

1969 DAIRY
FARM BUSINESS
SUMMARY

WESTERN
PLATEAU REGION

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WESTERN PLATEAU REGION DAIRY FARM BUSINESS SUMMARY - 1969

This report summarizes the records of 48 Western Plateau dairy farmers who in 1969 participated in business management projects sponsored by the Cooperative Extension Service in Allegany, Cattaraugus, Chautauqua and Erie Counties and the Department of Agricultural Economics at Cornell University. The data presented here do not represent the average of all dairymen in these counties but the average of a group of dairymen interested enough in their farm businesses to keep good records and take the time to study and analyze them. Averages for the group of farms in each of these counties are included at the end of the publication. These are not to be taken as indicative of the relative profitability of dairy farming in the various counties.

One of the purposes of the business management projects is to teach and encourage farmers to keep better records. A more important purpose is to teach farmers to use the records as a basis for sound management decisions. The business analysis beginning on Page 10 is a good starting point for using your farm records in decision making. Your records should be useful as a basis for budgeting the probable consequences of the alternatives available to you in the operation of your farm business.

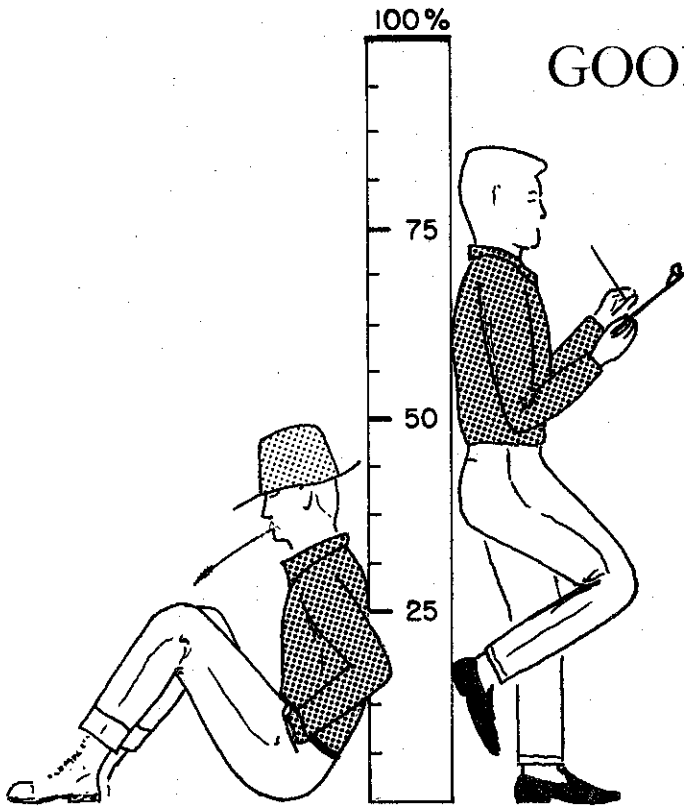
Farmers in many counties of New York State participate in business management projects similar to those in the Western Plateau Region. Some of the data included in this booklet is taken from the 1968 records of 568 New York dairy farmers. This gives farmers the opportunity to compare their business with a larger group of their competitors. The larger number of farmers also makes possible the sorting of farms into groups, thereby allowing comparisons that could not be made from the relatively small number of records in any one county.

Note that in calculating Labor Income (Page 9) and Machinery Costs (Page 14) interest has been charged at seven percent rather than at the 5 percent rate used in the past. The interest charge is intended to reflect the fact that the capital invested in the business would earn a return if invested elsewhere. Thus, the interest charge is not necessarily the interest rate on borrowed money but is an "opportunity cost" -- the rate of return the capital would earn if invested elsewhere. This opportunity cost varies from farm to farm but there is no doubt that alternative investments -- savings accounts, government bonds, etc. -- returned a much higher rate of interest in 1969 than in earlier years. This situation, plus the fact that interest rates on borrowed money were much higher in 1969 than two or three years earlier, was the basis for the decision to use a 7 percent interest charge for 1969. Note also that on Pages 9 and 14, the 1968 data for 568 New York farms has been recalculated using a 7 percent interest rate.

The information in this report should be useful to farmers in the county who are not enrolled in the business management projects. It should also be helpful to persons who work with farmers, such as agricultural teachers and credit representatives.

This summary was prepared by George L. Casler, Department of Agricultural Economics, Cornell University. The following Cooperative Extension Agents supervised the projects within the counties and assisted with the summarization of the records: Charles Hebblethwaite, Allegany; Roger Lord, Cattaraugus; Richard Zimmer, Chautauqua; and Thomas Jorgensen, Erie.

GOOD MANAGEMENT IS BASIC



How do you measure up?

1. Have you developed a systematic approach to management problems?
2. Do you have the facts on your business?
3. Are you improving your managerial skills?

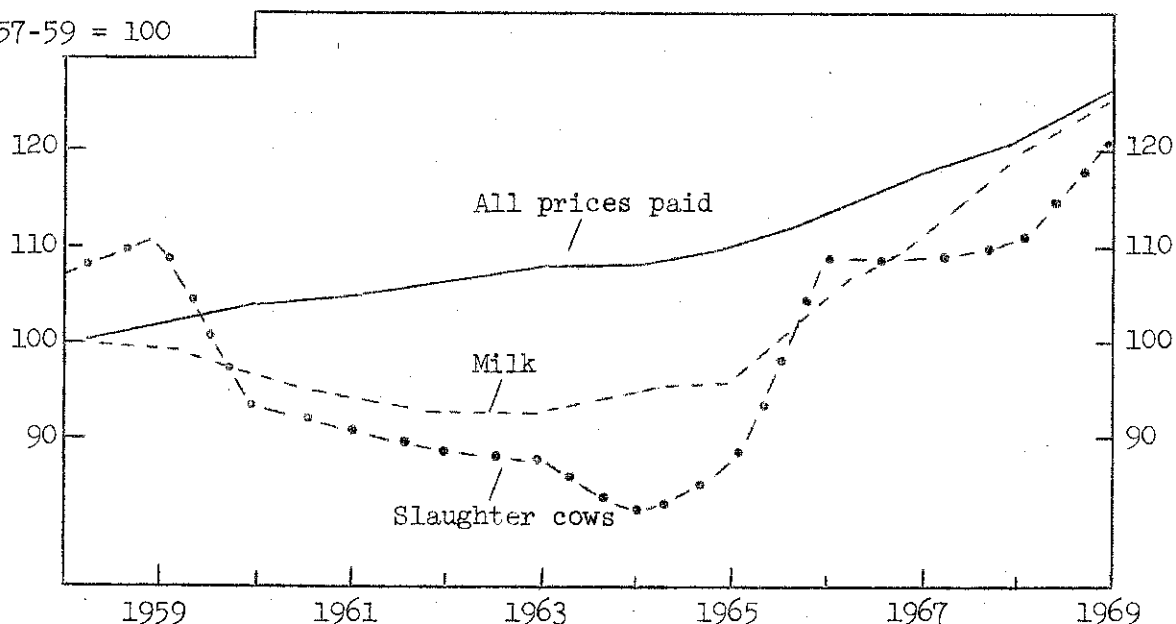
Steps in making a management decision :

1. Locate the trouble spot (problem)
2. What is your objective? (goal)
3. Size up what you have to work with (resources)
4. Look for various ways to solve the problem (alternatives)
5. Consider probable results of each way (consequences)
6. Compare the expected results (evaluate)
7. Select way best suited to your situation (decision)
8. Put the decision into operation (action)

This workbook can help you !

