

NEW YORK DAIRY FARM BUSINESS SUMMARIES FOR 1956

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"Dairy farm business management projects" were sponsored by the county agricultural agents in ten counties in the State during the year 1956. These projects, which were carried on in cooperation with the College of Agriculture at Cornell, are organized on a three-year basis. This was the first year for three counties, the second year for five counties, and the third year for two counties.

Each farm family in these projects kept a farm cash account book and a farm inventory book. At the end of the year these books were checked and summarized at the College. Various farm business factors were calculated. The figures for each farm were combined with those of the other cooperators in a county to get averages for the county group. These group averages were presented in county summary reports which were used by the individual cooperators in studying their businesses.

Participation in these projects was voluntary. The farm families that cooperated generally were scattered throughout the county. The major interest of the cooperators was to find ways to improve their farm business. There was considerable variation in the nature of the farms but all were dairy operations. It should be pointed out that the summary of these businesses does not reflect the average for all farms in these counties. The summary merely reports on the experiences of the individual farm operators in the projects.

Farm operators today are faced with many business management decisions. Good managers in any kind of business look for facts which will aid them in making decisions. The records kept by these farm families during 1956, and the business analyses made from them provides some facts that may be of help to other farmers in making management decisions.

A general summary of the 342 farm businesses in the ten counties has been prepared. The averages for the 342 farms are reported in this mimeograph. Blank spaces have been provided so that any interested farmer can compare his figures with the group averages. Selected information from the individual county summaries is included on pages 18 and 19.

The county agricultural agents in ten other counties in the State obtained farm business information for 1956 from farmers and prepared summary reports. Selected business factors from these county summaries are reported on page 20.

This report has been prepared principally for the use of county agricultural agents and teachers of vocational agriculture in their educational programs. Farmers and others interested in agriculture also may find a use for this information.

This summary prepared by C. A. Bratton, Department of Agricultural Economics. G. J. Conneman, C. W. Loomis, R. S. Smith, and C. A. Bratton in cooperation with the county agents prepared the individual county summaries.

Agents sponsoring the ten county farm business management projects included: G. L. Conklin, Cayuga; H. W. Matott, Chenango; C. S. Denton, Delaware; Ray Bender, Essex; R. W. Agor, Fulton; R. M. Cary, Madison; Frank Colling, Montgomery; R. W. Hadlock, Oneida; W. D. Brown, Otsego; and R. E. Wingert, Schoharie.

Steps in making a management decision:

1. Locate the trouble spot (problem)
2. Review 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)

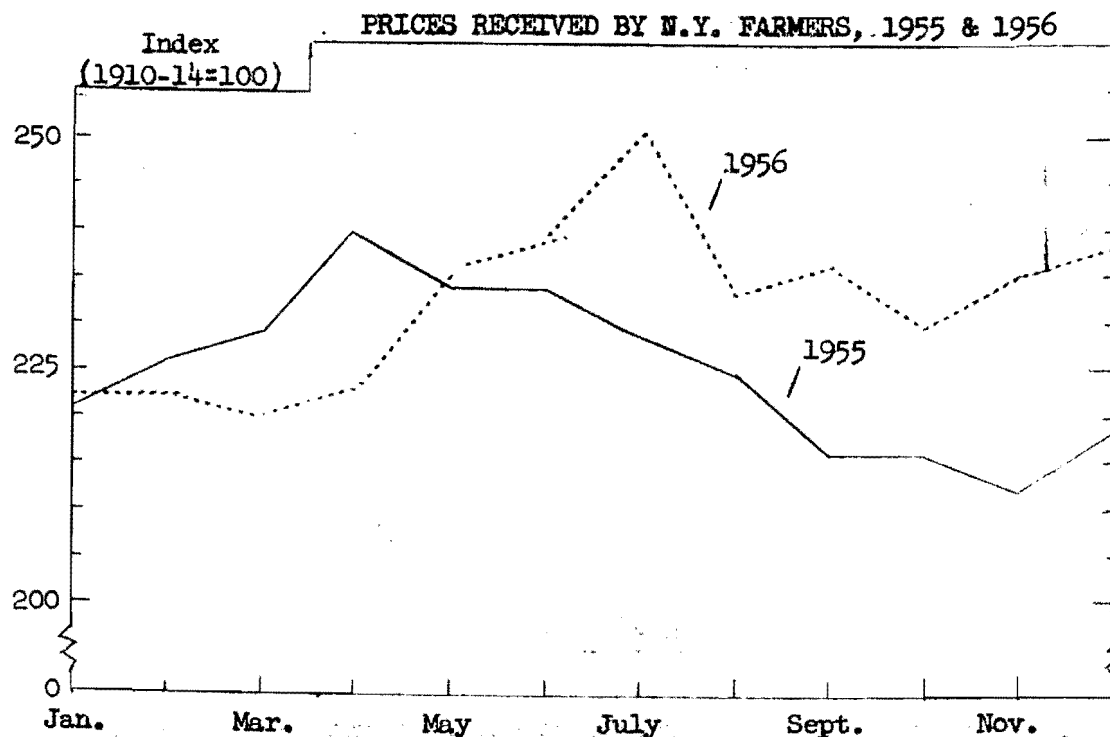
Have you developed a sound procedure for
arriving at management decisions?

or

"Do you shoot from the hip?"

FARM PRICES

Prices are an important factor affecting profits from farming. In studying the financial returns from farm businesses for any year, consideration must be given to the nature of prices for that year.



Prices received by New York farmers which declined each year from 1952 to 1955 turned up in 1956. Starting with May 1956, the index of New York farm prices each month was higher than the corresponding month of 1955. The December 1956 price index was 9 per cent above December 1955. For the year, New York prices averaged about 2 per cent above 1955.

Not all New York farmers shared equally in the upturn in prices. For example, the prices of turkeys, chickens, eggs, calves, lambs, and dry beans were lower late in 1956 than they were in 1955.

