DAIRY FARM MANAGEMENT BUSINESS SUMMARY

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NEW YORK

1979

Stuart F. Smith

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

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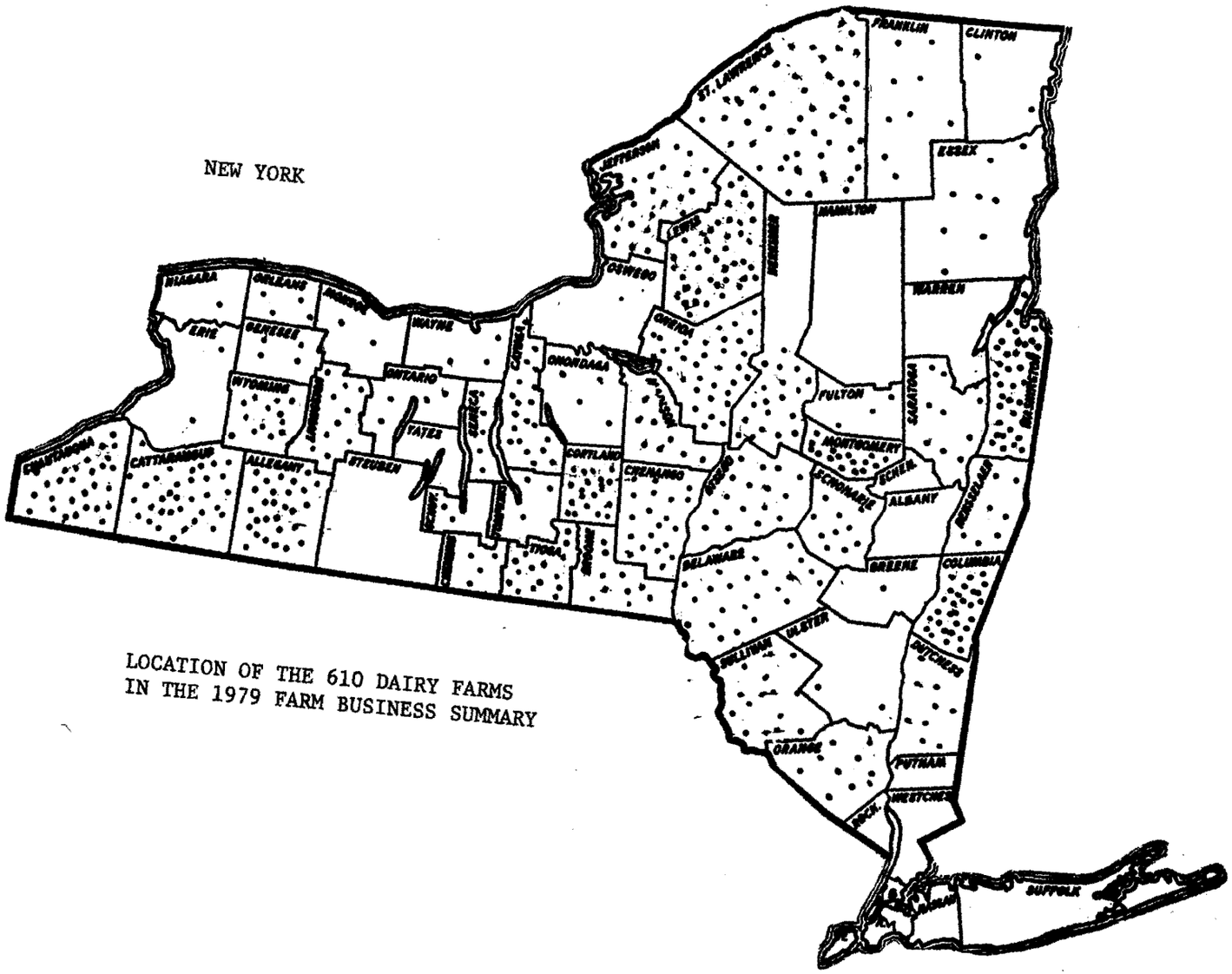
NEW YORK



LOCATION OF THE 610 DAIRY FARMS
IN THE 1979 FARM BUSINESS SUMMARY

INTRODUCTION

Farm business management projects are a basic part of the agricultural extension program in New York State. The New York State College of Agriculture and Life Sciences at Cornell University and the County Extension staffs cooperate in sponsoring these projects. In 1979, about 800 dairy farmers participated in these management projects. Each dairyman submitted farm business record information to the College for summary and analysis. These records provide the basis for extension educational programs and also data for applied research studies.

Extension agents and specialists enrolled the cooperators and collected the records. Regional summary reports were prepared by the college staff for use by the agents in winter meetings with farmers. Each cooperator received a summary and analysis of his business, and a regional report for use in studying his or her operation. These extension activities aim to help the operators develop their managerial skills and solve business management problems.

The records from all regions of the State have been combined for use in an applied research study of the effects of price and technological changes on dairy farm incomes. This research also provides current farm business information for use by dairymen, extension staff, teachers, agribusinessmen, policy makers, and others concerned with the New York dairy industry.

A total of 610 farm business records have been included in the general dairy summary for 1979. These 610 farms do NOT represent the "average" for all dairy farms in the State. Participation was on a voluntary basis so not all areas or types of operations were represented (see map on opposite page). The 610 farms do represent a good cross section of better than average commercial dairy farm operators in the State.

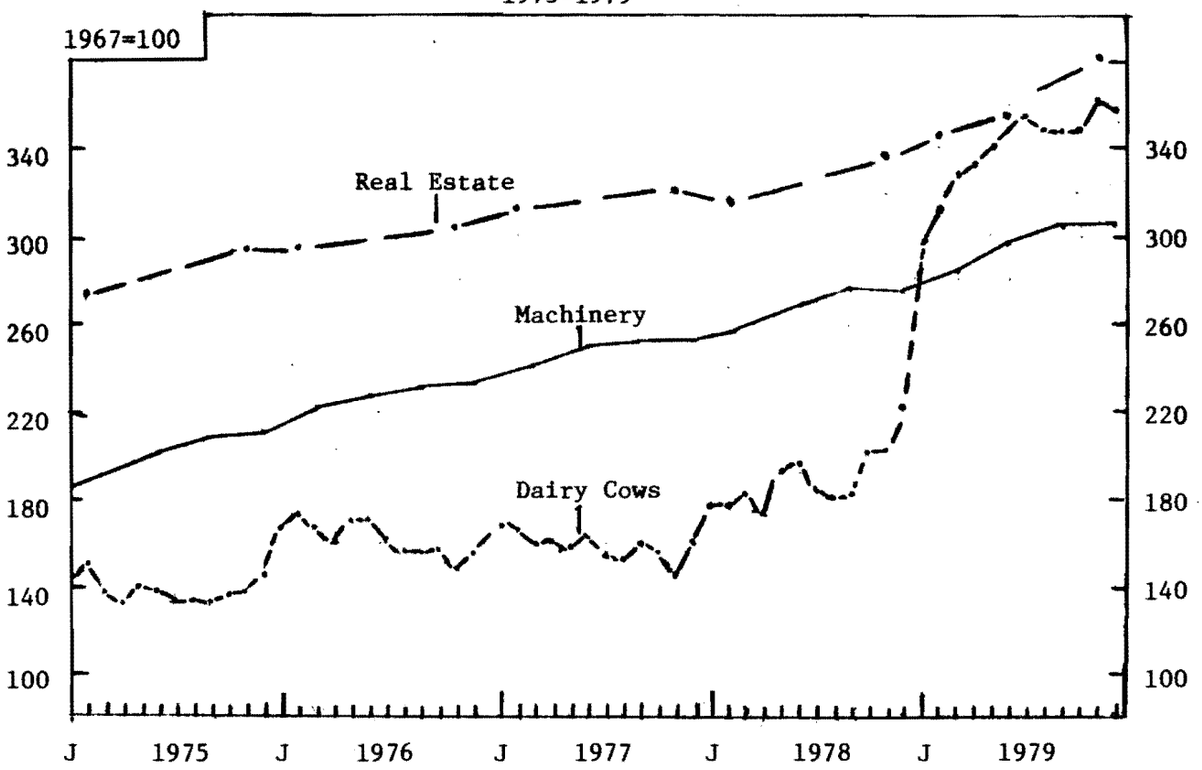
1979 Regional Summary Publications

Region	Publications	Author(s)
Southeastern New York	A.E. Ext. 80-3	Stuart F. Smith Gerald J. Skoda
Eastern Plateau	A.E. Ext. 80-6	Stuart F. Smith
Oneida-Mohawk Region	A.E. Ext. 80-8	Eddy L. LaDue
Northern New York	A.E. Ext. 80-9	Robert A. Milligan
Columbia & Dutchess Counties	A.E. Ext. 80-10	Stuart F. Smith
Western Plateau	A.E. Ext. 80-12	Loren W. Tauer
Western Plains	A.E. Ext. 80-13	Wayne A. Knoblauch
Northern Hudson Region	A.E. Ext. 80-14	Stuart F. Smith
Central New York	A.E. Ext. 80-15	Wayne A. Knoblauch

Acknowledgements

W. A. Knoblauch, E. L. LaDue, A. C. Lowry, R. A. Milligan, S. F. Smith and L. W. Tauer, with the assistance of the Cooperative Extension Agents and Specialists, supervised the farm business management projects and the records which made this summary possible. Summarization and tabulation of the records and all machine operations were completed under the supervision of Myrtle Voorheis. The typing and completion of the publication was under the direction of Cindy Farrell.

Prices VALUE OF NEW YORK FARM REAL ESTATE, DAIRY COWS & MACHINERY
1975-1979



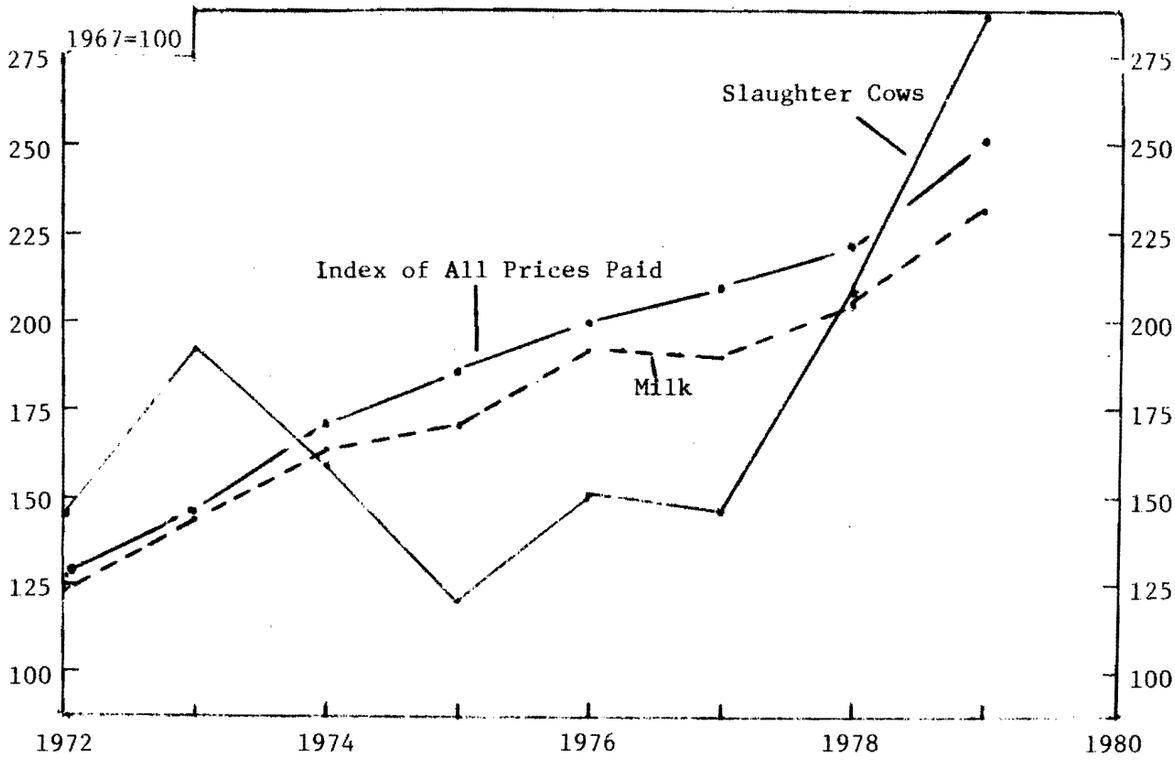
Price changes have a direct affect on the inventory values on New York dairy farms. Real estate and machinery prices have risen steadily during the past five years. Dairy cow prices dropped during 1974, rose sharply in late 1975, fluctuated throughout 1976 and 1977, and then jumped 62 percent in 1978. Dairy cow prices continued upward in 1979 and were reported at $1,105 for December, or 38 percent above the December 1978 price. From 1967 to 1979, machinery prices increased 205 percent, dairy cows 256 percent and real estate increased 281 percent.

Table 1. REPORTED VALUES OF DAIRY FARM INVENTORY ITEMS, 1975-1979

	N.Y. Dairy Cows		Machinery	N.Y. Farm Real Estate	
Year*	Value/Head	1967=100	1967=100	Value/Acre	1967=100
1975	(Dec.) $450	145	(Dec.) 222	(Nov.) $543	294
1976	(Dec.) 485	156	(Dec.) 233	(Nov.) 562	304
1977	(Dec.) 495	160	(Dec.) 253	(Nov.) 593	320
1978	(Dec.) 800	258	(Dec.) 276	(Nov.) 629	339
1979	(Dec.) 1105	356	(Dec.) 305	(Nov.) 704	381
Percent change:					
1975 to 1976	+ 8%		+ 5%	+ 3%	
1976 to 1977	+ 3%		+ 9%	+ 5%	
1977 to 1978	+62%		+ 9%	+ 6%	
1978 to 1979	+38%		+ 9%	+12%	

* Latest figure reported for year, i.e., November for real estate.

PRICES RECEIVED AND PAID BY NEW YORK DAIRY FARMERS, 1972-1979

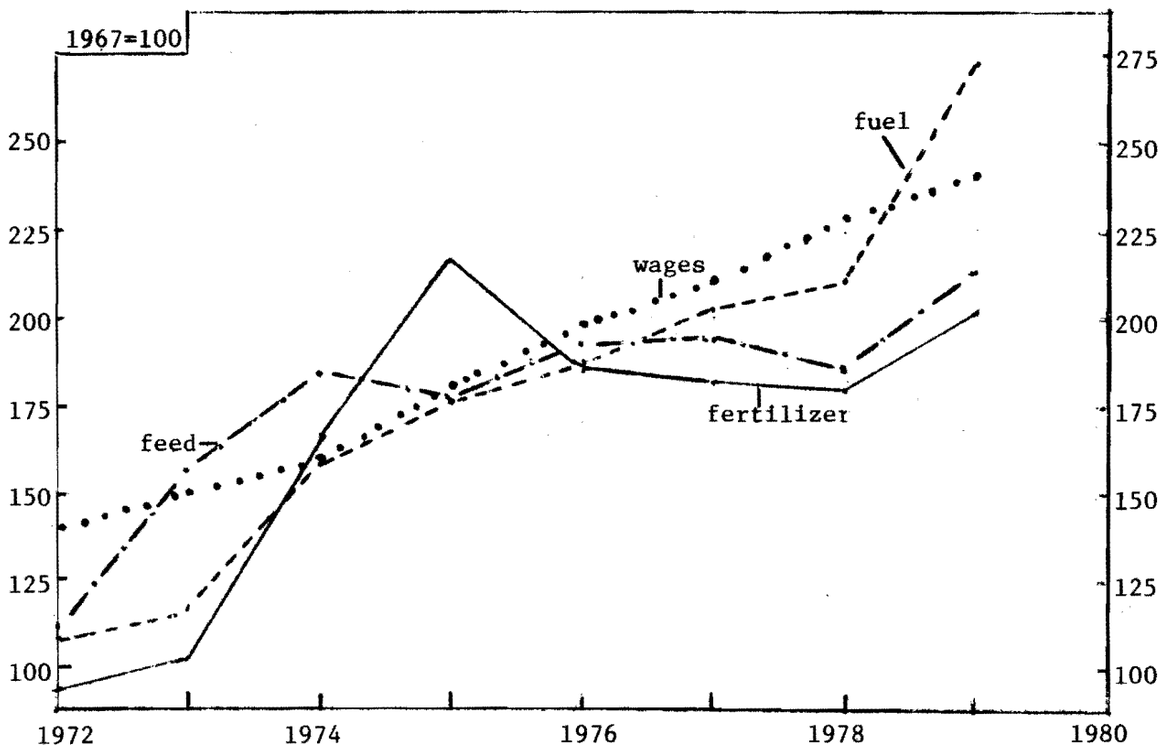


The relationship of prices received to prices paid is a major factor in determining farm income. The graph above shows the trend in prices since 1972 for milk, cull cows, and the index of prices paid by New York dairy farmers. Milk prices have lagged behind all prices paid since 1971. Slaughter cow prices follow the beef cycle and have risen sharply since 1977. In 1979, prices paid rose 14 percent, milk three percent, and slaughter cows 38 percent.

