October 1984

A.E. Ext. 84-27

# Poultry Farm Business Summary 1983

D.L. Cunningham

**Department of Poultry and Avian Sciences** 

A.C. Lowry

**Department of Agricultural Economics** 

New York State College of Agriculture and Life Sciences A Statutory College of the State University Cornell University, Ithaca, New York, 14853

#### TABLE OF CONTENTS

INTRODUCTION 1	
Good Management is Basic 2	
General Summary of All Farms 3	
SUMMARY OF THE EGG PRODUCING BUSINESSES	
Physical Resources and Business Practices	
Capital Investment	
Receipts	
Expenses	
Financial Summary	
Farm income	
Labor and management income	
Rate of return on investment	
Net farm cash flow and debt repayment ability	
······································	7
ANALYSIS OF THE EGG PRODUCTION BUSINESSES	
Size of Business 11	
Rates of Production	
Labor Efficiency	
Cost Control	
Labor and machinery costs	
Comparison of Recent Summaries	
Cost of Producing Eggs	
dopt of floadeting head that the first state of the	
FARM BUSINESS SUMMARY: 13 Farms	
Averages Per Hen, 13 Farms	
13 Farms	
Progress of the Farm Business 23	
SUMMARY OF SELECTED POULTRY FARM MANAGEMENT FACTORS	

و المراجع ال

-

#### Page

#### 1983 NEW YORK POULTRY FARM BUSINESS SUMMARY

Large nonfarm businesses usually prepare and publish an annual report in which they review and analyze the business for the year. This provides a basis for evaluating past operations and for making plans for the future. A similar summary and analysis is useful in managing a farm business. The Cooperative Extension business management projects provide farm operators an annual business report which can be used much the same as nonfarm business annual reports.

١

Poultry farm business management records have been summarized by the College of Agriculture and Life Sciences at Cornell for a number of years. For the 1983 record year, 21 poultry producers submitted records for summary and analysis. Extension field staff working with poultry producers collected the figures for each farm and the College staff summarized them. The summary results are presented in this workbook.

Poultry farm businesses vary in organizational makeup. The farms included in this report were divided into two groups; poultry (egg production) only, and poultry and others which include those with other major enterprises such as crops, dairy or hogs.

The economic climate for poultry producers in 1983 improved considerably over 1982. The cost of producing eggs in 1983 was 2.9¢ less than 1982 while egg prices averaged 1.9¢ a dozen higher. Most poultry producers had positive labor income values in 1983 whereas most of the income values in 1982 were negative.

This workbook is designed to provide a systematic summarization and analysis of a poultry business. The group averages can be used in making comparisons. Working through this report step by step provides a good checkup for a poultry operation. In addition to the persons whose records are in the summary, this report should be useful to other poultry producers in the State, to teachers of agriculture, college farm management instructors, agency representatives, and to agribusiness persons.

#### Acknowledgements

This summary was prepared by D. L. Cunningham, Department of Poultry & Avian Sciences and A. C. Lowry, Department of Agricultural Economics, New York State College of Agriculture and Life Sciences, in cooperative with Cooperative Extension Specialists S. E. Ackerman and W. J. Toleman and Cooperative Extension Agent Gerald Skoda. Barbara Wilcox supervised the summarization of the records and Barbara Smagner typed this report.



# GOOD MANAGEMENT IS BASIC

HOW DO YOU MEASURE UP



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

Steps in making a management decision:

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

This workbook can help you!

#### General Summary of All Farms

Twenty-one poultry farm records for 1983 were used for this summary. The organization of these farms varied widely. There were 8 poultry with other major enterprises, and 13 layer only operations. In this general section, all businesses are included. For the more detailed analysis in the sections that follow, the 13 layer operations and the layer with other enterprises are separated.

<b>Fable</b>	1.	FARM	Bl	JSINES	S	F
		21 N	~ * *	Vamle	Ð,	<b>.</b>

#### FARM BUSINESS FINANCIAL SUMMARY 21 New York Poultry Farms, 1983

	Average All Farms
Item	1983
Average Capital Investment	\$532,575
Total Farm Receipts	657,696
Total Farm Expenses	582,315
Farm Income	\$ 75,381
Interest @ 9% on Capital	47,747
Labor and Management Income Per Farm	\$ 27,634
Number of Operators	1.57
LABOR AND MANAGEMENT INCOME PER OPERATOR	\$ 17,601

Labor and management 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 21 poultry farms, the averate labor and management income per operator was \$17,601. In addition to the labor and management income, the operator usually has certain privileges such as a house to live in, eggs and poultry to use, and other miscellaneous items.

Labor and management income per operator varied widely. There were six farms with minus labor incomes, and six with incomes per operator of over \$30,000. Three of the farms with minus incomes were in the layer group and three in the poultry and other group.

The average capital investment of these 21 farms was \$532,575. The receipts averaged \$657,696 and the expenses \$582,315. On these farms, the receipts were considerably more than the capital investment giving a "capital turnover" (as measured by the number of years for the receipts to equal the capital) of about 0.8. This is in contrast to dairy businesses where commonly it takes two to three years for receipts to equal capital.

Poultry producers in 1983 experienced lower production costs and higher egg incomes compared to 1982. These factors combined to produce a positive income situation for many farms even after a 9% charge on average capital was deducted. The positive income picture in 1983 followed three years of negative returns for most poultry producers. During the period 1980-1982 egg producers averaged labor income per operator of -\$19,952. However, during the period of 1976-1979 egg producers averaged a labor income per operator of \$18,774.

