DAIRY FARM BUSINESS SUMMARY

March 1980 A.E. Ext. 80-8

ONEIDA MOHAWK REGION 1979

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1979 FARM BUSINESS SUMMARY

ONEIDA - MOHAWK REGION

The Oneida - Mohawk Region of New York State includes Oneida, Herkimer, Fulton, Montgomery and Schoharie counties. This report is a summary of the 1979 business records from 86 of the dairy farms in this region.

The primary purpose of the Cornell business management project is to assist cooperators in farm record keeping and analysis and thereby improve their skills as farm business managers. This report is prepared in workbook form for use in the systematic study of individual farm business operations.

Presented below is a historical view of the characteristics of the farms included in the Oneida - Mohawk farm management program.

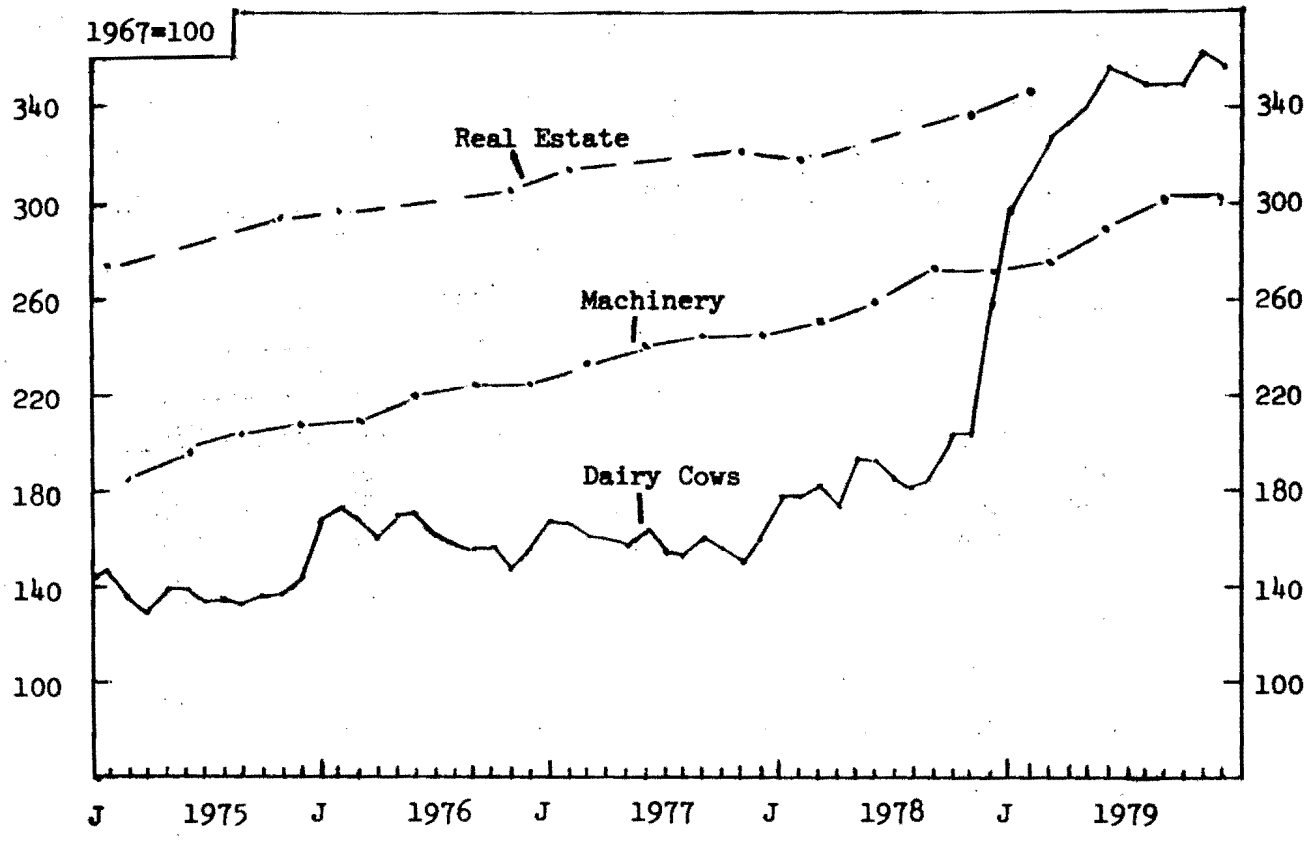
Oneida - Mohawk Dairy Farm Management Summary

Item	Year			
	1969	1977	1978	1979
Number of farms	48	63	69	86
Cows per farm	54	58	56	62
Labor force	2.0	2.1	2.1	2.3
Investment per farm	$97,000	$223,400	$252,895	$335,245
Investment per cow	$1,804	$3,850	$4,437	$4,859
Milk sold per cow (lbs)	12,000	13,300	13,400	14,500
Milk sold per man (lbs)	325,000	371,000	362,000	399,000
Average price per cwt. milk sold	$5.73	$9.59	$10.31	$11.61
Feed cost per cwt. milk	$1.38	$2.82	$3.11	$3.19
Average cash operating expenses per cwt. milk sold	$3.71	$8.05	$8.86	$9.62
Labor & mgmt. income/oper.	$7,629	$13,032	$13,542	$23,363

The record high 1979 average return to labor and management is largely due to skyrocketing cow values that pushed the cattle inventory up about $25,000 per farm. Nearly 90 percent of the 1979 labor and management income can be directly attributed to owning and maintaining the dairy herd in a period of rapidly rising prices. An important factor limiting labor and management income was higher costs of capital. The charge for equity capital was increased from seven to nine percent in 1979, resulting in an increased cost per farm of $4,300.

This summary was prepared by Eddy L. LaDue, Department of Agricultural Economics, New York State College of Agriculture and Life Sciences, Cornell University, in cooperation with John S. Adams, Cooperative Extension Specialist; David L. Roy, Cooperative Extension Agent; Teddy J. Aber, Cooperative Extension Agent and Ed Luczynski, Farm Credit Service.

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



Price changes affect 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 202 percent, dairy cows 256 percent and real estate increased an estimated 255 percent.

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

Year	N.Y. Dairy Cows Value/Head	N.Y. Dairy Cows 1967=100	Machinery 1967=100	N.Y. Farm Real Estate Value/Acre	N.Y. Farm Real Estate 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.) 302	(est.)	355
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%	+ 5% (est.)	

SUMMARY OF THE FARM BUSINESS

Business Characteristics and Resources Used

Information on the availability of farm resources and their characteristics is fundamental to judging management performance. The combination of resources and the management techniques used to put the resources to work is an important function called farm organization.