Table 2. PRICES RECEIVED & PAID BY NEW YORK DAIRY FARMERS, 1967-1979

Year	Milk 3.5% B.F. (cwt.)	Slaughter Cows (cwt.)	Prices Paid by N.Y. Dairy Farmers (1967=100)	Monthly Farm Price Per 100 Lbs. of Milk, 1979	
1967	$5.07	$17.10	100		
				January	$11.49
1970	5.89	20.70	112	February	11.57
1971	6.02	21.20	120	March	11.12
1972	6.25	24.48	126	April	10.95
1973	7.30	32.80	146	May	10.93
1974	8.24	27.40	172	June	11.03
				July	11.60
1975	8.64	20.60	186	August	12.23
1976	9.71	25.57	200	September	12.51
1977	9.61	25.09	210	October	12.64
1978	10.38	35.58	221	November	12.62
1979	11.74	49.27	252	December	12.25

PRICES PAID BY FARMERS FOR SELECTED ITEMS, 1972-1979



Prices of major farm inputs have all increased since 1972 but only wages paid by farmers have increased at a fairly constant rate. Feed prices rose 15 percent in 1979 following a four year period of stable prices. Fertilizer prices increased 12 percent in 1979 after declining for three consecutive years. Fuel prices jumped 29 percent last year following four years of single digit increases.

Table 3. PRICES PAID BY FARMERS FOR SELECTED ITEMS, 1973-1979

	Index 1967=100				
Year	Feed	Fertilizer	Fuel	Wages	Taxes
1972	112	94	108	140	142
1973	157	102	116	150	146
1974	185	167	159	160	154
1975	177	217	177	180	166
1976	192	185	187	199	176
1977	194	182	203	212	195
1978	186	180	212	229	210
1979	213	202	273	241	221
Percent increase:					
1972 to 1978 (ave./year)	13%	16%	22%	10%	8%
1978 to 1979	15%	12%	29%	5%	5%

SOURCE: U.S.D.A. - Agricultural Prices

SUMMARY OF THE FARM BUSINESS

Business Characteristics and Resources Used

Recognition of important business characteristics and a knowledge of the farm resources used helps in evaluating management performance. The combining of resources and management practices is known as farm organization. Important farm business characteristics, the number of farms reporting these characteristics, and the average use of labor and land resources, are presented in Table 4.

Table 4. BUSINESS CHARACTERISTICS AND RESOURCES USED
610 New York Dairy Farms, 1979

Type of Business	Number	Percent	Business Records	Number	Percent
Individual	485	80	Account Book	247	41
Partnership	113	18	Agrifax	147	24
Corporation	12	2	CAMIS	106	17
			Agway	44	7
Barn Type			Farm Bureau	13	2
Stanchion	368	60	Other	53	9
Free Stall	213	35			
Other	29	5	Dairy Records		
			D.H.I.C.	434	71
Milking System			Owner Sampler	62	10
Bucket & Carry	13	2	Other	30	5
Dumping Station	150	25	None	84	14
Pipeline	252	41			
Herringbone	164	27			
Other Parlor	31	5			

Labor Force	My Farm	Average	Land Used	My Farm	Average
Operator	_____	15 mo.	Total acres:		
Family paid	_____	4 mo.	Owned	_____	315
Family unpaid	_____	3 mo.	Rented (489)	_____	96
Hired	_____	10 mo.	Crop acres:		
Total months	_____	32 mo.	Rented (483)	_____	73
			Total	_____	228
Operators (755)	_____	1.24			
Age	_____	41 yrs.	Number of Cows		
Education	_____	13 yrs.	Beginning of year	_____	75
Estimated value			End of year	_____	78
labor & management	$_____	$13,720	Ave. for year	_____	75

The most typical dairy farm was managed by an individual owner using a stanchion barn, milk transfer system, farm account book and DHIC records. There were 755 operators on the 610 dairy farms for an average of 1.24 full-time operators per farm. The operators averaged 41 years of age and 13 years of formal education. Their estimated value of labor and management averaged $13,700 per operator.

Four-hundred-eighty-three farms rented an average of 73 acres of cropland. Six additional farms rented pastureland. All 610 farms averaged 228 total crop acres of which 58 acres were rented.

Farm Inventory Values

Table 5. CAPITAL INVESTMENT - FARM INVENTORY VALUES
610 New York Dairy Farms, 1979

Item	My Farm 1/1/79	My Farm 1/1/80	Average 610 Farms 1/1/79	Average 610 Farms 1/1/80
Livestock	$_____	$_____	$ 82,670	$106,271
Feed & supplies	_____	_____	23,153	27,496
Machinery & equipment	_____	_____	61,887	71,063
Land & buildings	_____	_____	171,480	190,093
TOTAL	$_____	$_____	$339,190	$394,923

The total farm inventory on the 610 dairy farms increased an average of $55,700 per farm or 16 percent during 1979. The livestock inventory jumped $23,600 or 29 percent and accounted for 42 percent of the total increase. Feed and supplies were up 19 percent, th machinery inventory increased 15 percent and the real estate inventory went up $18,600 or 11 percent.

Feed and supply inventories increased in 1979 even though hay and forage prices were higher in 1978. Crop production improved in 1979 and many dairy farmers added purchased feed and supplies to year-end inventories with cash reserves built up during the year.

A sharp rise in cattle prices during 1979 was the primary cause of the increase in livestock inventories. Milk cow prices reported by the New York Crop Reporting Service increased from $800 per head in December 1978 to $1,105 in December 1979 for a 38 percent jump. Since it is suggested that inventories reflect market values, the large increase in livestock inventories is to be expected.

Table 6. CHANGES IN LIVESTOCK INVENTORY VALUES
610 New York Dairy Farms, 1979

Item	Average of 610 Farms Value	Number of Cows	Ave. Value/Cow and .72 Heifers
Inventory 1/1/79	$ 82,670	75	$1,102
Inventory 1/1/80	106,271	78	1,362
Change 1/79 to 1/80	+$ 23,601	+ 3	+$ 260

Increase due to change in cattle values: 75 cows x $260 = $19,500
Increase due to herd expansion: $23,601 - $19,500 = $4,101

Changes in livestock inventory attributed to higher values placed on the existing herd versus the increase caused by herd expansion are shown in table 6. Dairy cow numbers averaged 75 head at the beginning of the year and 78 at year's end. Business data from farms that participated in both 1978 and 1979 summaries indicate that the ratio of heifers to cows remained at 72 percent over the two year period.

Machinery and Real Estate Calculations

Capital expenditures for machinery and buildings usually occur in large amounts but then are used over a number of years. Calculation of the machinery depreciation to be charged to the 1979 business is shown below. The building depreciation shown in table 7 is an approximation of the amount reported for tax purposes. Both are included as farm expenses on page 10.

Table 7. MACHINERY DEPRECIATION
610 New York Dairy Farms, 1979

Item	My Farm		Average 610 Farms	
Beginning inventory	$_____		$61,887	
Purchases	_____		17,056	
Total (1)		$_____		$78,943
End inventory	$_____		$71,063	
Sales	_____		490	
Total (2)		$_____		$71,553
DEPRECIATION (1 minus 2)		$_____		$ 7,390
Percent depreciation		_____%		9%

Table 8. REAL ESTATE CALCULATIONS
610 New York Dairy Farms, 1979

Item	My Farm		Average 610 Farms	
Beginning inventory		$_____		$171,480
Plus cost of purchases	$_____		$15,880	
Less lost capital	-_____		- 2,630	
Value added		+_____		+ 13,250
Less building depreciation	$_____		$ 3,980	
Less items sold	_____		911	
Value deducted		-_____		- 4,891
Plus appreciation		+_____		+ 10,254
End of year inventory		$_____		$190,093

Lost capital is the difference between the cost of new buildings purchased during the year and the amount these improvements added to the sale value of the farm. Lost capital is not included in farm expenses since building depreciation is based on the full cost of new buildings and will account for the lost capital over the life of the building.

Real estate appreciation was estimated by each farm operator. It is the increase in real estate market value caused by demand and inflation. Appreciation averaged six percent of the beginning real estate inventory on these farms in 1979.

Receipts

Total farm receipts indicate the value of the farm's production for the year. All the cash received for products sold plus the increases in livestock and feed and supply inventories are included. The receipts on these 610 farms averaged about $480 per day or $6 per cow per day.

Table 9. FARM RECEIPTS
610 New York Dairy Farms, 1979

Item	My Farm	Average 610 Farms		
		Per Farm	Per Cow	Percent
Milk sales	$_____	$127,299	$1,697	87
Crop sales	_____	1,220	16	1
Dairy cattle sold	_____	12,005	160	8
Other livestock sales	_____	3,356	45	2
Gas tax refunds	_____	145	2	--
Government payments	_____	623	8	1
Work off farm	_____	214	3	--
Custom machine work	_____	132	2	--
Miscellaneous	_____	1,346	18	1
Total Cash Receipts	$_____	$146,340	$1,951	100
Increase in livestock inventory	_____	23,601	315	
Increase in feed & supply inventory	_____	4,343	58	
TOTAL FARM RECEIPTS	$_____	$174,284	$2,324	

The dairy herd generated 95 percent of the cash receipts realized by these dairy farmers in 1979. Ninety-three percent of the total farm receipts can be directly attributed to the production, growth and increase in value of the dairy herd. The increases in livestock and feed and supply inventories are examined on page six.

Table 10. INCOME ANALYSIS
610 New York Dairy Farms, 1979

Item	My Farm	Average 610 Farms	Top 10%*
Average price per cwt. milk sold	$_____	$11.90	$11.97
Milk sales per cow	$_____	$1,697	$1,790
Total cash receipts per man	$_____	$54,200	$69,143

* Sixty-one farms with highest labor and management income per operator.

The average price received for milk sold on all the farms was $11.90 per hundredweight in 1979, $1.39 above the 1978 average. Milk sales per cow averaged $1,700 for the 610 farms, while the top 10 percent based on labor and management income averaged $1,800 per cow. Total cash receipts per man averaged $54,200 for all farms and $69,143 or 27 percent more for the top 10 percent.

The average price per hundredweight of milk sold is calculated by dividing the gross milk receipts for the year by the total pounds of milk sold. The average price for the 610 farms was $11.90 but there was considerable variation among the individual farms. The variation in average price received for different farms is shown below.

Variation in Average Milk Price Received

Average Price Per Cwt. Received for Milk	Farms	
	Number	Percent
Below $11.00	20	3
$11.00 to $11.49	103	17
11.50 to 11.99	299	49
12.00 to 12.49	97	16
12.50 to 12.99	69	11
Over 12.99	22	4
Total	610	100

Nearly one-half of the farms received from $11.50 to $11.99 per hundredweight for milk sold. Fifteen percent of the farms received $12.50 per hundredweight or more but three percent got less than $11.00 per hundredweight. Location and organization of markets are factors contributing to the variability of milk prices on these dairy farms. Management practices on farms as well as in milk companies also affect farm milk prices. Seasonality of production and butterfat test are two variables under the direct control of the farm manager.

Total farm receipts are sometimes used as a measure of size of business. The Census of Agriculture uses this measure in classifying farms. The distribution of total farm receipts of the 610 farms in 1979 is shown below.

Distribution of Farms by Total Farm Receipts

Total Farm Receipts	Farms	
	Number	Percent
Under $ 50,000	9	2
$ 50,000 to 99,999	141	23
100,000 to 149,999	189	31
150,000 to 199,999	107	18
200,000 to 249,999	52	9
250,000 to 299,999	39	6
300,000 to 349,999	27	4
350,000 to 399,999	13	2
400,000 and over	33	5
Total	610	100

Only two percent of the 610 farms had total farm receipts under $50,000, while five percent had receipts of $400,000 or more.

Expenses

Total cash farm expenses for the 610 farms averaged about $300 per day or $4.00 per cow per day. Total farm expenses averaged $400 per day. The average expenses per farm and per cow for each expense item are shown below.

Table 11. FARM EXPENSES
610 New York Dairy Farms, 1979

Item	My Farm	Average 610 Farms Per Farm	Average 610 Farms Per Cow	Percent
Labor				
Hired labor	$_____	$ 10,593	$ 141	10
Feed				
Dairy concentrate	_____	34,946	466	32
Other feed	_____	1,105	15	1
Machinery				
Machine hire	_____	979	13	1
Machinery repairs	_____	6,440	86	6
Auto expense (farm share)	_____	433	6	--
Gas and oil	_____	4,589	61	4
Livestock				
Purchased animals	_____	5,341	71	5
Breeding fees	_____	1,600	21	1
Veterinary and medicine	_____	2,366	32	2
Milk marketing	_____	3,385	45	3
Other livestock expense	_____	4,532	61	4
Crops				
Lime and fertilizer	_____	6,644	89	6
Seeds and plants	_____	2,083	28	2
Spray and other crop expense	_____	1,663	22	1
Real Estate				
Land, building, fence repair	_____	2,220	30	2
Taxes	_____	3,037	40	3
Insurance	_____	2,196	29	2
Rent	_____	1,685	22	2
Other				
Telephone (farm share)	_____	477	6	--
Electricity (farm share)	_____	2,269	30	2
Interest paid	_____	10,666	142	10
Miscellaneous	_____	1,622	22	1
TOTAL CASH EXPENSES	$_____	$110,871	$1,478	100
Machinery depreciation	_____	7,390	99	
Building depreciation	_____	3,980	53	
Unpaid labor	_____	1,350	18	
Interest on equity capital @ 9%	_____	23,526	314	
Decrease in livestock inventory	_____	0	0	
Decrease in feed & supply inventory	_____	0	0	
TOTAL FARM EXPENSES	$_____	$147,117	$1,962	

The cash expense classifications used on page 10 are taken from the "Cornell Farm Account Book".

Interest paid on farm indebtedness is included as a cash expense in these summaries. Debt payments usually include both interest and principal but only the interest portion is included in the expenses. Principal payments are an investment not an operating expense of the business.

Machinery and real estate depreciation calculations are shown on page 7. Expenditures for machinery and buildings are usually made in large amounts. To include all the expenses in the year of purchase would inflate the farm expenses for that year.

Unpaid family labor refers to work done by members of the family who are not paid cash wages. The operator's labor is not included. Unpaid family labor is charged to the business at $450 per month.

Interest on equity capital at nine percent has been included as a non-cash expense item. This represents what the operator might have earned on his equity capital had he not had it invested in the farm business. This is often called an "opportunity cost". The end-of-year farm net worth (see page.15) is used as the equity capital for computing this interest charge.

Decrease in livestock and feed inventories is the amount that the beginning inventory for each of these two items exceeds the end inventory. Since this indicates a "using up" of inventory items, it is considered as a farm expense for the year. For the 610 farms, the net inventory change was an increase for feed and supplies and livestock.

Classifying farm expenses as fixed and variable costs is helpful in forward planning or budgeting. Fixed or overhead costs do not vary directly with changes in production and include some cash expenses, capital maintenance costs and opportunity costs. Variable costs change with variations in units of input and are all cash operating expenses.

Fixed (overhead) Costs		Variable Costs	
Land & building repairs	$ 2,220	Labor	$10,593
Real estate taxes	3,037	Feed	36,051
Insurance	2,196	Machinery repairs	6,440
Rent	1,685	Gas & oil	4,589
Interest paid	10,666	Machine hire	979
Fixed Cash Expenses	$19,804	Auto	433
Depreciation	$11,370	Livestock purchased	5,341
Unpaid labor	1,350	Livestock expenses	11,883
Interest on equity capital	23,526	Fertilizer & lime	6,644
Total Fixed Costs	$56,050	Other crop expenses	3,746
		Electricity	2,269
		Telephone	477
		Miscellaneous	1,622
		Total Variable Costs	$91,067

Several costs including repairs, rent, and utilities may be partly fixed and variable depending upon the size and nature of the business.

Financial Summary of Year's Business

The financial summary of the year's business reflects the results of the management. Researchers have developed a number of ways to measure the returns from a farm business. Four common measures are reported here. The measure selected at any one time will depend on the purpose for which it is used.

Table 12. NET CASH FARM INCOME
610 New York Dairy Farms, 1979

Item	My Farm	Average 610 Farms	
		Per Farm	Per Cow
Cash Farm Receipts	$_____	$146,340	$1,951
Cash Farm Expenses	_____	110,871	1,478
NET CASH FARM INCOME	$_____	$ 35,469	$ 473

Net cash farm income is a measure of the cash available from the year's farm operations for family living, principal payments and other uses. A family may have additional cash available if they have nonfarm income. Net cash income is not a good measure of farm business profits but it shows the cash flow situation, and is useful in planning debt repayment programs and family budgets.

Table 13. LABOR AND MANAGEMENT INCOME
610 New York Dairy Farms, 1979

Item	My Farm	Average 610 Farms, 1979 Increase in Cattle Prices		Average 527 Farms
		Included	Excluded	1978
Total Farm Receipts	$_____	$174,284	$154,784	$139,700
Total Farm Expenses	_____	147,117	145,362	115,443
LABOR & MANAGEMENT INCOME	$_____	$ 27,167	$ 9,422	$ 24,257
No. of Operators per Farm	_____	1.24	1.24	1.21
LABOR & MGT. INCOME/OPERATOR	$_____	$ 21,962	$ 7,598	$ 20,047

Labor and management income measures the return to the operator for his or her efforts in operating the business. A nine percent charge for the use of equity capital (see explanation on page 11) is included as a farm expense. Labor and management income per operator is the measure generally used for comparing farm businesses. There were 755 operators on the 610 farms in 1979.

