

Data From Prior Censuses

Some data for the cost or tonnage of fertilizer used has been obtained in most censuses since 1880. However, only limited comparable data are available from prior censuses. Data from prior censuses are shown in the report along with that from 1969 for essentially comparable items. Data from 1954, 1959, and 1964 were based on a sample of approximately 20 percent of the farms. A description of the types of fertilizer data collected in censuses since 1880 is shown in table 2.

Table 2. Summary of Data Covering Fertilizer Obtained for 1969 and Prior Censuses

	Kind of data obtained
1969.....	Commercial fertilizer used in 1969--Tons separately for dry and liquid fertilizer and acres fertilized for economic class 1-5 farms. There were separate inquiries for cropland used only for pasture, other pasture (not cropland or woodland pasture) and 34 individual crops. In addition, there were separate inquiries for six crop groups. These crop groups were all hay or grass silage, all field seeds, all land in bearing and non-bearing orchards, all berries, all vegetables, all nursery or greenhouse products, and all other crops. There was a separate question in 1969 for commercial fertilizer purchased for all farms and economic class 1-5 farms.
1964.....	Commercial fertilizer and fertilizing materials in 1964--tons separately for dry and liquid materials and acres on which used. There were separate inquiries for hay and cropland pasture, other pasture (not cropland pasture), and three important crops (the crops varied by State) and for all other crops. There was a separate question in 1964 for expenditure for fertilizer and fertilizing materials.
1959.....	Commercial fertilizer and fertilizing materials in 1959--tons (separately for dry and liquid) and acres on which used. Inquiries were obtained separately for hay and cropland pasture, other pasture (not cropland), three important crops (which varied by States), and for all other crops.
1954 ¹	Commercial fertilizer and fertilizing materials in 1954--tons, acres on which used, and cost. Inquiries were obtained separately for hay and cropland pasture; other pasture; two important crops (which varied by States); fruits, vegetables, and potatoes; and for all other crops.
1945 ¹	Commercial fertilizer in 1944--cost only.
1940 ¹	Quantity and cost of commercial fertilizer bought in 1939.
1930 ¹	Quantity of commercial fertilizer bought in 1929. Amount expended was for commercial fertilizer, manure, marl, lime, and limestone. (No separate expenditure data were obtained for fertilizer alone.)
1925 ¹	Amount expended in 1924 for manure and fertilizer, including lime and ground limestone. (No separate data were obtained for fertilizer alone.)
1920.....	Amount expended in 1919 for manure and fertilizer.
1910.....	Amount expended in 1909 for manure and other fertilizer.
1900 ¹	Amount expended for fertilizer in 1899.
1890 ¹	Amount expended for fertilizer in 1889.
1880 ¹	Amount expended for fertilizer in 1879.

¹Alaska and Hawaii not included.

In most censuses since 1925, some data have been collected either on the expenditure for or the use of lime and liming materials. Data from prior censuses are shown when comparable to 1969. Table 3 shows the type of data which have been collected in censuses since 1925.

DEFINITIONS AND EXPLANATIONS

Reporting Instructions and Problems

The farm operator was instructed to report for each crop or group of crops, the number of acres that were fertilized in 1969 and the total tons and 10ths of tons of commercial fertilizer

Table 3. Summary of Data Covering Lime and Liming Materials for 1969 and Prior Censuses

	Kind of data obtained
1969.....	Tons of lime and liming materials and acres limed for farms reporting 2,500 dollars or more of agriculture products sold and cost of liming materials for all farms. Ground limestone, hydrated and burnt lime, marl, oyster shells, etc. to be included. Lime used for sprays or sanitation to be omitted. Lime furnished under the Agriculture Conservation Programs to be included.
1964 and 1959.....	Tons of lime and liming materials and acres limed. Ground limestone, hydrated and burnt lime, marl, oyster shells, etc., to be included. Lime used for sprays or sanitation to be omitted. Lime furnished under the Agriculture Conservation Program to be included.
1954.....	Lime or liming materials purchased in 1954 (tons and cost) and acres limed. Ground limestone, hydrated and burnt lime, marl, oyster shells, etc., to be included. Lime used for sprays or sanitation to be omitted. Lime furnished under the Agriculture Conservation Program to be included.
1945.....	Cost of lime or liming materials purchased in 1944. Ground limestone, hydrated and burnt lime, marl, oyster shells, etc., to be included. Lime used for sprays or sanitation to be omitted. Lime furnished under the Agriculture Conservation Program to be included.
1940.....	Tons and cost of liming materials--lime, marl, gypsum, etc., bought in 1939.
1930.....	Amount expended in 1929 for commercial fertilizer, manure, marl, lime, and ground limestone. (No separate data for liming materials.)
1925.....	Amount expended in 1924 for manure and fertilizer, including lime and ground limestone. (No separate data for liming materials.)

used in all applications. If more than one application of fertilizer was made, the acreage covered was to be reported only once. Acreage fertilized and tonnage used were to be included on the report form for the farm operator who was operating the land. The fertilizer was to be reported regardless of whether it was purchased by the landlord, tenant, or both jointly.

If two or more crops were harvested from the same land or if one crop was harvested and the land then planted to another crop for harvest next year and both crops were fertilized, then the acreage fertilized and the tonnage used was to be reported for each crop. In the case of wheat and some other crops planted in the fall of 1969 and fertilized at the time of planting, the acreage fertilized may relate to the acreage harvested in 1970 and not to the acreage harvested in 1969.

The tons of fertilizer and lime used shown for class 1-5 farms do not account for the total tons used in the United States. Farms with sales of less than \$2,500, purchased \$102 million tons of fertilizer in 1969. The short form used for such farms did not provide for reporting on which crops the fertilizer was used.

Considerable quantities of fertilizer and lime are used by places such as golf courses, lawns and gardens of homes, places with insufficient agricultural operations to qualify them as census farms, and farms entirely in the soil-bank program. In some of the more urban States, the quantity of fertilizer and lime used by such places represents a significant portion of the total consumed by all users.

It appears that in some instances underreporting of gross tons occurred in the census when farm operators reported the tons of plant nutrients in place of the gross tons. This was most likely to occur in the reporting of liquid fertilizers. For census reports