Business Factor	Average 21 Farms
Worker equivalent	4.94
Months unpaid labor	3.8
Months hired labor	36.5
Total months of labor	59.3
Percent of labor hired	62%
Average cost per month for hired labor	\$1,094
Average number hens for year	39,479
Eggs producer per hen	249
Pounds feed per dozen eggs produced	4.2
Average price per cwt. layer feed	8.39
Average price received per dozen eggs	61.3¢

### Table 2.GENERAL FARM BUSINESS FACTORS21 New York Poultry Farms, 1983

Poultry farm operations differ a great deal in their organization and the combination of enterprises involved. The range in the capital investment is a reflection of these factors. The low capital investment was \$47,000, while the high was nearly \$1.5 million. Similarly, the lowest expense reported was \$70,000, while the high was \$1.3 million. This wide range indicates that one should recognize limitations in the "averages" when they are used.

The labor force on these farms ranged from 1.0 to 14.5 worker equivalents with an average of 4.94. For all 21 farms, 62% of the labor was hired and the rest was furnished by the operator and his family. The average labor expense per month of hired labor was \$1,094. Unpaid family labor was valued at \$500 per month.

Number of hens is a common measure of size for a laying operation. The numbers varied from 7,600 to 121,000. These figures reflect the average number of layers for the year. The number of eggs produced per hen averaged 249 but with a range of 188 to 279.

Marketing arrangements differ with some selling all eggs wholesale, while other sell at retail. The average price received per dozen sold by the 21 farms during 1983 was 61.3 cents. A number of poultry producers in the summary had premium markets.

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 on many farms but efforts were made to calculate this factor. The average for the 21 farms was 4.2 pounds per dozen eggs. Layer feed costs per hundredweight averaged \$8.39.

#### SUMMARY OF THE EGG PRODUCING BUSINESSES

The first step in examining any business operation is a systematic summary of the business. In this section we will examine the physical resources, business practices, capital investment, receipts, expenses and the financial summary for the year.

#### Physical Resources and Business Practices

Below is a summary of the physical resources and business practices used by the 13 farms with poultry only and the 8 farms with poultry and other for the year 1983.

Table 3.LABOR FORCE, LIVESTOCK, CROPS GROWN, AND BUSINESS PRACTICES21New York Poultry Farms, 1983

		Aver, Per Farm	Numbers Reporting
	My	13 Farms with	8 Farms with
Item	Farm	Poultry Only	Poultry & Other
Labor			
Months of:			
Operators		(13 farms) 16	.6 (8 farms) 22.5
Familyunpaid		(5 farms) 2	.5 (5farms) 6.1
Hired		(11 farms) 31	1 (8 farms) 45.6
Total		50	74.2
Worker equivalent		4	.2 6.2
Number of operators		1	.4 1.88
Percent of labor hired		7	62% 62%
Livestock (number)			
Laying hens		36.7	43.866
Pullets raised		(5 farms) 45, (	)22* (4 farms)30,075*
Business Practices			
Percent of eggs marketed:			
Wholesale		<u>X</u>	347 427
Premium outlet		X	60% 46%
Retail		X	6 <b>%</b> 12 <b>%</b>
Percent of replacement			
pullets:			
Raised		<u>x</u>	57% 52%
Bought		<u>x</u>	43% 48%
Percent of layer feed:			
Purchased		7	100% 76%
Homegrown		<u>x</u>	0% 24%

\*Average of number reporting.

#### Capital Investment

The capital used to operate a poultry business is invested in machinery and equipment, poultry, feed and supplies, and land and buildings. Some of the capital used is owned by the operator and some is borrowed. The end-ofyear farm inventory is used as a measure of the capital investment in the business. It is suggested that the inventory reflect "market value".

Table 🖗.	FARM	INVENTORY	VALU	ES,	JANI	JARY	1,	1984
		21 New '	York	Poul	ltry	Farm	15	

		Amount	Per Farm
Item	My Farm	13 Farms with Poultry Only	8 Farms with Poultry & Other
Machinery & equipment	\$	\$124,246	\$201,443
Poultry	1	49,442	65,896
Other livestock		447	31,943
Feed & supplies	` 	10,226	93,792
Land & buildings		163,919	443,820
Other TOTAL INVESTMENT	\$	\$347,833	<u>6,556</u> \$843,450

Total investment on these farms ranged from \$47,000 to \$1.455 million. All of the poultry and other farms, and six of the poultry only farms had investments of more than \$250,000. The inventories of land and buildings, machinery, and feed and supplies were larger on the farms with other enterprises.

How the capital is used is more important than the amount. Below are some measures used in analyzing the efficiency of the use of capital. Farms having other enterprises have larger investments because of the added land and machinery used.

Table 5. CAPITAL INVESTMENT ANALYSIS

Item	My Farm	13 Farms with Poultry Only	8 Farms with Poultry & Other
Total investment/worker	\$	\$ 83,214	\$187,433
Total investment/hen	\$	\$ 9.46	\$ 19.23
Machinery investment/ hen	\$	\$ 3.38	\$ 4.59
Land & buildings/hen	\$	\$ 4.46	\$ 10.12
% Land & buildings are of total investment	X	47%	53%
Capital turnover (years)		•55	1.22

#### Receipts

The source and amount of receipts tells us about the nature and size of the business. The size of many nonfarm businesses often is measured in terms of gross sales. However, in poultry businesses, egg price fluctuations from year to year cause total receipts to fluctuate also.

Table 6.

