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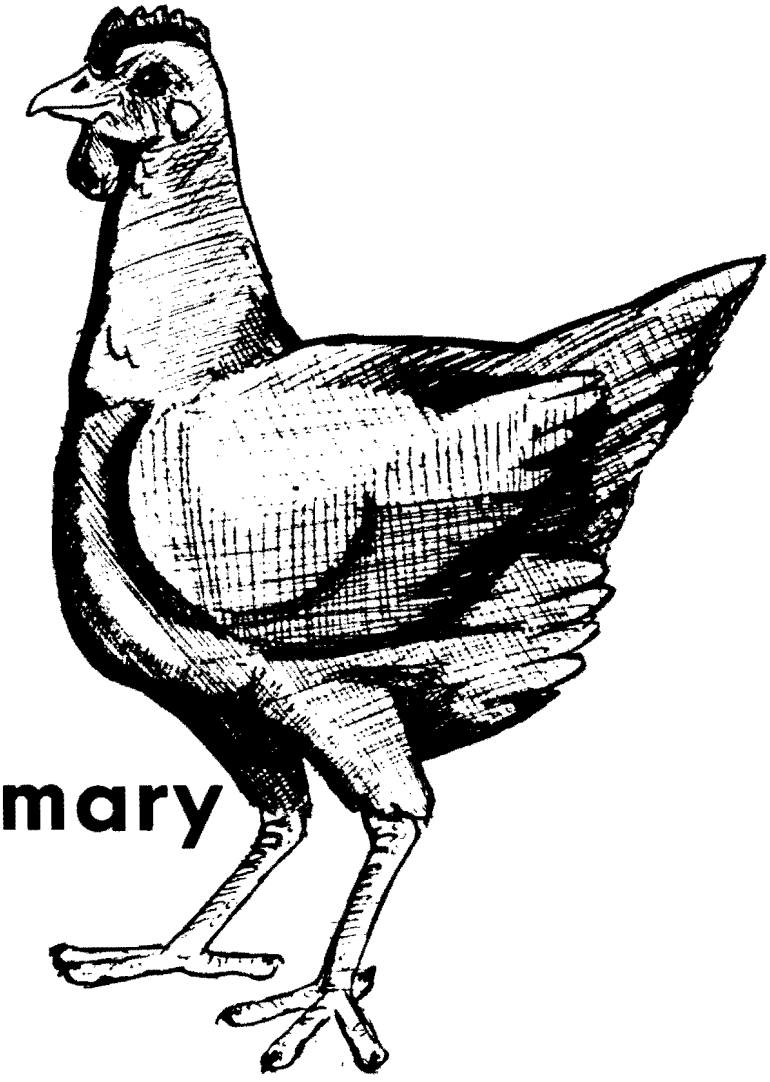

Poultry Farm Business Summary 1982

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1982 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 1982 record year, 26 poultrymen submitted records for summary and analysis. Extension field staff working with poultrymen 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 1982 showed little improvement over 1981. The cost of producing eggs in 1982 was 1.7¢ greater than 1981 while egg prices averaged 2.0¢ a dozen lower. Many poultrymen again had negative labor incomes in 1982.

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 poultrymen 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 cooperation with Cooperative Extension Specialists S. E. Ackerman and W. J. Toleman. 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-six poultry farm records for 1982 were used for this summary. The organization of these farms varies widely. There were seven poultry with other major enterprises, and nineteen layer only operations. In this general section, all businesses are included. For the more detailed analysis in the sections that follow, the 19 layer operations and the seven layer with other operations are included.

Table 1. FARM BUSINESS FINANCIAL SUMMARY
26 New York Poultry Farms, 1982

Item	Average All Farms 1982
Average Capital Investment	$416,426
Total Farm Receipts	468,289
Total Farm Expenses	436,598
Farm Income	$ 31,691
Interest @ 9% on Capital	$ 37,478
Labor and Management Income Per Farm	$ -5,787
Number of Operators	1.385
LABOR AND MANAGEMENT INCOME PER OPERATOR	$ -4,178

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 26 poultry farms, the average labor and management income per operator was $-4,178. 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 17 farms with minus labor incomes, and 2 with incomes per operator of over $30,000. Twelve of the farms with minus incomes were in the layer group.

