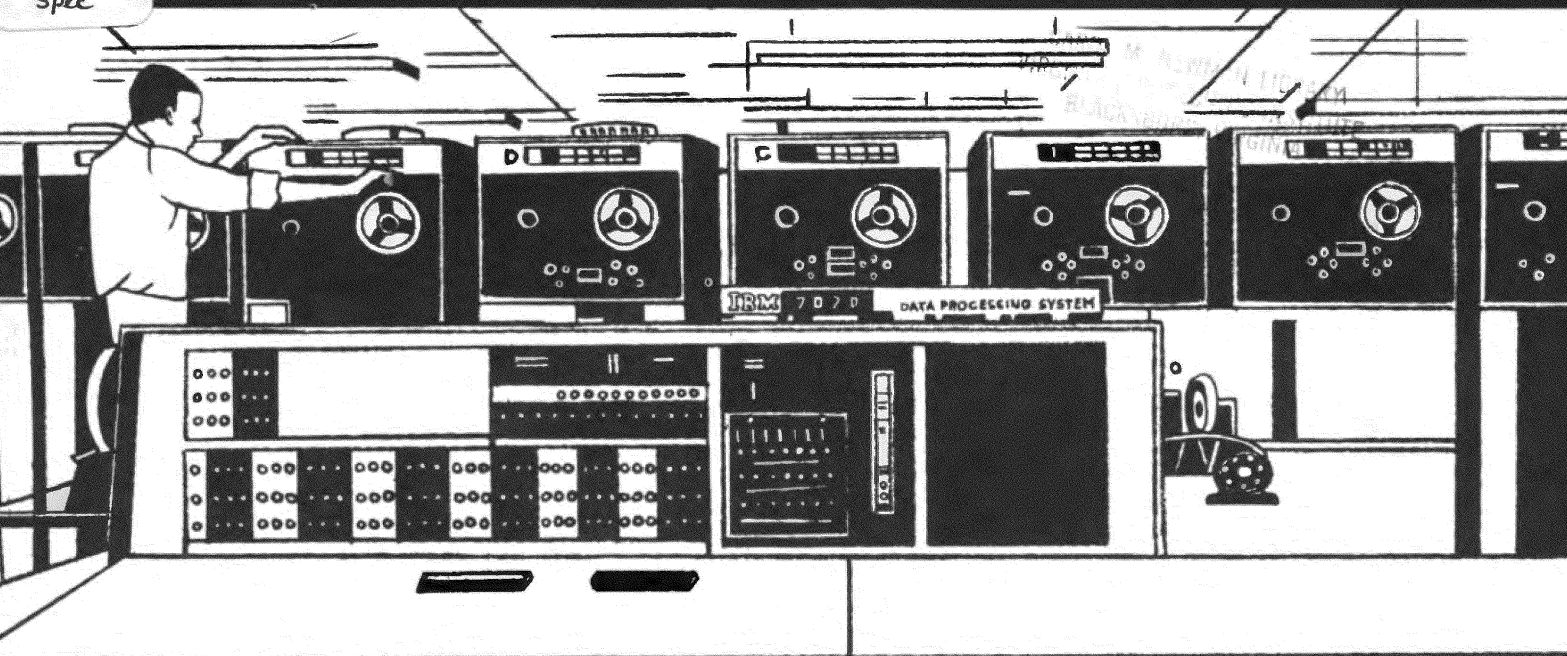


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Electronic Farm Account Program

1962 FARM BUSINESS SUMMARY

CASH GRAIN
TOBACCO
PEANUT
GENERAL

CIRCULAR 918

AGRICULTURAL EXTENSION SERVICE
VIRGINIA POLYTECHNIC INSTITUTE
BLACKSBURG, VIRGINIA

REVISED
FEBRUARY 1964

INTRODUCTION

A. Barry Carr* and Robert K. Reynolds*

This circular contains a summary and analysis of the records of tobacco, cash crop, and general farms enrolled in the V. P. I. Electronic Farm Account Program during 1962. This program is a joint project of the Virginia Agricultural Extension Service and the Virginia Agricultural Experiment Station. It is conducted by the Department of Agricultural Economics, with the assistance of county Extension workers and participating farmers, in support of the county agents' farm management educational program for farmers. The information contained in this publication does not necessarily represent the situation on all farms of similar type in Virginia.

The purpose of these data is to assist farmers in the analysis of their businesses. Discovery of strong and weak points in the business operation is the first step toward improving farm profits.

The first half of the publication contains averages for 4 burley tobacco farms, 4 dark-fired tobacco farms, 17 cash grain farms, 7 peanut farms, and 44 general farms. A general farm is one which receives less than 50% of its gross receipts from each enterprise, including livestock.

