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DAIRY FARM BUSINESS SUMMARY

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WESTERN PLATEAU 1979

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1979 FARM BUSINESS SUMMARY
WESTERN PLATEAU REGION

The Western Plateau is a four county region that encompasses Southwest New York. It includes the counties of Allegany, Cattaraugus, Chautauqua and Steuben. This report is a summary of the 1979 business records from 68 of the dairy farms in this region.

The primary purpose of this business management project is to help cooperators do a better job of keeping and using records, and thus improve their skills as farm managers. This report has been prepared in workbook form for use in a systematic study of individual farm business operations. This booklet should also be useful to farmers in this area who are not enrolled in the business management projects of the region and to agribusinessmen connected with the agriculture of the area.

The following data gives a view of the characteristics of farms participating in the Western Plateau farm management summary program the last five years. Although many farms are consistently represented in the summary each year, there are additions and subtractions each year. Therefore, caution is advised when making year to year comparisons.

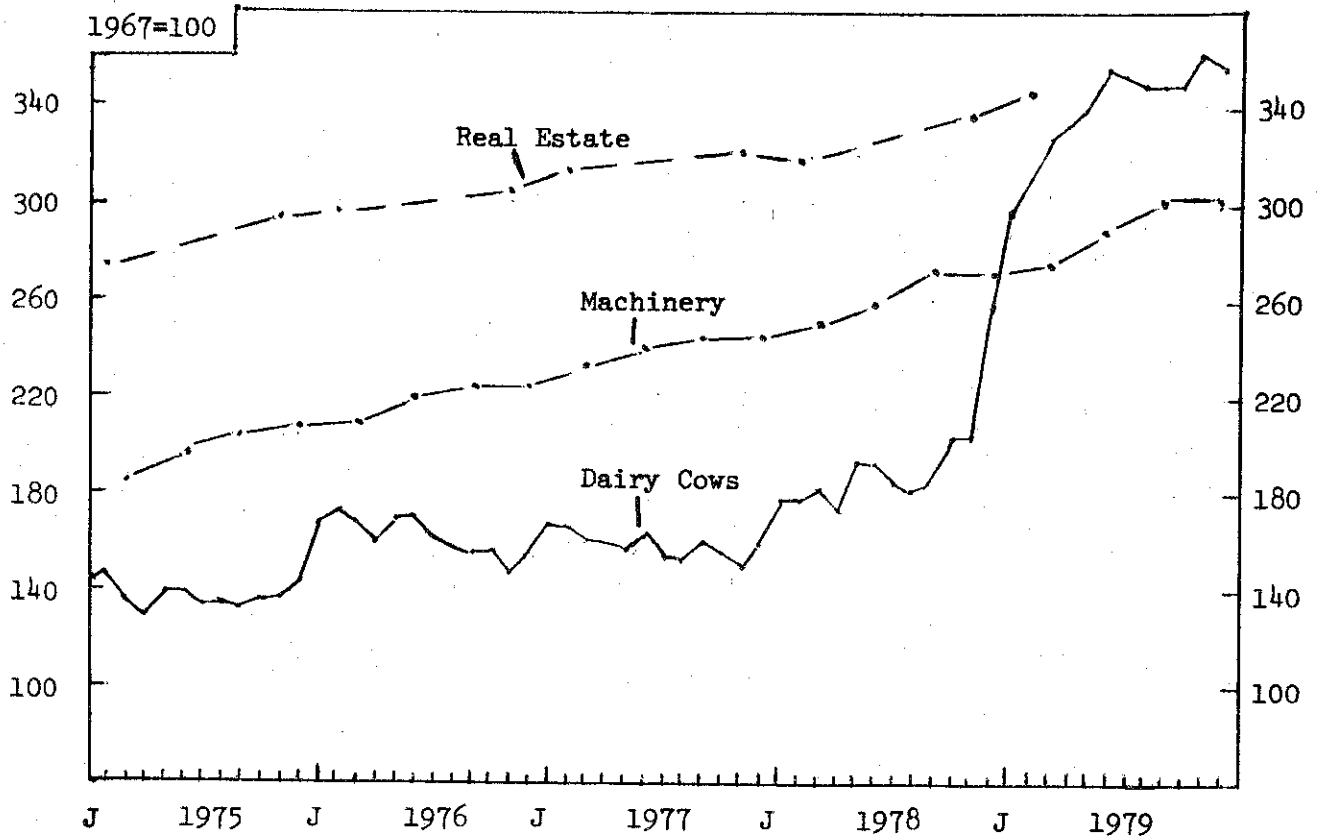
WESTERN PLATEAU DAIRY FARM MANAGEMENT SUMMARY