BUSINESS CHARACTERISTICS AND RESOURCES USED
86 Oneida - Mohawk Region Dairy Farms, 1979

Type of Business	Number	Business Records	Number	Dairy Records	Number
Individual	71	CAMIS	5	D.H.I.C.	51
Partnership	15	Account Book	29	Owner Sampler	9
Corporation	0	Agrifax	45	Other	4
		Other	7	None	22

Barn Type	Number	Milking System	Number		Number
Stanchion	65	Bucket & carry	3	Herringbone	16
Freestall	16	Dumping station	18	Other parlor	0
Other	5	Pipeline	49		

Labor Force	My Farm	Average	Land Used	My Farm	Average
Operator	_____	14 mo.	Total acres owned	_____	279
Family paid	_____	4 mo.	Total acres rented	_____	63
Family unpaid	_____	4 mo.	Total crop acres	_____	194
Hired	_____	5 mo.	Crop acres rented	_____	54
Total	_____	27 mo.			
			Number of Cows	My Farm	Average
Man equivalent		2.3	Beginning of year	_____	65
Estimated value oper's			End of year	_____	69
labor & management		$12,878	Average for year	_____	62

There were 103 operators on the 86 farms for an average of 1.20 per farm. Sixty-one of the 86 farms rented an average of 54 crop acres per farm. Only five farms rented all the land cropped. Total farm inventory increased $50,234 or 18 percent during 1979. The end of year farm inventory values are the financial measures of farm assets used in this report.

CAPITAL INVESTMENT - FARM INVENTORY VALUE
86 Oneida - Mohawk Region Dairy Farms, 1979

	My Farm		Average 86 Farms	
Item	1/1/79	1/1/80	1/1/79	1/1/80
Livestock	$_____	$_____	$ 68,538	$ 93,436
Feed & supplies	_____	_____	17,036	19,759
Machinery & equipment	_____	_____	55,712	63,398
Land and buildings	_____	_____	143,725	158,652
TOTAL	$_____	$_____	$285,011	$335,245

Machinery and Real Estate Inventory Calculations

Capital outlays for machinery and buildings usually occur in large, uneven amounts, but these assets depreciate gradually over a period of time. Machinery depreciation is calculated below and is included as a farm expense.

MACHINERY & EQUIPMENT DEPRECIATION
86 Oneida - Mohawk Region Dairy Farms, 1979

Item	My Farm		Average 86 Farms
Beginning inventory	$_____		$55,712	
Machinery purchases	_____		15,634	
Total (1)		$_____		$71,346
End of year inventory	$_____		$63,398	
Machinery sold	_____		970	
Total (2)		$_____		$64,368
DEPRECIATION (1 minus 2)		$_____		$ 6,978
Percent depreciation		_____%		10%

REAL ESTATE INVENTORY CALCULATIONS
86 Oneida - Mohawk Region Dairy Farms, 1979

Item	My Farm		Average 86 Farms
Beginning market value		$_____		$143,725
Cost of new real estate	$_____		$12,626	
Less lost capital	-_____		- 2,733	
Value of new added		+$_____		+ 9,893
Less building depreciation		- _____		- 3,210
Less real estate sold		- _____		- 1,008
Total Without Appreciation		$_____		$149,400
Appreciation of beginning real estate		+ _____		+ 9,252
End of Year Market Value		$_____		$158,652

Lost Captial is the difference between the cost of new buildings and the amount these improvements added to the value of the farm. It is not included in farm expenses, since building depreciation is based on the full cost of new buildings and will account for lost capital over the life of the building. Building depreciation was taken from the farm depreciation schedule and is included as a farm expense. Real Estate Appreciation was estimated by each farm operator. It is the increase in value of real estate caused by demand and inflation. Appreciation averaged six percent on these farms in 1979.

Receipts

Receipts from the business should be large enough to cover the operating and overhead costs and leave a return for the operator's labor and management. Here we look at sources and amounts of receipts for this group of farms.

FARM RECEIPTS
86 Oneida - Mohawk Region Dairy Farms, 1979

Item	My Farm	Average 86 Farms Per Farm	Average 86 Farms Per Cow
Milk sales	$_____	$104,240	1681
Crop sales	_____	794	13
Dairy cattle sold	_____	9,976	161
Calves & other livestock sales	_____	1,320	21
Gas tax refunds	_____	183	3
Government payments	_____	573	9
Work off farm	_____	144	3
Custom machine work	_____	73	1
Other	_____	732	12
Total Cash Receipts	$_____	$118,035	1904
Increase in livestock	_____	24,898	401
Increase in feed & supplies	_____	2,723	44
TOTAL FARM RECEIPTS	$_____	$145,656	2349

The large increase in livestock inventory is due largely to the increase in dairy cattle prices during the year. The average number of cows per farm increased from 65 to 69 cows. When the inventory increase due to change in livestock numbers is eliminated, livestock inventory increased $334 per cow. This reflects the price increase in both cows and youngstock.

Nineteen percent of total farm receipts were made up of noncash items: livestock, feed and supplies inventory increases. This is much higher than the four to six percent normally experienced by New York dairy farmers and implies that a much lower proportion of net farm income will be spendable without sale of assets.

INCOME ANALYSIS

Item	Average 69 Farms 1978	Average 86 Farms 1979	My Farm
Average price/cwt. milk sold	$ 10.31	$ 11.61	$_____
Milk sales per cow	$ 1,386	$ 1,681	$_____
Total cash receipts per man	$42,884	$52,460	$_____

Expenses

There are many cost control opportunities when cash farm expenses average $236 per day. Classifying expenses into the categories on this page will help you identify those that may need tighter control.

FARM EXPENSES
86 Oneida - Mohawk Region Dairy Farms, 1979

Item	My Farm	Average 86 Farms Per Farm	Per Cow
Hired Labor	$_____	$ 5,790	93
Feed			
Dairy concentrate	_____	28,622	462
Other feed	_____	469	8
Machinery			
Machine hire	_____	495	8
Machinery repairs	_____	5,068	82
Auto expense (farm share)	_____	544	9
Gas & oil	_____	3,618	58
Livestock			
Purchased livestock	_____	4,383	71
Breeding fees	_____	1,247	20
Veterinary & medicine	_____	1,808	29
Milk marketing	_____	2,083	34
Other livestock expense	_____	3,662	59
Crops			
Fertilizer & lime	_____	4,387	71
Seeds & plants	_____	1,517	24
Spray, other crop expense	_____	833	13
Real Estate			
Land, building, fence repair	_____	2,269	37
Taxes	_____	2,550	41
Insurance	_____	1,660	27
Rent	_____	1,509	24
Other			
Telephone (farm share)	_____	373	6
Electricity (farm share)	_____	2,012	32
Interest paid	_____	9,650	156
Miscellaneous	_____	1,755	28
Total Cash Expenses	$_____	$ 86,304	1392
Non-Cash Items			
Machinery Depreciation	$_____	$ 6,978	112
Building Depreciation	_____	3,210	52
Unpaid Family Labor @ $425/month	_____	1,800	29
Interest on Equity Capital @ 9%	_____	19,398	313
Decrease in Livestock & Feed	_____	0	0
TOTAL FARM EXPENSES	$_____	$117,690	1898

Financial Summary of Year's Business

The results of management are reflected in the net return from the business. Agricultural Economists have developed a number of ways to measure the returns from a farm business. Four common measures are reported on the next two pages.

NET CASH FARM INCOME
Oneida - Mohawk Region Dairy Farms, 1979

Item	My Farm	Average of 86 Farms	
		Per Farm	Per Cow
Cash Farm Receipts	$_____	$118,035	1,904
Cash Farm Expenses	_____	86,304	1,392
NET CASH FARM INCOME	$_____	$ 31,731	512

Net Cash Farm Income reflects the cash available from the year's operation of the business. Family living has first claim on cash income followed by fixed payments on debts. A family may have additional cash available if they have a non-farm income. Cash flow is not a good measure of farm business profits, but it is useful when planning debt repayment programs.