FARM RECEIPTS 21 New York Poultry Farms, 1983

· · · · · · · · · · · · · · · · · · ·	My	13 Farms with	8 Farms with
Item	Farm	Poultry Only	Poultry & Other
Yog galag	¢	\$505 90¢	*522 700
199 gares	۷	4595,000	\$23 <b>3,</b> /89
Poultry sales		17,587	13,340
Other livestock sales			51,582
Crop sales		27	46,419
Work off farm		1,751	9.343
Government payments & refunds		877	14,654
Miscellaneous		1,286	23,498
Total Cash Farm Receipts	\$	\$617.334	\$692.625
Increase in Inventory	*	14,951	-0-
	-		Ŭ
TOTAL FARM RECEIPTS	ş	\$632,285	\$692,625

Total farm receipts averaged \$632,285 for the farms with poultry only, and \$692,625 for the farms with poultry and other. Egg sales accounted for 94 percent and 77 percent respectively of the cash receipts on the two groups of farms. Crop sales accounted for 7 percent of the cash receipts on the farms with other enterprises, and the poultry and livestock sales accounted for 9 percent of the cash receipts.

Increases in inventory are usually due to expansion or improvements in the business. Inventory increases are considered as farm receipts. The increases could have been sold and converted to cash, therefore, they are considered as receipts in summarizing the year's business. Costs associated with the increases are reported as farm expenses.

Table 7.	INCOME ANALYS	[S	
Item	My Farm	13 Farms with Poultry Only	8 <b>Farms with</b> Poultry & Other
Av. price/doz. of eggs sold Total cash receipts/worker Total (cash) receipts per	\$¢	63.2¢ <b>\$147,688</b>	58.2¢ \$112,075
\$1,000 average investment	\$	\$ 1,510	\$ 820

The 13 farms with poultry only reported an average price/dozen eggs sold of 63.2¢ compared to the 58.2¢ price reported for poultry and other farms. This difference in price was a reflection of the difference in the percentage of eggs marketed wholesale versus retail for the two types of operations.

#### Expenses

Knowing where the money went is important in any business analysis. The first step in controlling costs on poultry farms is to know what the expenses are and how they compare with those of other businesses. Below is a summary of the average farm expenses for these two groups of poultry farms.

#### Table 8.

#### FARM EXPENSES 21 New York Poultry Farms, 1983

Item	My Farm		13 Farms with Poultry Only	8 Farms with Poultry & Other
Chicks purchased	\$	(5 farms)	\$ 8,507	\$ 4,661
Pullets purchased			30,023	74,609
Layer feed bought			263,400	259.193
Other feed			15,687	28,761
Hired labor			32,174	52,505
Machine hire	+		6,356	4,011
Poultry equip. repair			3,351	-0-
Machinery expense		8	5,398	14,569
Gas and oil			6,847	15,570
Poultry supplies, etc.		ky waa para ka	28,751	25,505
Crop expense		(3 farms)	382	39,000
Building expense			3,959	597
Taxes			2,864	7,966
Insurance			4,144	8,275
Utilities			12,752	14,221
Eggs bought for resale		(8 farms)	100,441(4 farms	) 3,830
Other livestock			1,058	3,499
Miscellaneous			4,920	28,184
TOTAL CASH OPERATING EXPENSE	\$		\$531,014	\$584,956
New machinery			26,504	22,762
Real estate			1,706	7.852
Unpaid labor			1,044	2,571
Decrease in inventory			-0-	2,955
TOTAL FARM EXPENSES	\$		\$560,268	\$621,096

Interest paid averaged \$20,475 for the 13 farms and \$51,656 for the eight farms. Seventeen farms did not report equity capital so in the summary a 9% interest charge on all capital was used and interest paid was omitted from the cash expenses.

#### Financial Summary

The financial success of a poultry business can be measured in varied ways. There is no one best measure so in this summary several are used.

Farm income measures the return from the business to the operator for his labor and management and capital. Farm income is the difference between total receipts (including increase in inventory) and total expenses (including decrease in inventory).

Table 9.	FARM	INCOME,	AND	LABOR A	<b>UND</b>	MANAGEMENT	INCOME
		21 New	York	Poultr	ry E	arms, 1983	

	Му	13 Farms with	8 farms with
Item	Farm	Poultry Only	Poultry & Other
Total farm receipts	\$	\$632,285	\$692,625
Total farm expenses		560,268	621,096
FARM INCOME	\$	\$ 72,017	\$ 71,529
Interest on Average Capital @ 9%		30,334	76,044
Labor income per farm	\$	\$ 41,683	\$ -4,515
Number of operators LABOR AND MANAGEMENT INCOME	•	1.385	1.875
PER OPERATOR	\$	\$ 30,096	\$ -2,408

Labor and management income is the return to the farm operator for his time and efforts. This is the measure most commonly used when studying farm businesses. To get labor and management income, a 9% interest charge on the operator's average capital is subtracted from the farm income. The charge on average capital represents an "opportunity cost" or what could have been earned had this capital been invested in something such as a certificate of deposit.

The average labor income per operator for the 13 farms was \$30,096 and for the 8 farms \$-2,408. The 8 poultry farms had farm receipts that exceeded total farm expenses, however, when the 9% interest on average capital was deducted, it resulted in negative returns.

The labor and management incomes varied widely as shown below. Twenty-nine percent of the farms had a minus income, while 43 percent had incomes \$20,000 or more.

Table 10.	DISTRIBUTION OF LABOR	INCOMES 1	FOR 21 POULTRY	OPERATIONS
	Labor and Management		Farms	
	Income Per Operator		Number	Percent
	Minus		6	29
	0 - \$ 9,999		2	9
	\$10,000 - \$19,999		4	19
	\$20,000 - or more		9	43

Table 11.

