

CHAPTER IV, SECTION A Continued

About one-half of the total increase (1.3 million tons) of liquid fertilizer between 1969 and 1974 was applied to corn. Other crops, such as wheat and soybeans, for which comparable data are available also showed substantial increases in the use of liquid fertilizers.

Table 8. Fertilizer Used or Purchased: 1909 to 1974

All Farms	Farms reporting	Increase or decrease (-) over preceding censuses		Percent of all farms
		Farms	Percent	
1974.....	1,625,097	-328,413	-16.8	70.2
1969.....	1,953,510	-270,207	-12.2	71.6
1964.....	2,223,717	-154,737	-6.5	70.4
1959.....	2,378,454	-537,952	-18.4	64.1
1954.....	2,916,406	336,135	13.0	60.1
1944.....	2,580,271	243,240	10.4	44.0
1939.....	2,337,031	12,941	.6	38.3
1929.....	2,324,090	140,034	6.4	36.9
1924.....	2,184,056	-87,123	-3.8	34.3
1919.....	2,271,179	448,147	24.6	35.2
1909.....	1,623,032	-	-	28.6

Table 9. Fertilizer Used: 1954 to 1974

Farms With Sales of \$2,500 and Over	Tons of fertilizer used	Increase or decrease (-) over preceding censuses	
		Tons	Percent
1974.....	29,333,869	3,124,818	11.9
1969.....	26,209,051	4,786,356	22.3
1964.....	21,422,695	4,040,410	23.2
1959.....	17,382,285	2,480,868	16.6
1954.....	14,901,417	-	-

Table 10. Dry and Liquid Fertilizer Used: 1959 to 1974

Farms With Sales of \$2,500 and Over	Fertilizer (tons) used		Increase or decrease (-) over preceding censuses	
	Dry	Liquid	Dry (tons)	Liquid (tons)
1974.....	22,480,383	6,853,486	1,832,493	1,292,325
1969.....	20,647,890	5,561,161	2,194,253	2,592,103
1964.....	18,453,637	2,969,058	2,628,107	1,412,303
1959.....	15,825,530	1,556,755	-	-

Use on Selected Crops

The acreage of corn fertilized has increased 30 percent from 1969 to 1974 and the tonnage increased by almost one-fourth. The largest increase in acres fertilized and tons of fertilizer used on crops has been on corn, wheat, hay crops, soybeans, and cotton.

From 1969 to 1974, the average number of pounds per acre applied to all crops decreased 5.6 percent. Two primary contributors to the decline were the rapid price increase and the spot shortages of fertilizer which began occurring in 1973. The rate for corn decreased by about 4 percent. This situation closely paralleled the fast-paced price rise of petroleum inputs used in fertilizer production.

For crops in States for which comparable data are available from prior censuses, the most significant increases in the use of fertilizer occurred for corn, wheat, and soybeans. These three crops also accounted for the largest increases in acres of crops harvested between the 1969 and 1974 censuses. The percent of corn acres fertilized increased 5 percent to 86 percent while wheat increased 7 percent to 62 percent. Soybeans, cotton, and hay crops show an average 3.7-percent increase in their respective acres fertilized. The acres fertilized for corn, wheat, and soybeans accounted for 67 percent of all acres of cropland fertilized. The comparable data for five selected crops are shown in table 11.

Use on Fully Irrigated and Nonirrigated Selected Crops

Proportionally less nonirrigated harvested cropland is fertilized than fully irrigated harvested cropland. Table 12 shows that the overall percent of selected crops fertilized on fully irrigated cropland was 84.3 percent. However, the sum of the acres of nonirrigated selected crops harvested averaged 62.8 percent fertilized.

Vegetable, wheat, orchard, and tobacco acreage generally had a higher application rate of fertilizer per acre on fully irrigated crop acreage than on nonirrigated crops.

Corn, soybeans, and cotton acreage generally had a lower application rate of fertilizer per acre on fully irrigated crop acreage than on nonirrigated crops. This relationship may be the result of analysis of fertilizer used in different geographic areas and not necessarily a valid comparison if the nutrient values were known.

Use of Lime and Liming Materials

In 1974, about 1 out of 12 farms with sales of \$2,500 or more reported the use of lime and liming materials. Both the number of these farms and the proportion of farms reporting the use of lime have decreased since 1964. The proportion of farms using lime has decreased from 15.1 to 8.5 percent since 1969. In 1974,

Table 11. Acres Fertilized for Selected Crops: 1969 and 1974

Farms With Sales of \$2,500 and Over	Acres fertilized		Tons used	
	1974	1969	1974	1969
Corn for all purposes.....	61,417,259	47,541,038	11,834,744	9,558,346
Wheat.....	38,785,874	24,182,158	3,270,790	1,893,562
Soybeans for beans.....	14,785,316	9,875,613	1,728,123	1,103,718
Cotton.....	9,733,967	8,587,434	1,673,987	1,551,600
Hay crops.....	10,061,006	7,917,453	1,462,985	1,184,781

Table 12. Fertilizer Usage on Fully Irrigated and Nonirrigated Selected Crops: 1974

Farms With Sales of \$2,500 and Over	Total acres harvested	Acres harvested	Percent	Fully irrigated					Nonirrigated					
				Acres fertilized		Fertilizer used			Acres fertilized		Fertilizer used			
				Total	Percent	Dry (tons)	Liquid (tons)	Pounds per acre	Acres harvested	Total	Percent	Dry (tons)	Liquid (tons)	Pounds per acre
Corn for all purposes.....	71,220,393	5,335,315	7.5	5,112,169	95.8	418,742	436,346	335	63,607,530	54,187,466	85.2	7,588,563	3,066,141	393
Soybeans for beans.....	47,787,723	254,002	.5	136,454	53.7	11,974	2,024	205	46,874,394	14,315,033	30.5	1,512,656	168,098	235
Cotton.....	12,128,978	3,114,461	25.7	2,693,966	86.5	272,825	171,325	330	7,828,641	6,335,197	80.9	834,076	307,924	361
Wheat.....	62,594,072	2,495,720	4.0	2,171,244	87.0	188,135	117,478	282	57,685,650	35,184,458	61.0	2,151,726	706,502	162
Vegetables, sweet corn, or melons for sale.....	3,070,068	1,479,517	48.2	1,432,689	96.8	543,160	172,912	1,000	1,288,155	964,530	74.9	240,572	30,706	563
Land in orchards.....	4,048,121	2,244,315	55.4	1,860,641	82.9	546,843	69,405	662	1,243,736	796,932	64.1	243,200	9,667	635
Tobacco.....	842,041	70,506	8.4	70,457	99.9	70,585	718	2,024	733,377	730,029	99.5	668,120	7,195	1,850