The second half of this circular contains a variety of information on flue-cured tobacco farms. In addition to data on all 47 farms, there is a column for 23 farms which harvested 8 or more acres of flue-cured tobacco and a column for 24 farms which harvested less than 8 acres. The 47 farms are also divided into a high-income group with 24 farms of \$3,000 or more labor earnings, and a low-income group with 23 farms of less than \$3,000 labor earnings. Labor earnings are computed by subtracting a 5% interest charge on total average investment from net farm income, and adding the value of farm products used in the home.

The column headed "My Farm" is provided for your use. When you have entered comparable data for your farm, you can compare your operation with the averages contained in the tables. Your county Extension agent can help you find ways to improve your net income.

Other available publications on this program:

Dairy Farm Business Summary - Circular 883
Livestock Farm Business Summary - Circular 788

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CAPITAL INVESTMENT AND SIZE MEASURES

	Burley Tobacco	Dark-Fired Tobacco	Cash Grain	Peanut	General	My Farm
<u>Dollars Invested In:</u>						
Machinery & equipment	\$ 2,997	\$ 2,092	\$ 8,087	\$ 6,167	\$ 4,961	_____
Buildings	3,863	842	2,998	5,965	4,466	_____
Land	17,800	13,025	26,891	23,236	17,709	_____
Beef cattle	2,974	1,701	2,975	4,328	2,787	_____
Swine	0	5	1,545	2,348	1,077	_____
Sheep					40	_____
Other livestock	1,608	330	171	319	1,431	_____
Crops, feed, seed, supplies	2,351	2,230	4,873	4,877	2,260	_____
TOTAL INVESTMENT <u>1/</u>	\$ 31,593	\$ 20,225	\$ 47,540	\$ 47,239	\$ 34,731	_____
<u>Percent of Investment In:</u>						
Machinery & equipment	9	10	17	13	14	_____
Buildings	12	4	6	13	13	_____
Land	56	65	57	49	51	_____
Livestock	15	10	10	15	15	_____
Crops, feed, seed, supplies	7	11	10	10	7	_____
Acres tobacco	3.10	3.91	--- <u>4/</u>	--- <u>4/</u>	--- <u>4/</u>	_____
Total investment per acre tobacco	\$ 10,191	\$ 5,173	---	---	---	_____
Acres crops	41	42	279	137	107	_____
Total investment per acre crops	\$ 771	\$ 482	\$ 170	\$ 345	\$ 325	_____
Animal units <u>2/</u>	31	13	25	43	40	_____
Total investment per A.U.	\$ 1,019	\$ 1,556	\$ 1,902	\$ 1,099	\$ 868	_____
Man equivalents <u>3/</u>	1.7	1.4	1.8	2.9	1.9	_____
Total investment per man	\$ 18,584	\$ 14,446	\$ 26,411	\$ 16,289	\$ 18,279	_____

1/ The investment values given are the average of the beginning and ending inventories. Machinery, equipment, and building investment are given at the actual undepreciated book value. Cattle and feed inventories are given at the current market value. Land is valued at the fair agricultural value.

2/ Animal units (A.U.) are a measure of the total livestock on the farm, measured in cow equivalents.

3/ Man equivalent (M.E.) is calculated from the hours of operator, unpaid family, and hired labor used on the farm. One man equivalent equals 2,880 hours.

4/ This information is not calculated on cash grain, peanut, and general farms.

RECEIPTS

	Burley Tobacco	Dark-Fired Tobacco	Cash Grain	Peanut	General	My Farm
Dairy cattle (including inventory change)	\$ 1,443	\$ 97	\$ 86	\$ 64	\$ 1,546	_____
Beef cattle (including inventory change)	1,021	804	1,221	2,627	1,260	_____
Swine (including inventory change)	0	0	2,204	5,074	2,434	_____
Sheep (including inventory change)	55	0	36	93	26	_____
Poultry (including inventory change)	44	121	10	3	588	_____
Other livestock receipts	0	0	0	0	3	_____
Tobacco	5,650	1,760				
Corn receipts	--- 1/	--- 1/	2,824	515	--- 1/	_____
Soybean receipts	---	---	7,530	787	---	_____
Wheat receipts	---	---	1,383	8	---	_____
Other crop receipts	141	486	2,045	15,855	6,590	_____
Miscellaneous receipts	33	332	2,311	1,347	2,096	_____
Crops, feed, seed, supplies inventory increase	0	0	1,049	1,471	102	_____
TOTAL FARM RECEIPTS	\$ 8,387	\$ 3,600	\$ 20,699	\$ 27,844	\$ 14,645	_____
Receipts per dollar invested	\$ 0.27	\$ 0.18	\$ 0.44	\$ 0.59	\$ 0.42	_____

1/ Individual crop receipts are not calculated for burley tobacco, dark-fired tobacco, and general farms.