Prices paid by farmers increased about 2 per cent during 1956. Machinery, building materials, and wages were up while feed, livestock, and seed were down. Between 1954 and 1956 farm wages increased 5 per cent whereas farm machinery prices rose about 6 per cent. Fertilizer continued to be a good buy as prices decreased about 3 per cent. Feed prices declined 9 per cent from 1954 to 1956 due to the large supplies on hand.

THINGS TO WORK WITH

The 342 farms included in this summary were scattered throughout the ten counties. All the farms had dairies but there was considerable variation in the combination of other enterprises on these farms. The "resources" or things to work with are reported below:

THINGS TO WORK WITH 342 New York Dairy Farms, 1956

Item	Number reporting	Average*	Range	
			Low	High
<u>Labor:</u>				
Man equivalent (No. men)		1.8	1.0	4.7
Operator only	(4 farms)			
Hired help	(296 farms)			
Unpaid family labor	(181 farms)			
<u>Livestock: (Number)</u>				
Cows		34	12	102
Heifers		20	0	70
Bulls	(174 farms)	1.4	1.0	6.5
Hens	(108 farms)	255	3	3250
<u>Crops: (Acres grown)</u>				
Hay		56	5	300
Grass silage	(87 farms)	4	2	72
Corn for grain	(71 farms)	12	1	55
Corn for silage	(300 farms)	13	3	67
Oats	(254 farms)	13	1	55
Total cropland		98	26	370

*Average for farms reporting

These were "family farms". The farm operator and members of the family made up most of the labor force. A total of 296 farms reported hiring some labor, 181 farms reported some unpaid labor, while only 4 farms had neither unpaid family labor nor hired labor. Some farms were operated by two or more individuals as partners. There were 298 single operators and 44 partnerships (4 with 3 operators) making a total of 390 operators on the 342 farms.

Crops and livestock other than those listed above were grown on some of the farms. Only the most common are shown above.

CAPITAL INVESTMENT

Capital is one of the four basic factors of production (i.e. land, labor, capital, management). The capital investment in modern farm businesses is large. In this report the farm inventory is used as a measure of capital investment.

FARM INVENTORY VALUES, JANUARY 1, 1957
342 New York Dairy Farms

Item	Amount per farm		Amount per cow	
	Av. 342 farms	Your farm	Av. 342 farms	Your farm
Land and buildings	\$18,906	\$ _____	\$ 556	\$ _____
Machinery and equipment	8,438	_____	248	_____
Cattle	9,676	_____	285	_____
Other livestock	182	_____	5	_____
Feed and supplies	<u>3,396</u>	_____	<u>100</u>	_____
TOTAL INVESTMENT	\$40,598	\$ _____	\$ 1,194	\$ _____

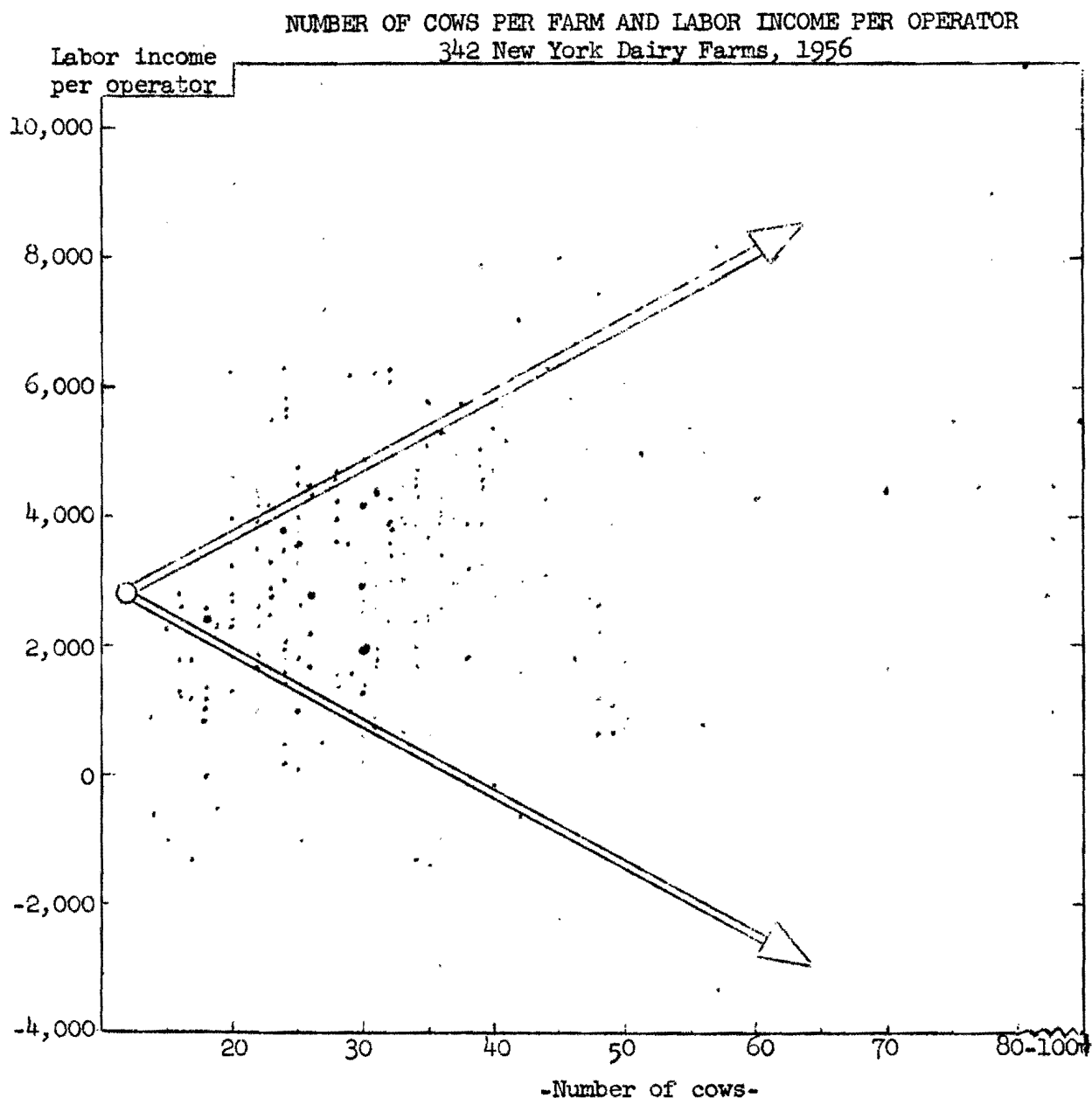
The average investment per man on these farms was \$22,554. This is nearly double the capital investment per worker in many industries.

