

## FARMERS AND FARM PRODUCTION

# MAJOR DAIRY REGIONS

Clearer understanding of dairy producers and dairy production requires that considerable attention be given to production conditions in several geographic regions and areas and on farms of several sizes. Differences in the technical phases of dairying, in production conditions, levels of income, and the organization of farms, are related to the size of the farms as well as to physical and economic features of the area.

The economic subregion is the basic unit for delineating the production areas. Because of the large number of economic subregions in which dairy farms predominate, those with somewhat similar physical and natural characteristics are combined, forming what will be called dairy regions.

The resources included in the study are only a part of those associated with the dairy industry of the United States. Sixteen percent of all commercial farms in this country were classed as dairy farms in 1954 and 385,429 or 70 percent were in areas covered by the sections analyzing the production situation in the major dairy regions and special dairy areas. They used 65 percent of the land in farms and 68 percent of the harvested cropland.

The dairy regions delineated here cover areas that are both important areas of dairy production and where dairy farms are a major segment of the agriculture.

The portion of the United States covered by the different dairy regions and areas includes approximately 90 percent of the 100 counties that have the largest number of milk cows and also highest total value of dairy products sold.

Some economic subregions have a fair representation of dairy farms which, in some circumstances, might be considered dairy regions but when considered in relation to the total number of farms within the subregion the proportion becomes rather small. Economic Subregion 69, for example, has 5 counties among the 100 leading counties in numbers of milk cows. This subregion has more than 33,000 beef and hog farms, 15,000 dairy farms, 15,000 cash-grain and field-crop farms, and 13,000 general farms. It has only 1 county among the 100 counties with the largest

sale of dairy products. This economic subregion is considered more a part of the cash-grain-livestock region than a dairy area.

There are 20 economic subregions in the Northern Dairy Region of the United States. This belt contains 54 percent of all dairy farms in the United States. In 1954, it accounted for nearly three-fifths of the total milk sales as well as more than two-fifths of all butter sales. It is hoped that a grouping of the 20 economic subregions into five larger areas will result in a clearer picture of the dairy industry than can be obtained through a presentation of the individual subregions (Table 12).

### GENERAL CHARACTERISTICS

The topography of the whole Northern Dairy Region was transformed by glacial action which left a rolling to rough terrain, a mixed soil pattern, and a drainage system with some poorly drained spots intermixed with well-drained localities. Any one farm may have soils ranging from rather light and subject to drought, to heavy soils with good water-holding capacities; places with little or no outlet for surface water to well-drained fields; small irregular fields to large, well-laid-out fields where the bigger pieces of machinery can be used effectively; and smooth easily cultivated fields to fields so full of stones and boulders or so rough as to be useful only for grazing.

Throughout this Northern Dairy Region there is somewhat less intense summer heat than in the Corn Belt. It has shorter growing seasons and colder winters. Average annual precipitation is around 25 inches in the western part. It increases somewhat irregularly eastward until 40 inches is recorded from Pennsylvania eastward. All livestock and practically all feed are placed under roof during the long winter. The producer's markets range from an almost completely fluid-milk market in the eastern to butter or other manufactured dairy products on the western edge of the belt. As the higher priced dairy markets are in the east, the surplus production from the western part finds outlets there.

A milking herd is the obvious characteristic common to all dairy farms. A variety of crops, a goodly supply of pastureland, and a considerable amount of family labor, are found on dairy farms of all economic classes. Different secondary or minor enterprises are found in the different subregions but they seem to fit into the organization with little special or unusual demands upon capital or labor.

### VARIATION IN FARM CHARACTERISTICS

The smallest herds among the major dairy regions are in the Northern Woods area, Economic Subregion 66, where the average herd has 13 milk cows. More than two-thirds of these farms have fewer than 15 cows and only 14 percent have more than 20 cows. The Northeastern Dairy Region not only has the most cows per herd but it has the fewest small herds and the most large ones. None of the Northern Dairy Regions have as many as one-half percent of the farms with herds in excess of 100 cows per herd.

The range in total incomes as well as per crop acre in 1954 indicates a wide difference in resources and perhaps in the effectiveness with which resources are used (Table 13). The Economic Class I farms had total incomes averaging from \$30,000 to \$36,000 for the different regions or \$95 to \$136 per acre of cropland. Economic Class VI, on the other hand, had total incomes ranging from \$750 to \$903 per farm or \$19 to \$23 per crop acre. The incomes of the other four classes were between these two extremes both in total income per farm and per crop acre.

Table 12.—NUMBER OF MILK COWS ON DAIRY FARMS BY MAJOR DAIRY REGIONS: 1954

Item	Major dairy region				
	North-eastern (Subregions 1, 2, 6, 7, 8, 10)	Eastern Ohio- Western Pennsyl- vania (Subregions 17, 27, 28, 29, 30)	Central Michigan- New York Lake Shore (Subregions 9, 49, 50, 64)	Northern Lake (Subregions 65, 67, 68, 88)	Northern Woods (Subregion 66)
Number of farms.....	67, 521	40, 636	35, 605	124, 501	28, 001
Average number of milk cows per farm..	24	15	18	18	13
Percent distribution of farms by num- ber of milk cows:					
Total.....	100	100	100	100	100
Under 5.....	2	5	4	2	6
5 to 9.....	9	22	19	13	30
10 to 14.....	16	28	24	24	32
15 to 19.....	19	20	19	25	18
20 to 29.....	29	18	21	27	12
30 to 49.....	20	6	11	8	2
50 to 99.....	5	1	2	1	(Z)
100 and over.....	(Z)	(Z)	(Z)	(Z)	(Z)

Z Less than 0.5 percent.