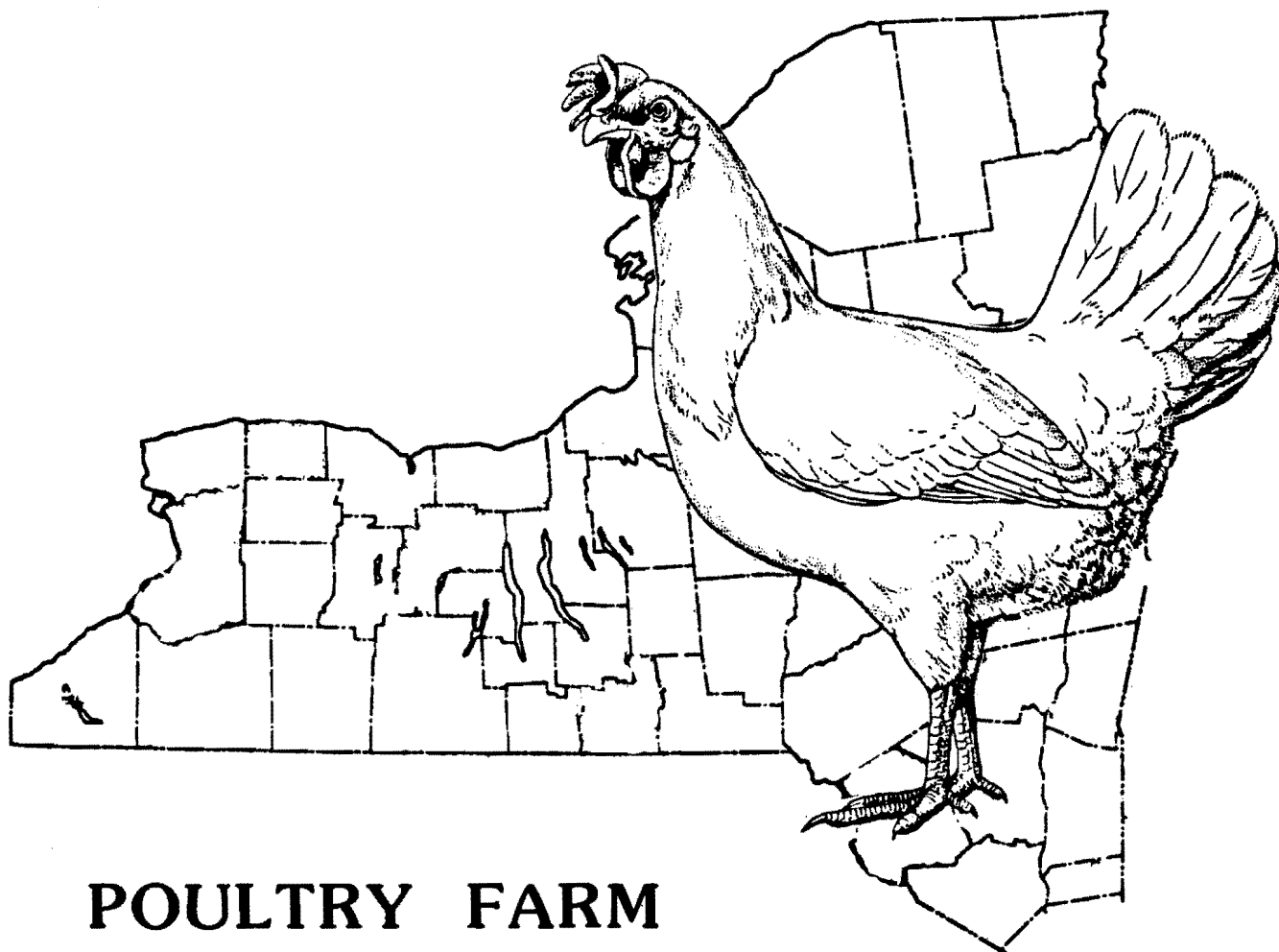


1986



**POULTRY FARM  
BUSINESS SUMMARY**

by

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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 with 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 1986, 16 poultry producers submitted records for summary and analysis. Extension field staff working with poultry producers collected the figures for each farm and 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 other enterprises.