LABOR AND MANAGEMENT INCOME
Oneida - Mohawk Region Dairy Farms - 1979

Item	My Farm	Average for 86 Farms, 1979			
		Including Cattle Price Increases		Excluding Cattle Price Increases*	
		Per Farm	Per Cow	Per Farm	Per Cow
Total Farm Receipts	$_____	$145,656	$2,349	$124,948	$2,015
Total Farm Expenses	_____	117,690	1,898	114,461	1,846
LABOR & MANAGEMENT INCOME	$_____	$ 27,966	$ 451	$ 10,487	$ 169
Number of Operators	_____	1.20		1.20	
LABOR & MANAGEMENT INCOME PER OPERATOR	$_____	$ 23,363	$ 377	$ 8,739	$ 141

* Calculated by subtracting from receipts the increase in livestock inventory due to price increases and subtracting from expenses the increased interest on equity capital due to the higher livestock investment.

Labor and management income is the return to the operator for his efforts in operating the business. It is computed with and without the affect of the large increase in livestock inventory caused by higher cattle prices. Dairymen who used realistic cow values in their beginning and end inventories should recognize this increase as part of the return for operating the farm. A nine percent charge for the use of the operator's equity capital in the business has been included as a farm expense. This interest charge reflects what the operator could have earned from this capital had it been invested elsewhere.

Labor, management and ownership income per operator measures the combined return to the farmer for his triple role of worker-manager, financier and owner. The return here provides for the operator's living and his gain in business net worth.

LABOR, MANAGEMENT AND OWNERSHIP INCOME
Oneida - Mohawk Region Dairy Farms, 1979

Item	My Farm	Average 86 Farms 1979	
		Per Farm	Per Cow
Labor & management income	$_____	$27,966	$ 451
Real estate appreciation	_____	9,252	149
Interest on equity capital	_____	19,398	313
Total Per Farm	$_____	$56,616	$ 913
Number of operators		1.20	
LABOR, MANAGEMENT AND OWNERSHIP INCOME PER OPERATOR	$_____	$47,298	$ 763

Return on equity capital is a common measure for non-farm businesses. When appreciation in all assets is included the rate of return for these businesses in 1979 was 19.1%. When real estate appreciation was excluded the rate dropped to 14.8%. Also excluding livestock appreciation reduced the rate to 6.7%.

RETURN ON EQUITY CAPITAL
Oneida - Mohawk Region Dairy Farms, 1979

Item	My Farm	Average 86 Farms 1979	
		Including Cattle Price Increases	Excluding Cattle Price Increases
		Including Real Estate Appreciation	
Labor, Mgt. & Ownership Income/Farm	$_____	$56,616	$39,137
Less: Value of Operator's Labor & Mgt.	_____	15,436	15,436*
Return on Equity Capital	_____	$41,180	$23,701
Rate of Return on Equity Capital	_____%	19.1%	11.0%
		Excluding Real Estate Appreciation	
Return on Equity Capital (from above)	$_____	$41,180	$23,701
Less: Real Estate Appreciation	_____	9,252	9,252
Return on Equity Capital	$_____	$31,928	$14,449
Rate of Return on Equity Capital	_____%	14.8%	6.7%

* Value of operator's labor and management estimated by operators, $12,878 from page 3, times 1.20 operators per farm.

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 with a high level of scheduled debt repayment may find his management flexibility seriously restricted even though he has a good labor and management income.

FARM FAMILY FINANCIAL SITUATION
86 Oneida - Mohawk Region Dairy Farms, January 1, 1980

Item	My Farm	Average for 86 Farms Per Farm	Per Cow*
Assets			
Livestock	$_____	$ 93,437	$1354
Feed and supplies	_____	19,759	286
Machinery and Equipment	_____	63,399	919
Land and buildings	_____	158,653	2299
Co-op investment	_____	4,269	62
Accounts receivable	_____	8,786	127
Cash and checking accounts	_____	2,115	31
Total Farm Assets	$_____	$350,418	$5078
Savings accounts	$_____	$ 2,992	$ 43
Cash value life insurance	_____	2,410	35
Stocks and bonds	_____	1,318	19
Non-farm real estate	_____	2,426	35
Auto (personal share)	_____	2,390	35
All other	_____	2,722	40
Total Non-Farm Assets	$_____	$ 14,258	$ 207
TOTAL ASSETS	$_____	$364,676	$5285
Liabilities			
Real estate mortgage	$_____	$ 75,985	$1101
Liens on cattle and equipment	_____	45,208	655
Installment contracts	_____	1,754	25
Other loans: 10 years and over	_____	2,876	42
1 to 10 years	_____	5,925	86
Under 1 year	_____	1,298	19
Accounts payable	_____	1,834	27
Total Farm Liabilities	$_____	$134,880	$1955
Non-Farm Liabilities	_____	1,178	17
TOTAL LIABILITIES	$_____	$136,058	$1972
Farm Net Worth (equity capital)	$_____	$215,538	3123
Family Net Worth	$_____	$228,618	$3313

* Number of cows January 1, 1980 was 69.

Payment Ability is the most important consideration in determining if and how proposed investments should be financed. The farm business must produce enough cash income to meet operating expenses, to cover family or personal living expenses and to make debt payments. Cash purchases of capital items that normally take place during the year must also be included.

Payment ability is calculated in the following table. Interest paid is added to net cash farm income because planned or budgeted debt payments will include interest as well as principal. Estimate family living expenses for your farm to calculate cash available for debt payment and capital purchases made in cash.

Debt payments planned for 1980 are the scheduled debt payments as of January 1980. Some farms in the group had scheduled debt payemnts exceeding 40 percent of the milk receipts. Committing this much cash inflow to debt payments can put a "big squeeze" on cash available for operating the business and family living.

FINANCIAL MEASURES & DEBT COMMITMENT
86 Oneida - Mohawk Region Dairy Farms, January 1, 1980

Item	My Farm	Average for 86 Farms Per Farm	Per Cow*
Payment Ability			
Net cash farm income	$_____	$31,731	$ 512
Add: Interest paid	_____	9,650	155
CASH AVAILABLE FOR DEBT SERVICE & LIVING	$_____	$41,381	$ 667
Less: Family living espenses	_____	11,921**	192
CASH AVAILABLE FOR DEBT PAYMENT & CAPITAL PURCHASES	$_____ $_____	$29,460	$ 475
Scheduled Annual Debt Payments			
Real estate mortgage	$_____	$ 8,097	$ 117
Cattle and equipment liens	_____	11,470	166
Installment contracts	_____	279	4
Other loans: 10 years and over	_____	829	12
1 to 10 years	_____	1,426	21
Notes and other loans under 1 year	_____	1,583	23
TOTAL PAYMENTS PLANNED 1980	$_____	$23,684	$ 343
Measure of Debt Commitment & Equity Position			
Scheduled debt payments per cow	$_____	$ 343	
Scheduled debt payments as % of milk sales	_____ %	23%	
Farm debt per cow	$_____	$ 1,927	
Percent equity (total)	_____ %	63%	

* Average of 62 cows for 1979 and 69 cows for 1980.

