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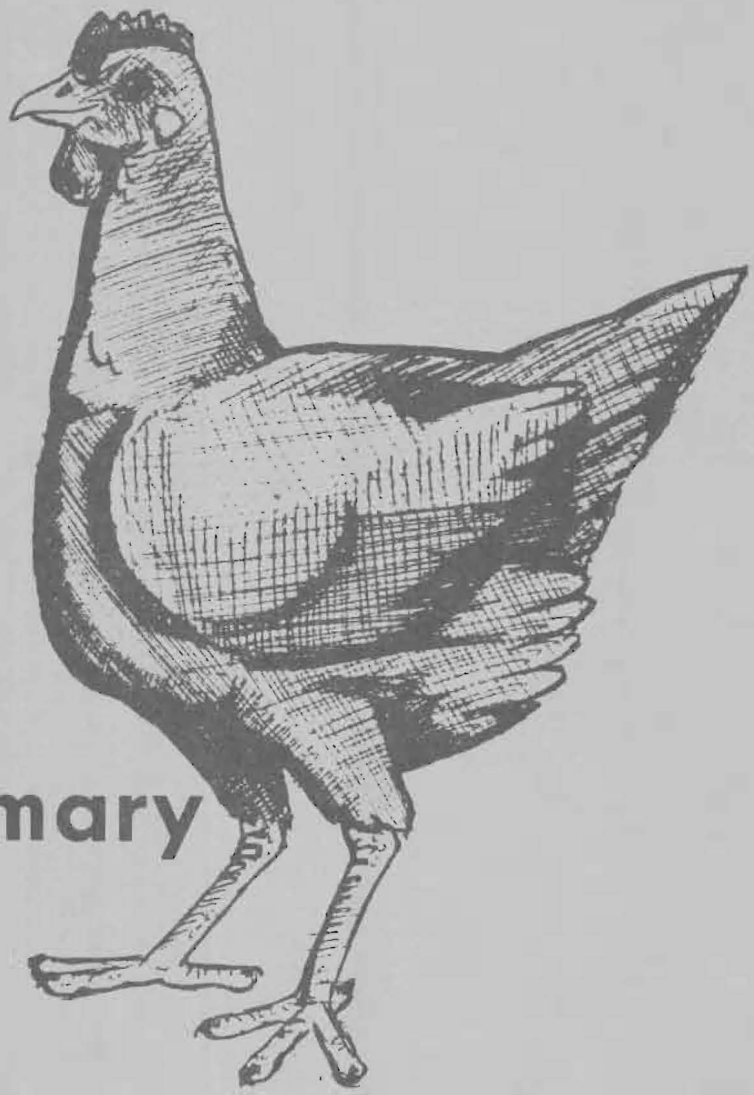

Poultry Farm Business Summary 1983

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TABLE OF CONTENTS

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.

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.

Table 1. FARM BUSINESS FINANCIAL SUMMARY
21 New York Poultry Farms, 1983

Item	Average All Farms 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.

Table 2. GENERAL FARM BUSINESS FACTORS
21 New York Poultry Farms, 1983

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¢

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 PRACTICES
21 New York Poultry Farms, 1983

Item	My Farm	Aver. Per Farm & Numbers Reporting: 13 Farms with Poultry Only	8 Farms with Poultry & Other
Labor			
Months of:			
Operators	_____	(13 farms) 16.6	(8 farms) 22.5
Family--unpaid	_____	(5 farms) 2.5	(5 farms) 6.1
Hired	_____	(11 farms) 31.1	(8 farms) 45.6
Total	_____	50.2	74.2
Worker equivalent	_____	4.2	6.2
Number of operators	_____	1.4	1.88
Percent of labor hired	_____ %	62%	62%
Livestock (number)			
Laying hens	_____	36,779	43,866
Pullets raised	_____	(5 farms) 45,022*	(4 farms) 30,075*
Business Practices			
Percent of eggs marketed:			
Wholesale	_____ %	34%	42%
Premium outlet	_____ %	60%	46%
Retail	_____ %	6%	12%
Percent of replacement pullets:			
Raised	_____ %	57%	52%
Bought	_____ %	43%	48%
Percent of layer feed:			
Purchased	_____ %	100%	76%
Homegrown	_____ %	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-of-year farm inventory is used as a measure of the capital investment in the business. It is suggested that the inventory reflect "market value".

Table 4. FARM INVENTORY VALUES, JANUARY 1, 1984
21 New York Poultry Farms

Item	My Farm	Amount Per Farm: 13 Farms with Poultry Only	Amount Per Farm: 8 Farms with Poultry & Other
Machinery & equipment	$_____	$124,246	$201,443
Poultry	_____	49,442	65,896
Other livestock	_____	447	31,943
Feed & supplies	_____	10,226	93,792
Land & buildings	_____	163,919	443,820
Other	_____	---	6,556
TOTAL INVESTMENT	$_____	$347,833	$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	_____ %	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

Item	My Farm	13 Farms with Poultry Only	8 Farms with Poultry & Other
Egg sales	$_____	$595,806	$533,789
Poultry sales	_____	17,587	13,340
Other livestock sales	_____	-0-	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-
TOTAL FARM RECEIPTS	$_____	$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 ANALYSIS

