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1969 NEW YORK POULTRY FARM BUSINESS SUMMARY

Forty-three poultrymen scattered over the State submitted records of their 1969 businesses for summary and analysis. Some records were from the Cornell electronic farm accounting program while others kept conventional record books. All accounts were checked by the farmer and the Extension Agent and sent to the College for summarization.

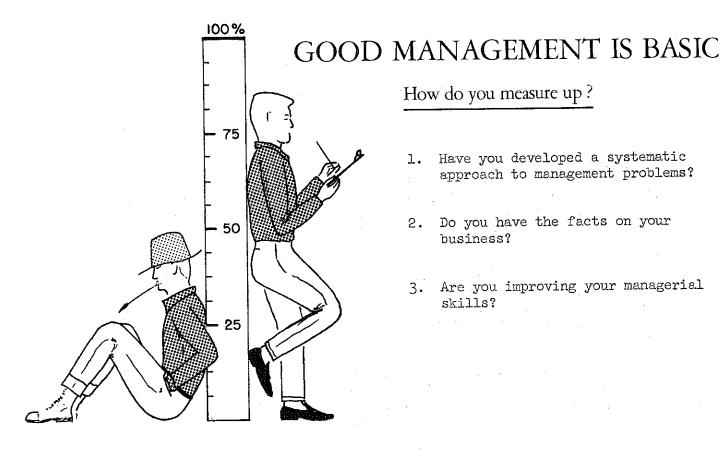
Twenty-three of the farms were layer operations with no crops. Thirteen farms were layer operations which also grew grain. There were four contract operations and three with one or more major enterprises in addition to the poultry. All 43 are included in a general summary but only the 23 straight layer operations and the 13 layer and grain crop operations are included in the detailed analysis.

This report is prepared in workbook form. Group averages are presented along with space for the figures from an individual business. This makes it convenient to systematically summarize and analyze an operation. This kind of study is useful for locating the strengths and weaknesses in a business.

Tools for use by managers of farm businesses are quite limited. A device for taking an analytical look at a business is one kind of management tool. This workbook is designed as a management tool for New York poultrymen.

Acknowledgements

This summary was prepared by C. A. Bratton, Department of Agricultural Economics, and G. H. Thacker, Department of Poultry Science, New York State College of Agriculture, in cooperation with Cooperative Extension Agents and Specialists S. E. Ackerman, A. Aja, G. A. Earl, Earl Howes, and W. J. Toleman.



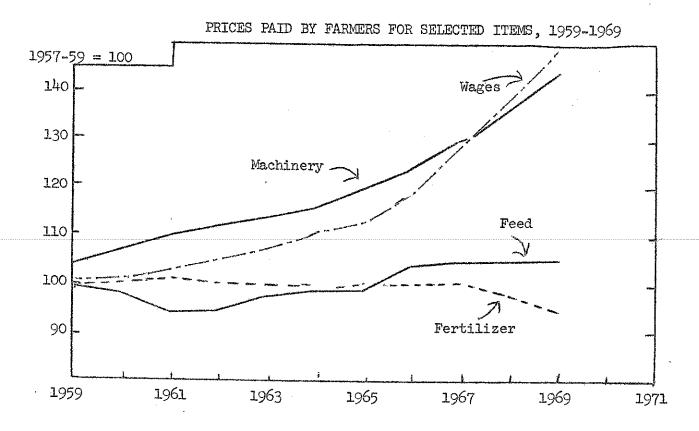
How do you measure up?

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

Steps in making a management decision:

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

This workbook can help you.



The overall USDA index of prices paid by farmers in the United States continues to rise. However, the prices of some inputs have risen much more than others. For example, the index of New York hourly farm wages in 1969 was up 49 percent from 1957-59, while fertilizer prices were down six percent.

Feed is the major expense item on a poultry farm. Poultry ration prices in 1969 were about the same as 1968 but less than in 1967 or in 1959. In contrast, wages and machinery prices in 1969 were at an all time high.

Table 3. PRICES PAID BY NEW YORK POULTRY FARMERS, 1959-69

		Index 195		100	Poultry ration	N.Y. farm
Year	Feed	Fertilizer	Wages	Machinery	(cwt.)	wages per hour
1959 1960 1961 1962	101 98 94 95	99 100 101 100	101 101 103 105	10 ¹ 4 107 110 112	\$4.13 4.03 3.85 3.89	\$1.12 1.12 1.14 1.17
1963 1964 1965 1966 1967	98 99 99 104 105	100 99 100 100	107 111 113 119 129	11 ¹ 4 116 120 12 ¹ 4 130	4.02 4.04 4.06 4.25 4.30	1.19 1.23 1.25 1.32 1.43
1968 1969	100 100	98 94	139 149	136 144	4.10 4.07	1.54 1.65

General Summary of All Forty-Three Farms

Forty-three poultry farm records were submitted for summary. The organization of these farms varied widely. There were four contract operations, three poultry with other major enterprises, thirteen poultry layers with grain production, and twenty-three straight layer operations. In this general section, all forty-three businesses are included. For the more detailed analysis in the sections that follow, only the twenty-three layer operations and the thirteen layer with grain crops are included.

Table 4. FARM BUSINESS FINANCIAL SUMMARY 43 New York Poultry Farms, 1969

	Average	Ra	ange
Item	43 farms	Low	High
Average Capital Investment	\$100,485	\$9,494	\$404,214
Total Farm Receipts Total Farm Expenses	144,975 119,083	5,951 4,886	457,399 444,759
Farm Income Interest @ 7% on Capital	\$ 25,892 	\$1,065 <u>665</u>	\$ 79,824 22,628
Labor Income per Farm	\$ 18,858	\$ - 2,154	\$ 61,402
Number of Operators	48		
LABOR INCOME PER OPERATOR	\$ 16,893	\$-2,154	\$ 61,402

Labor income is a measure of the return to the operator for his labor and management. It is the most commonly used measure for comparing the overall results of farm operations. For these 43 poultry farms, the average labor income per operator was \$16,893. In addition to the labor income, the operators usually have certain privileges such as a house to live in, eggs and poultry to use, and other miscellaneous items.