PRICES RECEIVED AND PAID BY N. Y. DAIRY FARMERS

1957-59 = 100



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

Prices are one of the important factors affecting farm incomes. The relationship of prices received and prices paid determines the general level of farm incomes. The blended New York farm price for 3.5% milk in 1969 averaged \$5.67 per hundredweight. This was 24 cents higher than the average for 1968 and \$1.40 more than 1965. Cull dairy cow prices also were good in 1969. The overall index of prices paid by New York dairy farmers continued to rise in 1969.

In recent years, prices of some farm inputs have risen while others have declined. From 1965 to 1969, farm wages rose 35 percent, dairy cows rose 41 percent, while feed declined 3 percent, and fertilizer prices declined slightly. These differences give rise to management questions concerning substitutions.

AVERAGE YEARLY PRICES RECEIVED AND PAID BY N. Y. FARMERS, 1960-69

Year	Milk (cwt.)	Slaughter cows (cwt.)	Dairy cows (head)	Dairy ration (ton)	Wages per month with house	Prices paid by New York dairymen
1960	\$4.31	\$15.00	\$278	\$71	\$210	104
1961	4.21	14.60	260	72	213	105
1962	4.14	14.26	245	74	218	106
1963	4.10	14.01	234	76	221	108
1964	4.21	13.17	237	74	227	108
1965	4.27	13.91	238	76	235	110
1966	4.79	17.35	269	80	258	113
1967	5.07	17.33	303	80	291	118
1968	5.43	17.58	319	74	306	121
1969*	5.67	19.42	336	74	316	126

* Preliminary

PART I
SUMMARY OF THE FARM BUSINESS

The first part of this booklet is designed to enable you to summarize your business in a systematic, orderly manner. It provides an opportunity to study your physical resources, capital investment, receipts, and expenses. This is the first step to be taken in the study and analysis of your farm business.

PHYSICAL RESOURCES

Knowledge of what resources are employed and how they are combined is fundamental to sound business planning. This includes both the physical and financial resources of the business. Below are listed the physical resources of this group of Western Plateau Region dairy farms.

FARM ORGANIZATION

Item	Average of 568 New York Farms, 1968	My Farm	48 Western Plateau Farms, 1969		
			Average	Range	
				Low	High
<u>Labor:</u>					
Man equivalent	2.1	_____	1.9	1.0	3.5
Full-time hired men			(6 farms)		
Hired men part of year			(26 farms)		
Family help			(38 farms)		
Partnerships			(10 farms)		
<u>Livestock:</u> (Av. Number)					
Cows	58	_____	54	21	142
Heifers	40	_____	45	0	226
<u>Crops:</u> (Acres grown)**					
Hay and hay crop silage	90 (560)*	_____	76 (45)*	20	182
Corn for silage	38 (515)*	_____	37 (41)*	0	140
Corn for grain	8 (149)*	_____	6 (17)*	0	40
Oats for grain	12 (275)*	_____	9 (20)*	0	60
Other crops	7 --	_____	7 --	--	--
Total crop acres	155	_____	135	60	387

*Number of farmers that reported each crop.

**Crop data from 560 of the 568 New York farms and 45 of the 48 Western Plateau farms.

CAPITAL INVESTMENT

Management of the capital resource of a farm business is becoming increasingly important. To measure the complete financial progress of a dairy farm, year to year changes in the capital structure must be considered.

In this report borrowed as well as owned capital is included and the end-of-year farm inventory is used as the measure of capital investment.

FARM INVENTORY VALUES, end of year

Item	Average of 568 New York Farms, 1968	My Farm	48 Western Plateau Farms, 1969	
			Average Per Farm	Percent of Total
Machinery and equipment	\$ 25,247	\$ _____	\$ 25,886	24
Cattle	27,317	_____	28,430	26
Other livestock	--	_____	115	--
Feed and supplies	7,638	_____	7,287	7
Land and buildings	<u>51,733</u>	_____	<u>47,237</u>	<u>43</u>
Total Investment	\$111,935	\$ _____	\$108,955	100

In many farm businesses, poor capital efficiency is a major cause of low profits. The following measures of capital efficiency will help you evaluate your overall capital management.

INVESTMENT ANALYSIS

Item	Average of 568 New York Farms, 1968	My Farm	Average of 48 Western Plateau Farms, 1969
Machinery and equipment per cow	\$ 435	\$ _____	\$ 479
Land and buildings per cow	\$ 892	\$ _____	\$ 875
Total Investment per cow	\$ 1,930	\$ _____	\$ 2,018
Total Investment per man	\$53,302	\$ _____	\$57,344
Total Investment per crop acre	\$ 722	\$ _____	\$ 807
Real Estate Investment/crop acre	\$ 334	\$ _____	\$ 350
Capital turnover*	2.5 years	_____ years	2.4 years

*Calculated by dividing the total year end investment by the total cash receipts for the year.

WHERE THE MONEY CAME FROM

A successful farm business requires a level of gross earnings great enough to pay all costs, both operating and overhead, and leave a margin for the operator's labor. Here we examine the sources of receipts for this group of dairy farms.

FARM RECEIPTS

Item	Average of 568 New York Farms, 1968	My Farm	48 Western Plateau Farms, 1969	
			Average Per Farm	Percent of Total
Milk sales	\$39,477	\$ _____	\$39,038	84
Livestock sold	3,915	_____	5,111	11
Crop sales	393	_____	826	2
Miscellaneous*	<u>1,301</u>	_____	<u>1,316</u>	<u>3</u>
TOTAL CASH RECEIPTS	\$45,086	\$ _____	\$46,291	100
Increase in inventory	<u>8,161</u>	_____	<u>9,327</u>	
TOTAL FARM RECEIPTS	\$53,247	\$ _____	\$55,618	

*Includes work off farm, conservation payments, refunds, etc.

Increases in inventory resulting from more cows, more machinery and equipment, additions to buildings or a better feed situation are a normal occurrence in most "going" farm businesses and are considered as farm receipts. These items could have been sold and turned into cash receipts, but instead the operator decided to invest this additional capital in his business. The cost of producing or acquiring these items normally is included in the farm expenses.

The increase in inventory on these farms was made up of the following: Equipment - \$2,272, Livestock - \$1,966, Feed and Supplies - \$739, Land and Buildings - \$4,350. On some farms, the increase in inventory was more than could actually be justified. For example, cow values on some farms were increased markedly from the beginning to the end of the year. In some cases, insufficient depreciation was taken on equipment. In summary, the \$9,327 average increase in inventory may overstate the actual increase in value of assets on these farms during 1968.

SELECTED INCOME FACTORS

	Average of 568 New York Farms, 1968	My Farm	48 Western Plateau Farms, 1969
Average price per cwt. of milk sold	\$ 5.52	\$ _____	\$ 5.65
Milk sales per cow	\$ 681	\$ _____	\$ 723
Total cash receipts per man	\$21,470	\$ _____	\$24,364

WHERE THE MONEY WENT

Some farmers may be able to increase profits by reducing costs. This requires a complete knowledge of what the business expenses are. With the large amount of cash flowing through a farm business today it is important that the farm operator study his expenses closely. Here is an opportunity for you to see how your're doing.

