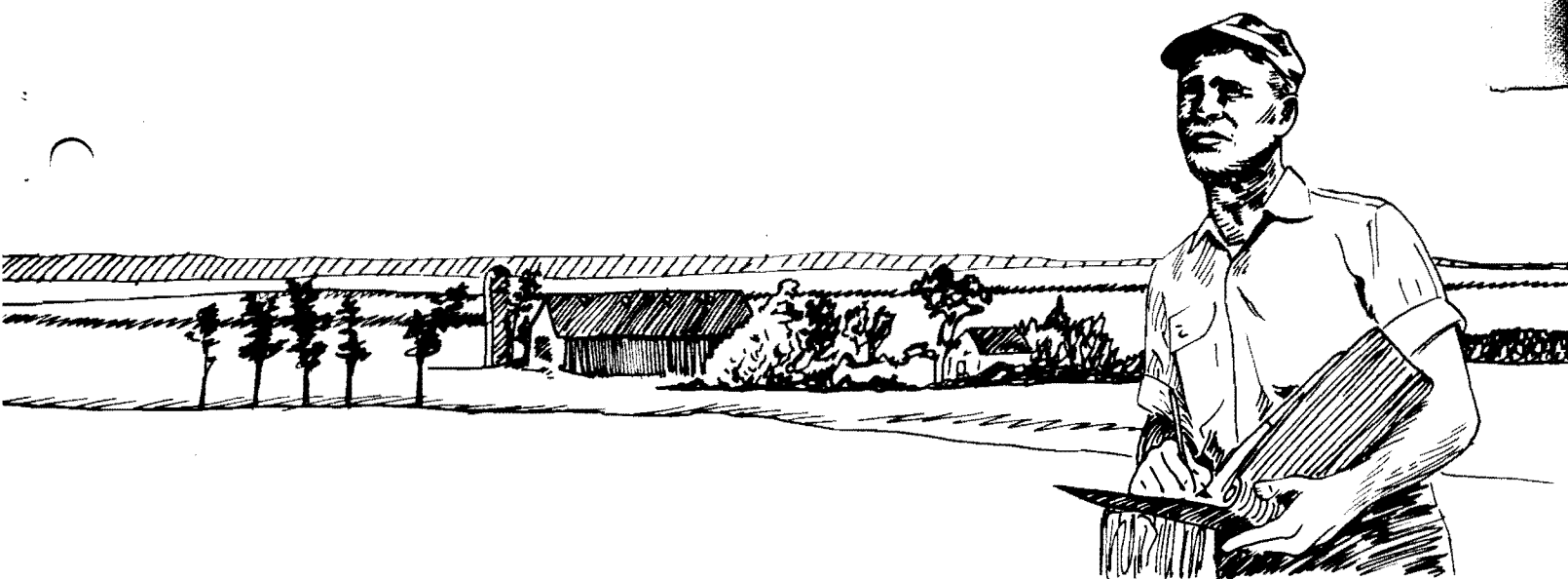


SUMMARY AND ANALYSIS OF 1962 DAIRY FARM BUSINESSES



A. E. SHAPLEY

C. A. BRATTON

Department of Agricultural Economics
Cornell University Agricultural Experiment Station
New York State College of Agriculture
A Contract College of the State University
Cornell University, Ithaca, New York

TABLE OF CONTENTS

	<u>Page</u>
INTRODUCTION-----	1
DECISION MAKING MACHINERY FOR GOOD MANAGEMENT-----	2
NEW YORK FARM PRICES-----	3
PART I - SUMMARY OF THE FARM BUSINESS-----	4
Resources-----	4
Capital Investment-----	5
Receipts-----	6
Expenses-----	7
Financial Summary Of The Year's Business-----	8
Labor income-----	8
Return on investment-----	9
Farm cash operating income-----	9
PART II - ANALYSIS OF THE FARM BUSINESS-----	10
Size Of Business-----	10
Rates Of Production-----	11
Labor Efficiency-----	12
Cost Control-----	13
Feed costs-----	14
Labor and machinery costs-----	16
Summary Of Farm Business Factors-----	18
Farm Business Chart-----	19
Comparison Of Business Summaries By Size Of Farm-----	20
Comparison Of Business Summaries Of The 30 Farms With Highest Labor Incomes And The 30 Farms With Lowest Labor Incomes-----	22
Combination Of Factors-----	24
Farm Family Financial Situation-----	26
Family Living Expenses-----	28
PART III - GUIDE TO DECISION MAKING-----	29
Summarizing The Strong And Weak Points-----	29
Goals And Objectives-----	30
Budgeting A Change In Your Farm Business-----	31
PART IV - SUPPLEMENTARY INFORMATION-----	32
Comparison Of Business Summaries Of Dairy Farms With Other Major Sources Of Income-----	32
Comparison Of Selected Farm Business Factors For 1962	
26 Counties included in general farm business summary-----	34
13 Counties not included in general farm business summary-----	41
Comparison Of Selected Farm Business Factors, New York Dairy Farms 1958-62-----	44

ACKNOWLEDGEMENT

C. A. Bratton, A. E. Shapley, C. W. Loomis, R. S. Smith, and L. A. Stanton with the assistance of county agricultural agents in 39 counties supervised the farm business management projects and the records which made this summary and analysis possible. The summarization and tabulation of the books processed at Cornell was under the direction of G. H. Bull.

SUMMARY AND ANALYSIS OF 1962 DAIRY FARM BUSINESSES

In 1962, farmers in 39 New York counties cooperated in Farm Business Management Projects. These projects were sponsored jointly by the County Extension Services and the Department of Agricultural Economics at Cornell.

These projects aim to help farmers improve their management ability. This is done by teaching farmers:

1. How to keep better farm records.
2. How to analyze records and use them in managing the business.

The records from 26 counties were summarized and analyzed at Cornell. In the other 13 counties, the farmers summarized their own records but the analysis and summary reports were prepared at Cornell. In the 39 counties, 1095 records were summarized from farms that had dairy herds. A total of 641 records from the 26 counties summarized at Cornell have been combined into a general summary.

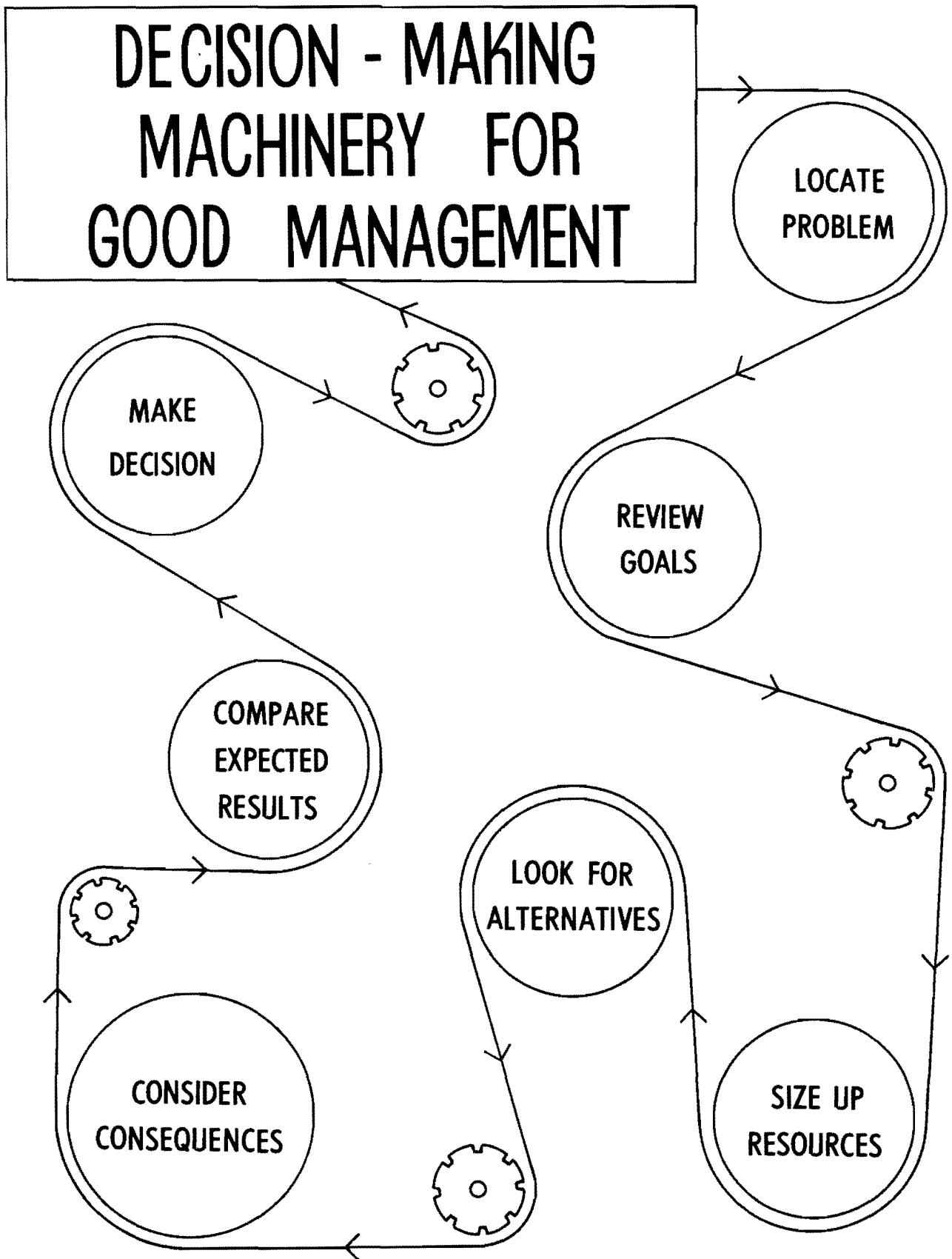
These 641 farms all had commercial dairy herds. However, 138 of these farms also had sizeable receipts from sources other than milk. These were separated out for analysis leaving 503 specialized dairy farms. The averages presented here do not represent the average for all the dairy farms in the State. Enrollment by the farmer is voluntary. As a group, the farmers are somewhat better than the average of all dairy farms in the State.

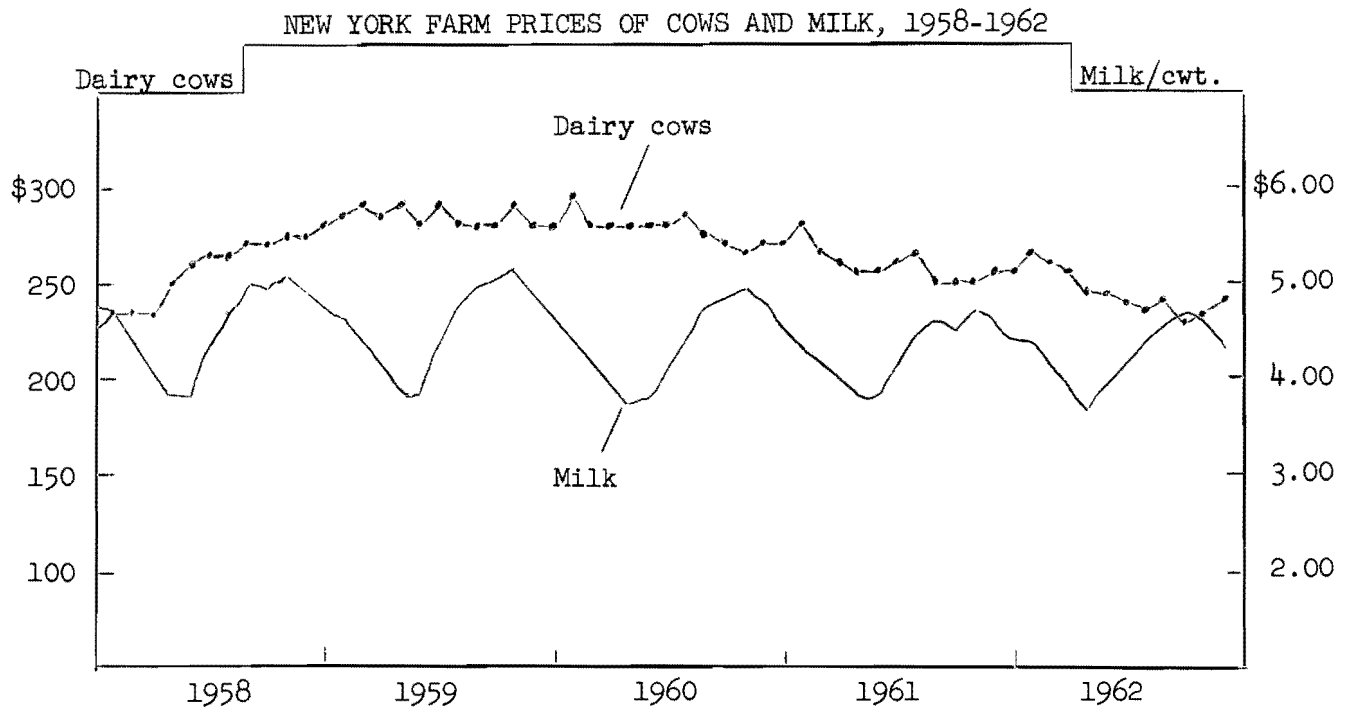
Each farm family whose record is included in this summary took a farm inventory at the beginning and end of 1962. During the year receipts and expenses and information such as crop acreages and yields were recorded. At the end of the year, each record was checked by a county agent or farm management specialist. A summary was prepared for the cooperating group of farmers in each county.