The total investment per cow of \$1,194 is in line with that found in most dairy areas. (Land and buildings was the largest item amounting to \$556 per cow.) The amount of cropland on the farms and the location in respect to cities affects the land and building investment per cow.

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

Capital turnover (years required for receipts to equal capital) is sometimes used to measure efficiency in the use of capital. On these farms, it would require 2.3 years for the 1956 farm receipts to equal the capital investment.

FINANCIAL SUMMARY OF YEAR'S BUSINESS



Each dairy farm included in the farm business management projects is represented by a dot on the above graph. Labor income per operator is plotted rather than the labor income per farm.

The labor incomes per operator ranged from a minus \$4,500 to a high of \$14,300 or a difference of \$18,800.

LABOR INCOMES
342 New York Dairy Farms, 1956

Item	Your farm	Average of 342 farms
Capital Investment	\$ _____	\$39,708
Farm Receipts	\$ _____	\$17,654
Farm Expenses	\$ _____	\$12,397
Farm Income	\$ _____	\$ 5,257
Interest on Capital at 5%	\$ _____	\$ 1,985
LABOR INCOME per farm	\$ _____	\$ 3,272
Number of operators	_____	390
LABOR INCOME per operator	\$ _____	\$ 2,870

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

Changes in inventories during the year are included in figuring labor income. If the farmer builds up his inventory this is considered as a farm receipt, and if he depletes his inventory the amount used up is included as a farm expense. Interest and principal payments on debts are not included in the expenses. On the other hand, to make all farms comparable, a five per cent interest charge on the capital investment (average of beginning and end inventories) is deducted in figuring labor income.

A labor income of \$2,870 would be equivalent to a salary of about \$55 per week or \$240 per month.

In addition to the labor income on a farm, the family usually has the use of a house, milk, eggs, meat, vegetables, and other products produced on the farm. The estimated value of these farm privileges for 1956 on 152 of these dairy farms averaged \$1,020. In general, these items were valued at what they would sell for at the farm. If they were purchased in the city, they would cost considerably more.

WHERE THE MONEY CAME FROM

FARM RECEIPTS			
342 New York Dairy Farms, 1956			
Eggs sold	_____	508	3
Crop sales	_____	429	3
Miscellaneous*	_____	1,068	7
Total cash receipts	\$ _____	\$15,864	100
Increase in inventory	_____	1,790	
TOTAL FARM RECEIPTS	\$ _____	\$17,654	

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

Total cash receipts on these farms amounted to \$15,864 per farm in 1956. This is equivalent to about \$1,300 per month or \$43 per day.

Increases in inventory due to expansion in the business are considered as a farm receipt. These items could have been sold and turned into cash receipts but the farmer decided to invest this in the business. In other businesses they refer to it as "plowed back" into the business.

Milk was the largest source of income making up 79 per cent of the total cash receipts. Livestock and poultry sold were the second most important receipt item.

Milk sales averaged \$371 per cow.

WHERE THE MONEY WENT

The expenses on these farms averaged about \$1,000 per month or \$34 per day including Sundays. This is the equivalent of spending \$1.42 per hour every hour of the year.

FARM EXPENSES
342 New York Dairy Farms, 1956

Item	Your farm	Average of 342 farms	Per cent of total
Dairy feed bought	\$ _____	\$ 3,250	33
Other feed bought	_____	381	4
Hired labor	_____	1,102	11
Dairy & poultry expense*	_____	848	9
Gas and oil	_____	625	6
Machinery repairs, etc.	_____	641	7
Auto expense (farm share)	_____	143	1
Machine hire	_____	118	1
Fertilizer and lime	_____	578	6
Seeds	_____	224	2
Other crop expenses	_____	119	1
Building repairs, etc.	_____	318	3
Livestock bought	_____	485	5
Miscellaneous**	_____	1,051	11
Total cash operating	\$ _____	\$ 9,883	100
New machinery	_____	1,584	
New buildings	_____	678	
Unpaid family labor	_____	252	
Decrease in inventory	_____	--	
TOTAL FARM EXPENSE	\$ _____	\$12,397	

*Veterinary \$158, Breeding \$127, DHIA \$81, Milk Hauling \$237, Other \$245

**Taxes \$418, Insurance \$176, Electricity \$198, Telephone \$52, Rent \$59,
Other \$148.

FEED COSTS

Feed bought is usually the largest single expense item on a dairy farm. It is a challenge to dairymen to keep feed costs under control. A few business "checks" may be helpful in locating weaknesses in the feed program.

SELECTED FACTORS RELATED TO FEED COSTS
342 New York Dairy Farms, 1956

Item	Your farm	Average of 342 farms
<u>Purchased feed</u>		
Dairy feed bought	\$ _____	\$3,250
Feed bought per cow	\$ _____	\$96
Feed bought per Cwt. milk sold	\$ _____	\$1.07
Feed bought as % of milk receipts	_____ %	26%
<u>Roughage Harvested (hay equivalent)</u>		
Hay (tons)	_____	117 tons
Grass silage (_____ tons + 3)	_____	9 tons
Corn silage (_____ tons + 3)	_____	43 tons
Total tons hay equivalent	_____	169 tons
Tons hay equivalent per cow	_____	5.0 tons
Acres in crops per cow	_____	2.9 acres
Lime and fertilizer expense per cow	\$ _____	\$17
Lime and fertilizer expense per crop acre	\$ _____	\$6
Number of heifers per 10 cows	_____	5.9

Good quality roughage is the cheapest source of nutrients on a New York dairy farm. In considering purchased feed costs, one needs to look at the roughage program. These farms harvested an average of 5 tons of "hay equivalent" per cow. In addition to the quantity, the quality also must be taken into consideration.

