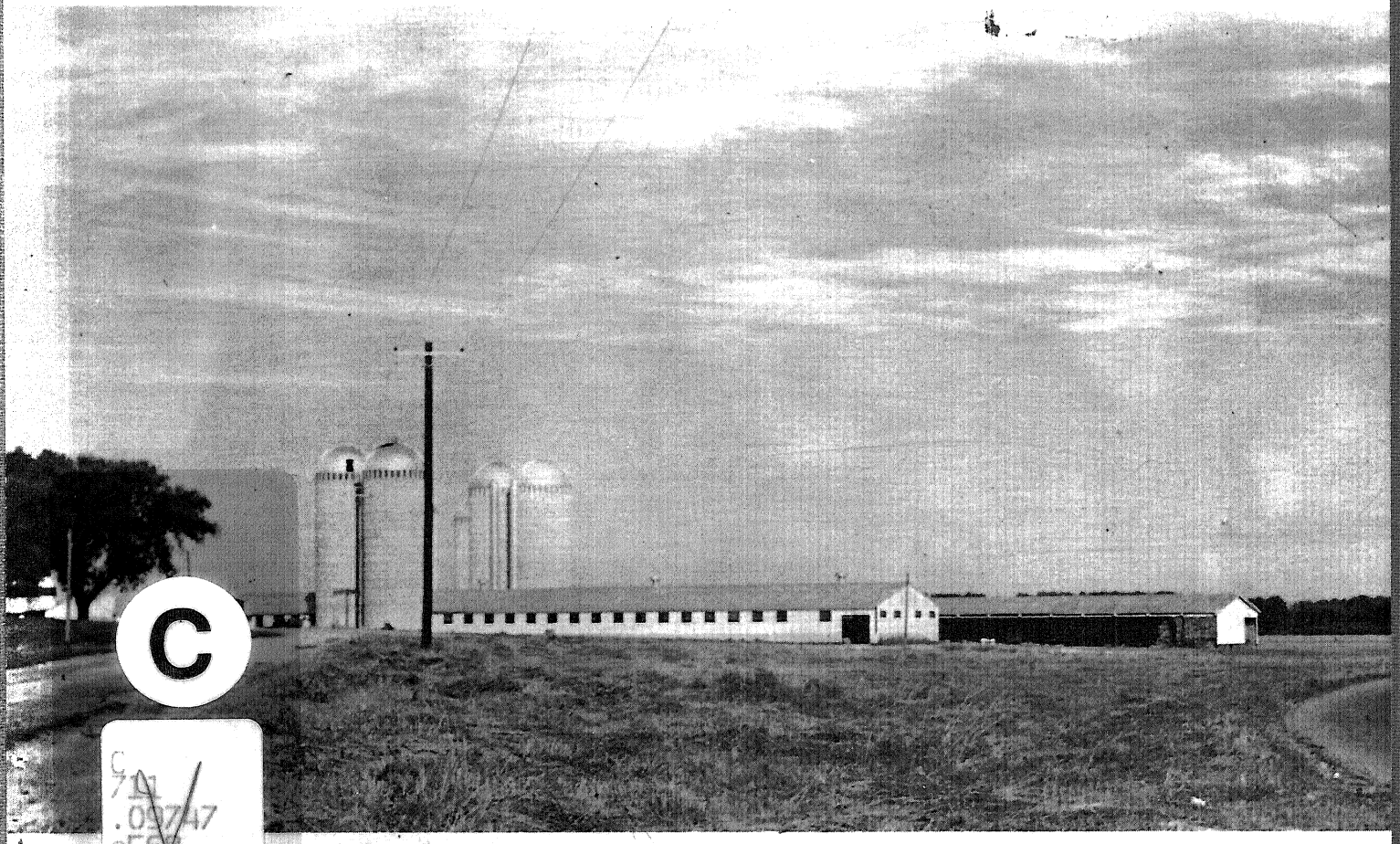
February 1966

1965
FARM BUSINESS SUMMARY
Erie County



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1965
FARM BUSINESS SUMMARY

ERIE COUNTY

The Extension Service in New York State has developed Farm Business Management Projects to help farm families improve their managerial skills. These projects were conducted in 44 counties in 1965. Erie was one of the participating counties.

Records are a basic feature in these projects. Records can serve as a valuable tool in managing a farm business. Records for any business provide the information needed for making a management summary and analysis.

This summary report is prepared in workbook form to help you summarize and analyze your business. It provides the framework for a systematic study of a farm operation.

The 1965 records from Erie County farms have been used to get the group averages included in this report. These can be used as a benchmark for making comparisons. Figures have also been included from a general summary made of 434 dairy farms from 26 counties which were in Farm Business Management Projects in 1964. You can compare your business not only with the Erie County farms but also with those of farmers from other counties across New York State.

It is hoped that your participation in this Farm Business Management Project will help you to develop a systematic approach to management problems. This in turn can give you a better income and a higher level of living.

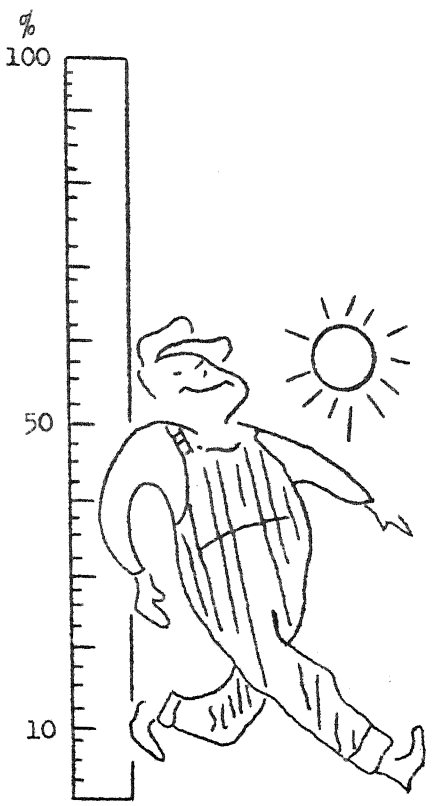
This summary prepared by C. A. Bratton, Department of Agricultural Economics, New York State College of Agriculture, in cooperation with T. Jorgensen of the Erie County Extension Service.