In table 13, 1979 labor and management income is reported with the increase in inventory due to higher cattle prices included and excluded. The average labor and management income reported for 527 farms summarized for 1978 includes the "increase in cattle prices". Excluding the 1979 increase in inventory caused by rising cattle prices not only reduces farm receipts by $19,500 but also lowers year-end farm equity which reduces the average interest charge by $1,755 per farm. Labor and management income averaged $6,778 per operator in 1978 when the effect of rising cattle prices was excluded from the change in inventory.

Since dairy cattle prices did rise in 1979 and farmers are encouraged to inventory using current market values, the labor and management income comparisons presented in the balance of this study include the "increase in cattle prices".

Labor and management income per operator averaged $21,962 on these 610 dairy farms in 1979 but the range was from less than $0 to more than $60,000. Returns to labor and management income ranged from $10,000 to $29,999 on 40 percent of the farms. Negative returns were found on 12 percent of the farms while five percent showed labor and management incomes of $60,000 or more per operator.

Distribution of Labor and Management Income Per Operator

Labor and Management Income Per Operator	Farms	
	Number	Percent
Minus	72	12
$ 0 to $ 9,999	105	17
10,000 to 19,999	137	22
20,000 to 29,999	108	18
30,000 to 39,999	75	13
40,000 to 49,999	53	9
50,000 to 59,999	26	4
60,000 or more	34	5
TOTAL	610	100

Labor, management, and ownership income per operator reflects the combined return to the farmer for his triple role of worker-manager, financier, and owner. This measure includes appreciation on real estate and interest on equity capital, as returns to ownership. This measure of farm profit includes the operator's gain in net worth as well as net farm income. The average labor, management, and ownership income per operator was $49,270, more than double the labor and management income per operator.

Table 14. LABOR, MANAGEMENT AND OWNERSHIP INCOME
610 New York Dairy Farms, 1979

Item	My Farm	Average 610 Farms	Percent
Labor & management income per farm (p. 12)	$_____	$27,167	45
Real estate appreciation (p. 7)	_____	10,254	17
Interest on equity capital @9% (p. 10)	_____	23,526	38
Total Per Farm	$_____	$60,947	100
Number of operators per farm	_____	1.24	
LABOR, MANAGEMENT & OWNERSHIP INCOME PER OPERATOR	$_____	$49,270	

Management income may also be used in comparing the profitability of various farm businesses. It is determined by subtracting a value for the operator's labor from labor and management income per operator. When the operator's labor is valued at $7,800 management income is $14,162 or 12 percent of average cash receipts per operator. If labor were charged at $900 per month, management income would be $11,162 per operator or 10 percent of cash receipts per operator. However, if the increase in cattle inventory attributed to rising cow prices were excluded from management income, it would become a negative figure.

Return on Equity Capital can be computed with or without real estate appreciation. To calculate return on equity capital (including real estate appreciation), the estimated value of operator's labor and management is deducted from labor, management and ownership income. This return to equity capital is divided by the farm net worth to get the rate of return on equity capital. To compute return on equity capital, excluding real estate appreciation, real estate appreciation must be deducted from ownership income.

Table 15. RETURN ON EQUITY CAPITAL
610 New York Dairy Farms, 1979

Item	My Farm	Average 610 Farms
	Including Real Estate Appreciation	
Labor, Management & Ownership Income (p. 13)	$_____	$ 60,947
Value of Operator's Labor & Management (p. 5)	_____	(1.24) 16,940
RETURN ON EQUITY CAPITAL	$_____	$ 44,007
Amount of Equity Capital	_____	$261,398
RATE OF RETURN ON EQUITY CAPITAL	_____%	16.8%
	Excluding Real Estate Appreciation	
Return on Equity Capital (from above)	$_____	$ 44,007
Real Estate Appreciation	_____	10,254
RETURN ON EQUITY CAPITAL	$_____	$ 33,753
Amount of Equity Capital	_____	$261,398
RATE OF RETURN ON EQUITY CAPITAL*	_____%	12.9%

* The rate of return on the end-of-year capital was 8.6 percent.

The operators were asked to estimate the value of their labor and management on the basis of what they might be able to earn if they were to work in a similar position. The average estimate for the 755 operators was $13,720. This is in line with the value if determined by using $650 per month for the labor plus a management charge based on five percent of the cash receipts per operator ($7,800 + $6,098 = $13,898).

Returns Per Unit of Input

Income from a business can also be calculated in relation to various input units. For example, the labor and management return can be allocated to the entire labor force and figured on a per man basis. Returns can also be figured on a per cow basis. These are shown below:

Returns to All Labor and Management	
Labor & mgmt. income per farm	$27,167
Cost of hired labor	10,593
Value of unpaid labor	1,350
Total Returns to Labor & Mgmt.	$39,110
Average man equivalent	2.7
Returns per man equivalent	$14,485
Returns per hour (3,000 hrs./yr.)	$4.83

Returns Per Cow	
Net cash farm income	$473
Labor & mgmt. income	$362
Labor, management & ownership income	$813
Inc. in Cattle Values Excluded	
Labor & mgt. inc./cow	$126
Returns/hour labor	$2.64

Farm and Farm Family Financial Situation

The financial situation is an important part of the farm business summary. It has a direct affect on current cash outflow and future capital investment decisions. A farmer may have a good labor income but a high debt payment schedule may seriously restrict management flexibility.

Table 16. FARM AND FARM FAMILY FINANCIAL SITUATION
610 New York Dairy Farms, January 1, 1980

Item	My Farm	Average 610 Farms Amount	Average 610 Farms Percent
Assets			
Livestock	$_____	$106,272	25
Feed & supplies	_____	27,496	6
Machinery & equipment	_____	71,064	16
Land & buildings	_____	190,094	44
Co-op investment	_____	4,629	1
Accounts receivable	_____	9,928	2
Cash & checking accounts	_____	2,509	1
Total Farm Assets	$_____	$411,992	95
Savings accounts	$_____	$ 3,397	1
Cash value life insurance	_____	2,986	1
Stocks & bonds	_____	2,446	1
Nonfarm real estate	_____	4,680	1
Auto (personal share)	_____	1,281	--
All other	_____	5,108	1
Total Nonfarm Assets	$_____	$ 19,898	100
TOTAL ASSETS	$_____	$431,890	
Liabilities			
Real estate mortgage	$_____	$ 83,616	56
Liens on cattle & equipment	_____	49,845	33
Installment contracts	_____	4,243	3
Loans: More than 10 years	_____	3,213	2
1 to 10 years	_____	5,099	3
Less than 1 year	_____	2,209	1
Other	_____	2,369	2
Total Farm Liabilities	$_____	$150,594	100
Nonfarm Liabilities	_____	1,292	
TOTAL LIABILITIES	$_____	$151,886	
Farm Net Worth (equity capital)	$_____	$261,398	
Family Net Worth	$_____	$280,004	

Total farm assets accounted for 95 percent of the total assets. Real estate mortgages were the largest liability and accounted for 56 percent of all debts. Installment contracts, notes and other debt accounted for 11 percent of all liabilities. These are often problem debt areas. Equity capital for the 610 farms averaged $261,400, and the total family net worth exceeded $280,000.

Table 17. FINANCIAL MEASURES AND DEBT COMMITMENTS
610 New York Dairy Farms, January 1, 1980

Measure	My Farm	Average 610 Farms	Average Top 10% Farms*
Percent equity	_____%	65%	67%
Farm debt per cow	$_____	$1,930	$1,614
Available for debt service & living	$_____	$46,130	$88,270
Scheduled annual debt payments	$_____	$27,600	$47,200
Scheduled debt payments per cow	$_____	$354	$330
Scheduled debt payments as percent of milk check	_____%	22%	20%

* 61 farms with the highest labor and management income per operator.

Equity capital, or farm net worth, is the difference between the total farm assets and the total farm liabilities. It is the amount of farm capital that belongs to the owner-operator.

Percent equity is the family net worth divided by the total assets. This indicates the general equity position of the family for credit purposes.

Farm debt per cow is total farm liabilities divided by number of cows at the end of the year. It indicates the relative debt load per production unit.

Available for debt service and living is the net cash farm income plus the interest paid. In planning debt repayments, subtract the expected family living expenses to determine the amount available for debt service.

Scheduled annual debt payments represent the commitments outstanding as of January 1, 1980. When figured on a per cow or percent of milk check basis, the reasonableness of the debt commitment can be appraised.

As shown in table 18, there did not appear to be any definite relationship between herd size and percent equity or debt per cow.

Table 18. FINANCIAL SITUATION BY SIZE OF HERD
610 New York Dairy Farms, 1979

Herd Size (Cows)	Number of Farms	Number of Cows	Total Farm Assets	Farm Liabilities	Farm Equity Capital	Percent Equity	Debt Per Cow
Under 40	89	33	$205,920	$ 66,170	$139,750	70%	$1,890
40 to 54	168	46	280,500	101,100	179,429	65	2,060
55 to 69	123	61	346,830	128,700	218,150	65	2,000
70 to 84	73	75	441,900	158,100	283,750	65	2,000
85 to 99	30	90	513,500	203,200	310,280	62	2,200
100 to 114	34	105	526,920	213,660	313,260	61	1,920
115 to 129	24	121	631,730	208,200	423,530	68	1,550
130 to 149	22	137	747,200	278,000	469,200	65	1,940
150 & over	47	205	979,320	364,890	614,430	63	1,740

An analysis of the farm business financial situation can point up many things about the operator's management of finances. The checklist below is designed to help focus on financial management practices in use by New York farmers.

Table 19. A FARM FINANCE CHECKLIST
610 New York Dairy Farms, 1979

	My Farm	1979 Ave. 610 New York Farms	1979 Ave. Top 10% Farms
A. How farm assets are being used:			
1. Total inventory (capital) per cow	$_____	$5,100	$4,600
2. % assets in livestock	_____%	26%	29%
3. % assets in farm real estate	_____%	46%	42%
4. % assets in machinery	_____%	17%	17%
5. % assets in cash & checking accts.	_____%	1%	1%
B. Characteristics of the debt structure:			
1. % debt long-term	_____%	56%	53%
2. % debt in chattel liens	_____%	33%	32%
3. % debt installment contracts	_____%	3%	5%
4. % debt in notes & open accounts	_____%	8%	10%
C. Have you borrowed to the limit?			
1. % equity in business	_____%	65%	67%
2. Real estate debt as % of inventory value	_____%	44%	43%
3. Liens as % of livestock and machinery inventory	_____%	19%	24%
D. How is your debt repayment schedule?			
1. Farm debt per cow	$_____	$1,930	$1,614
2. Scheduled debt payments per cow	$_____	$354	$330
3. Scheduled debt payments as % of milk check	_____%	22%	20%
E. What financial progress did you make last year?			
1. Change in farm assets	$_____	+$59,900*	
2. Change in farm debts	$_____	+$16,000	
3. Change in net worth	$_____	+$43,900	

* Progress of 384 same farms included in the 1978 and 1979 summary.

The average of the 610 farms provides a general basis or benchmark for comparison purposes. Averages for the top 10 percent of the farms on the basis of labor and management income per operator show the practices used by the best farm managers in the study.

ANALYSIS OF THE FARM BUSINESS

A systematic analysis of the operation helps to determine strengths and weaknesses in the business. In this section, five business factors are examined: size of business, rates of production, labor efficiency, capital efficiency, and cost control. The 1979 averages of selected measures for these factors for the 610 farms, and the average for the 10 percent with the highest labor and management incomes per operator, are reported along with general relationships of factors to labor income. Since the measures examined are interrelated, all factors should be studied before arriving at major conclusions.

Size of Business

Size has an effect on other factors such as labor efficiency, cost control and capital efficiency. The prices received and paid are often affected by volume which is a function of size. Farm management studies show that in general, larger farm businesses (when well managed) make larger labor incomes. Two basic reasons for this are that larger businesses make possible more efficient use of overhead inputs such as labor and machinery, and there are more units on which to make a profit.

Table 20. MEASURES OF SIZE OF BUSINESS
610 New York Dairy Farms, 1979

Measure	My Farm	Average 610 Farms	Average Top 10% Farms
Number of cows	_____	75	134
Number of heifers	_____	53	93
Man equivalent	_____	2.7	3.8
Total acres in crops	_____	228	367
Pounds of milk sold	_____	1,069,800	2,003,600
Total work units	_____	829	1,446
Total cash receipts	$_____	$146,340	$272,803
Total investment (end inventory)	$_____	$394,923	$653,746

Number of cows is the average number in the herd for the year. Where available, the DHI annual average is used.

Total acres in crops includes all acres on which crops were harvested during the 1979 year. It does not include cropland pasture or uncropped land.

Man equivalent is all of the labor used on the farm during the year in terms of full-time man years. Work of part-time employees and family members is converted to full-time man equivalent.

Total work units represents the number of productive man days that would be required under average conditions to care for the acreage of crops grown and the number of livestock handled. One man work unit is the average amount of productive work accomplished in ten hours of work.

The relationship of business size to labor and management income can be observed in tables 21 and 22. Farm size is measured by number of cows and by man equivalent. In general, the larger the businesses, the higher the labor and management incomes per operator. This relationship is consistent with that of earlier studies. A well-managed large farm will provide the operator a higher income than a well-managed small farm, but a large, poorly-managed farm can lose more than a small one.

Table 21. COWS PER FARM AND LABOR AND MANAGEMENT INCOME
610 New York Dairy Farms, 1979

Number of Cows	Number of Farms	Percent of Farms	Labor & Management Income Per Operator	Labor & Management Income Per Cow
Under 40	89	14	$11,635	$380
40 to 54	168	27	14,680	344
55 to 69	123	20	19,435	404
70 to 84	73	12	22,814	387
85 to 99	30	5	18,876	301
100 to 114	34	6	24,429	308
115 to 129	24	4	35,147	460
130 to 149	22	4	23,757	268
150 to 179	26	4	39,777	343
180 to 199	5	1	53,399	462
200 & over	16	3	64,865	351

Number of cows is a good measure of size on the dairy farm because it measures the variability in the key source of production, the dairy herd. As size of herd varied from less than 40 cows to 200 and more in 1979, labor and management income increased from less than $12,000 per man to more than $64,000. Note that the increase in labor and management income did not occur at each size interval or in even amounts. It should also be noted that 78 percent of the farms had less than 100 cows per farm.

Man equivalent is another common measure of size as it measures the total labor force used during the year. In general, the size of herd and labor and management incomes increase as the labor force grows from 1.0 to 4.5 man equivalent.

Table 22. MAN EQUIVALENT PER FARM AND
LABOR AND MANAGEMENT INCOME
610 New York Dairy Farms, 1979

Man Equivalent	Number of Farms	Percent of Farms	Number of Cows	Labor & Management Income Per Operator
1.0 to 1.4	55	9	38	$14,260
1.5 to 1.9	118	19	46	19,660
2.0 to 2.4	161	26	58	19,090
2.5 to 2.9	83	14	66	20,240
3.0 to 3.4	84	14	90	23,790
3.5 to 3.9	37	6	102	19,420
4.0 to 4.4	24	4	135	38,490
4.5 & over	48	8	188	47,160

Rates of Production

Production per animal and per acre are major factors affecting farm profits. Milk sold per cow is the most reliable production measure used in dairy farm analysis.

Table 23. MEASURES OF RATES OF PRODUCTION
610 New York Dairy Farms, 1979

Item	My Farm Acres	My Farm Yield	610 Farms Farms Reporting	610 Farms Average* Acres	610 Farms Average* Yield	Av. Yield Top 10% Farms
Milk sold/cow (lbs.)	____	____	610		14,260	14,950
All hay crops (tons H.E. per acre)	____	____	608	129	2.7	3.3
Corn silage (tons/acre)	____	____	582	62	13.6	14.9
All forage crops (tons H.E. per acre)	____	____	610	188	3.3	3.9
Grain corn (bu. per acre)	____	____	269	63	92	95
Oats (bu. per acre)	____	____	155	24	62	60

* Average for farms reporting the crop.

Pounds of milk sold per cow is calculated by dividing the total pounds of milk sold for the year by the average number of cows. No adjustment is made for differences in test of the milk.

Tons of hay crops per acre is calculated by adding the hay equivalent of hay crop silage and green chop to dry hay and dividing by the total acres of cropland used for hay crops.

Tons of hay equivalent per acre of all forages is determined by adding tons of hay equivalent of corn silage and hay crops, and dividing by total acres used for growing forages.

Studies have shown repeatedly that farms with higher rates of production tend to have higher labor incomes. In 1979, the farms that sold more than 14,000 pounds of milk per cow had substantially higher profit margins with slightly higher than average herd size.

Table 24. MILK SOLD PER COW AND LABOR AND MANAGEMENT INCOME
610 New York Dairy Farms, 1979

Pounds of Milk Sold Per Cow	Number of Farms	Number of Cows	Feed Bought Per Cow	Labor & Management Income Per Operator	Labor & Management Income Per Cow
Under 10,000	22	48	$286	$ 1,092	$ 26
10,000 to 10,999	32	54	357	9,137	217
11,000 to 11,999	45	58	386	12,273	235
12,000 to 12,999	72	68	423	13,673	237
13,000 to 13,999	106	77	459	18,496	302
14,000 to 14,999	128	86	462	27,895	433
15,000 to 15,999	115	80	509	26,527	401
16,000 and over	90	77	548	29,697	488

Labor Efficiency

Labor inputs account for about one-sixth of the costs in producing milk. Therefore, it is important that labor be used efficiently. Output or productivity per worker is used to measure labor efficiency. This is an important factor affecting labor and management incomes.