#### RATE OF RETURN ON INVESTMENT 21 New York Poultry Farms, 1983

Item	My	13 Farms with	8 Farms with
	Farm	Poultry Only	Poultry & Other
Farm income	\$	\$ 72,017	\$ 71,529
Minus value of operator's labor and management*'		13,850	18,750
Return on investment	\$x	\$ 58,167	\$ 52,779
Average capital investment		\$340,357	\$844,928
RATE OF RETURN ON INVESTMENT		17.1 <b>%</b>	6.37

\*\$10,000 per operator - some farms had more than one operator.

<u>Rate of return on investment</u> is calculated by subtracting from the "farm income" a charge for the operator's labor and management, and then dividing by the average investment for the year. In the above calculation, \$10,000 has been used as the value of the operator's labor and management. This is a modest charge for the operator's labor and management.

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. Since actual living expenses were not available, they were estimated at \$10,000 per operator. 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 12.

#### NET FARM CASH FLOW AND DEBT REPAYMENT ABILITY 21 New York Poultry Farms, 1983

Item	My	13 Farms with	8 Farms with
	Farm	Poultry Only	Poultry & Other
Total cash receipts Total cash operating expense NET FARM CASH FLOW	\$ \$	\$617,334 531,014 \$ 86,320	\$692,625 584,956 \$107,669
Less family living expense*	\$	<u>13,850</u>	<u>18,750</u>
DEBT REPAYMENT ABILITY		\$ 72,470	\$ 88,919

\*Estimated at \$10,000 per operator per year.

#### ANALYSIS OF THE EGG PRODUCTION BUSINESSES

The "summary" of a business provides an overall look at the operation. It shows what you did. The "analysis" which follows includes a more detailed examination of the different parts of the business. The analysis helps to show WHY you did what you did and to find ways to improve the operation. Measures have been developed to aid in analyzing farm business strengths and weaknesses.

In this section, several business factors are examined. Among these are: size of business, rates of production, labor efficiency, and cost control. Since many of the measures are interrelated, all of the factors should be examined before arriving at major conclusions. A complete analysis of the factors should point up the major strong and weak points of a business.

#### Size of Business

Size is usually the first factor examined when analyzing a business. Size affects other factors such as labor efficiency and cost control. Prices received and paid by poultrymen are often affected by volume which is a function of the size factor.

Farm management research has shown that in general large 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 fixed cost items. Secondly, there are more units of production (hens) on which to make a profit. However, when a business is unprofitable, these same factors operate and large farms have larger losses.

Measure	My Farm	13 Farms with Poultry Only	8 Farms with Poultry & Other
Number of hens		36,779	43,866
Dozens of eggs sold*		942,961	916,650
Dozens of eggs produced		762,028	908,783
Worker equivalent		. 4.18	6.18
Total farm receipts	\$	\$632,285	\$692,625
Total investment (end year)	\$	\$347,833	<b>\$</b> 843,450

## Table 13.MEASURES OF SIZE OF BUSINESS21 New York Poultry Farms, 1983

\*Includes eggs bought for resale.

#### Rates of Production

Rates of production for both poultry and crops are factors contributing to the success of poultry businesses. It is a challenge to find the levels of inputs, such as feed and fertilizer, which will give rates of production that yield the highest net income. This means a consideration of both the physical and economic returns from production.

To	 <b>N</b> 1 (1)	

Measures of Rates of Production 21 New York Poultry Farms, 1983

Measure	My Farm	13 Farms with Poultry Only	β Farms with Poultry & Other
Eggs produced/hen		249	249
Eggs sold/hen	and a state of the	308	251

Eggs produced and sold per hen is used in measuring the rate of production on poultry farms. Production per hen is calculated by dividing total eggs <u>produced</u> by the average number of hens for the year. Some farmers bought eggs for resale. For eggs sold per hen, the eggs bought have been added to the dozens produced to get the eggs sold per hen.

The eggs produced per hen averaged 249 for both groups. The range for the <sup>21</sup> farms was from 188 to 279 eggs produced per hen. This is a range of 91 eggs per hen from the lowest to the highest.

The relationship of eggs produced per hen and labor and management income is illustrated below.

Eggs Produced Per Hen	Number of Farms	Average Number of Hens	Labor & Management Income/Operator
Less than 225	3	40,519	\$18,334
225 - 245	3	28,945	\$27,274
More than 245	7	35,729	\$12,670

Table 15.EGGS PRODUCED PER HEN AND LABOR AND MANAGEMENT INCOME13 New York Poultry Farms, 1983

Farms with the highest numbers of eggs produced per hen had the lowest labor and management incomes per operator. This was a result of these 7 farms averaging 9.1¢ less in egg income per dozen than the 6 lower producing farms. The reason for the decrease in price received per dozen for these farms is not apparent but may be a result of the small sampling size.

#### Labor Efficiency

Table 16.

Labor efficiency is sometimes claimed to be the most important single business factor affecting incomes on farms today. This is brought about by the fact that the operator's labor and management income is a function of the labor output. Rising farm wage rates over time have meant that generally more output is required to pay those wages. 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.

MEASURES OF LABOR EFFICIENCY

21 New York Poultry Farms, 1983						
Measure	My Farm	13 Farms with Poultry Only	8 Farms with Poultry & Other			
Dozens eggs sold/worker*		225,589	148,325			
Dozen eggs produced/worker	•	182,303	147,052			
Number hens/worker		8,799	7,098			

\*Includes eggs bought for resale.

The farms with poultry only had higher labor efficiencies than the farms with poultry and other. In part, the higher dozen eggs sold per man reflects that practice of the poultry only group of buying eggs for resale. Also, on the poultry and other farms, a considerable amount of work is on the crops. This means more total time per hen or per dozen of eggs than on a poultry only operation.