Labor incomes per operator ranged from a minus \$2,150 to a plus \$61,000. This is a great difference. There were two farms with minus labor incomes and fifteen with labor incomes per operator of over \$20,000. Fifteen, or one-third of the farms, had labor incomes between \$5,000 and \$15,000 (see page 12 for distribution.)

The average capital investment on these 43 farms was about \$100,000. The receipts averaged \$145,000 and the expenses \$119,000. Thus, on these farms, the receipts and the expenses were greater than the capital investment. "Capital turnover" on these farms, as measured by the number of years for the receipts to equal the capital, would be less than one (.69). This is in contrast to dairy businesses where commonly it takes two to three years for the receipts to equal the capital.

Table 5. GENERAL FARM BUSINESS FACTORS
43 New York Poultry Farms, 1969

Average		Range
43 farms	Low	High
2,9	1.0	7.4
1.8 19.1 55.2% \$423	O O NA NA	6.0 77.0 NA NA
13,700	2,000	49,480
1,101 380	209 115	3,859 817
215 4.8 \$3.77 \$.46	165 3.8 \$3.25 \$.35	272 5.7 \$5.11 \$.51
	43 farms 2.9 1.8 19.1 55.2% \$423 13,700 1,101 380 215 4.8 \$3.77	43 farms Low 2.9 1.0 1.8 0 19.1 0 55.2% NA \$423 NA 13,700 2,000 1,101 209 380 115 215 165 4.8 3.8 \$3.77 \$3.25

Poultry farm operations differ a great deal in their organization. Contract versus independent operations are one difference. The range in the capital investment is a reflection of this. The low capital investment was \$9,500 while the high was \$404,000. Similarly, the low expense reported was \$4,900 while the high was \$445,000. The wide range indicates that one should recognize certain limitations in the "averages" when they are used.

The labor force on these farms ranged from 1.0 to 7.4 man equivalent with an average of 2.9. The high farm, therefore, was not "large" from the standpoint of work force involved. For all 43 farms, over half the labor was hired and less than half was furnished by the operator and his family. The average labor expense per month of hired labor was \$423.

Number of hens is a common measure of size for a laying operation. The numbers varied from 2,000 to 49,500. These reflect the average number for the year. The number of eggs sold per hen averaged 215 but with a range from 165 to 272. The 215 average for the 43 farms compares with a reported New York State average for 1969 of 220 (see page 3).

Marketing arrangements differ with some selling all eggs wholesale while others sell all retail and some for hatching purposes. The average price received per dozen sold during 1969 was 46 cents with the range from 35 cents to 51 cents.

Feed is the major cost item on poultry farms. Efficiency of feed conversion is an important factor affecting incomes. It is not easy to arrive at this figure but efforts were made to calculate this factor. The average was 4.8 pounds per dozen eggs with the range from 3.8 to 5.7. Feed costs per hundredweight ranged from \$3.25 to \$5.11 with an average of \$3.77.

SUMMARY OF THE BUSINESS

The first step in a management analysis is a systematic summary of the business. In this portion of the study, we examine the physical resources, capital investment, receipts, expenses, and the financial summary for the year.

Labor, Livestock, and Crops Grown

An early step in the management analysis of any business is to look at the resources being used. This includes both the physical and financial resources. Management decisions must be based on the things you have to work with. Below are the averages for the physical resources of 36 New York poultry farms for 1969.

Table 6. LABOR FORCE, LIVESTOCK, AND CROPS GROWN 36 New York Poultry Farms, 1969

	,	Average or Number Reporting			
		23 farms		13 farms	
ItemMy_	farm	poultry c	nly	poultry and	l grain
Labor: Months of: Operators Familyunpaid Hired Total Man equivalent (No. men) Number of operators		(23 farms) (10 farms) (20 farms)	13.0 1.7 20.8 35.5 3.0	(13 farms) (7 farms) (13 farms)	14.8 2.0 17.3 34.1 2.8
Percent of labor hired			59%		51%
Livestock: (number) Laying hens Pullets raised		(9 farms)	15,760 12,700	(10 farms)	14,660 13,400
Crops: (acres grown) Hay Corn for grain Oats Wheat Total acres of crops				(4 farms) (13 farms) (8 farms) (8 farms)	19* 103* 30* 24* 143

^{*} Average of number reporting

Capital Investment

Capital is a sizeable and important input in present day poultry operations. This capital is invested in machinery and equipment, poultry, feed and supplies, and land and buildings. Some of the capital is owned by the operator and some is borrowed. The end-of-year farm inventory is used as the measure of capital investment. The inventory reflects the "market value" of items.

Table 7. FARM INVENTORY VALUES, JANUARY 1, 1970 36 New York Poultry Farms

		Amount per Farm		
Item	My farm	23 farms with poultry only	13 farms with poultry & grain	
Machinery & equipment	\$	\$ 25,554	\$ 31,899	
Poultry		20,909	17,883	
Other livestock		203	785	
Feed & supplies		5,278	11,591	
Land & buildings		48,861	53,211	
TOTAL INVESTMENT	\$	\$100,805	\$115,369	

Total investment on these farms ranged from \$11,000 to \$421,000. Seventeen of the farms had investments of more than \$100,000. The inventory of machinery and of feed and supplies was larger on the farms growing grain which is logical.

How the capital is used is more important than the amount. Below are figures for analyzing the efficiency of the use of capital.