Table 25. MEASURES OF LABOR EFFICIENCY
610 New York Dairy Farms, 1979

Measure	My Farm	Average 610 Farms	Average Top 10% Farms
Number of cows per man	_____	28	36
Pounds of milk sold per man	_____	400,700	534,300
Work units per man	_____	310	386
Crop acres per man	_____	84	97

Pounds of milk sold per man is determined by dividing the total pounds of milk sold by the man equivalent. This is the best measure of labor efficiency for dairy farms.

Labor productivity (efficiency) depends on a number of things. Among these are the amount of mechanization, the field and building layout, the work methods used, and the abilities of the workers. All of these are management items under the control of the operator.

The 10 percent of the farms with the highest labor and management incomes per operator were considerably above the average of all 610 farms in the four measures of labor efficiency. The top 10 percent sold 27 percent more milk per man than the average of all farms.

The relationship of labor efficiency to labor income was very positive on the 610 farms. The higher output per man was achieved by more and better cows.

Table 26. MILK SOLD PER MAN AND LABOR AND MANAGEMENT INCOME
610 New York Dairy Farms, 1979

Pounds of Milk Sold Per Man	Number of Farms	Number of Cows	Lbs. Milk Per Cow	Labor & Management Income Per Operator	Per Cow
Under 250,000	68	40	11,600	$ 4,778	$137
250,000 to 299,999	85	54	13,200	12,141	293
300,000 to 349,999	94	58	13,800	16,458	335
350,000 to 399,999	102	64	14,500	18,276	361
400,000 to 449,999	83	75	14,600	20,204	331
450,000 to 499,999	54	81	14,900	26,863	418
500,000 to 599,999	81	113	14,800	39,637	446
600,000 and over	43	151	15,300	49,358	403

Capital Efficiency

Capital is a major farm resource and it is important to analyze how efficiently it is used in the business. The measure of total capital examined here is the end-of-year total farm inventory which averaged $394,900 per farm on the 610 farms. This includes both owned and borrowed capital for all farms. The use of borrowed capital or credit is part of capital management.

Table 27. MEASURES OF CAPITAL EFFICIENCY
610 New York Dairy Farms, 1979

Measure	My Farm	Average 610 Farms	Average Top 10% Farms
Total capital per man	$_____	$147,900	$174,300
Total capital per cow	$_____	$5,100	$4,600
Total capital per cwt. milk sold	$_____	$37	$33
Machinery & equipment per cow	$_____	$910	$800
Land & building inventory per cow	$_____	$2,440	$2,000
Land & building inventory per crop acre owned	$_____	$1,230	$1,200
Capital turnover (capital ÷ receipts)	_____	2.3	1.9

The comparisons in table 27 suggests that efficiency in the use of capital can be obtained by keeping more cows without increasing the capital investment. A high investment per man equivalent does not necessarily mean strong capital efficiency. High investment per man must be accompained by high labor productivity to result in good farm profits.

Capital turnover is a good measure of capital efficiency as it shows the number of years of farm receipts required to equal or "turnover" capital investment. It is computed by dividing the year-end farm inventory by the year's total farm receipts. The relationship capital turnover has to labor and management income and other factors is shown in table 28. As a general rule, dairy farmers should aim for a capital turnover of 2.5 years or less.

Table 28. CAPITAL TURNOVER AND LABOR AND MANAGEMENT INCOME
610 New York Dairy Farms, 1979

Capital Turnover Rate - Years	Number of Farms	Number of Cows	Capital Investment Per Cow	Capital Investment Per Man	Labor & Mgmt. Income Per Operator
less than 1.5	13	117	$3,230	$102,900	$45,648
1.5 to 1.99	122	101	4,160	126,835	35,313
2.0 to 2.49	247	74	4,984	149,255	24,415
2.5 to 2.99	135	60	5,832	159,245	14,989
3.0 to 3.49	49	60	6,560	180,556	7,764
3.5 and over	44	54	7,645	179,670	- 4,965

Cost Control

Successful dairy farm managers are able to keep costs under control. Feed, machinery, labor, and capital are major cost items and are examined in detail in this section. Profitable businesses usually maintain a "tight" control on all costs, both large and small. But, cost control should not be so tight that the efficient and economical use of important farm inputs is restricted.

Feed Costs

Feed is the largest single expense item on New York dairy farms. Purchased dairy concentrates accounted for 32 percent of all cash operating expenses on the 610 dairy farms in 1979.

Dairy feed costs must be analyzed by examining the entire feed and forage situation. The make-up of the dairy herd will also affect feed costs so several measures must be studied and compared to make the analysis complete.

Table 29. ITEMS RELATED TO FEED COSTS
610 New York Dairy Farms, 1979

Item	My Farm	Average 610 Farms	Average Top 10% Farms
Feed bought per cow	$_____	$466	$480
Crop expense per cow	$_____	$139	$146
Feed bought per cwt. milk	$_____	$3.27	$3.21
Feed & crop expense per cwt. milk	$_____	$4.24	$4.19
% feed is of milk sales	_____%	27%	27%
Hay equivalent per cow	_____T	8.3T	8.8T
Crop acres per cow	_____A	3.0A	2.7A
Fertilizer & lime per crop acre	$_____	$29	$33
Heifers as % of cow numbers	_____%	71%	69%

The average cost of feed bought per cow in 1979 was $466 while in 1978 it was $408. The percent that feed bought is of milk sales was 27 percent in 1979, down one percent from 1978 and 1977.

The 1979 forage crop situation was good. Tons of hay equivalent produced per cow was 8.3 tons from 2.7 acres in 1979. It took 3.1 acres to produce the same quantity of forage in 1978.

Feed costs include all feed for cows and heifers. Per cow costs are influenced markedly by the number of replacements on hand. Heifers as percent of cow numbers must be considered when evaluating most of the per cow factors. For 1979, there were 71 percent as many heifers as cows.

The 61 farms with highest labor and management incomes spent more for crops and for feed bought per cow than the 610 farm average, but the feed and crop expense per hundredweight of milk sold was 5¢ less than the average of all farms.

Feed cost is influenced by a number of factors. On the production side, it is affected by the amount of homegrown grains fed, quality and quantity of the roughage, and the number of youngstock. On the purchasing side, it is influenced by the farmer's ability to purchase concentrates at reasonable prices.

Feed bought per cow is calculated by dividing the total expenses for dairy concentrate by the average number of cows. Because this also includes the amount spent for calf and heifer feed, it actually represents the feed cost per cow and the replacements being raised.

Crop expense per cow is the total spent for fertilizer and lime, seeds and plants, spray, and other crop expense divided by the average number of cows. It does not include a charge for land or machinery and fuel expenses.

Feed and crop expense per hundredweight of milk is one of the most useful feed cost measures because it accounts for variations in milk production between herds and it includes crop expenses that are associated with feed production.

Feed purchased as percent of milk receipts is calculated by dividing feed purchased by milk receipts. This is another useful measure of feed efficiency although variations in homegrown grains fed and milk prices can have an adverse affect.

Hay equivalent per cow is calculated by converting all hay crops and corn silage to a dry hay equivalent, and dividing by the average number of cows.

Heifers as percent of cow numbers is figured by dividing the number of heifers by the number of cows and multiplying by 100.

Table 30. PERCENT PURCHASED FEED IS OF MILK RECEIPTS AND LABOR AND MANAGEMENT INCOME
610 New York Dairy Farms, 1979

% Feed is of Milk	Number of Farms	Number of Cows	H.E. Per Cow	Lbs. Milk Per Cow	Labor & Management Income Per Operator
Over 40%	33	69	8.4	13,700	$14,400
35 to 39	88	65	7.6	14,000	18,500
30 to 34	143	78	8.1	14,000	22,200
25 to 29	160	75	8.4	14,400	26,300
20 to 24	90	71	8.1	13,900	22,200
Under 20%	96	79	8.7	13,700	23,700

Generally, the lower the percent of the milk check going for purchased feed, the higher the income (table 30). From the 1979 data, the best income was for farms spending 25 to 29 percent of their milk check for feed, although there was little difference between the four groups that held feed costs below 35 percent of milk receipts.

Machinery Costs

Machinery accounted for 18 percent of the farm inventory on these 610 farms, and the new purchases in 1979 averaged about $17,000 per farm. The cost of owning and operating this machinery accounted for about one-sixth of the total farm expenses. An examination of the machinery costs is a key part of a systematic analysis of a dairy farm business.

Table 31. MACHINERY COST
610 New York Dairy Farms, 1979

Item	My Farm	Average 610 Farms Amount	Average 610 Farms Percent	Average Top 10% Farms
Depreciation (from page 7)	$_____	$ 7,390	28	$11,846
Interest @ 9% on average inventory	_____	5,983	23	9,528
Machine hire	_____	979	4	1,553
Machinery repairs	_____	6,440	25	11,125
Auto expense (farm share)	_____	433	2	550
Gas & oil	_____	4,589	18	7,842
Total Machinery Costs	$_____	$25,814	100	$42,444
Machinery cost:				
per cow	$_____	$344		$317
per cwt. milk sold	$_____	$2.41		$2.12

The machinery depreciation calculations were shown on page seven. Depreciation accounted for 28 percent of the total machinery costs and interest 23 percent. These two fixed cost items are often overlooked in a casual examination of machine operating costs. Repairs were the second largest cost item and one which must be kept in line if costs are to be kept under control. The cost of gasoline and oil showed the greatest increase of all direct costs as they jumped 39 percent per farm and 33 percent per cow over 1978.

Machinery costs averaged $344 per cow, compared to $286 in 1978 for an increase of 20 percent in 1979. The farms with $200 to $300 of machinery costs per cow produced the highest incomes in 1979 although there was little difference between all groups below $400 per cow.

Table 32. MACHINERY COST PER COW AND LABOR AND MANAGEMENT INCOME
610 New York Dairy Farms, 1979

Machinery Cost Per Cow	Number of Farms	Percent of Farms	Labor & Management Income Per Operator
Under $200	39	6	$21,330
$200 to $249	67	11	27,490
$250 to $299	116	19	29,730
$300 to $349	126	21	21,810
$350 to $399	102	17	23,660
$400 to $449	66	11	16,140
$450 & over	94	15	15,030

Labor Costs

Labor costs should not be overlooked in a farm business analysis even though the farm family provides a large part of the labor input. On these 610 farms, the family (including paid family labor) provided 69 percent of the months of labor inputs, while hired nonfamily labor provided 31 percent (page 5). The operator's and other unpaid family labor are assigned values and included in tables 33 and 34.

Table 33. LABOR COSTS
610 New York Dairy Farms, 1979

Item	My Farm	Average 610 Farms Amount	Average 610 Farms Percent	Average Top 10% Farms
Value operator's labor (@ $650/month)	$_____	$ 9,750	45	$ 8,450
Hired labor expense (from page 10) (includes paid family labor)	_____	10,593	49	25,645
Unpaid family labor @ $450 per month	_____	1,350	6	1,350
Total Labor Costs	$_____	$21,693	100	$35,445
Labor cost per cow	$_____	$289		$265
Labor cost per cwt. milk	$_____	$2.03		$1.77
Cost per month hired labor	$_____	$757		$884
Cost per month all labor	$_____	$678		$788

Although the top 10 percent farms paid $127 per month more for hired labor and $110 per month more for all labor than the average of the 610 farms, superior labor efficiency kept labor costs per cow and per hundredweight of milk sold well below average.

Labor and machinery operate as a "team" so the challenge is to get a combination that will give a reasonable cost per unit of milk sold. On these 610 farms, the machinery costs were higher than labor costs. The labor and machinery costs for the top 10 percent farms were 55¢ per hundredweight of milk, less than the average for all farms.

Table 34. LABOR AND MACHINERY COSTS
610 New York Dairy Farms, 1979

Item	My Farm	Average 610 Farms	Average Top 10% Farms
Total labor costs	$_____	$21,693	$35,445
Total machinery costs	_____	25,814	42,444
Total Labor and Machinery Costs	$_____	$47,507	$77,889
Labor and machinery cost per cow	$_____	$633	$581
Labor and machinery cost per cwt. milk	$_____	$4.44	$3.89

Miscellaneous Costs

Costs in addition to feed, machinery, and labor make up a sizeable amount on a dairy farm. The "cost conscious" manager checks on all cost items both large and small. A number of miscellaneous cost items are reported in table 35 to help in a detailed checkup on all farm costs.

Table 35. MISCELLANEOUS COST CONTROL MEASURES
610 New York Dairy Farms, 1979

Item	My Farm	Average 610 Farms	Average Top 10% Farms
Livestock			
Breeding fees per cow	$_____	$21	$21
Veterinary & medicine per cow	_____	$32	$33
Other livestock expense per cow	_____	$60	$59
Milk marketing per cow	_____	$45	$49
Milk marketing per cwt. milk	_____¢	32¢	33¢
Real Estate			
Taxes per cow	$_____	$40	$41
Taxes per $1,000 year-end real estate value	_____	$16	$19
Insurance paid per cow	_____	$29	$31
Cash rent paid per cow	_____	$22	$27
Cash rent paid per crop acre rented	_____	$24	$29
Real estate expense per cow	_____	$122	$123
Capital Cost			
Interest paid per cow	$_____	$142	$133
Interest on equity per cow	_____	$314	$307
Interest paid as % of year-end debt	_____%	7%	7.6%
Depreciation per cow	_____	$152	$140
Fixed & Variable Costs			
Fixed costs per cow	$_____	$748	$713
Variable costs per cow	_____	$1,214	$1,254
Variable costs per cwt. of milk sold	_____	$8.51	$8.39

It is of interest to observe that the livestock and real estate expense items for the top 10 percent of the farms were slightly higher than those for all 610 farms. These are probably related to more intensive use and higher production capacities of cows and cropland. The capital cost items per unit were less for the top farms which is related to efficient use of capital. Fixed costs per cow were lower on the top farms indicating some efficiency in size and scale. Variable costs were three percent higher per cow but slightly lower per hundredweight of milk sold on the top farms.

Good cost management requires careful planning and priority spending on farm inputs that will pay dividends in the milk check!

Combination of Factors

Individual factors have been examined in the analysis up to this point. It has been suggested that these factors are interrelated. In this section, the combination of four important factors is studied. The factors used here are size, rates of production, labor efficiency, and cost control as measured by number of cows, pounds of milk sold per cow, pounds of milk sold per man, and percent purchased feed was of milk receipts.

For each factor, the farms were divided on the basis of whether they were above or below the average for the 610 farms. They were then grouped on the basis of the number of factors better than average. The combination of factors above or below average within the three middle groups varied.

Table 36. COMBINATION OF FACTORS ABOVE AVERAGE* AND LABOR AND MANAGEMENT INCOME 610 New York Dairy Farms, 1979

Number of Factors Above Average	Number of Farms	Percent of Farms	Labor & Management Income Per Operator
4 Factors better than average	56	9	$51,000
3 Factors better than average	111	18	32,400
2 Factors better than average	161	26	20,900
1 Factors better than average	191	31	15,700
0 Factors better than average	91	15	10,500

* Factors were:

Size - number of cows - average 75.
Rates of production - pounds of milk sold per cow - average 14,300.
Labor efficiency - pounds of milk sold per man - average 400,700.
Cost control - percent purchased feed was of milk receipts - average 27%.

The relationship between the number of factors better than average and labor and management income is shown in table 36. As the number of factors better than average decreased, labor and management incomes decreased at a rapid rate.

It is important in managing a farm business to give attention to all major factors affecting the business. Concentrating on only one or two factors and neglecting the others will not give the kind of net return most farmers want.

Farm Business Chart

The Farm Business Chart is a tool which can be used in analyzing a business by drawing a line through the figure in each column which represents the current level of management performance. The figure at the top of each column is the average of the top 10 percent of the 610 farms for that factor. The other figures in each column are the average for the second 10 percent, third 10 percent, etc. Each column of the chart is independent of the others. The farms which are in the top 10 percent for one factor would not necessarily be the same farms which make up the top 10 percent for any other factor.

FARM BUSINESS CHART FOR FARM MANAGEMENT COOPERATORS
610 New York Dairy Farms, 1979

Size of Business			Rates of Production			Labor Efficiency	
Man Equivalent	No. of Cows	Pounds Milk Sold	Pounds Milk Sold Per Cow	Tons Hay Crops Per Acre	Tons Corn Silage Per Acre	Cows Per Man	Pounds Milk Sold Per Man
5.5	191	2,798,600	17,400	4.6	19	44	651,800
3.6	116	1,686,600	16,000	3.8	17	37	531,700
3.1	87	1,264,000	15,400	3.3	16	33	474,400
2.8	72	1,041,800	14,900	3.0	15	30	429,400
2.4	63	915,100	14,500	2.8	14	28	393,500
2.2	56	799,700	14,000	2.5	13	26	363,400
2.0	50	704,100	13,400	2.3	12	24	331,400
1.8	45	604,700	12,800	2.1	10	23	301,100
1.6	40	513,300	11,800	1.8	8	20	266,200
1.3	32	370,500	9,900	1.4	5	17	202,900

Feed Bought		Machinery Cost Per Cow	Labor and Machinery Cost Per Cow	Feed and Crop Expense Per Cwt. Milk
Per Cow	% of Milk Receipts			
$198	13%	$182	$426	$2.68
309	19	242	494	3.31
362	23	270	537	3.62
410	26	296	570	3.85
449	28	320	605	4.12
490	29	344	642	4.37
532	32	369	683	4.60
566	34	403	726	4.85
615	36	454	785	5.17
709	41	569	957	5.78

The cost control factors are ranked from low to high, but the lowest cost is not necessarily the most profitable. Many things affect the level of costs, and these items must be taken into account when analyzing the factors.