GOOD DECISIONS ARE THE CRUX OF SOUND MANAGEMENT!

Steps in making a management decision:

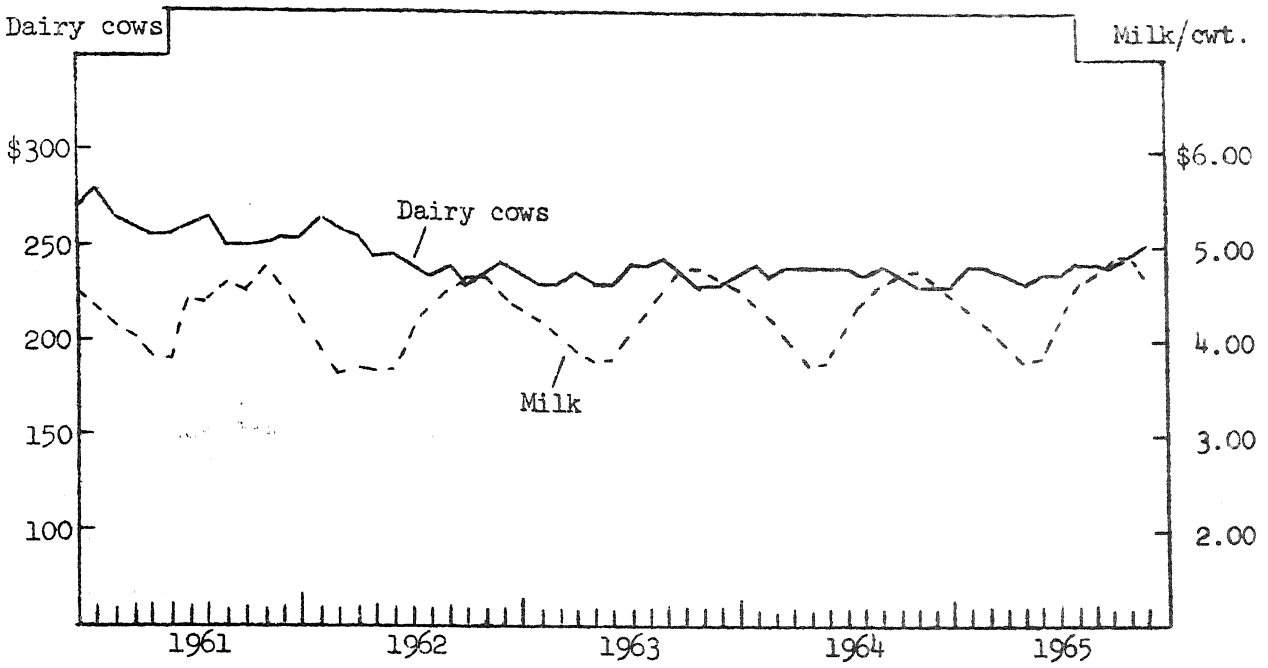
1. Locate the trouble spot (problem)
2. What is your objective? (goal)
3. Size up what you have to work with (resources)
4. Look for various ways to solve the problem (alternatives)
5. Consider probable results of each way (consequences)
6. Compare the expected results (evaluate)
7. Select way best suited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

Have you developed a systematic approach to management problems?



How do you measure up as a manager?

NEW YORK FARM PRICES OF DAIRY COWS AND MILK, 1961-1965



Source: Current Economic Situation.

Prices are one of several important factors affecting farm incomes. When studying farm incomes for any year, consideration must be given to the price situation. This includes both prices received and prices paid. The relationship of prices received and prices paid by farmers determines the general level of farm incomes.

The blended New York farm price for 3.7% milk in 1965 averaged $4.38 per hundredweight. This was six cents higher than the average for 1964. Dairy cow prices which declined from 1960 to 1963 held steady in 1965. The overall index of prices paid by New York dairy farmers continued to rise in 1965. Machinery, wages, feed and building materials were up, milk cows and fertilizer were the same, and seeds were down. The index of prices paid has risen about two percent per year during the past decade.

AVERAGE YEARLY PRICES RECEIVED AND PAID BY N. Y. FARMERS, 1956-65

Year	Milk (cwt.)	Dairy cows (head)	Prices paid by N. Y. dairy farms (1910-14=100)	Year	Milk (cwt.)	Dairy cows (head)	Prices paid by N. Y. dairy farms (1910-14=100)
1956	$4.20	$180	352	1961	$4.32	$260	394
1957	4.58	196	363	1962	4.26	245	401
1958	4.55	255	376	1963	4.26	234	409
1959	4.58	284	386	1964	4.32	237	414
1960	4.42	278	393	1965*	4.38	237	421

* Preliminary.

PART I - SUMMARY OF THE FARM BUSINESS

This part is to help you systematically summarize your business. It provides for an examination of the physical resources, capital investment, receipts, expenses, and the financial summary for the year.

Physical Resources

Each farm family must make their management decisions on the basis of the things they have to work with. Therefore, in analyzing a farm business, a first step is to look at the resources. This includes both the physical and financial things that are available. Below are the averages and ranges for the physical resources of this Erie County group for 1965.