Item	My Farm	13 Farms with Poultry Only	8 Farms with Poultry & Other
Av. price/doz. of eggs sold	_____¢	63.2¢	58.2¢
Total cash receipts/worker	$_____	$147,688	$112,075
Total (cash) receipts per $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	_____(7 farms)	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	_____	5,398	14,569
Gas and oil	_____	6,847	15,570
Poultry supplies, etc.	_____	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 AND MANAGEMENT INCOME
21 New York Poultry Farms, 1983

Item	My Farm	13 Farms with Poultry Only	8 Farms with 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	_____	1.385	1.875
LABOR AND MANAGEMENT INCOME 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 FOR 21 POULTRY OPERATIONS

Labor and Management Income Per Operator	Farms Number	Farms 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 Farm	13 Farms with Poultry Only	8 Farms with Poultry & Other
Farm income	$_____	$ 72,017	$ 71,529
Minus value of operator's labor and management*	_____	13,850	18,750
Return on investment	$_____	$ 58,167	$ 52,779
Average capital investment	$_____	$340,357	$844,928
RATE OF RETURN ON INVESTMENT	_____%	17.1%	6.3%

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

Rate of return on investment 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 Farm	13 Farms with Poultry Only	8 Farms with Poultry & Other
Total cash receipts	$_____	$617,334	$692,625
Total cash operating expense	_____	531,014	584,956
NET FARM CASH FLOW	$_____	$ 86,320	$107,669
Less family living expense*	_____	13,850	18,750
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.

Table 13. MEASURES OF SIZE OF BUSINESS
21 New York Poultry Farms, 1983

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	$843,450

*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.

Table 14. Measures of Rates of Production
21 New York Poultry Farms, 1983

Measure	My Farm	13 Farms with Poultry Only	8 Farms with Poultry & Other
Eggs produced/hen	_____	249	249
Eggs sold/hen	_____	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 produced 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 21 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.

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

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

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

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.

Table 16. 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 CONTROL MEASURES
21 New York Poultry Farms, 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¢	18.2¢
Insurance per hen	_____¢	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 COSTS
21 New York Poultry Farms, 1983

Item	My Farm	13 Farms with Poultry Only	8 Farms with Poultry & 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. inventory	_____	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 share)	_____	12,752	14,221
Total Power and Machinery Cost	$_____	$ 49,595	$ 92,985
Less: Gas tax refund	$_____	$ 13	$181
Income from machine work	_____	-0-	-0-
NET POWER AND MACHINERY COST		$ 49,608	$ 92,804
Net power and machinery costs:			
per hen		$1.35	$2.12
per worker		$ 11,868	$ 15,017
per dozen eggs produced*		6.5¢	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 AND POWER AND MACHINERY COSTS
21 New York Poultry Farms, 1983

Item	My Farm	13 Farms with Poultry Only	8 Farms with 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¢
Labor and machinery cost:			
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	_____%	33%	30%
Unpaid family	_____%	5%	8%
Hired	_____%	62%	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	1979	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 hens	36,350	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	55.6¢	54.8¢	63.3¢	58.6¢	61.3¢
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 Farms with Poultry Only
Total farm expenses	$_____	$560,268
Interest on ave. capital @ 9%	_____	30,334
Operator's labor and Management*	_____	13,850
Total Cost	$_____	$604,452
Total receipts	$_____	$632,285
Less egg sales	_____	595,806
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.

Table 23. COST ITEMS IN PRODUCING A DOZEN EGGS
13 New York Poultry Farms, 1983

Item	My Farm	Cost Per Dozen Amount	Percent
Feed for layers		34.6¢	57.5%
Replacements:			
Chicks & pullets bought	____¢	5.1¢	8.5%
Grower feed	____	2.1	3.5
Total	____¢	7.4¢	12.0%
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 for 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 OF COSTS OF PRODUCING EGGS IN RECENT YEARS

Year	Av. Price Received	Farm Unit Cost Per Doz.*	Poultry Ration (cwt)	Feed Costs/Doz. Cents	Feed Costs/Doz. % Total	Labor Cost Per Doz.
1973	54.8¢	52.5¢	$6.75	30.3¢	58%	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

	1/1/83	1/1/84
Machinery & equip.	$105,974	$124,246
Livestock	53,011	49,442
Feed & supplies	8,153	10,226
Land & buildings	165,744	163,919
TOTAL INVESTMENT	$332,882	$347,833

EXPENSES

Replacements	
Chicks bought	$ 8,507
Pullets bought	30,023
Feed	
Layer feed bought	$263,400
Other feed	15,687
Labor	
Hired	32,174
Unpaid	1,044
Power and Machinery	
Machine hire	6,356
Machinery repair	8,749
Gas and oil	6,847
Util.	12,752
Poultry	
Eggs bought for resale	100,441
Livestock expense	1,058
Supplies	28,751
Crop	
Crop expense	382
Real Estate	
Land, bldg., & fence repair	3,959
Taxes	2,864
Insurance	4,144
Capital Items	
New machinery	26,504
New real estate	1,706
Other	
Advertising & promotion	-0-
Miscellaneous	4,920
Decrease in inventory	-0-
TOTAL FARM EXPENSES	$560,208