Table 8. CAPITAL INVESTMENT ANALYSIS

Item	My farm	23 farms with poultry only	13 farms with poultry & grain
Total investment/man	\$	\$33,600	\$41,200
Total investment/hen	\$	\$6.40	\$7.87
Machinery investment/hen	\$	\$1.62	\$2.18
Land & building/hen	\$	\$3.10	\$3. 63
% land & buildings are of total investment		48%	46%

Receipts

In the examination of any business, a look at the receipts reveals the major sources and amounts of income. It also gives an indication of the size of operation. Many nonfarm businesses use gross sales as a measure of size.

Table 9. FARM RECEIPTS
36 New York Poultry Farms, 1969

		the second secon	
Item	My farm	23 farms with poultry only	13 farms with poultry & grain
Egg sales	\$	\$149,577	\$121,720
Livestock sold		3,478	6,614
Crop sales		36	3,431
Miscellaneous		1,920	2,558
Total cash farm receipts	\$	\$155,011	\$134,323
Increase in inventory		4,888	8,030
TOTAL FARM RECEIPTS	\$	\$159,899	\$142,353
			·

Total cash receipts averaged \$155,000 per farm for the farms with poultry only and \$134,000 for the farms with poultry and grain. Egg sales accounted for 96 percent and 91 percent respectively of the cash receipts on the two groups of farms.

Increases in inventory are usually due to expansion or improvements in the business. Inventory increases are considered as farm receipts. The major increases for the thirteen farms with poultry and grain were machinery and equipment \$3,700, and feed and supplies \$3,400.

Table 10.

INCOME ANALYSIS

Item	My farm	23 farms with poultry only	13 farms with poultry & grain
Av. price/doz. of eggs sold Total cash receipts/man	\$	45.0¢ \$51,670	42.5¢ \$47,970
Total cash receipts per \$1,000 investment	\$	\$1,538	\$1,164

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Expenses

Cost control is an important job of any manager. This is certainly true for poultrymen. The first step in cost control is to know what the expenses are and how they compare with those of similar businesses.

Table 11. FARM EXPENSES
36 New York Poultry Farms, 1969

Item	My farm	23 farms with poultry only	13 farms with poultry & grain
Hired labor	\$	\$ 9,060	\$ 7,244
Layer feed bought		57,119	45,482
Other feed		5/1/4	493
Machine hire		91	868
Machinery expense		2,109	2,729
Auto expense (farm share)		206	301
Gas and oil		1,104	1,986
Livestock expense		6,910	5,918
Lime & fertilizer		5	2,842
Seeds and plants			599
Spray & other crop expense		9	369
Building expense		930	1,266
Taxes		1,103	1,362
Insurance		1,044	1,155
Electricity		1,356	1,377
Telephone		288	322
Livestock purchases		19,905	12,513
Eggs bought for resale*		21,313	12,922
Rent		114	663
Miscellaneous		2,119	1,048
TOTAL CASH OPERATING EXPENSE	\$	\$125,029	\$101,459
New machinery		5,261	8,883
Real estate		1,729	3,453
Unpaid labor	***************************************	496	600
Decrease in inventory			
TOTAL FARM EXPENSE	\$	\$132,5 1 5	\$114,395

^{* 12} farms with poultry only and 5 farms with poultry and grain

Financial Summary

The financial summary of a poultry business can be measured in several ways. There is no one best measure. It is often helpful to look at several of the measures.

Farm income measures the return from the business to all capital and the operator's labor and management. Farm income is the difference between total receipts, including increase in inventory, and total expenses, including decrease in inventory but excluding interest payments.

Table 12.

FARM INCOME AND LABOR INCOME 36 New York Poultry Farms, 1969

Item	My farm	23 farms with poultry only	13 farms with poultry & grain
Total farm receipts Total farm expenses FARM INCOME	\$ \$	\$159,899 132,515 \$ 27,384	\$142,353 114,395 \$ 27,958
Interest on average capital at 7% Labor income per farm Number of operators LABOR INCOME PER OPERATOR	\$	6,885 \$ 20,499 25 \$ 18,858	8,154 \$ 19,804 16 \$ 16,091

Labor income is the return to the farm operator for his labor and management. This is the measure most commonly used when studying farm businesses. To get the labor income, a seven percent interest charge on all capital is subtracted from the farm income. (In previous years, a five percent interest charge has been used.) The average labor income per operator for the 23 farms was \$18,900, and for the 13 farms \$16,100. The distribution for all 43 farms is shown below.

Labor income	Farms			
per operator	Number	Percent		
Minus 0 - \$ 4,999 \$ 5,000 - \$ 9,999 \$10,000 - \$14,999 \$15,000 - \$19,999 \$20,000 or more	2 3 9 6 8 <u>15</u> 43	5 7 21 14 18 35 100		

The labor income per hen was \$1.30 for the 23 farms and \$1.35 for the 13 farms. If the operator's labor is valued at \$8,000 per year, the return to "management" per farm for the two groups would be \$11,803 and \$9,958 respectively. The management return would be 7.4 percent and 7.0 percent respectively of the total farm receipts.

Table 13. RATE OF RETURN ON INVESTMENT 36 New York Poultry Farms, 1969

Item	My farm	23 farms with poultry only	13 farms with poultry & grain
Farm income	\$	\$27,384	\$ 27,958
Value of operator's labor*		8,696	9,846
Return on investment	\$	\$18,688	\$ 18,112
Average capital investment	\$	\$98,361	\$111,454
RATE OF RETURN ON INVESTMENT		19.0%	16.2%

^{* \$8,000} per operator. Some farms had more than one operator.

Rate of return on investment is calculated by deducting a charge for the operator's labor from the "farm income." This is then divided by the average investment for the year to determine the rate of return on investment. In the above calculation, \$8,000 has been used as the value of the operator's labor. The return on investment represents the return to "capital" and "management" combined.

Net farm cash flow reflects the cash available from the year's operation of the farm business for family living, interest and debt payments, and new capital purchases or investments. A family may have had additional cash available if some member of the family had a nonfarm income, or if money was inherited or borrowed.