FARM EXPENSES

Item	Average of 568 New York Farms, 1968	My Farm	48 Western Plateau Farms, 1969	
			Average Per Farm	Percent of Total
Hired labor	\$ 3,006	\$ _____	\$ 2,059	8
Dairy feed bought	9,459	_____	9,429	37
Other feed bought (includes hay)	259	_____	363	1
Machine hire	287	_____	256	1
Truck, tractor, machinery expense	1,605	_____	1,640	6
Auto expense (farm share)	247	_____	198	1
Gasoline and oil	1,136	_____	1,043	4
Breeding fees	401	_____	475	2
Veterinary and medicine	645	_____	888	3
Other dairy, livestock expense	1,745	_____	1,940	8
Lime and fertilizer	1,732	_____	2,146	9
Seeds and plants	460	_____	536	2
Spray, other crop expense	430	_____	543	2
Building, fence expense	775	_____	827	3
Taxes, insurance	1,851	_____	1,650	7
Electricity, telephone (farm share)	741	_____	616	3
Miscellaneous	818	_____	867	3
TOTAL CASH OPERATING EXPENSES	\$25,597	\$ _____	\$25,476	100
New machinery	6,178	_____	5,662	
New buildings, improvements	3,301	_____	4,727	
Livestock purchased	1,823	_____	2,640	
Unpaid family labor	818	_____	975	
Decrease in inventory	--	_____	--	
TOTAL FARM EXPENSES	\$37,717	\$ _____	\$39,480	

FINANCIAL SUMMARY OF THE YEAR'S BUSINESS

There are several ways of measuring the returns from a farm business. These measures have been developed for specific purposes. The measure selected at any one time will depend on the purpose for which it is to be used.

Three measures are used here. The first is "Farm Cash Operating Income". The second, "Labor Income", is a measure of the returns to the operator for his labor and management. The last one is "Return on Investment".

FARM CASH OPERATING INCOME

Item	Average of 568 New York Farms, 1968	My Farm	Average of 48 Western Plateau Farms, 1969
Total Cash Receipts	\$45,086	\$ _____	\$46,291
Total Cash Operating Expenses	-25,597	- _____	-25,476
FARM CASH OPERATING INCOME	\$19,489	\$ _____	\$20,815
Less: Family Living Expense*	- 6,275	- _____	-6,525
Amount available for debt payments and purchase of capital items	\$13,214	\$ _____	\$14,290

*Estimated cash living expenses @ \$5,400 per operator.

"Farm Cash Operating Income" is the amount of money available from the farm business for family living, debt payments, and purchases of new capital items such as equipment, real estate, and livestock.

The "cash flow" of a farm business is important to the operator and his family in planning for capital purchases, debt payments and living expenses. However, the above measures are not good indicators of the profitability of your farm business. This is because you may increase the amount of cash available during the year by selling off or using up some of your farm property or, more likely, you decrease the amount of cash available by investing more dollars in your business during the year. Labor Income is a much better measure of what the business did for you during the year.

LABOR INCOME

Item	Average of 568 New York Farms, 1968	My Farm	Average of 48 Western Plateau Farms, 1969
Average capital investment	\$107,855	\$ _____	\$104,292
TOTAL FARM RECEIPTS	\$53,247	\$ _____	\$55,618
TOTAL FARM EXPENSES	<u>-37,717</u>	<u>- _____</u>	<u>-39,480</u>
FARM INCOME	\$15,530	\$ _____	\$16,138
Interest on capital at 7%	<u>-7,550</u>	<u>- _____</u>	<u>-7,302</u>
LABOR INCOME per far	\$ 7,980	\$ _____	\$ 8,836
Number of operators	660	_____	58
LABOR INCOME per operator	\$ 6,868	\$ _____	\$ 7,313

"Labor Income" is a measure used to determine the return the farm operator receives for his labor and management. It is the amount left after paying all farm expenses, and deducting charges for unpaid family labor and for interest on all of the capital invested in the farm business. Labor Income is the measure most commonly used when studying or comparing farm businesses.

Interest payments and payments on debts are not included in the farm expenses. To make all farms comparable, a 7 percent interest charge on the average capital investment (average of beginning and end inventories) is deducted in calculating Labor Income.

In addition to Labor Income, the family has "farm privileges" such as the use of a house and farm produced food. These items may amount to \$1,000 or more per year.

RETURN ON INVESTMENT

Item	Average of 568 New York Farms, 1968	My Farm	Average of 48 Western Plateau Farm, 1969
Farm Income	\$15,530	\$ _____	\$16,138
Value of Operator's Labor*	<u>-6,275</u>	<u>- _____</u>	<u>-6,525</u>
Return on Investment	\$ 9,255	\$ _____	\$ 9,603
Rate of Return on Capital	8.6%	_____ %	9.2%

*\$5,400 per year. There were 58 operators on the 48 Western Plateau dairy farms.

"Return on Investment" is calculated by deducting from the "farm income" a charge for the operator's labor. This return is then divided by the average capital investment for the year to arrive at the rate of return on investment.

PART II

ANALYSIS OF THE FARM BUSINESS

A farmer's success depends on the resources available to him and his ability to manage the use of these resources. He must understand and apply basic principles of farm management.

Farm management studies indicate that certain business factors are related to labor income. Four important factors are size of business, labor efficiency, rates of production, and cost control. The averages presented here are not intended to represent what is "best". They are to help you see how your farm business compares with those of a group of your competitors.

SIZE OF BUSINESS

In general, large farms pay better than small farms. Larger farms make it possible to use equipment and other items of production more efficiently. However, some 40 cow farms make larger incomes than others with 100 cows. This can happen when other factors are not in balance with size of business.

MEASURES OF SIZE OF BUSINESS

Item	My Farm	Average per farm	
		48 Western Plateau Farms, 1969	568 New York Farms, 1968
Number of cows	_____	54	58
Pounds of milk sold	_____	691,100	715,200
Man equivalent	_____	1.9	2.1
Total work units	_____	638	692

In the following table, the New York dairy farms have been sorted into various size groups. For each size group the average labor income per operator is shown. Sorting the farms in this manner shows the relationship between size of business and labor income.

COWS PER FARM AND LABOR INCOME 568 New York Dairy Farms, 1968

Number of cows	Number of farms	Labor income per operator
Less than 25	13	\$ 3,080
25 - 39	126	6,080
40 - 54	193	7,230
55 - 69	98	9,920
70 - 84	52	10,400
85 - 99	34	11,800
100 - 114	24	14,850
115 - 129	16	20,410
130 and over	12	19,270

RATES OF PRODUCTION

High rates of production of both animals and crops are very important to the success of a farm business. However, when high crop and animal yields are achieved without regard to costs, net income is reduced. In general, it pays to increase yields up to the point where the last unit of input (such as feed or fertilizer) is just paid for by the increase in output due to this last unit of input.

MEASURES OF RATES OF PRODUCTION

Item	My Farm	Average Per Farm	
		48 Western Plateau Farms, 1969	568 New York Farms, 1968
Pounds of milk sold per cow	_____	12,700	12,300
Tons of hay per acre	_____	3.1	2.8
Tons of corn silage per acre	_____	17	14
Bushels of oats per acre	_____	56	61
Bushels of corn grain per acre	_____	72	71

The relationship of production per cow to labor income on three sizes of farms is shown in the following table for 568 New York dairy farms in 1968.

MILK SOLD PER COW AND LABOR INCOME 568 New York Dairy Farms, 1968

Pounds of Milk Sold Per Cow	Number of Farms	Number of Cows	Feed Bought Per Cow	Labor Income
Under 10,000	58	55	\$124	\$ 4,250
10,000 - 10,999	66	56	130	6,990
11,000 - 11,999	112	56	150	7,880
12,000 - 12,999	133	60	169	9,670
13,000 - 13,999	112	62	173	10,240
14,000 and over	87	58	198	11,560

LABOR EFFICIENCY

Labor is one of the limiting resources on many dairy farms. Efficient use of labor tends to add to the profitability of a farm business. The productivity of labor can be increased by use of modern equipment and buildings. However, one must be careful not to invest in equipment or buildings that add little to productivity in relation to their cost.