FARM ORGANIZATION
12 Erie County Dairy Farms, 1965

Item	Average or No. reported		Your farm	Range Low	Range High
Labor:					
Months of:					
Operators	(12 farms)	15.0	_____		
Family paid	(6 farms)	2.2	_____		
Family unpaid	(5 farms)	1.0	_____		
Hired	(6 farms)	3.8	_____		
Total		22.0	_____		
Man equivalent (No. men)		1.8	_____	1.2	3.2
Livestock: (Number)					
Cows		51	_____	30	83
Heifers		34	_____	4	70
Crops: (Acres grown)					
Hay		74	_____	40	127
Grass silage	(6 farms)	29	_____	5	85
Corn for silage	(11 farms)	21	_____	10	35
Oats	(9 farms)	21	_____	10	43
Total acres of crops		145	_____	70	235

Production records are another useful management tool on a dairy farm. Of the 12 farms, 7 were in D.H.I.A., 3 had owner-sampler records, and 2 reported no production records.

Age of operators were reported as: Under 30 - 1; 30 to 39 - 5; 40 to 49 - 5; 50 or over - 0; not reported - 1.

Capital Investment

Capital resources are essential in any business. They make it possible to assemble the physical resources of machinery, livestock, and land and buildings. Some of the capital used in a farm business is owned by the operator and some is borrowed. Here we consider all capital used whether owned or borrowed. The farm inventory at the end of the year is used as the measure of capital investment.

FARM INVENTORY VALUES, January 1, 1966
12 Erie County Dairy Farms

Item	Amount per farm		Amount per cow	
	Your farm	Av. 12 farms	Your farm	Av. 12 farms
Machinery and equipment	$_____	$16,963	$_____	$ 333
Cattle	_____	22,458	_____	440
Feed and supplies	_____	5,274	_____	103
Land and buildings	_____	33,925	_____	665
TOTAL INVESTMENT	$_____	$78,620	$_____	$1,541

Total investment on these 12 farms ranged from $38,000 to $117,000. Six of the farms had investments of more than $75,000.

On these farms, the amount invested in machinery and cattle combined exceeded the value of the real estate. In recent years, the personal property has been increasing in importance compared with the real property. This is happening even though real estate values have been rising steadily.

Below are some capital investment factors:

Item	Your farm	Av. 12 farms	Av. 434 N.Y. farms
Total investment per man	$_____	$43,700	$34,500
Land & building investment per acre of crops	$_____	$234	$268
% Land & buildings are of total investment	_____ %	43%	47%
Capital turnover (years for receipts to equal investment)	_____	2.1	2.3

Receipts

In any commercial enterprise, it is essential that there be a sizeable gross income. Unless there is a reasonable amount of receipts, one cannot expect to have much net income.

FARM RECEIPTS
12 Erie County Dairy Farms, 1965

Item	Your farm	Average of 12 farms		Percent of total
Milk sales	$_____	$27,397		85
Livestock sold	_____	2,699		8
Crop sales	_____	178		1
Machinery sold	$_____	$233		
Government payments	_____	164		
Work off the farm	_____	297		
Custom machine work	_____	658	1,899	6
Gas tax refunds	_____	233		
Other miscellaneous	_____	314		
Total cash farm receipts	$_____	$32,173		100
Increase in inventory	_____	5,648		
TOTAL FARM RECEIPTS	$_____	$37,821		

Total cash receipts on these 12 farms averaged $32,173 per farm in 1965, or $88 per day. Milk sales accounted for 85 percent of the cash receipts.

Increases in inventory are usually due to expansion in the business. For 1965, the average increase on these farms was $5,648. Machinery had an increase of $1,960, and land and buildings $1,308, while livestock increased $1,652, and feed increased $728. Inventory increases are considered as farm receipts.

Income Analysis

	Your farm	Average per farm
Average price per cwt. of milk sold	$_____	$4.30
Milk sales per cow	$_____	$537
Total cash receipts per man	$_____	$17,900
Total cash receipts per acre of crops	$_____	$222
Total cash receipts per $1,000 investment	$_____	$409

Expenses

A good manager keeps his eye on the expenditures. Expenses can be too low as well as too high. Good information on actual expenses is the first step toward expense control.

FARM EXPENSES
12 Erie County Dairy Farms. 1965

Item	Your farm	Average of 12 farms	Percent
Hired labor	$_____	$1,575	8
Dairy concentrates bought	_____	6,399	34
Other feed (hay, etc.)	_____	17	-
Machine hire	_____	289	2
Machinery expense	_____	1,403	8
Auto expense (farm share)	_____	248	1
Gas and Oil	_____	923	5
Breeding fees	_____	291	2
Veterinary & medicine	_____	464	2
Other livestock expense	_____	1,866	10
Lime and fertilizer	_____	1,423	8
Seeds and plants	_____	354	2
Spray and other crop expense	_____	319	2
Building expense	_____	381	2
Taxes & insurance ($600 & $415)	_____	1,015	5
Electricity & telephone	_____	453	2
Miscellaneous	_____	1,219	7
TOTAL CASH OPERATING EXPENSE	$_____	$18,639	100
New machinery	$_____	$4,354	
Real estate	_____	1,242	
Livestock purchases	_____	1,708	
Unpaid labor	_____	150	
Decrease in inventory	_____	--	
TOTAL FARM EXPENSE	$_____	$26,093	

The total farm expenses on these 12 farms averaged $71 per day, or $512 per cow.

Financial Summary of Year's Business

The returns from a farm business can be measured in several ways. Two are used here--labor income and farm cash operating income.

LABOR INCOME
12 Erie County Dairy Farms, 1965

Item	Your farm	Average of 12 farms
Total Farm Receipts	$_____	$37,821
Total Farm Expenses	_____	26,093
Farm Income	$_____	$11,728
Interest on Capital @ 5% ($75,796)	_____	3,790
LABOR INCOME per farm	$_____	$ 7,938
Number of operators on 12 farms	_____	15
LABOR INCOME per operator	$_____	$ 6,350

"Labor Income" is a measure of the return the farm operator receives for his labor and management. It is the amount left after paying all farm expenses, and deducting a charge for unpaid labor and for interest on the capital invested.