Individual farm records are confidential. The averages, however, are used by extension workers, agriculture teachers, and others interested in agriculture. This summary has been prepared primarily for their use. The farmers in each county farm business management group have already had their county summary. However, farmers not included in a county summary may have use for this summary.

This publication is divided into four major sections. Part I is a business summary of the 503 specialized dairy farms. Part II is an analysis of business factors and how they affect income. Part III is a guide to decision making and Part IV is supplementary data consisting of the summaries of business factors for the other 138 farms, and for the 39 county summaries.

The year 1962 was an unusual one in New York State due to a serious drought. This resulted in smaller feed supplies, less money "plowed back" into the business, higher feed costs and ultimately considerably lower labor incomes. For items directly affected by weather, the 1962 figures should not be used alone in budgeting or for other long-range projections.





Source: Current Economic Situation

Prices are one of several important factors affecting farm incomes. When studying farm incomes for any period, 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 1962 averaged \$4.27 per hundredweight. This was five cents below the average for 1961. Dairy cow prices which started to weaken the latter part of 1960 continued downward in 1962. The average price per head in 1962 was down \$15 from 1961 and about \$40 from 1959. The general index of prices paid by New York dairy farmers in 1962 was about two per cent higher than in 1961.

AVERAGE YEARLY PRICES RECEIVED AND PAID BY N. Y. FARMERS, 1953-62

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)
1953	\$4.34	\$209	346	1958	\$4.55	\$255	376
1954	4.11	176	343	1959	4.58	284	387
1955	4.09	174	346	1960	4.42	278	394
1956	4.20	180	352	1961	4.32	260	394
1957	4.58	196	363	1962	4.27	245	401

PART I

SUMMARY OF THE FARM BUSINESS

The 503 specialized dairy farms included in this summary were scattered throughout the 26 counties. There is considerable variation in size of farm, amounts and type of crops grown, and income. The figures presented here are averages and therefore should not be used as goals or recommendations but only as a basis for analysis.

Resources

An analysis of the "resources" or things to work with is important in decision making. The farm resources for the 503 dairy farms are reported below.

FARM RESOURCES
503 New York Dairy Farms, 1962

Item	Number reporting	Average*	Range	
			Low	High
<u>Labor:</u>				
Man equivalent (No. men)		1.8	1.0	7.5
Operator only	(22 farms)			
Hired man 12 or more months	(110 farms)			
Hired help part of year	(241 farms)			
Unpaid family labor	(271 farms)			
Partnerships	(62 farms)			
<u>Livestock:</u> (Number)				
Cows		38	8	192
Heifers		24	0	87
<u>Crops:</u> (Acres grown)**				
Hay	(490 farms)	70	8	300
Grass silage	(91 farms)	21	3	100
Corn for silage	(389 farms)	16	2	87
Corn for grain	(92 farms)	11	1	65
Oats	(238 farms)	19	1	140
Total acres in crops		101	30	460

*Average for farms reporting.

**Only most common crops are listed.

The farm resources for the 503 farms in the 1962 summary are much the same as those for the 490 farms in the 1961 summary.

Age was reported for 355 of the farm operators. The age distribution was as follows: 20 to 29 - - - 57 40 to 49 - - - 97
30 to 39 - - - 123 50 to 59 - - - 49 60 and over - - - 29

Capital Investment

"It takes money to make money in a farm business." This money is referred to as "capital investment." In this report, the farm inventory at the end of the year is used as a measure of capital investment.

FARM INVENTORY VALUES, JANUARY 1, 1963
503 New York Dairy Farms, 1962

Item	Amount per farm		Amount per cow		Percent of total
	Your farm	Average per farm	Your farm	Average per cow	
Machinery and equipment	\$_____	\$11,252	\$_____	\$ 296	21
Cattle	_____	13,898	_____	366	26
Feed and supplies	_____	3,331	_____	88	6
Land and buildings	_____	<u>25,652</u>	_____	<u>675</u>	<u>47</u>
TOTAL INVESTMENT	\$_____	\$54,133	\$_____	\$1,425	100

Total investment on these dairy farms averaged \$54,000 per farm. This is about \$1000 less than the average total investment in 1961. The lower average in 1962 is primarily due to the short feed supply brought on by the drought.

The total investment per cow on these farms averaged \$1,425. Land and buildings accounted for 47 percent of the total and amounted to \$675 per cow. Also the value of land and buildings amounted to \$254 per crop acre.

High capital investment per "productive unit" (per cow) in a business tends to cause a heavy overhead cost per unit. In some cases, it may indicate that the capital resources are not being used to capacity.

Investment per man or per job is higher for these dairy farms than in many other businesses. But farming is not the only business with high capital requirements per man. Here are some figures from other businesses and farms.

Investment Per Man or Per Worker

All Industry	\$24,000	Cash Grain Farms, Ill.	\$120,000
Petroleum	\$62,000	Egg-Producing Farms, N.J.	\$ 26,000
Iron & Steel	\$21,000	Dairy Farms, Wisc.	\$ 42,000
Food Products	\$11,000	Wheat-Pea Farms, Wash.	\$151,000
Autos & Trucks	\$15,000	Small Cotton Farms, Miss.	\$ 12,000
503 Dairy Farms, N.Y.		\$30,000	

Receipts

FARM RECEIPTS
503 New York Dairy Farms, 1962

Item	Your farm	Average per farm 1962	Percent of total
Milk sales	\$ _____	\$17,094	85
Livestock & poultry sold	_____	2,041	10
Eggs sold	_____	13	--
Crop sales	_____	127	1
Miscellaneous*	_____	894	4
Total cash receipts	\$ _____	\$20,169	100
Increase in inventory	_____	1,183	
TOTAL FARM RECEIPTS	\$ _____	\$21,352	

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

Total cash receipts amounted to \$20,169 per farm. Milk was the largest source of income, and made up 85 percent of the cash receipts. Livestock sales amounted to 10 percent of cash receipts.

Increases in inventory are due to gradual expansion and are a usual occurrence in a "going" dairy farm business. Inventory changes occur as a result of more cows, more machinery and equipment, additions to buildings, or a better feed situation. Changes in these items resulted in an average increase in inventory for 1962 of \$1,183 per farm. In 1961 the average increase was \$2,782. (The difference was due chiefly to less feed as a result of the drought.)

Increases in inventory due to expansion are considered as farm receipts. These items could have been sold and turned into cash receipts if a farm wished to do so. Instead the farmer decided to invest this in his business. Also the costs of producing or acquiring these items are included in the farm expenses.

	Your farm	Average 503 farms 1962	Average 490 farms 1961
Average price per hundredweight of 3.7 milk	\$ _____	\$ 4.33	\$ 4.47
Average milk sales per cow	\$ _____	\$ 450	\$ 445
Average farm receipts per man	\$ _____	\$11,862	\$12,503

Expenses

FARM EXPENSES
503 New York Dairy Farms, 1962

Item	Your farm	Average per farm 1962	Percent of total
Hired labor	\$ _____	\$ 1,158	9
Feed	_____	5,591	45
Machine hire	_____	110	1
Machinery, small tool expense	_____	690	6
Auto expense (farm share)	_____	152	1
Gas and oil	_____	667	5
Breeding fees	_____	210	2
Veterinary, medicine	_____	262	2
Other livestock expense*	_____	806	6
Lime and fertilizer	_____	677	5
Seeds and plants	_____	216	2
Spray, other crop expense	_____	113	1
Land, building and fence repair	_____	381	3
Taxes, insurance	_____	812	7
Electricity, telephone (farm share)	_____	371	3
Miscellaneous	_____	236	2
Total Cash Operating Expenses	\$ _____	\$12,452	100
New machinery	_____	1,958	
New real estate	_____	899	
Livestock purchases	_____	716	
Unpaid labor	_____	381	
Decrease in inventory	_____	--	
TOTAL FARM EXPENSES	\$ _____	\$16,406	

*Includes milk hauling, \$281.

Total cash operating expenses averaged \$12,452 in 1962. This was \$500 higher than 1961. Dairy feed is the largest item of expense and in 1962 was \$800 more than the similar group of farms in 1961. Feed accounted for 45 percent of the total cash operating expenses.

All capital purchases (new machinery, real estate and livestock) were somewhat lower in 1962. These smaller capital purchases contributed to the smaller increase in inventory.

Only the net change in inventory is used in this summary. However, many farms had a substantial decrease in inventory. This results when depreciation and sale of capital items is greater than the capital purchases. A decrease in inventory is considered as a farm expense.

Financial Summary of 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 have been calculated for the 503 dairy farms for 1962. They are (1) Labor Income, (2) Return on Investment, and (3) Farm Cash Operating Income.

LABOR INCOME
503 New York Dairy Farms, 1962

Item	Your farm	Average per farm
Total Farm Receipts	\$ _____	\$21,352
Total Farm Expenses	_____	<u>16,406</u>
Farm Income	\$ _____	\$ 4,946
Interest on average Capital of \$53,541 at 5%	_____	<u>2,677</u>
LABOR INCOME per farm	\$ _____	\$ 2,269
Number of operators on 503 farms	_____	565
LABOR INCOME per operator	\$ _____	\$ 2,020

"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 a charge for unpaid family labor and for interest on the capital invested. Labor income is the measure used most commonly 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 five percent interest charge on the average capital investment (average of beginning and end inventories) is deducted to get labor income.

The average labor income per operator was \$2,020 or about \$40 per week. The labor incomes ranged from minus \$11,500 to \$14,700, or a difference of \$26,200. The labor income per operator in 1961 averaged \$1,332 greater than that in 1962. As mentioned earlier, this difference was primarily due to the drought conditions in 1962. The distribution of the labor incomes is shown below.

Labor income per operator	1961		1962	
	No. of farms	Percent	No. of farms	Percent
\$5,000 and over	122	25	68	13
\$2,500 to \$4,999	180	37	148	30
0 to \$2,499	153	31	175	35
Minus return	35	7	112	22

RETURN ON INVESTMENT
503 New York Dairy Farms, 1962

Item	Your farm	Average per farm
Farm Income (p. 8)	\$ _____	\$4,946
Value of Operator's Labor*	_____	<u>4,044</u>
Return on Investment of \$53,541	\$ _____	\$ 902
Rate of Return on Investment	_____ %	1.7%

* \$3,600 per year. There were 565 operators on 503 farms.

The return on investment is calculated by deducting a charge for the operator's labor from the "Farm Income". This return is then divided by the average investment for the year to determine the rate of return on investment.

The average return on investment was 1.7%. In 1961 it was 4.5% for a similar group of farms.

FARM CASH OPERATING INCOME
503 New York Dairy Farms, 1962

Item	Your farm	Average per farm
Total Cash Receipts (p. 6)	\$ _____	\$20,169
Total Cash Operating Expenses (p. 7)	_____	<u>12,452</u>
FARM CASH OPERATING INCOME	\$ _____	\$ 7,717

"Farm Cash Operating Income" reflects the cash available from the year's operation of the farm business for family living, debts, and new capital purchases or investments. If non-farm income was earned by some member of the family or if money was inherited or borrowed, the actual cash used might be greater than the amount shown here.

A farmer can have a high "farm cash operating income" with a poor business. This could result from selling off or using up farm property during the year. Conversely, a successful business might look bad when this measure is used. This could result from a buildup in feed and supplies or in raised heifers. Therefore, this measure is not a good one to use for measuring the profitability of the business. It is useful only to show the net cash flow for the farm business.

