than during 1990.

--The fall potato crop was down 13% from 1990 because of lower yields. Given a record national crop, prices were not as adversely affected as effected as might be expected with high production.

The outlook for 1992 appears good for both fresh and processing vegetable growers. However, fall potato production in Long Island will continue to decline. For fresh market vegetable growers, with the exception of lettuce growers, markets have stabilized and/or continue to increaseparticularly strawberry and tomato markets. Growing conditions will continue to be favorable and harvest labor will not be a problem. Greater use of Integrated Pest Management (IPM) will reduce the total amount of pesticides used and therefore reduce the cost of this costly input. However, the promotional aspects of "IPM Grown" do not appear favorable as compared to "Organically Grown". The development of the national "5-A-Day" promotional campaign will increase the demand for fresh market vegetables. Also, continued drought conditions in the Western U.S. bode well for Eastern U.S. producers. Processing vegetable producers can count on another year of continued good demand for contracted vegetable production. New developments in shelf-stable and/or 'minimally processed' food *entres* will continue to fuel the demand for sweet corn, peas, green beans, and carrots. In addition, the state's processing tomato growers will see another year of good demand.

Table II presents production and crop value figures for the major fall potato producing states. Nationally, production was up 9% from 1989 and 13% from 1988 and reached 352.5 million cwt. Yields were up 1% and 4% from 1989 and 1988, respectively. The increased production led to lower average prices--\$6.08 per cwt compared to \$7.36 and \$6.02 in 1989 and 1988, respectively. Fall potato production represented 87.7% of total U.S. potato production and during 1990 a record 224 million cwt were processed--an 11% increase from 1989. Shrinkage and losses were 8.5% of total production, representing a 13% increase from the previous year losses.

TABLE II....U.S. FALL POTATOES: PRODUCTION AND CROP VALUE

		Pro	duction			Cro	value	
	1987	1988	1989	1990	1987	1988	1989	1990
		1,	,000 cwt			millio	n dollars -	
New York:								
L.I.	2,425	1,992	1,898	1,950	12.5	16.14	16.37	13.13
Upstate	6,250	4,800	4,730	5,940	38.4	44.88	38.02	42.17
California	7,869	6,105	6,440	6,630	32.7	49.76	49.89	33.84
Colorado	19,500	19,040	22,603	22,750	34.1	139.94	150.18	84.22
Idaho	99,710	102,610	102,475	119,070	349.0	554.09	655.85	543.36
Maine	23,240	22,000	22,000	20,520	98.8	160.60	149.11	109.93
Michigan	9,720	7,820	7,350	9,240	49.6	59.04	54.53	54.26
Minnesota	16,330	12,075	13,860	14,280	52.3	74.87	72.36	70.67
North Dakota	24,050	15,525	15,070	16,675	84.2	98.58	84.86	83,16
Oregon	25,924	20,735	23,308	23,450	90.0	99.64	122.18	114.38
Pennsylvania	4,730	3,690	4,715	5,400	28.9	28.04	38.30	38.08
Washington	66,960	63,250	64,310	67,980	244.4	284.63	308.54	329.58
Wisconsin	22,100	20,000	23,120	23,075	85.1	128.0	159.80	122.73
Other	16,190	13,916	14,794	15,547	73.4	89.19	78,48	94.96
Total Fall	344,998	313,558	324,673	352,507	1,273.4	1,827.4	1,999.1	1,734.5

Source: <u>Potatoes</u>, Agricultural Statistics Board, National Agricultural Statistical Service, United States Department of Agriculture. September 26, 1991.

New York fall potato production was up 19% from 1989 to a total of 7.89 million cwt. The value of the crop was \$58.5 million--1% above the 1989 crop value. Potato production in Long Island increased by only 2.7% to 1.95 million cwt and its value was \$13.7 million dollars--down 20% from 1989. In contrast, the value of Upstate potato production was up 11% to \$44.8 million and production increased by 25.6% to 5.94 million cwt. Average prices for New York potatoes were \$7.41 per cwt--\$1.30 lower than in 1989. However, contrary to 1989, average prices for Upstate potatoes were higher than for Long Island potatoes. New York's share of the national fall potato market increased slightly, but is still less than 2.5%. In value terms, New York's crop represented 3.19% of the national fall crop value and in 1989 the figure was 2.72%. Idaho continues to lead the nation in production with 33% of the market, followed by Washington--19%--and Oregon and Wisconsin had the same share at nearly 7% each.