** Estimated at $6,000 per family and four percent of cash receipts, assuming one family per operator.

ANALYSIS OF THE FARM BUSINESS

Research has shown that certain factors controlled by management affect farm incomes. In analyzing a farm business, we examine the factors of size, rates of production, labor efficiency, capital efficiency and cost control.

Size of Business

Studies have shown that, in general, larger farms pay better. 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 of production on which to make a profit. It is imperative to remember, however, all large farms are not profitable and big size without good management can lead to big trouble!

MEASURES OF SIZE OF BUSINESS
Oneida - Mohawk Region Dairy Farms, 1978 & 1979

Measure	Average 69 Farms 1978	Average 86 Farms 1979	My Farm
Number of cows	56	62	_____
Number of heifers	36	43	_____
Pounds of milk sold	752,400	897,500	_____
Man equivalent	2.1	2.3	_____
Total work units	631	692	_____
Total acres of crops	189	194	_____

In the table below, the 527 New York farms for 1978 are sorted by number of cows and the labor income is shown for each size group. In general, the large farms paid better, but variability of income was significant.

COWS PER FARM AND LABOR AND MANAGEMENT INCOME
527 New York Dairy Farms, 1978

Number of Cows	Number of Farms	Percent of Farms	Labor & Management Income Per Operator	Per Cow
Under 40	73	13%	$ 9,865	$307
40 - 54	156	30	14,480	345
55 - 69	104	20	18,505	376
70 - 84	68	13	20,246	345
85 - 99	34	6	18,818	286
100 - 114	28	5	32,417	382
115 - 129	19	4	27,440	358
130 - 149	16	3	32,752	341
150 and over	29	6	45,387	329

Rates of Production

Crop yields and animal production rates are factors that affect farm incomes. Crop acres, yields and pounds of milk sold per cow are compared in the following table.

CROP YIELDS AND MILK SOLD PER COW
86 Oneida - Mohawk Region Dairy Farms, 1979

Crop	Average of Farms Reporting			My Farm	
	Farms Reporting	Acres	Yield	Acres	Yield
Dry hay	80	87	(combined	____	____
Hay crop silage	59	56	below)	____	____
Corn silage	81	54	11.8 ton	____	____
Grain corn	27	33	87 bu.	____	____
Oats	20	22	64 bu.	____	____
Hay equivalent:					
All hay crops	86	121	2.6 ton	____	____
All hay & silage	86	172	3.0 ton	____	____
Milk sold per cow			14,476 lbs.	____	

Tons of hay equivalent of all hay and silage is a good measure of the overall rate of forage production. One ton of hay equivalent is equal to one ton of dry hay containing 90 percent dry matter.

The hay crop yields reported in 1979 were 13 percent higher than in 1978 but corn silage yields were 14 percent below those reported last year. Milk sold per cow was about the same in 1979 as in 1978.

The importance of strong milk output per cow is shown in the table below.

MILK SOLD PER COW AND LABOR AND MANAGEMENT INCOME
527 New York Dairy Farms, 1978

Pounds of Milk Sold Per Cow	Number of Farms	Number of Cows	Feed Bought Per Cow	Labor & Management Income	
				Per Operator	Per Cow
Under 10,000	28	60	$294	$ 3,400	$ 64
10,000 - 10,999	37	52	339	10,170	227
11,000 - 11,999	37	67	334	19,230	349
12,000 - 12,999	76	69	370	18,680	296
13,000 - 13,999	99	75	378	18,680	294
14,000 - 14,999	99	79	442	23,650	369
15,000 - 15,999	85	75	465	26,690	456
16,000 and over	66	65	499	21,590	438

Labor Efficiency

Labor utilization is an important factor in milk production. Several measures of accomplishment per man or labor efficiency are shown below..

MEASURES OF LABOR EFFICIENCY
Oneida - Mohawk Region Dairy Farms, 1978 & 1979

Item	Average 69 Farms 1978	Average 86 Farms 1979	My Farm
Man equivalent	2.1	2.3	
Cows per man	27	28	
Pounds of milk sold per man	362,000	399,000	
Works units per man	303	308	

Number of cows per man is calculated by dividing the average number of cows by the man equivalent which represents the total farm labor force. There was an increase of one cow per man when the average for 1979 is compared with the average of the 69 farms summarized for 1978.

Pounds of milk sold per man is the single best measure of labor efficiency on the dairy farm. It measures the ability of the labor force to handle a large number of cows without sacrificing milk output per cow. The farms included in the 1979 summary were more efficient than those in the 1978 study as milk output per man increased by 37,000 pounds.

It is important to look at other measures of labor efficiency, such as work units per man because all dairy farms do not have the same relationship between cows, heifers and crops grown. One work unit is the equivalent of one ten hour work day.

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

MILK SOLD PER MAN AND LABOR AND MANAGEMENT INCOME
527 New York Dairy Farms, 1978

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	62	41	11,200	$ 6,760	$191
250,000 - 299,999	60	49	12,900	12,830	309
300,000 - 349,999	71	68	13,100	14,170	279
350,000 - 399,999	91	66	13,800	21,000	376
400,000 - 449,999	82	73	14,400	23,090	392
450,000 - 499,999	64	79	14,500	23,500	337
500,000 - 599,999	67	97	15,200	25,570	366
600,000 and over	30	120	14,500	34,840	413

Capital Efficiency

Capital is a key resource and a manager must continually analyze its use in the business. The measures of capital efficiency shown in the following table include owned as well as borrowed capital. The management of borrowed capital has been analyzed on page 10. It's possible for the business to be under capitalized, but investing too much capital per productive unit is a more common problem. The best way a farmer can get a good return on capital invested in his business is to "put it to work".

MEASURES OF CAPITAL EFFICIENCY
Oneida - Mohawk Region Dairy Farms

Item	Average 69 Farms 1978	Average 86 Farms 1979	My Farm
Farm capital per man	$121,584	$148,998	$_____
Farm capital per cow	4,437	4,859	_____
Land & buildings per cow	2,278	2,299	_____
Land & buildings per crop acre owned	1,091	1,133	_____
Machinery investment per cow	882	919	_____
Capital turnover	2.4 years	2.3 years	_____

Land and building investment per crop acre owned shows the relationship between investments in land and buildings. The farmer who owns little cropland but invests in lots of farm buildings will have a relatively large land and building investment per crop acre owned. This could be an indication that his use of capital is "out of balance".

Capital turnover is calculated by dividing the total farm capital (total year end farm inventory) by the total farm receipts for the year. The factor is called capital turnover because it measures the number of years of receipts needed to equal or "turnover" farm capital. A fast rate of turnover is more desirable than a slow rate because it means capital purchases can be paid off at a faster rate.

CAPITAL TURNOVER AND LABOR INCOME
527 New York Dairy Farms, 1978

Capital Turnover (Years)	Number of Farms	Labor and Management Income Per Operator
Less than 1.5	61	$ 33186
1.5 - 1.9	188	26706
2.0 - 2.4	168	17035
2.5 - 2.9	61	8326
3.0 - 3.4	23	3576
3.5 and over	26	-9006

Cost Control

The control of costs could be a dominant factor in the success of modern commercial dairy operations. Feed, machinery and labor costs are major items examined in detail. However, it is important to check all cost items both large and small.

