

## PRODUCTION PER UNIT OF LABOR

Labor productivity is an important measure of efficiency in farming (5). Even on farms that are highly mechanized, labor represents a large proportion of the total inputs. The level of farm income is mainly a function of the value of products produced per worker. The productivity of labor, generally, is increased as the quantity of other resources used per worker is increased.

Quantities of specified resources used per man-equivalent of labor on cash-grain and livestock farms in the Corn Belt are shown in table 95 along with the value of farm products sold per man-equivalent. The average acreage of all land per man-equivalent of labor on all commercial farms in the Corn Belt in 1954 was 171 acres. Land acreage per man-equivalent averaged largest on cash-grain farms in the Western Corn Belt (240 acres), and smallest on livestock farms in the Eastern Corn Belt (140 acres). The acreage of land per man-equivalent was larger on cash-grain farms than on livestock farms in every region.

TABLE 95.—SPECIFIED RESOURCES USED AND VALUE OF FARM PRODUCTS SOLD, PER MAN-EQUIVALENT OF LABOR, BY TYPE OF FARM, IN THE CORN BELT AND COMPONENT REGIONS: 1954

Region and type of farm	Resources per man-equivalent of labor						Value of all farm products sold per man-equivalent of labor
	All land	Crop-land harvested	Capital investment		Total specified expenses <sup>2</sup>	Tractors	
			Total <sup>1</sup>	Livestock, machinery, and equipment			
	Acres	Acres	Dollars	Dollars	Dollars	Number	Dollars
<b>Total Corn Belt:</b>							
All commercial farms.....	171	105	35,217	8,429	2,120	1.33	6,870
Cash-grain farms.....	195	138	41,996	7,587	1,670	1.53	6,756
Livestock farms <sup>3</sup> .....	179	98	36,454	10,271	2,627	1.31	8,070
<b>Eastern Corn Belt:</b>							
All commercial farms.....	136	89	35,952	7,968	2,279	1.47	6,408
Cash-grain farms.....	165	118	41,270	7,846	1,867	1.68	6,981
Livestock farms <sup>3</sup> .....	140	85	39,985	10,091	2,938	1.47	8,275
<b>Central Corn Belt:</b>							
All commercial farms.....	154	113	48,782	9,447	2,496	1.49	8,909
Cash-grain farms.....	179	143	59,681	8,331	1,961	1.66	8,662
Livestock farms <sup>3</sup> .....	145	98	45,129	11,534	3,036	1.44	9,923
<b>Northern Corn Belt:</b>							
All commercial farms.....	147	98	29,052	8,481	1,851	1.28	6,443
Cash-grain farms.....	181	139	32,188	7,371	1,478	1.45	6,236
Livestock farms <sup>3</sup> .....	148	94	31,985	10,423	2,226	1.29	7,738
<b>Western Corn Belt:</b>							
All commercial farms.....	219	126	34,406	8,864	2,070	1.26	6,946
Cash-grain farms.....	240	156	35,568	7,352	1,377	1.35	5,868
Livestock farms <sup>3</sup> .....	226	118	36,879	10,666	2,679	1.26	8,479
<b>Southern Corn Belt:</b>							
All commercial farms.....	184	89	24,612	7,115	1,791	1.14	4,685
Cash-grain farms.....	208	127	28,520	6,679	1,447	1.37	4,733
Livestock farms.....	198	82	26,167	8,202	2,125	1.11	5,366

<sup>1</sup> Value of total investment in land, buildings, livestock, machinery, and equipment.  
<sup>2</sup> Total expenditures for machine hire, hired labor, feed bought, gasoline and other petroleum fuel and oil, commercial fertilizer and fertilizing material, and lime and liming material.

<sup>3</sup> Livestock other than dairy and poultry farms.

For all commercial farms in the Corn Belt in 1954, total capital investment per man-equivalent of labor averaged \$35,217, of which about a fourth was investment in livestock, machinery, and equipment. Total specified expenses per man-equivalent averaged \$2,120, but ranged from an average of \$3,036 on livestock farms in the Central Corn Belt down to \$1,377 on cash-grain farms in the Western Corn Belt. Value of all farm products sold per man-equivalent of labor averaged \$6,870 for all commercial farms.