VEGETABLES

The 1991 national fall potato crop is at a record high 370 million cwt. The increase is almost all attributed to a 16 million cwt <u>increase from North Dakota</u>. New York's forecast is for 6.917 million cwt--12% below 1990. Both Long Island and Upstate production is down. Prices (November '91) for 10-lbs bagged potatoes were at \$5.50 to \$6.50 per cwt--down from \$8.95 in 1990. However, because much of the crop is small, large potato (70-count size) cartons are commanding higher prices than in 1990--\$16.00 per cwt vs. \$15.20 in 1990. Also, because of increased sales abroad and the potential for exports to the USSR, the record supply has not depressed prices to levels commensurate with such high production. The USSR may buy up to 5 million cwt of the 1991 crop.

The outlook for potato demand looks good. A national survey conducted in 1990 indicates that consumers--99%--consider potatoes to have relatively high nutritional value. In addition, 94% of respondents indicated that potatoes are high in vitamins and minerals. In contrast to consumers--34%-in 1970, only 20% of consumers in 1990 indicated potato consumption is fattening. More appealing to eastern producers is the fact that household demand has shifted to a smaller potato whereas foodservice demand continues to want a larger potato.

Table III provides figures for U.S. storage onion production and crop value from 1988 to 1991. National storage onion production is 36.675 million cwt--down 4.27% from 1990. Most of the decline can be attributed to decreased production in Colorado, Michigan, and New York. New York's share of the national market is 7.8%--down from 11.5% in 1990. The share in value terms for the 1990 crop was 15.5%--i.e. New York onion prices were relatively higher than average national prices. This is particularly relevant because the 1990 onion crop in New York was abnormally high. Current grower prices for Orange Co. onions are significantly higher than a year ago--\$5.50 to \$6.25 per 50-lbs bag vs. \$2.85 to \$3.00 during fall 1990. Western and Central New York onion prices are slightly higher than Orange Co.--\$6.00 to \$6.50 during Fall 1991 vs. \$3.00 to \$3.25 during fall 1990.

Table IV presents figures for New York storage onion production for the past six years. Production in 1991 is only 9% below the five-year average, but 35% below last year's production. With the exception of Wayne Co., all producing regions had declines in production--between 15% to 30% yield reductions. Orange Co. production only represents 41.3% of state production in 1991 whereas historically it has represented over 50%. One reason for the lower share from Orange Co. in the shift to plant red onions or Red Boston lettuce. Also in 1991, 10% or about 300 acres in Orange Co. were planted with "Sweet Sandwich" onions.

The outlook for 1992 and beyond looks good if more acreage continues to be planted to "Sweet Sandwich" onions. They will not replace the traditional yellow globe onion, but with increased interest in a promotional effort to develop a niche for "New York Sweets", the possibility for additional production has increased. Also, Central and Western state production will continue to increase relative to Orange Co. production.

Table V presents the value of the major vegetables produced in New York. The commodities are ranked by their share of state vegetable production value. As compared to the 1989 ranking, tomatoes--both fresh and processed--elevated in ranking. The value of the strawberry crop increased one-share point as did potatoes. Also, as might have been expected from the high level of production, onion crop value increased by 3.5 share points. Commodities with a lower ranking in 1990 vs. 1989 were: fresh market cabbage, fresh market green beans, cucumbers, and celery.