The average capital investment on these 26 farms was $416,426. The receipts averaged $468,289, and the expenses $436,598. 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 0.9. This is in contrast to dairy businesses where commonly it takes two to three years for receipts to equal capital.

Poultry producers in 1982 again faced high production costs and low egg prices. These factors combined with a 9% interest charge on average capital produced a negative income situation for many poultry producers. Poultry farms in our Poultry Business Summaries for the years 1976-1979 have averaged a labor income per operator of $18,774 indicating that over the long run, egg producers have had positive incomes in New York. However, for the period 1980-1982 egg producers have averaged a labor income per operator of -$19,952.

Table 2. GENERAL FARM BUSINESS FACTORS
26 New York Poultry Farms, 1982

Business Factor	Average 26 Farms
Worker equivalent	3.7
Months unpaid labor	3.3
Months hired labor	25
Total months of labor	44.9
Percent of labor hired	56%
Average cost per month for hired labor	$1,051
Average number hens for year	28,727
Eggs produced per hen	248
Pounds feed per dozen eggs produced	4.0
Average price per cwt. layer feed	$ 8.28
Average price received per dozen eggs	58.6¢

Poultry farm operations differ a great deal in their organization. Poultry only versus poultry combined with other enterprises is another, while contract versus independent operations is still another. The range in the capital investment is a reflection of these factors. The low capital investment was $61,000, while the high was nearly 1.3 million. Similarly, the lowest expense reported was $75,000, while the high was 1.4 million. The wide range indicates that one should recognize limitations in the "averages" when they are used.

The labor force on these farms ranged from 1.3 to 8.5 worker equivalent with an average of 3.7. For all 26 farms, 56% 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 $1,051. 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 6,600 to 102,000. These figures reflect the average number of layers for the year. The number of eggs produced per hen averaged 248 but with a range of 187 to 286.

Marketing arrangements differ with some selling all eggs wholesale, while other sell at retail. The average price received per dozen sold by the 26 farms during 1982 was 58.6 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 26 farms was 4.0 pounds per dozen eggs. Layer feed costs per hundredweight averaged $8.28.

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 19 farms with poultry only and the 7 farms with poultry and other for the year 1982.

Table 3. LABOR FORCE, LIVESTOCK, CROPS GROWN, AND BUSINESS PRACTICES
26 New York Poultry Farms, 1982

Item	My Farm	Aver. Per Farm & Numbers Reporting: 19 Farms with Poultry Only	7 Farms with Poultry & Other
Labor			
Months of:			
Operators	_____	(19 farms) 14.5	(7 farms) 22.3
Family--unpaid	_____	(10 farms) 3.5	(4 farms) 2.6
Hired	_____	(17 farms) 23.5	(7 farms) 29.2
Total	_____	41.5	54.1
Worker equivalent	_____	3.4	4.5
Number of operators	_____	1.21	1.858
Percent of labor hired	_____ %	57%	54%
Livestock (number)			
Laying hens	_____	27,205	32,856
Pullets raised	_____	(7 farms) 34,219*	(2 farms) 39,500*
Business Practices			
Percent of eggs marketed:			
Wholesale	_____ %	41%	37%
Premium outlet	_____ %	51%	51%
Retail	_____ %	8%	12%
Percent of replacement pullets:			
Raised	_____ %	65%	67%
Bought	_____ %	35%	33%
Percent of layer feed:			
Purchased	_____ %	98%	89%
Homegrown	_____ %	2%	11%

*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, 1983
26 New York Poultry Farms

Item	My Farm	Amount Per Farm: 19 Farms with Poultry Only	Amount Per Farm: 7 Farms with Poultry & Other
Machinery & equipment	$_____	$ 87,554	$184,345
Poultry	_____	44,196	41,583
Other livestock	_____	447	48,345
Feed & supplies	_____	10,820	98,489
Land & buildings	_____	161,931	363,300
TOTAL INVESTMENT	$_____	$304,948	$736,062