Feed Costs

Feed purchased is the largest single expenditure category on these dairy farms. These Oneida-Mohawk region dairy farms used 27 cents from each dollar's worth of milk sold to purchase dairy feed in 1979.

The crop program has an important influence on purchased feed costs. Increasing the amount of roughage and/or grain grown on the farm will reduce the quantity of feed to be purchased. However, this will reduce the total cost of feeding the animals only if the cost of growing feed on the farm is less than the cost of purchased feed. Also, the number of heifers being raised on the farm will affect the total feed cost per cow or hundredweight of milk sold. The overall feed situation must be examined and evaluated as a "system".

FEED COSTS AND RELATED MEASURES
Oneida - Mohawk Region Dairy Farms, 1978 & 1979

Item	Average 69 Farms 1978	Average 86 Farms 1979	My Farm
Feed bought per cow	$418	$462	$_____
Crop expense per cow	$103	$109	_____
Feed bought per cwt. milk	$ 3.11	$ 3.19	_____
Feed & crop expense per cwt. milk	$ 3.88	$ 3.94	_____
Percent feed is of milk receipts	30%	27%	_____%
Hay equivalent per cow (tons)	9.2	8.3	_____
Crop acres per cow	3.4	3.1	_____
Lime & fertilizer per crop acre	$ 19	$ 23	$_____
Heifers as % of cow numbers	64%	69%	_____%

Several factors are known to be an important influence on feed and crop expense per hundreweight of milk. Early cutting of hay and hay crop silage increases the amount of protein and energy that can be supplied by forage. Feeding according to production so that cows in early lactation are not underfed and cows in late lactation are not overfed increases the efficiency of concentrate use. Feeding a balanced, least-cost ration reduces the cost of the concentrate required to meet the cow's needs.

Machinery, Labor and Miscellaneous Costs

Labor and machinery operate as a "team" on a modern farm. The management challenge is to find the combination of labor and mechanization that will give a reasonable cost per unit of output.

LABOR AND MACHINERY COSTS
Oneida - Mohawk Region Dairy Farms, 1978 & 1979

Item	Average 69 Farms 1978	Average 86 Farms 1979	My Farm
Total Machinery[1/]	$16,760	$22,063	$_____
Machinery cost per cow	$ 299	$ 356	_____
Machinery cost per cwt. of milk	2.23	2.46	_____
Total labor costs[2/]	$13,578	$16,340	_____
Labor costs per cow	251	264	_____
Labor costs per cwt. of milk	1.86	1.82	_____
Labor & machinery costs per cwt. of milk	4.09	4.28	_____

1/ Machinery depreciation, interest on the average machinery inventory, machine hire, machinery repairs, farm share of auto expense and gas and oil are all included.

2/ Includes hired labor and paid family labor, plus unpaid family labor valued at $425 per month and operator's labor valued at $650 per month.

Machinery costs increased more than labor costs in 1979. Labor and machinery costs per cow in 1979 were 13 percent higher than the average for 1978.

MISCELLANEOUS COSTS CONTROL MEASURES
Oneida - Mohawk Region Dairy Farms, 1978 & 1979

Item	Average 69 Farms 1978	Average 86 Farms 1979	My Farm
Veterinary & medicine per cow	$ 22.93	$ 29.16	$_____
Other livestock expense per cow	51.23	59.06	_____
Real estate expense per cow	106.77	128.84	_____
Total farm expense per cow	$1,558	$1,898	_____

Other livestock expenses per cow include dairy supplies, bedding and DHIC fees, but exclude breeding fees and milk marketing. Real estate expenses include repairs, taxes, insurance and rent.

Total farm expenses per cow were up 22 percent in 1979.

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.

FARM COST OF PRODUCING MILK
86 Oneida - Mohawk Region Dairy Farms, 1979

Item	My Farm	Average 86 Farms	
Total cash farm expenses	$	$ 86,304	
Machinery depreciation		6,978	
Building depreciation		3,210	
Unpaid labor		1,800	
Interest on equity capital @ 9%		19,398	
Decrease in feed and supplies		0	
Decrease in livestock inventory		0	
TOTAL FARM EXPENSES	$	$117,690	
Value Operator's Labor @ $700/mo.		10,080	
TOTAL COST OF PRODUCTION (A)	$		$127,770
Total cash farm receipts	$	$118,035	
Less: Milk sales		-104,240	
Non-milk cash receipts		13,795	
Increase in feed & supplies		2,723	
Increase in cattle inventory[a/]		4,190	
TOTAL NON-MILK INCOME (B)			20,708
COST OF PRODUCING MILK (A minus B)	$		$106,982
Hundredweights of milk sold		8,975	
COST OF PRODUCING CWT. MILK	$		$ 11.92
Management charge @ 5% cash receipts	$	$ 4,315	
Management charge per cwt. milk		.48	
COST OF PRODUCING MILK WITH MGT. CHARGE	$		$ 12.40

a/ Due to change in livestock numbers. Excludes inventory change due to price variation.

COST OF PRODUCING MILK, NEW YORK DAIRY FARMS, 1972-1978

Year	Value Operator's Labor	Value Operator's Management*	Cost/Cwt. With Management Excluded	Cost/Cwt. With Management Included	Average Price Received	Average Price Reported**
1972	$6,000	$3,275	$ 6.43	$ 6.80	$ 6.41	$ 6.25
1973	6,000	3,689	7.26	7.69	7.30	7.30
1974	6,000	4,330	8.34	8.82	8.57	8.24
1975	6,000	4,474	9.07	9.55	8.65	8.66
1976	6,000	5,162	9.87	10.42	9.90	9.86
1977	7,200	5,212	10.55	11.09	9.76	9.61
1978	7,800	5,862	10.74	11.34	10.51	10.38

* Estimated @ 5% of cash receipts.
** New York - New Jersey Milk Marketing Area.

YEARLY FINANCIAL PLANNING AND ANALYSIS
86 Oneida - Mohawk Region Dairy Farms, 1979
Average: 62 Cows, 14,476 Lbs. Milk Per Cow, $11.61 Per Cwt.

Item	Average Per Cow	My Farm, Per Cow	My Farm, Total	Goal
CASH RECEIPTS				
Milk Sales	$1,681	$	$	$
Crop Sales	13			
Dairy cattle	161			
Calves & other livestock	21			
Other	28			
Total Cash Receipts	$1,904	$	$	$
CASH EXPENSES				
Hired Labor	$ 93	$	$	$
Dairy Concentrate	462			
Hay & other	8			
Machine hire	8			
Machine repair & auto expense	91			
Gas & oil	58			
Breeding fees	20			
Vet & medicine	29			
Milk marketing (ADA, dues, hauling)	34			
Other livestock expense	59			
Fertilizer & lime	71			
Seeds & plants	24			
Spray & other	13			
Land, bldg., fence repair (owner)	37			
Taxes (owner)	41			
Insurance (owner)	27			
Rent (owner)	24			
Telephone (farm share)	6			
Electricity (farm share)	32			
Miscellaneous	28			
Total Cash Expenses[1/]	$1,165	$	$	$
Total Cash Receipts	$1,904	$	$	$
Total Cash Expenses[1/]	-1,165	-	-	-
Net Cash Flow	$ 739	$	$	$
Cash Family Living Expense[2/]	- 192	-	-	-
Amount Left for Debt Service, Capital Investment & Retained Earnings	$ 547	$	$	$
Scheduled Debt Service	- 343	-	-	-
Available for Capital Investment[3/]	$ 204	$	$	$
Planned Cattle Purchase				
Planned Equipment Purchase				
Borrowed Funds Needed[4/]		$	$	$

1/ Interest paid excluded from cash expenses as it is contained in Scheduled Debt Service. Purchased livestock are also excluded.
2/ Estimated: $6,000 per family and four percent of cash receipts.
3/ Retained earnings are $0.
4/ May be replaced by equity capital.