SUPPLEMENTAL INFORMATION

The farm business records include information in addition to that used in the summary and analysis sections. These data are useful in studies of dairy farming. Selected items are reported in the "supplemental information" section.

Age of Individual Operators

Age of operator is a factor that affects management. Data on age of individual farm operators and business factors are on page 31.

Education of Operators

The 1979 record forms included space for reporting the years of formal education of the operators and 538 of the 610 farms provided the information. Data on education and related business factors are on pages 32 and 33.

Financial Situation

Information on percent equity and debt per cow and its relation to business factors is reported on pages 34 and 35.

Cost of Producing Milk

The average cost of producing milk in 1979, calculated from the farm business summaries for the 610 farms, and comparisons by herd size and rates of production, are on pages 36 and 37.

Comparison by Herd Size

The business summary, business factors, and financial situation for nine herd size groups, are shown on pages 38 to 43.

Farms With Free Stall Barns

The 1979 summary reported 213 farms with free stall barns. Comparisons of the farms with free stall and stanchion barn facilities are on page 44.

Milking Systems

Cooperators report the kind of milking system they use. The 610 farms were sorted by type of milking system and factors are reported on page 45.

Type of Business Organization

Summaries for the three business types; individual operators, partnerships, and corporations, are on pages 46 and 47.

Same Farms for 1978 and 1979

Of the 610 farms in the 1979 summary, 384 had been in the 1978 summary. A comparison of the 1978 and 1979 businesses of the same farms is reported on pages 48 and 49.

Trends

One way to observe trends is to compare similar business studies that have been made. On page 50, selected farm business summary factors are given for 1959, 1964, 1974 and 1979.

Operating Statements

Operating statements for several groups of farms are on pages 51 to 56. These include: farms with over 200 cows, dairy-cash-crop farms, dairy renters, top 10 percent farms based on labor incomes, and the average of the 610 farms.

Age of Individual Operators

Table 37. AGE OF INDIVIDUAL OPERATORS AND LABOR & MANAGEMENT INCOME
610 New York Dairy Farms, 1979

Age of Individual Operator	Number of Farms	Number of Cows	Lbs. Milk Sold Per Cow	Lbs. Milk Sold Per Man	Labor and Management Income Per Operator
Under 30	65	59	14,400	364,200	$20,040
30 to 34	90	75	14,600	451,100	26,650
35 to 39	119	66	14,500	424,100	25,900
40 to 44	91	80	14,100	421,400	23,840
45 to 49	75	80	14,400	417,800	22,200
50 to 54	70	75	14,200	376,100	17,300
55 to 59	56	78	14,300	381,500	14,900
60 & over	44	96	14,300	400,000	19,800

Table 38. AGE OF INDIVIDUAL OPERATOR AND RELATED BUSINESS FACTORS
610 New York Dairy Farms, 1979

Age of Individual Operator	Percent Free Stall Barns	Total Capital Per Cow	Feed Bought Per Cow	Machinery Cost Per Cow	Labor Cost Per Cow	Total Expense Per Cow
Under 30	15%	$5,000	$471	$365	$283	$1,950
30 to 34	31	5,100	486	333	252	1,950
35 to 39	27	5,100	478	326	268	1,950
40 to 44	40	4,800	461	348	277	1,960
45 to 49	49	5,200	446	364	294	2,000
50 to 54	37	5,100	475	346	299	2,000
55 to 59	46	5,200	473	365	324	2,000
60 & over	41	5,100	445	334	324	1,970

Table 39. AGE OF INDIVIDUAL OPERATOR AND FINANCIAL SITUATION
610 New York Dairy Farms, 1979

Age of Individual Operator	Total Farm Inventory	Percent Equity	Debt Per Cow	% Milk For Debt Payment	Available For Debts & Living
Under 30	$320,140	53%	$2,500	25%	$37,240
30 to 34	394,280	56	2,400	23	46,950
35 to 39	347,690	60	2,200	23	41,600
40 to 44	407,000	65	1,800	23	48,500
45 to 49	431,040	68	1,800	21	48,100
50 to 54	397,000	70	1,700	20	45,600
55 to 59	424,500	74	1,500	19	49,700
60 & over	506,900	78	1,200	17	57,700

Education of Operators

The years of operator's education was requested again for 1979. Operators on 538 of the 610 farms reported years of formal education. The average education of all operators reporting was 13 years. In the tables below, the age of the senior partner on farms with partnerships or corporations was used for sorting the farms by education.

Table 40. EDUCATION OF OPERATOR AND LABOR & MANAGEMENT INCOME
538 New York Dairy Farms, 1979

Years of Education of Operator	Farms		Estimated Value of Operator's Labor & Management*	Labor and Management Income/Operator
	Number	Percent		
Less than 12	58	11	$12,870	$18,870
12	264	49	13,400	19,100
13 to 14	107	20	13,700	19,800
15 to 16	92	17	14,500	40,300
Over 16	17	3	15,100	20,000

* Estimated by the farm operator.

Table 41. EDUCATION OF OPERATOR AND RELATED BUSINESS FACTORS
538 New York Dairy Farms, 1979

Years Education of Operator	Average Age of Operator*	Average Number		Pounds Milk Sold	
		Operators	Cows	Per Cow	Per Man
Less than 12	44	1.25	71	13,800	393,100
12	41	1.22	70	14,000	392,800
13 to 14	38	1.25	74	14,500	414,800
15 to 16	39	1.27	84	14,800	438,600
Over 16	35	1.18	56	15,100	376,600

* Senior partner if more than one operator.

Table 42. EDUCATION OF OPERATOR AND FINANCIAL SITUATION
538 New York Dairy Farms, 1979

Years of Education of Operator	Total Farm Inventory 1/80	Percent Equity	Farm Debt Per Cow	Debt Payment As Percent of Milk Receipts
Less than 12	$392,430	66%	$1,870	22%
12	363,300	67	1,800	21
13 to 14	394,100	64	2,000	22
15 to 16	445,800	61	2,200	25
Over 16	319,100	58	2,400	23

In general, the more years of education of the farm operator the higher the labor and management income.

Table 43. OPERATORS' AGE AND EDUCATION AND RELATED FACTORS
666 New York Dairy Farm Operators, 1979

Operator's Age and Years of Education	Operators		Cows Per Farm	Lbs. Milk Sold		Labor & Mgt. Income Per Operator
	Number	Percent		Per Cow	Per Man	
Under 40						
Less than 12	12	2	59	13,900	411,400	$21,700
12	116	17	55	13,800	365,300	19,400
13 or more	159	24	73	14,700	442,900	26,000
40 to 49						
Less than 12	20	3	67	14,100	378,600	21,100
12	90	14	75	14,100	396,300	21,300
13 or more	53	8	86	14,400	437,800	24,800
50 & over						
Less than 12	41	6	78	13,800	392,400	16,900
12	116	17	85	14,100	400,100	17,400
13 or more	59	9	80	14,500	376,900	18,500

The amount of formal education has increased over the years, therefore the younger farmers have more years of education. Fifty-five percent of the 287 operators under 40 years of age has some college education, but only 27 percent of the farmers 50 years of age and older had some college. In the older group, 19 percent had not completed high school, compared with four percent of the younger farmers.

For the operators under 50, those with some college education had larger farms, sold more milk per cow and per man, had more money available for debts and family living, and had higher labor incomes than the high school graduates. Those over 50 with some college education made less than the high school graduates. Years of education appears to have had much less affect on the management performance of farm operators 50 years of age and older which suggests experience is a good teacher.

Table 44. OPERATORS' AGE AND EDUCATION AND FINANCIAL SITUATION
666 New York Dairy Farm Operators, 1979

Operator's Age and Years of Education	Total Farm Inventory	Percent Equity	Farm Debt Per Cow	Percent Debt Payment is of Milk	Available for Debt & Living
Under 40					
Less than 12	$310,200	66%	$1,800	27%	$36,200
12	299,600	57	2,400	24	33,200
13 or more	380,800	56	2,400	24	45,900
40 to 49					
Less than 12	347,600	61	2,000	24	40,500
12	386,600	68	1,700	21	46,000
13 or more	466,100	66	1,900	24	51,200
50 & over					
Less than 12	460,500	69	1,800	19	51,600
12	434,300	74	1,400	19	49,300
13 or more	438,200	73	1,600	20	49,200

Financial Situation

Each cooperator submits a financial statement as a part of the business record. A general summary is on pages 15 and 16. A simple comparison of the relationship debt per cow and percent equity have to other business factors is tabulated here.

Table 45. FARM DEBT PER COW AND LABOR AND MANAGEMENT INCOME
610 New York Dairy Farms, 1979

Farm Debt Per Cow	Number of Farms	Number of Cows	Lbs. Milk Sold Per Cow	Lbs. Milk Sold Per Man	Labor & Management Income Per Operator
None	20	54	13,300	331,500	$11,900
$1 to $599	65	71	14,300	379,000	20,300
$600 to $1,199	95	82	14,800	429,600	31,840
$1,200 to $1,799	101	77	13,900	400,000	20,590
$1,800 to $2,399	104	86	14,200	444,300	21,870
$2,400 to $2,999	99	74	14,300	422,500	24,113
$3,000 and over	126	64	14,600	385,000	16,042

In tables 45 and 46, the farms are sorted on the basis of debt per cow. Three percent of the farms reported no debt, while 21 percent reported debt per cow of $3,000 or more. There appears to be some relationship between debt per cow and labor and management income although size and production have a stronger influence.

Table 46. FARM DEBT PER COW AND RELATED BUSINESS FACTORS
610 New York Dairy Farms, 1979

Farm Debt Per Cow	Age of Operator	Percent Equity	Debt Payment Per Cow	Debt Payment % Milk	Available for Living & Invest.
None	48	100%	$ 0	0%	$33,670
$1 to $599	44	94	108	7	38,170
$600 to $1,199	45	82	236	15	34,900
$1,200 to $1,799	42	71	307	19	21,410
$1,800 to $2,399	40	59	409	25	14,850
$2,400 to $2,999	39	52	450	28	9,080
$3,000 and over	36	42	550	33	1,760

Debt per cow shows a close relationship to operator's age, percent equity, debt payment and cash available for family living and investment, in table 46. The farms with the highest debt loads are owned by young operators with relatively low equities and high debt payment commitments. Although this data does not identify a specific recommended debt load it is apparent that the 222 dairy farmers with $2,400 or more debt per cow may have difficulty meeting planned payment schedules and family living expenses during 1980.

The relationship of farm family equity (percent equity) to production, farm income, debt payments and cash available for family living, is shown in tables 47 and 48. Percent equity is determined by dividing the family net worth by total farm family assets.

Table 47. PERCENT EQUITY AND LABOR AND MANAGEMENT INCOME
610 New York Dairy Farms, 1979

Percent Equity*	Number of Farms	Number of Cows	Lbs. Milk Sold Per Cow	Lbs. Milk Sold Per Man	Labor & Management Income Per Operator
Less than 40%	72	70	13,900	389,200	$18,940
40 to 49	82	76	14,300	435,300	19,300
50 to 59	119	82	14,200	423,700	22,760
60 to 69	88	71	14,100	388,500	21,320
70 to 79	82	88	14,600	418,200	27,130
80 to 89	74	68	14,600	410,600	23,420
90 to 99	69	69	14,500	374,200	21,200
100%	20	54	13,300	331,500	11,910

* Based on family net worth.

Seventy-two or 12 percent of the 610 farms had less than 40 percent equity and 25 percent reported less than 50 percent equity. Only the lowest and highest equity farms were below average size and production. Equity appears to have little affect on labor and management income.

Table 48. PERCENT EQUITY AND RELATED BUSINESS FACTORS
610 New York Dairy Farms, 1979

Percent Equity*	Age of Operator	Debt Per Cow	Debt Payments Per Cow	Debt Payments % of Milk	Available for Living & Inv.
Less than 40%	36	$3,430	$510	33%	$- 1,200
40 to 49	36	3,000	470	29	5,520
50 to 59	39	2,390	440	27	10,900
60 to 69	41	1,970	370	23	16,000
70 to 79	42	1,290	290	18	31,300
80 to 89	46	950	230	14	30,400
90 to 99	44	340	120	7	37,700
100%	48	0	0	0	33,700

* Based on family net worth.

Farm operators with less than 60 percent equity have heavy debt commitments. Those with less than 50 percent equity are in a cash flow bind with too little cash left for family living. Although the operators on the 100 percent equity farms were below average on milk output, they enjoy a healthy cash flow situation.

Cost of Producing Milk

The "farm unit" method is used here to compute cost of producing milk. Farm expenses include all costs except the operator's labor and management. Non-milk receipts are deducted on the assumption they were produced at cost.

Table 49. FARM COST OF PRODUCING MILK
610 New York Dairy Farms, 1979

Item	Average 610 Farms		My Farm	
Total cash farm expenses (p.10)	$110,871		$_____	
Machinery depreciation	7,390		_____	
Building depreciation	3,980		_____	
Unpaid labor	1,350		_____	
Interest on equity capital @ 9%	23,526		_____	
TOTAL FARM EXPENSES	$147,117		$_____	
Value Operator's Labor @ $650/mo.	9,750		_____	
TOTAL COST OF PRODUCTION (1)		$156,867		$_____
Total cash farm receipts (p.8)	$146,340		$_____	
Less: Milk sales	127,299		_____	
Non-milk cash receipts	$ 19,041		$_____	
Increase in feed & supplies	4,343		_____	
Increase due to herd expansion*	4,101		_____	
TOTAL OTHER INCOME (2)		27,485		_____
COST OF PRODUCING MILK (1 minus 2)		$129,382		$_____
Hundredweights of milk sold (p.18)	10,698		_____	
COST OF PRODUCING CWT. MILK		$ 12.10		$_____
Management charge @ 5% cash receipts	$ 7,317		$_____	
Management charge cwt. milk	68¢		_____¢	
COST OF PRODUCING MILK WITH MGT. CHARGE		$ 12.78		$_____

* The change in livestock inventory attributed to herd expansion (page 6) is classified as a non-milk receipt.

The cost of producing milk is shown in table 49 with and without a charge for management included. The rational for including a management charge is presented at the top of page 37. The cost of producing milk, including the management fee, exceeded the price received by 88 cents or seven percent in 1979.

Table 50. COST OF PRODUCING MILK AND PRICES RECEIVED, 1973 - 1979

Year	Value Operator's Labor	Value Operator's Management*	Cost/Cwt. With Management Excluded	Cost/Cwt. With Management Included	Average Price Received
1973	$6,000	$3,689	$ 7.26	$ 7.69	$ 7.30
1974	6,000	4,330	8.34	8.82	8.57
1975	6,000	4,474	9.07	9.55	8.65
1976	6,000	5,162	9.87	10.42	9.90
1977	7,200	5,212	10.55	11.09	9.76
1978	7,800	5,862	10.74	11.34	10.51
1979	7,800	7,317	12.10	12.78	11.90

* Estimated @ 5% of cash receipts.

Farm expenses do not include any charge for management. The farm operator's labor is valued at hired worker rates. The management input is an important part of any business operation and is traditionally a part of the costs in business accounting. In this analysis, a management charge was computed on the basis of five percent of the cash receipts. In some areas, management services are provided for absentee owners on the basis of five to eight percent of the receipts. The management charge amounted to an average of 68 cents per hundredweight of milk.

Table 51. FARM COST OF PRODUCING MILK BY HERD SIZE
610 New York Dairy Farms, 1979

Number of cows	Cost/Cwt. With Management		Average Price Received
	Excluded	Included	
Under 40	$13.17	$13.85	$11.75
40 to 54	12.89	13.58	11.80
55 to 69	12.08	12.75	11.84
70 to 84	12.11	12.79	11.93
85 to 99	12.06	12.75	11.79
100 to 114	12.06	12.66	12.16
115 to 129	11.35	12.02	11.88
130 to 149	11.64	12.33	11.91
150 & over	11.52	12.21	11.99

Size is an important factor in the analysis of farm businesses. The costs of producing milk were computed for nine herd size groups (table 51). In general, the larger herds had lower costs. The average cost excluding management was $13.17 for herds with under 40 cows, while it was $11.35 for those with 115 to 129 cows, or a difference of $1.82 per hundredweight.

Rate of milk production is also a major business factor so costs were computed by levels of production (table 52). The spread here was much greater than for size indicating a strong relationship between rates of production and costs. Farms selling less than 10,000 pounds of milk per cow had an average cost of production of $16.33, while those selling 16,000 pounds and over averaged $11.70 or a difference of $4.63 per hundredweight.