The tons of hay equivalent per cow must feed the accompanying young cattle. If a farm has an unusually large number of heifers more roughage per cow will be needed. There was an average of 5.9 heifers of all ages per 10 cows on these farms.

FARM MACHINERY COSTS

Machinery costs of all kinds (including milk hauling) were 22 per cent of the total farm expenses and interest on investment. Machinery costs were unquestionably the second most important item of expense on these farms.

MACHINERY COSTS*
342 New York Dairy Farms, 1956

Item	Your farm	Average 342 farms	
		Amount	Per cent
Beginning inventory	\$ _____	\$7,971	
New machinery bought	_____	<u>1,584</u>	
Total	\$ _____	\$9,555	
End inventory	\$ _____	\$8,438	
Machinery sold	_____	<u>66</u>	
Total	\$ _____	<u>\$8,504</u>	
Depreciation	\$ _____	\$1,051	33
Interest @ 5% Av. inventory	_____	410	13
Gas and oil	_____	625	19
Machinery repairs	_____	641	20
Milk hauling	_____	237	7
Machine hire	_____	118	4
Auto expense (farm share)	_____	<u>143</u>	<u>4</u>
Total machinery cost	\$ _____	\$3,225	100
<hr style="border-top: 1px dashed black;"/>			
Machinery cost per cow	\$ _____	\$95	
Machinery cost per crop acre	\$ _____	\$33	
Machinery cost per work unit	\$ _____	\$5.61	
Machinery cost per man	\$ _____	\$1,792	

*Does not include insurance, housing, or labor repair costs.

Depreciation was the largest item in the machinery costs and accounted for one-third of the total. This is an item sometimes overlooked by farmers in estimating what it costs to operate machinery. Machines do wear out and become obsolete which accounts for the depreciation. The fixed costs of depreciation and interest made up 46 per cent of the total cost.

ANALYSIS OF FARM BUSINESS

Size of business, rates of production, labor efficiency, and cost control are important factors affecting farm incomes. Below are some measures used in studying these factors.

SIZE OF BUSINESS 342 New York Dairy Farms, 1956

Item	Your farm	Average 342 farms
Man equivalent	_____	1.8
Number of cows	_____	34
Pounds 3.7% milk sold	_____	302,505
Total crop acres	_____	98
Total work units*	_____	575

*A "work unit" is the average amount of productive work accomplished by a man in a 10-hour day under New York farm conditions.

Farm management studies have shown that in general larger farms pay better than small farms. Larger farms make it possible to use equipment and other items more efficiently. However, if costs are not under control, large farms can lose more than small farms.

Below are some data on size of farm and income for the 342 farms in the farm business management projects in 1956.

COWS PER FARM AND LABOR INCOME 342 New York Dairy Farms, 1956

Number of cows	Number of farms	Lbs. Milk Sold		Labor income per operator
		per cow	per man	
Under 20	37	8,470	117,300	\$1,400
20-29	101	8,760	157,500	2,800
30-39	125	9,050	174,000	3,000
40-49	45	9,420	216,200	3,400
50-over	34	8,950	206,700	3,900

RATES OF PRODUCTION
342 New York Dairy Farms, 1956

Item	Your farm	Av. of farms reporting
<u>Animal Production:</u>		
Lbs. 3.7% milk sold per cow	_____	8,897
<u>Crop Yields:</u>		
Tons hay per acre	_____	2.1
Tons corn silage per acre	_____	9.5
Bu. oats per acre	_____	52

Pounds of milk sold has been adjusted to a 3.7 per cent butterfat equivalent so that farms would be comparable. Pounds of milk sold per cow is always less than D.H.I.C. or other production records. The pounds of milk sold per cow ranged from 4,700 to 13,300.

Roughage is the cheapest source of nutrients available to New York State dairymen. It is for this reason that good crop yields are important on dairy farms. Crop yields are frequently a weak point in farm businesses.

Rates of production also have an effect on farm incomes. There is a point, however, beyond which it is no longer profitable to increase the rates of production. Below are data on rates of production and incomes from the dairy farms in the 1956 farm business management projects.

MILK SOLD PER COW AND LABOR INCOME
342 New York Dairy Farms, 1956

Lbs. Milk sold per cow	Number of farms	Number of cows	Milk sold per man	Labor income per operator
Under 7,000	34	28	116,500	\$1,440
7,000-7,999	55	30	142,900	2,750
8,000-8,999	78	35	170,100	2,650
9,000-9,999	93	34	178,300	2,790
10,000-10,999	50	36	206,100	4,370
11,000-over	32	33	212,100	3,220

LABOR EFFICIENCY
342 New York Dairy Farms, 1956

	Average
Work units per man	319

Measures of labor efficiency indicate how much the labor force on the farm accomplishes. On a dairy farm, pounds of milk sold per man is a good simple measure to use. Work units per man combines all productive work done by the labor force but it has the disadvantage of not taking into account the products produced or the output.

High labor efficiency can be accomplished in several ways. Some farmers do it by long hours and unusually hard work. Others get efficiency by the use of machinery and equipment, but this can be costly. Still others develop good work methods which oftentimes can be done at little cost yet enable the operator to accomplish more.

Below are some data showing the relationship of labor efficiency and incomes.

POUNDS OF MILK SOLD PER MAN AND LABOR INCOME
342 New York Dairy Farms, 1956

Pounds milk sold per man	Number of farms	Number of cows	Lbs. Milk sold per cow	Labor Income
Under 120,000	52	25	7,570	\$2,150
120,000-150,000	79	27	8,560	2,050
150,000-180,000	79	34	8,390	2,920
180,000-210,000	56	35	9,450	3,310
210,000-240,000	41	45	9,980	3,380
240,000-over	35	45	9,940	4,550

"Cost control" is essential in a modern farm business. This means keeping check on all costs. At the same time a farmer must guard against cutting costs which might reduce the efficiency of the business.