Item	1975	1976	1977	1978	1979
Number of farms	60	49	65	57	68
Cows per farm	61	63	61	58	57
Labor force	2.1	2.3	2.3	2.3	2.3
Investment per farm	\$193,915	\$220,400	\$227,905	\$246,170	\$302,761
Investment per cow	\$3,179	\$3,499	\$3,736	\$4,103	\$5,046
Return to operator's labor and management	\$3,406	\$9,364	\$5,266	\$16,320	\$24,407
Milk sold per cow (lbs)	12,900	13,500	13,543	13,974	14,551
Milk sold per man (lbs)	377,100	377,900	354,549	360,222	355,966
Average price per cwt. milk sold	\$8.51	\$9.74	\$9.61	\$10.18	\$11.73
Operating expenses/cwt. milk sold	\$7.10	\$7.89	\$8.28	\$9.27	\$10.43

The record high 1979 average return to labor and management is mostly due to rising cow values. The higher price received for dairy stock and higher milk prices also contributed to labor and management return. Partially offsetting the increase in return was the higher cost of debt and equity capital.

This summary was prepared by Loren W. Tauer, Department of Agricultural Economics, New York State College of Agriculture and Life Sciences, Cornell University, in cooperation with the following Extension Agents: Lee Brumback, Dan Hudson, and Gary Snider.

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		Machinery	N.Y. Farm Real Estate	
	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.) 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

Knowledge of farm resource availability and business characteristics is fundamental to judging management performance. The tables below show important farm business characteristics, the number of farms reporting these characteristics, and the average use of farm resources.

BUSINESS CHARACTERISTICS AND RESOURCES USED
68 Western Plateau Dairy Farms, 1979

Type of Business	Number	Business Records	Number	Dairy Records	Number
Individual	60	CAMIS	15	D.H.I.C.	57
Partnership	7	Account Book	30	Owner Sampler	5
Corporation	1	Agrifax	11	Other	1
		Farm Bureau	2	None	5
		Agway	6		
		Other	4		

Barn Type	Number	Milking System	Number	Number
Stanchion	47	Bucket & Carry	2	Herringbone
Freestall	17	Dumping Station	28	Other parlor
Other	4	Pipeline	23	

Labor Force	My Farm	Average	Land Use	My Farm	Average
Operator	_____	14 mo.	Total acres owned	_____	279
Family paid	_____	3 mo.	Total acres rented	_____	81
Family unpaid	_____	5 mo.	Total crop acres	_____	169
Hired	_____	6 mo.	Crop acres rented	_____	62
Total	_____	28 mo.			
Age of operator(s)	_____	40 yrs.	Number of Cows	My Farm	Average
Years of Education	_____	13 yrs.	Beginning of year	_____	58
Estimated value op's labor & management	_____	\$13,397	End of year	_____	60
			Average for year	_____	57

There were 77 operators on the 68 farms for an average of 1.1 per farm. Average man equivalent per farm was 2.3.

Total farm inventory increased nearly \$50,683 or 20 percent during 1979. The end of year farm inventory values are used in determining farm assets in this report.

CAPITAL INVESTMENT - FARM INVENTORY VALUE
68 Western Plateau Dairy Farms, 1979

Item	My Farm		Average 68 Farms	
	1/1/79	1/1/80	1/1/79	1/1/80
Livestock	\$ _____	\$ _____	\$ 64,174	\$ 87,623
Feed & supplies	_____	_____	18,542	22,330
Machinery & equipment	_____	_____	49,184	57,577
Land & buildings	_____	_____	120,178	135,231
TOTAL	\$ _____	\$ _____	\$252,078	\$302,761

Machinery and Real Estate Inventory Calculations

Machinery and real estate values and depreciation are shown below. Machinery depreciation is measured by the decrease in market value of machinery. Real estate depreciation is taken from the farm depreciation schedule. Both are included as farm expenses.