Livestock farms in the Central Corn Belt obtained the greatest value of all farm products sold per man-equivalent of labor (\$9,923). This group of farms also had the largest investment in livestock, machinery, and equipment per man-equivalent and the greatest current inputs in terms of total specified expenses per man-equivalent. Cash-grain farms in the Central Corn Belt obtained an average of \$8,662 in value of farm products sold per man-equivalent of labor. This was a greater amount than that obtained by the cash-grain farms in any other region. Cash-grain farms in the Central Corn Belt had the largest total capital investment per man-equivalent among all groups of farms and the largest amount of total specified expenses per man-equivalent among the cash-grain farms in all regions. Cash-grain farms in the Southern Corn Belt averaged lowest among the cash-grain farms in all regions as to the value of farm products sold per man-equivalent, and were also lowest among the cash-grain farms in value of total investment and in value of investment in livestock, machinery, and equipment. Cash-grain farms in the Southern Corn Belt were among the lowest groups in total specified expenses per man-equivalent of labor. Livestock farms in the Southern Corn Belt ranked lowest among the livestock farms in all regions as to value of farm products sold per man-equivalent and as to total capital investment, investment in livestock, machinery and equipment, and total specified expenses per man-equivalent of labor.

Value of farm products sold per man-equivalent of labor is strongly correlated with economic class of farm (table 96). Economic Class I farms among both the cash-grain and livestock types ranked much higher than any other economic class in terms of value of farm products sold per man-equivalent. Likewise, Class II farms ranked substantially above Class III farms, Class III farms ranked above Class IV farms, and so on down to Class VI farms, where the value of farm products sold per man-equivalent was the lowest of all.

TABLE 96.—SPECIFIED RESOURCES USED AND VALUE OF FARM PRODUCTS SOLD, PER MAN-EQUIVALENT OF LABOR, BY TYPE AND ECONOMIC CLASS OF FARM, IN THE CORN BELT: 1954

Type and economic class of farm	Resources per man-equivalent of labor						Value of all farm products sold per man-equivalent of labor
	All land	Crop-land harvested	Capital investment		Total specified expenses <sup>2</sup>	Tractors	
			Total <sup>1</sup>	Livestock, machinery, and equipment			
	Acres	Acres	Dollars	Dollars	Dollars	Number	Dollars
<b>All commercial farms.....</b>	171	105	35,217	8,429	2,120	1.33	6,870
<b>Cash-grain farms:</b>							
Total.....	195	138	41,996	7,587	1,670	1.53	6,756
Class I.....	261	202	72,132	9,103	3,419	1.54	14,475
II.....	224	170	56,621	8,576	2,252	1.64	9,889
III.....	193	137	39,132	7,584	1,527	1.52	6,139
IV.....	169	110	29,321	6,577	1,123	1.45	3,897
V.....	148	85	23,924	5,923	897	1.50	2,609
VI.....	101	48	14,327	3,560	460	0.96	970
<b>Livestock farms:<sup>3</sup></b>							
Total.....	179	98	36,454	10,271	2,627	1.31	8,070
Class I.....	211	125	54,168	14,624	6,192	1.31	21,201
II.....	194	118	45,426	12,061	3,163	1.45	10,251
III.....	178	99	33,452	9,731	2,018	1.34	5,755
IV.....	163	78	25,787	8,049	1,448	1.21	3,464
V.....	150	57	21,494	6,864	1,052	1.15	2,227
VI.....	111	31	13,645	4,264	566	0.70	937

<sup>1</sup> Value of total investment in land, buildings, livestock, machinery, and equipment.  
<sup>2</sup> Total expenditures for machine hire, hired labor, feed bought, gasoline and other petroleum fuel and oil, commercial fertilizer and fertilizing material, and lime and liming material.

<sup>3</sup> Livestock other than dairy and poultry farms.