Historic, archived document

Do not assume content reflects current scientific knowledge, policies, or practices.

UNITED STATES DEPARTMENT OF AGRICULTURE
Bureau of Agricultural Economics

in cooperation with the

UNIVERSITY OF KENTUCKY
Kentucky Agricultural Experiment Station

FARM COSTS AND RETURNS, 1950, WITH COMPARISONS,
COMMERCIAL FAMILY-OPERATED TOBACCO-LIVESTOCK FARMS,
BLUEGRASS AREA OF KENTUCKY

FARM COSTS AND RETURNS, 1950, WITH COMPARISONS,
COMMERCIAL FAMILY-OPERATED TOBACCO-LIVESTOCK FARMS,
BLUEGRASS AREA OF KENTUCKY 1/

By Erling Hole, Bureau of Agricultural Economics and
John H. Bondurant, Kentucky Agricultural Experiment Station

Net cash farm income on commercial family-operated tobacco-livestock farms in the Bluegrass Area of Kentucky in 1950 declined to the lowest level in the last 4 years. Cash receipts went down for the second consecutive year and cash expenditures remained high (fig. 1).

Net farm income which, in addition to cash, includes the value of perquisites and allowance for changes in inventories, was \$2,080 for small farms in 1950, \$2,868 for medium farms, \$3,958 for large farms, and \$3,082 for the average of commercial family-operated tobacco-livestock farms. These net incomes averaged about 20 percent lower than those of 1948 and about 4 percent lower than those for 1949. But they were $2\frac{1}{2}$ times larger than in the prewar period 1937-41 (tables 1 and 3).

The price of burley tobacco was 3 cents a pound higher in 1950 than in 1949. Production of tobacco declined, however; the acreage was about 12 percent smaller and the yield per acre was lower by nearly 40 pounds (table 2). Therefore, receipts from the sale of tobacco declined considerably--an average of \$243. Prices received for cattle, calves, lambs and wool were higher in 1950 than in 1949; they were about the same for hogs and milk, but were much lower for chickens and eggs. The decline in total receipts by small farms was somewhat greater than by the other two sizes of farms. Increased receipts from livestock on the larger farms partly offset some of the decrease in receipts from the sale of tobacco.

Prices paid by these tobacco-livestock farmers for items used in production averaged about the same in 1950 as in 1949. Moderate declines in expenditures for fertilizers and labor were practically offset by higher expenditures for farm machinery and real estate taxes.

Cost per unit of production was somewhat higher in 1950 than in 1949; principally because the volume of production was lower. Input per unit of production (cost per unit of production excluding price change) was about 7 percent larger in 1950 than in 1949 (table 3).

Returns per hour in 1950 for labor and management performed by the farm operator and members of his family were 62 cents for small farms, 71 cents for medium farms, 83 cents for large farms, and 73 cents for average commercial family-operated farms. These returns were about 25 percent lower than the returns in 1948, but were nearly three times larger than in the prewar period, 1937-41.

1/ Information concerning these farms for the years 1930-48 is given in Kentucky Agricultural Experiment Station Bulletin 544, Farming in the Bluegrass Area of Kentucky, December 1949. Information as to 16 types of farms (including the Bluegrass Area) for 1950 and earlier years is given in F.M. 82, Farm Costs and Returns, 1950, with Comparisons, Commercial Family-Operated Farms in 8 Major Farming Regions, U. S. Bureau of Agricultural Economics, May 1951.

CASH RECEIPTS, CASH EXPENDITURES AND NET CASH FARM INCOME

Family-Operated Tobacco-Livestock Farms, Kentucky Bluegrass Area

Table 1.- Farm returns, costs, and related factors, averages for family-operated tobacco-livestock farms, Bluegrass Area, Kentucky, 1937-41 average and 1942-50 1/