MACHINERY & EQUIPMENT DEPRECIATION
68 Western Plateau Dairy Farms, 1979

Item	My Farm	Average of 68 Farms
Beginning Market Value	\$ _____	\$49,184
Machinery Purchases	_____	<u>14,661</u>
Total (1)	\$ _____	\$63,845
End of Year Market Value	\$ _____	\$57,577
Machinery Sold	_____	<u>504</u>
Total (2)	\$ _____	<u>\$58,081</u>
MARKET DEPRECIATION (1 minus 2)	\$ _____	\$ 5,764
Percent Depreciation	_____ %	9%

REAL ESTATE INVENTORY CALCULATIONS
68 Western Plateau Dairy Farms, 1979

Item	My Farm	Average of 68 Farms
Beginning Market Value	\$ _____	\$120,178
Cost of New Real Estate	\$ _____	\$ 10,346
Less Lost Capital	- _____	<u>-2,284</u>
Value of New Added	+\$ _____	+8,062
Less Building Depreciation (Accounting)	- _____	-2,752
Less Real Estate Sold	- _____	<u>- 44</u>
Total Without Appreciation	\$ _____	\$125,444
Appreciation of Beginning Real Estate	+ _____	+9,787
End of Year Market Value	\$ _____	<u>\$135,231</u>

Lost Capital 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. Real Estate appreciation was estimated by each farm operator. Appreciation averaged 8.1 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. The sources and amounts of receipts are listed below.

FARM RECEIPTS
68 Western Plateau Dairy Farms, 1979

Item	My Farm	Average 68 Farms	
		Amount	Percent
Milk Sales	\$ _____	\$ 97,325	84
Crop Sales	_____	1,085	1
Dairy cattle sold	_____	10,137	9
Calves & other livestock sales	_____	3,875	3
Gas tax refunds	_____	85	} 1
Government payments	_____	517	
Work off farm	_____	818	
Custom machinery work	_____	281	
Other	_____	2,485	2
Total cash receipts	\$ _____	\$116,608	100
Increase in livestock	_____	23,449	
Increase in feed & supplies	_____	3,788	
TOTAL FARM RECEIPTS	\$ _____	\$143,845	

Although cash receipts increased from \$97,099 to \$116,608 for 1978 to 1979, the percent distribution was almost identical in both years.

INCOME ANALYSIS

Item	My Farm	Western Plateau Average	
		68 Farms, 1979	57 Farms, 1978
Average price/cwt. milk sold	\$ _____	\$ 11.73	\$ 10.18
Milk sales per cow	_____	\$ 1,707	\$ 1,422
Total cash receipts/man	_____	\$50,046	\$43,155

Expenses

There are many opportunities for dollar leaks when cash farm expenses average \$237 per day. Classifying expenses into the categories on this page will help you identify those that may need tighter control.

FARM EXPENSES
68 Western Plateau Dairy Farms, 1979

Item	My Farm	Average 68 Farms	
		Amount	Percent
<u>Hired Labor</u>	\$ _____	\$ 6,461	7
<u>Feed</u>			
Dairy Concentrate	_____	27,531	32
Other Feed	_____	2,021	2
<u>Machinery</u>			
Machine Hire	_____	526	1
Machinery Repairs	_____	5,239	6
Auto Expense (farm share)	_____	395	-
Gas & Oil	_____	3,519	4
<u>Livestock</u>			
Purchased Livestock	_____	4,141	5
Breeding Fees	_____	1,339	2
Veterinary & Medicine	_____	2,213	3
Milk Marketing	_____	2,689	3
Other Livestock Expense	_____	3,676	4
<u>Crops</u>			
Fertilizer & Lime	_____	5,365	6
Seeds & Plants	_____	1,562	2
Spray, Other Crop Expense	_____	1,676	2
<u>Real Estate</u>			
Land, Building, Fence Repair	_____	1,558	2
Taxes	_____	2,146	2
Insurance	_____	1,610	2
Rent	_____	1,376	2
<u>Other</u>			
Telephone (farm share)	_____	325	-
Electricity (farm share)	_____	1,823	2
Interest Paid	_____	7,443	9
Miscellaneous	_____	1,899	2
Total Cash Expenses	\$ _____	\$ 86,533	100
<u>Non-Cash Items</u>			
Machinery Depreciation	\$ _____	\$ 5,764	
Building Depreciation	_____	2,752	
Unpaid Family Labor	_____	2,250	
Interest on Equity Capital @ 9%	_____	18,917	
Decrease in Livestock and Feed	_____	0	
TOTAL FARM EXPENSES	\$ _____	\$116,216	

