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FARM BUSINESS ANALYSIS AND SUMMARY

21 Chautauqua County Grape Farms

1968

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This report is a summary and analysis of the farm business records kept by 21 Chautauqua County grape growers for the 1968 calendar year. These farms were included in a record keeping project in this County in 1956 - 1958. This report was prepared so the individual growers could compare their operations with the average of the 21 growers as well as compare their physical inputs, expenses and returns with those of ten years ago. A report will be issued comparing 1968 with 1958.

The growers included in this report were not selected at random. They were ones interested in a financial record of their businesses and a comparison with averages of other farms. This should be kept in mind as one studies this report. However, this report is useful to any grape grower. It provides a simple framework for summarizing and analyzing the farm business. Also, it provides standards which any grower can use as a basis for comparison to determine how his operations measure up to these averages.

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Chautauqua County Grape Growers  
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MEASURING THE PROFIT OR LOSS FROM THE FARM BUSINESS IN 1968

<u>Items</u>	<u>My Farm</u>	<u>Average per Farm</u> <u>21 Farms</u>
Average farm inventory	\$ _____	\$95,440
Farm receipts, grapes (cash receipts, 1968*)	\$ _____	\$26,512
Farm receipts, other	_____	<u>5,241</u>
Total farm receipts	\$ _____	\$31,753
Farm expenses	_____	<u>23,676</u>
Farm income	\$ _____	\$ 8,077
Interest on capital @ 6 per cent	_____	<u>5,726</u>
Labor income per farm	\$ _____	\$ 2,351

Labor income is the return the farm operator receives for his labor and management, in addition to the use of a house and products from the farm. It is the amount left after paying all farm expenses, and deducting a charge for unpaid family labor, and for interest on all of the capital invested in the business.

Because receipts from the grape crop are spread over two or three years, labor income as measured here for one year is somewhat misleading.

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\* In calculating receipts, all cash income from grapes received in 1968 was included, regardless of what crop the payment was for. All grape certificates for the 1966-67 crops were valued at 53 per cent of the face value, and added to cash receipts. Receipts from grape certificates that were sold for cash were not included.

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CAPITAL INVESTMENT

Farm Inventories, End of Year

<u>Items</u>	<u>My Farm</u>	Average per <u>Farm</u>	Per Cent of <u>Total</u>
Livestock	\$ _____	\$ 95	*
Crops, feed and supplies	_____	1,555	2
Machinery and equipment	_____	11,822	12
Land and buildings	_____	<u>82,648</u>	<u>86</u>
Total farm inventories	\$ <u>_____</u>	<u>\$96,120</u>	<u>100</u>
Man equivalent	_____	3.3	
Investment per man	\$ _____	\$29,127	
Number of acres of grapes	_____	54	
Total farm investment per acre of grapes	\$ _____	\$ 1,780	
Number of crop acres	_____	60	
Investment per acre in crops	\$ _____	\$ 1,602	

Based on end of year inventory values, the total investment on the 21 grape farms averaged \$96,120.

Investment costs are an important part of your costs of operation. If yours are out of line in relation to your production capacity, this means an added burden in overhead cost.

\* Less than one per cent.

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SOURCES OF INCOME

<u>Items</u>	<u>My Farm</u>	<u>Average per Farm</u>	<u>Per Cent of Total</u>
Farm Receipts			
Grape Receipts:			
1968 crop	\$ _____	\$12,486	
1967 crop	_____	9,277	
1966 crop	_____	687	
1966-67 crop (certificates)	_____	<u>4,062</u>	
Total grape receipts*	\$ _____	\$26,512	84
Other crop receipts	_____	1,011	3
Livestock products and livestock sales	_____	64	**
Miscellaneous receipts	_____	2,807	9
Increase in inventory	_____	<u>1,359</u>	<u>4</u>
Total farm receipts	\$ <u>_____</u>	<u>\$31,753</u>	<u>100</u>

Grape income comprised 84 per cent of total farm receipts. About half of the grape income received in 1968 was for the current crop.

Increase in inventory is included as a farm receipt because it is assumed that the added inventory value could be turned into cash at the owner's discretion. The increase in inventory came about through additional investment in machinery and in land and buildings.

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\* Cash received during 1968, plus cash value of 1966-67 grape certificates calculated at 53 per cent of face value.

\*\* Less than one per cent.

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FARM EXPENSES

<u>Items</u>	<u>My Farm</u>	Average per <u>Farm</u>	Per Cent of <u>Total</u>
Livestock expense	\$ _____	\$ 27	*
Lime and fertilizer	_____	735	3
Seeds and plants	_____	303	1
Storage and containers	_____	17	*
Spray materials	_____	1,418	6
Vineyard and other crop expense	_____	499	2
Gas and oil	_____	713	3
Auto and truck	_____	199	1
Equipment repair	_____	1,011	4
Machine hire	_____	937	4
Real estate upkeep	_____	150	1
Labor	_____	11,540	49
Telephone and electricity	_____	214	1
Taxes	_____	1,715	7
Miscellaneous farm expense	_____	937	4
New buildings	_____	939	4
New machinery	_____	1,873	8
Livestock bought	_____	13	*
Other (grape contract)	_____	143	1
Unpaid family labor	_____	<u>293</u>	<u>1</u>
Total farm expenses	\$ <u>_____</u>	<u>\$23,676</u>	<u>100</u>

Farm expenses on these 21 Chautauqua County farms averaged \$23,676. Hired labor was the most important, accounting for 49 per cent of the total. Equipment costs were the next largest expense. The combined costs of gas, truck and auto, equipment repair, machine hire, and new machinery accounted for 20 per cent of all expenses.

\* Less than one per cent.