Many farmers want a measure of profit that can be used to compare their income with that of the man who works in town. "Labor earnings" is sometimes used for this purpose. This is calculated by adding to the labor income, the value of products used in the home that were produced on the farm (milk, meat, garden produce, etc.) and the rental value of the house. Prior studies have shown the value of these privileges to be about \$1000 per year.

PART II

ANALYSIS OF THE FARM BUSINESS

Good records are important in checking on the financial success of a farm business. A more important use, however, is for analyzing the business in an effort to locate the strong and weak points. Determining the strong and weak points is usually an essential part in making profitable changes in any business.

This section of the publication presents averages for four business factors. They are (1) Size of Business, (2) Rates of Production, (3) Labor Efficiency, and (4) Cost Control. There are two or more measures for each factor and the averages for each measure is given. A farmer can compare these averages with the corresponding figures on his own business in order to determine which factors in his business are strong and which are weak.

Additional information is presented that demonstrates the effect of each of the four business factors on labor income. These relationships help in deciding which point should be corrected first if two or more points show a weakness.

Also included in this section are the averages for the financial summary and business factors of the 503 farms broken down by herd size. Averages are also presented for the 30 farms with the highest incomes and the 30 farms with the lowest incomes. Finally there are some data on farm assets, liabilities, and family living costs. A comparison of the figures for an individual business with the figures presented here will provide a good foundation on which to plan necessary changes.

Size of Business

In general, larger businesses make larger incomes. However, some businesses with 25 cows make larger incomes than others with 80 cows. A farm should be large enough to make efficient use of the machinery and regular labor force. To increase size beyond this point can be profitable if the other factors of management are also strong. If the other factors are weak, an increase in size may result in a decrease in income.

MEASURES OF SIZE OF BUSINESS
503 New York Dairy Farms, 1962

Measure	Your farm	Average per farm
Number of cows	_____	38
Pounds of 3.7 milk sold	_____	394,900
Man equivalent	_____	1.8
Total work units	_____	524

The most common measure used when comparing size of dairy farms is number of cows. In 1962, the average for the 503 farms summarized was 38 cows per farm. In the following table these farms are sorted into various size groups with the average labor income and other factors given for each group.

COWS PER FARM AND LABOR INCOME
503 New York Dairy Farms, 1962

Number of cows	Av. No. Cows	Number of farms	Pounds milk sold		Labor income per operator
			per cow	per man	
Under 20	16	28	8,950	119,300	\$ -260
20 - 29	25	128	10,030	193,000	1,330
30 - 39	34	165	10,210	228,700	2,160
40 - 49	44	92	10,420	235,900	2,530
50 - 59	53	44	10,310	247,900	2,300
60 or more	78	46	10,680	282,600	2,770

Rates of Production

High rates of production for both animals and crops is very important to the success of a farm business. Few farmers have reached the point where the cost of an extra input into milk production or crop yields is equal to the value of the additional output. Until that point is reached there is room for improvement.

MEASURES OF RATES OF PRODUCTION
503 New York Dairy Farms, 1962

Measure	Your farm	Average per farm
Pounds of 3.7 milk sold per cow	_____	10,390
Tons of hay per acre	_____	1.8
Tons of corn silage per acre	_____	12
Bushels of oats per acre	_____	50

When comparing dairy farms, the most common measure used to study this factor is pounds of 3.7 milk sold per cow. On the farms summarized this measure ranged from 3,600 pounds to 14,600 pounds. The table below demonstrates the relationship between milk production per cow and labor income.

MILK SOLD PER COW AND LABOR INCOME
503 New York Dairy Farms, 1962

Pounds milk sold per cow	Number of farms	Number of cows	Pounds milk sold per man	Operator's labor income per cow	Labor income per operator
Under 7,000	30	33	140,400	\$-20	\$ -660
7,000 to 8,000	31	31	151,000	13	410
8,000 to 9,000	77	40	188,200	35	1,420
9,000 to 10,000	83	38	211,700	53	2,020
10,000 to 11,000	101	38	225,000	53	2,030
11,000 to 12,000	82	41	247,400	55	2,250
12,000 and over	99	40	277,200	81	3,250

Labor Efficiency

Good labor efficiency can be accomplished by working long hours, making wise use of labor saving equipment and developing efficient work habits and practices. With wage rates increasing rapidly relative to machinery prices, labor efficiency is becoming increasingly important on farms. Below are some of the measures used to study labor efficiency.

MEASURES OF LABOR EFFICIENCY
503 New York Dairy Farms, 1962

Measure	Your farm	Average per farm
Number of cows per man	_____	21
Pounds of 3.7 milk sold per man	_____	219,400
Work units per man	_____	291
Crop acres per man	_____	56

The most common measure used for comparison on dairy farms is either cows per man or pounds of 3.7 milk sold per man. However, if crop acres per man is high, then cows per man may be below average and still not be a weak point.

Pounds of 3.7 milk sold per man is an excellent measure because it allows for variation in the number of cows one man handles and also allows for the fat variation found between the breeds. It measures the amount of product sold per man. The table below demonstrates how this measure of labor efficiency is related to labor income. In general the farms with the higher pounds of milk sold per man, had more cows and better cows, and higher labor incomes.

POUNDS OF MILK SOLD PER MAN AND LABOR INCOME
503 New York Dairy Farms, 1962

Pounds milk sold per man	Number of farms	Man equivalent	Number of cows	Pounds milk sold per cow	Labor income per operator
Under 120,000	31	1.7	24	7,500	\$ -920
120,000 to 150,000	43	1.6	26	8,600	110
150,000 to 180,000	69	1.8	32	9,300	1,190
180,000 to 210,000	94	1.8	37	9,700	1,570
210,000 to 240,000	77	2.0	42	10,700	2,210
240,000 to 270,000	71	1.8	44	10,900	2,140
270,000 to 300,000	50	1.7	43	11,300	3,230
300,000 and over	68	1.7	49	11,800	4,290

Cost Control

Keeping costs in line is one of the most important factors of a successful business. This does not mean cutting costs to the point of reducing efficiency, but it does mean keeping a close eye on costs to prevent any unnecessary or unwise expenditures.

Even though cost control is so important, it is often one of the weakest factors, especially on farms that are expanding rapidly. This sometimes happens when the operator spends so much time in the barns and fields, that he neglects his records. Records help an operator keep his eye on costs.

Some of the measures used, in determining whether or not costs are in line, are given below.

MEASURES OF COST CONTROL 503 New York Dairy Farms, 1962

Measure	Your farm	Average per farm
% Feed bought is of milk receipts	_____	33%
Feed bought per cow	_____	\$ 147
Feed bought per cwt. milk sold	_____	\$1.41
Machinery cost per cow	_____	\$ 106
Machinery cost per crop acre	_____	\$ 40
Labor and machinery cost per cow	_____	\$ 253
Labor and machinery cost per crop acre	_____	\$ 95
Labor and machinery cost per cwt. milk sold	_____	\$2.43
Fertilizer and lime expense per cow	_____	\$ 18
Fertilizer and lime expense per crop acre	_____	\$6.70
Taxes and insurance per cow	_____	\$ 21
Taxes and insurance per crop acre	_____	\$8.04
Veterinary, medicine per cow	_____	\$ 7
Electricity, telephone per cow	_____	\$ 10
Total capital per cow	_____	\$1400

Feed, labor and machinery are the major costs on dairy farms and can easily get out of line if not watched closely. Each of these costs is discussed in detail so that the farmer can determine the position of these costs on his farms.

Feed Costs on a dairy farm are influenced directly by the amount of roughage and grain grown on the farm. Most New York dairy farmers produce most of their own roughage and little or none of their own grain. Where this is the case, the percent of milk receipts that go to feed run around 25 to 30% in a "normal" year. (The 33% figure for 1962 is high due to drought. In 1961, it was 28% for a similar group of farms). If a farmer raises all or most of his own grain as well as roughage, this percentage may run in the neighborhood of 10%. Due to the effect of home-grown crops on this figure, these other items must be used in the comparison. Below are some of the items used in checking on the feed costs.

ITEMS RELATED TO FEED COSTS
503 New York Dairy Farms, 1962

Item	Your farm	Average per farm
<u>Purchased Feed</u>		
Dairy feed bought (grain and hay)	\$ _____	\$5,573
Feed bought per cow	\$ _____	\$ 147
Feed bought as % of milk receipts	_____ %	33%
Feed bought per cwt. of milk sold	\$ _____	\$ 1.41
<u>Roughage Harvested (hay equivalent)</u>		
Hay (tons) _____		116 tons
Corn silage (tons ÷ 3) _____		48 tons
Grass and other silage (tons ÷ 3) _____		6 tons
Total tons hay equivalent _____		170 tons
Tons hay equivalent per cow _____		4.5 tons
<u>Other Considerations</u>		
Total acres in crops per cow _____		2.7 acres
Lime and fertilizer expense per cow \$ _____		\$ 18
Lime and fertilizer expense per crop acre \$ _____		\$ 6.70
Number of heifers per 10 cows _____		6.3

The tons of hay equivalent harvested per cow in 1962 averaged 4.5 tons. For a similiar group of farms in 1961 the average was 6.1 tons. This is a decrease of one-fourth. When less roughage is produced, more feed must be purchased. The effects of the short hay crop in 1962 will also carry-over into the 1963 records.

On a dairy farm lime and fertilizer expenses are closely related to feed costs. Lime and fertilizer properly used should produce more feed and in turn this should be reflected in lower amounts spent for feed.

Percent feed bought is of milk receipts is considered to be one measure which can be used in studying feed costs. Home-grown grain tends to lower this figure for some farms. The measure is probably most useful in locating the high feed cost operations.

The relationship between percent feed bought is of milk receipts and labor income is shown below.

PERCENT PURCHASED FEED IS OF MILK RECEIPTS AND LABOR INCOME
503 New York Dairy Farms, 1962

% Feed bought is of milk sales	Number of farms	Pounds of milk sold per cow	Crop acres per cow	T.H.E.* per cow	Fert. and lime per crop acre	Labor income per operator
Under 15	20	8,870	3.3	5.6	\$4.56	\$2,930
15 - 19	36	9,194	3.4	5.7	4.75	2,656
20 - 24	64	9,847	3.1	5.2	5.58	2,611
25 - 29	68	10,485	2.7	4.9	6.80	2,649
30 - 34	103	10,322	2.4	4.5	7.48	2,144
35 - 39	105	10,337	2.5	4.4	7.12	1,790
40 - 44	54	10,531	2.3	4.0	6.99	1,270
45 and over	53	10,432	2.2	4.0	8.40	34

* Tons hay equivalent.

Farms that had a high proportion of their milk check going for purchased feed had relatively low labor incomes. The farms with under 15 percent of the milk check going for purchased feed had the highest average labor incomes.

There was a rather direct relationship between the crop acres per cow and the hay equivalent per cow and the percent feed bought was of milk sales. The farms with low feed costs had more crop acres and more roughage per cow.

The farms with the smaller proportion of milk receipts going for feed did have lower milk production per cow. Apparently the effects of the good production rates tended to be eaten up by high feed costs.

Labor and Machinery Costs are important and necessary ingredients on a dairy farm. Machinery is purchased in part to save labor. The two work as a team. Generally, the only economic justification for machinery is to save labor. Therefore, when analyzing these two costs they must be studied together.

These costs can become excessively expensive if a farmer fails to give close consideration to the amount of use a particular machine will have, how the machine fits into his present labor and machinery program, and whether or not the job this particular machine performs could be done more economically some other way.

One of the major items included in "labor and machinery costs" that is often overlooked by farmers is the cost of obsolescence or depreciation of machinery. Since this is not a cash operating expense, the farmer is apt to ignore it until the machine needs replacing.

How to calculate these two basic costs is shown below.

LABOR AND MACHINERY COSTS
503 New York Dairy Farms, 1962

Item	Your farm	Average per farm
Beginning inventory	\$ _____	\$10,805
New machinery bought	_____	<u>1,958</u>
Total	\$ _____	\$12,763
End inventory	\$ _____	\$11,252
Machinery sold	_____	<u>83</u>
Total	\$ _____	<u>\$11,335</u>
Depreciation	\$ _____	\$ 1,428
Interest at 5% Av. inventory	_____	551
Gas and oil	_____	667
Machinery repairs	_____	690
Bale ties	_____	56
Milk hauling	_____	281
Machine hire	_____	110
Auto expense (farm share)	_____	152
Electricity (farm share)	_____	<u>302</u>
Total power and machinery cost	\$ _____	\$ 4,237
Less: Gas tax refund	\$ _____	\$ 141
Income from machine work	_____	<u>72</u>
NET POWER AND MACHINERY COST	\$ _____	\$ 4,024

Value of operators labor*	\$ _____	\$ 4,044
Hired labor	_____	1,158
Unpaid family labor	_____	381
Net machinery cost	_____	<u>4,024</u>
Total	\$ _____	\$ 9,607

* \$3,600 per year. There were 565 operators on 503 farms.

