

projects of 500 acres or more in size in 39 States. In addition, estimates prepared in the mid-1960's show another 39 million acres of land drained by individual land owners outside of drainage projects and in small drainage projects less than 500 acres in size.¹ The approximately 130 million acres of drained land accounted for in this fashion far exceed the acreage reported in the censuses of agriculture as shown in table 1.

Apparent Decrease in Drained Land, 1969 to 1974

In 1974, 113,000 fewer farms and 16.8 million fewer acres drained were tabulated than in 1969. Part of this apparent decline in inventory of drained land represents differences in data processing and questionnaire design between the two censuses rather than an actual decline. Two factors appear to contribute toward this large decline in tabulated drained land:

1. In both 1969 and 1974, the introductory inquiry to the drainage section asked "is (was) any land on this place artificially drained?" In 1969, if the lead-in inquiry was "yes" followed by a blank drainage section the review and edit procedure called for supplying drainage entries from reports for farms of approximately the same average size and farm type. However, in 1974 the response to the lead-in inquiry was not keyed and therefore could not be used in the subsequent edit procedure. Any reports returned with the lead-in entry marked "yes" and drainage entries blank, remained blank.
2. In 1974, the drainage section was located at the top of page 10 to which was affixed the return envelope and the instructions. Occasionally, the report form was returned with page 10 blank because it was shielded from the respondent's view

¹Gain, Elmer W. "Land drainage for production of food and fiber crops," *International Conference on Water for Peace*, volume 7, pp 451-461, Washington, D.C., 1967

by the affixed material when the questionnaire was completed. All of the inquiries on page 10 were affected by this problem to some degree.

Land Drained by Systems Installed in 1969 and 1974

Since the time span between drainage systems construction and reporting was a year or less, it is judged that memory bias has not significantly affected the accuracy of the reported data. Therefore, figures on newly drained land for 1974 and 1969 should accurately reflect current new drainage activity.

	Farms	Acres drained (1,000)
1974	31,143	1,693
1969	24,372	1,395

Drainage Data in Other Reports

Much of the drainage data in this chapter are repeated at the county level in volume I, chapter IV, table 13. Data for acreage of drained land and number of farms reporting drained land also appear in other parts of volume II: By size of farm in part 2; by tenure, age and principal occupation of farm operator, and type of organization in part 3; by value of agricultural products sold in part 7; and by standard industrial classification of farm in part 8.

Conclusions

In 1974, drained land in the United States on farms with sales of \$2,500 and over totaled 43 million acres on 226,000 farms as measured in the census.

Drainage activity is concentrated in the North Central States and Lower Mississippi Valley. The five leading drainage States (Illinois, Iowa, Indiana, Minnesota, and Ohio) account for nearly three-fifths of the total drained land reported in the 1974 census. Other highly drained areas are the gulf coast areas of Texas, southern Florida, and the Sacra-

mento and San Joaquin River areas of California. The number of farms reporting drained land and acreage of drained land by region in 1974 are shown in table 2.

Farms with artificial drainage averaged 433 acres in size and had an average of 189 acres drained. Average size of drained farm and acres drained per farm for 1974 by region are shown in table 3.

Farms with sales of \$100,000 and over reported 19.1 million acres drained, or 44.7 percent of the U.S. total. Acres drained by farms classified by value of agricultural products sold are shown in table 4.

Land drained by systems installed during the 1974 census year total 1,693,000

Table 1. Drainage on Farms: 1974, 1969, 1930, and 1920

	Farms	Drained land (1,000 acres)
1974 ¹	225,818	42,784
1969 ¹	338,696	59,551
1930	651,172	44,524
1920	924,810	53,025

¹Data are for farms with sales of \$2,500 and over.

Table 2. Drained Farms and Acres Drained: 1974

	Farms	(1,000 acres)
United States, total	225,818	42,784
Northeast	15,274	929
North Central	163,355	30,214
South	32,983	8,957
West	14,206	2,685

Table 3. Average Size of Drained Farms and Acres Drained Per Farm: 1974

	Average size of farm (acres)	Average acres drained per farm
United States, total	433	189
Northeast	302	61
North Central	358	185
South	631	272
West	980	189