Total investment on these farms ranged from $61,000 to $1,354,000. Six of the poultry and other farms, and seven 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	19 Farms with Poultry Only	7 Farms with Poultry & Other
Total investment/worker	$_____	$ 89,691	$163,569
Total investment/hen	$_____	$ 11.21	$ 22.40
Machinery investment/ hen	$_____	$ 3.22	$ 5.61
Land & buildings/hen	$_____	$ 5.95	$ 11.06
% Land & buildings are of total investment	_____%	53%	49%
Capital turnover (years)	_____	.66	1.54

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
26 New York Poultry Farms, 1982

Item	My Farm	19 Farms with Poultry Only	7 Farms with Poultry & Other
Egg sales	$_____	$445,703	$352,850
Poultry sales	_____	4,493	5,483
Other livestock sales	_____	-0-	74,173
Crop sales	_____	1,017	27,128
Work off farm	_____	19	504
Government payments & refunds	_____	25	2,186
Miscellaneous	_____	2,612	5,286
Total Cash Farm Receipts	$_____	$453,869	$467,610
Increase in Inventory	_____	10,849	10,386
TOTAL FARM RECEIPTS	$_____	$464,713	$477,996

Total farm receipts averaged $464,713 for the farms with poultry only, and $477,996 for the farms with poultry and other. Egg sales accounted for 95 percent and 75 percent respectively of the cash receipts on the two groups of farms. Crop sales accounted for 6 percent of the cash receipts on the farms with other enterprises, and the poultry and livestock sales accounted for 17 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	19 Farms with Poultry Only	7 Farms with Poultry & Other
Av. price/doz. of eggs sold	_____¢	61.4¢	52.2¢
Total cash receipts/worker	$_____	$133,491	$103,913
Total (cash) receipts per $1,000 average investment	$_____	$ 1,510	$ 640

The 19 farms with poultry only reported an average price/dozen eggs sold of 61.4¢ compared to the 52.2¢ 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
26 New York Poultry Farms, 1982

Item	My Farm		19 Farms with Poultry Only		7 Farms with Poultry & Other
Chicks purchased	$_____	(9 farms)	$ 4,066		$ 9,978
Pullets purchased	_____	(13 farms)	25,033		32,005
Layer feed bought	_____		175,277		154,129
Other feed	_____		12,481		17,740
Hired labor	_____		25,044		29,637
Machine hire	_____		3,170		1,242
Poultry equip. repair	_____		1,888		663
Machinery expense	_____		5,371		11,724
Gas and oil	_____		6,181		20,955
Poultry supplies, etc.	_____		21,422		15,049
Crop expense	_____		1,525		43,857
Building expense	_____		1,940		286
Taxes	_____		2,457		5,813
Insurance	_____		4,263		5,967
Utilities	_____		9,081		13,302
Eggs bought for resale	_____	(12 farms)	91,995	(0 farms)	-0-
Other livestock	_____		2,407		14,121
Miscellaneous	_____		7,187		9,605
TOTAL CASH OPERATING EXPENSE	$_____		$400,808		$386,073
New machinery	_____		12,961		13,339
Real estate	_____		23,657		29,729
Unpaid labor	_____		1,512		1,111
Decrease in inventory	_____		-0-		-0-
TOTAL FARM EXPENSES	$_____		$438,938		$430,252

Interest paid averaged $19,495 for the 19 farms and $32,865 for the seven farms. Sixteen 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
26 New York Poultry Farms, 1982

Item	My Farm	19 Farms with Poultry Only	7 Farms with Poultry & Other
Total farm receipts	$_____	$464,713	$477,996
Total farm expenses	_____	438,938	430,252
FARM INCOME	$_____	$ 25,775	$ 47,744
Interest on Average Capital @ 9%	_____	27,052	65,778
Labor income per farm	$_____	$ -1,277	$-18,034
Number of operators	_____	1.21	1.385
LABOR AND MANAGEMENT INCOME PER OPERATOR	$_____	$ -1,055	$-13,021

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 19 farms was $-1,055 and for the 7 farms $-13,021. The 26 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. Sixty-five percent of the farms had a minus income, while 12 percent had incomes of $20,000 or more.