LABOR AND MACHINERY COSTS

Labor and Machinery cost/cow	\$ _____	\$ 253
Labor and Machinery cost/crop acre	\$ _____	\$ 95
Labor and Machinery cost/cwt. milk sold	\$ _____	\$ 2.43

The relationship between machinery cost per cow and labor income is shown below. There is a definite relationship throughout the range but it is very strong when machinery costs go above \$160.

There is a definite relationship between machinery cost per cow and size of business (number of cows). It takes almost the same amount of machinery on a 20 cow operation as it does on a 40 cow operation. Therefore, as cow numbers increase, the machinery cost per cow goes down.

MACHINERY COST PER COW AND LABOR INCOME
503 New York Dairy Farms, 1962

Machinery cost per cow	Number of farms	Number of cows	Pounds milk sold		Labor income per operator
			per cow	per man	
Under \$80	73	44	8,922	226,959	\$2,816
\$80 to \$100	118	43	9,957	225,415	2,753
\$100 to \$120	126	37	10,370	225,071	1,852
\$120 to \$140	104	36	10,677	227,154	1,735
\$140 to \$160	38	34	10,903	220,000	1,624
\$160 to \$180	18	33	11,350	199,111	928
\$180 and over	26	29	9,996	165,769	-1,619

When labor costs are added to machinery costs the relationship of their total to labor income is much stronger. The table below shows this relationship.

LABOR AND MACHINERY COST PER COW AND LABOR INCOME
503 New York Dairy Farms, 1962

Cost per cow	Number of farms	Number of cows	Pounds milk sold		Labor income per operator
			per cow	per man	
Under \$200	53	51	9,077	268,340	\$3,115
\$200 to \$250	154	43	9,959	243,000	2,793
\$250 to \$300	177	38	10,628	224,684	1,860
\$300 to \$350	71	31	10,323	182,592	789
\$350 to \$400	29	25	10,910	165,793	531
\$400 and over	19	18	9,289	116,789	- 800

Since, the only economic justification for machinery generally, is to save labor, the measure of labor and machinery cost per cow is a good one to use in sizing up a farm's machinery situation. As the combined labor and machinery costs per cow increase labor income per operator decreases.

SUMMARY OF FARM BUSINESS FACTORS
503 New York Dairy Farms, 1962

Factor	Your farm	Average per farm
<u>Size of Business</u>		
Number of cows	_____	38
Pounds of 3.7 milk sold	_____	394,900
Man equivalent	_____	1.8
Total work units	_____	524
<u>Rates of Production</u>		
Pounds of 3.7 milk sold per cow	_____	10,390
Tons of hay per acre	_____	1.8
Tons of corn silage per acre	_____	12
Bushels of oats per acre	_____	50
<u>Labor Efficiency</u>		
Number of cows per man	_____	21
Pounds of 3.7 milk sold per man	_____	219,400
Work units per man	_____	291
Crop acres per man	_____	56
<u>Cost Control</u>		
% Feed bought is of milk receipts	_____	33%
Feed bought per cwt. milk sold	_____	\$ 1.41
Machinery cost per cow	_____	\$ 106
Machinery cost per crop acre	_____	\$ 40
Labor and machinery cost per cow	_____	\$ 253
Labor and machinery cost per crop acre	_____	\$ 95
Labor and machinery cost per cwt. milk sold	_____	\$ 2.43
Fertilizer and lime expense per cow	_____	\$ 18
Fertilizer and lime expense per crop acre	_____	\$ 6.70
Total capital per cow	_____	\$ 1,400

Farm Business Chart

In 1962, a total of 503 farms were included in the general dairy farm business summary. Business analysis of these farms show them to be above the state average in most factors affecting profits. Information from these farms has been used to construct the chart below. The figure at the top of each column is the average for the highest (or lowest) ten percent of the farms in that factor. The next figure in the column is for the next highest ten percent of the farms and so forth down the column. Each of the columns is independent of the others.

FARM BUSINESS CHART FOR FARM MANAGEMENT COOPERATORS

Man equiv- alent	Size		Rates of Production			Labor Efficiency		Feed Factors	
	Number of cows	Pounds of milk sold	Pounds milk sold per cow	Tons hay per acre	Tons corn silage per acre	Cows per man	Pounds milk sold per man	Hay equiv. per cow	Percent feed is of milk receipts
3.1	76	836,100	13,332	3.4	21	33	352,887	8.3	15
2.3	51	566,360	12,226	2.6	16	27	291,820	6.4	21
2.1	45	475,260	11,632	2.2	14	25	265,620	5.5	25
2.0	40	418,100	10,982	2.0	13	23	244,020	5.1	28
1.8	37	378,098	10,448	1.8	12	22	222,300	4.6	31

1.5	34	341,412	9,986	1.6	10	21	205,760	3.9	34
1.4	31	303,078	9,466	1.4	10	19	189,980	3.7	36
1.3	28	259,460	8,772	1.2	8	18	172,760	3.4	38
1.2	24	219,180	8,158	1.0	7	16	149,360	3.0	42
1.0	18	155,120	6,632	0.8	5	13	112,400	2.2	50

How does your business measure up against this group of commercial dairy farms? Take a pencil and draw a line through each column which will show where your business stands. Are you in the "first division" (above the center line) on more than half of these factors?

COMPARISON OF BUSINESS SUMMARIES BY SIZE OF FARM
503 New York Dairy Farms, 1962

	28 Farms	128 Farms	165 Farms	92 Farms	44 Farms	46 Farms
	Under	20-29	30-39	40-49	50-59	60 cows
Item	20 cows	cows	cows	cows	cows	and over
<u>Capital Investment (end of year)</u>						
Machinery and equipment	\$ 6,464	\$ 7,351	\$10,318	\$13,203	\$15,211	\$ 20,678
Cattle	5,900	8,905	11,676	17,027	18,525	29,946
Feed and supplies	1,870	2,136	2,866	3,907	4,622	6,823
Land and buildings	14,500	17,180	22,721	29,489	33,932	50,935
TOTAL INVESTMENT	\$28,734	\$35,572	\$47,581	\$63,626	\$72,290	\$108,382
<u>Farm Receipts</u>						
Milk sales	\$ 6,171	\$10,921	\$15,179	\$19,736	\$23,498	\$ 36,378
Livestock sold	796	1,314	1,774	2,423	2,830	4,261
Crop sales	157	92	102	120	245	196
All other sales	536	721	818	1,149	867	1,513
Total Cash Receipts	\$ 7,660	\$13,048	\$17,873	\$23,428	\$27,440	\$ 42,348
Increase in Inventory	254	768	921	1,359	1,216	3,461
TOTAL RECEIPTS	\$ 7,914	\$13,816	\$18,794	\$24,787	\$28,656	\$ 45,809
<u>Farm Expenses</u>						
Hired labor	\$ 193	\$ 295	\$ 753	\$ 1,438	\$ 1,941	\$ 4,289
Feed	1,966	3,740	4,852	6,275	7,737	12,211
Machine hire	110	65	101	162	80	196
Machinery, small tools	324	441	600	825	925	1,435
Auto expense (f.s.)	118	114	156	159	157	248
Gas and oil	339	480	592	752	873	1,285
Breeding fees	109	159	193	242	250	377
Veterinary and medicine	71	175	235	347	339	475
Other livestock expense	382	577	748	876	980	1,604
Lime and fertilizer	279	393	619	768	1,020	1,404
Seeds and plants	100	135	184	257	275	485
Other crop expense	39	79	99	124	141	257
Real estate repair	154	214	332	443	409	1,011
Taxes and insurance	407	546	675	961	1,075	1,737
Elec. and tel. (f.s.)	196	255	320	429	477	761
Miscellaneous	57	188	181	217	505	450
Total Cash Operating	\$ 4,844	\$ 7,856	\$10,640	\$14,275	\$17,184	\$ 28,225
New machinery	1,104	1,175	1,938	2,167	2,534	3,757
New real estate	236	641	669	1,104	1,352	2,000
Purchased livestock	302	658	531	697	812	1,744
Unpaid family labor	221	379	404	404	459	276
TOTAL FARM EXPENSES	\$ 6,707	\$10,709	\$14,182	\$18,647	\$22,341	\$ 36,002
<u>Financial Summary</u>						
Farm receipts	\$ 7,914	\$13,816	\$18,794	\$24,787	\$28,656	\$ 45,809
Farm expenses	6,707	10,709	14,182	18,647	22,341	36,002
Farm Income	\$ 1,207	\$ 3,107	\$ 4,612	\$ 6,140	\$ 6,315	\$ 9,807
5% on Av. Capital	1,430	1,759	2,356	3,147	3,584	5,333
Labor Income/Farm	\$ - 223	\$ 1,348	\$ 2,256	\$ 2,993	\$ 2,731	\$ 4,474
Number of Operators	29	129	174	112	55	66
LABOR INCOME/Operator	\$ - 214	\$ 1,335	\$ 2,149	\$ 2,453	\$ 2,185	\$ 3,129

BUSINESS FACTORS BY SIZE OF FARM
503 New York Dairy Farms, 1962

Item	28 Farms Under 20 cows	128 Farms 20-29 cows	165 Farms 30-39 cows	92 Farms 40-49 cows	44 Farms 50-59 cows	46 Farms 60 cows and over
<u>Size of Business</u>						
Man equivalent	1.2	1.4	1.6	2.0	2.3	3.0
Number cows	16	25	34	44	53	78
Pounds of 3.7% milk sold	144,464	252,727	351,127	457,076	548,682	828,435
Crop acres	59	76	95	104	128	179
Man work units	257	357	475	575	707	1,047
<u>Rates of Production</u>						
Milk sold per cow	9,029	10,109	10,327	10,388	10,352	10,621
Hay per acre	1.7	1.7	1.8	1.8	1.8	2.1
Corn silage per acre	9	11	12	12	12	13
Oats per acre	37	44	53	51	50	53
<u>Labor Efficiency</u>						
Work units per man	214	255	297	288	307	349
Pounds milk per man	120,387	180,519	219,454	228,538	238,557	276,145
Cows per man	13	18	21	22	23	26
Crop acres per man	49	54	59	52	56	60
<u>Use of Capital</u>						
Total capital per man	\$23,945	\$25,409	\$29,738	\$31,813	\$31,430	\$36,127
Total capital per cow	1,796	1,423	1,399	1,446	1,364	1,390
<u>Machinery Costs</u>						
Total machinery cost	\$ 2,304	\$ 2,815	\$ 3,713	\$ 4,528	\$ 5,186	\$ 7,437
Machinery cost per cow	144	113	109	103	98	95
Machinery cost/crop acre	39	37	39	44	41	42
<u>Feed Costs</u>						
Feed bought per cow	\$ 123	\$ 150	\$ 143	\$ 143	\$ 146	\$ 157
% Feed is of milk receipts	32%	34%	32%	32%	33%	34%
Fertilizer and lime expense per crop acre	\$ 4.73	\$ 5.17	\$ 6.52	\$ 7.38	\$ 7.97	\$ 7.84
Crop acres per cow	3.7	3.0	2.8	2.4	2.4	2.3
<u>Prices</u>						
Average price for 3.7% milk	\$ 4.27	\$ 4.32	\$ 4.32	\$ 4.32	\$ 4.28	\$ 4.39
<u>Other</u>						
% Expenses are of receipts	85%	78%	75%	75%	78%	79%

COMPARISON OF BUSINESS SUMMARIES OF 30 FARMS WITH
HIGHEST LABOR INCOMES AND THE 30 FARMS WITH LOWEST LABOR INCOMES
503 New York Dairy Farms, 1962