Table 52. FARM COST OF PRODUCING MILK BY MILK SOLD PER COW
610 New York Dairy Farms, 1979

Pounds of Milk Sold Per Cow	Cost/Cwt. With Management		Average Price Received
	Excluded	Included	
Under 10,000	$16.33	$17.03	$12.33
10,000 to 10,999	14.17	14.87	12.14
11,000 to 11,999	13.01	13.69	11.80
12,000 to 12,999	12.88	13.58	12.01
13,000 to 13,999	12.35	13.04	11.90
14,000 to 14,999	11.74	12.42	11.90
15,000 to 15,999	11.91	12.59	11.92
16,000 & over	11.70	12.35	11.77

Table 53. FARM BUSINESS SUMMARY BY HERD SIZE
610 New York Dairy Farms, 1979

Item	Farms with: Less than 40 Cows	40 to 54 Cows	55 to 69 Cows	70 to 84 Cows
Capital Investment (end of year)				
Livestock	$ 50,187	$ 70,091	$ 88,963	$111,369
Feed & supplies	9,101	15,519	21,812	29,839
Machinery & equipment	35,935	49,977	62,625	78,440
Land & buildings	104,827	135,709	160,421	203,220
TOTAL INVESTMENT	$200,050	$271,296	$333,821	$422,868
Receipts				
Milk sales	$ 52,145	$ 75,798	$104,128	$131,609
Dairy cattle sold	4,756	7,682	9,105	11,993
Other livestock sales	2,009	2,290	2,419	3,524
Crop sales	312	684	1,038	1,261
Miscellaneous receipts	1,551	1,717	1,538	2,534
Total Cash Receipts	$ 60,773	$ 88,171	$118,228	$150,921
Increase in livestock	13,255	15,875	21,148	27,034
Increase in feed & supplies	1,283	2,339	3,002	4,796
TOTAL FARM RECEIPTS	$ 75,311	$106,385	$142,378	$182,751
Expenses				
Hired labor	$ 1,685	$ 4,066	$ 6,343	$ 10,558
Dairy feed	15,147	21,995	28,255	35,466
Other feed	752	693	836	1,066
Machine hire	368	578	698	752
Machinery repair	2,370	3,585	5,211	6,965
Auto expense (farm share)	332	336	384	365
Gas & oil	2,023	2,603	3,704	4,727
Purchased animals	2,562	3,364	4,332	4,580
Breeding fees	653	1,023	1,290	1,712
Veterinary & medicine	1,011	1,499	1,845	2,144
Milk marketing	1,331	1,857	2,654	4,130
Other livestock expense	1,820	2,967	3,899	4,902
Fertilizer & lime	2,206	3,612	5,028	7,973
Seeds & plants	759	1,160	1,698	2,000
Spray & other crop expense	513	803	1,290	1,772
Land, bldg. fence repair	853	1,604	2,046	2,202
Taxes & insurance	2,623	3,527	4,207	5,611
Electric & phone (farm share)	1,331	1,953	2,293	3,211
Interest paid	4,034	6,447	9,016	11,734
Miscellaneous expenses	1,094	1,931	2,535	2,960
Total Cash Expenses	$ 43,467	$ 65,603	$ 87,564	$114,830
Machinery depreciation	3,536	4,605	5,431	7,940
Building depreciation	1,388	2,418	3,306	4,052
Unpaid family labor	1,800	1,800	1,800	1,350
Interest on equity @ 9%	12,578	16,149	19,634	25,537
Decrease in feed & supplies	0	0	0	0
TOTAL FARM EXPENSES	$ 62,769	$ 90,575	$117,735	$153,709
Financial Summary				
Total Farm Receipts	$ 75,311	$106,385	$142,378	$182,751
Total Farm Expenses	62,769	90,575	117,735	153,709
Labor & Management Income	$ 12,542	$ 15,810	$ 24,643	$ 29,042
Number of operators	(96) 1.08	(181) 1.07	(156) 1.27	(93) 1.27
LABOR & MGMT. INCOME/OPER.	$ 11,635	$ 14,680	$ 19,435	$ 22,814

Table 53 continued — FARM BUSINESS SUMMARY BY HERD SIZE
610 New York Dairy Farms, 1979

Item	Farms with: 85 to 99 Cows	100 to 114 Cows	115 to 129 Cows	130 to 149 Cows	150 or More Cows
Capital Investment (end of year)					
Livestock	$136,167	$137,361	$175,692	$189,163	$263,356
Feed & supplies	34,434	40,338	46,263	56,794	79,357
Machinery & equipment	85,131	91,369	106,611	121,377	158,209
Land & buildings	238,672	234,728	274,673	342,599	425,345
TOTAL INVESTMENT	$494,404	$503,796	$603,239	$709,933	$926,267
Receipts					
Milk sales	$154,571	$180,777	$209,809	$234,613	$359,184
Dairy cattle sold	16,866	15,073	17,760	23,315	35,240
Other livestock sales	6,160	3,256	4,207	5,766	8,626
Crop sales	1,137	1,005	2,359	1,878	4,592
Miscellaneous receipts	2,476	4,106	2,805	6,401	5,912
Total Cash Receipts	$181,210	$204,217	$236,940	$271,973	$413,554
Increase in livestock	25,461	27,240	43,204	27,591	56,202
Increase in feed & supplies	5,373	5,052	7,627	11,121	14,077
TOTAL FARM RECEIPTS	$212,044	$236,509	$287,771	$310,685	$483,833
Expenses					
Hired labor	$ 11,971	$ 17,474	$ 18,740	$ 27,423	$ 44,078
Dairy feed	42,224	50,188	55,670	58,640	98,093
Other feed	1,503	1,767	2,875	2,041	1,941
Machine hire	1,432	1,096	1,359	2,213	3,517
Machinery repair	9,058	9,239	10,912	12,484	17,939
Auto expense (farm share)	706	829	574	473	660
Gas & oil	6,263	6,884	7,418	8,388	12,702
Purchased animals	6,332	5,808	5,184	9,439	18,686
Breeding fees	2,301	1,977	2,383	2,827	4,391
Veterinary & medicine	2,914	2,919	4,033	4,648	7,070
Milk marketing	2,956	5,161	4,675	6,919	10,167
Other livestock expense	5,919	6,770	5,822	6,877	12,078
Fertilizer & lime	9,022	10,514	10,624	14,231	18,152
Seeds & plants	2,974	2,845	3,765	4,152	6,082
Spray & other crop expense	2,179	2,588	2,273	3,420	5,585
Land, bldg., fence repair	2,919	3,124	3,208	2,874	5,575
Taxes & insurance	6,163	6,689	7,772	9,503	13,436
Electric & phone (farm share)	3,513	3,868	3,464	4,430	6,256
Interest paid	13,343	15,730	15,335	18,721	29,434
Miscellaneous expenses	4,512	4,853	5,830	7,582	9,802
Total Cash Expenses	$138,204	$160,323	$171,916	$207,285	$325,644
Machinery depreciation	12,034	9,451	15,076	13,519	17,676
Building depreciation	5,481	4,422	6,124	10,497	10,695
Unpaid family labor	1,350	1,800	900	450	900
Interest on equity @9%	27,925	28,193	38,118	42,230	55,299
Decrease in feed & supplies	0	0	0	0	0
TOTAL FARM EXPENSES	$184,994	$204,189	$232,134	$273,981	$410,214
Financial Summary					
Total Farm Receipts	$212,044	$236,509	$287,771	$310,685	$483,833
Total Farm Expenses	184,994	204,189	232,134	273,981	410,214
Labor & Mgmt. Income	$ 27,050	$ 32,320	$ 55,637	$ 36,704	$ 73,619
Number of operators	1.4	1.3	1.6	1.5	1.5
LABOR & MGMT. INC./OPER.	$ 18,876	$ 24,420	$ 35,147	$ 23,757	$ 50,149

Table 54. SELECTED BUSINESS FACTORS BY HERD SIZE
610 New York Dairy Farms, 1979

Item	Farms with: Less than 40 Cows	40 to 54 Cows	55 to 69 Cows	70 to 84 Cows
Number of farms	89	168	123	73
Size of Business				
Number of cows	33	46	61	75
Number of heifers	24	32	43	58
Pounds of milk sold	443,600	642,600	879,300	1,103,500
Man equivalent	1.8	2.0	2.3	2.6
Total work units	392	521	677	842
Total crop acres	114	152	190	237
(Crop acres rented)	(27)	(42)	(60)	(77)
Rates of Production				
Milk sold per cow	13,440	13,970	14,420	14,700
Tons hay crops per acre	2.2	2.4	2.6	2.8
Tons corn silage per acre	11.7	12.7	12.6	13.8
Bushels of oats per acre	58	60	62	56
Labor Efficiency				
Cows per man	19	23	26	29
Pounds milk sold per man	253,500	321,300	377,400	427,700
Work units per man	224	261	291	326
Feed Costs				
Feed purchased per cow	$459	$478	$463	$473
Crop expense per cow	$105	$121	$131	$157
Feed cost per cwt. milk	$3.41	$3.42	$3.21	$3.21
Feed & crop exp. per cwt milk	$4.20	$4.29	$4.12	$4.28
% feed is of milk receipts	29%	29%	27%	27%
Hay equivalent per cow	7.9T	8.4T	8.1T	8.9T
Crop acres per cow	3.5	3.3	3.1	3.2
Fertilizer & lime/crop acre	$19	$24	$26	$34
Machinery and Labor Costs				
Total machinery costs	$11,653	$15,927	$20,719	$27,362
Machinery cost per cow	$353	$346	$340	$365
Machinery cost/cwt. milk	$2.63	$2.48	$2.36	$2.48
Labor cost per cow	$362	$311	$293	$289
Labor cost per cwt. milk	$2.69	$2.23	$2.03	$1.96
Capital Efficiency				
Investment per man	$114,300	$135,650	$143,300	$163,900
Investment per cow	$5,700	$5,650	$5,220	$5,400
Investment per cwt. milk	$45	$42	$38	$38
Land & buildings per cow	$3,000	$2,800	$2,500	$2,600
Machinery investment/cow	$1,030	$1,040	$980	$1,000
Capital turnover	2.7	2.6	2.3	2.3
Other				
Price per cwt. milk sold	$11.75	$11.80	$11.84	$11.93
Acres hay crops	83	101	117	135
Acres corn silage	23	36	46	64
Inventory changes 1979*:				
Number of cows	0	0	0	0
Invt. value per cow**	+ $438	+ $377	+ $388	+ $439

* Change from 1/1/79 to 1/1/80.
** Livestock inventory includes heifers.

Table 54 continued — SELECTED BUSINESS FACTORS BY HERD SIZE
610 New York Dairy Farms, 1979

Item	Farms with: 85 to 99 Cows	100 to 114 Cows	115 to 129 Cows	130 to 149 Cows	150 or More Cows
Number of farms	30	34	24	22	47
Size of Business					
Number of cows	90	105	121	137	205
Number of heifers	73	74	95	97	136
Pounds of milk sold	1,311,500	1,486,700	1,766,500	1,969,200	2,996,700
Man equivalent	3.1	3.4	3.8	3.8	5.3
Total work units	1,041	1,156	1,347	1,488	2,186
Total crop acres	298	316	357	387	545
(Crop acres rented)	(111)	(122)	(104)	(160)	(186)
Rates of Production					
Milk sold per cow	14,572	14,159	14,599	14,374	14,618
Tons hay crops per acre	3.1	2.8	3.1	3.0	3.3
Tons corn silage/acre	13.2	13.6	13.8	15.2	15.1
Bushels oats/acre	70	64	76	47	69
Labor Efficiency					
Cows per man	29	31	32	36	38
Pounds milk sold/man	425,812	434,708	471,067	514,151	562,233
Work units per man	338	338	359	389	410
Feed Costs					
Feed purchased per cow	$469	$478	$460	$428	$479
Crop expense per cow	$158	$152	$138	$159	$145
Feed cost per cwt. milk	$3.22	$3.38	$3.15	$2.98	$3.27
Feed & crop exp./cwt. milk	$4.30	$4.45	$4.09	$4.09	$4.27
% feed is of milk receipts	27%	28%	27%	25%	27%
Hay equivalent per cow	9.0T	8.2T	8.7T	8.3T	8.0T
Crop acres per cow	3.3	3.0	3.0	2.8	2.7
Fert. & lime/crop acre	$30	$33	$30	$37	$33
Machinery and Labor Costs					
Total machinery costs	$36,827	$34,952	$44,095	$47,430	$65,823
Machinery cost per cow	$409	$333	$364	$346	$321
Machinery cost/cwt. milk	$2.81	$2.35	$2.50	$2.41	$2.20
Labor cost per cow	$271	$276	$264	$289	$273
Labor cost/cwt. milk	$1.86	$1.95	$1.81	$2.01	$1.87
Capital Efficiency					
Investment per man	$160,521	$147,309	$160,864	$185,361	$173,784
Investment per cow	$5,260	$4,539	$4,536	$4,965	$4,432
Investment/cwt. milk	$38	$34	$34	$36	$31
Land & buildings/cow	$2,539	$2,115	$2,065	$2,396	$2,035
Machinery investment/cow	$906	$823	$802	$849	$757
Capital turnover	2.3	2.1	2.1	2.3	1.9
Other					
Price per cwt. milk sold	$11.79	$12.16	$11.80	$11.91	$11.99
Acres hay crops	153	167	193	179	237
Acres corn silage	77	88	101	119	170
Inventory changes 1979*:					
Number of cows	+ 4	+ 5	+ 7	+ 6	+ 6
Invt. value per cow**	+ $219	+ $198	+ $219	+ $144	+ $240

* Change from 1/1/79 to 1/1/80.
** Livestock inventory includes heifers.

Table 55. FARM FAMILY FINANCIAL SITUATION BY HERD SIZE
610 New York Dairy Farms, January 1, 1980

Item	Farms with: Less than 40 Cows	40 to 54 Cows	55 to 69 Cows	70 to 84 Cows
Number of farms	89	168	123	73
Assets				
Livestock	$ 50,187	$ 70,092	$ 88,964	$111,370
Feed & supplies	9,102	15,519	21,812	29,839
Machinery & equipment	35,936	49,978	62,625	78,440
Land & buildings	104,827	135,709	160,422	203,220
Co-op investment	702	2,080	3,223	5,540
Accounts receivable	3,511	5,323	7,806	10,878
Cash & checking accounts	1,652	1,804	1,975	2,573
Total Farm Assets	$205,917	$280,505	$346,827	$441,860
Savings accounts	3,420	1,872	4,069	3,690
Cash value life insurance	2,132	2,329	3,363	2,325
Stocks & bonds	2,467	1,227	2,598	1,733
Nonfarm real estate	861	2,639	8,283	4,678
Auto (personal share)	798	1,204	1,454	1,312
All other	4,605	5,213	5,143	3,430
Total Nonfarm Assets	$ 14,283	$ 14,484	$ 24,910	$ 17,168
TOTAL ASSETS	$220,200	$294,989	$371,737	$459,028
Liabilities				
Real estate mortgage	$ 35,766	$ 56,931	$ 74,477	$ 92,788
Liens on cattle & equipment	22,083	32,439	40,873	52,896
Installment contracts	2,016	3,120	2,610	2,300
Other loans over 10 years	1,329	1,943	2,647	1,601
Other loans 1 to 10 years	3,057	3,253	4,206	4,138
Other loans less than 1 year	714	1,167	1,604	1,713
Feed store & other accounts	1,202	2,223	2,260	2,675
Total Farm Liabilities	$ 66,167	$101,076	$128,677	$158,111
Nonfarm Liabilities	344	980	1,954	1,005
TOTAL LIABILITIES	$ 66,511	$102,056	$130,631	$159,116
Farm Net Worth (Equity Capital)	$139,750	$179,429	$218,150	$283,749
FAMILY NET WORTH	$153,689	$192,933	$241,106	$299,912
Financial Measures				
Percent equity	70%	65%	65%	65%
Farm debt per cow	$1,890	$2,060	$2,010	$2,000
Available for debt service & living	$21,334	$29,000	$39,700	$47,820
Scheduled annual debt payment	$11,210	$16,900	$22,900	$28,300
Scheduled debt payment per cow	$320	$345	$360	$360
Scheduled debt payment as percent of milk check	21%	22%	22%	22%

Table 55 continued — FARM FAMILY FINANCIAL SITUATION BY HERD SIZE
610 New York Dairy Farms, January 1, 1980