Farm Business Chart

The Farm Business Chart is a tool which can be used in analyzing a business to determine the strong and weak points. The figure at the top of each column is the average of the top 10 percent of the 527 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
527 New York Dairy Farms, 1978

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
5.0	168	2,333,700	17,100	4.4	20	44	631,900
3.4	106	1,499,800	15,800	3.4	17	37	518,900
2.9	83	1,188,200	15,200	3.0	16	33	473,100
2.5	70	1,004,200	14,700	2.7	15	31	434,000
2.3	62	875,000	14,100	2.5	14	29	403,100
2.0	55	769,700	13,600	2.3	13	27	373,500
2.0	50	671,400	13,000	2.1	12	25	340,700
1.7	44	578,000	12,400	1.9	11	23	306,000
1.5	39	487,500	11,300	1.7	9	21	264,200
1.2	31	352,100	9,400	1.2	6	17	192,400

Feed Bought		Machinery Cost	Labor and Machinery Cost	Feed and Crop Expense Per
Per Cow	% of Milk Receipts	Per Cow	Per Cow	Cwt. Milk
$178	13%	$151	$382	$2.36
263	20	197	443	2.98
322	24	226	482	3.24
371	26	250	517	3.48
398	28	271	541	3.67
424	30	288	565	3.85
455	32	311	598	4.04
489	34	338	636	4.29
539	37	376	695	4.62
644	43	476	826	5.27

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.

This chart can be used to analyze a dairy business by drawing a line through the figure in each column which represents the level of management for this farm.

FARM BUSINESS SUMMARY BY HERD SIZE
527 New York Dairy Farms, 1978

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	$ 35,739	$ 52,755	$ 65,255	$ 78,468
Feed and supplies	8,173	13,258	19,892	28,543
Machinery and equipment	30,530	42,334	56,067	70,121
Land and buildings	89,130	119,477	144,548	187,022
TOTAL INVESTMENT	$163,572	$227,824	$285,762	$364,154
Receipts				
Milk sales	$ 44,369	$ 64,277	$ 88,791	$113,625
Dairy cattle sold	3,822	5,553	8,146	9,008
Other livestock sales	1,260	1,481	1,623	2,366
Crop sales	327	610	855	659
Miscellaneous receipts	1,474	1,612	1,969	2,739
Total Cash Receipts	$ 51,252	$ 73,533	$101,384	$128,397
Increase in livestock	9,421	13,303	15,071	17,986
Increase in feed & supplies	1,470	2,855	4,074	4,797
TOTAL FARM RECEIPTS	$ 62,143	$ 89,691	$120,529	$151,180
Expenses				
Hired labor	$ 1,371	$ 2,682	$ 5,625	$ 9,875
Dairy feed	12,936	18,960	24,903	31,012
Other feed	830	1,067	1,242	1,048
Machine hire	299	476	637	1,081
Machinery repair	2,287	3,202	4,783	6,270
Auto expense (farm share)	281	308	283	374
Gas and oil	1,534	1,996	2,823	3,497
Purchased animals	2,402	3,242	2,776	1,885
Breeding fees	606	912	1,085	1,338
Veterinary and medicine	841	1,236	1,559	1,953
Milk marketing	1,218	1,581	2,516	3,161
Other livestock expense	1,734	2,543	3,185	4,233
Fertilizer and lime	1,922	2,788	4,508	6,902
Seeds and plants	612	1,044	1,525	2,101
Spray and other crop expense	327	744	877	1,455
Land, bldg, fence repair	1,085	1,091	1,708	2,158
Taxes and insurance	2,304	3,068	3,752	4,805
Electric & phone (farm share)	1,218	1,622	2,098	2,548
Interest paid	3,190	5,806	7,232	8,654
Miscellaneous expenses	885	1,467	2,190	3,321
Total Cash Expenses	$ 37,882	$ 55,835	$ 75,307	$ 97,671
Machinery depreciation	3,077	4,280	5,626	6,504
Building depreciation	1,283	1,835	2,574	2,957
Unpaid family labor	1,700	1,700	1,275	850
Interest on equity @ 7%	8,070	10,171	12,801	17,303
Decrease in feed & supplies	--	--	--	--
TOTAL FARM EXPENSES	$ 52,012	$ 73,821	$ 97,583	$125,285
Financial Summary				
Total Farm Receipts	$ 62,143	$ 89,691	$120,529	$151,180
Total Farm Expenses	52,012	73,821	97,583	125,285
Labor & Mgt. Income	$ 10,131	$ 15,870	$ 22,946	$ 25,895
Number of operators	1.03	1.10	1.24	1.28
LABOR & MGT. INCOME/OPERATOR	$ 9,865	$ 14,480	$ 18,505	$ 20,246