Item	Unit	Small 21-70 acres				Medium 71-120 acres			
		1937-41	1948	1949	1950	1937-41	1948	1949	1950
Gross farm income	Dol.	1,257	3,418	3,136	2,946	1,833	5,230	4,777	4,715
Net farm income	do.	909	2,563	2,273	2,080	1,136	3,391	2,945	2,868
Return per hour to operator and family 2/	do.	.25	.82	.68	.62	.26	.93	.74	.71
Cost per unit of production									
Current price	Pct.	100	204	219	238	100	203	218	235
Excluding price change 3/	do.	100	88	93	100	100	89	93	99
Operating expense per dollar of gross farm income	Dol.	.28	.24	.28	.29	.39	.35	.38	.39
Net farm production	Pct.	100	119	114	104	100	124	119	112
Crop yield index	do.	100	123	121	123	100	123	122	125
Prices received for products sold	do.	100	233	225	234	100	236	225	240
Prices paid for production items	do.	100	183	187	188	100	200	202	204
Item	Unit	Large 121-260 acres				Area-type 21-260 acres			
		1937-41	1948	1949	1950	1937-41	1948	1949	1950
Gross farm income	Dol.	2,995	8,180	7,614	7,406	2,073	5,911	5,431	5,275
Net farm income	do.	1,593	4,789	4,131	3,958	1,219	3,742	3,217	3,082
Return per hour to operator and family 2/	do.	.29	1.17	.89	.83	.26	1.01	.78	.73
Cost per unit of production									
Current price	Pct.	100	196	209	226	100	201	217	231
Excluding price change 3/	do.	100	87	90	98	100	89	92	98
Operating expense per dollar of gross farm income	Dol.	.48	.41	.46	.47	.42	.37	.41	.42
Net farm production	Pct.	100	123	120	110	100	124	120	112
Crop yield index	do.	100	123	121	123	100	123	122	124
Prices received for products sold	do.	100	232	221	237	100	237	228	242
Prices paid for production items	do.	100	209	211	211	100	203	208	206

1/ Information for the years 1930-46 inclusive is given in Kentucky Agricultural Experiment Station Bulletin 544, "Farming in the Bluegrass Area of Kentucky".

2/ Net farm income less a charge for the use of capital, divided by the hours of operator and family labor used on the farm during the year.

3/ Based on 1935-39 dollars.

Table 2.- Land use, livestock numbers, and distribution of income and expense, averages for family-operated tobacco-livestock farms, Bluegrass Area, Kentucky, 1937-41 average and 1946-50