Table 10. DISTRIBUTION OF LABOR INCOMES FOR 26 POULTRY OPERATIONS

Labor and Management Income Per Operator	Farms Number	Farms Percent
Minus	17	65
0 - $ 9,999	5	19
$10,000 - $19,999	1	4
$20,000 - or more	3	12

Table 11. RATE OF RETURN ON INVESTMENT
26 New York Poultry Farms, 1982

Item	My Farm	19 Farms with Poultry Only	7 Farms with Poultry & Other
Farm income	$_____	$ 25,775	$ 47,744
Minus value of operator's labor and management*	_____	10,200	18,000
Return on investment	$_____	$ 15,575	$ 29,744
Average capital investment	$_____	$300,579	$730,869
RATE OF RETURN ON INVESTMENT	_____%	5.2%	4.1%

*$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
26 New York Poultry Farms, 1982

Item	My Farm	19 Farms with Poultry Only	7 Farms with Poultry & Other
Total cash receipts	$_____	$453,869	$467,610
Total cash operating expense	_____	400,808	386,073
NET FARM CASH FLOW	$_____	$ 53,061	$ 81,537
Less family living expense*	_____	12,100	18,600
DEBT REPAYMENT ABILITY	$_____	$ 40,961	$ 62,937

*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
26 New York Poultry Farms, 1982

Measure	My Farm	19 Farms with Poultry Only	7 Farms with Poultry & Other
Number of hens	_____	27,205	32,856
Dozens of eggs sold*	_____	727,147	693,103
Dozens of eggs produced	_____	557,097	693,103
Worker equivalent	_____	3.4	4.5
Total farm receipts	$_____	$464,713	$477,996
Total investment (end year)	$_____	$304,948	$736,062

*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
26 New York Poultry Farms, 1982

Measure	My Farm	19 Farms with Poultry Only	7 Farms with Poultry & Other
Eggs produced/hen	_____	235	243
Eggs sold/hen	_____	261	253

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 235 and 243 for the two groups. The range for the 26 farms was from 187 to 286 eggs produced per hen. This is a range of 99 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
19 New York Poultry Farms, 1982

Eggs Produced Per Hen	Number of Farms	Average Number of Hens	Labor & Management Income/Operator
Less than 225	6	20,113	$ -9,280
225 - 245	6	12,987	$-16,478
More than 245	7	45,471	$ -1,517

Farms producing less than 245 eggs per hen had lower labor incomes than those with higher production rates. The seven farms producing 245 eggs or more per hen had the best labor incomes.

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
26 New York Poultry Farms, 1982

Measure	My Farm	19 Farms with Poultry Only	7 Farms with Poultry & Other
Dozens eggs sold/worker*	_____	209,966	154,023
Dozen eggs produced/worker	_____	160,864	154,023
Number hens/worker	_____	7,856	7,301

*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 19 poultry farms expenses average $1,100 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
26 New York Poultry Farms, 1982

Item	My Farm	19 Farms with Poultry Only	7 Farms with Poultry & Other
Value of layer feed/hen	$_____	$ 6.58	$ 5.16
Layer feed/doz. eggs produced	_____¢	35¢	36¢
Lbs. feed/doz. eggs produced	_____	4.3	4.4
Total labor cost per hen*	$_____	$ 1.34	$ 1.30
Total labor cost per dozen eggs produced*	_____¢	5.0¢	6.1¢
Building repairs per hen	_____¢	7.1¢	0.9¢
Utilities per hen	_____¢	33.4¢	40.5¢
Taxes per hen	_____¢	9.0¢	17.7¢
Insurance per hen	_____¢	15.7¢	18.2¢
Total farm production expenses/ hen (total less inventory increase and eggs bought)	$_____	$12.35	$12.77
Total expenses per $100 receipts	$_____	$94.88	$90.01

*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 sizeable on a poultry farm. It is important to keep these under control. Since labor and machinery work as a team, it is