Interest payments and payments on debts are not included in the farm expenses. To make all farms comparable, a five percent interest charge on the average capital investment is deducted to get labor income.

The average labor income per operator was $6,350 or $529 per month. In addition, the family had a house to live in and some farm produced food. The labor incomes ranged from $1,295 to $12,000 per operator. There were six farms with over $7,500 labor income per operator.

FARM CASH OPERATING INCOME
12 Erie County Farms, 1965

Item	Your farm	Average 12 farms
Total cash farm receipts	$_____	$32,173
Total cash operating expenses	_____	18,639
FARM CASH OPERATING INCOME (available for family living, capital purchases, debts, etc.)	$_____	$13,534

PART II - ANALYSIS OF THE FARM BUSINESS

This part includes guidelines to use in studying the important factors in your business. The averages for 434 New York State dairy farms in 1964 and the averages for the ten percent with the highest labor incomes for 1964 are given for making comparisons.

Four farm business factors are examined here. They are: size of business, rates of production, labor efficiency, and cost control. Farm management research has repeatedly shown these to be major factors affecting income.

Business Factor: Size of Business

Size is an important factor in any business. It affects other factors such as labor and capital efficiency, and cost control. In general, the larger farms make higher incomes, but at the same time some of the larger farms have large losses.

MEASURES OF SIZE OF BUSINESS

Measure	Your farm	12 Erie County farms, 1965	434 N. Y. State dairy farms, 1964	
			Average	Top 10%*
Number of cows	_____	51	40	55
Pounds of milk sold	_____	636,900	450,400	674,600
Man equivalent	_____	1.8	1.7	2.0
Total work units	_____	676	507	693

* The 10 percent of the farms with highest labor incomes.

Above are four measures of size. The 12 Erie County farms averaged somewhat larger than the 434 farms but smaller than the ten percent with the highest labor incomes.

In the table below, the 434 farms are sorted into various size groups with the average labor income for each group.

COWS PER FARM AND LABOR INCOME
434 New York Dairy Farms, 1964

Number of cows	Number of farms	Labor income per operator
Under 20	11	$ 695
20 - 29	93	$2,080
30 - 39	144	$3,029
40 - 49	99	$3,345
50 - 59	48	$2,857
60 & over	39	$4,801

Business Factor: Rates of Production

Rates of production for both animals and crops have long been important factors contributing to the success of a farm business. The operator must strive to find the level of inputs, such as feed and fertilizer, which will give the highest net income. Few farmers exceed this level whereas many fall short.

MEASURES OF RATES OF PRODUCTION

Measure	Your farm	12 Erie County farms, 1965	434 N. Y. State dairy farms, 1964	
			Average	Top 10%*
Lbs. of milk** sold/cow	_____	12,500	11,260	12,300
Tons of hay per acre	_____	2.8	2.0	2.1
Tons of corn silage/acre	_____	15	12	14
Bushels of oats/acre	_____	73	51	54

* The 10 percent of farms with highest labor incomes.
** Average test 3.6%.

Pounds of milk sold is used in measuring the output on dairy farms. Production per cow is calculated by dividing total pounds of milk sold by the average number of cows for the year. Pounds sold per cow is less than that produced as shown by D.H.I.A. because of milk used on the farm and spillage.

The pounds of milk sold per cow for the 12 farms averaged 12,500. This compares with 11,260 pounds for the 434 farm business management project farms in 1964 and 12,300 for the ten percent of the farms with the highest labor incomes. The range for the 12 farms was from 9,900 to 15,100 pounds sold per cow.

The effect of pounds of milk sold per cow on labor income is illustrated below. In each of the three size groups, the farms with high production had an average labor income considerably higher than those with low production.

MILK SOLD PER COW AND LABOR INCOME
434 New York Dairy Farms, 1964

Pounds milk sold per cow	Farms with less than 30 cows		Farms with 30 - 49 cows		Farms with 50 cows and over	
	Number of farms	Labor income	Number of farms	Labor income	Number of farms	Labor income
Under 10,000	39	$1,097	56	$1,973	17	$- 142
10,000 - 11,999	34	$2,086	92	$2,768	34	$4,013
12,000 & over	31	$2,821	95	$4,235	36	$5,288

Business Factor: Labor Efficiency

Labor efficiency is sometimes claimed to be the most important single factor on farms today. This is brought about by the rapidly rising wage rates. If a farmer wants top efficiency from his hired man's time as well as his own, he must keep a close watch on the factors which affect labor efficiency.

MEASURES OF LABOR EFFICIENCY

Measure	Your farm	12 Erie County farms, 1965	434 N. Y. State dairy farms, 1964	
			Average	Top 10%*
Lbs. of milk** sold/man	_____	353,800	264,900	337,300
Number of cows per man	_____	28	24	28
Work units per man	_____	376	298	346
Crop acres per man	_____	81	61	70

* The 10 percent of farms with highest labor incomes.
** Average test 3.6%.

The 12 Erie County farms sold an average of 353,800 pounds of milk per man in 1965. The range was from 199,400 to 620,000 pounds per man. Three farms sold more than 400,000 pounds per man. The average for the top ten percent in 1964 was 337,300 pounds per man.

When labor efficiency is related to labor income as in the table below, two points show up. One is that the more pounds of milk sold per man the higher the labor income per operator. The other is that a much higher percentage of the large farms have high labor efficiency. One-fourth of the large farms sold 350,000 pounds or more milk per man, while none of the small-size group accomplished this.