MEASURES OF LABOR EFFICIENCY

Item	My Farm	Average Per Farm	
		48 Western Plateau Farms, 1969	568 New York Farms, 1968
Number of cows per man	_____	28	28
Pounds of milk sold per man	_____	363,700	340,600
Work units per man	_____	336	330

The relationship between milk sold per man and labor income is illustrated in the table below.

MILK SOLD PER MAN AND LABOR INCOME 568 New York Dairy Farms, 1968

Pounds of Milk Sold Per Man	Number of Farms	Number of Cows	Lbs. Milk Per Cow	Labor Income Per Operator
Under 200,000	29	47	9,800	\$ 2,504
200,000 - 299,999	172	49	11,600	5,731
300,000 - 399,999	196	57	12,400	8,893
400,000 - 499,999	119	65	12,900	11,462
500,000 and over	52	87	13,400	16,627

COST CONTROL

Obtaining high production at reasonable cost is one of the keys to a profitable farm business. The exact level of production items to be used to obtain the greatest net return is difficult to determine. The averages presented here may help you find some of the weaknesses in the cost structure on your farm.

FEED COSTS

Feed bought is the largest single expense item on most dairy farms. The success of a dairy farm manager depends to a large degree on his ability to provide a good feeding program for his herd at reasonable cost. Because the feeding program includes both purchased and homegrown feed, and both roughage and concentrates, it is not easy to locate the weak spots in efforts to control feed costs. The items on this page all have a bearing on feed costs, and may be helpful in planning a more efficient feeding program.

SELECTED FACTORS RELATED TO FEED COSTS

Item	My Farm	Average Per Farm	
		48 W. Plateau Farms, 1969	568 New York Farms, 1968
<u>Purchased Feed</u>			
Dairy feed bought	\$ _____	\$9,429	\$9,459
Feed bought per cow	\$ _____	\$ 175	\$ 163
Feed bought as % of milk receipts	_____ %	24%	24%
Feed bought per cwt. of milk sold	\$ _____	\$ 1.36	\$ 1.32
<u>Roughage Harvested (hay equivalent)</u>			
Hay (tons)	_____	230 tons	234 tons
Hay crop silage (____ tons ÷ 3)	_____	11 tons	12 tons
Corn silage (____ tons ÷ 3)	_____	208 tons	174 tons
Total tons hay equivalent	_____	449 tons	420 tons
Tons hay equivalent per cow	_____	8.3 tons	7.2 tons
<u>Other Considerations</u>			
Total acres in crops per cow	_____	2.5 acres	2.7 acres
Lime & fertilizer expense/cow	\$ _____	\$ 40	\$ 30
Lime & fertilizer expense/crop acre	\$ _____	\$ 16	\$ 11
Heifer number as % of cow numbers	_____ %	83%	69%

The above measures of harvested roughage consider only the quantity. Quality is also significant and has a bearing on purchased feed and milk production.

FARM POWER AND MACHINERY COSTS

On today's dairy farms, power and machinery costs account for a large part of the total costs. For this group of farms, power and machinery costs were 22 percent of the total farm expenses.

POWER AND MACHINERY COSTS*

Item	My Farm	Average Per Farm	
		48 W. Plateau Farms, 1969	568 New York Farms, 1968
Beginning inventory	\$ _____	\$23,614	\$22,575
New machinery bought	_____	<u>5,662</u>	<u>6,178</u>
Total	\$ _____	\$29,276	\$28,753
End inventory	\$ _____	\$25,886	\$25,247
Machinery sold	_____	<u>52</u>	<u>168</u>
Total	\$ _____	<u>\$25,938</u>	<u>\$25,415</u>
Depreciation	\$ _____	<u>\$3,338</u>	<u>\$3,338</u>
Depreciation	\$ _____	\$ 3,338	\$3,338
Interest at 7% av. inventory	_____	1,732	1,674
Gas and oil	_____	1,043	1,136
Machinery and repairs	_____	1,640	1,605
Bale ties	_____	62	80
Milk hauling	_____	430	435
Other machine hire	_____	256	287
Auto expense (farm share)	_____	198	247
Electricity (farm share)	_____	<u>502</u>	<u>601</u>
TOTAL MACHINERY COSTS	\$ _____	\$ 9,201	\$9,403
Gas tax refunds	\$ _____	\$ 82	\$ 81
Income from machine work	_____	<u>308</u>	<u>106</u>
Total	- _____	- <u>390</u>	- <u>187</u>
NET MACHINERY COST	\$ _____	\$ 8,811	\$9,216
Net machinery cost per cow	\$ _____	\$ 163	\$ 159
Net machinery cost per crop acre	\$ _____	\$ 65	\$ 59
Net machinery cost per man	\$ _____	\$ 4,638	\$4,389
Net machinery cost/cwt. milk sold	\$ _____	\$ 1.27	\$ 1.29

*Does not include insurance, housing, or farm labor on repairs.

LABOR AND MACHINERY COSTS

Most farm operators justify major machinery purchases as a way to save labor and increase productivity. How well labor and machinery are combined has an important bearing on farm profits.

LABOR AND POWER AND MACHINERY COSTS

Item	My Farm	Average Per Farm	
		48 W. Plateau Farms, 1969	568 New York Farms, 1968
Value of operator's labor	\$ _____	\$ 6,525	\$ 6,275
Hired labor	_____	2,059	3,006
Unpaid family labor	_____	975	818
TOTAL LABOR COSTS	\$ _____	\$ 9,559	\$10,099
Net power and machinery cost	_____	8,811	9,216
TOTAL LABOR & MACHINERY COST	\$ _____	\$18,370	\$19,315
Total per cow	\$ _____	\$ 340	\$ 333
Total per crop acre	\$ _____	\$ 136	\$ 125
Total per man	\$ _____	\$ 9,668	\$ 9,198
Total per cwt. milk sold	\$ _____	\$ 2.66	\$ 2.70

The following table shows the relationship of machinery costs per cow to labor income on the 568 dairy farms in 1968.

MACHINERY COST PER COW AND LABOR INCOME 568 New York Dairy Farms, 1968

Machinery Cost Per Cow	Number of Farms	Percent of Farms	Labor Income Per Operator
\$225 & over	33	6	\$ 4,800
\$200 - \$224	37	6	6,869
175 - 199	78	14	8,467
150 - 174	109	19	9,476
125 - 149	129	23	9,084
100 - 124	125	22	8,897
75 - 99	48	8	11,744
Less than \$75	9	2	8,490

Farm Business Chart

The chart on pages 16 and 17 is a tool for use in analyzing a dairy farm business. It is essentially a series of measuring sticks combined into one tool.