RECEIPTS

Egg sales	$595,806
Livestock sold	17,587
Crop sales	27
Miscellaneous	3,914
Total Cash Receipts	$617,334
Increase in Inventory	14,951
TOTAL FARM RECEIPTS	$632,285

FINANCIAL SUMMARY

Total Farm Receipts	$632,285
Total Farm Expenses	560,268
Farm Income	$ 72,017
Interest on capital @ 9%	30,334
Farm Labor Income	$ 41,683
Number of operators	1.385
LABOR INCOME/OPERATOR	$ 30,096

BUSINESS FACTORS

Worker equivalent	4.18
Number of hens	36,779
Number of pullets raised (5 farms)	17,316
Dozen of eggs (produced)	762,028
Eggs produced per hen	249
Dozens of eggs produced/worker	182,303
Hens per worker	8,799
Lbs. feed/doz. eggs produced	4.2
Av. price/cwt. feed bought	$8.39
Av. price/doz. eggs (all)	63.2¢

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

CAPITAL INVESTMENT	1/1/83	1/1/84
Machinery & equip.	$ 2.38	$ 2.38
Livestock	1.49	1.22
Feed & supplies	.28	.29
Land & buildings	3.90	4.40
TOTAL INVESTMENT	$ 8.05	$ 8.29

EXPENSES	
Replacements	
Chicks bought	$ .23
Pullets bought	.82
Feed	
Layer feed bought	7.16
Other feed	.43
Labor	
Hired	.87
Unpaid	.03
Power and Machinery	
Machine hire	.17
Machinery repair	.24
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
Capital Items	
New machinery	.72
New real estate	.05
Other	
Advertising & promotion	-0-
Miscellaneous	.13
Decrease in inventory	-0-
TOTAL FARM EXPENSES	$ 15.23

RECEIPTS	
Egg sales	$ 16.20
Livestock sold	.48
Crop sales	0
Miscellaneous	.11
Total Cash Receipts	$ 16.79
Increase in Inventory	.41
TOTAL FARM RECEIPTS	$ 17.20

FINANCIAL SUMMARY	
Total Farm Receipts	$ 17.20
Total Farm Expenses	15.23
Farm Income	$ 1.97
Interest on capital @ 9%	.83
Farm Labor Income	$ 1.14
LABOR INCOME/OPERATOR/HEN	$ .82

FARM BUSINESS SUMMARY
13 New York Poultry Farms, 1983

CAPITAL INVESTMENT

	1/1/83	1/1/84
Machinery & equip.	$143,753	$153,654
Poultry	62,292	55,710
Other livestock	12,801	12,169
Feed & supplies	39,534	44,558
Land & buildings	$270,130	$270,548
TOTAL INVESTMENT	$528,510	$536,639

EXPENSES

Replacements	
Chicks bought	$ 7,042
Pullets bought	47,003
Other livestock	745
Feed	
Layer feed bought	261,797
Other feed	20,668
Labor	
Hired	39,919
Unpaid	1,626
Power and Machinery	
Machine hire	5,463
Machinery repair	10,967
Gas and oil	10,170
Util.	13,312
Poultry	
Eggs bought for resale	63,637
Livestock expense	1,243
Supplies	27,514
Crop	
Crop expense	15,094
Real Estate	
Land, bldg., & fence repair	2,678
Taxes	4,807
Insurance	5,718
Capital Items	
New machinery	25,078
New real estate	4,047
Other	
Decrease in inventory	-0-
Miscellaneous	13,782
TOTAL FARM EXPENSES	$582,315

RECEIPTS

Egg sales	$572,180
Poultry sold	15,970
Other livestock	19,650
Crop sales	17,700
Miscellaneous	20,516
Total Cash Receipts	$646,016
Increase in Inventory	11,680
TOTAL FARM RECEIPTS	$657,696

FINANCIAL SUMMARY

Total Farm Receipts	$657,696
Total Farm Expenses	582,315
Farm Income	$ 75,381
Interest on average capital @ 9%	47,747
Farm Labor Income	$ 27,634
Number of operators (33)	1.57
LABOR INCOME/OPERATOR	$ 17,601

BUSINESS FACTORS

Worker equivalent	4.94
Number of hens	39,479
Number of pullets raised (9 farms)	16,448
Doz. of eggs (produced)	817,935
Eggs produced/hen	249
Doz. of eggs produced/worker	165,574
Hens per worker	7,992
Lbs. feed/doz. eggs produced	4.2
Av. price/cwt. feed bought	8.39
Av. price/doz. eggs (all)	61.3¢

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.

	1981	1982	1983	Target 1984
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				
Dozen eggs sold per worker				
Capital Efficiency				
Total inventory value	$	$	$	$
Total investment/hen	$	$	$	$
Farm receipts per $100 investment	$	$	$	$
Cost Control				
Layer feed bought per hen	$	$	$	$
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	$	$	$	$
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

NAME

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