POUNDS OF MILK SOLD PER MAN AND LABOR INCOME
434 New York Dairy Farms, 1964

Pounds milk sold per man	Farms with less than 30 cows		Farms with 30 - 49 cows		Farms with 50 cows and over	
	Number of farms	Labor income	Number of farms	Labor income	Number of farms	Labor income
Under 250,000	77	$1,391	94	$2,024	21	$2,132
250,000 - 349,999	27	$3,482	109	$3,400	44	$3,378
350,000 & over	0	---	40	$5,165	22	$5,953

Business Factor: Cost Control

Cost control has been growing in importance on farms. As more "input" items are purchased, cost control has a larger effect on incomes. Cost control is difficult to measure. However, keeping good records and making use of them can give you some useful checks.

Feed, labor, and machinery are major cost items on dairy farms and can easily get out of line. On the next two pages, you can study your costs for these three input items.

FEED COSTS

Item	Your farm	12 Erie County farms, 1965	434 N. Y. State dairy farms, 1964 Average	Top 10%*
Purchased Feed				
Dairy feed bought	$_____	$6,399	$6,206	$8,386
Feed bought per cow	$_____	$125	$155	$152
Feed bought as % of milk receipts	_____%	23%	31%	29%
Feed bought/cwt. of milk sold	$_____	$1.00	$1.38	$1.24
Total crop expense** per cow	$_____	$41	$31	$35
Feed bought and crop expense/cow	$_____	$166	$186	$187
Roughage Harvested (hay equivalent)				
Hay (tons)	_____	210	142	180
Silage (tons ÷ 3)	_____	128	64	121
Total tons hay equivalent	_____	338	206	301
Tons hay equivalent/cow	_____	6.6	5.1	5.5
Other Considerations				
Total acres in crops/cow	_____	2.8	2.6	2.5
Tons H. E. per acre in crops	_____	2.3	2.0	2.2
Number of heifers per 10 cows	_____	6.7	6.0	6.2

* The 10 percent of the farms with the highest labor incomes.
** Lime and fertilizer, seeds, spray and other crop expense.

The percent feed bought was of milk receipts ranged from a low of 11 percent to a high of 42 percent. Eight farms had 25 percent or less of the milk receipts going for feed bought.

In addition to the quantity of roughage harvested, one must also consider the quality. Time of harvest is an important factor affecting quality of hay. Did you complete your first cutting by July 4? _____

Labor and Machinery Costs are sizeable on a dairy farm. It is important to keep these under control. Since labor and machinery work as a team, it is well to study them together.

POWER AND MACHINERY COSTS

Item	Your farm	12 Erie County farms, 1965	434 N. Y. State dairy farms, 1964 Average	434 N. Y. State dairy farms, 1964 Top 10%*
Beginning inventory	$_____	$15,003	$11,597	$14,667
New machinery bought	_____	4,354	2,556	3,297
Total	$_____	$19,357	$14,153	$17,964
End inventory	$_____	$16,963	$12,591	$16,080
Machinery sold	_____	233	89	215
Total	$_____	$17,196	$12,680	$16,295
Depreciation	$_____	$ 2,161	$ 1,473	$ 1,669
Int. @ 5% av. invt.	_____	800	605	768
Gas and oil	_____	923	694	845
Machinery repairs	_____	1,403	756	898
Bale ties	_____	88	107	143
Milk hauling	_____	996	352	349
Machine hire	_____	289	104	189
Auto expense (f.s.)	_____	248	153	136
Electricity (f.s.)	_____	355	327	462
Total power and machinery cost	$_____	$ 7,263	$ 4,571	$ 5,459
Less: Gas tax ref.	$_____	$233	$135	$180
Income from machine work	_____	658	73	96
NET POWER AND MACHINERY COST	$_____	$ 6,372	$ 4,363	$ 5,183
Net power & mach. cost:				
per cow	$_____	$125	$109	$94
per crop acre	$_____	$44	$42	$37
per man	$_____	$ 3,540	$ 2,567	$ 2,730
per cwt. milk sold	$_____	$1.00	$0.97	$0.77

* The 10 percent of the farms with the highest labor incomes.

Farmers frequently justify high machinery costs on the basis that the machinery saves labor. The combined machinery and labor cost measure gives a good check. In the table below, the effect of labor and machinery costs on income can be observed.

LABOR AND POWER AND MACHINERY COSTS

Item	Your farm	12 Erie County farms, 1965	434 N. Y. State dairy farms, 1964	
			Average	Top 10%*
Value of operators' labor**	$_____	$ 4,500	$3,924	$ 3,683
Hired labor	_____	1,575	1,170	2,529
Unpaid family labor	_____	150	367	366
TOTAL LABOR COSTS	$_____	$ 6,225	$5,461	$ 6,578
Net power & mach. cost	_____	6,372	4,363	5,183
TOTAL LABOR & MACH. COSTS	$_____	$12,597	$9,824	$11,761
Total per cow	$_____	$247	$246	$214
Total per crop acre	$_____	$87	$94	$84
Total per man	$_____	$ 6,998	$5,779	$ 5,881
Total per cwt. milk sold	$_____	$1.98	$2.18	$1.74

* The 10 percent of the farms with the highest labor incomes.
** Valued at $3,600 per operator.

On these Erie County dairy farms, the power and machinery cost was just about the same as the labor cost. In other words, for each dollar spent for labor, a dollar was also spent for mechanization.

The following table shows the relationship of combined labor and machinery costs to labor and income.

LABOR AND MACHINERY COST PER COW AND LABOR INCOME
434 New York Dairy Farms, 1964

Cost per cow	Farms with less than 30 cows		Farms with 30 - 49 cows		Farms with 50 cows and over	
	Number of farms	Labor income	Number of farms	Labor income	Number of farms	Labor income
Under $250	26	$2,537	144	$3,836	61	$4,455
$250 - $349	60	$2,260	90	$2,173	26	$2,025
$350 & over	18	- $23	9	$2,170	0	---

There are many costs in operating a farm. It is essential that one control the major items, but it is also important to watch the smaller costs too. Small leaks can build up into sizeable losses. Below are some measures which can be used in exercising overall cost control.