Item	Average of the 503 farms	Average of 30 farms with:	
		Highest labor incomes	Lowest labor incomes
<u>Capital Investment (End of year):</u>			
Machinery	\$11,252	\$15,937	\$14,063
Cattle	13,898	21,610	15,177
Feed and supplies, other	3,331	5,149	3,817
Land and buildings	25,652	33,567	40,500
TOTAL END INVENTORY	\$54,133	\$76,263	\$73,557
<u>Farm Receipts:</u>			
Milk sales	\$17,094	\$26,853	\$16,830
Livestock sold	2,041	3,547	2,373
All other sales and income	1,033	1,843	1,093
Total Cash Receipts	\$20,168	\$32,243	\$20,296
Increase in Inventory	1,183	5,260	--
TOTAL FARM RECEIPTS	\$21,351	\$37,503	\$20,296
<u>Farm Expenses:</u>			
Hired labor	\$ 1,158	\$ 2,657	\$ 2,013
Dairy feed	5,573	7,183	6,203
Other feed	18	--	27
Machine hire	110	163	185
Machinery, small tools	690	1,058	785
Auto expense (farm share)	152	157	148
Gas and oil	667	853	797
Breeding fees	210	341	190
Veterinary and medicine	262	503	274
Other livestock, poultry expense	806	1,103	930
Lime and fertilizer	677	1,300	770
Seeds and plants	216	310	350
Spray, other crop expense	113	193	127
Land, building, fence repair	381	483	667
Taxes, insurance	812	1,183	1,173
Elec., tel. (farm share)	371	497	467
Miscellaneous	236	315	207
Total Cash Operating Expenses	\$12,452	\$18,299	\$15,313
New machinery	1,958	2,747	2,590
New real estate	899	2,893	1,460
Purchased livestock	716	1,074	844
Unpaid family labor	381	317	500
Decrease in inventory	--	--	553
TOTAL FARM EXPENSES	\$16,406	\$25,330	\$21,260
<u>Financial Summary:</u>			
Farm Receipts	\$21,351	\$37,503	\$20,296
Farm Expenses	16,406	25,330	21,260
Farm Income	\$ 4,945	\$12,173	\$ -964
5% on Av. Capital	2,678	3,682	3,692
Labor Income per Farm	\$ 2,267	\$ 8,491	\$-4,656
Number of Operators	565	32	30
LABOR INCOME per Operator	\$ 2,019	\$ 7,958	\$-4,656

COMPARISON OF FARM BUSINESS FACTORS OF 30 FARMS WITH HIGHEST
LABOR INCOMES AND THE 30 FARMS WITH LOWEST LABOR INCOMES
503 New York Dairy Farms, 1962

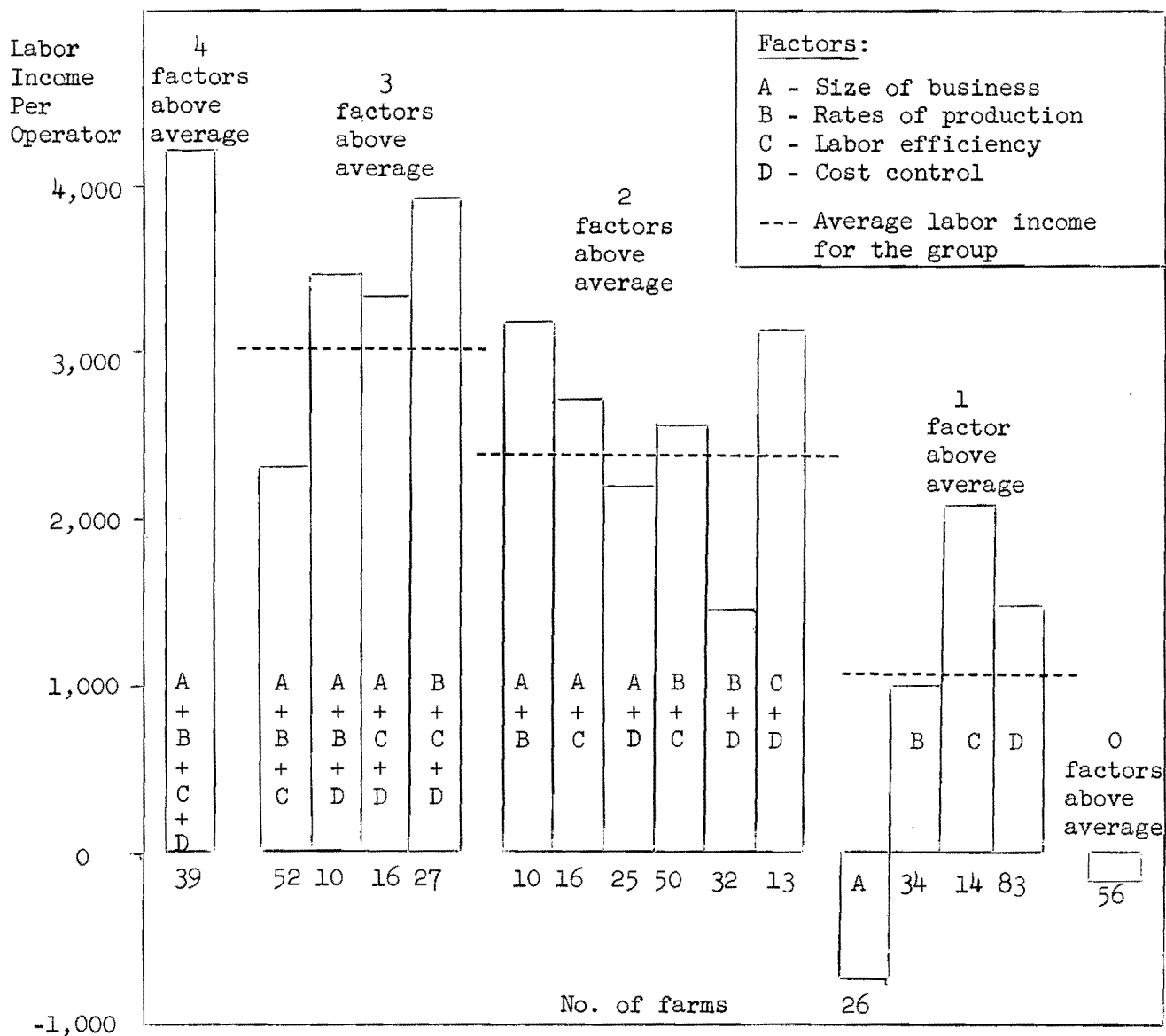
Item	Average of the 503 farms	Average of 30 farms with:	
		Highest labor incomes	Lowest labor incomes
<u>Size of Business:</u>			
Man equivalent	1.8	2.1	2
Average number cows	38	52	42
Pounds of milk sold (3.7% equiv.)	394,893	618,433	388,200
Total crop acres	101	145	134
Total man work units	524	699	600
<u>Rates of Production:</u>			
Pounds milk sold per cow	10,392	11,893	9,243
Tons hay per acre	1.8	2.0	1.8
Tons corn silage per acre	12	13	10
Bushels oats per acre	50	53	50
<u>Labor Efficiency:</u>			
Man work units per man	291	333	300
Pounds milk sold per man (3.7%)	291,385	294,492	194,100
<u>Use of Capital:</u>			
Total capital per man	\$30,074	\$36,316	\$36,778
Total capital per cow	\$ 1,425	\$ 1,467	\$ 1,751
Land & buildings per cow	\$ 675	\$ 646	\$ 964
Machinery investment: per man	\$ 6,251	\$ 7,589	\$ 7,032
per cow	\$ 296	\$ 306	\$ 335
<u>Feed Costs:</u>			
Dairy feed bought per cow	\$ 147	\$ 138	\$ 148
% Feed bought was of milk receipts	33%	27%	37%
Crop acres per cow	2.7	2.8	3.2
Fertilizer & lime expense/crop acre	\$ 7	\$ 9	\$ 6
Number of heifers per 10 cows	6.3	6.9	6.7
<u>Machinery Costs:</u>			
Total machinery cost	\$ 4,024	\$ 5,310	\$ 5,533
Machinery cost: per cow	\$ 106	\$ 102	\$ 132
per cwt. milk sold	\$ 1.02	\$.86	\$ 1.43
per man	\$ 2,236	\$ 2,529	\$ 2,766
<u>Prices:</u>			
Av. price received for milk (3.7%)	\$ 4.33	\$ 4.34	\$ 4.34
<u>Other:</u>			
% Real estate is of total capital	47%	44%	55%
% Cattle is of total capital	26%	28%	21%
% Expenses are of receipts	77%	68%	105%

Combination of Factors

In this section, four major factors were studied in combination. The factors used were size, rates of production, labor efficiency and cost control measured by number of cows, pounds of milk sold per cow, pounds of milk sold per man, and percent that purchased feed was of milk receipts, respectively. For each factor, the farms were divided on the basis of whether they were above or below the average for the 503 farms.

Sorting the farms in this manner, the number of farms and the average labor incomes are reported for 16 different combinations in the graph below. The relationship is very evident. Of particular interest is the large minus income when size is the only factor better than average. On the farms where this was the case, the average income was less than the income where all factors were average or below.

COMBINATION OF FACTORS ABOVE AVERAGE AND LABOR INCOME
503 New York Dairy Farms, 1962



COMBINATION OF FACTORS ABOVE AVERAGE* AND LABOR INCOME
New York Dairy Farms

Number of factors better than average	503 farms 1962		490 farms 1961	
	Number of farms	Labor income per operator	Number of farms	Labor income per operator
4 factors better than average	39	\$4,190	39	\$6,660
3 factors better than average	105	2,978	96	4,970
2 factors better than average	146	2,362	155	3,420
1 factor better than average	157	1,075	135	2,350
0 factors better than average	56	- 163	65	1,070

* Factors were:
Size as measured by number of cows (average of 38 cows)
Rate of production as measured by pounds milk sold per cow (average of 10,392 pounds per cow)
Labor efficiency as measured by pounds milk sold per man (average of 219,385 pounds per man)
Cost control as measured by percent purchased feed was of milk receipts (average of 33%)

The farms were further grouped on the basis of the number of factors better than average. As the number of factors better than average decreased, the average labor income decreased rapidly.

In 1962, only those farmers who were better than average in all four factors made enough income to cover their labor charge of \$3,600 whereas in 1961, farmers who were better than average in two or more factors made enough income to pay for their own labor. This demonstrates that good management is even more important in a poor farming year.

Farmers below average in all factors or better than average in only one factor made very low labor incomes. If a farmer wants to achieve a high labor income year after year, he needs to be above average in at least three of the factors most years and all four in poor years.

Farm Family Financial Situation

Good management in getting and using capital in a farm business is becoming more and more important. The first step to good financial management is a working knowledge of the financial situation. A few counties are beginning to summarize information on assets and debts of the cooperators. The financial situation is a key factor in planning for adjustments in a business.

FARM FAMILY ASSETS, 1962

Item	Your farm	30 Farms Lewis Co.	20 Farms Jefferson Co.	Average 138 farms*
<u>Farm Assets:</u>				
Machinery & equipment	\$ _____	\$11,636	\$14,556	\$12,485
Cattle	_____	12,977	14,686	15,177
Other livestock	_____	79	84	100
Feed & supplies	_____	3,462	3,968	4,476
Land & buildings	_____	<u>21,698</u>	<u>22,030</u>	<u>27,302</u>
Total farm assets	\$ _____	\$49,852	\$55,324	\$59,540
<u>Non-Farm Assets:</u>				
Other real estate	\$ _____	\$ 98	\$ 1,002	\$ 679
Stocks & bonds	_____	762	289	1,052
Personal share of auto	_____	450	741	631
Cash value of life insurance	_____	1,230	1,496	1,963
Household goods	_____	2,957	2,330	2,422
Cash on hand and in checking account	_____	378	671	762
Savings accounts	_____	--	--	1,213
Investment in cooperatives	_____	506	134	1,157
Accounts receivable	_____	382	92	2,374
Other	_____	--	--	<u>159</u>
Total non-farm assets	\$ _____	\$ 6,763	\$ 6,755	\$12,412
TOTAL ALL ASSETS	\$ _____	<u>\$56,615</u>	<u>\$62,079</u>	<u>\$71,952</u>

* Farm Credit Study, Cayuga, Delaware, Oneida, and Otsego Counties.

Feed and supplies are often not considered by lenders as "loanable assets" because they are stock-in-trade which is used up. Likewise, some non-farm items are not "loanable assets." Most lenders are reluctant to lend over 60 percent of the value of land and buildings, machinery, and livestock.

Most farmers use credit in some amount. Unless you are one of the very few who have no debts at all, the following table will help you to summarize your debts and compare them with those of other dairymen. You may already have the financial situation figures needed in your farm inventory record.