Debt repayment ability is a measure of the amount of cash available for debt payments. It is calculated by deducting family living expenses from the farm cash operating income. It is assumed here that new machinery and real estate are purchased with borrowed capital. This measure is useful in planning debt repayment schedules.

Table 14. FARM CASH FLOW AND DEBT REPAYMENT ABILITY 36 New York Poultry Farms, 1969

Item	My farm	23 farms with Poultry only	13 farms with poultry & grain
Total cash receipts	\$	\$155,011	\$134,323
Total cash operating expense		125,029	101,459
NET FARM CASH FLOW	\$	\$ 29,982	\$ 32,864
Family cash living expenses*		8,696	9,846
DEBT REPAYMENT ABILITY	\$	\$ 21,286	\$ 23,018

^{*} Estimated at \$8,000 per operator per year

ANALYSIS OF THE FARM BUSINESS

Farm business records provide information which can be used in making management decisions. A manager is always interested in finding ways to improve the income. A number of measures have been developed to aid in analyzing farm businesses for strong and weak points which is a first step toward improving the income.

In this section, four business factors are examined. These are: size of business, rates of production, labor efficiency, and cost control. The 1969 averages for selected measures for each of these factors are reported.

When analyzing a farm business, remember that many of the measures are interrelated. This means that all of the factors should be examined before arriving at major conclusions. A complete analysis of the business factors should point up the major strong and weak points of a farm business.

Size of Business

Size is usually the first factor to be examined when analyzing a farm business. Size of farm has an important effect on other factors such as labor efficiency and cost control. The prices received and paid by a farmer are often affected by the volume involved which is a function of the size factor.

Farm management research has shown that in general larger farm businesses make larger incomes. There are two basic reasons for this. Larger businesses make possible more efficient use of inputs such as equipment, the regular labor force, and other overhead items. Secondly, there are more units of production (eggs) on which to make a profit. However, when a business is unprofitable, these same factors operate and large farms have large losses.

Table 15. MEASURES OF SIZE OF BUSINESS 36 New York Poultry Farms, 1969

Dozens of eggs sold* 331,710 286,715 Man equivalent 3.0 2.8 Total work units 1,213 1,119	Measure	. My farm	23 farms with poultry only	13 farms with poultry & grain
Man equivalent 3.0 2.8 Total work units 1,213 1,119	Number of hens		15,760	14,660
Total work units 1,213 1,119	Dozens of eggs sold*		331,710	286,715
	Man equivalent		3.0	2.8
Marke 1 forms received a day 1000 day 1	Total work units	<u> </u>	1,213	1,119
Total larm receipts 5 \$159,099 \$142,355	Total farm receipts	\$	\$159,899	\$142,353
Total investment \$\$ \$100,805 \$115,369	Total investment	\$	\$100,805	\$115,369

^{*} Includes eggs bought for resale

Rates of Production

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

Table 16. MEASURES OF RATES OF PRODUCTION 36 New York Poultry Farms, 1969

Measure	My farm	23 farms with poultry only	13 farms with poultry & grain
Eggs produced/hen		216	210
Bushels corn/acre			82
Bushels oats/acre		desir half	NA
Bushesl wheat/acre			NA
3,522,52			

Eggs produced per hen is used in measuring the rate of production on poultry farms. Production per hen is calculated by dividing total eggs reported by the average number of hens for the year. Some farmers bought eggs for resale to supplement their own production. For eggs per hen, the eggs bought have been deducted from the dozens sold to get the eggs produced.

The eggs sold per hen averaged 216 and 210 for the two groups. This compares with an average of 215 for all farms as shown on the Farm Business Chart (page 21). The range for the 36 farms was from 165 to 272 eggs sold per hen.

The effect of eggs sold per hen on labor income is illustrated below.

Table 17. EGGS SOLD PER HEN AND LABOR INCOME 36 New York Poultry Farms, 1969

Eggs sold per hen	Number of farms	Average number hens	Labor income per operator
Less than 210	17	16,200	\$13,819
210 - 230	12	13,800	\$18,010
More than 230	7	15,563	\$30,128

Labor Efficiency

Labor efficiency is sometimes claimed to be the most important single business factor on farms today. This is brought about by the rising wage rates and the fact that the operator's labor income is a function of his labor output. If a poultryman wants top efficiency from his hired worker's time as well as his own, he must keep a close watch on the factors which affect labor efficiency.

Table 18. MEASURES OF LABOR EFFICIENCY 36 New York Poultry Farms, 1969

Measure	My farm	23 farms with poultry only	13 farms with poultry & grain
Doz. eggs sold/man*		110,570	102,400
Number hens/man		5,250	5,230
Work units per man		404	400

^{*} Includes eggs bought for resale

The farms with poultry only had about the same labor efficiency as the farms with poultry and grain when measured by number of hens and work units per man. The poultry only showed larger numbers for dozens of eggs sold per man. This may indicate that the poultry only are buying eggs for resale to balance the time spent growing crops by the poultry and grain operators.

The relationship of labor efficiency and labor income is shown in the table below.

Table 19. HENS PER MAN AND LABOR INCOME 36 New York Poultry Farms, 1969

Hens	No. of	Labor income
per man	farms	per operator
Less than 4,000	11	\$10,874
4,000 - 6,000	15	\$17,606
More than 6,000	10	\$27,824

Labor efficiency is affected by many things. Size of operation tends to reduce the overhead time per unit and in turn increases labor efficiency. Arrangements of buildings and work areas is another factor. Work methods likewise affect the output per worker. The human factor or how fast a person works also enters into this business factor. An operator must look at all of these when he tries to find ways to improve the labor efficiency of his business.

Cost Control

These poultry farms spent an average of \$363 and \$313 per day respectively. With expenses of this amount, cost control becomes important on farms. As more "input" items are purchased, cost control has a greater effect on incomes. It is difficult to measure cost control. Nonetheless, good records properly used can give you some useful checks.