EXPENSES

	Burley Tobacco	Dark-Fired Tobacco	Cash Grain	Peanut	General	My Farm
Hired labor	\$ 2,041	\$ 952	\$ 1,478	\$ 3,278	\$ 1,533	_____
Value unpaid family labor	150	100	409	86	188	_____
Purchased feed	377	106	799	1,629	1,535	_____
Fertilizer	621	431	2,845	2,100	1,420	_____
Lime	3	29	277	218	114	_____
Other crop expenses	271	220	860	1,458	684	_____
Supplies	15	8	130	159	172	_____
Machine hire	44	38	444	733	149	_____
Gas and oil	127	163	1,102	1,331	709	_____
Veterinary and medicine	9	8	62	163	93	_____
Livestock expenses	113	14	23	128	52	_____
Livestock marketing					114	_____
Taxes	240	163	318	220	187	_____
Miscellaneous expenses <u>1/</u>	238	44	1,755	1,873	577	_____
Real estate decrease (including maint. & repair) <u>2/</u>	555	133	776	820	824	_____
Machinery decrease (including maint. & repair) <u>2/</u>	528	696	4,275	2,978	2,010	_____
Crops, feed, seed, supplies inventory decrease	602	248	0	0	0	_____
TOTAL FARM EXPENSES	\$ <u>5,934</u>	\$ <u>3,353</u>	\$ <u>15,553</u>	\$ <u>17,174</u>	\$ <u>10,361</u>	_____

1/ Miscellaneous expenses include such items as rent (other than pasture), electricity, telephone, farm subscriptions, and other unclassified business expenses.

2/ Inventory decrease is the result of yearly depreciation.

PROFIT OR LOSS

	Burley Tobacco	Dark-Fired Tobacco	Cash Grain	Peanut	General	My Farm
Total receipts	\$ 8,387	\$ 3,600	\$ 20,699	\$ 27,844	\$ 14,645	_____
Total expenses	5,934	3,353	15,553	17,174	10,361	_____
NET FARM INCOME <u>1/</u>	\$ <u>2,453</u>	\$ <u>247</u>	\$ <u>5,146</u>	\$ <u>10,670</u>	\$ <u>4,284</u>	_____
Total average capital invest.	31,593	20,225	47,540	47,239	34,731	_____
Interest @ 5%	1,580	1,011	2,377	2,362	1,737	_____
LABOR INCOME <u>2/</u>	\$ <u>873</u>	\$ <u>-764</u>	\$ <u>2,769</u>	\$ <u>8,308</u>	\$ <u>2,547</u>	_____
Value farm products used in home	476	610	239	383	416	_____
LABOR EARNINGS <u>3/</u>	\$ <u>1,349</u>	\$ <u>-154</u>	\$ <u>3,008</u>	\$ <u>8,691</u>	\$ <u>2,963</u>	_____
% return on invest. <u>4/</u>	2	-11	6	18	5	_____
Net return per hour operator's labor <u>5/</u>	\$ 0.39	\$ -0.32	\$ 1.00	\$ 2.99	\$ 0.88	_____

- 1/ Net farm income is the difference between total receipts and total expenses. No adjustment is made for farm size.
- 2/ Labor income is a measure of the actual return to the farmer for his labor and management, after a charge of 5% interest on the total average investment has been deducted from net farm income. Since the deduction for interest is more for larger farms, labor income is a better figure than net farm income to use in comparing farms of unequal size.
- 3/ Labor earnings are computed by adding to labor income an estimate of the value of farm products produced and consumed on the farm (such as milk, meat, and garden produce). The value of housing is not included in labor earnings because the value of the farm dwelling is not included in the capital investment.
- 4/ Return on investment is a somewhat different look at the profit picture than labor income. All labor (including the operator's labor computed at \$200 per month) is charged as an expense against net farm income. The remaining income is considered return to investment, and when divided by the total average investment gives the return on investment.
- 5/ Net return per hour operator's labor is calculated by dividing the labor income by the hours worked by the operator during the year. A full-time operator works 2,880 hours or 240 hours per month.

MACHINERY AND EQUIPMENT COSTS

	Burley Tobacco	Dark-Fired Tobacco	Cash Grain	Peanut	General	My Farm
Crops:						
Machinery and equipment investment	\$ 2,877	\$ 2,092	\$ 7,926	\$ 5,701	\$ 4,331	_____
Interest on investment @ 5%	144	105	396	285	217	_____
Depreciation	387	494	2,979	1,641	962	_____
Gas, oil, and repairs	253	360	2,112	2,195	1,323	_____
Machine work hired	15	55	455	687	142	_____
Electricity	9	20	23	74	16	_____
Miscellaneous <u>1/</u>	86	63	238	171	130	_____
Gross crop machinery and equipment cost	\$ 865	\$ 1,097	\$ 6,203	\$ 5,053	\$ 2,790	_____
½ crop custom receipts	1	29	84	137	240	_____
NET CROP MACHINERY AND EQUIPMENT COST <u>2/</u>	\$ 864	\$ 1,068	\$ 6,119	\$ 4,916	\$ 2,550	_____
Net crop machinery cost per acre crops	21	25	22	36	24	_____
Crop machinery investment per acre crops	70	50	28	42	40	_____
Livestock:						
Machinery and equipment investment	\$ 120	\$ 0	\$ 161	\$ 466	\$ 630	_____
Interest on investment @ 5%	6	0	8	23	31	_____
Depreciation	19	0	111	133	280	_____
Gas, oil, and repairs	6	4	107	251	147	_____
Machine work hired	0	0	1	45	8	_____
Electricity	45	0	38	102	96	_____
Miscellaneous <u>1/</u>	4	0	5	14	19	_____
Gross livestock mach. and equip. cost	\$ 80	\$ 4	\$ 270	\$ 568	\$ 581	_____
½ livestock custom receipts	0	0	0	0	5	_____
NET LIVESTOCK MACHINERY AND EQUIPMENT COST <u>2/</u>	\$ 80	\$ 4	\$ 270	\$ 568	\$ 576	_____