TABLE III....U.S. STORAGE ONIONS: PRODUCTION AND CROP VALUE

		Pro	oduction		-	Crop Value				
	1988	1988 1989 1990 1991 ¹			1988	1989	1990 ¹	1991		
		1,00	00 cwt ·			millio	n dollars -			
New York	2,808	2,912	4,636	3,024	40.5	36.8	49.4	39.3 ²		
Colorado Idaho &	4,688	5,520	5,130	4,620	55.8	58.4	42.7			
Malheur Co. Michigan Oregon	10,140 1,900 1,512	9,288 2,212 1,418	10,296 2,442 1,365	10,915 2,044 1,152	85.3 17.0 11.2	91.2 17.8 15.1	79.4 15.4 11.8			
Washington Other	2,300 1,495	2,790 1,618	2,992 1,948	3,096 2,044	$19.9 \\ 11.8$	26.7 13.1	21.4 12.6			
Subtotal	25,167	25,826	28,809	26,895	241.5	258.9	232.7			
California	10,730	10,512	11,590	11,780	58.2	74.9	85.1			
TOTAL	35,897	35,495	40,399	38,675	299.7	338.9	318.4			

¹Preliminary.

² Based on fall prices. Source: <u>Vegetables, 1990 Summary</u>. Agricultural Statistics Board, National Agricultural Statistics Service. United States Department of Agriculture. June 1991.

	1986	1987	1988	1989	1990	19911	Five-Year Average 1987-1991
			1,(000 hundre	dweight		
Orange* Orleans-Genesee* Oswego* Madison* Steuben-Yates- Ontario Wayne and Other	1,998 650 392 160 182 <u>84</u>	1,652 660 458 144 135 <u>83</u>	1,050 648 448 140 156 88	1,500 315 504 182 288 123	2,340 930 760 126 360 <u>120</u>	1,250 676 612 121 247 <u>118</u>	1,558 646 556 143 237 106
TOTAL	3,456	3,132	2,808	2,912	4,636	3,024	3,302

TABLE IV NEW YORK ONION PRODUCTION BY AREA, 1986-1991

*Includes seed and set onions.

¹October 15, 1991 estimate.

Source: New York Agriculture and Markets, "Vegetables," New York Agricultural Statistics, Division of Statistics, October 15, 1991.

VEGETABLES

Commodity	Value of 1990 Production	1986-1990 Average Value	Highest Value In Last 15 Years	15 Year Value Trend(per year)	Value Share in 1990				
millions of dollars									
Potatoes	58.500	51.876	(1980) 97.628	zero	21.9%				
Onions	49.421	47.248	(1980) 62.612	zero	18.5%				
Cabbage (fresh)	27.150	32.156	(1983) 48.828	zero	10.1%				
Sweet Corn (fresh)	24.380	24.854	(1989) 29.958	+1.313	9.11%				
Tomatoes	16.397	14.100	(1988) 17.434	+0.649	6.13%				
Strawberries	14.110	10.267	(1990) 14.110	+0.543	5.27%				
Green Beans (fresh)	13.832	10.694	(1989) 18.603	+0.495	5.17%				
Green Beans (processed)	12.891	11.281	(1980) 19.134	zero	4.82%				
Sweet Corn (processed)	9.929	8.258	(1987) 11.005	+0.364	3.71%				
Cauliflower	8.408	8.966	(1984) 11.677	+0.321	3.14%				
Lettuce	8.112	8.129	(1981) 13.412	zero	3.04%				
Cucumbers	5.675	6.167	(1989) 8.068	+0.287	2.12%				
Green Peas (processed)	5.139	4.422	(1985) 8.564	+0.254	1.92%				
Tomatoes (processed)	3.928	3.405 (3 years)	(1990) 3.928	zero	1.47%				
Carrots	3.745	4.507	(1987) 5.555	+0.161	1.40%				
Beets	2.219	1.737	(1979) 2.950	-0.062	0.83%				
Cabbage for Kraut	2.203	2.184	(1981) 3.199	zero	0.82%				
Celery		3.004	(1981) 4.171	zero	_0.57%				
TOTAL	267 563	253,255			100%				

TABLE V.....COMMODITY RANKING OF VALUE OF NEW YORK STATE VEGETABLE PRODUCTION IN 1990.