FARM BUSINESS CHART FOR FARM MANAGEMENT COOPERATORS 568 New York Dairy Farms,* 1968

Size of Business			Rates of Production			Labor Efficiency	
Man equiv- alent	No. of cows	Pounds milk sold	Pounds milk sold per cow	Tons hay per acre	Tons corn silage per acre	Cows per man	Pounds milk sold per man
4.0	124	1,545,800	15,300	4.6	21	44	554,600
2.8	86	1,075,600	14,000	3.6	19	37	464,800
2.4	69	868,800	13,400	3.2	17	34	417,600
2.2	59	736,800	13,000	3.0	16	31	379,300
2.0	53	651,500	12,600	2.8	15	29	346,000

1.8	48	587,300	12,100	2.6	14	27	322,100
1.6	43	524,100	11,600	2.4	13	24	298,700
1.4	40	472,600	11,100	2.2	12	23	271,500
1.3	36	408,900	10,400	2.0	10	21	245,700
1.1	28	301,500	8,900	1.6	8	18	195,800

* These farms are considerably above the average for all farms in New York State. For example, the median number of cows for the 568 farms was 50 compared with 36 for all farms in the State.

The Farm Business Chart is a tool which can be used in analyzing a business to determine the strong and weak points. The chart shows how far the individual farm is above or below the midpoint of the 568 farms for each factor.

The figure at the top of each column is the average of the top 10 percent of the farms for that factor. For example, the figure 4.0 at the top of the column headed "Man equivalent" is the average man equivalent on the 10 percent of the farms with the most men. The other figures in each column are the average for the second 10 percent, third 10 percent, etc. The figure at the bottom of each column (1.1 for Man equivalent) is the average for the 10 percent of the farms which ranked lowest in that factor.

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.

This chart is used in analyzing a particular dairy business by drawing a line through the figure in each column which shows where the farm being analyzed stands for that factor. This helps identify the strengths and weaknesses. Summarize these and list them at the bottom of page 17.

Farm Business Chart contd.

The cost control factors are ranked from low to high. For cost control factors, the lowest cost is not necessarily the most profitable. In some cases, the "best" might be somewhere near the average. Many things affect the level of these costs, and these items must be taken into account when analyzing the factors.

FARM BUSINESS CHART FOR FARM MANAGEMENT COOPERATORS 568 New York Dairy Farms, 1968

Cost Control			
Feed bought per cow	% Feed is of milk receipts	Feed and crop expense per cwt. milk	Machinery cost per cow
\$ 69	11%	\$1.01	\$ 87
103	16	1.27	106
125	20	1.44	117
145	22	1.55	129
160	24	1.65	140

173	26	1.74	150
185	28	1.84	162
201	30	1.93	177
218	31	2.07	195
262	37	2.38	241

Based on the analyzed results shown on the business chart, list below the strong and weak points of the business. Then identify the major problems.

STRONG POINTS:

WEAK POINTS:

MAJOR PROBLEMS:

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

FARM BUSINESS SUMMARY BY HERD SIZE
568 New York Dairy Farms, 1968

Item	My farm	Farms with less than 40 cows	40 to 54 cow farms	55 to 69 cow farms
<u>Capital Investment (End of Year)</u>				
Machinery and equipment	\$ _____	\$15,049	\$20,490	\$ 26,851
Livestock	_____	15,016	21,633	28,442
Feed and supplies	_____	3,607	5,835	7,938
Land and buildings	_____	29,274	40,289	49,013
TOTAL INVESTMENT	\$ _____	\$62,946	\$88,247	\$112,244
<u>Receipts</u>				
Milk sales	\$ _____	\$21,733	\$30,939	\$ 40,843
Livestock sold	_____	2,234	3,035	4,241
Crop sales	_____	243	321	356
Miscellaneous receipts	_____	719	1,070	1,272
Total Cash Receipts	\$ _____	\$24,929	\$35,365	\$ 46,712
Increase in inventory	_____	4,189	6,122	8,946
TOTAL FARM RECEIPTS	\$ _____	\$29,118	\$41,487	\$ 55,658
<u>Expenses</u>				
Hired labor	\$ _____	\$ 558	\$ 1,587	\$ 2,916
Dairy feed	_____	5,626	7,578	10,070
Other feed	_____	186	275	141
Machine hire	_____	153	188	328
Machinery repair	_____	829	1,282	1,583
Auto expense (farm share)	_____	184	250	246
Gas and oil	_____	661	941	1,158
Breeding fees	_____	256	335	419
Veterinary and medicine	_____	345	534	693
Other livestock expense	_____	930	1,267	1,729
Lime and fertilizer	_____	713	1,310	1,803
Seeds and plants	_____	231	386	487
Spray and other crop expense	_____	195	337	440
Land, bldg., fence repair	_____	392	621	742
Taxes and insurance	_____	1,047	1,450	1,786
Elec. and tel. (farm share)	_____	457	617	726
Miscellaneous expenses	_____	369	571	768
Total Cash Operating Exp.	\$ _____	\$13,132	\$19,529	\$26,035
New machinery	_____	3,227	4,921	6,683
New real estate	_____	2,007	2,544	2,961
Purchased livestock	_____	1,045	1,344	1,967
Unpaid family labor	_____	831	898	823
TOTAL FARM EXPENSES	\$ _____	\$20,242	\$29,236	\$ 38,469
<u>Financial Summary</u>				
Total Farm Receipts	\$ _____	\$29,118	\$41,487	\$ 55,658
Total Farm Expenses	_____	20,242	29,236	38,469
Farm Income	\$ _____	\$ 8,876	\$12,251	\$ 17,189
Interest on av. capital @ 5%	_____	3,043	4,259	5,389
Labor Income per Farm	\$ _____	\$ 5,833	\$ 7,992	\$ 11,800
Number of operators	_____	141	218	121
LABOR INCOME PER OPERATOR	\$ _____	\$ 5,751	\$ 7,075	\$ 9,557

FARM BUSINESS SUMMARY BY HERD SIZE
568 New York Dairy Farms, 1968

Item	My farm	70 to 84 cow farms	85 to 99 cow farms	Farms with 100 or more cows
<u>Capital Investment (End of Year)</u>				
Machinery and equipment	\$ _____	\$ 36,325	\$ 38,176	\$ 47,617
Livestock	_____	36,180	42,525	60,363
Feed and supplies	_____	11,724	12,322	17,389
Land and buildings	_____	68,346	93,203	115,641
TOTAL INVESTMENT	\$ _____	\$152,575	\$186,226	\$241,010
<u>Receipts</u>				
Milk sales	\$ _____	\$ 53,053	\$ 65,737	\$ 85,278
Livestock sold	_____	4,433	6,466	8,877
Crop sales	_____	339	901	846
Miscellaneous receipts	_____	1,618	1,844	3,092
Total Cash Receipts	\$ _____	\$ 59,443	\$ 74,948	\$ 98,093
Increase in inventory	_____	12,194	10,445	19,346
TOTAL FARM RECEIPTS	\$ _____	\$ 71,637	\$ 85,393	\$117,439
<u>Expenses</u>				
Hired labor	\$ _____	\$ 4,868	\$ 6,626	\$ 10,760
Dairy feed	_____	12,376	14,964	19,020
Other feed	_____	238	380	558
Machine hire	_____	252	463	858
Machinery repair	_____	2,078	2,758	3,697
Auto expense (farm share)	_____	341	318	268
Gas and oil	_____	1,413	1,610	2,497
Breeding fees	_____	537	647	701
Veterinary and medicine	_____	827	1,149	1,260
Other livestock expense	_____	2,241	3,163	4,302
Lime and fertilizer	_____	2,282	3,144	4,603
Seeds and plants	_____	601	733	973
Spray and other crop expense	_____	646	634	1,031
Land, bldg., fence repair	_____	1,109	1,410	1,680
Taxes and insurance	_____	2,527	3,248	4,030
Elec. and tel. (farm share)	_____	988	1,167	1,457
Miscellaneous expenses	_____	1,138	1,678	1,953
Total Cash Operating Exp.	\$ _____	\$ 34,462	\$ 44,092	\$ 59,648
New machinery	_____	9,464	7,850	13,405
New real estate	_____	4,671	6,097	7,017
Purchased livestock	_____	1,779	2,737	4,853
Unpaid family labor	_____	358	644	1,050
TOTAL FARM EXPENSES	\$ _____	\$ 50,734	\$ 61,420	\$ 85,973
<u>Financial Summary</u>				
Total Farm Receipts	\$ _____	\$ 71,637	\$ 85,393	\$117,439
Total Farm Expenses	_____	50,734	61,420	85,973
Farm Income	\$ _____	\$ 20,903	\$ 23,973	\$ 31,466
Interest on av. capital @ 5%	_____	7,324	9,050	11,567
Labor Income per Farm	\$ _____	\$ 13,579	\$ 14,923	\$ 19,899
Number of operators	_____	69	45	66
LABOR INCOME PER OPERATOR	\$ _____	\$ 10,233	\$ 11,275	\$ 15,678