COST CONTROL MEASURES

Item	Your farm	12 Erie County farms, 1965	434 N. Y. dairy farms 1964
Feed bought/cow	$_____	$125	$155
Labor/cow (see p. 14)	_____	122	136
Land & building repair/cow	_____	7	10
Machinery depreciation/cow	_____	42	37
Machinery repair/cow	_____	28	19
Gas and oil/cow	_____	18	17
Electricity/cow	$_____	$ 7	$8
Vet & medicine/cow	_____	9	8
Breeding fees/cow	_____	6	6
Taxes/cow	_____	12	14
Insurance/cow	_____	8	8
Gas & oil/crop acre	$_____	$ 6	$6
Fertilizer & lime/crop acre	_____	10	9
Seeds & plants/crop acre	_____	2	2
Total expenses/cow	$_____	$512	$489
Total expenses/$100 rcts.	_____	69	76

FARM BUSINESS CHART

The chart on this page is a tool for use in analyzing a farm business. It is essentially a series of measuring sticks. The top figure in each column is the average of the top ten percent of the farms for that factor. The next figure in the column is for "the next best ten percent," etc. The last figure is the bottom ten percent.

For each column, draw a line to show where your farm stands.

FARM BUSINESS CHART FOR FARM MANAGEMENT COOPERATORS
434 New York Dairy Farms,* 1964

Size				Rates of Production		
No. of cows	Total work units	Man equiva-lent	Pounds 3.7 milk sold	Pounds 3.7 milk sold per cow	Tons hay per acre	Tons corn silage per acre
75	930	3.0	902,200	14,300	3.7	21
53	669	2.2	617,500	13,200	2.9	17
46	580	2.0	528,600	12,500	2.5	15
42	528	1.9	480,000	12,000	2.3	14
38	488	1.6	431,900	11,400	2.1	12
35	452	1.5	395,600	10,900	1.8	11
33	420	1.3	357,600	10,400	1.6	10
30	381	1.2	313,100	9,800	1.4	9
26	336	1.2	266,800	9,100	1.1	7
21	265	1.1	194,200	7,800	.7	4

Labor Efficiency		Cost Control			
Cows per man	Pounds 3.7 milk sold per man	Feed bought per cow	% Feed is of milk receipts	Net machinery cost per cow	Labor and machinery cost per cow
36	441,600	$ 63	16%	$ 63	$180
30	347,700	95	23	80	202
28	315,100	115	26	88	216
26	287,600	131	28	94	227
24	269,700	145	30	101	238
23	250,900	158	32	110	251
21	233,800	173	34	119	263
20	212,000	187	36	128	279
18	185,400	207	40	142	305
15	143,600	249	47	184	372

* These farms are considerably above the average for all farms in the State. For example, the median number of cows for the 434 farms was 36.5 compared with 31.5 for all farms in the State.

CHANGES ON NEW YORK DAIRY FARMS

In 1960, the Department of Agricultural Economics at Cornell started a research study of the changes in milk production in New York. A random sample of farms was selected. The sample farms were visited in June each year from 1960 to 1965 to obtain information on changes that had been made.

The sample of farms studied included a 2.5 percent sample of the dairy farms in the New York Milkshed and a 5 percent sample of the Hudson Valley area. Farms delivering to all markets in New York State, and those located in New York State but delivering to New England markets were included. The sample included 1,073 farms in 1960. From this sample, estimates can be made for the entire State or the Milkshed.

Results from this study point up the major changes made in the past five years. Based on this, we can make an estimate of the situation which may exist five years ahead or 1970. It is important to look ahead as you make long-term plans for your business.

Item	New York State situation in: 1960	1965	% Change 1960 to 1965	Your estimate 1970
Number of dairy farms	40,200	30,500	- 24%	_____
Number of cows	1,200,000	1,100,000	- 8	_____
Million lbs. milk sold	10,000	10,800	+ 8	_____
Cows per farm	30	36	+ 20	_____
Lbs. milk sold per cow	8,300	9,800	+ 18	_____
Lbs. milk sold per farm	249,000	354,000	+ 42	_____
Man equivalent per farm	1.8	1.8	0	_____
Cows per man	17	20	+ 18	_____
Lbs. milk sold per man	138,000	197,000	+ 43	_____
Farms with less than 20 cows	31%	18%	- 42	_____%
Farms with bulk tanks	20%	35%	+ 75	_____%
Farms with free stalls	0%	2%	--	_____%
Farms with gutter cleaner	31%	48%	+ 55	_____%
Farms with silo unloader	5%	18%	+ 260	_____%