FARM BUSINESS SUMMARY BY HERD SIZE
527 New York Dairy Farms, 1978

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	$ 97,347	$121,909	$119,719	$141,329	$190,365
Feed and supplies	30,205	35,548	41,538	45,886	64,626
Machinery and equipment	74,732	87,843	93,068	99,001	132,126
Land and buildings	207,813	233,434	253,252	280,079	367,009
TOTAL INVESTMENT	$410,097	$478,734	$507,577	$566,295	$754,126
Receipts					
Milk sales	$131,892	$154,734	$178,211	$209,111	$292,088
Dairy cattle sold	12,876	14,438	12,279	17,746	23,754
Other livestock sales	2,776	4,671	2,549	3,182	5,066
Crop sales	1,537	1,051	1,479	944	2,102
Miscellaneous receipts	2,717	3,977	3,514	5,236	7,646
Total Cash Receipts	$151,798	$178,871	$198,032	$236,219	$330,656
Increase in livestock	22,212	35,079	29,387	34,682	46,650
Increase in feed & supplies	2,474	8,471	5,959	3,937	9,566
TOTAL FARM RECEIPTS	$176,484	$222,421	$233,378	$274,834	$386,872
Expenses					
Hired labor	$ 12,139	$ 14,607	$ 18,495	$ 24,385	$ 41,507
Dairy feed	36,223	48,215	46,532	58,126	78,730
Other feed	2,093	3,096	3,003	2,422	3,797
Machine hire	1,325	1,025	950	972	3,918
Machinery repair	8,028	8,105	9,079	12,487	15,440
Auto expense (farm share)	584	523	448	379	572
Gas and oil	4,808	4,963	5,854	6,361	9,147
Purchased animals	2,219	8,158	4,912	4,120	9,642
Breeding fees	1,764	1,938	2,186	2,640	3,151
Veterinary and medicine	2,419	2,870	3,102	4,394	4,704
Milk marketing	4,026	3,733	5,333	5,473	9,729
Other livestock expense	4,170	5,089	5,572	6,937	9,295
Fertilizer and lime	7,551	7,293	7,886	9,950	16,339
Seeds and plants	2,415	2,844	2,785	3,767	5,176
Spray and other crop expense	1,583	2,026	2,815	3,429	4,364
Land, bldg., fence repair	2,524	1,957	2,740	4,565	4,788
Taxes and insurance	5,970	5,919	7,178	8,028	11,419
Electric & phone (farm share)	3,176	3,258	3,914	3,406	5,161
Interest paid	10,676	13,477	12,395	14,610	20,567
Miscellaneous expenses	3,854	4,016	5,995	5,297	8,626
Total Cash Expenses	$117,547	$143,112	$151,174	$181,748	$266,072
Machinery depreciation	9,155	9,979	9,912	10,443	15,674
Building depreciation	3,284	5,885	4,293	7,095	7,289
Unpaid family labor	850	1,700	425	425	850
Interest on equity @ 7%	19,641	21,224	24,274	28,063	32,855
Decrease in feed & supplies	--	--	--	--	--
TOTAL FARM EXPENSES	$150,477	$181,900	$190,078	$227,774	$322,740
Financial Summary					
Total Farm Receipts	$176,484	$222,421	$233,378	$274,838	$386,872
Total Farm Expenses	150,477	181,900	190,078	227,774	322,740
Labor & Mgt. Income	$ 26,007	$ 40,521	$ 43,300	$ 47,064	$ 64,132
Number of operators	1.38	1.25	1.58	1.44	1.41
LABOR & MGT. INCOME/OPR	$ 18,818	$ 32,417	$ 27,440	$ 32,752	$ 45,387

SELECTED BUSINESS FACTORS BY HERD SIZE
527 New York Dairy Farms, 1978

Item	Farms with: Less than 40 Cows	40 to 54 Cows	55 to 69 Cows	70 to 84 Cows
Number of farms	73	156	104	68
Size of Business				
Number of cows	33	46	61	75
Number of heifers	22	31	41	54
Pounds of milk sold	426,800	624,700	855,100	1,085,500
Man equivalent	1.6	1.8	2.3	2.6
Total work units	370	512	677	839
Total crop acres	111	147	199	244
(Crop acres rented)	(17)	(29)	(50)	(70)
Rates of Production				
Milk sold per cow	12,930	13,600	14,000	14,500
Tons hay crops per acre	2.1	2.3	2.4	2.6
Tons corn silage per acre	13.0	13.2	13.3	14.2
Bushels of oats per acre	55	72	58	61
Labor Efficiency				
Cows per man	21	25	27	29
Pounds milk sold per man	270,100	341,400	380,000	420,700
Work units per man	234	280	301	325
Feed Costs				
Feed purchased per cow	$392	$412	$408	$413
Crop expense per cow	$87	$99	$113	$139
Feed cost per cwt. milk	$3.03	$3.04	$2.91	$2.86
Feed & crop exp./cwt. milk	$3.70	$3.77	$3.72	$3.82
% feed is of milk receipts	29%	29%	28%	27%
Hay equivalent per cow	7.8	8.3	8.5	8.8
Crop acres per cow	3.4	3.2	3.3	3.3
Fertilizer & lime/crop acre	$17	$19	$23	$28
Machinery and Labor Costs				
Total machinery costs	$9,501	$13,110	$17,825	$22,372
Machinery cost per cow	$288	$285	$292	$298
Machinery cost/cwt. milk	$2.23	$2.10	$2.08	$2.06
Labor cost per cow	$329	$279	$273	$273
Labor cost per cwt. milk	$2.55	$2.05	$1.95	$1.89
Capital Efficiency				
Investment per man	$103,500	$124,500	$127,000	$141,100
Investment per cow	$4,800	$4,850	$4,600	$4,860
Investment per cwt. milk	$38	$36	$33	$34
Land & buildings per cow	$2,620	$2,540	$2,330	$2,490
Machinery investment/cow	$900	$900	$900	$935
Capital turnover	2.6	2.5	2.4	2.4
Other				
Price per cwt. milk sold	$10.40	$10.29	$10.38	$10.47
Acres hay crops	85	99	123	140
Acres corn silage	22	37	52	66
Inventory changes 1978*:				
Number of cows	0	0	0	+1
Invt. value per cow**	+$277	+$348	+$243	+$229

* Change from 1/1/78 to 1/1/79.
** Livestock inventory includes heifers.

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	34	28	19	16	29
Size of Business					
Number of cows	91	106	121	138	195
Number of heifers	72	77	90	90	124
Pounds of milk sold	1,240,100	1,482,800	1,699,200	1,999,300	2,651,400
Man equivalent	2.8	3.4	3.5	3.8	5.4
Total work units	1,014	1,183	1,333	1,487	2,064
Total crop acres	271	331	361	382	506
(Crop acres rented)	(83)	(115)	(159)	(111)	(212)
Rates of Production					
Milk sold per cow	13,600	14,000	14,000	14,500	13,600
Tons hay crops per acre	3.0	2.5	2.6	2.5	2.6
Tons corn silage/acre	14.1	13.6	14.4	14.6	14.4
Bushels oats/acre	52	52	64	66	73
Labor Efficiency					
Cows per man	32	31	35	36	36
Pounds milk sold/man	438,200	433,600	485,500	522,000	489,200
Work units per man	358	346	381	388	381
Feed Costs					
Feed purchased per cow	$398	$455	$385	$421	$404
Crop expense per cow	$127	$115	$111	$124	$133
Feed cost per cwt. milk	$2.92	$3.25	$2.74	$2.91	$2.97
Feed & crop exp./cwt. milk	$3.85	$4.07	$3.53	$3.76	$3.95
% feed is of milk receipts	27%	31%	26%	28%	27%
Hay equivalent per cow	8.7	8.9	8.8	8.2	7.7
Crop acres per cow	3.0	3.1	3.0	2.8	2.6
Fertilizer & lime/crop acre	$28	$22	$22	$26	$32
Machinery and Labor Costs					
Total machinery costs	$28,917	$30,361	$32,366	$37,230	$53,376
Machinery cost per cow	$318	$286	$267	$270	$274
Machinery cost/cwt. milk	$2.33	$2.05	$1.90	$1.86	$2.01
Labor cost per cow	$257	$246	$258	$260	$274
Labor cost/cwt. milk	$1.89	$1.76	$1.84	$1.79	$2.01
Capital Efficiency					
Investment per man	$144,900	$140,000	$145,000	$147,900	$139,100
Investment per cow	$4,410	$4,470	$4,100	$4,000	$3,800
Investment/cwt. milk	$33	$32	$30	$28	$28
Land & buildings/cow	$2,235	$2,180	$2,000	$2,000	$1,840
Machinery investment/cow	$800	$820	$750	$700	$660
Capital turnover	2.3	2.2	2.2	2.1	1.9
Other					
Price per cwt. milk sold	$10.64	$10.44	$10.49	$10.46	$11.02
Acres hay crops	141	180	194	198	234
Acres corn silage	80	110	115	130	185
Inventory changes 1978*:					
Number of cows	+3	+1	+4	+1	+3
Invt. value per cow**	+$212	+$320	+$212	+$239	+$222

* Change from 1/1/78 to 1/1/79.