Below are some "yardsticks" for checking the reasonableness of expenses on a dairy farm.

COST CONTROL MEASURES
342 New York Dairy Farms, 1956

Item	Your farm	Average for 342 farms
% feed bought is of milk receipts	_____%	26%
Feed bought per cow	\$ _____	\$96
Fertilizer & lime cost per cow	_____	17
Machinery repairs per cow	_____	19
Taxes per cow	_____	12
Insurance per cow	_____	5
Electricity per cow	_____	6
Veterinary cost per cow	_____	5
Total farm expense per cow	_____	365
Machinery cost per crop acre	_____	33
Fertilizer & lime/crop acre	_____	5.90
Gas & oil per crop acre	_____	6.38
Taxes per crop acre	_____	4.27
% expenses are of receipts	_____%	70%

There is NO magic in keeping costs in line. All cost items must be watched.

COMPARISON OF BUSINESS SUMMARIES OF 20 FARMS WITH
HIGHEST LABOR INCOMES AND THE 20 FARMS WITH LOWEST LABOR INCOMES
342 New York Dairy Farms, 1956

	Average of the 342 farms	Average of 20 farms with:	
		Highest labor incomes	Lowest labor incomes
<u>Capital Investment (End of year):</u>			
Land and buildings	\$18,906	\$22,568	\$26,153
Cattle	9,676	11,977	8,859
Machinery	8,438	12,082	8,419
Feed and supplies	3,396	6,876	2,847
Other	182	204	209
TOTAL END INVENTORY	\$40,598	\$53,707	\$46,487
<u>Farm Receipts:</u>			
Milk sales	\$12,600	\$18,442	\$10,927
Livestock sold	1,259	2,019	1,137
All other sales	2,005	4,692	1,911
Total Cash Receipts	\$15,864	\$25,153	\$13,975
Increase in Inventory	1,790	4,373	165
TOTAL FARM RECEIPTS	\$17,654	\$29,526	\$14,140
<u>Farm Expenses:</u>			
Feed bought	\$ 3,631	\$ 4,742	\$ 4,456
Hired labor	1,102	2,459	1,375
Machinery repairs & auto	784	1,123	793
Gas and oil	625	857	544
Milk hauling	237	271	184
Dairy expense	611	792	595
Fertilizer and lime	578	880	526
Other crop expense	461	802	430
Livestock bought	485	1,044	612
Building repairs	318	414	474
Miscellaneous	1,051	1,661	1,116
Total Cash Operating	\$ 9,883	\$15,045	\$11,105
New machinery	1,584	2,585	1,089
New buildings	678	1,031	665
Unpaid labor	252	151	370
TOTAL FARM EXPENSES	\$12,397	\$18,812	\$13,229
<u>Financial Summary:</u>			
Total farm receipts	\$17,654	\$29,526	\$14,140
Total farm expenses	12,397	18,812	13,229
Farm Income	\$ 5,257	\$10,714	\$ 911
5% on Av. Capital	1,985	2,576	2,320
Labor Income per Farm	\$ 3,272	\$ 8,138	\$-1,409
Number of Operators	390	21	20
LABOR INCOME per Operator	\$ 2,870	\$ 7,751	\$-1,409

COMPARISON OF FARM BUSINESS FACTORS OF 20 FARMS WITH HIGHEST
LABOR INCOMES AND THE 20 FARMS WITH LOWEST LABOR INCOMES
342 New York Dairy Farms, 1956

	Average of the 342 farms	Average of 20 farms with Highest labor incomes	Lowest labor incomes
<u>Farm Business Factors:</u>			
<u>Size:</u>			
Man equivalent	1.8	2.2	1.8
Average number cows	34	43	30
Pounds of milk sold (3.7% equiv.)	302,505	434,910	265,738
Total crop acres	98	145	75
Total man work units	575	769	524
<u>Rates of Production:</u>			
Lbs. milk sold per cow	8,897	10,114	8,858
Tons hay per acre	2.1	2.5	2.0
Tons corn silage per acre	10	10	11
Bushels oats per acre	52	60	48
<u>Labor Efficiency:</u>			
Man work units per man	319	350	291
Lbs. milk sold per man (3.7%)	168,100	197,686	147,632
<u>Use of Capital:</u>			
Total capital per man	\$22,554	\$24,412	\$25,826
Total capital per cow	1,194	1,249	1,550
Land & buildings per cow	556	525	872
<u>Machinery investment:</u>			
per man	4,688	5,492	4,677
per cow	248	281	281
<u>Feed Costs:</u>			
Dairy feed bought per cow	\$96	\$98	\$114
% Feed bought was of milk receipts	26%	23%	31%
Crop acres per cow	2.9	3.4	2.5
Fertilizer & lime expense/crop acre	\$6	\$6	\$7
Hay equivalent harvested per cow	5.0	7.0	5.1
Number heifers per 10 cows	5.9	4.7	5.7
<u>Machinery Costs:</u>			
Total machinery cost	\$3,225	\$4,398	\$3,330
Machinery cost per cow	95	102	111
Machinery cost per man	1,792	1,999	1,850
<u>Prices:</u>			
Av. price received for milk (3.7%)	\$4.18	\$4.24	\$4.11
<u>Other</u>			
% Real estate is of total capital	47%	42%	56%
% Expenses are of receipts	70%	64%	94%
% Machinery cost is of total farm expenses & interest on investment	22%	23%	25%

COMPARISON OF SELECTED FARM BUSINESS FACTORS FOR 1956
10 County Farm Business Management Summaries