Item	My Farm		19 farms with Poultry Only		7 farms with Poultry & Other	
Beginning inventory	$_____		$ 87,612		$ 197,953	
New machinery bought	_____		12,961		13,339	
Total (1)		$_____		$ 100,573		$ 211,292
End inventory	$_____		$87,554		$184,345	
Machinery Sold	_____		-0-		-0-	
Total (2)		$_____		$ 87,554		$184,345
Depreciation (1 minus 2)	$_____		$ 13,019		$ 26,947	
Int. @ 9% av. inventory	_____		7,882		17,203	
Gas and oil	_____		6,181		20,955	
Machinery repairs and auto expense	_____		5,371		11,724	
Machine hire	_____		3,170		1,242	
Elec. & Util. (farm share)	_____		9,081		13,302	
Total Power and Machinery Cost		$_____		$ 44,704		$ 91,373
Less: Gas tax refund	$_____		$ 24		$-0-	
Income from machine work	_____		-0-		-0-	
NET POWER AND MACHINERY COST				$ 44,728		$ 92,528

Net power and machinery costs:		
per hen	$1.64	$2.82
per worker	$13,155	$20,562
per dozen eggs produced*	8.1¢	13.3¢

*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
26 New York Poultry Farms, 1982

Item	My Farm	19 Farms with Poultry Only	7 Farms with Poultry & Other
Value of labor of operator*	$_____	$ 12,100	$ 18,600
Hired labor	_____	25,044	29,637
Unpaid family labor	_____	1,512	1,111
TOTAL LABOR COSTS	$_____	$ 38,656	$ 49,348
Net power & machinery cost	_____	44,728	92,528
TOTAL LABOR & MACHINERY COSTS	$_____	$ 83,384	$ 141,876
Labor cost per hen	$_____	$1.42	$1.50
Labor cost/dozen eggs produced	_____¢	7.0¢	7.1¢
Labor and machinery cost:			
per hen	$_____	$3.06	$4.32
per dozen eggs sold	_____¢	11.5¢	20.5¢

*Valued at $10,000 per operator.

For the 19 poultry only farms, the labor cost was less than the power and machinery cost. For the poultry and other the machinery and power cost was more. 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	19 Farms with Poultry Only	7 Farms with Poultry & Other
Months of hired labor	_____	23.5	29.2
Hired labor expense	$_____	$25,044	$29,637
Labor expense/month hired	$_____	$ 1,066	$ 1,015
Total labor cost/month	$_____	$ 929	$ 827
Percent of total labor by:			
Operator	_____%	35%	41%
Unpaid family	_____%	8%	5%
Hired	_____%	53%	52%

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, 1978-1982

Factor	1978	1979	1980	1981	1982
Number of farms	25*	24*	24*	26*	26*
Worker equivalent	4.2	4.6	4.3	4.3	3.7
Number of hens	23,115	36,350	40,390	40,719	28,727
Investment					
Land & buildings	$175,731	$255,515	$267,174	$264,449	$216,146
Machinery	93,667	109,466	109,693	118,274	113,613
Livestock & poultry	42,189	64,601	75,833	76,863	56,162
Feed & other	36,654	46,562	39,712	31,538	35,096
Total	$348,241	$476,144	$492,144	$491,124	$421,017
Receipts					
Egg sales	$342,575	$469,531	$506,927	$561,757	$420,704
Livestock sales	18,724	23,762	18,832	22,501	24,730
Other	51,068	56,586	35,040	21,263	36,865
Total	$412,367	$549,879	$560,799	$605,521	$457,569
Expenses					
Feed bought	$125,147	$220,121	$305,982	$299,047	$183,480
Hired labor	24,026	33,270	30,980	30,385	26,280
Chicks & pullets	29,713	50,660	48,870	50,806	32,568
Elec., util. & phone	4,822	6,951	8,490	9,497	10,218
Other	200,894	190,095	193,296	181,984	144,294
Total	$384,602	$501,097	$587,618	$571,719	$396,840
Business Factors					
Av. price/doz. eggs	58.8¢	55.6¢	54.8¢	63.3¢	58.6¢
Eggs per hen	228	240	240	231	237
Hens per worker	5,500	7,900	9,400	9,383	7,956
Lbs. feed/doz. eggs	4.6	4.0	4.0	4.3	4.0
Labor income/operator	$ 8,635	$ 13,216	$-47,536	$ -8,278	$ -4,178