Financial Summary of Year's Business

The results of management are reflected in the net return from the business. Researchers 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
Western Plateau Dairy Farms, 1979 & 1978

Item	My Farm	Average 68 Farms 1979	Average 57 Farms 1978
Cash Farm Receipts	\$ _____	\$116,608	\$97,099
Cash Farm Expenses	_____	86,533	75,119
NET CASH FARM INCOME	\$ _____	\$ 30,075	\$21,980

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 nonfarm income. Cash flow is not a measure of farm business profits but it is useful when planning debt repayment programs.

LABOR AND MANAGEMENT INCOME
Western Plateau Dairy Farms, 1979 & 1978

Item	My Farm	Average 68 Farms 1979	Average 57 Farms 1978
Total Farm Receipts	\$ _____	\$143,845	\$114,800
Total Farm Expenses	_____	116,216	95,918
LABOR & MGT. INCOME/FARM	\$ _____	\$ 27,629	\$ 18,882
Number of Operators	_____	1.1	1.2
LABOR & MGT. INCOME/OPER.	\$ _____	\$ 24,407	\$ 16,320

Labor and management income is the return to the operator for his efforts in operating the business. Labor and management income is the measure used most commonly when comparing farm businesses. 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. By subtracting it as an expense farms that have different amounts of net worth can be compared.

The average 1979 labor and management income per operator for the Western Plateau farms was about \$8,000 higher than for the 1978 group. In 1979, a large part of the labor and management income was due to the increase in cattle values during the year.

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 return provides for the operator's living and his gain in business net worth.

LABOR, MANAGEMENT AND OWNERSHIP INCOME
Western Plateau Dairy Farms, 1979 & 1978

Item	My Farm	Average 68 Farms 1979	Average 57 Farms 1978
Labor & management income	\$ _____	\$27,629	\$18,882
Real estate appreciation	_____	9,787	4,282
Interest on equity capital	_____	18,917	10,835
TOTAL PER FARM	\$ _____	\$56,333	\$33,999
Number of operators	_____	1.1	1.2
LABOR, MANAGEMENT AND OWNERSHIP INCOME/OPERATOR	\$ _____	\$49,764	\$29,385

Return on equity capital is a common measure for nonfarm businesses. It can be computed with or without real estate appreciation. Both measures are shown below.

RETURN ON EQUITY CAPITAL
Western Plateau Dairy Farms, 1979 & 1978

Item	My Farm	Average 68 Farms 1979	Average 57 Farms 1978
		<u>Including Real Estate Appreciation</u>	
Labor, Mgt. & Ownership Income/Farm	\$ _____	\$56,333	\$33,999
Less: Value of Operator's Labor & Mgt.*	_____	15,172*	14,132
Return on Equity Capital	\$ _____	\$41,161	\$19,867
Rate of Return on Equity Capital	_____ %	19.6%	12.8%
		<u>Excluding Real Estate Appreciation</u>	
Return on Equity Capital (from above)	\$ _____	\$41,161	\$19,867
Less: Real Estate Appreciation	_____	9,787	4,282
Return on Equity Capital	\$ _____	\$31,374	\$15,585
Rate of Return on Equity Capital	_____ %	14.9%	10.0%

* Value of operator's labor and management estimated by operators (\$13,397, page 3), times approximately 1.1 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 may have a good labor income, but a high debt payment schedule may seriously restrict his management flexibility.