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 S. E. Ackerman and K. S. Park, Regional Extension Specialists, Department of Extension Administration, New York State College of Agriculture and Life Sciences. Susanne Lennon typed this report.

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## INTRODUCTION

One of the factors which influences the farm's bottom-line profit is the price the farm is able to receive for its eggs. To an extent this price may be influenced by marketing efforts on the part of the farm business, however, many other factors influencing the regional price are outside of the farmer's control. These may include the supply of laying hens, the economy, government policies and regulations, etc. The farm prices in New York from 1977 to 1986 show year-to-year fluctuations and do not move in the same direction for more than 3 consecutive years.

Table 1.

### NEW YORK STATE EGG PRODUCTION AND FARM PRICE<sup>1</sup>

Year	Eggs Produced	Farm Price per dozen
	(millions)	(cents)
1977	1,805	53.4
1978	1,845	46.5
1979	1,767	54.4
1980	1,776	50.3
1981	1,858	56.7
1982	1,859	55.5
1983	1,741	57.5
1984	1,710	70.8
1985	1,710	55.8
1986	1,523	59.0

Feed costs influence the cost of production and are in general approximately 50% of the total cost of eggs sold. Changes in poultry feed costs are also displayed in Figure 1.

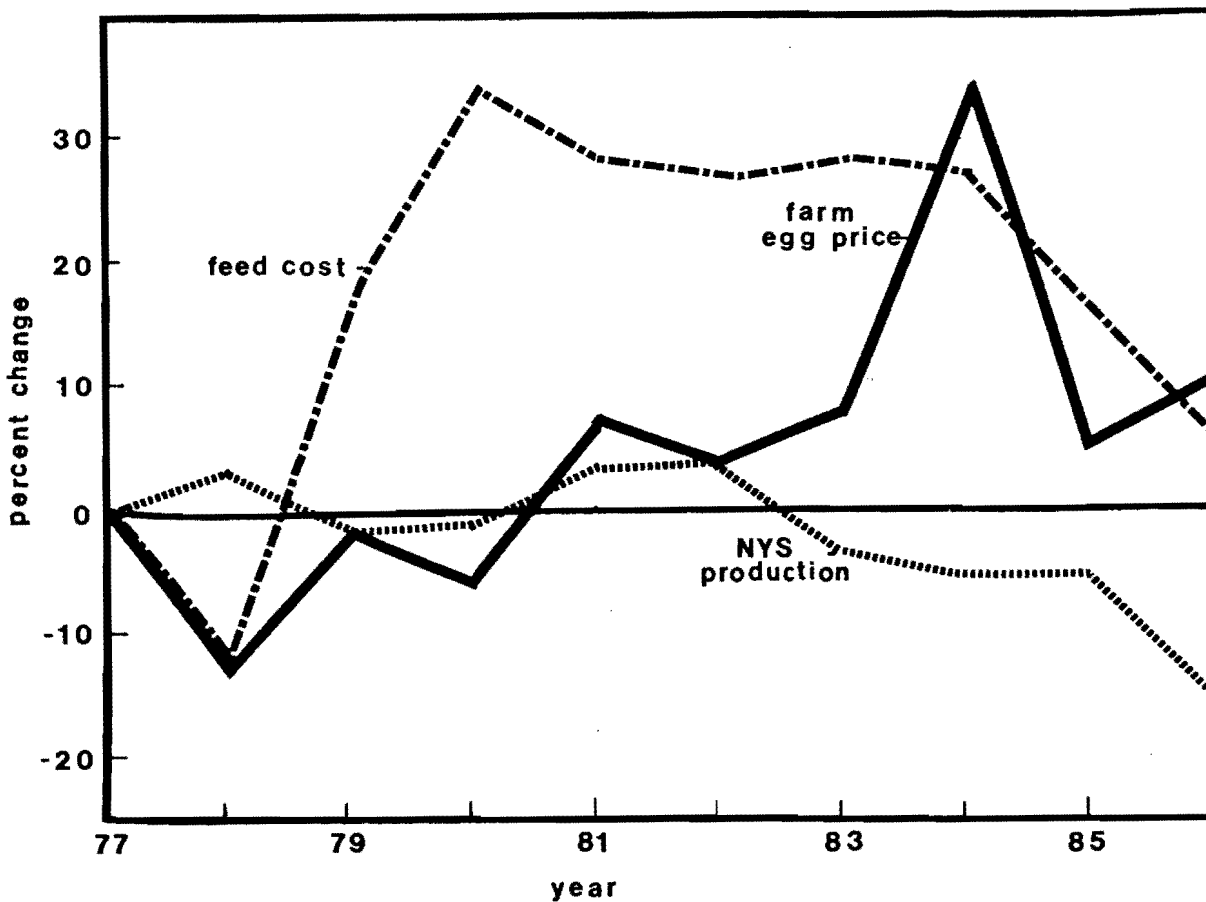
<sup>1</sup>Source: NY Crop Reporting Service, New York Agricultural Statistics.