Feed, <u>labor</u>, and <u>machinery</u> are major cost items on poultry farms. However, it is also important to watch the minor costs. Small leaks can build up into sizeable losses. The next three pages are provided to help you study your costs.

Table 20. COST CONTROL MEASURES
36 New York Poultry Farms, 1969

Item	Му	farm		farms with ultry only	13 farms with poultry & grain
Layer feed bought per hen	3		_	\$3.62	\$3.10
Feed bought/doz. eggs produced			¢	20.1ϕ	17.7ϕ
Lbs. feed/doz. eggs produced			_	4.8	4.6
Total labor cost per hen*	ß	·	_	\$1.16	\$1.21
Total labor cost/doz. eggs produced*		<u></u>	_¢	6.4¢	6.9¢
Building repairs per hen			_¢	6¢	9¢
Electricity per hen			_¢	9¢	9¢
Taxes per hen			_¢	7ϕ	9¢
Insurance per hen			_¢	7¢	8¢
Lime & fertilizer per crop acre	\$	<u></u>		, mare 4444	\$20
Total farm production expenses/hen (Total less inventory increase and eggs bought)	\$		-	\$6.75	\$6. 38
Total expenses per \$100 receipts	\$			\$83	\$80

^{*} Includes operator's labor

For the above measures, it must be kept in mind that the "poultry and grain" farms had crop enterprises which affect some cost control measures.

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

Table 21. POWER AND MACHINERY COSTS 36 New York Poultry Farms, 1969

Item	My farm	23 farms with poultry only	n 13 farms with poultry & grain	
Beginning inventory \$		\$24,534	\$28,328	
New machinery bought		5,261	8,749	
Total	\$	 \$29,795		
End inventory \$		\$25,554	\$31,899	
Machinery sold		85	m cs	
Total	\$	<u>\$25,639</u>	\$31,899	
Depreciation \$		\$ 4,156	\$ 5 , 178	
Int. @ 7% av. inventory		1,753	2,108	
Gas and oil		1,104	1,986	
Machinery repairs		2,109	2,729	
Machine hire		91	868	
Auto expense (f.s.)		206	301	
Electricity (f.s.)		1,356	1,377	
Total power and machinery cost	\$	\$10,775		
Less: Gas tax refund \$	·	\$ 6	\$ 93	
Income from machine work		67	Bank Junity	
NET POWER AND MACHINERY COST	\$	\$10,702	\$14,454	
Net power & machinery cost: per hen		_¢ 68.	¢ 99¢	
per man	\$	- \$ 3,567	, , , , , , , , , , , , , , , , , , , ,	
per dozen eggs produced*	·	¢ 3.8	() ,	

Farmers frequently justify high machinery costs on the basis that the machinery saves labor. The combined machinery and labor cost measure gives a good check.

Table 22. LABOR AND POWER AND MACHINERY COSTS 36 New York Poultry Farms, 1969

Item	My farm	23 farms with poultry only	13 farms with poultry & grain
Value of operator's labor* Hired labor Unpaid family labor	\$	\$ 8,696 9,060 496	\$ 9,846 7,244 600
TOTAL LABOR COSTS Net power & machinery cost	\$	\$18,252 10,702	\$17,690 14,454
TOTAL LABOR & MACHINERY COSTS	\$	\$28,954	\$32,144
Total per hen Total per doz. eggs sold Total per work unit	\$ \$	\$1.84 ¢ 10.2¢ \$24	\$2.19 12.5¢ \$29

^{*} Valued at \$8,000 per operator

On both groups of farms, labor cost was greater than the power and machinery cost. It is important to watch these costs. They can "eat into" the net returns.

Below are some measures for use in examining your labor costs.

Table 23. LABOR USE ANALYSIS

Item	My farm	23 farms with poultry only	13 farms with poultry & grain
Months of hired labor		20.8	17.3
Hired labor expense Labor expense/month hired	\$	\$9,060 \$436	\$7,244 \$419
Percent of total labor by:	Ψ	φ+3∪	Ψ+±9
Operator		37%	43%
Unpaid family		5%	6%
Hired		58%	51%

Array of Selected Farm Business Factors

Some of the records included items of chicken arithmetic which had been calculated. Those reported have been arrayed below. You can see how your factors compare with the others reporting.

Eggs sold per layer	Av. price paid for feed	Av. price received for eggs	Lbs. feed per doz. eggs	Hens per man
272 254 246 239 236 236 229 225 225 225 2219 217 217 217 216 213 211	\$65 66 70 70 71 71 72 72 72 73 73 73 73 73 73 74 74 74	\$.51 .50 .50 .50 .50 .49 .48 .48 .48 .47 .47 .47 .47 .46 .46 .46 .45	3.8 3.8 4.0 4.1 4.1 4.5 4.5 4.6 4.7 4.8 4.8	16,542 15,461 11,975 11,730 11,629 9,850 7,368 7,000 6,905 6,466 5,677 5,600 5,541 5,014 5,000 4,933 4,913 4,909
208 208 208 206 206 203 200 196 194 194 190 189 183 172 165	74 75 75 76 76 77 77 78 78 78 78 78 81 85 86 86	.45 .45 .44 .44 .42 .40 .40 .40 .39 .39 .39 .39 .39 .38 .38 .38	4.8.9.9.9.0.0.1.1.2.3.4.4.4.5.5.6.7.7.5.5.5.5.5.5.5.5.5.5.5.5.5.5.5	4,858 4,795 4,626 4,400 4,341 4,179 4,038 3,950 3,544 3,316 3,952 2,941 2,9801 2,650 2,650 2,040

FARM BUSINESS CHART

FARM	OF		YEAR
TOTAL	ACRES IN THE	FARM	ACRES OF TILLABLE LAND

Success in farming is the result of many factors. Farm business studies show that the most important factors under the farmer's control are size of business, production rates of crops and animals, labor efficiency and selection of enterprises.

The chart below shows the range of the experience of commercial farmers in New York with respect to size of business, production rates and labor efficiency.