FARM FAMILY DEBTS AND NET WORTH, 1962

Item	Your farm	30 Farms Lewis Co.	20 Farms Jefferson Co.	Average 138 farms*
Debts:				
Real estate debt	\$ _____	\$10,781	\$14,906	\$11,144
Chattel mortgages on cattle and equipment	_____	4,673	2,404	7,544
Notes payable	_____	1,988	2,280	1,662
Installment contracts	_____	627	--	239
Other secured loans	_____	30	--	439
Feed, seed, etc. open accounts	_____	529	642	834
Other farm accounts payable	_____	1,063	--	487
Personal bills and accounts	_____	--	--	138
TOTAL DEBTS	\$ _____	\$19,691	\$20,232	\$22,487

Total assets	\$ _____	\$56,615	\$62,079	\$71,952
Total debts	_____	19,691	20,232	22,487
NET WORTH	\$ _____	\$36,924	\$41,847	\$49,465
% Equity	_____%	65%	67%	69%
% Real estate is of total debt	_____%	55%	74%	50%
Total debt per cow	\$ _____	\$ 505	\$ 450	\$ 562

* Farm Credit Study, Cayuga, Delaware, Oneida and Otsego Counties.

How does your position compare with other dairymen?

<u>Debt per cow position</u>	<u>Check yours</u>
Less than \$300 - low	_____
\$300 - \$600 - medium	_____
\$600 - \$900 - high	_____
Over \$900 - very high	_____

Twenty-six of the Jefferson County farmers reported the amount they paid on debts in 1962. This averaged \$1,913 for short-term debts and \$2,727 for long-term or a total of \$4,640 per farm. The payments included both interest and principle payments. The total debt payment was 20 percent of the average cash farm receipts for the Jefferson County farms.

Family Living Expenses

Family living expenses have a high-priority claim on farm income. In figuring debt carrying capacity of a farm one must know family living expenses as well as farm expenses.

FARM FAMILY LIVING EXPENDITURES, 1962

Expenditures	Your family	21 families Central N.Y.	10 families Jefferson Co.	Range	
				Lowest	Highest
<u>Living expenses:</u>					
Food*	\$ _____	\$1,379	\$1,538	\$ 733	\$ 1,987
Clothing	_____	426	276	75	1,008
Furnishings & equipment	_____	286	483	0	1,341
Household operating	_____	896	257	65	1,850
Family transportation	_____	207	251	12	1,077
Medical & health	_____	343	390	46	1,043
Personal	_____	85	210	13	600
Education & recreation	_____	433	265	60	1,397
Gifts & contributions	_____	<u>413</u>	<u>360</u>	<u>15</u>	<u>1,248</u>
Total living expenditures	\$ _____	\$4,468	\$4,030	\$1,892	\$ 7,888
<u>Other outlays:</u>					
Insurance, savings, etc.	\$ _____	\$ 796	\$ 849	\$ 92	\$ 3,477
Taxes - income, etc.	_____	<u>350</u>	<u>339</u>	<u>0</u>	<u>1,835</u>
Total family expenditures	\$ _____	\$5,614	\$5,218	\$2,127	\$10,949

* Value of home produced food not included.

Seven families in the Cayuga County Farm Business Management Project and 14 families in the Electronic Farm Accounting (ELFAC) pilot project kept a record of family living expenditures for 1962. Likewise, ten Jefferson County families kept family records. The expenditures reported by these families were tabulated and summarized.

The expenditures reported above should NOT be taken to represent the average of all farm families. They simply indicate what these groups of families spent. The families in these groups do give an indication of what it costs some farm families to live. The range in figures reported shows the variation which exists.

The expenditure classifications used above are the ones frequently found in home account records. The ELFAC records had more classifications but some were combined in order to be comparable with the non-ELFAC records.

You can compare your expenditures with those of the other families. You should keep in mind, however, that the amounts in themselves do not measure how well a family manages. The number of members in the family, ages, health, and interests vary considerably. These all have an effect on living expenditures.

PART III

GUIDE TO DECISION MAKING

Summarizing the Strong and Weak Points of the Business

Each page in this booklet was designed to help you study your farm business. However, study and analysis alone will not assure a more profitable business. Action must be taken.

Now take a careful overall look at your farm business. Summarize the strong and weak points revealed from the detailed analysis. This will help you to locate the trouble spots or problems. Then look at your goals. In view of your goals and what you have to work with, consider the possible ways that these problems might be solved. Next budget the likely effects of the proposed changes. Finally decide on the most promising proposal and then take action to put it into effect.

<u>Business Factor</u>	<u>Your Business 1962</u>			<u>Your Goal for 1970</u>
	<u>Below Average</u>	<u>Average</u>	<u>Above Average</u>	
Size of business	_____	_____	_____	_____
Lbs. milk sold per cow	_____	_____	_____	_____
Crop yields	_____	_____	_____	_____
Labor efficiency	_____	_____	_____	_____
Use of capital	_____	_____	_____	_____
Cost control:				
% of milk check for feed bought	_____	_____	_____	_____
Labor and machinery cost per cow	_____	_____	_____	_____
Use of credit	_____	_____	_____	_____

MAJOR PROBLEMS TO BE SOLVED

- 1. _____
- 2. _____
- 3. _____

PROPOSED CHANGES TO STRENGTHEN THE BUSINESS

- 1. _____
- 2. _____
- 3. _____

Goals and Objectives

An important ingredient in making decisions concerning the farm business is the "goals" or "objectives" of the family. Every family has some things uppermost in their minds that they expect to get from their business or their job. These "objectives" or "goals" may not be easy to put into words. But if they are written down, or at least talked about, it may help you see what things need to be done in the farm business in order to accomplish these goals.

Goals for Your Farm and Family

The Farm -- List the major farm improvements you want to make in the next five years. The list should include changes in buildings, land, crops, and livestock.

The Home -- List major changes you want to make in the home in the next five years. Include remodeling, equipment, and furniture.

Family Security -- List things you want to get done relative to financial security. This list might include debt reduction, a better life insurance program, more business insurance, a will, plans for retirement.

Education -- List your objectives for educating the children.

Recreation -- List your plans for major vacations, trips, new cars, etc.

Better Working Conditions -- What do you hope to accomplish concerning the hours you work, lightening physical work, and the like?

The Community -- What do you hope to get done relative to making your community a better place to live - schools, church, roads, and so forth?

Budgeting A Change In Your Farm Business

After locating the weak points in a business, the next step is to consider changes to correct the weaknesses. Budgeting can help to determine the likely results of a proposed change.

	<u>My business</u> <u>in 1962</u>	<u>Proposed</u> <u>Change # 1</u>	<u>Proposed</u> <u>Change # 2</u>
I. <u>Farm Receipts:</u>	\$	\$	\$
Milk sales, gross			
Livestock sales			
Egg sales			
Crop sales			
Miscellaneous receipts			
Total Cash Receipts			
Increase in Inventory			
Total Farm Receipts	\$	\$	\$
II. <u>Farm Expenses:</u>			
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 exp.			
Land, building, fence exp.			
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. <u>Farm Financial Summary:</u>			
Capital Investment	\$	\$	\$
Total Farm Receipts	\$	\$	\$
Total Farm Expenses			
Farm Income			
Interest on Capital			
LABOR INCOME	\$	\$	\$

PART IV
SUPPLEMENTARY INFORMATION

COMPARISON OF BUSINESS SUMMARIES OF DAIRY FARMS WITH
OTHER MAJOR SOURCES OF INCOME, NEW YORK, 1962

Item	Dairy Poultry	Dairy Cash-crop	Dairy Fruit	Dairy Renters	Dairy Part-time
<u>Capital Investment (End of year):</u>					
Machinery	\$12,629	\$15,862	\$ 19,088	\$ 8,400	\$ 9,683
Cattle	14,594	16,267	18,325	12,005	7,525
Poultry	919	--	--	--	--
Feed, supplies & other	4,191	6,574	5,775	2,511	2,426
Land and buildings	<u>27,294</u>	<u>34,354</u>	<u>73,500</u>	<u>273</u>	<u>19,833</u>
TOTAL INVESTMENT	\$59,627	\$73,057	\$116,688	\$23,189	\$39,467
<u>Farm Receipts:</u>					
Milk sales	\$19,606	\$19,949	\$ 19,712	\$14,995	\$ 7,183
Livestock sales	2,965	2,542	2,988	1,518	850
Egg sales	4,735	37	62	45	--
Crop sales	341	3,524	9,138	368	542
Miscellaneous	<u>1,971</u>	<u>1,462</u>	<u>1,600</u>	<u>591</u>	<u>5,567</u>
Total cash receipts	\$29,618	\$27,514	\$ 33,500	\$17,517	\$14,142
Increase in inventory	<u>195</u>	<u>3,178</u>	<u>2,875</u>	<u>1,468</u>	<u>767</u>
TOTAL FARM RECEIPTS	\$29,813	\$30,692	\$ 36,375	\$18,985	\$14,909
<u>Farm Expenses:</u>					
Hired labor	\$ 2,529	\$ 2,618	\$ 5,188	\$ 968	\$ 583
Dairy feed	6,341	5,053	4,100	5,195	2,217
Other feed	3,173	105	135	94	7
Machine hire	188	186	505	46	96
Machinery, small tools	792	1,306	1,115	603	1,130
Auto expense (farm share)	224	194	110	139	209
Gas and oil	741	1,027	1,050	500	850
Breeding fees	227	217	235	160	86
Veterinary & medicine	231	343	311	207	82
Other livestock, poultry exp.	1,559	903	1,762	886	417
Lime and fertilizer	765	1,405	2,050	618	900
Seeds and plants	300	441	388	200	225
Spray, other crop expense	171	394	938	150	125
Land, building, fence repair	588	578	975	255	233
Taxes and insurance	982	1,103	1,825	236	508
Elec. and tel. (farm share)	447	480	425	264	267
Miscellaneous	<u>247</u>	<u>400</u>	<u>288</u>	<u>1,677</u>	<u>617</u>
Total Cash Operating	\$19,505	\$16,753	\$ 21,400	\$12,198	\$ 8,552
New machinery	1,618	2,980	4,175	2,091	1,575
New real estate	629	1,728	300	45	583
Purchased livestock	1,495	957	1,012	715	423
Unpaid family labor	<u>212</u>	<u>296</u>	<u>138</u>	<u>323</u>	<u>467</u>
TOTAL FARM EXPENSES	\$23,459	\$22,714	\$ 27,025	\$15,372	\$11,600
<u>Financial Summary:</u>					
Total farm receipts	\$29,813	\$30,692	\$ 36,375	\$18,985	\$14,909
Total farm expenses	<u>23,459</u>	<u>22,714</u>	<u>27,025</u>	<u>15,372</u>	<u>11,600</u>
Farm Income	\$ 6,354	\$ 7,978	\$ 9,350	\$ 3,613	\$ 3,309
5% on Av. Capital	<u>2,976</u>	<u>3,573</u>	<u>5,762</u>	<u>1,123</u>	<u>1,954</u>
Labor income per farm	\$ 3,378	\$ 4,405	\$ 3,588	\$ 2,490	\$ 1,355
Number of operators	20	92	10	23	13
LABOR INCOME per Operator	\$ 2,863	\$ 3,797	\$ 2,870	\$ 2,371	\$ 1,255

COMPARISON OF FARM BUSINESS FACTORS OF DAIRY FARMS
WITH OTHER MAJOR SOURCES OF INCOME, NEW YORK, 1962

Item	Dairy Poultry	Dairy Cash-crop	Dairy Fruit	Dairy Renters	Dairy Part-time
No. of farms	17	79	8	22	12
<u>Size of Business:</u>					
Man equivalent	2.2	2.2	3.0	1.6	1.7
Average number cows	41	43	41	33	24
Pounds of milk sold (3.7% equiv.)	447,059	463,620	446,625	330,091	169,417
Average number hens*	777	--	--	--	--
Total crop acres	104	154	178	100	92
Total man work units	584	667	931	474	527
<u>Rates of Production:</u>					
Pounds milk sold per cow	10,904	10,782	10,893	10,003	7,059
Tons hay per acre*	2.4	2.3	2.9	1.4	1.8
Tons corn silage per acre*	12	13	12	12	9
Bushels oats per acre*	53	60	84	44	32
<u>Labor Efficiency:</u>					
Man work units per man	265	303	310	296	310
Pounds milk sold per man (3.7%)	203,209	210,736	148,875	206,307	99,657
<u>Use of Capital:</u>					
Total capital per man	\$27,103	\$33,208	\$38,896	\$14,493	\$23,216
Total capital per work unit	\$ 102	\$ 110	\$ 125	\$ 49	\$ 75
Land & buildings per crop acre	\$ 262	\$ 223	\$ 413	\$ 27	\$ 216
Machinery investment per man	\$ 5,740	\$ 7,210	\$ 6,363	\$ 5,250	\$ 5,696
<u>Feed Costs:</u>					
Dairy feed bought per cow	\$ 155	\$ 118	\$ 100	\$ 157	\$ 92
% Feed bought was of milk receipts	32%	25%	21%	35%	31%
Crop acres per cow	2.5	3.6	4.3	3.0	3.8
Fertilizer & lime expense/crop acre	\$7.36	\$ 9.12	\$ 11.52	\$ 6.18	\$ 9.78
Number heifers per 10 cows	6.8	6.7	7.3	6.1	6.2
<u>Machinery Costs:</u>					
Total machinery cost	\$ 4,882	\$ 5,766	\$ 7,262	\$ 3,268	\$ 3,350
Machinery cost per crop acre	\$ 47	\$ 37	\$ 41	\$ 33	\$ 36
Machinery cost per man	\$ 2,219	\$ 2,621	\$ 2,421	\$ 2,042	\$ 1,971
<u>Prices:</u>					
Av. price received for milk (3.7%)	\$ 4.38	\$ 4.30	\$ 4.41	\$ 4.54	\$ 4.24
<u>Other:</u>					
% Real estate is of total capital	46%	47%	63%	2%	50%
% Expenses are of receipts	79%	74%	74%	81%	78%
% Machinery cost is of total farm expense & interest on investment	18%	22%	22%	20%	25%