Figure 1 shows the relationships among New York State egg production, farm price and feed costs. The farm price of eggs in relation to the farm price in 1977 appears to be increasing each year while New York production is declining. Low farm prices and high feed costs in the early 80's resulted in an average income per operator of \$-19,952 for 1980 - 1982.

Feed prices have been declining slightly since 1982 when compared to 1977 feed prices. This has been due to the drop in the price of grains and other feed ingredients and also may be due to improved on-farm milling operations.

EGGS: NEW YORK STATE PRODUCTION, FARM PRICE AND FEED COST<sup>2</sup>

% change from 1977



<sup>2</sup>NY Crop Reporting Service, New York Agricultural Statistics and Poultry Farm Business Summary 1983.

GENERAL SUMMARY OF ALL FARMS

The 1986 Poultry Summary included 16 farm records. The size, organization and enterprises of the farms varied widely, and the figures presented in this summary are merely the averages of all farm situations. The 16 farms used in the summary can be divided into 9 farms with poultry operations only and 7 farms with other major enterprises such as beef, hogs, dairy or crops.

Below is a brief overview of some major business factors summarized from the 16 farms included in the statewide summary. For more detailed business analyses, calculations for the 9 farms with poultry only and the 7 farms including other major enterprises are separated.

Table 2.                   SUMMARY OF FARM BUSINESS FACTORS

Business Factor	16 Farm Average
No. of operators	1.48
Worker equivalent	6.93
months unpaid labor	3.96
months hired labor	59.4
total months labor	83.1
% Labor hired	71.5 %
Average Inventory	716,544
Average No. laying hens	53,652
Eggs Sold (dz.)	1,290,386

The Farm Income from Table 3 is accrual base Farm Receipts minus accrual Farm Expenses. The accrual base accounting includes machinery and real estate depreciation/appreciation as part of the farm business expenses. Changes in inventory are also accounted for. Inventory increases due to storage of feed that is not fed or sold that year and inventory decreases when feed is used up faster than it is being replaced are adjustments to the production expenses that must be made to accurately assess the income for the year. Farm Expenses also includes an adjustment for unpaid family labor.

Table 3.

## FARM BUSINESS FINANCIAL SUMMARY

Item	16 Farm Average
Total Farm Receipts	\$878,442
Total Farm Expenses	(811,813)
Farm Income	\$66,629
Interest on Capital	(35,550)
Labor & Management Income/farm	\$31,079
Operators/Farm	1.48
Labor & Management Income/Operator	\$21,008

Labor and Management Income per Farm is calculated by subtracting the expense (cost) of using the owner's equity or investment in the farm business. The owner's equity, if used in an alternative investment would be expected to earn interest. Since the owner is using it in a farm business though, it is actually "costing" the farmer to keep it there, and that cost should be deducted from Farm Income. Nine percent of average inventory less the interest paid for the year is used to estimate the cost of equity.