FARM FAMILY FINANCIAL SITUATION
68 Western Plateau Dairy Farms, January 1, 1980

Item	My Farm	Average 68 Farms
<u>Assets</u>		
Livestock	\$ _____	\$ 85,946
Feed and supplies	_____	21,536
Machinery and equipment	_____	56,242
Land and buildings	_____	133,787
Co-op investment	_____	1,913
Accounts receivable	_____	7,829
Cash and checking accounts	_____	1,634
Total Farm Assets	\$ _____	\$308,887
Savings accounts	\$ _____	\$ 1,644
Cash value life insurance	_____	2,849
Stocks and Bonds	_____	1,627
Nonfarm real estate	_____	3,531
Auto (personal share)	_____	1,023
All other	_____	4,183
Total Nonfarm Assets	\$ _____	\$ 14,857
TOTAL ASSETS	\$ _____	\$323,744
<u>Liabilities</u>		
Real estate mortgage	\$ _____	\$ 46,691
Liens on cattle and equipment	_____	40,068
Installment contracts	_____	3,489
Other loans over 10 years	_____	7,553
Other loans 1 to 10 years	_____	3,600
Other loans less than 1 year	_____	2,081
Feed store and other accounts	_____	1,838
Total Farm Liabilities	\$ _____	\$105,320
Nonfarm Liabilities	_____	1,394
TOTAL LIABILITIES	\$ _____	\$106,714
Farm Net Worth (equity capital)	\$ _____	\$203,567
Family Net Worth	\$ _____	\$217,030

Farm net worth (equity capital) is total farm assets less total farm liabilities. Family net worth is total assets less all liabilities reported.

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 purchase 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 payments 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
68 Western Plateau Dairy Farms, January 1, 1980

Item	My Farm	Average 68 Farms
<u>Payment Ability</u>		
Net cash farm income	\$ _____	\$30,075
Add: Interest paid	_____	7,443
CASH AVAILABLE FOR DEBT SERVICE & LIVING	\$ _____	\$37,518
Less: Family living expenses	_____	11,864*
CASH AVAIL. FOR DEBT PYMT. & CAP. PURCH.	\$ _____	\$25,654
<u>Scheduled Annual Debt Payments</u>		
Real estate mortgage	\$ _____	\$ 7,624
Cattle and equipment liens	_____	8,500
Installment contracts	_____	1,596
Other loans over 10 years	_____	621
Other loans 1 to 10 years	_____	1,111
Other loans less than 1 year	_____	1,208
TOTAL PAYMENTS PLANNED 1980	\$ _____	\$20,660
<u>Measure of Debt Commitment & Equity Position</u>		
Scheduled debt payments per cow	\$ _____	\$ 350
Scheduled debt payments as % of milk sales	_____ %	22%
Farm debt per cow	\$ _____	\$ 1,785
Percent equity (total)	_____ %	67%

* Estimated at \$6,000 per family, (assuming 1.1 families per farm) plus four percent of cash receipts.

ANALYSIS OF THE FARM BUSINESS

Research and experience has shown that certain factors controlled by management affect farm incomes. A farm business should be analyzed by the factors of size, rates of production, labor efficiency, capital efficiency, and cost control. This will be done on the pages that follow.

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 (milk) on which to make a profit. However, if a large farm is poorly operated, the losses will also be larger.

MEASURES OF SIZE OF BUSINESS Western Plateau Dairy Farms, 1979 & 1978

Measure	My Farm	Average 68 Farms 1979	Average 57 Farms 1978
Number of cows	_____	57	58
Number of heifers	_____	46	44
Pounds milk sold	_____	829,400	810,500
Man equivalent	_____	2.3	2.3
Total work units	_____	658	662
Total acres of crops	_____	169	164

The average Western Plateau farm summarized for 1979 is almost identical in size to the average farm summarized in 1978.

Number of cows is one measure of size. In the table below, the 527 New York farms from 1978 records are sorted by number of cows. Labor and Management income is shown for each size group.

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 & over	29	6	45,387	329

Rates of Production

Crop yields and rates of animal production are extremely important factors that affect farm incomes. In the table below, crops grown and yields, along with the pounds of milk sold per cow are listed.