*Average for farms reporting

COMPARISON OF SELECTED FARM BUSINESS FACTORS FOR 1962
26 Counties Included in General Farm Business Summary

Item	Albany County	Allegany County	Broome County	Cattaraugus County
Number of farms	35	22	42	33
<u>Resources:</u>				
Number of cows	36	32	41	37
Number of heifers	22	26	26	24
Acres of hay*	89	70	82	58
Acres of corn silage*	16	13	17	14
Acres of oats*	14	26	13	11
Total crop acres	118	108	113	88
<u>Size of business:</u>				
Man equivalent	1.9	1.7	1.8	1.7
Total work units	536	482	568	491
Lbs. of milk sold	342,937	344,164	436,986	370,087
<u>Rates of production:</u>				
Lbs. milk sold/cow	9,526	10,755	10,658	10,002
Tons hay/acre	1.4	2.0	1.2	2.1
Tons corn silage/acre	10	11	12	14
Bu. oats/acre	42	54	43	53
<u>Labor efficiency:</u>				
Number cows/man	21	19	23	22
Work units/man	282	284	315	289
Lbs. of milk sold/man	180,493	202,449	242,770	217,698
<u>Cost control factors:</u>				
Machinery investment	\$10,944	\$10,769	\$11,630	\$11,137
Machinery cost	\$ 4,056	\$ 3,767	\$ 4,127	\$ 3,702
Machinery cost/cow	\$ 113	\$ 118	\$ 101	\$ 100
Feed bought/cow	\$ 117	\$ 132	\$ 169	\$ 121
% feed is of milk receipts	27%	30%	36%	29%
Fertilizer/crop acre	\$ 6.60	\$ 9.10	\$ 5.79	\$ 6.99
% Expenses are of receipts	77%	76%	79%	70%
<u>Price:</u>				
Av. price/cwt. milk	\$ 4.52	\$ 4.17	\$ 4.35	\$ 4.17
<u>Financial summary:</u>				
Average capital	\$52,390	\$43,655	\$61,298	\$46,319
Total farm receipts	\$20,072	\$20,528	\$22,443	\$19,455
Total farm expenses	\$15,461	\$15,677	\$17,758	\$13,546
LABOR INCOME/operator	\$ 1,743	\$ 2,447	\$ 1,448	\$ 3,387

*Average per farm reporting.

COMPARISON OF SELECTED FARM BUSINESS FACTORS FOR 1962
26 Counties Included in General Farm Business Summary

Item	Cayuga County	Chautauqua County	Chenango County	
			Group VII	Group VIII
Number of farms	24	22	14	16
<u>Resources:</u>				
Number of cows	40	46	39	43
Number of heifers	29	30	21	22
Acres of hay*	58	75	71	65
Acres of corn silage*	19	17	11	21
Acres of oats*	28	12	14	11
Total crop acres	151	125	96	84
<u>Size of business:</u>				
Man equivalent	1.9	2.5	1.8	1.8
Total work units	631	726	483	547
Lbs. of milk sold	444,602	498,819	380,833	439,334
<u>Rates of production:</u>				
Lbs. milk sold/cow	11,115	10,844	9,765	10,217
Tons hay/acre	2.2	2.4	1.3	1.7
Tons corn silage/acre	12	12	10	11
Bu. oats/acre	55	58	53	52
<u>Labor efficiency:</u>				
Number cows/man	21	18	22	24
Work units/man	332	290	268	304
Lbs. of milk sold/man	234,001	199,528	211,574	244,074
<u>Cost control factors:</u>				
Machinery investment	\$14,199	\$14,619	\$ 9,560	\$13,040
Machinery cost	\$ 5,845	\$ 5,518	\$ 3,994	\$ 3,825
Machinery cost/cow	\$ 146	\$ 120	\$ 101	\$ 90
Feed bought/cow	\$ 100	\$ 138	\$ 145	\$ 167
% feed is of milk receipts	21%	30%	33%	38%
Fertilizer/crop acre	\$ 10.15	\$ 8.01	\$ 4.40	\$ 8.20
% Expenses are of receipts	73%	79%	78%	79%
<u>Price:</u>				
Ave. price/cwt. milk	\$ 4.26	\$ 4.29	\$ 4.26	\$ 4.27
<u>Financial summary:</u>				
Average capital	\$72,942	\$71,530	\$44,309	\$53,786
Total farm receipts	\$27,771	\$34,446	\$19,543	\$23,936
Total farm expenses	\$20,193	\$27,364	\$15,147	\$18,798
LABOR INCOME/operator	\$ 3,630	\$ 2,856	\$ 1,696	\$ 2,178

*Average per farm reporting.

COMPARISON OF SELECTED FARM BUSINESS FACTORS FOR 1962
26 Counties Included in General Farm Business Summary

Item	Clinton County	Cortland County	Delaware County	Franklin County
Number of farms	14	13	42	21
<u>Resources:</u>				
Number of cows	33	56	38	42
Number of heifers	21	41	17	30
Acres of hay*	75	85	59	87
Acres of corn silage*	16	24	9	16
Acres of oats*	13	18	6	20
Total crop acres	100	138	70	118
<u>Size of business:</u>				
Man equivalent	1.6	2.6	1.7	1.9
Total work units	486	789	480	600
Lbs. of milk sold	334,992	609,903	370,745	391,399
<u>Rates of production:</u>				
Lbs. milk sold/cow	10,151	10,891	9,756	9,319
Tons hay/acre	1.9	1.7	1.5	4.4
Tons corn silage/acre	13	12	14	13
Bu. oats/acre	40	49	62	51
<u>Labor efficiency:</u>				
Number cows/man	21	21	22	22
Work units/man	304	304	282	321
Lbs. of milk sold/man	209,370	234,578	218,085	209,304
<u>Cost control factors:</u>				
Machinery investment	\$11,882	\$13,226	\$ 9,383	\$ 9,775
Machinery cost	\$ 3,528	\$ 5,454	\$ 3,631	\$ 3,668
Machinery cost/cow	\$ 107	\$ 97	\$ 96	\$ 87
Feed bought/cow	\$ 141	\$ 162	\$ 158	\$ 131
% feed is of milk receipts	33%	34%	37%	34%
Fertilizer/crop acre	\$ 2.81	\$ 7.57	\$ 10.29	\$ 5.28
% Expenses are of receipts	74%	75%	80%	81%
<u>Price:</u>				
Av. price/cwt. milk	\$ 4.15	\$ 4.41	\$ 4.37	\$ 4.12
<u>Financial summary:</u>				
Average capital	\$52,684	\$73,706	\$44,768	\$51,351
Total farm receipts	\$19,488	\$34,811	\$19,760	\$20,381
Total farm expenses	\$14,371	\$26,086	\$15,803	\$16,448
LABOR INCOME/operator	\$ 2,317	\$ 3,744	\$ 1,604	\$ 1,303

*Average per farm reporting.

COMPARISON OF SELECTED FARM BUSINESS FACTORS FOR 1962
26 Counties Included in General Farm Business Summary

Item	Greene County	Madison County	Monroe County	Montgomery County
Number of farms	19	35	10	19
<u>Resources:</u>				
Number of cows	32	46	39	45
Number of heifers	17	29	35	25
Acres of hay*	68	76	69	74
Acres of corn silage*	16	22	12	19
Acres of oats*	6	26	18	16
Total crop acres	84	123	153	115
<u>Size of business:</u>				
Man equivalent	1.6	2.1	2.0	2.0
Total work units	442	643	663	598
Lbs. of milk sold	259,485	466,768	450,141	438,411
<u>Rates of production:</u>				
Lbs. milk sold/cow	8,109	10,147	11,542	9,742
Tons hay/acre	1.2	2.0	2.7	1.4
Tons corn silage/acre	10	10	13	12
Bu. oats/acre	39	50	75	52
<u>Labor efficiency:</u>				
Number cows/man	20	22	20	22
Work units/man	276	306	332	299
Lbs. of milk sold/man	162,178	222,270	225,070	219,206
<u>Cost control factors:</u>				
Machinery investment	\$ 8,491	\$13,275	\$16,977	\$14,770
Machinery cost	\$ 2,896	\$ 4,807	\$ 6,814	\$ 4,771
Machinery cost/cow	\$ 90	\$ 104	\$ 175	\$ 106
Feed bought/cow	\$ 126	\$ 117	\$ 101	\$ 117
% feed is of milk receipts	35%	27%	20%	28%
Fertilizer/crop acre	\$ 4.85	\$ 6.19	\$ 8.52	\$ 3.95
% Expenses are of receipts	80%	78%	71%	75%
<u>Price:</u>				
Av. price/cwt. milk	\$ 4.42	\$ 4.22	\$ 4.47	\$ 4.27
<u>Financial summary:</u>				
Average capital	\$39,008	\$61,329	\$77,240	\$66,683
Total farm receipts	\$14,046	\$23,814	\$34,074	\$24,424
Total farm expenses	\$11,302	\$18,550	\$24,104	\$18,330
LABOR INCOME/operator	\$ 753	\$ 1,831	\$ 5,552	\$ 2,384

*Average per farm reporting.

COMPARISON OF SELECTED FARM BUSINESS FACTORS FOR 1962
26 Counties Included in General Farm Business Summary

Item	Niagara County	Onondaga County	Orange County	Oswego County
Number of farms	13	14	14	30
<u>Resources:</u>				
Number of cows	37	41	50	31
Number of heifers	22	27	31	22
Acres of hay*	76	69	56	55
Acres of corn silage*	24	20	30	14
Acres of oats*	32	35	--	16
Total crop acres	179	157	102	90
<u>Size of business:</u>				
Man equivalent	1.9	2.0	2.0	1.8
Total work units	664	643	648	438
Lbs. of milk sold	393,463	432,314	620,437	339,696
<u>Rates of production:</u>				
Lbs. milk sold/cow	10,723	10,544	12,409	10,958
Tons hay/acre	2.3	1.8	1.7	2.0
Tons corn silage/acre	11	10	14	12
Bu. oats/acre	73	44	--	58
<u>Labor efficiency:</u>				
Number cows/man	19	20	25	17
Work units/man	366	322	324	243
Lbs. of milk sold/man	208,776	216,157	310,219	188,720
<u>Cost control factors:</u>				
Machinery investment	\$16,551	\$12,719	\$14,533	\$ 9,891
Machinery cost	\$ 6,410	\$ 3,978	\$ 5,482	\$ 3,804
Machinery cost/cow	\$ 173	\$ 97	\$ 110	\$ 123
Feed bought/cow	\$ 88	\$ 111	\$ 241	\$ 161
% feed is of milk receipts	19%	25%	39%	35%
Fertilizer/crop acre	\$ 10.93	\$ 8.35	\$ 18.61	\$ 6.77
% Expenses are of receipts	75%	71%	80%	77%
<u>Price:</u>				
Av. price/cwt. milk	\$ 4.41	\$ 4.26	\$ 4.95	\$ 4.19
<u>Financial summary:</u>				
Average capital	\$71,112	\$65,612	\$74,541	\$40,053
Total farm receipts	\$26,690	\$26,339	\$35,768	\$19,160
Total farm expenses	\$20,035	\$18,831	\$28,449	\$14,754
LABOR INCOME/operator	\$ 2,518	\$ 3,698	\$ 3,352	\$ 2,253

*Average per farm reporting.