Net livst. mach. & equip. cost per A.U.	3	0.30	11	13	14	_____
Livst. mach. and equip. invest. per A.U.	4	0	6	11	16	_____
Total mach. gas, oil, and repairs as % of total machinery investment	9	17	27	40	30	_____
Total mach. depreciation as % of total mach. invest.	14	24	38	29	25	_____
Total gross machinery cost as % of gross receipts	11	30	31	20	22	_____

- 1/ Miscellaneous machinery expense includes housing, taxes, insurance, and farm labor used to service machinery. It is calculated on the basis of 3% of the average machinery investment.
- 2/ Gross machinery costs are reduced by $\frac{1}{2}$ of the custom work receipts to get a cost that may be fairly charged to the home farming operation.

LABOR COSTS

	Burley Tobacco	Dark-Fired Tobacco	Cash Grain	Peanut	General	My Farm
Operator's labor	\$ 1,850	\$ 2,400	\$ 2,306	\$ 2,314	\$ 2,411	
Hired labor	2,031	948	1,376	2,539	1,478	
Perquisites	285	88	140	909	188	
Unpaid family labor	150	100	409	86	189	
GROSS LABOR COST	\$ 4,316	\$ 3,536	\$ 4,231	\$ 5,848	\$ 4,266	
Gross labor cost per man	2,539	2,526	2,351	2,017	2,245	
Gross labor cost per hour	0.88	0.88	0.82	0.70	0.78	
Gross labor cost as % of total receipts	51	96	20	21	28	
Total PMWD <u>2/</u>	308	230	346	416	443	
% PMWD on crops	60	77	77	67	55	
% PMWD on livestock	40	21	20	30	34	
Net labor cost per PMWD	\$ 14.01	\$ 15.25	\$ 12.00	\$ 14.00	\$ 9.08	
PMWD per man	181	164	192	143	233	
<u>Crop labor:</u>						
Gross crop labor cost	\$ 2,590	\$ 1,758	\$ 3,321	\$ 3,977	\$ 2,581	
½ crop custom receipts	1	29	84	137	240	
Net crop labor cost <u>3/</u>	\$ 2,589	\$ 1,729	\$ 3,237	\$ 3,840	\$ 2,341	
Net labor cost per acre crops	63	41	12	28	22	
Acres crops per man	24	30	155	47	56	
<u>Livestock labor:</u>						
Gross livst. labor cost	\$ 1,726	\$ 778	\$ 910	\$ 1,871	\$ 1,685	
½ livst. custom receipts	0	0	0	0	5	
Net livst. labor cost <u>3/</u>	\$ 1,726	\$ 778	\$ 910	\$ 1,871	\$ 1,680	
Net labor cost per A.U.	56	60	36	44	42	
Animal units per man	18	9	14	15	21	

1/ The operator's labor is considered an expense for purposes of analysis, and is charged at the rate of \$200 for each month of full-time work on the farm.

2/ A productive man work day (PMWD) is the amount of productive work accomplished by an average farm worker with average efficiency in a 10-hour day. The total PMWD measures the amount of work required to care for all crop and livestock enterprises.

3/ Gross labor cost is reduced by ½ of the custom work receipts to obtain a net cost which may be more fairly charged to the home farming operation.

	CROP EFFICIENCY					My Farm
	Burley Tobacco	Dark-Fired Tobacco	Cash Grain	Peanut	General	
Total acres tobacco <u>1/</u>	3.10	3.91	--- <u>1/</u>	--- <u>1/</u>	--- <u>1/</u>	_____
Total acres other crops <u>2/</u>	38	38	279	137	107	_____
Acres pasture	107	31	26	39	51	_____
Total animal units	31	13	25	43	40	_____
Acre crops per A.U.	1.32	3.23	11.16	3.19	2.67	_____
Tobacco produced per acre allotment <u>1/</u>	2,588	1,557	--- <u>1/</u>	--- <u>1/</u>	--- <u>1/</u>	_____
Tobacco produced per M.E.	5,750	4,204	---	---	---	_____
Average price received for tobacco	\$ 0.63	\$ 0.52	---	---	---	_____
All crop receipts per acre crops	\$ 141	\$ 54	\$ 49	\$ 125	\$ 62	_____
All crop receipts per M.E.	\$ 3,406	\$ 1,604	\$ 7,657	\$ 5,919	\$ 3,468	_____
Crop index <u>3/</u>	131	135	135	134	118	_____
Fertilizer cost per acre crops	\$ 14	\$ 9	\$ 10	\$ 11	\$ 10	_____
Fertilizer cost per acre pasture	1	4	4	5	6	_____

1/ This information is not calculated for cash grain, peanut, and general farms.

