Expenditures per crop-acre declined in all subregions with a decrease in size of business as measured by gross sales. The biggest decrease was usually in hired labor. Some of the larger farms used hired labor rather than croppers. Some items of expense, like machine hire, increased on a per crop-acre basis as size of operations decreased, for these operators custom-hired some work when they did not own suitable equipment.

Practically all specialized tobacco farmers use fertilizer. The average rate of application per acre on tobacco, in 1954, was higher for Burley than for flue-cured producers (see Table 27). Farmers in the dark-fired and air-cured subregion used an average of 1,100 pounds per acre on tobacco. This was the lowest application for any of the areas for which data are available.

TABLE 27.—USE OF COMMERCIAL FERTILIZER ON OTHER FIELD-CROP FARMS IN SELECTED TOBACCO SUBREGIONS, BY ECONOMIC CLASS OF FARM: 1954

Itom	All farms	Economic class of farm					
		I	II	III	IV	v	VI
	Flue-cured tobacco (subregion 24)						
Percent of all farms using fertilizer Acres per farm on which fertilizer was used	99	100	99	99	99	99	97
	23 706	160 572	62 700	33 700	21 700	13 720	780
Percent of farms growing tobacco, fertilizing tobacco cres of tobacco fertilized per farm	98 6	100 28	97 14	99 8	99 5	98 4	93
Pounds used per acre of tobacco	1, 329	1, 139	1, 420	1, 360	1, 306	1, 317	1, 23
	Flue-cured tobacco (subregion 25)						
Percent of all farms using fertilizer Acres per farm on which fertilizer was used Pounds used per acre fertilized Percent of farms growing tobacco,	98	100	100	97	98	97	93
	$\begin{array}{c} 15 \\ 664 \end{array}$	76 810	65 642	34 666	19 659	12 670	658
fertilizing tobacco	97 5	$100 \\ 34$	97	96 10	98	97 4	9
Pounds used per acre of tobacco	1, 193	1, 212	1, 177		1, 189	1, 185	1, 19
	Burley tobacco (subregion 45)						
Percent of all farms using fertilizer Acres per farm on which fertilizer was used Pounds used per acre fertilized Percent of farms growing tobacco,	92	99	96	96	92	93	8
	9 923	104 663	28 850	14 893	8 960	4 1, 050	91
Acres of tobacco fertilized per farm	92 4	99 26	97 11	97 6	92 4	93 2	7
Pounds used per acre of tobacco	1, 551	1, 579	1, 540	1, 550	1, 526	1, 626	1, 47
	Burley tobacco (subregion 32)						
Porcent of all farms using fertilizer Acres per farm on which fertilizer	90	100	100	92	92	90	8
was used Pounds used per acre fertilized Percent of farms growing tobacco,	11 480	242 372	34 668	35 506	19 499	12 472	46
A cres of tobacco fertilized per farm	84 1	100 19	100	92	93	90	7
Pounds used per acre of tobacco	1, 493	758	1, 324	1, 525	1, 628	1, 506	1, 42
	Southern Maryland tobacco ¹ (subregion 19)						
Percent of all farms using fertilizer Acres per farm on which fertilizer was used Pounds used per acre fertilized	95	97	97	96	95	98	8
	23 640	112 798	67 661	33 606	18 644	12 636	67
	Dark-fired and air-cured tobacco (subregion 53)						
Percent of all farms using fertilizer		100	94	100	92	91	8
Acres per farm on which fortilizer was used Pounds used per acre fertilized Percent of forma refertilized	24 360	81 410	125 422	52 395	32 382	20 349	1 33
fertilizing tobacco,	88	100	95	97	91	89	8
Acres of tobacco fertilized per farm Pounds used per acre of tobacco	$ \begin{array}{c} 3 \\ 1,042 \end{array} $	1, 063	11 1,266	6 1, 152	1,086	3 968	98

¹ Data not available for use of fertilizer on tobacco.

The percentage of the farms using fertilizer, the percentage of farms with tobacco reporting tobacco fertilized, and the average amount of fertilizer applied per acre for all crops and for tobacco were approximately the same for each economic class of farm in all areas.

INCOME AND EFFICIENCY LEVELS

Sources of farm income.—Gross farm income is important in determining income levels on tobacco farms. A high net income requires a relatively high gross income. Gross sales average \$4,530 on farms in flue-cured subregion 24. This was the highest of any of the subregions. In each of the tobacco subregions, tobacco contributed 65 percent or more of the gross income (see Table 28).

On flue-cured tobacco farms some income was received from cotton and peanuts in subregion 24 but average receipts from these enterprises were small in subregion 25. Receipts from livestock or livestock products were not very important on farms in either of the flue-cured areas although the amount of these receipts increased with gross income. On the average the percent that receipts from tobacco was of gross sales decreased slightly as gross income increased but the relationship was not consistent. Gross sales per crop acre increased as amount of gross income increased.

Receipts from livestock made up a larger proportion of gross income on Burley than on flue-cured tobacco farms. But the proportion of gross receipts from livestock was not large on these farms. As in the case of flue-cured tobacco farms, the proportion of gross receipts from tobacco in the Burley area declined as the amount of gross income increased. Average gross receipts per crop-acre were about 50 percent higher in Burley subregion 45 than in subregion 32.

On Southern Maryland tobacco farms, receipts from tobacco contributed on the average 82 percent of the gross receipts. On the larger farms, income from livestock, especially beef cattle, was important. On the Class I farms, gross sales per crop-acre averaged \$136 per farm compared to only \$36 on the Class VI farms.

Total gross sales on the dark-fired and air-cured tobacco farms averaged only \$2,499 per farm; of this amount tobacco contributed 71 percent. There was no consistent relationship between the amount of gross income and the percent that income from tobacco was of gross sales.

Gross income minus specified expenses.—Gross sales minus specified expenses should not be confused with net income. The specified expenditures do not include any fixed costs nor all operating costs. Net income would be much less than the amount indicated by gross sales minus specified expenditures.

On flue-cured tobacco farms, the amount that gross sales exceeded specified expenses averaged 33,327 for subregion 24 and 22,306 for subregion 25 (Table 29). In the Burley area, similar figures were 22,926 for subregion 45 and 1,011 for subregion 32. Farmers growing dark tobacco had on the average a net of 1,940 above specified expenses and producers of Southern Maryland tobacco, a net of 2,665. Obviously, the net above specified expenses increased as amount of gross farm income increased. For the different types of tobacco, there was a considerable variation in the average net income for farms in similar economic classes. Income above expenses was generally lower, for example, on Class IV tobacco farms in the Burley and Southern Maryland areas than in other areas.

Efficiency levels of farm operation.—Census data do not provide all of the information needed to make a complete analysis of the differences in efficiency of farm operations in different tobacco areas. However, the data do afford some comparisons that indicate levels even though the specific figures may not always reflect the precise relationship.