Item	Unit	Small 21-70 acres				Medium 71-120 acres				Large 121-260 acres				Area-time 21-260 acres			
		1937-41	1946	1949	1950	1937-41	1946	1949	1950	1937-41	1946	1949	1950	1937-41	1946	1949	1950
Total land in farm	Acre	50	50	50	50	50	50	50	50	173	173	173	173	110	113	113	113
Proportion of land in:																	
Cropland harvested	Pct.	32	33	33	32	25	27	28	28	25	25	26	26	26	27	28	27
Row crops	do.	16	14	14	13	12	12	12	11	11	10	10	9	12	11	11	10
Small grains harvested	do.	5	3	2	2	3	2	2	2	5	4	4	3	5	3	3	3
Hay	do.	11	16	17	18	10	13	14	15	9	11	12	14	9	13	14	15
Idle fallow and failure	do.	4	2	2	2	3	2	2	2	3	2	2	2	3	2	2	2
Flowable pasture	do.	49	47	47	47	49	47	46	46	49	48	48	48	49	48	47	47
Other land	do.	15	18	18	18	23	24	24	24	23	25	24	24	22	23	23	23
Crops harvested:																	
Tobacco	Acre	3.3	3.2	3.2	2.8	4.7	4.8	4.9	4.4	7.4	7.4	7.6	6.7	5.3	5.4	5.5	4.9
Corn	do.	4.5	3.6	3.6	3.4	6.9	6.4	6.2	5.9	11.1	10.0	9.5	9.2	7.7	7.0	6.8	6.5
Wheat	do.	2.2	1.2	1.1	.9	2.4	1.7	1.5	1.3	7.5	4.9	4.7	3.8	4.2	2.8	2.6	2.2
Other small grains	do.	.3	.2	.2	.2	.8	.5	.6	.6	1.5	1.4	1.7	1.6	.9	.8	.9	.9
Alfalfa hay	do.	1.1	2.3	2.4	2.3	2.0	2.8	3.1	3.3	3.1	3.5	4.0	4.1	2.1	2.9	3.3	3.3
Other hay	do.	4.6	5.8	6.0	6.6	7.4	9.6	10.6	11.1	12.1	16.4	17.7	19.4	8.2	11.2	12.1	13.1
Total	do.	16.0	16.3	16.5	16.2	24.2	25.8	26.9	26.5	42.7	43.6	45.2	44.8	28.4	30.1	31.2	30.9
Crop yield (per harvested acre):																	
Tobacco	Lb.	964	1,317	1,238	1,208	982	1,341	1,260	1,230	1,023	1,396	1,312	1,281	995	1,362	1,283	1,245
Corn	Bu.	34.6	46.3	43.5	45.0	34.6	46.3	45.0	46.5	36.4	49.4	46.5	48.0	35.5	48.3	45.3	47.2
Wheat	do.	16.4	17.5	20.0	17.0	16.4	17.5	20.0	17.0	16.4	17.5	20.0	17.0	16.4	17.5	20.0	17.0
Other small grains	do.	27.7	32.0	30.6	27.0	27.7	32.0	30.6	27.0	27.7	32.0	30.6	27.0	27.5	31.2	31.1	26.7
Alfalfa hay	Ton	1.9	2.0	2.1	2.1	1.9	2.0	2.1	2.1	1.9	2.0	2.1	2.1	1.9	2.0	2.1	2.1
Other hay	do.	1.1	1.3	1.3	1.4	1.1	1.3	1.3	1.4	1.1	1.3	1.3	1.4	1.1	1.3	1.3	1.4
All crops (index 1937=100)	Pct.	100	123	121	123	100	123	122	123	100	123	121	123	100	123	122	124
Livestock on farm January 1:																	
All cattle	No.	4.6	5.4	5.2	5.1	6.8	10.2	9.8	10.5	10.0	14.4	14.0	14.8	7.2	10.5	10.2	10.7
Milk cows	do.	3.1	3.2	3.3	3.2	3.7	5.3	5.0	5.2	4.9	5.9	5.6	5.6	3.9	5.0	4.8	4.8
Hogs, all ages	do.	4.9	4.8	5.3	5.4	7.5	5.2	6.6	6.6	10.1	8.0	8.6	8.8	7.7	6.5	7.0	7.1
Sheep and lambs	do.	6.9	5.4	5.3	5.3	20.8	10.0	9.5	9.8	34.8	23.6	22.4	23.0	21.7	14.1	13.4	13.7
Poultry	do.	45	44	43	45	51	50	48	50	54	53	51	52	50	50	48	49
Workstock	do.	2.4	2.1	2.0	1.8	2.9	2.6	2.3	2.1	4.0	3.0	2.9	2.6	3.1	2.6	2.4	2.2
Farms with tractors	Pct.	4	15	18	20	4	22	26	28	18	40	48	52	9	27	32	35
Proportion of cash receipts from:																	
Tobacco	Pct.	65	67	68	68	62	64	69	66	62	65	68	65	63	65	68	66
Other crops	do.	1	0	0	0	1	0	0	0	3	2	1	3	2	1	2	1
Livestock	do.	17	20	19	18	21	24	20	22	21	25	21	24	20	24	22	23
Livestock products	do.	12	12	12	13	11	11	10	11	9	7	9	7	10	9	7	9
Government payments	do.	5	1	1	1	5	1	1	1	5	1	1	1	5	1	1	1
Proportion of cash expenditures for:																	
Labor	Pct.	7	6	6	5	25	27	27	25	32	37	35	33	27	31	30	28
Feed and other livestock expense	do.	15	21	16	16	13	16	11	12	10	9	7	7	11	11	9	9
Crop expense	do.	14	19	21	21	11	14	17	17	9	13	15	15	11	14	16	16
Machinery and equipment	do.	30	30	32	33	23	23	25	25	22	21	22	23	23	23	24	25
Farm buildings	do.	16	12	12	11	11	8	8	8	11	9	9	9	11	9	9	9
General farm miscellaneous	do.	18	12	13	14	17	12	12	13	16	11	12	13	17	12	12	13
Preliminary.																	

1/ Preliminary.