CROP YIELDS & MILK SOLD PER COW
68 Western Plateau Dairy Farms, 1979

Crop	My Farm		Average of Farms Reporting		
	Acres	Yield	Farms Reporting	Acres	Yield
Dry hay	_____	_____	66	75	(combined
Hay crop silage	_____	_____	54	43	below)
Corn silage	_____	_____	63	40	14.5 tons
Grain corn	_____	_____	33	29	100 bu.
Oats	_____	_____	21	14	60 bu.

Hay equivalent:					
All hay crops	_____	_____	67	108	2.8 tons
All hay & silage	_____	_____	67	145	3.3 tons
Milk sold per cow	_____		14,551 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 importance of high 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 & over	66	65	499	21,590	438

Labor Efficiency

The labor input is an important factor in farm production. Several measures of accomplishment per man or labor efficiency are shown below.

MEASURES OF LABOR EFFICIENCY
Western Plateau Dairy Farms, 1979 & 1978

Item	My Farm	Average 68 Farms 1979	Average 57 Farms 1978
Man equivalent	_____	2.3	2.3
Cows per man	_____	24	26
Lbs. milk sold per man	_____	355,966	360,222
Work units per man	_____	282	294

Number of cows per man is calculated by dividing the average number of cows by the man equivalent (total farm labor force). There is a slight reduction in 1979 because of a slight decrease in cows per farm.

Pounds of milk sold per man is the 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. This average was lower in 1979.

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 equivalent to work that normally requires 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	Income 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 & over	30	120	14,500	34,840	413

Capital Efficiency

Capital is a key resource and it is important to 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
Western Plateau Dairy Farms, 1979 & 1978

Item	My Farm	Average 68 Farms 1979	Average 57 Farms 1978
Farm capital per man	\$ _____	\$129,940	\$109,409
Farm capital per cow	\$ _____	5,046	4,103
Land & buildings per cow	\$ _____	2,254	1,895
Land & buildings/crop acre owned	\$ _____	1,264	1,093
Machinery investment per cow	\$ _____	960	807
Capital turnover	_____ yrs.	2.1 yrs.	2.1 yrs.

Land and buildings investment per crop acre owned shows the relationship between investments in land and buildings. The farmer who owns little cropland but builds 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 may be paid off at a faster rate.

SIZE OF HERD AND CAPITAL EFFICIENCY
527 New York Dairy Farms, 1978

Number of Cows	Number of Farms	Capital Investment Per Cow			Total Capital Per Cwt. Milk
		Total	Real Estate	Machinery	
Under 40	73	\$4,860	\$2,660	\$900	\$38
40 - 54	156	4,780	2,500	890	36
55 - 69	104	4,570	2,300	890	33
70 - 84	68	4,880	2,500	940	34
85 - 99	34	4,390	2,200	800	33
100 - 114	28	4,480	2,200	800	32
115 - 129	19	4,100	2,000	750	30
130 - 149	16	4,000	2,000	700	28
150 & over	29	3,800	1,800	680	28

Cost Control

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

Feed Costs

Feed is usually the largest single expenditure on New York dairy farms. These Western Plateau dairy farms put 34 cents of each dollar of total cash expenses into purchased dairy feed during 1979. Feed costs can be controlled by efficient feeding procedures and by feeding balanced rations.

Also, the crop program has an important influence on purchased feed costs. Both roughages and grains grown have a bearing on the purchased feed items. Heifer raising practices also affect feed costs. The overall feed situation must be examined and evaluated as a "system."

FEED COSTS AND RELATED MEASURES
Western Plateau Dairy Farms, 1979 & 1978

Item	My Farm	Average 68 Farms 1979	Average 57 Farms 1978
Feed bought per cow	\$ _____	\$483	\$404
Crop expense per cow	\$ _____	\$151	\$125
Feed bought per cwt. milk	\$ _____	\$3.32	\$2.89
Feed & crop expense per cwt. milk	\$ _____	\$4.36	\$3.78
Percent feed is of milk receipts	_____ %	28%	28%
Hay equivalent per cow (tons)	_____	8.5	8.2
Crops acres per cow	_____	3.0	2.8
Lime & fertilizer per crop acre	\$ _____	\$32	\$27
Heifers as percent of cow numbers	_____ %	81%	76%

Feed bought per cow was 20 percent higher in 1979 than in 1978. However, production per cow was also greater by 577 pounds. The percent of the milk check used to buy dairy feed was about the same in 1979 as in 1978.