Labor and Management Income per Operator is a measure of the return to the operator for his labor and management that he has invested in the farm business, and is a common measure for comparing the overall results of farm operations. The average Income per Operator from the 16 farms sampled was \$20,032. In addition to the labor and management income, the operator usually has certain privileges such as a house to live in, use of an automobile, utilities, eggs and poultry to use and other miscellaneous items.

The last Statewide Poultry Summary in 1983 also posted a positive average income. Three years prior, 1980-1982, however the average income per operator was -\$19,952. In 1986, the Income per Operator varied widely with a range of negative incomes to some with over \$30,000.

POULTRY FARM INCOME STATEMENT

Receipts

The size and the nature of a business many times can be assessed by examining its receipts. The size of many nonfarm businesses are measured in terms of gross sales. However, in the egg industry egg prices fluctuate causing substantial fluctuations in gross sales.

Below, Total Cash Farm Receipts are converted to accrual Total Farm Receipts by adjusting for any increase in inventory. Inventory increases are usually due to expansion or improvements or to changes in operations. Because increases in inventory could have been converted to cash and sold, they are considered here as receipts when summarizing the business data.

Table 4. FARM RECEIPTS

Item	My Farm	9 Farms with Poultry Only	7 Farms with Poultry & Other
Egg		\$785,341	\$779,700
Poultry		40,246	13,888
Livestock		0	14,242
Crops		0	5,936
Custom Work		0	35,126
Gov't payments and refunds		965	32,816
Misc.		6,343	37,590
 Total Cash Farm Receipts		\$832,895	\$919,298
Inv. Increase		10,376	4,364
 Total Farm Receipts		\$843,271	\$923,662
 Analysis:			
Average Price per dozen Sold		\$ .612	\$ .600
Cash Receipts per Worker		\$147,560	\$107,971

Total Farm Receipts for both farm categories, poultry only and poultry with other, were very close. However, egg sales on farms with only poultry comprised 93% of total receipts and only 84% on



farms with other enterprises.

Expenses

Cost information is needed in order to control production costs and to understand where and how to become more cost efficient.

Table 5. FARM EXPENSES

Item	My Farm	9 Farms with Poultry Only	7 Farms with Poultry & Other
<u>Replacements</u>			
Chicks purchased		\$19,341	\$16,536
Pullets purchased		67,370	50,624
<u>Feed</u>			
Layer Feed		336,233	234,723
Grower Feed		32,348	23,490
<u>Labor</u>			
Hired Labor		50,820	95,897
<u>Machinery</u>			
Machinery Hire		4,905	5,335
Poultry Equip. Repair		3,392	12,701
Machinery Exp.		6,064	5,480
Gas and Oil		4,116	14,883
<u>Poultry</u>			
Poultry Supplies		73,979	77,223
<u>Crop</u>			
Crop Expenses		0	27,679
<u>Real Estate</u>			
Land & Building Repairs		2,527	4,207
Taxes		4,058	8,273
Insurance		8,819	15,405
<u>Other</u>			
Utilities		20,522	17,598
Eggs purchased		42,387	168,700
Other Livestock exp.		0	5,840
Miscellaneous		39,659	46,435
Total Cash Expenses		\$716,540	\$831,027
Machine Depreciation		24,494	31,433
Real Estate Depre.		12,172	9,388
Inventory Decrease		3,161	6,751
Unpaid Labor		2,500	1,286
Total Farm Expenses		\$758,867	\$879,885

The miscellaneous expense item contains expenses such as

interest paid, office expenses, dues, travel, etc.

Total Farm Expenses were higher for poultry farms with other enterprises due primarily to higher labor costs, machinery expenses and crop expenses. Total farm expenses per day were \$2,079 and \$2,411 for "poultry only" farms and "poultry and other" farms respectively.

The price per dozen the farmer receives for his eggs is an important factor in determining the profitability of the business. The table below illustrates the relationship between the average egg price received at the farm and the Income per Operator.