2/ Acres of crops includes rented and double-cropped land.

3/ Crop index is a measure of all crop yields, based on the 5-year state average equal to 100.

LIVESTOCK PRODUCTION

	Burley Tobacco	Dark-Fired Tobacco	Cash Grain	Peanut	General	My Farm
Total animal units	31	13	25	43	40	_____
% calf crop	64	88	103	82	91	_____
Pigs weaned per litter	--- <u>1/</u>	--- <u>1/</u>	7.5	8.0	7.2	_____
Lambs weaned per ewe	0.8	---	1.0	--- <u>1/</u>	0.7	_____
Total livestock receipts (including inventory change)	\$ 2,563	\$ 1,022	\$ 3,557	\$ 7,861	\$ 5,857	_____
Total livestock receipts per man equivalent	1,508	730	1,976	2,711	3,083	_____
Total livestock receipts per acre crops and pasture	17	14	12	45	37	_____
Total livestock receipts per A.U. in inventory	83	79	142	183	146	_____

1/ Insufficient data.

ARE MY CROP AND LIVESTOCK PRODUCTION RATES AT THE MOST PROFITABLE LEVEL?

WHAT COSTS CAN BE REDUCED? LABOR COSTS? MACHINERY COSTS? FEED COSTS?

WHAT CAN I DO TO IMPROVE MY NET FARM INCOME?

CAPITAL INVESTMENT AND SIZE MEASURES

Flue-Cured Tobacco Farms						
	All Farms	Farm Size		Income Level		My Farm
		Large	Small	High	Low	
<u>Dollars Invested In:</u>						
Machinery & equipment	\$ 4,625	\$ 6,308	\$ 3,012	\$ 4,412	\$ 4,847	_____
Buildings	5,521	6,635	4,453	4,879	6,191	_____
Land	15,398	20,453	10,553	16,012	14,756	_____
Beef cattle	2,775	4,312	1,303	3,804	1,702	_____
Swine	348	485	217	207	495	_____
Other livestock	689	661	717	692	686	_____
Crops, feed, seed, supplies	1,063	1,438	704	1,300	816	_____
TOTAL INVESTMENT <u>1/</u>	\$ <u>30,419</u>	\$ <u>40,292</u>	\$ <u>20,959</u>	\$ <u>31,306</u>	\$ <u>29,493</u>	_____
<u>Percent of Investment In:</u>						
Machinery & equipment	15	16	14	14	16	_____
Buildings	18	16	21	16	21	_____
Land	51	51	50	51	50	_____
Livestock	13	13	11	15	10	_____
Crops, feed, seed, supplies	3	4	4	4	3	_____
Acres tobacco	9.49	13.87	5.29	10.51	8.42	_____
Total investment per acre tobacco	\$ 3,205	\$ 2,905	\$ 3,962	\$ 2,979	\$ 3,503	_____
Animal units <u>2/</u>	26	33	20	35	18	_____
Man equivalents <u>3/</u>	2.3	3.2	1.5	2.4	2.2	_____
Total investment per man	\$ 13,226	\$ 12,591	\$ 13,973	\$ 13,044	\$ 13,406	_____

1/ The investment values given are the average of the beginning and ending inventories. Machinery, equipment, and building investments are given at the actual undepreciated book value. Cattle and feed inventories are given at the current market value. Land is valued at the fair agricultural value.

2/ Animal units (A.U.) are a measure of the total livestock on the farm, measured in cow equivalents.

3/ Man equivalent (M.E.) is calculated from the hours of operator, unpaid family, and hired labor used on the farm. One man equivalent equals 2,880 hours.

Detailed analysis of individual records does not allow the conclusion that the 5% higher livestock investment on high-income farms is necessarily a contributing factor to their high income. On many tobacco farms the livestock enterprises have proved to be unprofitable, and are carried at the expense of the tobacco enterprise. On the other hand, certain livestock enterprises can be profitable on tobacco farms when the enterprise is such that: (a) its requirements can be met by resources (land, labor, feed, etc.) on the farm that are unused or poorly used; (b) there is sufficient managerial and technical "know how" present on the farm for the particular livestock enterprise being considered.