** Livestock inventory includes heifers.

FARM FAMILY FINANCIAL SITUATION BY HERD SIZE
527 New York Dairy Farms, January 1, 1979

Item	Farms with: Less than 40 Cows	40 to 54 Cows	55 to 69 Cows	70 to 84 Cows
Number of farms	73	156	104	68
Assets				
Livestock	$ 35,740	$ 52,755	$ 65,255	$ 78,470
Feed and supplies	8,174	13,258	19,892	28,543
Machinery & equipment	30,530	42,335	56,068	70,121
Land and buildings	89,130	119,478	144,549	187,022
Co-op investment	838	2,393	2,585	3,794
Accounts receivable	3,226	4,828	6,532	8,284
Cash & checking accounts	1,275	1,374	1,971	2,617
Total Farm Assets	$168,913	$236,421	$296,852	$378,851
Savings accounts	2,336	3,254	4,117	3,505
Cash value life insurance	2,376	1,886	2,570	3,131
Stocks and bonds	982	520	1,808	3,695
Nonfarm real estate	2,201	2,698	3,157	4,945
Auto (personal share)	969	1,032	962	1,042
All other	3,816	3,620	4,336	4,843
Total Nonfarm Assets	$ 12,680	$ 13,010	$ 16,950	$ 21,161
TOTAL ASSETS	$181,593	$249,431	$313,802	$400,012
Liabilities				
Real estate mortgage	$ 27,851	$ 53,975	$ 63,209	$ 77,966
Liens on cattle & equipt.	18,893	29,321	38,989	40,351
Installment contracts	1,567	1,913	2,363	2,447
Other loans over 7 years	720	1,317	2,591	2,185
Other loans 1 to 7 years	2,696	2,481	3,040	5,201
Other loans less than 1 year	201	517	1,372	1,787
Feed store & other accounts	1,693	1,592	2,414	1,725
Total Farm Liabilities	$ 53,621	$ 91,116	$113,978	$131,662
Nonfarm Liabilities	412	587	711	729
TOTAL LIABILITIES	$ 54,033	$ 91,703	$114,689	$132,391
Farm Net Worth (Equity Capital)	$115,292	$145,305	$182,874	$247,189
FAMILY NET WORTH	$127,560	$157,728	$199,113	$267,621
Financial Measures				
Percent equity	70%	63%	63%	67%
Farm debt per cow	$1,577	$1,898	$1,809	$1,755
Available for debt service and living	$16,555	$23,498	$33,303	$39,376
Scheduled annual debt payment	$9,140	$14,216	$19,411	$23,752
Scheduled debt payment/cow	$269	$296	$308	$317
Scheduled debt payment as percent of milk check	21%	22%	22%	21%

FARM FAMILY FINANCIAL SITUATION BY HERD SIZE
527 New York Dairy Farms, January 1, 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	34	28	19	16	29
Assets					
Livestock	$ 97,349	$121,910	$119,720	$141,329	$190,366
Feed and supplies	30,206	35,549	41,539	45,886	64,626
Machinery & equipment	74,733	87,844	93,069	99,001	132,127
Land and buildings	207,814	233,435	253,252	280,080	367,010
Co-op investment	5,970	5,439	8,301	8,186	12,723
Accounts receivable	10,338	10,866	20,992	18,651	24,789
Cash & checking accounts	1,929	2,476	4,846	5,012	3,992
Total Farm Assets	$428,339	$497,519	$541,719	$598,145	$795,633
Savings accounts	4,607	4,087	3,571	3,327	2,497
Cash value life insurance	3,013	7,869	2,509	4,274	3,698
Stocks and bonds	3,118	4,885	1,465	5,580	4,771
Nonfarm real estate	2,058	250	7,236	15,656	15,442
Auto (personal share)	561	1,206	816	1,134	2,131
All other	3,191	3,780	2,942	4,281	9,901
Total Nonfarm Assets	$ 16,548	$ 22,077	$ 18,539	$ 34,252	$ 38,440
TOTAL ASSETS	$444,887	$519,596	$560,258	$632,397	$834,073
Liabilities					
Real estate mortgage	$ 80,379	$109,060	$105,786	$119,664	$172,762
Liens on cattle & equipt.	52,117	62,451	74,989	70,337	129,739
Installment contracts	2,163	3,762	2,755	2,366	3,763
Other loans over 7 years	3,663	719	2,184	687	10,191
Other loans 1 to 7 years	6,754	10,783	3,793	1,666	5,731
Other loans less than 1 year	828	2,184	1,895	625	1,995
Feed store & other accounts	1,846	5,361	3,540	1,902	2,088
Total Farm Liabilities	$147,750	$194,320	$194,942	$197,247	$326,269
Nonfarm Liabilities	276	324	3,476	687	1,724
TOTAL LIABILITIES	$148,026	$194,644	$198,418	$197,934	$327,993
Farm Net Worth (Equity Capital)	$280,589	$303,199	$346,777	$400,898	$469,364
FAMILY NET WORTH	$296,861	$324,952	$361,840	$434,463	$506,080
Financial Measures					
Percent equity	67%	63%	65%	69%	61%
Farm debt per cow	$1,572	$1,799	$1,572	$1,379	$1,623
Available for debt service and living	$44,922	$49,231	$59,244	$69,078	$85,141
Scheduled annual debt payment	$27,466	$33,068	$36,631	$31,485	$56,418
Scheduled debt payment/cow	$292	$306	$295	$220	$281
Scheduled debt payment as percent of milk check	21%	21%	21%	15%	19%

PROGRESS OF THE FARM BUSINESS

Comparing your business with that of other farmers is one part of a business checkup. It is equally important to compare your current year's business with that of earlier years to show the progress you are making, and to plan ahead, by setting business targets or goals.

Item	1977	1978	1979	1980 Goal
Size of Business				
Number of cows				
Number of heifers				
Pounds of milk sold				
Man equivalent				
Acres of crops				
Rates of Production				
Lbs. milk sold per cow				
Tons hay crops per acre				
Tons corn silage/acre				
Labor Efficiency				
Cows per man				
Lbs. milk sold per man				
Cost Control				
Feed bought per cow	$	$	$	$
Machinery cost per cow	$	$	$	$
Labor cost per cow	$	$	$	$
Capital Efficiency				
Farm capital per cow	$	$	$	$
Land & bldgs. per cow	$	$	$	$
Machinery investment per cow	$	$	$	$
Price				
Price per cwt. milk	$	$	$	$
Financial Summary				
Net cash farm income	$	$	$	$
Total farm receipts	$	$	$	$
Total farm expenses	$	$	$	$
Labor & mgmt. inc./oper.	$	$	$	$
Farm Net Worth	$	$	$	$

Are you satisfied with your progress? Have you set a realistic goal for 1980?