SELECTED BUSINESS FACTORS BY HERD SIZE
568 New York Dairy Farms, 1968

Item	My farm	Farms with less than 40 cows	40 to 54 cow farms	55 to 69 cow farms
Number of farms		139	193	98
<u>Size of Business</u>				
Number of cows		33	46	61
Pounds of milk sold		398,700	563,800	745,500
Crop acres		88	126	156
Man equivalent		1.4	1.8	2.1
Total work units		394	557	724
<u>Rates of Production</u>				
Milk sold per cow		12,100	12,300	12,200
Tons hay per acre		2.5	2.6	2.8
Tons corn silage per acre		14	14	14
Bushels of oats per acre		54	55	63
<u>Labor Efficiency</u>				
Cows per man		24	26	29
Pounds milk sold per man		284,800	313,200	355,000
Work units per man		281	309	345
Crop acres per man		63	70	74
<u>Feed Costs</u>				
Feed purchased per cow	\$	\$170	\$165	\$165
Crop expense per cow	\$	\$35	\$44	\$45
Feed & crop expense per cow	\$	\$205	\$209	\$210
Feed cost per cwt. milk	\$	\$1.41	\$1.34	\$1.35
Feed & crop expense/cwt. milk	\$	\$1.70	\$1.70	\$1.72
% Feed is of milk receipts	%	26%	24%	25%
Hay equivalent per cow		6.6	7.1	7.3
Crop acres per cow		2.7	2.7	2.6
Fertilizer & lime/crop acre	\$	\$8	\$10	\$12
<u>Machinery Costs</u>				
Total machinery costs	\$	\$4,930	\$7,017	\$8,771
Machinery cost per cow	\$	\$149	\$153	\$144
Machinery cost per man	\$	\$3,521	\$3,898	\$4,177
Machinery cost per cwt. milk	\$	\$1.24	\$1.24	\$1.18
Machinery cost per crop acre	\$	\$56	\$56	\$56
<u>Capital Efficiency</u>				
Investment per man	\$	\$44,961	\$49,026	\$53,450
Investment per cow	\$	\$1,907	\$1,918	\$1,840
Investment per cwt. milk sold	\$	\$16	\$16	\$15
Land and buildings per cow	\$	\$887	\$876	\$803
Machinery investment per cow	\$	\$456	\$445	\$440
Return on investment	%	5.6%	7.0%	9.4%
<u>Other</u>				
Price per cwt. milk sold	\$	\$5.45	\$5.49	\$5.48
Acres hay and hay crop silage		60	77	92
Acres corn silage		14	20	37

SELECTED BUSINESS FACTORS BY HERD SIZE
568 New York Dairy Farms, 1968

Item	My farm	70 to 84 cow farms	85 to 99 cow farms	Farms with 100 or more cows
Number of farms		52	34	52
<u>Size of Business</u>				
Number of cows		76	92	126
Pounds of milk sold		966,400	1,177,800	1,513,000
Crop acres		199	236	320
Man equivalent		2.5	2.9	3.7
Total work units		905	1,084	1,459
<u>Rates of Production</u>				
Milk sold per cow		12,700	12,800	12,000
Tons hay per acre		2.8	3.2	2.9
Tons corn silage per acre		14	13	15
Bushels oats per acre		61	62	69
<u>Labor Efficiency</u>				
Cows per man		30	32	34
Pounds milk sold per man		386,600	406,100	408,900
Work units per man		362	374	394
Crop acres per man		80	81	86
<u>Feed Costs</u>				
Feed purchased per cow	\$	\$163	\$163	\$151
Crop expense per cow	\$	\$46	\$49	\$52
Feed & crop expense per cow	\$	\$209	\$212	\$203
Feed cost per cwt. milk	\$	\$1.28	\$1.27	\$1.26
Feed & crop expense/cwt. milk	\$	\$1.65	\$1.65	\$1.69
% Feed is of milk receipts	%	23%	23%	22%
Hay equivalent per cow		7.5	7.0	7.6
Crop acres per cow		2.6	2.6	2.5
Fertilizer & lime/crop acre	\$	\$11	\$13	\$14
<u>Machinery Costs</u>				
Total machinery costs	\$	\$12,215	\$14,034	\$18,290
Machinery costs per cow	\$	\$161	\$153	\$145
Machinery cost per man	\$	\$4,886	\$4,839	\$4,943
Machinery cost per cwt. milk	\$	\$1.26	\$1.19	\$1.21
Machinery cost per crop acre	\$	\$61	\$59	\$57
<u>Capital Efficiency</u>				
Investment per man	\$	\$61,030	\$64,216	\$65,138
Investment per cow	\$	\$2,008	\$2,024	\$1,973
Investment per cwt. milk sold	\$	\$16	\$16	\$16
Land and buildings per cow	\$	\$899	\$1,013	\$918
Machinery investment per cow	\$	\$478	\$415	\$378
Return on investment	%	9.0%	13.4%	10.6%
<u>Other</u>				
Price per cwt. milk sold	\$	\$5.49	\$5.58	\$5.64
Acres hay and hay crop silage		107	120	157
Acres corn silage		58	62	92

Considering a Change in the Dairy Business

Describe change: _____

List possible alternative changes : (use additional worksheets to analyze these alternatives) _____

I. Basic nature of proposed change

	<u>Present</u>	<u>Change</u>	<u>Future with change</u>
Number of cows	_____	_____	_____
Number of youngstock	_____	_____	_____
Production per cow	_____	_____	_____
Labor force (man equiv.)	_____	_____	_____

II. Estimated forage requirements and production:

No. of cows _____ x _____ tons hay equivalent = _____ tons
 No. of youngstock _____ x _____ tons hay equiv./head = _____ tons
 total hay equiv. requirement _____ tons

Allocate total hay equivalent requirement to hay and silage production:

Total hay equiv. required _____ = _____ hay tons + _____ tons hay equiv.
 as silage

Tons hay equiv. as silage _____ x 3 = _____ tons silage

Estimate needed crop acres and changes from present:

<u>Future crop</u>	<u>Proposed Production</u>	<u>Estimated Yield</u>	<u>Acres Needed</u>	<u>Change in acres (list as plus or minus)</u>
Hay	_____	_____	_____	_____
Hay crop silage	_____	_____	_____	_____
Corn silage	_____	_____	_____	_____
Other forage	_____	_____	_____	_____
Grain	_____	_____	_____	_____

III. Additional forward planning steps and pointers

1. List new capital items associated with the change including land, buildings, machinery and cattle. Estimate their cost.
2. Estimate changes in receipts and expenses (Part IV) considering all input and production items that are affected by the change under consideration. Adjust present figures if anticipated price changes are used in the budget.
3. When analyzing the effects of the proposed change, fulfillment of non-monetary goals may be considered.
4. More than one alternative change should be considered.