Item	Cayuga County	Chenango County*		Delaware County	Essex County
		Group I	Group II		
Number of farms	22	35	27	33	16
<u>Things to work with:</u>					
Number of cows	28	36	34	35	28
Number of heifers	22	23	15	19	22
Acres of hay	54	66	48	55	61
Acres of corn silage	12	14	13	6	17
Acres of oats	23	15	7	4	10
Total crop acres	147	100	69	74	121
<u>Size of business:</u>					
Man equivalent	1.9	1.8	1.7	1.6	2.1
Total work units	630	628	542	554	524
Cwt. milk sold	2,751	3,136	3,005	3,145	2,156
<u>Rates of production:</u>					
Lbs. milk sold/cow	9,824	8,710	8,837	8,986	7,699
Tons hay/acre	2.4	1.9	2.1	1.9	1.9
Tons corn silage/acre	12	8	10	12	6
Bu. oats/acre	60	55	48	41	39
<u>Work per man:</u>					
Number cows/man	15	20	20	22	13
Work units/man	332	349	319	346	250
Cwt. milk sold/man	1,448	1,742	1,767	1,966	1,027
<u>Financial summary:</u>					
Average capital	\$44,334	\$37,536	\$36,505	\$32,939	\$41,970
Total farm receipts	19,639	19,171	17,056	17,527	16,571
Total farm expenses	12,849	14,121	12,704	12,756	10,348
LABOR INCOME/Operator	4,375	2,583	2,353	2,946	3,666
<u>Cost control factors:</u>					
Machinery investment	\$ 9,339	\$ 7,864	\$ 7,217	\$ 6,400	\$10,886
Machinery cost	4,129	3,209	2,882	2,637	3,637
Machinery cost/cow	147	89	85	75	130
Feed bought/cow	\$66	\$104	\$120	\$135	\$77
Fertilizer/crop acre	\$5.83	\$7.10	\$6.87	\$6.72	\$3.43
% Expenses are of receipts	65%	74%	74%	73%	62%
Av. price/cwt. milk	\$4.16	\$4.20	\$4.18	\$4.18	\$4.12

*Group I are second year cooperators; Group II are first year

COMPARISON OF SELECTED FARM BUSINESS FACTORS FOR 1956 (Cont.)
10 County Farm Business Management Summaries

Item	Madison County	Montgomery- Fulton Cos*	Oneida County	Otsego County	Schoharie County
Number of farms	56	46	31	45	31
Things to work with:	---	---	---	---	---
<u>Size of business:</u>					
Man equivalent	2.0	1.7	1.5	1.7	1.9
Total work units	665	552	494	534	560
Cwt. milk sold	3,669	2,870	2,844	2,822	2,977
<u>Rates of production:</u>					
Lbs. milk sold/cow	9,407	8,696	9,174	8,818	9,021
Tons hay/acre	2.7	1.7	2.6	2.1	1.6
Tons corn silage/acre	10	8	10	9	10
Bu. oats/acre	59	42	57	47	36
<u>Work per man:</u>					
Number cows/man	20	19	21	19	17
Work units/man	332	325	329	314	294
Cwt. milk sold/man	1,834	1,688	1,896	1,660	1,567
<u>Financial summary:</u>					
Average capital	\$45,101	\$40,871	\$35,764	\$38,486	\$41,898
Total farm receipts	20,737	15,801	14,693	16,047	18,190
Total farm expenses	13,650	10,883	9,424	12,046	14,002
LABOR INCOME/Operator	3,656	2,404	3,083	2,035	2,028
<u>Cost control factors:</u>					
Machinery investment	\$9,341	\$9,490	\$7,260	\$8,207	\$8,739
Machinery cost	3,647	3,346	2,693	2,999	3,231
Machinery cost/cow	93	101	87	94	98
Feed bought/cow	\$80	\$76	\$83	\$101	\$111
Fertilizer/crop acre	\$6.18	\$3.95	\$7.89	\$5.72	\$6.34
% Expenses are of receipts	66%	69%	64%	75%	77%
Av. price/cwt. milk	\$4.03	\$4.23	\$4.16	\$4.14	\$4.23

*Montgomery and Fulton Counties included in same summary

COMPARISON OF SELECTED FARM BUSINESS FACTORS FOR 1956
From 10 County Summaries Not In Farm Business Management Projects*

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Item	Catta- raugus	Chau- tauqua	Columbia	Dutchess	Herkimer	Jefferson	Ontario	Rensselaer	St. Lawrence	Wyoming
Number of farms	30	16	15	30	39	27	21	39	57	50
<u>Things to work with:</u>										
Number of cows	27	33	31	43	36	35	30	31	29	35
Acres of hay	na	48	na	82	63	81	48	54	55	52
Total acres of crops	75	84	na	144	98	126	146	105	83	121
<u>Size of business:</u>										
Man equivalent	1.5	1.8	1.6	2.1	1.7	1.9	2.0	1.8	1.6	2.0
Cwt. milk sold	2,516	2,765	2,755	4,163	3,251	2,934	3,008	2,822	2,465	3,265
<u>Rates of production:</u>										
Lbs. milk sold/cow	9,150	8,379	8,463	9,586	9,032	8,381	10,027	9,102	8,498	9,329
Tons hay/acre	na	2.1	2.1	2.1	2.0	1.6	2.5	2.2	2.0	2.5
<u>Work per man:</u>										
Number of cows/man	19	18	21	20	21	22	15	17	18	18
Cwt. milk sold/man	1,708	1,536	1,722	1,982	1,913	1,830	1,504	1,568	1,540	1,632
<u>Cost Control factors:</u>										
% Feed bought is of milk sales	23%	28%	21%	25%	25%	24%	17%	20%	30%	21%
Machinery cost/cow	\$75	\$94	\$87	na	\$84	\$72	\$148	\$106	\$80	\$137
% Expenses are of receipts	71%	77%	73%	77%	72%	67%	67%	73%	72%	71%
<u>Financial summary:</u>										
Average capital	\$35,310	\$36,946	\$39,713	\$64,000	\$37,288	\$31,961	\$47,569	\$37,978	\$28,533	\$50,580
Total farm receipts	\$16,610	\$16,383	\$16,762	\$27,541	\$17,905	\$14,034	\$23,618	\$17,843	\$13,167	\$23,611
Total farm expenses	\$11,832	\$12,589	\$12,184	\$21,313	\$12,875	\$ 9,357	\$15,897	\$13,055	\$ 9,459	\$16,667
Labor income/operator	\$2,825	\$ 1,768	\$ 2,592	\$ 3,028	\$ 3,165	\$ 2,867	\$ 4,155	\$ 2,889	\$ 2,016	\$ 3,504

