

## Fertilization and Irrigation

Commercial fertilizer is used on 71 percent of the total crop acreage on irrigated farms in the eastern area compared with 56 percent on nonirrigated farms (summary table 3). In the western area, the fertilized percent figures are 62 on irrigated farms and 41 on nonirrigated farms. If fertilized acreage on irrigated farms in the West is compared with the irrigated acreage, over 87 percent of the irrigated crop area is fertilized. In the East, the acreage fertilized on irrigated farms is nearly double the acreage irrigated.

Summary Table 3. Acres Fertilized and Rate of Application on Irrigated and Nonirrigated Farms

	Total acres of crop harvested	Acres of crops irrigated	Acres of crops fertilized		Rate of application (pounds per acre)		
			Total	Percent of total crop acres	All fertilizer	Dry fertilizer	Liquid fertilizer
United States, total...	264,318,297	33,059,581	138,701,317	52.5	340	262	78
Irrigated farms.....	50,385,527	33,059,581	32,101,023	63.7	414	306	108
Nonirrigated farms..	213,932,770	-	106,600,294	49.8	316	248	68
17 Western States and Louisiana.....	128,118,643	29,875,008	61,714,391	48.2	228	154	74
Irrigated farms.....	41,969,523	29,875,008	26,104,084	62.2	332	220	112
Nonirrigated farms..	86,149,120	-	35,610,297	41.3	150	106	44
30 Eastern States, Alaska and Hawaii.....	136,199,654	3,184,573	76,986,926	56.5	428	348	80
Irrigated farms.....	8,416,004	3,184,573	5,996,929	71.3	772	688	84
Nonirrigated farms..	127,783,650	-	70,989,997	55.6	400	320	80

The rate of application of fertilizer also varies by area and for irrigated and nonirrigated farms. The average rate of application for all class 1-5 farms in the United States was 340 pounds per acre fertilized. The rate varied from 428 pounds per acre in the East to 228 pounds per acre in the West. Comparison of application rates on irrigated versus nonirrigated farms showed an average of 414 pounds per acre on irrigated farms and 316 pounds per acre on nonirrigated farms. These differences became much more pronounced when comparing irrigated and nonirrigated farms in the East versus those in the West. This is undoubtedly due to the availability of water and the cropping intensity patterns in the East versus the West.

Similar data on the fertilization of pasture as well as more geographical detail on the fertilization of crops will be found in table 9 in the body of this volume. The total acreage of pasture fertilized (10.2 million acres of cropland pasture and 6.4 million acres of other pasture) is about one-fifteenth as large as the crop acreage fertilized, and application rates are considerably lower.

## Method of Irrigation Water Distribution

The method used to distribute or apply irrigation water also varies from one area to another. The four primary methods of applying irrigation water are furrows and ditches, flooding, sprinklers, and subirrigation.

CHART-5. Acreage Irrigated by Specified Methods of Water Distribution on Irrigated Farms: 1969