IV. Estimating changes in receipts and expenses

	<u>Present</u>	<u>Net change (plus or minus)</u>	<u>Future with change</u>
A. <u>Receipts</u>			
Milk sales, gross	\$ _____	\$ _____	\$ _____
Livestock sales	_____	_____	_____
Crop sales	_____	_____	_____
Miscellaneous receipts	_____	_____	_____
Total Cash Receipts	\$ _____	\$ _____	\$ _____
Increase in inventory	_____	_____	_____
Total Farm Receipts	\$ _____	\$ _____	\$ _____
B. <u>Expenses</u>			
Hired labor	\$ _____	\$ _____	\$ _____
Feed bought	_____	_____	_____
Machine hire	_____	_____	_____
Machinery repairs	_____	_____	_____
Auto expense (farm share)	_____	_____	_____
Gasoline and oil	_____	_____	_____
Breeding fees	_____	_____	_____
Veterinary and medicine	_____	_____	_____
Other livestock expense	_____	_____	_____
Lime and fertilizer	_____	_____	_____
Seeds and plants	_____	_____	_____
Spray, other crop expense	_____	_____	_____
Land, building, fence expense	_____	_____	_____
Taxes, insurance	_____	_____	_____
Electricity, telephone (farm share)	_____	_____	_____
Miscellaneous	_____	_____	_____
Total Cash Operating Exp.	\$ _____	\$ _____	\$ _____
New machinery and real estate	_____	_____	_____
Livestock purchases	_____	_____	_____
Unpaid family labor	_____	_____	_____
Decrease in inventory	_____	_____	_____
Total Farm Expenses	\$ _____	\$ _____	\$ _____
C. <u>Financial Summary</u>			
Capital Investment	\$ _____		\$ _____
Total Farm Receipts	\$ _____		\$ _____
Total Farm Expenses	_____		_____
Farm Income	\$ _____		\$ _____
Interest on Capital	_____		_____
LABOR INCOME	\$ _____		\$ _____

Selected Competitive Dairy Areas

A good manager aims to know how his business stands in relation to his competition both at home and in other dairy areas. The table below presents data from four states. These data were taken from reports on farm business management projects similar to the ones in New York. Some measures have been adjusted so that they are comparable for the four states.

1968 DAIRY FARM BUSINESS SUMMARY DATA

Selected Factors	New York	Southern Michigan	Pennsylvania	Ohio
Number of farms	568	331	76	65
Crop acres	155	275	171	178
Man equivalent	2.1	2.2	2.4	1.7
Number of heifers	40	NA	36	NA
Number of cows	58	54	55	47
Lbs. milk sold/ farm	715,200	665,100	630,000	592,560
Lbs. milk sold/ man	340,600	302,320	262,500	348,560
Lbs. milk sold/ cow	12,300	12,320	11,450	12,600
Milk sales/ cow	\$681	\$706	\$674	\$643
Av. price/ cwt. milk	\$5.52	\$5.73	\$5.88	\$5.10
Purchased feed/ cow	\$163	\$93	\$158	\$109
Taxes/ cow	\$20	\$18	\$16	\$28

<u>Capital Investment</u>				
Land & buildings	\$51,730	\$94,400	\$47,100	\$56,620
Machinery & equipment	\$25,250	\$22,500	\$21,250	\$16,870
Livestock	\$27,320	\$21,900	\$26,850	\$18,140
Feed & supplies	\$ 7,640	\$11,900	\$10,540	\$ 7,720
Investment/ man	\$53,300	\$68,500	\$44,058	\$58,440
Investment/ cow	\$ 1,930	\$ 2,790	\$ 1,922	\$ 2,110

<u>Financial Summary</u>				
Total farm receipts	\$53,247	\$49,553	\$46,326	\$40,328
Total farm expenses	\$37,717	\$33,735	\$33,070	\$26,068
Farm income	\$15,530	\$15,818	\$13,256	\$14,260
Interest at 5%	\$ 5,393	\$ 7,535	\$ 5,287	\$ 4,968
Labor income/ farm	\$10,137	\$ 8,283	\$ 7,969	\$ 9,292
Labor income/ operator	\$ 8,724	\$ 7,019	\$ 7,244	\$ 8,447

FARM BUSINESS SUMMARY

5 Allegany County Dairy Farms - 1969

Capital Investment

	<u>1/1/69</u>	<u>1/1/70</u>
Equipment	\$ 31,880	\$ 33,740
Livestock	26,745	28,680
Feed and supplies	5,976	6,811
Land and buildings	<u>44,050</u>	<u>44,810</u>
TOTAL INVESTMENT	\$108,651	\$114,041

Expenses

Hired labor	\$ 2,832
Dairy feed	8,724
Other feed	19
Machine hire	138
Machine expense	1,433
Auto expense	253
Gas & oil	1,069
Breeding fees	605
Veterinary & medicine	925
Other livestock	1,294
Lime & fertilizer	1,891
Seeds and plants	755
Spray, other crop	547
Building expense	984
Taxes, insurance	1,785
Electricity, telephone	639
Miscellaneous expense	<u>711</u>
Total Cash Expenses	\$ 24,609
New machinery	\$ 6,368
Real estate	998
Livestock purchases	233
Unpaid labor	<u>420</u>
TOTAL FARM EXPENSES	\$ 32,628

Receipts

Milk sales	\$ 38,942
Livestock sold	4,203
Crop sales	748
Miscellaneous receipts	<u>1,532</u>
Total Cash Receipts	\$ 45,425
Increase in inventory	<u>5,390</u>
TOTAL FARM RECEIPTS	\$ 50,815

Financial Summary

Total Farm Receipts	\$ 50,815
Total Farm Expenses	<u>32,628</u>
Farm Income	\$ 18,187
Interest	<u>7,794</u>
LABOR INCOME per farm	\$ 10,393
Number of operators	7
LABOR INCOME per operator	\$ 7,423

Business Factors

Number of cows	55
Number of heifers	46
Man equivalent	2.1
Total work units	673
Lbs. of milk sold	681,800
Lbs. milk sold per cow	12,400
Lbs. of milk sold per man	324,700
Cows per man	26
Percent feed is of milk receipts	22%
Feed bought per cow	\$ 159
Hay equiv. per cow	9.4
Machinery cost per cow	\$ 186
Lime & fertilizer per crop acre	\$ 12.70
Avg. milk price	\$ 5.71

Crops Grown

<u>Crop</u>	<u>Acres Per Farm</u>	<u>Yield Per Acre</u>	<u>Total Crop</u>
Hay and hay crop			
silage	78	4.1 t.	316 t.
Corn silage	32	18.6 t.	596 t.
Corn grain	6	85 bu.	512 bu.
Oats	30	60 bu.	1794 bu.
Other crops	<u>3</u>	--	--
Total acres of crops	149		

FARM BUSINESS SUMMARY

13 Cattaraugus County Dairy Farms - 1969

Capital Investment

	<u>1/1/69</u>	<u>1/1/70</u>
Equipment	\$ 22,251	\$ 24,919
Livestock	24,653	27,010
Feed and supplies	6,097	6,472
Land and buildings	<u>40,954</u>	<u>45,704</u>
TOTAL INVESTMENT	\$ 93,955	\$104,104