Table 3.- Investment, income, and related factors, averages for family-operated tobacco-livestock farms, Bluegrass Area, Kentucky, 1937-41 average and 1948-50

Item	Unit	Small 21-70 acres			Medium 71-120 acres			Large 121-260 acres			Area-type 21-260 acres		
		1937-41	1948	1949	1950	1937-41	1948	1949	1950	1937-41	1948	1949	1950
Total land in farm	Acres	50	50	50	50	95	95	95	173	173	173	113	113
Cropland harvested	do.	16.0	16.3	16.5	16.2	24.2	25.8	26.9	43.6	45.2	44.8	30.1	31.2
Total labor used	Hour	2,950	2,733	2,740	2,650	4,057	3,986	3,981	5,448	5,471	5,347	4,218	4,139
Operator and family	do.	2,772	2,615	2,620	2,560	2,908	2,849	2,846	2,831	2,933	2,902	2,817	2,786
Hired labor	do.	178	118	120	90	637	566	564	548	1,058	1,018	637	608
Cropper labor	do.	---	---	---	---	512	571	571	556	1,461	1,427	764	745
Total investment	Dol.	4,731	9,267	9,818	9,831	8,070	16,003	17,090	17,349	28,800	31,457	19,180	20,818
Land and buildings	do.	3,790	7,150	7,650	7,750	6,569	12,540	13,490	13,775	23,528	25,950	15,370	16,896
Machinery and equipment	do.	261	480	530	575	310	850	950	1,030	1,400	1,705	966	1,070
Livestock	do.	522	1,169	1,217	1,076	778	1,846	1,933	1,824	2,603	2,677	1,961	2,088
Crops on hand	do.	158	468	421	430	253	767	717	720	1,269	1,125	894	792
Cash receipts	do.	976	2,813	2,623	2,412	1,481	4,462	4,047	3,994	7,103	6,399	5,043	4,492
Cash expenditures	do.	365	895	928	919	695	1,851	1,864	1,872	3,357	3,504	2,154	2,221
Net cash farm income	do.	611	1,918	1,695	1,493	786	2,611	2,183	2,122	3,751	3,146	2,889	2,271
Perquisites for cropper and hired labor	do.	---	---	---	---	30	91	77	70	218	174	136	92
Total value of perquisites	do.	230	577	530	498	281	718	699	628	941	840	787	676
Net change in inventory	do.	68	88	48	89	99	153	180	188	315	302	202	189
Net farm income	do.	909	2,583	2,273	2,080	1,136	3,391	2,945	2,868	4,789	4,131	3,742	3,082
Charge for real estate capital	do.	171	329	367	372	301	577	648	661	1,082	1,212	707	792
Charge for working capital	do.	54	108	119	119	81	177	198	204	269	301	194	224
Total charge for capital	do.	225	437	486	491	382	754	846	865	1,351	1,513	901	1,015
Return to operator and family for labor and mgt.	do.	684	2,146	1,787	1,589	754	2,637	2,099	2,003	3,438	2,618	2,241	2,047
Percentage allocated to investment	Pct.	4.8	4.7	5.0	5.0	4.7	4.7	5.0	5.0	4.7	4.9	4.7	5.0
Return per hour to operator and family labor	Dol.	.25	.82	.68	.62	.26	.93	.74	.71	1.17	.89	1.01	.73
Index numbers (1937-41=100)													
Gross farm income	Pct.	100	272	250	235	100	285	261	257	100	247	286	294
Net farm income	do.	100	284	250	229	100	299	259	252	100	248	307	253
Net farm production	do.	100	119	114	104	100	124	119	112	100	110	124	112
Production per hour of man labor	do.	100	129	123	116	100	126	121	115	100	120	128	118
Operating expense per unit of production	do.	100	198	215	235	100	210	220	237	100	227	206	230
Total cost per unit of production	do.	100	204	219	238	100	203	218	235	100	226	201	231
Total input per unit of production	do.	100	88	93	100	100	89	93	99	100	98	89	98
Power and machinery used (quantity)	do.	100	130	133	142	100	162	167	179	100	169	155	172
Prices received for products sold	do.	100	233	225	234	100	236	225	240	100	237	237	242
Prices paid for production items	do.	100	183	187	188	100	200	202	204	100	211	203	206

1/ Preliminary.