COMPARISON OF BUSINESS SUMMARIES BY SIZE OF FARM
434 New York Dairy Farms, 1964

Item	My farm	Average of farms with: Less than 30 cows	30-49 cows	50 cows and over	Average of top 10% by labor income
Number of farms		104	243	87	43
Capital Investment (end of year)					
Machinery and equipment	$	$ 7,611	$12,215	$19,596	$16,080
Cattle		8,666	13,855	23,735	21,865
Feed and supplies		2,163	3,451	5,780	5,324
Land and buildings		18,134	25,027	47,326	37,044
TOTAL INVESTMENT	$	$36,574	$54,548	$96,437	$80,313
Farm Receipts					
Milk sales	$	$11,309	$18,806	$32,757	$29,381
Livestock sold		1,183	1,835	3,184	3,184
Crop sales		86	123	157	159
All other sales		485	812	1,424	1,359
Total Cash Receipts	$	$13,063	$21,576	$37,522	$34,083
Increase in inventory		1,579	2,582	5,375	5,832
TOTAL FARM RECEIPTS	$	$14,642	$24,158	$42,897	$39,915
Farm Expenses					
Hired labor	$	$ 213	$ 857	$ 3,189	$ 2,529
Dairy concentrate		3,713	5,825	10,249	8,386
Other feed		193	251	534	282
Machine hire		74	110	123	189
Machinery repairs		456	697	1,279	898
Auto expense (farm share)		127	156	178	136
Gas and oil		452	663	1,069	845
Breeding fees		157	219	346	326
Veterinary, medicine		176	289	495	413
Milk hauling		323	335	438	349
Other livestock expense		346	656	1,091	841
Lime and fertilizer		428	856	1,587	1,325
Seeds and plants		130	231	350	304
Bale ties		72	105	156	143
Spray, other crop expense		49	85	188	151
Land, bldg., fence repair		197	423	674	486
Taxes, insurance		514	833	1,465	1,264
Electricity (farm share)		205	298	555	462
Miscellaneous		182	277	525	395
Total Cash Operating	$	$ 8,007	$13,166	$24,491	$19,724
New machinery		1,307	2,450	4,344	3,297
New real estate		793	1,315	3,402	2,125
Livestock purchases		497	807	1,243	1,243
Unpaid labor		307	405	332	366
TOTAL FARM EXPENSES	$	$10,911	$18,143	$33,812	$26,755
Financial Summary					
Total farm receipts	$	$14,642	$24,158	$42,897	$39,915
Total farm expenses		10,911	18,143	33,812	26,755
Farm Income	$	$ 3,731	$ 6,015	$ 9,085	$13,160
Interest on capital @ 5%		1,789	2,663	4,687	3,870
Labor Income per Farm	$	$ 1,942	$ 3,352	$ 4,398	$ 9,290
Number of operators		105	261	107	44
LABOR INCOME/OPERATOR	$	$ 1,923	$ 3,121	$ 3,576	$ 9,081

BUSINESS FACTORS BY SIZE OF FARM
434 New York Dairy Farms, 1964

Measure	My farm	Average of farms with: Less than 30 cows	30-49 cows	50 cows and over	Average of top 10% by labor income
Size of Business					
Number of cows	_____	24	38	64	55
Pounds of 3.7 milk sold	_____	260,500	429,400	736,200	674,600
Total acres in crops	_____	75	102	147	140
Man equivalent	_____	1.3	1.6	2.4	2.0
Total work units	_____	323	487	781	693
Total investment	$_____	$36,574	$54,548	$96,437	$80,313
Rates of Production					
Pounds of 3.7 milk sold per cow	_____	10,850	11,300	11,500	12,300
Milk sales per cow	$_____	$471	$495	$512	$534
Tons hay per acre	_____	1.9	2.0	2.3	2.1
Tons corn silage per acre	_____	11	12	13	14
Bushels of oats per acre	_____	50	49	58	54
Labor Efficiency					
Number of cows per man	_____	18	24	27	28
Pounds of 3.7 milk sold per man	_____	200,400	268,400	306,800	337,300
Work units per man	_____	248	304	325	346
Crop acres per man	_____	58	64	61	70
Use of Capital					
Total capital per man	$_____	$28,134	$34,092	$40,182	$40,156
Total capital per cow	$_____	$1,524	$1,435	$1,507	$1,460
Total machinery per cow	$_____	$317	$321	$306	$292
Total land and building investment per cow	$_____	$756	$659	$739	$674
Machinery Costs (Net)					
Total	$_____	$2,811	$4,184	$6,720	$5,183
Machinery cost per cow	$_____	$117	$110	$105	$94
Machinery cost per crop acre	$_____	$37	$41	$46	$37
Feed Costs					
Feed bought per cow	$_____	$155	$153	$160	$152
Feed as % of milk receipts	_____%	33%	31%	31%	29%
Feed bought per cwt. of milk sold	$_____	$1.43	$1.36	$1.39	$1.24
Total feed bought and crop expense per cow	$_____	$183	$187	$196	$187
Prices					
Average price per cwt. of 3.7 milk sold	$_____	$4.34	$4.38	$4.45	$4.36

FINANCIAL SITUATION AND MANAGEMENT

The financial summary for 126 dairy farms in Cayuga, Delaware, Ontario, and Otsego counties is presented for comparison purposes. These farms were included in a credit study made in 1962 and repeated in 1964. The information shows some of the financial changes which occurred on these 126 farms in the two year period.

FARM FAMILY FINANCES

	My farm	126 Dairy Farms 1962	1964	Change
Farm Assets:				
Machinery and equipment	$_____	$12,561	$13,835	$1,274
Cattle	_____	15,157	16,057	900
Other livestock	_____	71	112	41
Feed and supplies	_____	4,369	4,591	222
Land and buildings	_____	27,343	31,931	4,588
All Farm Assets	$_____	$59,501	$66,526	$7,025
Non-Farm Assets:				
Other real estate	$_____	$ 609	$ 839	$ 230
Cash on hand and in checking account	_____	677	968	291
Stocks, bonds	_____	1,923	2,335	412
Household goods, personal auto	_____	3,025	3,204	179
Cash value life insurance	_____	1,980	2,604	624
Accounts receivable	_____	2,398	1,973	- 425
Other	_____	1,196	1,825	629
All Non-Farm Assets	$_____	$11,808	$13,748	$1,940
TOTAL FINANCIAL ASSETS	$_____	$71,309	$80,274	$8,965
Debts				
Real Estate Debt	$_____	$11,499	$13,585	$2,086
Chattle mortgages on cattle and equipment	_____	7,337	7,463	126
Unsecured notes	_____	1,801	2,231	430
Installment contracts	_____	400	691	291
Feed account	_____	658	634	- 24
Other debts	_____	780	830	50
TOTAL DEBTS	$_____	$22,475	$25,434	$2,959
NET WORTH	$_____	$48,834	$54,840	$6,006
% Equity	_____%	68%	68%	--
Number of cows	_____	40	42	2
Debt per cow	$_____	$562	$605	$43
% Real estate debt is of total	_____%	51%	53%	--

Life insurance is an important part of your financial situation. The insurance programs of 126 cooperators in four counties were summarized for 1964.