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

Cost of Producing Eggs

Table 22. AVERAGE FARM COST OF PRODUCING EGGS
19 New York Poultry Farms, 1982

Item	My Farm		19 Farms with Poultry Only	
Total farm expenses	$_____		$438,938	
Interest on ave. capital @ 9%	_____		27,052	
Operator's labor and Management*	_____		12,100	
Total Cost		$_____		$478,090
Total receipts	$_____		$464,713	
Less egg sales	_____		445,703	
Other Income		_____		19,010
Cost of Producing Eggs (Total Cost Less Other Income)		$_____		$459,080
Dozen eggs sold		_____		727,147
Cost per dozen eggs sold		_____¢		63.1¢
Average price received		_____¢		61.3¢

*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
26 New York Poultry Farms, 1982

Item	My Farm	Cost Per Dozen Amount	Cost Per Dozen Percent
Feed for layers		32.1¢	50.9%
Replacements:			
Chicks & pullets bought	_____¢	5.2	8.2%
Grower feed	_____	2.2	3.5
Total	_____¢	7.4¢	11.7%
Less sale of birds	_____	.8	1.3
Net Replacement Cost	_____	6.6¢	10.4%
Labor	_____	6.9	10.9
Power & machinery (without interest)	_____	6.6	10.5
Interest on capital	_____	4.9	7.8
Poultry supplies, etc.	_____	3.9	6.2
Taxes & insurance	_____	1.2	1.9
All other	_____	.9	1.4
Total	_____¢	63.1¢*	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 20 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 32.1¢ is the total layer feed expense divided by the dozen of eggs produced. Feed for layers accounted for 50.9 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.
1972	32.6¢	34.4¢	$4.50	17.3¢	50%	4.6¢
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

*For "Poultry Only" farms in business summaries.

FARM BUSINESS SUMMARY
19 New York Poultry Farms, 1982

CAPITAL INVESTMENT	1/1/82	1/1/83
Machinery & equip.	$ 87,612	$ 87,554
Livestock	54,937	44,937
Feed & supplies	10,410	10,820
Land & buildings	143,250	161,931
TOTAL INVESTMENT	$296,209	$304,948

EXPENSES	
Replacements	
Chicks bought	$ 4,066
Pullets bought	25,033
Feed	
Layer feed bought	$175,277
Other feed	12,481
Labor	
Hired	25,044
Unpaid	1,512
Power and Machinery	
Machine hire	3,170
Machinery repair	5,371
Gas and oil	6,181
Util.	9,081
Poultry	
Eggs bought for resale	91,995
Livestock expense	2,407
Supplies	21,422
Crop	
Crop expense	1,545
Real Estate	
Land, bldg., & fence repair	1,940
Taxes	2,457
Insurance	4,263
Capital Items	
New machinery	12,961
New real estate	23,657
Other	
Advertising & promotion	-0-
Miscellaneous	9,075
Decrease in inventory	-0-
TOTAL FARM EXPENSES	$438,938

RECEIPTS	
Egg sales	$445,703
Livestock sold	4,493
Crop sales	1,017
Miscellaneous	2,656
Total Cash Receipts	$453,869
Increase in Inventory	10,844
TOTAL FARM RECEIPTS	$464,713

FINANCIAL SUMMARY	
Total Farm Receipts	$464,713
Total Farm Expenses	438,938
Farm Income	$ 25,775
Interest on capital @ 9%	27,052
Farm Labor Income	$ -1,277
Number of operators	1.21
LABOR INCOME/OPERATOR	$ -1,055

BUSINESS FACTORS	
Worker equivalent	3.4
Number of hens	27,205
Number of pullets raised (7 farms)	12,607
Dozen of eggs (produced)	557,097
Eggs produced per hen	235
Dozens of eggs produced/worker	165,068
Hens per worker	11,335
Lbs. feed/doz. eggs produced	3.9
Av. price/cwt. feed bought	$ 8.28
Av. price/doz. eggs (all)	61.4¢

FARM BUSINESS SUMMARY - AVERAGES PER HEN
26 New York Poultry Farms, 1982

CAPITAL INVESTMENT	1/1/82	1/1/83
Machinery & equip.	$ 3.22	$ 3.22
Livestock	2.02	1.64
Feed & supplies	.38	.40
Land & buildings	5.27	5.95
TOTAL INVESTMENT	$ 10.89	$ 11.21