Expenses

Hired labor	\$ 2,191
Dairy feed	8,829
Other feed	374
Machine hire	241
Machine expense	1,710
Auto expense	224
Gas & oil	986
Breeding fees	450
Veterinary & medicine	771
Other livestock	1,648
Lime & fertilizer	2,390
Seeds and plants	562
Spray, other crop	581
Building expense	883
Taxes, insurance	1,686
Electricity, telephone	587
Miscellaneous expenses	<u>910</u>
Total Cash Expenses	\$ 25,023
New machinery	\$ 5,537
Real estate	5,113
Livestock purchases	3,785
Unpaid labor	<u>1,200</u>
TOTAL FARM EXPENSES	\$ 40,658

Receipts

Milk sales	\$ 36,923
Livestock sold	6,517
Crop sales	110
Miscellaneous receipts	<u>727</u>
Total Cash Receipts	\$ 44,277

Increase in inventory	<u>10,149</u>
TOTAL FARM RECEIPTS	\$ 54,426

Financial Summary

Total Farm Receipts	\$ 54,426
Total Farm Expenses	<u>40,658</u>
Farm Income	\$ 13,768
Interest	<u>6,923</u>
LABOR INCOME per farm	\$ 6,836
Number of operators	16
LABOR INCOME per operator	\$ 4,990

Business Factors

Number of cows	52
Number of heifers	48
Man equivalent	2.0
Total work units	607
Lbs. of milk sold	663,400
Lbs. milk sold per cow	12,800
Lbs. of milk sold per man	331,700
Cows per man	26

Percent feed is of milk receipts	24%
Feed bought per cow	\$ 170
Hay equiv. per cow	8.3
Machinery cost per cow	\$ 162
Lime & fertilizer per crop acre	\$ 20.60
Avg. milk price	\$ 5.57

Crops Grown

<u>Crop</u>	<u>Acres Per Farm</u>	<u>Yield Per Acre</u>	<u>Total Crop</u>
Hay and hay crop			
silage	86	2.8 t.	240 t.
Corn silage	33	17.4 t.	575 t.
Corn grain	7	59 bu.	415 bu.
Oats	6	52 bu.	310 bu.
Other crops	<u>5</u>		
Total acres of crops	137		

FARM BUSINESS SUMMARY

22 Chautauqua County Dairy Farms - 1969

Capital Investment

	<u>1/1/69</u>	<u>1/1/70</u>
Equipment	\$ 23,417	\$ 24,995
Livestock	27,143	28,718
Feed and supplies	6,746	7,800
Land and buildings	<u>43,695</u>	<u>48,948</u>
TOTAL INVESTMENT	\$101,001	\$110,461

Expenses

Hired labor	\$ 1,589
Dairy feed	9,718
Other feed	375
Machine hire	278
Machine expense	1,505
Auto expense	165
Gas & oil	994
Breeding fees	465
Veterinary & medicine	927
Other livestock	1,895
Lime & fertilizer	1,998
Seeds and plants	495
Spray, other crop	440
Building expense	711
Taxes, insurance	1,648
Electricity, telephone	643
Miscellaneous expense	<u>636</u>
Total Cash Expenses	\$ 24,482
New machinery	\$ 5,150
Real estate	5,645
Livestock purchases	2,541
Unpaid labor	<u>1,077</u>
TOTAL FARM EXPENSES	\$ 38,895

Receipts

Milk sales	\$ 38,958
Livestock sold	5,030
Crop sales	1,368
Miscellaneous receipts	<u>1,425</u>
Total Cash Receipts	\$ 46,781
Increase in inventory	<u>9,460</u>
TOTAL FARM RECEIPTS	\$ 56,241

Financial Summary

Total Farm Receipts	\$ 56,241
Total Farm Expenses	<u>38,895</u>
Farm Income	\$ 17,346
Interest	<u>7,404</u>
LABOR INCOME per farm	\$ 9,942
Number of operators	25
LABOR INCOME per operator	\$ 9,307

Business Factors

Number of cows	53
Number of heifers	42
Man equivalent	1.8
Total work units	613
Lbs. of milk sold	688,300
Lbs. milk sold per cow	13,000
Lbs. of milk sold per man	397,500
Cows per man	29
Percent feed is of milk receipts	25%
Feed bought per cow	\$ 183
Hay equiv. per cow	7.9
Machinery cost per cow	\$ 177
Lime & fertilizer per crop acre	\$ 15.98
Avg. milk price	\$ 5.66

Crops Grown

<u>Crop</u>	<u>Acres Per Farm</u>	<u>Yield Per Acre</u>	<u>Total Crop</u>
Hay and hay crop			
silage	68	3.0 t.	203 t.
Corn silage	38	17.1 t.	649 t.
Corn grain	7	77 bu.	541 bu.
Oats	7	56 bu.	391 bu.
Other crops	<u>5</u>	--	--
Total acres of crops	125		

FARM BUSINESS SUMMARY
8 Erie County Dairy Farms - 1969

Capital Investment

	<u>1/1/69</u>	<u>1/1/70</u>
Equipment	\$ 21,205	\$ 25,002
Livestock	28,053	30,480
Feed and supplies	7,097	7,500
Land and buildings	<u>43,081</u>	<u>46,538</u>
TOTAL INVESTMENT	\$ 99,436	\$109,520

Expenses

Hired labor	\$ 2,652
Dairy feed	10,048
Other feed	526
Machine hire	289
Machine expense	2,027
Auto expense	210
Gas & oil	1,255
Breeding fees	461
Veterinary & medicine	944
Other livestock	2,941
Lime & fertilizer	2,315
Seeds and plants	468
Spray, other crop	761
Building expense	961
Taxes, insurance	1,514
Electricity, telephone	578
Miscellaneous expense	<u>1,534</u>
Total Cash Expenses	\$ 29,484
 New machinery	 \$ 6,832
Real estate	3,911
Livestock purchases	2,553
Unpaid labor	<u>675</u>
TOTAL FARM EXPENSES	\$ 43,455

Receipts

Milk sales	\$ 42,754
Livestock sold	3,618
Crop sales	550
Miscellaneous receipts	<u>1,838</u>
Total Cash Receipts	\$ 48,760

Increase in inventory	<u>10,084</u>
TOTAL FARM RECEIPTS	\$ 58,844

Financial Summary

Total Farm Receipts	\$ 58,844
Total Farm Expenses	<u>43,455</u>
Farm Income	\$ 15,389
Interest	<u>7,313</u>

LABOR INCOME per farm \$ 8,076

Number of operators 10

LABOR INCOME per operator \$ 6,504

Business Factors

Number of cows	61
Number of heifers	45
Man equivalent	1.9
Total work units	737
Lbs. of milk sold	749,400

Lbs. milk sold per cow 12,300

Lbs. of milk sold per man 394,400

Cows per man 32

Percent feed is of milk receipts 24%

Feed bought per cow \$ 165

Hay equiv. per cow 7.8

Machinery cost per cow \$ 147

Lime & fertilizer per crop acre \$ 15.25

Avg. milk price \$ 5.70

Crops Grown

<u>Crop</u>	<u>Acres Per Farm</u>	<u>Yield Per Acre</u>	<u>Total Crop</u>
Hay	83	3.2 t.	262 t.
Corn silage	43	14.8 t.	638 t.
Oats	7	57 bu.	400 bu.
Other crops	<u>19</u>	--	--
Total acres of crops	152		