LIFE INSURANCE COVERAGE, FARM OPERATOR
126 Dairy Farms, New York, 1964

Degree of Coverage	Range of Coverage	Number of Operators	Av. Coverage
Minor	0 - 6,499	34	$ 3,538
Average	6,500 - 14,499	32	10,594
Above average	14,500 - 24,499	27	19,085
Broad coverage	24,500 and over	33	39,975
TOTAL or AVERAGE		126	$18,100

TYPE AND AVERAGE SIZE OF LIFE INSURANCE POLICIES
126 Dairy Farms, New York, 1964

Type of Policy	Percent of Policies	Average Size	Percent of Total Insurance
Ordinary Life	32.1	$ 6,623	34.5
Term	17.4	10,909	34.1
Limited Payment	32.0	3,271	18.3
Endowment	18.5	3,929	13.1
TOTAL or AVERAGE	100.0	$ 5,637	100.0

ASSET POSITION AND LIFE INSURANCE ON OPERATOR
126 Dairy Farms, New York, 1964

Assets*	Number of Operators	Average Amount of Insurance on Operator
Less than $50,000	31	$ 8,665
$50,000 to $69,999	42	15,240
$70,000 to $99,999	22	17,886
$100,000 and over	31	31,374
TOTAL or AVERAGE	126	$18,100

* Range of assets -- $28,300 - $385,200.

AGE OF OPERATOR AND AMOUNT OF LIFE INSURANCE CARRIED
126 Dairy Farms, New York, 1964

Age of Operator	Number of Operators	Net Worth	Average Amount of Life Insurance on Operator
Under 35	33	$43,500	$22,276
35 - 44	54	42,800	15,152
45 - 54	26	81,100	20,102
55 and over	13	80,900	16,815
TOTAL or AVERAGE	126	$54,800	$18,100

NEW YORK DAIRY FARMS AND THEIR COMPETITION

Many states conduct farm business analysis projects similar to the one in which New York farmers participate. Summary results from three other states are reported here for comparison with New York dairy farms. How would you rate New York's position with this outside competition?

Factor	434 New York Dairy Farms 1964	83 Maine and New Hampshire Dairy Farms 1964	723 Wisconsin Dairy Farms 1964	68 Indiana Dairy Farms 1964
Crop acres	104	N.R.	147	196
Man equivalent	1.7	2.0	1.6	1.7
Number of cows	40	40.6	37.6	39.1
Milk sold (3.7% eq.):				
Total	450,400	478,016	410,780	435,574
Per cow	11,260	11,774	10,925	11,140
Per man	264,900	241,422	256,738	256,220
Tons of hay per acre	2.0	N.R.	3.2	3.2
Tons corn silage per acre	12	N.R.	12.6	15.3
Capital investment:				
Land and buildings	$27,109	$26,650	$27,468	$57,384
Machinery	12,094	10,843	10,992	11,635
Livestock	14,310	13,590	11,380	16,409
Feed and supplies	3,674	N.R.	4,658	7,659
Total	$57,187	$51,083	$54,497	$93,087
Per man	$33,639	$25,799	$34,061	$54,474
Per cow	$ 1,430	$ 1,258	$ 1,449	$ 2,381
Financial summary:				
Total farm receipts	$25,634	$29,019	$23,678	$30,582
Total farm expenses	19,551	22,356	16,951	21,904
Farm income	$ 6,083	$ 6,663	$ 6,727	$ 8,678
Interest at 5%	2,859	2,554	2,725	4,655
LABOR INCOME/FARM	$ 3,224	$ 4,109	$ 4,002	$ 4,023
LABOR INCOME/OPERATOR	$ 2,958	N.R.	$ 3,765	N.R.
Average price/cwt. 3.7 milk	$4.40	$5.29	$3.71	$4.17
Milk sales per cow	$495	$623	$405	$465
Machinery cost per cow	$109	$94	$98	$149
Feed purchased per cow	$163	$220	$74	$128

N.R. - Not reported.

BUDGETING

When a farm manager considers making a change in his business, there are usually two or three alternatives for consideration. The outline below is a guide to help compare these alternatives. If the change is to be a major one, the farm manager may wish to consult with his county agricultural agent since he is experienced in the techniques of budgeting and has in his possession reference material that is helpful when comparing alternatives.

	My business in 1965	Proposed Change #1	Proposed Change #2
I. Farm Receipts			
Milk sales, gross	$	$	$
Livestock sales			
Egg sales			
Crop sales			
Miscellaneous receipts			
Total Cash Receipts			
Increase in inventory			
Total Farm Receipts	$	$	$
II. Farm Expenses			
Hired labor	$	$	$
Dairy feed bought			
_____ feed bought			
Machine hire			
Truck, tractor, machinery			
Auto expense (farm share)			
Gasoline and oil			
Breeding fees			
Veterinary and medicine			
Other livestock, poultry exp.			
Lime and fertilizer			
Seeds and plants			
Spray, other crop expense			
Land, building, fence expense			
Taxes, insurance			
Electricity, telephone (f.s.)			
Miscellaneous			
Total Cash Operating Expenses			
New machinery			
New real estate			
Livestock purchases			
Unpaid family labor			
Decrease in inventory			
Total Farm Expenses	$	$	$
III. Farm Financial Summary			
Capital Investment	$	$	$
Total Farm Receipts	$	$	$
Total Farm Expenses			
Farm Income	$	$	$
Interest on Capital			
LABOR INCOME	$	$	$