When analyzing your labor efficiency consider:

- 1. Size of operation it tends to reduce the overhead time per unit.
- 2. Extent of work performed i.e., wholesale vs. retail marketing.
- 3. Arrangement of buildings and work areas.
- 4. Work methods the easy way vs. the hard way.
- 5. The human factor or how fast persons work.
- 6. Clarity of directions given to workers.
- 7. Kind of hired workers employed.

#### Cost Control

The 13 poultry farms expenses average \$1,455 per day. With expenses of this amount, cost control is important. As more "input" items are purchased, cost control has a greater effect on incomes. Cost control is difficult to measure but an analysis of good records can provide some useful checks and point to possible areas of cutting costs.

Feed, labor, and machinery are big cost items on poultry farms, but it is important to watch the other costs too. Small leaks can build up into sizable losses. The next three pages are provided to help study your costs.

Table 17.

	COST	: C(	ONTROL	MEASURI	ES
21	New Yo	rk	Poult	ry Farma	s, 1983

Item	My Farm	13 Farms with Poultry Only	8 Farms with Poultry & Other
Value of layer feed/hen	\$	\$ 7.16	\$ 7.41
Layer feed/doz. eggs produced	¢	35¢	36¢
Lbs. feed/doz. eggs produced		4.2	4.2
Total labor cost per hen*	\$	\$ 1.28	\$ 1.68
Total labor cost per dozen eggs produced*	¢	6.2¢	8.1¢
Building repairs per hen	¢	10.8¢	6.1¢
Utilities per hen	¢	34.7¢	32.4¢
Taxes per hen	¢	7.8¢	<b>18.</b> 2¢
Insurance per hen	ې¢	11.3¢	18.9¢
Total farm production expenses/ hen (total less inventory			
increase and eggs bought)	\$	\$12.10	\$14.07
Total expenses per \$100 receipts	\$	\$88.61	\$89.67

\*Includes operator's labor.

For the above measurements, it must be kept in mind that the "poultry and other" farms had other enterprises which affect several cost control measures. As a result, the total expenses per hen are generally higher for the poultry and other farms.

.

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

Table 18.POWER AND MACHINERY COSTS21 New York Poultry Farms, 1983

Ttom	My	13 Farms with Poultry Only	8 Farms With Boultry & Other
Item	raim	Fourty only	Fourty a Other
Beginning inventory	\$	\$105,974	\$205,143
New machinery bought	*	26,504	22,762
Total (1)	\$\$	\$132,478	\$227,905
End inventory	\$	\$124,246	\$201,443
Machinery Sold	· ·····	350	144
Total (2)	\$	\$124,596	\$201,587
Depreciation (1 minus	2)\$	\$ 7,882	\$ 26,318
Int. @ 9% av. inventor	У	10,360	18,296
Gas and oil	-	6,847	15,570
Machinery repairs and			
auto expense		5,398	14,569
Machine hire		6,356	4,011
Elec. & Util. (farm sha	re)	12,752	14,221
Total Power and			
Machinery Cost	\$	<b>49,59</b> 5	\$ 92,985
Less: Gas tax refun	d \$	\$ 13	\$181
machine work		-0-	_0_
NET POWER AND MACHINER	Y COST	\$ 49,608	\$ 92,804
Web server and machine		ی ہیں دیدہ ذلک میں کلا ایک ایک ایک میں میں میں ایک ایک دینے ہیں ہیں ہیں ہیں ہیں ایک ایک ایک ایک ایک ایک ایک ای	ه بين خم هو بين جو بين جو بين هو بين
net power and machiner	y COSES:	ė1 25	\$2.12
per hen		41.00 	Ψ <b>4</b> 0 <b>4</b> 4
per worker		\$ 11,868	\$ 15,017
p <b>er dozen eggs produ</b>	ced*	6.50	; 10.2¢

\*Does not include eggs bought and resold.

Depreciation is the largest item in the power and machinery cost group. This is an indirect item and along with interest is often overlooked. Often nearly half of the cost is represented by these two "overhead" items.

\_\_\_\_\_

With the jump in fuel prices in recent years, the gas and electricity items have taken on added importance. Look for ways to save on energy use.

Farmers sometimes justify high machinery costs on the basis that the machinery saves on high cost labor. It is well to examine this justification. The combined machinery and labor cost measure gives a good check.

Table 19.	LABOR	ANI	POWE	R AND	MACHINERY	COSTS
	21	New	York	Poult	ry Farms,	1983

Item	My	13 <b>Farms wi</b> th	8 <b>Farms wi</b> th
	Farm	Poultry Only	Poultry & Other
Value of labor of operator*	\$	\$ 13,850	\$ 18,750
Hired labor		32,174	52,505
Unpaid family labor		1,044	2,571
TOTAL LABOR COSTS	\$	\$ 47,068	\$ 73,826
Net power & machinery cost		49,608	92,804
TOTAL LABOR & MACHINERY COSTS	\$	\$ 96,676	\$166,630
Labor cost per hen	\$	\$1.28	\$1.68
Labor cost/dozen eggs produced		¢ 6.2¢	8.1¢
per hen	\$	\$2.63	\$3.80
per dozen eggs sold		¢ 10.3¢	18.2¢

\*Valued at \$10,000 per operator.

For the 21 poultry farms, the labor cost was less than the power and machinery cost. It is important to watch the combined labor and machinery costs. It is easy to spend for additional machinery but neglect to reduce the labor used. Below are some measures for use in examining labor costs.