Table 6. PRICE PER DOZEN  
AND LABOR AND MANAGEMENT INCOME

Price per dozen (cents)	Labor and Management Income/Operator
< 55	\$ -9,466
55 - 65	12,625
> 65	18,817

#### Income Summary

The financial success of a poultry business can be measured in various ways, and there is no one best measure. This summary used the following measures:

- 1) Farm Income and Labor and Management Income
- 2) Rate of Return on Investment
- 3) Net Farm Cash Flow and Debt Repayment Ability

Farm Income measures the return from the business to the operator(s) for labor and management and capital and is the difference between total receipts and total expenses (accrual basis).

Labor and management Income per Operator is the return to each farm operator for his time and efforts.

The labor and management incomes varied widely among all farms in the survey with 10 of the 16 farms showing a negative income per operator and 6 farms showing a positive income per operator.

Table 7.

FARM INCOME AND  
LABOR AND MANAGEMENT INCOME

Item	My Farm	9 Farms with Poultry Only	7 Farms with Poultry & Other
Total Farm Receipts		\$843,271	\$923,662
Total Farm Expenses		(758,867)	(879,885)
Farm Income		\$84,404	\$43,777
Int. on Capital		(29,919)	(42,790)
Labor & Management Income/Farm		\$54,485	\$ 987
No. of Operators		1.4	1.6
Labor & Management Income/Operator		\$38,703	\$ 634

Rate of Return on Investment is calculated by subtracting a charge for the operator's labor and management from the "farm income" and then dividing by the average investment for the year. In the above calculation, \$15,000 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.

Table 8.

RATE OF RETURN ON INVESTMENT

Item	My Farm	9 Farms with Poultry Only	7 Farms with Poultry & Other
Farm Income		\$84,404	\$43,777
Value of Operator's Labor & Management		(22,567)	(23,643)
Return on Investment		\$61,838	\$ 20,134
Avg Capital Investment		\$648,418	\$804,134
Rate of Return on Investment		9.5%	2.5%

Net Farm Cash Flow reflects the cash that is available from the year's operation for family living, 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 \$15,000 per operator. It is assumed here that new machinery and real estate are purchased with borrowed capital. This measure is useful for planning debt repayment schedules.

Table 9.

NET FARM CASH FLOW  
AND DEBT REPAYMENT ABILITY

<u>Item</u>	<u>My Farm</u>	<u>9 Farms with Poultry Only</u>	<u>7 Farms with Poultry &amp; Other</u>
Total Cash Receipts	_____	\$832,895	\$919,298
Total Cash Expenses	_____	(716,540)	(831,027)
Net Farm Cash Flow	_____	\$116,355	\$ 88,271
Family Living Expenses	_____	( 22,567)	(23,643)
Debt Repayment Ability	_____	\$ 93,788	\$ 64,628

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 year's average inventory is used as a measure of the capital investment in the business. It is suggested that the inventory reflect its "market value".

Table 10.

## FARM INVENTORY VALUES

Item	My Farm	9 Farms with Poultry Only	7 Farms with Poultry & Other
Machinery and Equipment		\$204,511	\$212,800
Real Estate		320,159	412,093
Other		123,748	179,241
Total Inventory		\$648,418	\$804,134

More important than the amount of capital is how effectively it is used. Capital that is "not productive" and does not provide the farmer with a high enough rate of return may indicate that money has been unwisely invested. Below are some measures used in analyzing the efficiency of the use of capital. These measures will be helpful in finding possible sources of "nonproductive" capital.

Farms having other enterprises generally have larger investments because of the additional land and machinery used in the other enterprises. However, Total Investment/Worker is smaller on farms with other enterprises because of the larger work force for both the poultry and other operations.

Table 11.

## CAPITAL INVESTMENT ANALYSIS

Item	My Farm	9 Farms with Poultry Only	7 Farms with Poultry & Other
Total Investment/Worker		\$114,877	\$ 94,445
Total Investment/Hen		11.42	16.20
Machinery & Equip/Hen		3.60	4.29
Land & Buildings/Hen		5.64	8.30
% Land and Building of Total Inventory		49.4%	51.2%
Capital Turnover		1.30	1.15

Capital Turnover is used to measure how many times the business' total investment can be recovered from one year of sales. It took less than one year for both farm categories to recover their total business investment.