RECEIPTS

	Flue-Cured Tobacco Farms					
	All Farms	Farm Size		Income Level		My Farm
		Large	Small	High	Low	
Dairy cattle (including inventory change)	\$ 293	\$ 152	\$ 429	\$ 303	\$ 284	_____
Beef cattle (including inventory change)	1,306	2,070	574	1,704	891	_____
Swine (including inventory change)	691	1,132	268	428	964	_____
Sheep (including inventory change)	44	88	3	48	41	_____
Poultry (including inventory change)	62	53	71	53	72	_____
Other livestock receipts	-3	-4	-2	0	-5	_____
Tobacco	10,974	16,233	5,933	13,283	8,564	_____
Other crops	414	556	279	456	371	_____
Miscellaneous	1,411	2,158	695	1,573	1,243	_____
Crops, feed, seed, supplies inventory increase	147	236	61	143	152	_____
TOTAL FARM RECEIPTS	\$ <u>15,339</u>	\$ <u>22,674</u>	\$ <u>8,311</u>	\$ <u>17,991</u>	\$ <u>12,577</u>	_____
Receipts per dollar invested	\$ 0.50	\$ 0.56	\$ 0.40	\$ 0.57	\$ 0.43	_____

The effect that better management has on efficiency of capital use shows up in 14¢ higher receipts per dollar invested on high-income farms. This results from keeping the non-productive overhead as low as possible.

EXPENSES

Flue-Cured Tobacco Farms						
		Farm Size		Income Level		
	All Farms	Large	Small	High	Low	My Farm
Hired labor	\$ 3,312	\$ 5,644	\$ 1,078	\$ 3,536	\$ 3,079	_____
Value unpaid family labor	347	257	432	366	327	_____
Purchased feed	400	615	193	350	452	_____
Fertilizer	949	1,340	575	1,001	896	_____
Lime	80	88	73	74	87	_____
Other crop expenses	930	1,315	561	1,051	804	_____
Supplies	80	138	24	75	86	_____
Machine hire	165	178	153	187	142	_____
Gas and oil	482	617	353	454	511	_____
Veterinary and medicine	56	79	35	44	70	_____
Livestock expense	43	46	40	36	50	_____
Taxes	165	206	129	174	159	_____
Miscellaneous expenses <u>1/</u>	1,035	1,737	361	1,211	850	_____
Real estate decrease (including maint. & repair) <u>2/</u>	666	910	433	739	590	_____
Machinery decrease (including maint. & repair) <u>2/</u>	1,909	2,572	1,273	1,910	1,907	_____
Crops, feed, seed, supplies inventory decrease	0	0	0	0	0	_____
TOTAL FARM EXPENSES	\$ <u>10,619</u>	\$ <u>15,742</u>	\$ <u>5,713</u>	\$ <u>11,208</u>	\$ <u>10,010</u>	_____

1/ Miscellaneous expenses include such items as rent (other than pasture), electricity, telephone, farm subscriptions, and other unclassified business expenses.

2/ Inventory decrease is the result of yearly depreciation.

PROFIT OR LOSS

	Flue-Cured Tobacco Farms					
		Farm Size		Income Level		
	All Farms	Large	Small	High	Low	My Farm
Total receipts	\$ 15,339	\$ 22,674	\$ 8,311	\$ 17,991	\$ 12,577	_____
Total expenses	10,619	15,742	5,713	11,208	10,010	_____
NET FARM INCOME <u>1/</u>	\$ <u>4,720</u>	\$ <u>6,932</u>	\$ <u>2,598</u>	\$ <u>6,783</u>	\$ <u>2,567</u>	_____
Total average capital invest.	30,419	40,292	20,959	31,306	29,493	_____
Interest @ 5%	1,521	2,015	1,048	1,565	1,475	_____
LABOR INCOME <u>2/</u>	\$ <u>3,199</u>	\$ <u>4,917</u>	\$ <u>1,550</u>	\$ <u>5,218</u>	\$ <u>1,092</u>	_____
Value farm products used in home	605	513	693	592	618	_____
LABOR EARNINGS <u>3/</u>	\$ <u>3,804</u>	\$ <u>5,430</u>	\$ <u>2,243</u>	\$ <u>5,810</u>	\$ <u>1,710</u>	_____
% return on invest. <u>4/</u>	9	12	2	15	2	_____
Net return per hour operator's labor <u>5/</u>	\$ 1.26	\$ 1.92	\$ 0.61	\$ 1.95	\$ 0.45	_____

- 1/ Net farm income is the difference between total receipts and total expenses. No adjustment is made for farm size.
- 2/ Labor income is a measure of the actual return to the farmer for his labor and management, after a charge of 5% interest on the total average investment has been deducted from net farm income. Since the deduction for interest is more for larger farms, labor income is a better figure than net farm income to use in comparing farms of unequal size.
- 3/ Labor earnings are computed by adding to labor income an estimate of the value of farm products produced and consumed on the farm (such as milk, meat, and garden produce). The value of housing is not included in labor earnings because the value of the farm dwelling is not included in the capital investment.
- 4/ Return on investment is a somewhat different look at the profit picture than labor income. All labor (including the operator's labor computed at \$200 per month) is charged as an expense against net farm income. The remaining income is considered return to investment, and when divided by the total average investment gives the return on investment.
- 5/ Net return per hour operator's labor is calculated by dividing the labor income by the hours worked by the operator during the year. A full-time operator works 2,880 hours, or 240 hours per month.