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Source: <u>New York Agricultural Statistics 1990-1991</u>. New York Agricultural Markets, Division of Statistics. July 1991. Column 4 in table V indicates what year, within the last 15, was the highest in terms of value of production. Only two commodities had their best year be 1990--strawberries and processing tomatoes. The prior year, 1989, was the best year for fresh market sweet corn, fresh market green beans, and cucumbers. Column five from table V shows if the value of the commodity has shown any kind of trend over the past 15 years. As seen from the column, fresh market sweet corn value has increased the most--approximately \$1.313 million per year. Other commodities with increased value trends are: fresh market tomatoes, strawberries, fresh market green beans, processed sweet corn, cauliflower, cucumbers, processed green peas, and carrots. The only commodity showing a negative growth trend is beets. The reader should keep in mind that the figures are based on nominal prices so that inflationary pressures alone exhibit an increase. Therefore, a 'zero' trend may mean a negative trend in 'real' dollars.

	Onions	Potatoes	-	Snap Bear	15	Sweet Corn ¹		Corn ¹
Year	(Fresh) ²	(Fresh)3	Canned	Frozen	Canned	Frozen	Fresh	Total
							2 	14
1970	12.4	62.3	4.7	1.2	14.3	5.8	7.8	27.9
1971	13.1	56.1	4.6	1.3	14.8	5.5	7.5	27.8
1972	12.6	57.9	4.6	1.4	15.0	5.4	7.8	28.2
1973	12.5	52.4	4.9	1.7	14.5	6.0	7.9	28.4
1974	13.3	49.3	4.9	1.7	13.5	5.9	7.7	27.1
1975	13.4	52.6	4.4	1.4	12.0	6.3	7.8	26.1
1976	13.1	49.4	4.9	1.3	13.1	5.9	8.2	27.2
1977	13.7	50.1	4.8	1.4	14.1	7.4	7.6	29.1
1978	13.6	46.1	4.8	1.4	13.2	6.3	7.3	26.8
1979	14.7	49.6	4.7	1.4	12.5	6.8	7.2	26.5
1980	13.7	51.1	4.5	1.4	12.9	6.4	7.2	26.5
1981	13.0	45.7	4.6	1.7	12.1	6.2	7.1	25.4
1982	15.7	46.8	4.2	1.5	11.4	5.7	7.1	24.2
1983	15.4	49.7	4.0	1.5	11.5	6.6	7.3	25.4
1984	16.2	48.8	3.6	1.8	10.1	7.9	7.6	25.6
1985	16.9	46.7	3.7	1.9	11.7	7.8	7.6	27.1
1986	17.2	49.4	3.8	1.5	11.9	7.5	7.2	26.6
1987	16.8	48.9	3.7	1.7	10.5	7.8	7.4	25.7
1988	18.1	51.4	3.8	1.7	10.1	8.6	6.7	25.4
1989	17.9	49.8	3.9	1.9	9.3	7.8	7.5	24.6
19904	18.3	49.7	3.7	1.9	10.7	8.4	7.1	26.2

TABLE VI....PER CAPITA UTILIZATION, IN POUNDS - 1970-1990

¹ On cob basis.

² Includes California production, which is primarily for processing.

³ Crop year <u>not</u> calendar year.

⁴ Preliminary.

Source: Vegetables and Specialties: Situation and Outlook Report, USDA, Economic Research Service, TVS-254, August 1991.

Table VI presents national per capita consumption figures for four major vegetables and their various forms. The only real sustained growth has been for fresh market onions--almost a 50% increase over 20 years. Fresh market potato consumption has been flat since 1974, but last year was a record consumption year for all forms of potatoes--126 lbs. Frozen snap bean consumption has substituted for canned consumption with little change in total consumption. The same is true for sweet corn consumption.

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Distribution of Profit Firms by Number of Years in Business



Number of Firms Responded: 396

Source: Central New York Horticulture Agent's Survey.

ORNAMENTALS

During 1990, the central New York extension agents with responsibilities in ornamentals surveyed their respective constituencies--wholesale and retail nurseries, garden centers, florists, park/grounds superintendents for both private and public institutions, and other miscellaneous categories. A mail questionnaire was utilized to gather information on a number of issues pertinent to enhanced extension program delivery. The author was asked to tabulate the results of the survey and in the following section some of the information gathered is presented. Only a limited set of information is presented--for the entire survey results will be available soon.