COMPARISON OF SELECTED FARM BUSINESS FACTORS FOR 1962
26 Counties Included in General Farm Business Summary

Item	Otsego County	Saratoga County	Schenectady County	Schuyler County
Number of farms	86	20	12	18
<u>Resources:</u>				
Number of cows	37	38	31	34
Number of heifers	20	29	19	27
Acres of hay*	67	67	116	73
Acres of corn silage*	14	16	15	18
Acres of oats*	14	15	12	24
Total crop acres	92	116	138	122
<u>Size of business:</u>				
Man equivalent	1.7	2.0	1.6	1.8
Total work units	507	548	450	505
Lbs. of milk sold	369,893	418,436	249,737	371,167
<u>Rates of production:</u>				
Lbs. milk sold/cow	9,997	11,011	8,056	10,917
Tons hay/acre	1.6	2.2	1.3	1.7
Tons corn silage/acre	12	11	9	9
Bu. oats/acre	52	47	39	46
<u>Labor efficiency:</u>				
Number cows/man	22	19	19	19
Work units/man	298	274	281	281
Lbs. of milk sold/man	217,584	209,218	156,086	206,204
<u>Cost control factors:</u>				
Machinery investment	\$11,174	\$11,790	\$ 9,680	\$12,675
Machinery cost	\$ 3,753	\$ 4,488	\$ 3,583	\$ 4,614
Machinery cost/cow	\$ 101	\$ 118	\$ 116	\$ 136
Feed bought/cow	\$ 147	\$ 113	\$ 116	\$ 142
% feed is of milk receipts	34%	23%	31%	30%
Fertilizer/crop acre	\$ 5.82	\$ 9.34	\$ 2.41	\$ 6.77
% Expenses are of receipts	77%	71%	85%	75%
<u>Price:</u>				
Av. price/cwt. milk	\$ 4.27	\$ 4.41	\$ 4.56	\$ 4.30
<u>Financial summary:</u>				
Average capital	\$49,552	\$61,069	\$37,606	\$56,692
Total farm receipts	\$20,163	\$25,384	\$15,518	\$20,641
Total farm expenses	\$15,444	\$18,037	\$13,173	\$15,408
LABOR INCOME/operator	\$ 2,008	\$ 3,734	\$ 465	\$ 1,962

*Average per farm reporting.

COMPARISON OF SELECTED FARM BUSINESS FACTORS FOR 1962
26 Counties Included in General Farm Business Summary

Item	Sullivan County	Washington		Yates County
		Group II	Group III	
Number of farms	17	10	17	10
<u>Resources:</u>				
Number of cows	33	40	40	33
Number of heifers	17	32	26	24
Acres of hay*	63	73	85	50
Acres of corn silage*	12	16	20	13
Acres of oats*	--	12	12	27
Total crop acres	69	105	121	154
<u>Size of business:</u>				
Man equivalent	1.5	1.9	1.9	2.2
Total work units	414	570	566	549
Lbs. of milk sold	356,577	441,461	444,183	359,884
<u>Rates of production:</u>				
Lbs. milk sold/cow	10,805	11,037	11,104	10,906
Tons hay/acre	1.4	2.2	1.9	3.1
Tons corn silage/acre	8	11	12	12
Bu. oats/acre	--	53	45	64
<u>Labor efficiency:</u>				
Number cows/man	22	21	21	15
Work units/man	276	300	298	250
Lbs. of milk sold/man	237,718	232,348	233,780	163,584
<u>Cost control factors:</u>				
Machinery investment	\$10,136	\$12,121	\$13,089	\$14,578
Machinery cost	\$ 3,637	\$ 4,601	\$ 4,765	\$ 4,915
Machinery cost/cow	\$ 110	\$ 115	\$ 119	\$ 150
Feed bought/cow	\$ 189	\$ 157	\$ 173	\$ 77
% feed is of milk receipts	39%	31%	35%	17%
Fertilizer/crop acre	\$ 8.51	\$ 8.68	\$ 6.09	\$ 10.10
% Expenses are of receipts	80%	74%	82%	69%
<u>Price:</u>				
Av. price/cwt. milk	\$ 4.49	\$ 4.54	\$ 4.43	\$ 4.23
<u>Financial summary:</u>				
Average capital	\$51,146	\$54,069	\$57,070	\$68,623
Total farm receipts	\$18,914	\$26,744	\$26,470	\$29,120
Total farm expenses	\$15,177	\$19,751	\$21,647	\$20,201
LABOR INCOME/operator	\$ 1,056	\$ 3,899	\$ 1,674	\$ 4,221

*Average per farm reporting.

COMPARISON OF SELECTED FARM BUSINESS FACTORS FOR 1962
13 County Summaries Not in General Farm Business Summary*

Item	Herkimer County	Jefferson County	Lewis County	Livingston County
Number of farms	30	31	49	11
<u>Resources:</u>				
Number of cows	42	45	40	58
Acres of hay	73	79	76	72
Total acres of crops	103	155	100	182
<u>Size of business:</u>				
Man equivalent	1.8	2.0	1.6	2.3
Lbs. of milk sold	428,341	462,762	392,800	671,780
<u>Rates of production:</u>				
Lbs. milk sold/cow	10,199	10,284	9,820	11,564
Tons hay/acre	1.8	2.0	2.0	3.7
<u>Labor efficiency:</u>				
Number of cows/man	23	22	25	25
Lbs. of milk/man	237,967	231,381	245,500	288,655
<u>Cost control factors:</u>				
Feed bought/cow	\$ 126	\$ 102	\$ 117	\$ 136
% feed is of milk receipts	29%	24%	28%	27%
Machinery cost/cow	\$ 92	\$ 99	\$ 88	\$ 143
% Expenses are of receipts	73%	67%	69%	67%
<u>Financial summary:</u>				
Average capital	\$63,796	\$59,215	\$50,466	\$97,066
Total farm receipts	\$23,952	\$24,402	\$21,545	\$42,308
Total farm expenses	\$17,580	\$16,241	\$14,859	\$27,682
LABOR INCOME/operator	\$ 2,983	\$ 4,885	\$ 4,000	\$ 7,166

*County agricultural agents in these counties obtained farm business information from farmers in the counties, and in cooperation with farm management specialists summary reports were prepared for use with the cooperators and others in discussing farm business management problems.

COMPARISON OF SELECTED FARM BUSINESS FACTORS FOR 1962
13 County Summaries Not in General Farm Business Summary*

Item	Oneida County	Ontario County	Rensselaer County	St. Lawrence County
Number of farms	64	21	19	38
<u>Resources:</u>				
Number of cows	38	40	35	42
Acres of hay	53	71	57	85
Total acres of crops	91	185	85	132
<u>Size of business:</u>				
Man equivalent	2.0	2.1	1.7	1.9
Lbs. of milk sold	409,057	444,777	342,013	449,444
<u>Rates of production:</u>				
Lbs. milk sold/cow	10,765	11,119	9,772	10,701
Tons hay/acre	2.5	2.4	1.8	2.0
<u>Labor efficiency:</u>				
Number of cows/man	19	19	21	22
Lbs. of milk/man	204,528	211,799	201,184	236,549
<u>Cost control factors:</u>				
Feed bought/cow	\$ 117	\$ 111	\$ 110	\$ 150
% feed is of milk receipts	26%	23%	24%	33%
Machinery cost/cow	\$ 108	\$ 158	\$ 121	\$ 96
% Expenses are of receipts	74%	72%	72%	75%
<u>Financial summary:</u>				
Average capital	\$51,228	\$74,857	\$48,631	\$49,194
Total farm receipts	\$22,057	\$32,564	\$18,645	\$24,130
Total farm expenses	\$16,291	\$23,294	\$13,424	\$18,014
LABOR INCOME/operator	\$ 2,664	\$ 4,465	\$ 2,304	\$ 3,389

*County agricultural agents in these counties obtained farm business information from farmers in the counties, and in cooperation with farm management specialists summary reports were prepared for use with the cooperators and others in discussing farm business management problems.

COMPARISON OF SELECTED FARM BUSINESS FACTORS FOR 1962
13 County Summaries Not in General Farm Business Summary*

Item	Schoharie County	Seneca County	Steuben County	Tompkins County	Wyoming County
Number of farms	22	21	35	25	44
<u>Resources:</u>					
Number of cows	43	33	31	42	41
Acres of hay	83	67	75	73	57
Total acres of crops	107	166	124	122	133
<u>Size of business:</u>					
Man equivalent	1.9	1.7	1.6	1.8	2.0
Lbs. of milk sold	390,548	360,031	359,532	446,928	454,472
<u>Rates of production:</u>					
Lbs. milk sold/cow	9,083	10,910	11,598	10,641	11,085
Tons hay/acre	1.6	2.1	1.8	1.7	2.9
<u>Labor efficiency:</u>					
Number of cows/man	23	19	19	23	20
Lbs. of milk/man	205,552	211,783	224,708	248,293	227,236
<u>Cost control factors:</u>					
Feed bought/cow	\$ 125	\$ 105	\$ 123	\$ 140	\$ 98
% feed is of milk receipts	31%	23%	26%	31%	21%
Machinery cost/cow	\$ 99	\$ 137	\$ 125	\$ 105	\$ 129
% Expenses are of receipts	78%	74%	70%	75%	70%
<u>Financial summary:</u>					
Average capital	\$62,713	\$55,966	\$49,608	\$54,750	\$68,219
Total farm receipts	\$21,199	\$23,174	\$21,588	\$24,029	\$28,271
Total farm expenses	\$16,324	\$17,044	\$14,979	\$18,110	\$19,897
LABOR INCOME/operator	\$ 1,663	\$3,180	\$ 3,705	\$ 2,945	\$ 3,970

*County agricultural agents in these counties obtained farm business information from farmers in the counties, and in cooperation with farm management specialists summary reports were prepared for use with the cooperators and others in discussing farm business management problems.

COMPARISON OF SELECTED FARM BUSINESS SUMMARY FACTORS*
New York Dairy Farms, 1958-62

Item	1958	1959	1960	1961	1962
Number of farms	559	542	467	490	503
<u>Resources:</u>					
Number of cows	33	35	35	38	38
Number of heifers	20	22	21	23	24
Acres of hay**	59	62	64	66	70
Acres of corn silage**	14	15	15	15	16
Acres of oats**	17	18	16	17	19
Total crop acres	104	104	96	99	101
<u>Size of business:</u>					
Man equivalent	1.8	1.8	1.7	1.8	1.8
Total work units***	523	557	480	516	524
Lbs. of milk sold	310,900	327,400	333,900	378,700	394,893
<u>Rates of production:</u>					
Lbs. milk sold/cow	9,421	9,355	9,540	9,966	10,392
Tons hay/acre	2.3	2.0	2.3	2.6	1.8
Tons corn silage/acre	10	11	10	12	12
Bu. oats/acre	51	60	54	50	50
<u>Labor efficiency:</u>					
Number cows/man	18	19	21	21	21
Work units/man***	291	309	282	287	291
Lbs. of milk sold/man	172,700	181,900	196,400	210,400	219,385
<u>Financial summary:</u>					
Average capital	\$45,062	\$47,840	\$47,426	\$53,722	\$53,541
Total farm receipts	\$21,512	\$22,548	\$20,075	\$22,505	\$21,351
Total farm expenses	\$15,012	\$16,255	\$14,768	\$16,125	\$16,406
LABOR INCOME/operator	\$ 3,817	\$ 3,489	\$ 3,317	\$ 3,352	\$ 2,019
<u>Cost control factors:</u>					
Machinery investment	\$ 9,636	\$10,315	\$10,055	\$11,062	\$11,252
Machinery cost	\$ 3,611	\$ 3,872	\$ 3,729	\$ 4,056	\$ 4,024
Machinery cost/cow	\$ 109	\$ 111	\$ 107	\$ 107	\$ 106
Feed bought/cow	\$ 109	\$ 113	\$ 124	\$ 125	\$ 147
Fertilizer & lime/crop acre	\$ 7	\$ 7	\$ 7	\$ 7	\$ 7
% Expenses are of receipts	70%	72%	71%	72%	77%
<u>Prices:</u>					
Av. price/cwt. milk	\$ 4.68	\$ 4.73	\$ 4.64	\$ 4.47	\$ 4.33

* The averages for 1960, 61 and 62 include only farms with milk as the major source of income as described on page 1. The 1957-59 averages include some farms with large sources of income other than milk.

** Average per farm reporting.

*** Changes in work units for some crops and livestock made in 1958 and 1960.