*County Agricultural Agents in these counties obtained farm business information from farmers in the counties, and prepared summary reports for use with the cooperators and others in discussing farm business management problems.
na - Not available

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COMPARISON OF BUSINESS FACTORS OF NEW YORK DAIRY FARMS WITH
HIGH AND VERY HIGH RATES OF PRODUCTION, 1956

Factor	Amount per farm		Average all 342 farms
	50 high* production farms	32 very high** production farms	
<u>Size:</u>			
Man equivalent	1.9	1.9	1.8
Number of cows	36	33	34
Pounds 3.7% milk sold	377,740	382,250	302,506
Total crop acres	110	98	98
Total work units	629	572	575
Total product units	74	72	59
<u>Rates of Production:</u>			
Pounds 3.7% milk sold per cow	10,493	11,583	8,897
Tons hay per acre	2.5	2.5	2.2
Tons corn silage per acre	11.9	12.3	10
Bushels of oats per acre	57	58	50
<u>Labor Efficiency:</u>			
Number of cows per man	19	17	19
Pounds milk sold per man	198,810	201,184	168,059
Work units per man	331	301	319
Product units per man	39	38	33
<u>Capital Investment:</u>			
Land and buildings	\$19,960	\$19,844	\$18,906
Machinery	9,848	9,106	8,438
Cattle	11,232	11,091	9,676
Other livestock	220	189	182
Feed and supplies	4,346	3,647	3,396
Total	\$45,606	\$43,877	\$40,598
<u>Financial Summary:</u>			
Average capital investment	\$44,520	\$43,625	\$39,705
Farm receipts	22,158	20,834	17,654
Farm expenses	14,974	14,981	12,397
Farm income	\$ 7,184	\$ 5,853	\$ 5,257
Interest on capital at 5%	2,226	2,181	1,985
Labor income per farm	\$ 4,958	\$ 3,672	\$ 3,272
Number of operators	57	37	390
Labor income per operator	\$ 4,349	\$ 3,176	\$ 2,869

*10,000 to 10,999 pounds of milk sold per cow

**11,000 and over pounds of milk sold per cow

Source: Unpublished thesis, Jack A. Smith, Cornell University, 1959

COMPARISON OF FARM RECEIPTS AND EXPENSES OF
NEW YORK DAIRY FARMS WITH HIGH AND VERY HIGH RATES OF PRODUCTION, 1956

Item	Amount per farm		Average all 342 farms
	50 high production farms	32 very high production farms	
<u>Farm Receipts:</u>			
Milk sales	\$15,806	\$15,684	\$12,600
Livestock sales	1,462	1,919	1,259
Crop sales	812	612	429
Other	<u>1,882</u>	<u>1,759</u>	<u>1,576</u>
Total cash receipts	\$19,962	\$19,974	\$15,864
Increase in inventory	<u>2,196</u>	<u>860</u>	<u>1,790</u>
Total farm receipts	\$22,158	\$20,834	\$17,654
<u>Farm Expenses:</u>			
Dairy feed bought	\$ 3,838	\$ 4,556	\$ 3,250
Other feed bought	369	542	420
Gas and oil	762	622	625
Machinery expense	708	817	641
Auto expense (farm share)	158	167	143
Machine work hired	158	191	118
Fertilizer and lime	810	875	578
Other crop expenses	436	312	343
Building repairs	388	434	318
Livestock bought	413	711	485
Dairy expense	1,016	1,247	808
Labor hired	1,510	1,388	1,103
Miscellaneous expense	<u>1,320</u>	<u>1,141</u>	<u>1,051</u>
Total cash operating expense	\$11,886	\$13,003	\$ 9,883
New machinery	2,082	1,531	1,584
New buildings	788	216	678
Unpaid family labor	<u>218</u>	<u>231</u>	<u>252</u>
Total farm expense	\$14,974	\$14,981	\$12,397

Source: Unpublished thesis, Jack A. Smith, Cornell University, 1959.

COMPARISON OF SELECTED FACTORS RELATED TO FEED COST
342 New York Dairy Farms, 1956

Item	Amount per farm		Average all farms
	50 high production farms	32 very high production farms	
<u>Purchased feed:</u>			
Dairy feed bought	\$3,838	\$4,556	\$3,250
Feed bought per cow	\$107	\$138	\$96
Feed bought per 100 pounds milk sold	\$1.02	\$1.19	\$1.07
Feed bought as per cent of milk receipts	24%	29%	26%
<u>Roughage harvested (Hay equivalent):</u>			
Hay (tons)	134	115	117
Grass silage (tons divided by 3)	4	19	9
Corn silage (tons divided by 3)	59	53	43
Total tons hay equivalent	197	187	169
Tons hay equivalent per cow	5.5	5.7	5.0
Acres in crops	110	98	98
Crop acres per cow	3.1	3.0	2.9
Fertilizer and lime expense	\$810	\$875	\$578
Fertilizer and lime expenses per crop acre	\$7.36	\$8.93	\$5.90
Fertilizer and lime expenses per cow	\$22.50	\$26.52	\$17.00
Number of cows	36	33	34
Number of heifers	23	19	20
Number of heifers per 10 cows	6.4	5.8	5.9

Source: Unpublished thesis, Jack A. Smith, Cornell University, 1959.