EXPENSES	
Replacements	
Chicks bought	$ .15
Pullets bought	.92
Feed	
Layer feed bought	6.44
Other feed	.46
Labor	
Hired	.92
Unpaid	.06
Power and Machinery	
Machine hire	.12
Machinery repair	.20
Gas and oil	.23
Util.	.33
Poultry	
Eggs bought for resale	3.38
Livestock expense	.09
Supplies	.79
Crop	
Crop expense	.06
Real Estate	
Land, bldg., & fence repair	.07
Taxes	.09
Insurance	.16
Capital Items	
New machinery	.48
New real estate	.87
Other	
Advertising & promotion	-0-
Miscellaneous	.33
Decrease in inventory	-0-
TOTAL FARM EXPENSES	$ 16.13

RECEIPTS	
Egg sales	$ 16.38
Livestock sold	.17
Crop sales	.04
Miscellaneous	.10
Total Cash Receipts	$ 16.68
Increase in Inventory	.40
TOTAL FARM RECEIPTS	$ 17.08

FINANCIAL SUMMARY	
Total Farm Receipts	$ 17.08
Total Farm Expenses	16.13
Farm Income	$ .95
Interest on capital @ 9%	.99
Farm Labor Income	$ -.04
LABOR INCOME/OPERATOR/HEN	$ -.03

FARM BUSINESS SUMMARY
26 New York Poultry Farms, 1982

CAPITAL INVESTMENT	1/1/82	1/1/83
Machinery & equip.	$117,320	$113,613
Poultry	53,094	43,492
Other livestock	13,420	13,343
Feed & supplies	33,466	34,423
Land & buildings	194,535	216,146
TOTAL INVESTMENT	$411,835	$421,017

EXPENSES	
Replacements	
Chicks bought	$ 5,658
Pullets bought	26,910
Other livestock	3,062
Feed	
Layer feed bought	169,583
Other feed	13,897
Labor	
Hired	26,280
Unpaid	1,404
Power and Machinery	
Machine hire	2,651
Machinery repair	8,639
Gas and oil	10,158
Util.	10,218
Poultry	
Eggs bought for resale	67,227
Livestock expense	2,499
Supplies	19,706
Crop	
Crop expense	12,937
Real Estate	
Land, bldg., & fence repair	1,495
Taxes	3,360
Insurance	4,722
Capital Items	
New machinery	13,063
New real estate	25,291
Other	
Decrease in inventory	-0-
Miscellaneous	7,838
TOTAL FARM EXPENSES	$436,598

RECEIPTS	
Egg sales	$420,704
Poultry sold	4,760
Other livestock	19,970
Crop sales	8,047
Miscellaneous	4,088
Total Cash Receipts	$457,569
Increase in Inventory	10,720
TOTAL FARM RECEIPTS	$468,289

FINANCIAL SUMMARY	
Total Farm Receipts	$468,289
Total Farm Expenses	436,598
Farm Income	$ 31,691
Interest on average capital @ 9%	37,478
Farm Labor Income	$ -5,787
Number of operators (36)	1.385
LABOR INCOME/OPERATOR	$ -4,187

BUSINESS FACTORS	
Worker equivalent	3.7
Number of hens	28,727
Number of pullets raised (9 farms)	12,251
Doz. of eggs (produced)	593,714
Eggs produced/hen	237
Doz. of eggs produced/worker	164,127
Hens per worker	7.956
Lbs. feed/doz. eggs produced	4.0
Av. price/cwt. feed bought	10.20
Av. price/doz. eggs (all)	58.9¢

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

Your business analysis on the preceding pages provide the factors for 1982. You will need to refer to earlier summaries for the 1980 and 1981 factors.

	1980	1981	1982	Target 1983
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

NAME

Item	Your Farm	1982
Avg. Number of Layers		28,727
Eggs Produced/Hen		237
Pounds of Feed/Dozen		4.0
Feed Cost/Ton ($)		165
Feed Cost/Dozen ($)		32.1
Cash Cost/Dozen ($)		55.1
Price Received/Dozen Sold (¢)		61.4
Total Cash Receipts ($)		$457,567
Total Cash Expense ($)		396,840
Net Cash Flow ($)		60,727
Debt Repayment Ability ($)		40,961
Ending Farm Inventory ($)		421,017
Labor Income ($)		-4,178