The figure at the top of each column is the median of the highest ten per cent of the farms in that factor. For example, the figure 3.8 at the top of the column headed "Tons of Hay" is the median of the ten per cent of the farms with the highest yield of hay. The other figures in the column are the medians for "the next best 10 per cent," "the 10 per cent below that," and so forth. The figure 1.2 at the bottom of the column is the median of the ten per cent of the farms with the lowest yield of hay.

Each of the columns is independent of the others. The figure 22 at the top of the column headed "Tons of Corn Silage" is the median of the ten per cent of the farms with the highest yield of corn silage.

Hay, Silage, Grain Yields per Acre				Vegetable Yields per Acre				Fruit Yields per Acre							
Tons of Hay	Tons of Corn Sil- age	Bu. of Corn	Bu. of Oats	Bu. of Wheat	Lbs. of Dry Beans	Cwt. of Pota- toes	Tons of Cab- bage	Cwt. of Onions	Tons of Toma- toes	Net Tons of Sweet Corn	Tons of Snap Beans	Bu. of Ap- ples	Bu. of Pears	Tons of Grapes	Tons of Sour Cher- ries
3.8	22	120	92	58	2,300	340	32	470	23	5.0	2.8	540	330	7.5	6.6
3.0	19	100	80	52	1,900	305	26	410	19	4.4	2.5	480	260	6.0	4.6
2.7	17	90	70	47	1,700	285	23	370	17	3.9	2.3	430	230	5.5	3.6
2.4	16	83	65	44	1,500	265	20	345	15	3.7	2.1	390	200	5.0	3.0
2.2	15	78	60	41	1,300	250	18	320	14	3.5	1.9	355	180	4.6	2.6
2.1 1.9	14 13	73 65	56 52	39 37	1,100 1,000	240 225	16 14	300 280	13 12	3.3 3.1	1.8 1.7	325 295	160 140	4.2 3.8	2.3 2.0
1.7	12	55	48	34	900	205	12	250	11	2.8	1.5	260	$\frac{140}{120}$	3.4	1.6
1.5	11	$\frac{35}{45}$	40	30	800	185	10	220	10	2.3	1.3	220	100	3.0	1.0
1.2	8	30	30	25	600	150	8	170	9	1.5	1.1	180	70	2.5	0.8

Dairy Farms					Labor			Po	oultry Fa	rms		
Number of Cows	Pounds of Milk Sold	Pounds Milk Sold per Cow	Cows per Man	Pounds of Milk Sold per Man	Total Work Units	Man Equiv- alent	Work Units per Man	Number of Hens	Eggs Sold per Hen	Hens per Man	Dozens of Eggs Sold per Man	Pounds Feed per Dozen Eggs
95	1,000,000	14,500	38	475,000	1,000	3.5	420	55,000	250	12,000	240,000	4.0
60	640,000	12,500	32	350,000	720	2.7	340	30,000	235	9,500	175,000	4.3
50	530,000	11,500	28	300,000	590	2.3	310	20,000	225	7,500	125,000	4.6
42	450,000	10,900	25	260,000	520	2.0	290	16,000	220	6,000	100,000	4.7
39	400,000	10,300	23	230,000	460	1.8	270	12,000	217	5,000	85,000	4.8
36 32 28 24 20	355,000 315,000 265,000 210,000 150,000	9,700 9,000 8,100 7,200 6,000	21 20 19 17 14	210,000 190,000 175,000 160,000 120,000	430 390 350 310 250	1.6 1.4 1.3 1.2 1.0	250 230 210 190 160	9,500 7,000 5,200 4,000 3,000	214 210 205 200 185	4,000 3,500 3,000 2,500 2,000	75,000 65,000 55,000 45,000 35,000	4.9 5.0 5.2 5.4 5.8

HOW TO USE THIS CHART

w lines in each column to show the rank of the farm business being studied. For example, if the farm produced 57 bushels of oats per acre v a line in the "oats" column between the 56 and 60.

w heavy lines so that you can see them easily.

not draw lines for factors which are of only minor importance on the farm being studied.

WORK UNITS FOR LIVESTOCK AND CROPS MAN EQUIVALENT Number or Work units Total work acres on per head Workers Full-Time Months LIVESTOCK or per acre units this farm Operator(s) 7.5 Dairy Cows 2 Family (paid) **Beef Cows** 2 Heifers Family (unpaid) Hens (production only) 0.04 Hired men 0.002 =Egg processing (per doz.) Other 0.004Pullets raised Total 0.003 =Broilers raised Man equivalent **Brood sows** (Total ÷ 12) 0.15 Hogs raised 0.5 **Ewes** Yield per acre **Total Crop CROPS** 0.6 _ tons Hay X _ tons Corn Silage X 0.8 tons 0.6 Corn for grain _ bu. 0.6 Oats X _bu. 0.6 _bu. Wheat \times 1.5 lbs. Dry beans _× 6 **Potatoes** _X _ cwt. Cabbage _ tons 1 Snap beans for processing _ tons 12 Onions _× _cwt. X Apples—growing 4 .bu. 0.02 Apples—harvest—per bushel _× **WORK UNITS PER MAN OTHER** (Total work units + man equivalent) Work off farm, days Marketing $-\times$ $-\times$ TOTAL WORK UNITS pounds of milk sold per cow Total pounds of milk sold no. of cows Total pounds of milk sold _pounds of milk sold per mar man equivalent Number of cows man equivalent _cows per man Total dozens of eggs sold dozens of eggs sold per hea no. of hens Dozens of eggs per hen × 12 = _eggs sold per hen Number of hens man equivalent hens per man Total dozens of eggs sold man equivalent doz. of eggs sold per man Total lbs. of feed for laying flock_ doz. of eggs sold __lbs. of feed per doz. eggs

Financial Situation

Managing finances is an important part of farming today. Twelve of the 43 poultrymen included their financial situation in their records. These have been summarized and are reported below. It is helpful to examine your financial situation when you analyze your business.