Item	Farms with: 85 to 99 Cows	100 to 114 Cows	115 to 129 Cows	130 to 149 Cows	150 or More Cows
Number of farms	30	34	24	22	47
Assets					
Livestock	$136,168	$137,361	$175,692	189,165	$263,357
Feed & supplies	34,434	40,339	46,263	56,794	79,357
Machinery & equipment	85,132	91,369	106,612	121,377	158,210
Land & buildings	238,672	234,728	274,673	342,600	425,346
Co-op investment	5,347	6,353	7,832	10,821	17,202
Accounts receivable	11,581	14,193	15,230	21,918	30,163
Cash & checking accounts	2,153	2,578	5,428	4,540	5,686
Total Farm Assets	$513,487	$526,921	$631,730	$747,215	$979,321
Savings accounts	2,583	2,137	10,587	4,400	3,886
Cash value life insurance	4,050	6,302	4,506	4,021	2,654
Stocks & bonds	3,134	5,560	1,203	3,371	4,974
Nonfarm real estate	1,266	1,088	3,125	14,921	10,557
Auto (personal share)	1,035	1,034	2,087	2,295	1,419
All other	5,030	4,917	5,180	14,888	3,775
Total Nonfarm Assets	$ 17,098	$ 21,038	$ 26,688	$ 43,896	$ 27,265
TOTAL ASSETS	$530,585	$547,959	$658,418	$791,111	$1,006,586
Liabilities					
Real estate mortgage	$104,950	$115,743	$113,797	$157,919	$192,226
Liens on cattle & equipment	63,797	75,457	71,309	89,107	126,598
Installment contracts	19,913	4,445	3,677	7,523	8,377
Other loans over 10 years	2,498	3,872	3,166	8,424	12,868
Other loans 1 to 10 years	7,091	7,719	5,478	8,061	14,647
Other loans less than 1 year	2,541	3,613	8,185	1,970	6,953
Feed store & other accounts	2,421	2,816	2,584	4,991	3,218
Total Farm Liabilities	$203,211	$213,665	$208,196	$277,995	$364,887
Nonfarm Liabilities	326	672	635	2,687	3,662
TOTAL LIABILITIES	$203,537	$214,337	$208,831	$280,682	$368,549
Farm Net Worth (Equity Capital)	$310,276	$313,256	$423,534	$469,220	$614,434
FAMILY NET WORTH	$327,048	$333,622	$449,587	$510,429	$638,037
Financial Measures					
Percent equity	62%	61%	68%	65%	63%
Farm debt per cow	$ 2,162	$ 1,925	$ 1,554	$ 1,944	$ 1,738
Available for debt service & living	$ 56,341	$ 59,618	$ 80,352	$ 83,403	$117,338
Scheduled annual debt payment	$ 42,310	$ 40,026	$ 42,021	$ 44,834	$ 74,244
Scheduled debt payment per cow	$ 450	$ 361	$ 314	$ 314	$ 354
Scheduled debt payment as percent of milk check	27%	22%	20%	19%	21%

Table 56. COMPARISON OF FARMS BY TYPE OF BARN & HERD SIZE
610 New York Dairy Farms, 1979

Item	Herd Size (Number Cows)				
	Under 55	55-69	70-99	100-149	150 & Over
Number of farms					
Free stall	23	28	56	61	45
Other	234	95	47	19	2
Number of men					
Free stall	1.9	2.3	2.9	3.6	5.3
Other	1.8	2.3	2.8	4.1	5.5
Land & bldgs. per cow					
Free stall	$2,900	$2,600	$2,500	$2,100	$2,000
Other	$2,900	$2,500	$2,700	$2,400	- - -
Tons hay crops/acre					
Free stall	2.3	2.5	3.0	3.0	3.3
Other	2.4	2.7	2.8	2.9	- - -
Lbs. milk sold/cow					
Free stall	13,500	14,500	14,600	14,500	14,600
Other	13,900	14,300	14,700	13,800	- - -
Lbs. milk sold/man					
Free stall	324,300	400,100	403,800	488,700	562,500
Other	310,900	374,700	416,800	381,200	- - -
Labor cost per cow					
Free stall	$311	$286	$288	$267	$276
Other	$326	$286	$289	$313	- - -
Machinery cost/cow					
Free stall	$356	$338	$399	$353	$323
Other	$348	$339	$352	$319	- - -
Veterinary cost/cow					
Free stall	$26	$31	$33	$31	$35
Other	$33	$30	$26	$31	- - -
Feed & crop expense/cow					
Free stall	$583	$643	$635	$610	$623
Other	$591	$577	$616	$581	- - -
Debt per cow					
Free stall	$2,000	$1,900	$2,100	$1,800	$1,800
Other	$2,000	$2,000	$2,100	$2,000	- - -
Labor & mgt. inc./op.					
Free stall	$15,880	$18,962	$18,615	$32,343	$49,329
Other	$13,417	$19,821	$24,666	$16,234	- - -

A total of 213 of the 610 farms in this study reported having free stall barns. A comparison has been made by size of herd and type of barn for selected business factors.

Table 57. SELECTED BUSINESS FACTORS BY MILKING SYSTEMS
610 New York Dairy Farms, 1979

Item	Bucket and Carry	Dumping Station	Pipe-line	Herring-bone Parlor	Other Parlors
Number of farms	13	150	252	164	31
Percent of farms	2%	25%	41%	27%	5%
Capital Investment (end of year)					
Livestock	$ 50,241	$ 67,540	$ 93,183	$166,384	$105,562
Feed & supplies	9,856	13,452	22,354	49,294	29,326
Machinery & equipment	35,545	42,121	65,462	107,801	77,180
Land & buildings	121,988	128,672	166,373	285,961	201,506
TOTAL INVESTMENT	$217,630	$251,785	$347,372	$609,440	$413,574
Financial Summary					
Total farm receipts	$ 70,469	$102,343	$147,313	$287,085	$188,417
Total farm expenses	62,830	86,217	123,576	244,317	160,943
Labor & Mgmt. Income	$ 7,639	$ 16,126	$ 23,737	$ 42,768	$ 27,474
Number of operators	(14) 1.1	(171) 1.1	(305) 1.2	(229) 1.4	(36) 1.2
LABOR & MGMT. INC./OPER.	$ 7,099	$ 14,146	$ 19,617	$ 30,636	$ 23,664
Size of Business					
Number of cows	38	47	61	122	86
Number of heifers	23	31	45	88	61
Pounds of milk sold	438,500	616,300	896,700	1,771,500	1,224,200
Man equivalent	1.8	2.0	2.3	3.7	2.8
Crop acres	119	151	193	356	244
Rates of Production					
Milk sold per cow (lbs.)	11,500	13,100	14,700	14,500	14,200
Tons hay crops per acre	2.5	2.3	2.7	3.1	2.7
Tons corn silage per acre	11.7	11.9	13.5	14.4	13.2
Labor Efficiency					
Cows per man	22	24	26	33	30
Lbs. milk sold per man	250,600	308,150	384,850	482,700	432,580
Costs					
Feed purchased per cow	$351	$464	$470	$478	$412
% feed is of milk receipts	26%	30%	27%	28%	24%
Machinery cost per cow	$317	$309	$363	$346	$340
Labor cost per cow	$327	$316	$302	$274	$275
Capital Efficiency					
Investment per man	$124,360	$125,900	$149,100	$166,100	$146,100
Investment per cow	$5,700	$5,100	$5,500	$4,800	$4,700
Land & buildings per cow	$3,200	$2,600	$2,600	$2,200	$2,300
Machinery inv. per cow	$935	$860	$1,040	$842	$877
Other					
Price per cwt. milk sold	$11.84	$11.79	$11.88	$11.93	$12.03

Table 58. FARM BUSINESS SUMMARIES FOR INDIVIDUALS, PARTNERSHIPS, AND CORPORATIONS
610 New York Dairy Farms, 1979

Item	Averages for: 485 Individuals		113 Partnerships		12 Corporations	
CAPITAL INVESTMENT	1/1/79	1/1/80	1/1/79	1/1/80	1/1/79	1/1/80
Livestock	$ 74,120	$ 95,309	$107,087	$138,173	$198,295	$248,945
Feed & supplies	20,476	24,223	29,693	35,926	69,797	80,389
Machinery & equipment	56,459	64,679	76,061	88,113	147,830	168,561
Land & buildings	155,511	171,220	210,572	239,026	448,786	492,133
TOTAL INVESTMENT	$306,566	$355,431	$423,413	$501,238	$864,708	$990,028
EXPENSES						
Labor						
Hired	$ 9,742		$ 10,347		$ 47,336	
Feed						
Dairy concentrate	31,719		44,709		73,449	
Hay & other	953		1,811		632	
Machinery						
Machine hire	829		1,514		2,017	
Machinery repair	5,565		9,526		12,729	
Auto expense	409		508		717	
Gas & oil	3,973		6,189		14,448	
Livestock						
Purchased animals	4,337		8,839		12,972	
Breeding fees	1,394		2,281		3,497	
Veterinary, medicine	2,106		3,209		4,920	
Milk marketing	2,941		4,473		11,089	
Other livestock expense	4,035		6,223		8,702	
Crops						
Fertilizer & lime	5,765		8,837		21,542	
Seeds & plants	1,793		2,844		6,640	
Spray & other	1,429		2,365		4,471	
Real Estate						
Land, bldg., fence repair	2,048		2,726		4,378	
Taxes	2,729		3,639		9,831	
Insurance	1,954		2,802		6,279	
Rent	1,378		2,331		8,005	
Other						
Telephone (farm share)	429		634		911	
Electricity (farm share)	2,051		2,837		5,702	
Interest paid	9,726		13,844		18,725	
Miscellaneous	1,423		2,328		3,011	
TOTAL CASH EXPENSES	$ 98,728		$144,816		$282,003	
Machinery depreciation	6,580		9,810		17,354	
Building depreciation	3,464		5,270		12,647	
Unpaid labor ($450 per mo.)	1,800		900		450	
Interest on farm equity at 9 percent	21,084		29,593		65,097	
Decrease in feed & supplies	0		0		0	
TOTAL FARM EXPENSES	$131,656		$190,389		$377,551	

Table 58 continued — FARM BUSINESS SUMMARIES FOR INDIVIDUALS, PARTNERSHIPS AND CORPORATIONS
610 New York Dairy Farms, 1979

Item	Averages For: 485 Individuals	113 Partnerships	12 Corporations
RECEIPTS			
Milk sales	$113,285	$166,245	$326,942
Crop sales	919	2,100	5,142
Dairy cattle sold	10,494	16,521	30,570
Livestock sales	2,795	5,479	6,026
Gas tax refund	122	206	522
Government payments	540	921	1,158
Work off farm	185	360	0
Custom machine work	128	136	220
Miscellaneous	1,074	2,143	4,822
TOTAL CASH RECEIPTS	$129,542	$194,111	$375,402
Increase in livestock	21,189	31,086	50,650
Increase in feed & supplies	3,747	6,233	10,592
TOTAL FARM RECEIPTS	$154,478	$231,430	$436,644
FINANCIAL SUMMARY			
Total Cash Receipts	$129,542	$194,111	$375,402
Total Cash Expenses	98,728	144,816	282,003
NET FARM CASH FLOW	$ 30,814	$ 49,295	$ 93,399
Total Farm Receipts	$154,478	$231,430	$436,644
Total Farm Expenses	131,656	190,389	377,551
LABOR & MGMT. INCOME/FARM	$ 22,822	$ 41,041	$ 59,093
Number of operators	(485) 1.0	(246) 2.2	(24) 2.0
LABOR & MGMT. INCOME/OPER.	$ 22,822	$ 18,861	$ 29,547
BUSINESS FACTORS			
Man equivalent	2.4	3.3	5.2
Number of cows	67	96	180
Number of heifers	47	71	135
Acres of hay crops	119	157	260
Acres of corn silage	56	77	124
Total acres of crops	203	296	579
Pounds of milk sold	952,700	1,398,100	2,713,600
Pounds of milk sold/cow	14,200	14,600	15,100
Tons hay crops per acre	2.7	2.8	3.6
Tons corn silage per acre	13.4	14.4	14.9
Cows per man	28	30	35
Lbs. of milk sold/man	393,700	430,200	524,900
% feed is of milk sales	28%	27%	22%
Feed & crop expense/cwt. milk	$4.27	$4.20	$3.91
Fertilizer & lime/crop acre	$28	$30	$37
Machinery cost per cow	$340	$364	$342
Ave. price per cwt. milk	$11.89	$11.89	$12.05

Table 59. COMPARISON OF FARM BUSINESS SUMMARIES FOR 1978 & 1979
Same 384 New York Dairy Farms

Item	Averages 1978		Averages 1979	
CAPITAL INVESTMENT	1/1/78	1/1/79	1/1/79	1/1/80
Livestock	$ 56,444	$ 75,333	$ 78,714	$100,703
Feed & supplies	19,356	23,416	23,263	27,240
Machinery & equipment	53,763	60,112	60,978	69,400
Land & buildings	152,644	162,627	165,068	181,487
TOTAL INVESTMENT	$282,207	$321,488*	$328,023*	$378,830
EXPENSES				
Labor				
Hired	$ 8,698		$ 10,309	
Feed				
Dairy concentrate	29,379		33,816	
Hay & other	1,433		1,223	
Machinery				
Machine hire	817		959	
Machinery repair	5,478		6,379	
Auto expense	350		443	
Gas & oil	3,311		4,440	
Livestock				
Purchased animals	3,341		4,726	
Breeding fees	1,271		1,532	
Veterinary, medicine	1,846		2,256	
Milk marketing	2,955		3,232	
Other livestock expense	3,601		4,472	
Crops				
Fertilizer & lime	5,124		6,370	
Seeds & plants	1,767		1,997	
Spray & other	1,314		1,587	
Real Estate				
Land, building, fence repair	1,949		2,220	
Taxes	2,601		2,952	
Insurance	1,787		2,128	
Rent	1,283		1,537	
Other				
Telephone (farm share)	422		475	
Electricity (farm share)	1,882		2,141	
Interest paid	8,060		9,662	
Miscellaneous	1,336		1,494	
TOTAL CASH EXPENSES	$ 90,005		$106,350	
Machinery depreciation	6,188		6,935	
Building depreciation	2,989		3,857	
Unpaid labor @ $425 per month	1,275		1,350	
Interest on farm equity	14,863**		23,201**	
TOTAL FARM EXPENSES	$115,320		$141,693	

* Operators often make adjustments in values "between" years.
** Interest charged at seven percent in 1978 and nine percent in 1979.

Table 59
continued COMPARISON OF FARM BUSINESS SUMMARIES FOR 1978 & 1979
Same 384 New York Dairy Farms

Item	Averages 1978	Averages 1979
RECEIPTS		
Milk sales	$103,046	$123,379
Crop sales	779	1,045
Dairy cattle sold	8,834	11,724
Livestock sales	2,178	3,322
Gas tax refund	130	135
Government payments	950	526
Work off farm	61	87
Custom machine work	160	158
Miscellaneous	1,065	1,427
TOTAL CASH RECEIPTS	$117,203	$141,803
Increase in livestock	18,889	21,989
Increase in feed & supplies	4,060	3,977
TOTAL FARM RECEIPTS	$140,152	$167,769
FINANCIAL SUMMARY		
Total Cash Receipts	$117,203	$141,803
Total Cash Expenses	90,005	106,350
NET FARM CASH FLOW	$ 27,198	$ 35,453
Total Farm Receipts	$140,152	$167,769
Total Farm Expenses	115,320	141,693
LABOR & MGMT. INCOME PER FARM	$ 24,832	$ 26,076
Number of operators	(468) 1.2	(472) 1.2
LABOR & MGMT. INCOME PER OPERATOR	$ 20,388	$ 21,217
BUSINESS FACTORS		
Man equivalent	2.4	2.7
Number of cows	70	72
Number of heifers	50	52
Acres of hay crops	126	126
Acres of corn silage	62	60
Total acres of crops	214	219
Pounds of milk sold	987,400	1,036,300
Pounds of milk sold per cow	14,100	14,400
Tons hay crops per acre	2.4	2.7
Tons corn silage per acre	13.9	13.7
Cows per man	29	27
Pounds of milk sold per man	408,000	388,100
% feed is of milk sales	29%	27%
Feed & crop expense per cwt. milk	$3.81	$4.22
Fertilizer & lime per crop acre	$24	$29
Machinery cost per cow	$288	$348
Average price per cwt. milk	$10.44	$11.91

Table 60. SELECTED FARM BUSINESS SUMMARY FACTORS
New York Dairy Farms, Selected Years 1959-1979

Item	Year			
	1959	1964	1974	1979
Number of farms	542	434	628	610
Financial Summary				
Average capital invested	$47,840	$57,187	$221,974	$367,056
Total farm receipts	$22,548	$25,634	$92,108	$174,284
Total farm expenses	$16,255	$19,551	$86,315*	$147,117*
Labor income per operator	$3,489	$2,958	$4,880	$21,962
Size of Business				
Number of cows	35	40	72	75
Pounds of milk sold	327,400	450,400	905,800	1,069,800
Crop acres	104	104	213	228
Man equivalent	1.8	1.7	2.4	2.7
Total work units	557	507	792	829
Rates of Production				
Milk sold per cow	9,400	11,260	12,580	14,300
Tons hay crops per acre	2.0	2.0	2.6	2.7
Tons corn silage per acre	11.3	12	14	13.6
Labor Efficiency				
Cows per man	19	24	30	28
Pounds milk sold per man	181,900	264,900	374,300	400,700
Work units per man	309	298	327	310
Cost Control Factors				
Machinery cost per cow	$111	$109	$201	$344
Machinery cost per cwt. milk	$1.18	$.97	$1.60	$2.41
Feed bought per cow	$113	$162	$318	$466
Feed bought per cwt. milk	$1.32	$1.44	$2.53	$3.27
Feed & crop expense per cwt. milk	$1.73	$1.71	$3.26	$4.24
% feed is of milk receipts	26%	31%	30%	27%
Capital Efficiency				
Total investment per man	$27,400	$34,500	$95,700	$147,900
Total investment per cow	$1,400	$1,500	$3,200	$5,100
Machinery investment per cow	$295	$315	$572	$900
Total investment per cwt. milk	$15	$13	$26	$37
Other				
Price per cwt. milk sold	$4.73	$4.40	$8.57	$11.90
Acres hay crops	62	71	117	129
Acres corn silage	15	18	61	62
Total acres in crops per cow	3.0	2.6	3.0	3.0
Fertilizer & lime exp. per crop acre	$7	$9	$20	$29
Farm income per cow	$180	$152	$291	$473
Labor income per cow	$111	$81	$80	$362

* Includes interest paid, interest on equity capital, and building depreciation which were not included in total farm expenses prior to 1973. In earlier years, interest was charged on all capital and deducted from the net farm income and depreciation was included with inventory changes.