FINANCIAL SUMMARY
32 Very High Production New York Dairy Farms, 1956

Item	Average 32 farms	Amount per farm		
		Bottom one-third by labor income	Middle one-third by labor income	Top one-third by labor income
Average capital investment	\$43,625	\$50,818	\$34,000	\$45,182
Farm receipts	20,834	19,018	17,420	25,754
Farm expenses	<u>14,981</u>	<u>15,363</u>	<u>12,330</u>	<u>17,009</u>
Farm income	\$ 5,853	\$ 3,655	\$ 5,090	\$ 8,745
Interest on capital at 5%	<u>\$ 2,181</u>	<u>\$ 2,541</u>	<u>\$ 1,700</u>	<u>\$ 2,259</u>
Labor income per farm	\$ 3,672	\$ 1,114	\$ 3,390	\$ 6,486
Number of operators	37	14	11	12
Labor income per operator	\$ 3,176	\$ 878	\$ 3,082	\$ 5,946

FINANCIAL SUMMARY
50 High Production New York Dairy Farms, 1956

Item	Average 50 farms	Amount per farm		
		Bottom one-third by labor income	Middle one-third by labor income	Top one-third by labor income
Average capital investment	\$44,520	\$39,529	\$44,062	\$49,941
Farm receipts	22,158	17,735	21,750	26,965
Farm expenses	<u>14,974</u>	<u>13,276</u>	<u>14,450</u>	<u>17,165</u>
Farm income	\$ 7,184	\$ 4,459	\$ 7,300	\$ 9,800
Interest on capital at 5%	<u>2,226</u>	<u>1,976</u>	<u>2,203</u>	<u>2,497</u>
Labor income per farm	\$ 4,958	\$ 2,483	\$ 5,097	\$ 7,303
Number of operators	57	19	19	19
Labor income per operator	\$ 4,349	\$ 2,222	\$ 4,292	\$ 6,534

Source: Unpublished thesis, Jack A. Smith, Cornell University, 1959.

SELECTED FACTORS RELATED TO FEED COST
32 Very High Production New York Dairy Farms, 1956

Item	Average 32 farms	Average per farm		
		Bottom one-third by labor income	Middle one-third by labor income	Top one-third by labor income
<u>Purchased feed:</u>				
Dairy feed bought	\$4,556	\$5,200	\$4,150	\$4,282
Feed bought per cow	\$138	\$158	\$148	\$113
Feed bought per 100 lbs. milk sold	\$1.19	\$1.38	\$1.28	\$.97
Feed bought as per cent of milk receipts	29%	33%	31%	24%
<u>Roughage harvested:</u>				
Tons hay equivalent per cow	5.2	5.2	5.0	5.2
Crop acres per cow	3.0	2.8	2.2	3.6
Fertilizer and lime expense	\$875	\$636	\$790	\$1,191
Fertilizer and lime expense per cow	\$26.52	\$19.27	\$28.21	\$31.34
Number of cows	33	33	28	38
Heifers per 10 cows	5.8	6.4	5.7	5.3

SELECTED FACTORS RELATED TO FEED COST
50 High Production New York Dairy Farms, 1956

Item	Average 50 farms	Average per farm		
		Bottom one-third by labor income	Middle one-third by labor income	Top one-third by labor income
<u>Purchased feed:</u>				
Dairy feed bought	\$3,838	\$3,682	\$3,781	\$4,047
Feed bought per cow	\$107	\$115	\$108	\$96
Feed bought per 100 lbs. milk sold	\$1.02	\$1.11	\$1.06	\$.94
Feed bought as per cent of milk receipts	24%	27%	25%	22%
<u>Roughage harvested:</u>				
Tons hay equivalent per cow	5.5	5.4	5.3	5.5
Crop acres per cow	3.1	3.1	3.2	2.9
Fertilizer and lime expense	\$810	\$788	\$694	\$941
Fertilizer and lime expense per cow	\$22.50	\$24.62	\$19.83	\$22.40
Number of cows	36	32	35	42
Heifers per 10 cows	6.4	6.6	6.3	6.2

Source: Unpublished thesis, Jack A. Smith, Cornell University, 1959.

COST CONTROL
83 New York Dairy Farms, 1956

		Bottom	Middle	Top
Feed bought per cow	\$138	\$158	\$148	\$113
Feed bought per 10,000 lbs. milk sold	\$119	\$138	\$128	\$ 97
Machinery expense per 10,000 lbs. milk sold	\$ 42	\$ 48	\$ 35	\$ 42
Crop expense per 10,000 lbs. milk sold	\$ 36	\$ 27	\$ 36	\$ 44
Dairy expense per 10,000 lbs. milk sold	\$ 33	\$ 35	\$ 37	\$ 28
Miscellaneous expense per 10,000 lbs. milk sold	\$ 30	\$ 32	\$ 26	\$ 31
Feed bought as per cent of milk receipts	29%	33%	31%	24%
Machinery expense as per cent of milk receipts	10%	11%	8%	10%
Crop expense as per cent of milk receipts	9%	6%	9%	11%
Dairy expense as per cent of milk receipts	8%	8%	9%	7%

50 high production farms

Feed bought per cow	\$107	\$115	\$108	\$ 96
Feed bought per 10,000 lbs. milk sold	\$102	\$111	\$106	\$ 94
Machinery expense per 10,000 lbs. milk sold	\$ 43	\$ 44	\$ 42	\$ 43
Crop expense per 10,000 lbs. milk sold	\$ 37	\$ 40	\$ 32	\$ 39
Dairy expense per 10,000 lbs. milk sold	\$ 27	\$ 31	\$ 26	\$ 25
Miscellaneous expense per 10,000 lbs. milk sold	\$ 35	\$ 38	\$ 32	\$ 35
Feed bought as per cent of milk receipts	24%	27%	25%	22%
Machinery expense as per cent of milk receipts	10%	11%	10%	10%
Crop expense as per cent of milk receipts	9%	10%	8%	9%
Dairy expense as per cent of milk receipts	6%	7%	6%	6%

Source: Unpublished thesis, Jack A. Smith, Cornell University, 1959.