Forage production per cow was higher for 1979 than for the 1978 group. This may lower purchased feed requirements for this group during 1980.

Machinery, Labor, and Miscellaneous Costs

Labor and machinery operate as a "team" on a modern farm. The challenge is to get an efficient combination that will give a reasonable cost per unit of output.

LABOR & MACHINERY COSTS
Western Plateau Dairy Farms, 1979 & 1978

Item	My Farm	Average 68 Farms 1979	Average 57 Farms 1978
Total machinery costs ^{1/}	\$ _____	\$20,247	\$16,864
Machinery cost per cow	\$ _____	\$ 355	\$ 291
Machinery costs per cwt. milk	\$ _____	\$ 2.44	\$ 2.08
Total labor costs ^{2/}	\$ _____	\$17,461	\$16,746
Labor costs per cow	\$ _____	\$ 306	\$ 289
Labor costs per cwt. milk	\$ _____	\$ 2.11	\$ 2.07
Labor & machinery costs per cwt. milk	\$ _____	\$ 4.55	\$ 4.15

^{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.

MISCELLANEOUS COSTS CONTROL MEASURES
Western Plateau Dairy Farms, 1979 & 1978

Item	My Farm	Average 68 Farms 1979	Average 57 Farms 1978
Veterinary & medicine per cow	\$ _____	\$ 39	\$ 35
Other livestock expense per cow	\$ _____	\$ 64	\$ 53
Real Estate expense per cow	\$ _____	\$ 117	\$ 105
Total farm expense per cow	\$ _____	\$2,039	\$1,654

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.

YEARLY FINANCIAL PLANNING & ANALYSIS

68 Western Plateau Farms, 1979

Average: 57 Cows, 14,551 Lbs. Milk Per Cow, \$11.73 Per Cwt.

Item	Average	My Farm, _____ Cows		Goal
	Per Cow	Per Cow	Total	
<u>CASH RECEIPTS</u>				
Milk sales	\$1,707	\$ _____	\$ _____	\$ _____
Crop sales	19	_____	_____	_____
Dairy cattle	178	_____	_____	_____
Calves & other livestock	68	_____	_____	_____
Other	73	_____	_____	_____
Total Cash Receipts	\$2,045	\$ _____	\$ _____	\$ _____
<u>CASH EXPENSES</u>				
Hired labor	\$ 118	\$ _____	\$ _____	\$ _____
Dairy concentrate	483	_____	_____	_____
Hay & other	35	_____	_____	_____
Machine hire	9	_____	_____	_____
Machine repair & auto expense	99	_____	_____	_____
Gas & oil	62	_____	_____	_____
Breeding fees	23	_____	_____	_____
Vet & medicine	39	_____	_____	_____
Milk marketing (ADA, dues, hauling)	47	_____	_____	_____
Other livestock expense	64	_____	_____	_____
Fertilizer & lime	94	_____	_____	_____
Seeds & plants	27	_____	_____	_____
Spray & other	29	_____	_____	_____
Land, building, fence repair (owner)	27	_____	_____	_____
Taxes (owner)	38	_____	_____	_____
Insurance (owner)	28	_____	_____	_____
Rent (owner)	24	_____	_____	_____
Telephone (farm share)	6	_____	_____	_____
Electricity (farm share)	32	_____	_____	_____
Miscellaneous	33	_____	_____	_____
Total Cash Expenses ^{1/}	\$1,315	\$ _____	\$ _____	\$ _____
Total Cash Receipts ^{1/}	\$2,045	\$ _____	\$ _____	\$ _____
Total Cash Expenses ^{1/}	-1,315	- _____	- _____	- _____
Net Cash Flow	\$ 730	\$ _____	\$ _____	\$ _____
Cash Family Living Expense ^{2/}	- 208	- _____	- _____	- _____
Amount Left for Debt Service, Capital				
Investment & Retained Earnings	\$ 522	\$ _____	\$ _____	\$ _____
Scheduled Debt Service	- 350	- _____	- _____	- _____
Available for Capital Investment ^{3/}	\$ 172	\$ _____	\$ _____	\$ _____
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 then \$0.

