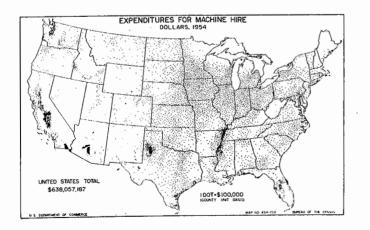
## PURCHASED MACHINE WORK HAS INCREASED

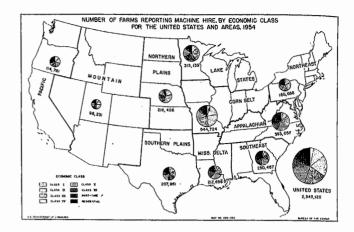
During early settlement of our country, most farm tools were simple and most farmers owned their own equipment or borrowed from their neighbors. Rarely did a farmer pay cash for a machine to work on his farm. With the coming of the grain reaper, the steam-powered thrashing machine, and other kinds of costly machines, it became customary for farmers to hire machines for certain kinds of work. As mechanization progressed and the cost of fully equipping a farm increased, the practice of hiring some machine work became general in practically all farming sections. In 1954, almost two-thirds of the commercial farms and one-third of all other farms reported some expense for machine hire. Heavy concentration of machine hire in 1954 was reported in the Mississippi River Delta and in several important western irrigation farming areas.

As machines become more specialized, it is probable that the hiring of machine work by farmers will become even more general. Frequently a farmer will buy a machine realizing that he does not have enough use for it on his own farm to make it pay and expecting to use it for hire on other farms in the neighborhood. Numerous firms that make a business of doing machine work for farmers have been established. Airplanes used for seeding, dusting, and spraying, and earth-moving equipment are examples of machines often provided by nonfarm firms. Hay balers, grain combines, and forage harvesters often used for custom work are usually owned by farmers.

Hiring a machine usually involves hiring some labor, too, as it is often customary for the owner of the machine to also provide all or a part of the crew for its operation.

Farms reporting machine hire in 1954 ranged from almost 70 percent of all farms in the Lake States to about 45 percent in the Appalachian area. Farms of all economic classes reported some machine hire. Between 60 and 68 percent of the farms of Economic Classes I, II, III, and IV hired some machine work done. These are the farms that, for the most part, are large enough to use machines effectively. Less than 60 percent of the farms of Class V and less than 50 percent of those of Class VI reported any machine hire in 1954. This low rate of machine hire applies to a relatively large number of farms with very small scale of operation. Almost half of the part-time farms hired some machine work. (The small amount of harvest work to be done on many of these places may not justify owning such expensive equipment as hay balers, forage harvesters, or corn pickers.)





Farmers spent about \$638,000,000 for machine hire in 1954, an average of about \$135 for every farm in the United States. Most of this expense was incurred in the farming areas where relatively costly and complicated machines are used in field operations. The Corn Belt, with almost \$119,000,000, led other areas in total expense for machine hire. The highest costs per farm were in the Pacific and Mountain areas where expenditures for all farms averaged \$316 and \$308, respectively.

More than 80 percent of the total cost of machine hire was for farms of classes I, II, III, and IV. Part-time and residential farms representing 30 percent of all farms accounted for only 5 percent of the total.

Average expenditure per farm reporting machine hire was about \$250 in 1954, up almost \$30 per farm since 1950.

For Class I farms the average expenditure for machine hire was \$1,676, or almost 4 times as much as for farms of Class II. Almost one-half of the total expenditure by Class I farms for machine hire was in the Mountain and Pacific areas. Many of these farms are very large and highly specialized. For some farm operations, operators of these farms prefer to use customwork rather than to own the machines and hire crews to operate them.

## GREATER DEPENDENCE ON PETROLEUM FUEL AND OIL

Power for farmwork provided by horses and mules and oxen was farm produced. Now that most of the power is provided by motors, the farmer must buy it. More cash is required to farm now than was required when the farmer produced his own power. It has been estimated that 80 million acres of cropland that once produced feed for horses and mules has been released for other purposes by the adoption of tractors, motortrucks, and automobiles. On the other hand, farmers spent during 1954 about one and a third billion dollars for gasoline and other petroleum fuel and oil used in the farm business. This is for farming purposes only. A part of these expenditures were for petroleum fuels used for such purposes as heating orchards, brooding chicks, and heating water, but most all of the total was used in equipment powered by internal-combustion engines.

Thus, farmers have become almost entirely dependent on petroleum products for most of their farm operations. They are no longer able to switch from mechanical to animal power in their field and road operations. Although electric motors are helping more and more in the stationary power jobs in the service areas, full-scale farm production is possible only when the necessary supply of petroleum products is available.