Table 24. FARM FAMILY FINANCIAL SITUATION 12 New York Poultry Farms, 1969

Item		My farm	Average 12 farms
Assets			
Land & buildings	\$		\$42,978
Machinery & equipment			29,920
Poultry & livestock			14,659
Feed & supplies			7,825
Non-poultry farm assets*			<u>11,345</u>
Total Farm Assets		\$	\$106,727
Non-farm assets			30,359
TOTAL ASSETS		\$	\$137,266
<u>Liabilities</u>			
Real estate mortgage	\$, , , , , , , , , , , , , , , , , , , 	\$23,971
Equipment mortgage			12,479
Secured notes			3,280
Unsecured notes		, , ,	83
Open accounts			2,291
TOTAL LIABILITIES			42,104
NET WORTH		\$	\$ 95,162
Percent equity			h 699
Percent debt on real estate			579
Number of hens			12,259
Total debt per hen		\$	\$3.43

^{*} Farms with enterprises other than poultry have sizeable inventories in this category

Table 25. NEW YORK POULTRY FARM SUMMARIES 1966, 1967, 1968 and 1969

Factor	1966	1967	1968	1969
Number of farms	30	26	36	43
Man equivalent	2.7	2.8	2.7	2.9
Number of hens	11,400	13,900	14,800	13,700
Investment Land & buildings Machinery Livestock & poultry Feed & other	\$ 48,396	\$ 54,831	\$ 50,257	\$ 48,818
	25,114	26,371	27,199	26,463
	19,254	20,202	20,440	18,626
	5,246	5,653	5,374	8,285
Total Receipts	\$ 98,010	\$107,057	\$103,270	\$102,192
Egg sales Livestock sales Other	\$ 92,299	\$ 84,852	\$102,249	\$127,852
	3,571	3,625	3,819	6,214
	21,473	8,090	7,663	4,392
Total	\$117,343	\$ 96,567	\$113,731	\$138,458
Expenses Feed bought Hired labor Pullets & livestock purcha Electricity & telephone Other Total	\$ 48,996	\$ 50,245	\$ 48,117	\$ 48,436
	5,571	5,943	6,750	8,075
	sed 10,711	10,656	12,843	14,804
	1,234	1,546	1,554	1,596
	27,972	12,161	25,006	36,304
	\$ 95,297	\$ 80,551	\$ 94,270	\$109,215
Business Factors Average price per doz. Eggs per hen Hens per man Lbs. feed per doz. eggs	42.6¢	32.0¢	36.7¢	45.6¢
	216	233	216	215
	4,200	4,800	5,500	4,720
	5.0	4.5	4.8	4.8
Labor income per operator	\$ 14,930	\$ 5,437	\$ 9,064	\$ 16,893

Progress of the Farm Business

One phase of business analysis is that of comparing your business with that of other poultrymen. Another kind of analysis is that of comparing your current year's business with that of previous years. This shows the progress you are making. In planning ahead, it is helpful to set business targets or goals, which should be related to the progress you have been making.

Your current business analysis will give you the factors for 1969. You will need to refer to earlier summaries for the 1967 and 1968 data.

				1970
	<u> 1967</u>	<u> 1968</u>	<u> 1969</u>	<u>target</u>
Size of Business Average number of layers Value of egg sales Man equivalent	\$	\$	\$	\$
Rate of Production Eggs produced per hen				
Labor Efficiency Hens per man Dozen eggs sold per man	***************************************			
Prices Average price per dozen	\$	\$	\$	\$
Cost Control Layer feed bought per hen Lbs. feed per dozen eggs Labor cost per hen Machinery cost per hen Total expenses/\$100 receipts	\$ 5 5	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	\$ \$ \$ \$	\$
Capital Efficiency Total inventory value Total investment/hen Farm receipts/\$100 investment	\$ 6	\$ \$ \$	\$ \$ \$	\$
Financial Summary Total Farm Receipts Total Farm Expenses Labor Income/Operator	\$ 5	\$ \$	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	\$\$ -
Total debt outstanding Debt per hen	69-69-	\$	\$ \$	\$
Net Worth	\$	\$	\$	\$

Summarizing the Analysis

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

Now take a careful overall look at your business. Summarize the strong and weak points revealed from the detailed analysis. This will help you to locate the trouble spots or problems. In view of 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.

.va 10.	DATE CALLED	
1.		
2.		
3.		
4.		•
POIN	TS .	
1.		
2.		-
3.		_
4.		_
R PRO		
1.		_
2.		•••
3.		_
4.		
OSED	CHANGES TO STRENGTHEN THE BUSINESS	
1.		_
2.		
3.		_
	1. 2. 3. 4. POIN 1. 2. 3. 4. 2. 4. POSED 1.	2. 3. 4. POINTS 1. 2. 3. 4. R PROBLEMS TO BE SOLVED 1. 2. 3. 4. POSSED CHANGES TO STRENGTHEN THE BUSINESS 1. 2. 3.