Table 20.

LABOR USE ANALYSIS

Item	My Farm	13 Farms with Poultry Only	8 Farms with Poultry & Other
Months of hired labor	·	31.2	45.6
Hired labor expense	\$	\$32,174	\$52,505
Labor expense/month hired	\$	\$ 1,031	\$ 1,151
Total labor cost/month	\$	937	995
Percent of total labor by: Operator		<b>x</b> 33 <b>X</b>	307
Unpaid family		<b>x</b> 5%	87
Hired		<b>X</b> 62 <b>X</b>	62%

#### Comparison of Recent Summaries

Businessmen must keep abreast of changes that are taking place. The poultry industry has changed more than many types of farm businesses. Below is a comparison of selected factors from the last five New York poultry summaries.

In comparing these factors, keep in mind that the farms included from year to year vary as indicated by the number of farms and there is also some change in individuals each year.

#### Table 21.NEW YORK POULTRY FARM SUMMARIES, 1979-1983

Factor	<u>1</u> 979	1980	1981	1982	1983
Number of farms	24*	24*	26*	26*	21*
Worker equivalent	4.6	4.3	4.3	3.7	4.9
Number of nens	30,330	40,390	40,719	28,727	39,497
Investment					
Land & buildings	\$255,515	\$267,174	\$264,449	\$216,146	\$270,548
Machinery	109,466	109,693	118,274	113,613	153,654
Livestock & poultry	64,601	75,833	76,863·	56,162	67,879
Feed & other	46,562	39,712	31,538	35,096	44,558
Total	\$476,144	\$492,144	\$491,124	\$421,017	\$536,639
Receipts					
Egg sales	\$469,531	\$506.927	\$561.757	\$420,704	\$572,180
Livestock sales	23,762	18,832	22,501	24.730	35.620
Other	56,586	35,040	21,263	36,865	38,216
Total	\$549,879	\$560,799	\$605,521	\$457,569	\$646,016
Expenses					
Feed bought	\$220,121	\$305,982	\$299.047	\$183,480	\$282,465
Hired labor	33,270	30,980	30,385	26.280	39,919
Chicks & pullets	50,660	48,870	50,806	32,568	54,050
Elec., util. & phone	6,951	8,490	9,497	10,218	13,312
Other	190,095	193,296	181,984	144,294	161,818
Total	\$501,097	\$587,618	\$571,719	\$396,840	\$551,564
Business Factors					
Av. price/doz. eggs	55.6c	54.8c	63.3c	58.6c	61.30
Eggs per hen	240	240	231	237	249
Hens per worker	7,900	9,400	9,383	7,956	7,995
Lbs. feed/doz. eggs	4.0	4.0	4.3	4.0	4.2
Labor income/operator	\$ 13,216	\$-47,536	\$ -8,278	\$ -4,178	\$17,601

\*Includes only layer operations, omits the contract pullet operations.

#### Cost of Producing Eggs

Table 22.

#### AVERAGE FARM COST OF PRODUCING EGGS 13 New York Poultry Farms, 1983

Item	My Farm	13 Far Poult	13 Farms with Poultry Only		
Total farm expenses	\$	\$560,268			
Interest on ave. capital @ 9%	••••••••••••••••••••••••••••••••••••••		•		
Operator's labor and Management*		13,850			
Total Cost		\$	\$604,452		
Total receipts	\$	- \$632,285			
Less egg sales		- 595,806	1		
Other Income			\$ 36,479		
Cost of Producing Eggs (Total Cost Less Other Income)		\$	\$567,973		
Dozen eggs sold			942,961		
Cost per dozen eggs sold		¢	60.2¢		
Average price received		¢¢	63.2¢		

\*Figured at \$10,000 per operator.

By adding to the total farm expenses an estimate of the value of the operator's labor and management, and an interest charge on the capital used, the farm cost of producing eggs can be calculated. The value of the operator's labor and management was estimated at \$10,000 per year. This was based on estimates made by dairymen. Receipts for items other than eggs are credited against the total cost on the assumption 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.

This "farm unit" method of calculating the cost of producing eggs has limitations but it does give a general indication of the overall costs. This method was applied to the farms with poultry only.

rante tra	Tab]	. <b>e</b> 2	3.
-----------	------	--------------	----

COST ITEMS IN PRODUCING A DOZEN EGGS 13 New York Poultry Farms, 1983

	Му		Cost Per Dozen			
Item	Farm	Amo	unt	Percent		
Feed for layers			34.6c	57.5%		
Replacements:						
Chicks & pullets bought	¢	5.1c		8.5%		
Grower feed		2.1		3.5		
Total	¢	7.4c		12.07		
Less sale of birds		2.3		3.8		
Net Replacement Cost			4.9¢	8.2%		
Labor			4.4	7.3		
Power & machinery (without	interest)		4.6	7.6		
Interest on capital			4.0	6.6		
Poultry supplies, etc.			3.9	6.5		
Taxes & insurance			0.9	1.5		
All other			2.9	5.8		
Total		¢	60.2*	100.0%		

\*Cost per doz. eggs sold.

Another approach to the cost of producing eggs is to examine individual cost items. This has been done above for the 13 poultry only farms. Some items have been calculated in earlier sections and the total cost per dozen was calculated by the "farm unit" method on page 21.

The feed cost of 34.6¢ is the total layer feed expense divided by the dozen of eggs produced. Feed tor layers accounted for 57.5 percent of the total cost of producing a dozen eggs.

Replacement costs include the expense for chick and pullets bought and grower feed. Fuel and other direct costs involved in rearing are not included here but are in other items listed. Hence, this replacement cost is on the low size. Receipts from birds sold are subtracted to get a "net" replacement cost. Replacements accounted for about one-eighth of the total cost.