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POWER AND MACHINERY COSTS\*

Item	My Farm	Average per Farm
Beginning inventory	\$ _____	\$11,951
New machinery bought	_____	<u>1,873</u>
Total	\$ _____	\$13,824
End inventory	\$ _____	\$11,822
Machinery sold	_____	<u>367</u>
Total	\$ _____	<u>\$12,189</u>
Depreciation	\$ _____	\$ 1,634
Interest at 6% av. inventory	_____	713
Gas and oil	_____	713
Machinery repairs	_____	977
Machine hire	_____	1,030
Auto expenses (farm share)	_____	197
Electricity (farm share)	_____	<u>29</u>
TOTAL MACHINERY COSTS	\$ _____	\$ 5,293
Income from machine work	\$ _____	\$ 817
Gas tax refund	\$ _____	\$ <u>42</u>
NET MACHINERY COST	\$ _____	\$ 4,434
<hr style="border-top: 1px dashed black;"/>		
Acres in grapes	_____	54
Machinery cost per acre in grapes	\$ _____	\$ 82
Man equivalent	_____	3.3
Machinery cost per man	\$ _____	\$ 1,344

All net machinery costs, including depreciation, totaled \$4,434. On the 21 grape farms, machinery costs on the basis of an acre in grapes averaged \$82.

Efficiency in the use of equipment is an important factor affecting profits in farming. These equipment costs varied from farm to farm.

\* Does not include housing or repair labor costs.

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LABOR AND MACHINERY COSTS

Most farm operators justify major machinery purchases as a way to save labor and increase productivity. How well labor and machinery are combined has an important bearing on farm profits.

LABOR AND POWER AND MACHINERY COSTS

Items	My Farm	Average per Farm
Value of operator's labor*	\$ _____	\$ 5,293
Hired labor	_____	11,540
Unpaid family labor	_____	<u>279</u>
TOTAL LABOR COSTS	\$ _____	\$17,132
Net power and machinery cost	_____	<u>4,434</u>
TOTAL LABOR & MACHINERY COST	\$ _____	\$21,566
Total labor and machinery cost per acre in grapes	\$ _____	\$ 399
Total labor and machinery cost per man	\$ _____	\$ 6,535

\* Valued at a rate of \$5,400 per operator per year. Some operators reported less than one year of labor devoted to the business.



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	<u>My Farm</u>	<u>Average per Farm</u>
<u>Measures of Size</u>		
1. Acres in bearing grapes	_____	50
2. Acres in non-bearing grapes	_____	4
3. Total acres in fruit	_____	56
4. Total crop acres	_____	60
5. Man equivalent	_____	3.3
6. Total work units	_____	771
7. Tons grapes produced	_____	200
<u>Labor Efficiency</u>		
1. Acres in bearing and non-bearing grapes per man	_____	16
2. Tons grapes produced per man	_____	61
3. Crop acres per man	_____	18
4. Work units per man	_____	234
<u>Rates of Production</u>		
1. Grape yield per acre (tons)	_____	4.0
2. Grape receipts per acre of bearing grapes	\$ _____	\$530
<u>Degree of Specialization</u>		
1. Per cent of work units on grapes	_____	89
2. Per cent of all receipts from grapes	_____	83

These business analysis factors show the size of the grape enterprise and its relation to the whole farm business on the 21 farms. They also show measures of labor efficiency and rates of grape production.

A grape producer can gain valuable information about the strong and weak points of his grape enterprise by comparing data from his business with the average on the 21 farms.

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AN ARRAY OF BUSINESS FACTORS

Acres of bearing grapes	Total work units	Yield per acre of bearing grapes	Investment per acre of grapes (bearing and non-bearing)	Per cent of total work units on grapes
		(tons)	(dollars)	
113	1730	6.1	677	100
104	1598	5.3	816	100
100	1558	5.1	1138	100
90	1394	4.9	1259	100
65	1059	4.8	1287	100
60	910	4.8	1387	100
56	860	4.7	1430	100
54	816	4.7	1724	100
50	792	4.6	1728	100
47	658	4.6	1906	100
42	655	4.3	2243	100
41	646	4.2	2250	94
40	624	4.1	2318	94
33	520	3.9	2337	93
30	488	3.9	2490	92
28	376	3.6	2538	92
24	366	3.5	2590	91
22	336	3.4	2801	84
20	310	2.7	3051	82
20	288	2.7	3344	77
14	216	1.5	3824	50

## USE YOUR RECORDS

Good farm records are worth many dollars to the farm manager. Here are the most important uses:

A Diary -- In planning work this month and this year, it helps to "check the record" to find out what action was taken last month or last year.

To Analyze the Business -- The operator of a commercial farm business must move fast to keep up-to-date. Good records will show him the strong and weak points of his business. This information provides a foundation on which to make changes to build a more profitable business.

For Tax Purposes -- Tax obligations make it a must to have complete records. Tax dollars can be saved every year by using farm records. Equally important are good records at the time of a sale of part or all of the farm property.

For Family Partnerships -- When a farm is owned and operated by father and son or other family combination, records are necessary for fair treatment of all family members. Good records will settle many disagreements before they start.

For Credit -- Most commercial farm businesses use credit. A record of cash receipts and expenses, together with an annual inventory are required by most lenders. Such records provide for wiser use of farm credit, and better understanding between borrower and lender.

In Case of Family or Business Crises -- At the death of the farm operator, good records can save the heirs time, money, and heartache. Annual inventories are especially important for this purpose. Inventories are also worth a lot in case of a fire or other disaster.

Keeping farm records is only part of the job. Learning to use them is even more important. Don't be satisfied just to meet tax requirements. You owe it to yourself and your business to make greater use of your farm records. They can be your most valuable farm equipment.