The \$4,216 difference in net farm income between the high- and low-income groups cannot be attributed to greater size. The total investment on the high-income farms is less than \$2,000 greater, and the tobacco average is only a little more than 2 acres greater than on the low-income farms. Effective management is just as important as size.

MACHINERY AND EQUIPMENT COSTS

	Flue-Cured Tobacco Farms					
	All Farms	Farm Size		Income Level		My Farm
		Large	Small	High	Low	
<u>Crops:</u>						
Machinery and equipment investment	\$ 4,401	\$ 6,000	\$ 2,868	\$ 4,261	\$ 4,546	
Interest on investment @ 5%	220	300	143	213	227	
Depreciation	1,276	1,679	890	1,233	1,320	
Gas, oil, and repairs	964	1,283	658	961	967	
Machine work hired	160	174	147	187	133	
Electricity	39	49	29	40	38	
Miscellaneous <u>1/</u>	132	180	86	128	136	
Gross crop machinery and equipment cost	\$ 2,791	\$ 3,665	\$ 1,953	\$ 2,762	\$ 2,821	
$\frac{1}{2}$ crop custom receipts	101	112	91	116	86	
NET CROP MACHINERY AND EQUIPMENT COST <u>2/</u>	\$ 2,690	\$ 3,552	\$ 1,862	\$ 2,646	\$ 2,735	
Net crop mach. and equip. cost per acre crops	52	53	51	50	54	
Crop mach. and equip. invest. per acre crops	85	90	79	81	90	
<u>Livestock:</u>						
Machinery and equipment investment	\$ 224	\$ 308	\$ 144	\$ 151	\$ 301	
Interest on investment @ 5%	11	15	7	8	15	
Depreciation	34	42	26	38	29	
Gas, oil, and repairs	129	198	63	109	150	
Machine work hired	10	11	9	7	13	
Electricity	34	39	30	38	30	
Miscellaneous <u>1/</u>	7	9	4	5	9	
Gross livestock mach. and equip. cost	\$ 225	\$ 314	\$ 139	\$ 205	\$ 246	
$\frac{1}{2}$ livestock custom receipts	0	0	0	0	0	
NET LIVESTOCK MACHINERY AND EQUIPMENT COST <u>2/</u>	\$ 225	\$ 314	\$ 139	\$ 205	\$ 246	

Net livst. mach. & equip. cost per A.U.	9	10	7	6	12	_____
Livst. mach. and equip. invest. per A.U.	9	9	7	4	8	_____
Total mach. gas, oil, and repairs as % of total machinery investment	24	23	24	24	23	_____
Total mach. depreciation as % of total mach. invest.	28	27	30	29	28	_____
Total gross machinery cost as % of gross receipts	20	17	25	16	24	_____

1/ Miscellaneous machinery expense includes housing, taxes, insurance, and farm labor used to service machinery. It is calculated on the basis of 3% of the average machinery investment.

2/ Gross machinery costs are reduced by $\frac{1}{2}$ of the custom work receipts to get a cost that may be fairly charged to the home farming operation.

The effect of small crop acreages on machinery cost per acre is shown in the \$52 per acre average machinery cost for all flue-cured tobacco farms. This cost is about twice the average cost per acre experienced on general farms, where the acreage of crops is more than twice as large.

Another example of what size of acreage and careful management can do is seen in the fact that gross machinery costs take 8¢ less of every dollar received on the high-income farms, compared with their low-income counterparts, and on the large farms compared with the small farms.