One way of categorizing the results was to divide the respondents between those representing 'for-profit' firms and those associated with a 'not-for-profit' entity. Table I indicates how long forprofit firms have been in the business. Clearly, the majority of the businesses were established during the past 15 years-220 out of a total of 396. Relatively newer firms are more apt to be computerized, but also in need of relatively more information regarding market development.

Table II is specific to for-profit firms identifying themselves as florists. A relatively low number of total respondents were florists, but this group has some interesting aspects. First, they are relatively more established than other for-profit firm groups--26 years. Contrary to other types of businesses, most employees are permanent rather than temporary. And, the mean annual sales of nearly \$181,000.00 makes the group interesting from a financial perspective. The most interesting aspects of this group are the informational/training needs of the group. Almost without exception, the needs and concerns fall under business management skills. Though cooperative extension is not focused on retail establishment needs, it appears that with this important segment of the industry programming does need to focus on retail business management skills.

Table III provides a county breakdown of where responses originated. Overall the response rate was good, but significant differences in response rates were experienced by county. However, it is safe to say that Onondaga, Chenango, Oneida, Broome, and Tompkins counties are the major counties within Central New York.

Table IV perhaps provides the more relevant information for extension programming. Though extension agents cannot advocate for less government regulations, it is certainly within the agents purview to assist constituencies in mobilizing their resources to challenge and/or make government regulations easier to implement. Within labor management and/or training, cooperative extension already has been developing a program, but up to now it has mostly been delivered to the dairy sector. In time, much of what has been developed can probably be transferred to the ornamentals sector. Certainly in the areas of new technology and pest management, cooperative extension has a role to play.

TABLE II. ORNAMENTALS

Table . Profile of Florists.*

		Responses		
Mean Number of Permanent Employees		6.39		
Mean Number of Temporary Employees	1.06			
Mean Number of Years in Business	26.26			
Mean Annual Sales of Firms		\$180,672		
Training Needs of Management	(1) (2)	Business Management Customer Relations		
Training Needs of Employees	(1) (2)	Customer Relations Business Management		
Greatest Concerns of Firms	(1) (2)	Labor Pool Shortage Government Regulations and/or Restrictions		
Critical Issues for Firms	(1) (2)	Economy/Consumer Demand Consumer Education		

Number of firms responding equals 31.

Source: Central New York Horticulture Agent's Survey.



Number of Firms

Source: Central New York Horticulture Agent's Survey

ORNAMENTALS

Number of Firms Responded: 396

Greatest Concerns for Profit Firms



Number of Firms: 368 (excludes 28 responding 0 concerns)

Note: Firms responded to more than one concern.

Source: Central New York Horticulture Agent's Survey

TABLE IV. ORNAMENTALS

ORNAMENTALS

Table V presents the latest information available on the national floriculture industry. U.S. floriculture crops' value increased by nearly 14% from 1989 to \$2.77 billion dollars. This growth rate was twice the rate between 1988-'89. The largest increase was in the potted flowering plants category while the more modest increase was in the cut flowers category. In dollar terms, potted flowering plants also had the largest increase-\$151 million while bedding plants was second-\$104 million.

	1989		19	1990		
	Value	Percent of Total	Value	Percent of Total	Over 1989 Percentage	
Cut Flowers	469,800	19.3%	503,000	18.2%	+ 7.2%	
Potted Flowering	522,000	21.5	673,000	24.3	+28.9	
Foliage Plants	476,000	19.6	512,000	18.5	+7.6	
Bedding Plants	867,000	35.6	971,000	35.1	+12.0	
Cut Greens	98,800	4.0	111,000	3.6	+ 12,3	
Total Value	2,432,800	100.0%	2,770,000	100.0%	+13.9	

TABLE V.....SUMMARY OF U.S. FLORICULTURE CROPS WHOLESALE VALUE OF SALES, 1989 AND 1990 -- 1,000 DOLLARS

Source: <u>Floriculture Crops - 1990 Summary</u>, U.S. Department of Agriculture, National Agricultural Statistics Service, Agricultural Statistics Board, April 1991.