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

		My business in 1969	Proposed Change #1	Proposed Change #2
I.	Farm Receipts		oriente // T	Official The
	Egg sales	\$	\$	\$
	Livestock sold	T	Ψ	Ψ
	Crop sales			
	Miscellaneous receipts			
	Total Cash Receipts	\$	\$	\$
	Increase in inventory	·	Υ	Ψ
	Total Farm Receipts	\$	\$	\$
		*		Υ
II.	Farm Expenses			
	Hired labor	\$	\$	\$
	Layer feed bought	Ψ	Ψ	Ψ
	Other feed bought	 -		
	Machine hire	*************	######################################	
	Machinery expense	-		
	Auto expense (farm share)			
	Gas and oil			
	Livestock expenses		·	
	Lime and fertilizer			
	Seeds and plants			
	Spray and other crop expense		F	
	Building expense			
	Taxes			
	Insurance			****
	Electricity			
	Telephone			
	Livestock purchases	***************************************		
	Eggs bought			
	Rent			
	Miscellaneous			
	Total Cash Operating Expenses	φ	ф	A
	The of worth the first of the second	Ψ	Φ	\$ <u></u>
	New machinery		•	
	Real estate			
	Unpaid labor			
	Decrease in inventory			***************************************
	Total Farm Expenses	\$	\$	¢
		4	Ψ	Ф
II.	Farm Financial Summary	•		•
	Capital Investment	de de	ф .	4
		Ψ	<u> </u>	\$
	Total Farm Receipts	\$	-\$	\$ ⁻
	Total Farm Expenses			I
	Farm Income	\$	\$	\$
	Interest on Capital			5
	LABOR INCOME	\$	\$	\$

Family Living Expenditures

Family living expenses have first claim on farm income. In any farm business financial planning, it is important that the family living expenses be considered. Below are the living expenditures for families in Illinois who were in record keeping projects.

FAMILY LIVING EXPENDITURES
Illinois Farm and Urban Families, 1967

		Aver	Average of	
•		176 farm	79 urban	
Item	My family	families	families	
Number in family		4.1	4.0	
Average age of husband		45	140	
Living Expenses		i - 000	ф л 000	
Food	\$	\$ 1,200	\$ 1,299 147	
Fuel		197	242	
Electricity, gas, and water	And the state of t	172		
Telephone		64	103	
Household supplies and bank	-	148	142	
Paid service and laundry		59	52	
Housing		536	1,470	
Furnishings and equipment		427	425	
Clothing		493	487	
Personal care	<u> </u>	172	294	
Transportation		442	1,368	
Medical care		689	477	
Recreation		311	470	
Education and reading		272	368	
Church and welfare		418	365	
Gifts		293	1.96	
Total Living Expenses	\$	\$ 5,893	\$ 7,905	
Income taxes		756	1,038	
Social Security		245	212	
Life insurance	 	573	489	
Savings and investments		<u>3,153</u>	2,050	
Total Family Expenditures	\$	\$10,620	\$11,69 ^L	

The urban family living expenses averaged about \$2,000 more than the farm families. The income taxes for the urban families were higher, while their savings and investments were lower than for the farm families. Housing and transportation for urban families were considerably higher than for the farm families.

Table 27. AVERAGE FARM COST OF PRODUCING EGGS 36 New York Poultry Farms, 1969

Item	My farm	23 farms wit poultry only	h 13 farms with poultry & grain
Farm expenses	\$	\$132,515	\$114,395
Interest at 7%		6,885	8,154
Operator's labor*		8,696	9,846
Total Costs	\$	_ \$148,096	5 \$132,395
Total receipts	\$	\$159 , 899	\$142,353
Less egg sales		149,577	121,720
Other Income	\$	\$ 10,322	<u>\$ 20,633</u>
Cost of Producing Eggs (Total less other income)	\$	_ \$137,77 ¹	\$111,762
Dozen eggs sold		_ 331,706	286,715
Cost per doz. eggs sold		_¢ 41.5	i¢ 39.0¢
Average price received	- 1111-1111111111	_¢ 45.0	0¢ 42.5¢

^{*} Figured at \$8,000 per operator but some farms had more than one operator

By adding an estimate of the value of the operator's labor and interest on the capital investment to the total farm expenses, the farm cost of producing eggs can be calculated. The value of the operator's time here was estimated at \$8,000 per year. Receipts for items other than eggs are credited against the total cost. This assumes that these items were produced at cost.

Farm expenses include costs for eggs purchased for resale. This tends to impose some egg market values in the calculation of production costs.

The cost per dozen of producing eggs was less for the thirteen farms that had poultry and grew grain than for the 23 farms with poultry only. This is only a general method of calculation of the cost of producing eggs but it gives an overall indication of the costs.

FARM BUSINESS SUMMARY Average of 36 New York Poultry Farms, 1969

		<u> </u>	
CAPITAL INVESTMENT	- 1- 1-0	RECEIPTS	÷
1/1/69	1/1/70 5 27,845 20,229 7,558 50,432	Egg sales Livestock sold Crop sales Miscellaneous	\$139,517 4,611 1,262 2,150
	3106,064	Total Cash Receipts Increase in Inventory	\$147,540 6,022
EXPENSES		TOTAL FARM RECEIPTS	\$1 53 ,5 62
Labor Hired	8,404	FINANCIAL SUMMARY	
Unpaid Feed	533	Total Farm Receipts Total Farm Expenses	\$153,562 125,972
Layer feed bought Other feed	52,917 33 ⁴	Farm Income Interest on average	\$ 27,590
Power and Machinery Machine hire	371	capital @ 7%	7,216 \$ 20,374
Machinery repair	2,333 241	Farm Labor Income Number of operators	φ 20,5; . 4 <u>1</u>
Auto expense Gas and oil Electricity	1,423 1,364	LABOR INCOME/OPERATOR	\$ 17,778
Poultry		BUSINESS FACTORS	•
Livestock purchases Eggs bought for resale Livestock expense	17,236 18,283 6,552	Man equivalent Number of hens Number of pullets raised	2.9 15,360 13,090
<u>Crop</u> Fertilizer and lime	1,029	(19 farms) Dozens of eggs sold	315,460
Seeds and plants Spray and other	217 139	Eggs produced/hen	214
Real Estate Land, bldg., & fence repairs	1,051	Dozens of eggs sold/man Hens per man	108,780 5,300
Taxes Insurance Rent	1,197 1,083 312	Lbs. feed/doz. eggs product Av. price/cwt. feed bought Av. price/doz. eggs	ed 4.8 \$3.77 \$.44
Capital Items New machinery New real estate	6,569 2,352		
Other Telephone Miscellaneous	300 1,732		
TOTAL FARM EXPENSES	\$125,972		