^{4/} May be replaced by equity capital.

How Does Your Management Measure Up?

After you have entered your farm business data on the previous pages of this workbook, summarize the facts by listing the strong and weak points below. Your business factors that exceed the regional average should be listed as strong points, factors that are close to the regional average should be identified as average, and factors that are below average should be listed under need improvement.

The Farm Business Chart on the opposite page can also be used to identify strengths and weaknesses by comparing your business with a large number of New York dairy farms summarized for the previous year. It is recommended that you use more than one standard for comparison when analyzing the farm business.

STRONG POINTS:

AVERAGE:

_____	_____
_____	_____
_____	_____
_____	_____

NEED IMPROVEMENT:

After identifying problems, consider alternative ways of solving each problem. Each alternative should be studied in detail. A budget can be used for projecting the likely results of each alternative.

A third and probably the best comparison that you should make can be accomplished by comparing your current business factors with your farm data from previous years. Page 26 is provided for this purpose. Answer the following questions to help evaluate the progress your business is making.

- 1) Do numbers of cows, heifers, labor force and crop acres make up a well balanced unit of resources?
- 2) Have rates of production increased each year?
- 3) When will milk output per man reach 600,000 pounds?
- 4) Have increases in costs per cow been limited to the effects of inflation?
- 5) Is growth in Net Worth keeping up with increased capital investment?
- 6) Is net cash farm income increasing fast enough to meet your needs?
- 7) Have you reached the business goals set for 1979 and set new goals for 1980?

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		Labor and		Feed and Crop	
Per Cow	% of Milk Receipts	Cost Per Cow		Machinery Cost Per Cow		Expense Per 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
<u>Size of Business</u>				
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)
<u>Rates of Production</u>				
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
<u>Labor Efficiency</u>				
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
<u>Feed Costs</u>				
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
<u>Machinery and Labor Costs</u>				
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
<u>Capital Efficiency</u>				
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
<u>Other</u>				
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.

SELECTED BUSINESS FACTORS 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
Number of farms	34	28	19	16	29
<u>Size of Business</u>					
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)
<u>Rates of Production</u>					
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
<u>Labor Efficiency</u>					
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
<u>Feed Costs</u>					
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
<u>Machinery and Labor Costs</u>					
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
<u>Capital Efficiency</u>					
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
<u>Other</u>					
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	<u>\$168,913</u>	<u>\$236,421</u>	<u>\$296,852</u>	<u>\$378,851</u>
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	<u>\$ 12,680</u>	<u>\$ 13,010</u>	<u>\$ 16,950</u>	<u>\$ 21,161</u>
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	<u>\$ 53,621</u>	<u>\$ 91,116</u>	<u>\$113,978</u>	<u>\$131,662</u>
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
<u>Size of Business</u>				
Number of cows	_____	_____	_____	_____
Number of heifers	_____	_____	_____	_____
Pounds of milk sold	_____	_____	_____	_____
Man equivalent	_____	_____	_____	_____
Acres of crops	_____	_____	_____	_____
<u>Rates of Production</u>				
Lbs. milk sold per cow	_____	_____	_____	_____
Tons hay crops per acre	_____	_____	_____	_____
Tons corn silage/acre	_____	_____	_____	_____
<u>Labor Efficiency</u>				
Cows per man	_____	_____	_____	_____
Lbs. milk sold per man	_____	_____	_____	_____
<u>Cost Control</u>				
Feed bought per cow	\$ _____	\$ _____	\$ _____	\$ _____
Machinery cost per cow	\$ _____	\$ _____	\$ _____	\$ _____
Labor cost per cow	\$ _____	\$ _____	\$ _____	\$ _____
<u>Capital Efficiency</u>				
Farm capital per cow	\$ _____	\$ _____	\$ _____	\$ _____
Land & bldgs. per cow	\$ _____	\$ _____	\$ _____	\$ _____
Machinery investment per cow	\$ _____	\$ _____	\$ _____	\$ _____
<u>Price</u>				
Price per cwt. milk	\$ _____	\$ _____	\$ _____	\$ _____
<u>Financial Summary</u>				
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?