Most likely floriculture crop value will surpass \$3 billion in 1991 because bedding plant demand was strong during this past season. With increased imports of cut flowers cutting into domestic producer's market share, the value of cut flowers will not increase at rates similar to other categories. However, potted flowering plants will continue to have strong growth because supermarkets are now devoting more square feet to their florist departments. Potted flowering plants are popular items for supermarket shoppers. In addition, many more Americans are getting back to gardening as either a hobby or as a means for growing more vegetables. In both instances, the demand for bedding plants will increase and continue to be the leading category within floriculture.

Table VI presents figures for New York's floriculture crop wholesale value. Because of a change in reporting, the figures are not directly comparable to the previous year. However, the reported crops' value increased to \$122,326,000 from \$117,741,000 in 1989. The categories that can be compared indicate modest growth--Foliage for indoor/patio use--to flat growth--cut flowers and bedding garden plants. In fact, the trend in New York was contrary to what took place across the country. New York's share of the total national market in terms of wholesale value was 4.4% as compared to 4.8% in 1989.

The outlook for 1992 and beyond will be good for firms producing products that retail supermarkets carry in their florist departments. In addition, the increased interest in gardening--for both vegetable and flowers--will increase the demand for these type of bedding plant products. For cut flowers, imports will continue to increase their share of the national market.

	Commercial						
	Producers	1 Quantity	Sold	Value			
	Number			\$1,000			
Cut Flowers							
Carnations							
Standard	19	351,000	blooms	119			
Chrysanthemums	51	715 000		500			
Standard	51	/15,000	blooms	580			
Pompon	47	182,000	bunches	437			
Hybrid Tea	25	22 193 000	blooms	15 002			
Sweetheart	17	6,330,000	blooms	2.943			
Other Cut Flowers	79		01001110	2,113			
Total				21,194			
				$(+0.2\%)^2$			
Potted Flowering Plants							
African Violets	81	1,084,000	pots	2,464			
Chrysanthemums	143	1,928,000	pots	4,819			
Finished Florist Azaleas	104	3,629,000	pots	9,736			
Poincetting	139	2 840 000	pots	2,157			
Total	212	2,049,000	pors	29.618			
1 Out				29,010			
Foliage For Indoor/Patio Use							
Potted Foliage	112		× 1.1 ×	2,245			
Foliage Hanging Baskets	264	549,000	baskets	3,006			
Total				5,251			
Bedding Garden Plants (flats)				(+9.3%)			
Geraniums	155	261.000	flats	2 947			
Other Flowering and Foliar Plants	514	3,464,000	flats	24.698			
Vegetable Type Plants	447	748,000	flats	5,685			
Total				33,330			
				(+0.5%)			
Other Potted Plants	0.40	1 (70 000	5.54	2 100			
Hardy Garden Chrysanthemums	248	1,072,000	pots	3,100			
Geraniums (seed)	1/0	5,637,000	pots	5 506			
Other Potted and Foliar Plants	268	4 414 000	pots	6,528			
Vegetable Plants	148	839,000	pots	1,193			
Foliage Hanging Baskets	513	1,503,000	baskets	9,439			
Total				38,184			
Total of Reported Eloricultur	e Crone			122 326			
rotar of Keporteu Fiorteuntur	o Crops			122,520			

TABLE VI.....COMMERCIAL PRODUCERS, QUANTITIES SOLD, AND WHOLESALE VALUE OF SELECTED FLORICULTURE CROPS, NEW YORK, 1990

¹ More than \$10,000 in gross sales of all floriculture crops.

2 Percentage change from 1989 sales.

Source: <u>Floriculture Crops 1990 Summary</u>, U.S. Department of Agriculture, National Agriculture Statistics Service, Agricultural Statistics Board, April 1991.
Other Agricultural Economics Extension Publications

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- No. 91-30 Considerations in Establishing George Casler Retirement Plans for Farm Employees Tom Maloney
- Item Pricing in New York State: Gene A. German No. 91-31 A Three Phase Study Focusing on Debra J. Perosio Pricing System Accuracy, Consumer Perception and Related Costs to the Food Industry