The labor item includes a value for the operator's work but not his management. The interest charge in power and machinery costs shown on page 18 was taken out since it is included in interest on capital. Building repairs and depreciation would be an item in the "all other".

Table	24.	COMPARISON	OFC	OSTS	OF	PRODUCING	EGGS	IN	RECENT	YEARS
-------	-----	------------	-----	------	----	-----------	------	----	--------	-------

	Av. Price	Farm Unit	Poultry	Feed C	osts/Doz.	Labor Cost
Year	Received	Cost Per Doz.*	Ration	Cents	% Total	Per Doz.
			(cwt)			
<b>19</b> 73	54.8¢	52.5¢	\$6.75	30.3¢	5 <b>8%</b>	5.1¢
1974	52.4	54.2	7.09	32.0	59	3.9
1975	57.1	57.9	7.02	32.2	56	4.6
1976	59.3	57.6	6.89	31.4	55	5.5
1977	53.7	51.1	6.56	28.5	56	4.7
1978	52.8	53.1	5.67	25.8	49	5.5
1979	56.5	54.6	7.56	28.6	52	4.7
1980	55.0	63.9	8.73	40.0	63	4.3
1981	63.3	61.4	8.40	35.0	57	4.5
1982	61.4	63.1	8.28	32.1	51	6.9
1983	63.2	60.2	8.39	34.6	58	4.4

\*For "Poultry Only" farms in business summaries.

#### FARM BUSINESS SUMMARY 13 New York Poultry Farms, 1983

CAPITAL INVESTMENT		PECEIDTC	
1/1/83	1/1/84	RECEIPIS	
<u></u>			
Machinery & equip. \$105,974	\$124,246	Egg sales	\$595,806
Livestock 53,011	49,442	Livestock sold	17,587
reed a supplies 8,153	10,226	Crop sales	27
Land & buildings <u>165,744</u>	163,919	Miscellaneous	3,914
TOTAL INVESTMENT \$332,882	\$347,833	Total Cash Receipts	\$617,334
	·	Increase in Inventory	14,951
EXPENSES		TOTAL FARM RECEIPTS	\$632,285
Replacements		FINANCIAL SURMARY	
Chicks bought	\$ 8,507	Total Farm Receipts	\$632.285
Pullets bought	30,023	Total Farm Expenses	560,268
Feed	. •	Para Tata and	\$ 72.017
Layer feed bought	\$263,400	rarm income	
Other feed	15,687	Interest on	
Labor		capital @ 9%	30,334
Hired	32,174	Rown Labor Income	A (1 (00
Unpaid	1,044	Farm Labor Income	\$ 41,083
Power and Machinery		Number of operators	1.385
Machine hire	6,356	TABOD INCOME ODEDATOD	+ 00 00r
Machinery repair	8,749	LADOR INCOME/OFERATOR	\$ 30,090
Gas and oil	6,847	BUSINESS FACTORS	
Util.	12,752	Worker equivalent	4.18
Poultry		Number of hone	36 770
Eggs bought for resale	100,441	Number of pullate raised	17 316
Livestock expense	1,058	(5 farma)	17,JIU
Supplies	28,751	Dozen of eggs (produced)	762.028
Grop		Face produced per ben	240
Crop expense	382	Eggs produced per nen	247
Real Fetate	502	Dozens of eggs produced/worker	182,303
Land hldg & fance renation	- 3 050	Hens per worker	8,799
Tavoe	2.864	The feed/dog eggs produced	4.2
Ingurance	4,144	Av. price/cwt. feed bought	\$8.30
Canital Items		not prized/ewer reed bodgie	40.33
New machinery	26.504	Av. price/doz. eggs (all)	63.2¢
New real estate	1,706		
Other			
Advertising & promotion	-0-		
Miscellaneous	4.920		
Decrease in inventory	-0-		
TOTAL FARM EXPENSES	\$560,208		

-----

\_\_\_\_\_

\_\_\_\_\_

#### FARM BUSINESS SUMMARY - AVERAGES PER HEN 13 New York Poultry Farms, 1983

-

- -

CAPITAL INVESTMENT 1/1/83	1/1/84	RECEIPTS	
Machinery & equip. \$ 2.38	\$ 2.38	Egg sales	\$ 16.20
Livestock 1.49	1.22	Livestock sold	.48
Feed & supplies .28	.29	Crop sales	0
Land & buildings 3.90	4.40	Miscellaneous	.11
TOTAL INVESTMENT \$ 8.05	\$ 8.29	Total Cash Receipts Increase in Inventory	\$ 16.79 .41
EXPENSES		TOTAL FARM RECEIPTS	\$ 17.20
Replacements			
Chicks bought	\$.23	FINANCIAL SUMMARY	
Pullets bought	.82		<b>A 17 00</b>
Feed		Total Farm Receipts	\$ 17.20
Layer feed bought	7.16	Total Farm Expenses	15.23
Other feed	.43	Farm Income	\$ 1.97
Labor		• · · · · · · · ·	
Hired	.87	Interest on	0.0
Unpaid	.03	capital @ 9%	.03
Power and Machinery		Farm Labor Income	\$ 1.14
Machine hire	.17	LABOD INCOME (ODEDATOD (HEN	\$ 82
Machinery repair	.24	LABOR INCOME/OFERATOR/HEN	₩ .02
Gas and oil	.19		
Util.	.35		
Poultry			
Eggs bought for resale	2.73		
Livestock expense	.03		
Supplies	.78		
Crop			
Crop expense	.01		
Real Estate			
Land, bldg., & fence repair	.11		
Taxes	.08	,	
Insurance	.11		
<u>Capital Items</u>			
New machinery	.72		
New real estate	.05		
Uther	•		
Advertising & promotion	-0-		
Miscellaneous	.13		
Decrease in inventory	-0-		
TOTAL FARM EXPENSES	\$ 15.23		