LABOR COSTS

	Flue-Cured Tobacco Farms					
	All Farms	Farm Size		Income Level		My Farm
		Large	Small	High	Low	
Operator's labor <u>1/</u>	\$ 2,117	\$ 2,130	\$ 2,104	\$ 2,225	\$ 2,004	_____
Hired labor	3,285	5,590	1,076	3,504	3,056	_____
Perquisites	251	378	130	253	250	_____
Unpaid family labor	347	257	433	366	327	_____
GROSS LABOR COST	\$ 6,000	\$ 8,355	\$ 3,743	\$ 6,348	\$ 5,637	_____
Gross labor cost per man	2,609	2,611	2,495	2,645	2,562	_____
Gross labor cost per hour	0.91	0.91	0.87	0.92	0.89	_____
Gross labor cost as % of total receipts	39	37	45	35	45	_____
Total PMWD <u>2/</u>	609	878	352	679	536	_____
% PMWD on crops	83	84	82	82	84	_____
% PMWD on livestock	13	10	15	13	13	_____
Net labor cost per PMWD	\$ 9.69	\$ 9.39	\$ 10.38	\$ 9.18	\$ 10.36	_____
PMWD per man	265	274	235	283	244	_____
<u>Crop labor:</u>						
Gross crop labor cost	\$ 5,160	\$ 7,269	\$ 3,125	\$ 5,428	\$ 4,848	_____
½ crop custom receipts	101	112	91	116	86	_____
Net crop labor cost <u>3/</u>	\$ 5,059	\$ 7,157	\$ 3,034	\$ 5,312	\$ 4,762	_____
Net labor cost per acre crops	98	107	84	101	94	_____
Acres crops per man	22	21	24	22	23	_____
<u>Livestock labor:</u>						
Gross livst. labor cost	\$ 840	\$ 1,086	\$ 618	\$ 920	\$ 789	_____
½ livst. custom receipts	0	0	0	0	0	_____
Net livst. labor cost <u>3/</u>	\$ 840	\$ 1,086	\$ 618	\$ 920	\$ 789	_____
Net labor cost per A.U.	32	33	31	26	44	_____
Animal units per man	11	10	13	15	8	_____

- 1/ The operator's labor is considered an expense for purposes of analysis, and is charged at the rate of \$200 for each month of full-time work on the farm.
- 2/ A productive man work day (PMWD) is the amount of productive work accomplished by an average farm worker with average efficiency in a 10-hour day. The total PMWD measures the amount of work required to care for all crop and livestock enterprises.
- 3/ Gross labor cost is reduced by ½ of the custom work receipts to obtain a net cost which may be more fairly charged to the home farming operation.

LABOR COSTS (Continued)

Thirty-nine less productive days work accomplished per man, on the small farms and on the low-income farms, results in a higher net labor cost per PMWD in these groups.

It is difficult to explain the higher labor cost per acre of crops on the large farms and on the high-income farms. Part or all of the higher labor cost is offset by greater yields in both groups and higher prices per pound of tobacco in the high-income group.

LIVESTOCK PRODUCTION

	Flue-Cured Tobacco Farms					
	All Farms	Farm Size		Income Level		My Farm
		Large	Small	High	Low	
Total animal units	26	33	20	35	18	_____
% calf crop	90	89	90	92	88	_____
Pigs weaned per litter	5.9	6.5	5.5	--- <u>1/</u>	6.9	_____
Lambs weaned per ewe	0.9	0.9	--- <u>1/</u>	1.2	--- <u>1/</u>	_____
Total livestock receipts (including inventory change)	\$ 2,393	\$ 3,491	\$ 1,343	\$ 2,536	\$ 2,247	_____
Total livestock receipts per man equivalent	1,040	1,091	895	1,057	1,021	_____
Total livestock receipts per acre crops and pasture	27	32	20	27	28	_____
Total livestock receipts per A.U. in inventory	92	106	67	72	125	_____

1/ Insufficient data.

The higher livestock receipts per A.U. in inventory on large farms and in the low-income group has resulted from the higher percentage of receipts from swine on these farms. The swine enterprise characteristically gives higher receipts per A.U. than do most beef enterprises. The higher receipts on swine are a reflection of their generally higher production costs per animal unit.

CROP EFFICIENCY

	Flue-Cured Tobacco Farms					
	All Farms	Farm Size		Income Level		My Farm
		Large	Small	High	Low	
Total acres tobacco	9.49	13.87	5.29	10.51	8.42	_____
Total acres other crops <u>1/</u>	42	53	31	42	42	_____
Total acres pasture	37	43	30	43	30	_____
Acres pasture per A.U. pastured	2.71	1.42	3.92	1.79	3.67	_____
Tobacco produced per acre allotment	1,873	1,935	1,814	1,994	1,748	_____
Tobacco produced per M.E.	7,257	7,976	6,725	7,926	6,526	_____
Average price received for tobacco	\$ 0.63	\$ 0.62	\$ 0.65	\$ 0.64	\$ 0.63	_____
Crop index <u>2/</u>	120	123	117	126	114	_____
Fertilizer cost per acre crops	\$ 6.08	\$ 5.67	\$ 6.46	\$ 8.24	\$ 3.82	_____
Fertilizer cost per acre pasture	1.81	1.29	2.30	2.10	1.51	_____

1/ Acres of crops includes rented and double-cropped land.

2/ Crop index is a measure of all crop yields, based on the 5-year state average equal to 100.

Top level know-how in the tobacco enterprise on the high-income farm is evident in the yield per acre, which is 246 lbs. higher, and the average price received per pound which is 1¢ higher than the low-income group. Yields were maintained at a high level without a sacrifice in quality.

Higher yields on all crops for high-income farms are shown by the crop index. Better crop yields are associated with \$4.42 higher fertilizer spent per acre of crops on high-income farms.



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