Table 61. BUSINESS SUMMARY OF FARMS WITH OVER 200 COWS
16 New York Dairy Farms, 1979

CAPITAL INVESTMENT	1/1/79	1/1/80
Livestock	$ 285,602	$ 359,01
Feed & supplies	85,091	96,573
Machinery & equipment	173,405	199,897
Land & buildings	488,589	549,650
TOTAL INVESTMENT	$1,032,687	$1,205,133

EXPENSES	
Labor	
Hired	$ 65,715
Feed	
Dairy concentrate	132,913
Hay & other	1,945
Machinery	
Machine hire	4,500
Machinery repair	23,681
Auto expense	472
Gas & oil	17,221
Livestock	
Purchased animals	26,241
Breeding fees	6,390
Veterinary, medicine	10,303
Milk marketing	12,264
Other livestock expense	16,978
Crops	
Lime & fertilizer	26,035
Seeds & plants	8,353
Spray & other	7,083
Real Estate	
Land, building fence repair	6,839
Taxes	10,640
Insurance	7,925
Rent	9,410
Other	
Telephone (farm share)	1,152
Electricity (farm share)	7,139
Interest paid	37,641
Miscellaneous	3,842
TOTAL CASH EXPENSES	$444,682
Machinery depreciation	21,203
Building depreciation	14,837
Unpaid labor	450
Interest on farm equity @ 9%	70,751
TOTAL FARM EXPENSES	$551,923

RECEIPTS	
Milk sales	$486,549
Crop sales	8,220
Dairy cattle sold	50,505
Livestock sales	10,239
Gas tax refund	446
Government payments	1,489
Work off farm	260
Custom machine work	373
Miscellaneous	6,247
TOTAL CASH RECEIPTS	$564,328
Increase in livestock	73,411
Increase in feed & supplies	11,482
TOTAL FARM RECEIPTS	$649,221

FINANCIAL SUMMARY	
Total Cash Receipts	$564,328
Total Cash Expenses	444,682
NET FARM CASH FLOW	$119,646
Total Farm Receipts	$649,221
Total Farm Expenses	551,923
LABOR & MGT. INCOME/FARM	$ 97,298
Number of operators (24)	1.5
LABOR & MGT. INCOME/OPER.	$ 64,865

BUSINESS FACTORS	
Man equivalent	6.9
Number of cows	277
Number of heifers	193
Acres of hay crops	283
Acres of corn silage	231
Total acres of crops	715
Lbs. of milk sold	4,069,800
Lbs. of milk sold per cow	14,690
Tons hay crops per acre	3.4
Tons corn silage/acre	14.7
Lbs. of milk sold per man	588,120
Cows per man	40
% feed is of milk sales	27%
Feed & crop exp./cwt. milk	$4.28
Fertilizer & lime/crop acre	$36
Machinery cost per cow	$303
Average price per cwt. milk	$11.96

Table 62. FARM BUSINESS SUMMARY
31 New York Dairy-Cash Crop Farms,* 1979

CAPITAL INVESTMENT	1/1/79	1/1/80
Livestock	$ 92,581	$110,353
Feed & supplies	36,445	42,582
Machinery & equipment	76,130	91,812
Land & buildings	221,364	247,006
TOTAL INVESTMENT	$426,520	$491,753

EXPENSES	
Labor	
Hired	$ 15,832
Feed	
Dairy concentrate	28,554
Hay & other	1,172
Machinery	
Machine hire	3,922
Machinery repair	8,721
Auto expense	380
Gas & oil	6,451
Livestock	
Purchased animals	5,908
Breeding fees	1,796
Veterinary, medicine	2,532
Milk marketing	3,647
Other livestock expense	5,577
Crops	
Fertilizer & lime	12,226
Seeds & plants	4,274
Spray & other	4,221
Real Estate	
Land, building, fence repair	2,476
Taxes	4,052
Insurance	2,614
Rent	2,946
Other Cash Expense	
Telephone (farm share)	434
Electricity (farm share)	2,468
Interest paid	11,132
Miscellaneous	3,307
TOTAL CASH EXPENSES	$134,642
Machinery depreciation	8,073
Building depreciation	4,413
Unpaid labor	900
Interest on farm equity @ 9%	32,885
TOTAL FARM EXPENSES	$180,913

RECEIPTS	
Milk sales	$136,993
Crop sales	26,015
Dairy cattle sold	15,248
Other livestock sales	3,750
Gas tax refund	227
Government payments	830
Work off farm	2,637
Custom machine work	1,096
Miscellaneous	2,352
TOTAL CASH RECEIPTS	$189,148
Increase in livestock	17,772
Increase in feed & supplies	6,137
TOTAL FARM RECEIPTS	$213,057

FINANCIAL SUMMARY	
Total Cash Receipts	$189,148
Total Cash Expenses	134,642
NET FARM CASH FLOW	$ 54,506
Total Farm Receipts	$213,057
Total Farm Expenses	180,913
LABOR & MGT. INCOME/FARM	$ 32,144
Number of operators (47)	1.52
LABOR & MGT. INCOME/OPER.	$ 21,203

BUSINESS FACTORS	
Man equivalent	3.3
Number of cows	78
Number of heifers	56
Acres of hay crops	122
Acres of corn silage	52
Total acres of crops	338
(Acres cropland rented)	(138)
Lbs. of milk sold	1,160,200
Lbs. milk sold per cow	14,900
Tons hay crops per acre	3.4
Tons corn silage/acre	15.0
Cows per man	24
Lbs. of milk sold per man	357,000
% feed is of milk receipts	21%
Feed & crop exp./cwt. milk	$4.25
Fertilizer & lime/crop acre	$36
Machinery cost per cow	$450
Ave. price per cwt. milk	$11.81

* Farms where crop sales amounted to 10 percent or more of milk sales

Table 63. FARM BUSINESS SUMMARY
64 New York Dairy-Renter Farms,* 1979

CAPITAL INVESTMENT	1/1/79	1/1/80
Livestock	$ 63,224	$ 83,424
Feed & supplies	17,573	20,805
Machinery & equipment	43,678	54,476
Land & buildings	13,378	14,640
TOTAL INVESTMENT	$137,853	$173,345

EXPENSES	
Labor	
Hired	$ 7,757
Feed	
Dairy concentrate	29,353
Hay & other	2,628
Machinery	
Machine hire	743
Machinery repair	5,254
Auto expense	195
Gas & oil	3,815
Livestock	
Purchased animals	6,290
Breeding fees	1,318
Veterinary, medicine	2,137
Milk marketing	4,488
Other livestock expense	4,876
Crops	
Fertilizer & lime	4,333
Seeds & plants	1,624
Spray & other	1,091
Real Estate	
Land, building, fence repair	1,252
Taxes	1,030
Insurance	1,609
Rent	8,063
Other Cash Expense	
Telephone (farm share)	381
Electricity (farm share)	1,853
Interest paid	4,990
Miscellaneous	918
TOTAL CASH EXPENSES	$ 95,998
Machinery depreciation	4,866
Building depreciation	345
Unpaid labor	900
Interest on farm equity @ 9%	11,478
TOTAL FARM EXPENSES	$113,587

RECEIPTS	
Milk sales	$111,939
Crop sales	1,143
Dairy cattle sold	9,051
Other livestock sales	2,325
Gas tax refund	81
Government payments	456
Work off farm	186
Custom machine work	284
Miscellaneous	1,129
TOTAL CASH RECEIPTS	$126,594
Increase in livestock	20,200
Increase in feed & supplies	3,232
TOTAL FARM RECEIPTS	$150,026

FINANCIAL SUMMARY	
Total Cash Receipts	$126,594
Total Cash Expenses	95,998
NET FARM CASH FLOW	$ 30,596
Total Farm Receipts	$150,026
Total Farm Expenses	113,587
LABOR & MGT. INCOME/FARM	$ 36,439
Number of operators (79)	1.23
LABOR & MGT. INCOME/OPER.	$ 29,529

BUSINESS FACTORS	
Man equivalent	2.3
Number of cows	63
Number of heifers	41
Acres of hay crops	104
Acres of corn silage	56
Total acres of crops	181
Lbs. of milk sold	919,100
Lbs. milk sold per cow	14,600
Tons hay crops per acre	2.5
Tons corn silage/acre	12.4
Cows per man	28
Lbs. of milk sold per man	408,500
% feed is of milk receipts	26%
Feed & crop exp./cwt. milk	$3.96
Fertilizer & lime/crop acre	$24
Machinery cost per cow	$306
Ave. price per cwt. milk	$12.18

* A farm was classified as renter if no real estate was owned or if all cropland was rented.

Table 64.

FARM BUSINESS SUMMARY
Top Ten Percent of The Farms by Labor & Management Income Per Operator
61 New York Dairy Farms, 1979

CAPITAL INVESTMENT	1/1/79	1/1/80
Livestock	$125,705	$179,003
Feed & supplies	38,335	48,969
Machinery & equipment	94,116	108,138
Land & buildings	222,223	254,275
TOTAL INVESTMENT	$480,379	$590,385

EXPENSES	
Labor	
Hired	$ 23,368
Feed	
Dairy concentrate	55,512
Hay & other	1,131
Machinery	
Machine hire	1,238
Machinery repair	10,072
Auto expense	543
Gas & oil	7,006
Livestock	
Purchased animals	6,218
Breeding fees	2,245
Veterinary, medicine	3,611
Milk marketing	6,306
Other livestock expense	7,489
Crops	
Fertilizer & lime	10,746
Seeds & plants	3,300
Spray & other	3,112
Real Estate	
Land, building, fence repair	2,971
Taxes	4,983
Insurance	3,461
Rent	3,260
Other Cash Expense	
Telephone (farm share)	607
Electricity (farm share)	3,336
Interest paid	15,662
Miscellaneous	2,750
TOTAL CASH EXPENSES	$178,927
Machinery depreciation	10,873
Building depreciation	6,028
Unpaid labor	900
Interest on farm equity @ 9%	37,174
TOTAL FARM EXPENSES	$233,902

RECEIPTS	
Milk sales	$214,072
Crop sales	1,748
Dairy cattle sold	17,859
Other livestock sales	4,471
Gas tax refund	234
Government payments	567
Work off farm	233
Custom machine work	282
Miscellaneous	2,536
TOTAL CASH RECEIPTS	$242,002
Increase in livestock	53,298
Increase in feed & supplies	10,634
TOTAL FARM RECEIPTS	$305,934

FINANCIAL SUMMARY	
Total Cash Receipts	$242,002
Total Cash Expenses	178,927
NET FARM CASH FLOW	$ 63,075
Total Farm Receipts	$305,934
Total Farm Expenses	233,902
LABOR & MGT. INCOME/FARM	$ 72,032
Number of operators (69)	1.13
LABOR & MGT. INCOME/OPER.	$ 63,689

BUSINESS FACTORS	
Man equivalent	3.5
Number of cows	120
Number of heifers	83
Acres of hay crops	173
Acres of corn silage	102
Total acres of crops	338
(Acres cropland rented)	(121)
Lbs. of milk sold	1,779,700
Lbs. of milk sold per cow	14,800
Tons hay crops per acre	3.3
Tons corn silage per acre	14.6
Cows per man	34
Lbs. of milk sold per man	508,500
% feed is of milk receipts	26%
Feed & crop exp./cwt. milk	$4.08
Fertilizer & lime/crop acre	$32
Machinery cost per cow	$324
Ave. price per cwt. milk	$12.03

Table 65. FARM BUSINESS SUMMARY
Average of 610 New York Dairy Farms, 1979

CAPITAL INVESTMENT	1/1/79	1/1/80
Livestock	$ 82,670	$106,271
Feed & supplies	23,153	27,496
Machinery & equip.	61,887	71,063
Land & buildings	171,480	190,093
TOTAL INVESTMENT	$339,190	$394,923

EXPENSES	
Labor	
Hired	$ 10,593
Feed	
Dairy concentrate	34,946
Hay & other	1,105
Machinery	
Machine hire	979
Machinery repair	6,440
Auto expense	433
Gas & oil	4,589
Livestock	
Purchased animals	5,341
Breeding fees	1,600
Veterinary, medicine	2,366
Milk marketing	3,385
Other livestock expense	4,532
Crops	
Lime & fertilizer	6,644
Seeds & plants	2,083
Spray & other	1,663
Real Estate	
Land, building, fence repair	2,220
Taxes	3,037
Insurance	2,196
Rent	1,685
Other	
Telephone (farm share)	477
Electricity (farm share)	2,269
Interest paid	10,666
Miscellaneous	1,622
TOTAL CASH EXPENSES	$110,871
Machinery depreciation	7,390
Building depreciation	3,980
Unpaid labor	1,350
Interest on farm equity @ 9%	23,526
TOTAL FARM EXPENSES	$147,117

RECEIPTS	
Milk sales	$127,299
Crop sales	1,220
Dairy cattle sold	12,005
Livestock sales	3,356
Gas tax refund	145
Government payments	623
Work off farm	214
Custom machine work	132
Miscellaneous	1,346
TOTAL CASH RECEIPTS	$146,340
Increase in livestock	23,601
Increase in feed & supplies	4,343
TOTAL FARM RECEIPTS	$174,284

FINANCIAL SUMMARY	
Total Cash Receipts	$146,340
Total Cash Expenses	110,871
NET FARM CASH FLOW	$ 35,469
Total Farm Receipts	$174,284
Total Farm Expenses	147,117
LABOR & MGT. INCOME/FARM	$ 27,167
Number of operators (755)	1.24
LABOR & MGT. INCOME/OPER.	$ 21,962

BUSINESS FACTORS	
Man equivalent	2.7
Number of cows	75
Number of heifers	53
Acres of hay crops	129
Acres of corn silage	62
Total acres of crops	228
(Acres cropland rented)	(73)
Lbs. of milk sold	1,069,800
Lbs. of milk sold per cow	14,300
Tons hay crops per acre	2.7
Tons corn silage/acre	13.6
Lbs. of milk sold per man	400,700
Cows per man	28
% feed is of milk sales	27%
Feed & crop exp./cwt. milk	$4.24
Fertilizer & lime/crop acre	$29
Machinery cost per cow	$344
Ave. price per cwt. milk	$11.90

Table 66. FARM BUSINESS SUMMARY
Average Per Cow, 610 New York Dairy Farms, 1979

CAPITAL INVESTMENT	1/1/79	1/1/80
Livestock	$1,102	$1,417
Feed & supplies	309	367
Machinery & equipment	825	948
Land & buildings	2,286	2,534
TOTAL INVESTMENT	$4,522	$5,266

EXPENSES	
Labor	
Hired	$ 141
Feed	
Dairy concentrate	466
Hay & other	15
Machinery	
Machine hire	13
Machinery repair	86
Auto expense	6
Gas & oil	61
Livestock	
Purchased animals	71
Breeding fees	21
Veterinary, medicine	32
Milk marketing	45
Other livestock expense	60
Crops	
Lime & fertilizer	89
Seeds & plants	28
Spray & other	22
Real Estate	
Land, building, fence repair	30
Taxes	41
Insurance	29
Rent	22
Other	
Telephone (farm share)	6
Electricity (farm share)	30
Interest paid	142
Miscellaneous	22
TOTAL CASH EXPENSES	$1,478
Machinery depreciation	99
Building depreciation	53
Unpaid labor	18
Interest on farm equity @ 9%	314
TOTAL FARM EXPENSES	$1,962

RECEIPTS	
Milk sales	$1,697
Crop sales	16
Dairy cattle sold	160
Livestock sales	45
Gas tax refund	2
Government payments	8
Work off farm	3
Custom machine work	2
Miscellaneous	18
TOTAL CASH RECEIPTS	$1,951
Increase in livestock	315
Increase in feed & supplies	58
TOTAL FARM RECEIPTS	$2,324

FINANCIAL SUMMARY	
Total Cash Receipts	$1,951
Total Cash Expenses	1,478
NET FARM CASH FLOW	$ 473
Total Farm Receipts	$2,324
Total Farm Expenses	1,962
LABOR & MGT. INCOME/FARM	$ 362
Number of operators (755)	1.24
LABOR & MGT. INCOME/OPER.	$ 293

BUSINESS FACTORS	
Man equivalent	.036
Number of cows	(75)
Number of heifers	.7
Acres of hay crops	.036
Acres of corn silage	.18
Total acres of crops	3.0
Lbs. milk sold	14,300
Tons hay crops	8.3
Tons corn silage	11.2
Feed & crop expense	$605
Lime & fertilizer	$89
Machinery cost	$344
Total debt	$1,930
Debt payment	$354