#### FARM BUSINESS SUMMARY 13 New York Poultry Farms, 1983

CAPITAL INVESTMENT		RECEIPTS	
1/1/83	1/1/84		
Machinery & equip. \$143,753	\$153,654	Egg sales	\$572,180
Poultry 62,292	55,710	Poultry sold	15.970
Other livestock 12,801	12,169	Other livestock	19,650
Feed & supplies 39,534	44,558	Crop sales	17,700
Land & buildings \$270,130	\$270,548	Miscellaneous	20,516
TOTAL INVESTMENT \$528,510	\$536,639	Total Cash Receipts	\$646,016
FVDENCEC		Increase in Inventory	11,680
LATENSES		TOTAL FARM RECEIPTS	\$657,696
Replacements	• • • • •	FINANCIAL SIMMARY	
Chicks bought	\$ 7,042		
Pullets bought	47,003	Total Farm Receipts	\$657,696
Uther livestock Road	745	Total Farm Expenses	582,315
Layer feed bought	261.797	Farm Income	\$ 75,381
Other feed	20,658	Interest on average	
Labor		capital @ 9%	47,747
Hired	39,919	Pour Lober Trees	\$ 27 634
Unpaid	1,626	farm Labor Income	Ψ 27,004
Power and Machinery		Number of operators (33)	1.57
Machine hire	5,463	LABOR INCOME OPERATOR	\$ 17,601
Machinery repair	10,967	ERBOR THOUM, OF ERRITOR	
Gas and oil	10,170	BUSINESS FACTORS	
	13,312	DODINIDO THOTOND	
Poultry		Worker equivalent	4.94
Eggs bought for resale	63,637	Number of hens	39.479
Livestock expense	1,243	Number of pullets raised	
Supplies	47,514	(9 farms)	16,448
Gran		Doz. of eggs (produced)	817,935
Crop expense	15,094	Econ analysis (hon	240
Real Fetate	10,004	Eggs produced/nen	249
Land, bldg, & fance renair	2.678	Doz. of eggs produced/worker	165,574
Taxes	4,807	Hens per worker	7,992
Insurance	5,718	The feed/doz erge produced	4.2
Capital Items	•,	Av. price/cwt. feed hought	4.2 8 30
New machinery	25.078	Avt price/ewer rece bought	61 30
New real estate	4.047	Av. price/doz. eggs (all)	01.54
Other			
Decrease in inventory	-0-		
Miscellaneous	13,782		
TOTAL FARM EXPENSES	\$582.315		
	10001040		

г ман , у ц, у, ман — малан , б. Б.

. ...

. - -- --

-----

#### Progress of the Farm Business

There are two kinds of comparisons used in analyzing a farm business. One is that of comparing your business with that of other poultry farmers. The other is comparing your current year's business with that of previous years to see the progress you are making. In looking ahead, it is suggested that you set targets for the future which are in line with the progress you have been making.

Your business analysis on the preceding pages provide the factors for 1983. You will need to refer to earlier summaries for the 1981 and 1982 factors.

	<u>1981</u>	<u>1982</u>	<u>1983                                    </u>	<b>Target</b> <u>1984</u>
Size of Business				•
Average number of layers				
Value of egg sales	\$	\$	\$	\$
Worker equivalent				
Rate of Production Eggs produced per hen				
Labor Efficiency				
Hens per worker				<u>.</u>
Dozen eggs sold per worker	······	·····		
Capital Efficiency				
Total inventory value	S	Ś	S	Ś
Total investment/hen	s	s	s	Ś
Farm receipts per \$100	•		·	•
investment	\$	\$	\$	\$
Cost Control				
Layer feed bought per hen	\$	\$	S	\$
Lbs. feed per dozen eggs		· · · · · · · · · · · · · · · · · · ·		·
Labor cost per hen	\$	\$	\$	\$
Machinery cost per hen	\$	\$	\$	\$
Total expense per \$100	······································			
receipts	\$	\$	\$	\$
Prices				
Average price per dozen	\$	\$	\$	\$
Financial Summary				
Total Farm Receipts	Ş	\$	\$	\$
Total Farm Expenses	\$	\$	\$	\$
Labor & management income			· · · · · · · · · · · · · · · · · · ·	·
per operator	\$	\$	\$	\$
Total debt outstanding	\$	\$	\$	\$
Debt per hen	\$	\$	\$	\$
Net Worth	\$	\$	\$	\$

#### SUMMARY OF SELECTED POULTRY FARM MANAGEMENT FACTORS 13 Poultry Only Farms

Item	Your Farm	1983
Avg. Number of Layers		36,779
Eggs Produced/Hen		249
Pounds of Feed/Dozen		4.2
Feed Cost/Ton (\$)		167.80
Feed Cost/Dozen (¢)		34.6
Cash Cost/Dozen Sold (¢)		56.3
Price Received/Dozen Sold (¢)		63.2
Total Cash Operating Receipts (\$)		\$617,334
Total Cash Operating Expense (\$)		\$531,014
Net Cash Flow (\$)		\$ 86,320
Debt Repayment Ability (\$)		\$ 72,470
Ending Farm Inventory (\$)		\$347,833
Labor Income / Operator (\$)		\$ 30,096