harvested for beans on all commercial farms in the country and produced 80.8 percent of the soybean crop.

Approximately half of the cash-grain farms and livestock farms (other than dairy and poultry farms) in the United States in 1954 were in the Corn Belt. The total number of commercial farms in the Corn Belt was 797,259, or 24 percent of the United States total. Most of the labor on these farms was that of the operator and members of his family. Commercial farms in the Corn Belt accounted for only 10.7 percent of the total expenditure for hired labor on all commercial farms in the United States.

The Corn Belt as defined for this study and report contains a larger area of farmland and more commercial farms than are included in the five States usually referred to as the Corn Belt States (table 2). The Corn Belt as here defined also includes a larger proportion of the United States total production of principal Corn Belt crops and livestock. This results from the fact that the 15 economic subregions comprising the Corn Belt as presently outlined contain a total area somewhat larger than the area of the five Corn Belt States. Furthermore, the portions of Missouri, Indiana, and Ohio included in the economic subregions used here contain a larger proportion of commercial farms and of commercial farm acreage than do the excluded portions of those States. The economic subregions selected for inclusion in the Corn Belt were those in which types of farms and kinds of crops and livestock characteristic of the Corn Belt were relatively most concentrated.

TABLE 2.—COMPARISON OF TOTALS FOR FIVE CORN BELT STATES AND THE CORN BELT AS USED IN THE PRESENT STUDY, WITH RESPECT TO SPECIFIED ITEMS FOR COMMERCIAL FARMS: 1954

Item	Percentage of United States total accounted for by—	
	5 Corn Belt States [1]	The Corn Belt [2]
Number of farms	21.2	24.0
Acres of all land in farms	12.4	16.5
Number of cash-grain farms	38.1	49.2
Number of livestock farms [3]	39.4	47.0
Bushels of corn harvested for grain	57.4	71.9
Bushels of oats threshed or combined	38.0	53.9
Bushels of wheat threshed or combined	18.0	23.2
Bushels of soybeans harvested for beans	72.6	80.8
Number of cattle and calves sold alive	21.9	28.2
Number of hogs and pigs sold alive	58.7	69.7

[1] Ohio, Indiana, Illinois, Iowa, and Missouri.
[2] Total of 15 economic subregions. See footnote to table 1.
[3] Livestock other than dairy and poultry farms.

REGIONS WITHIN THE CORN BELT

Because of the vast size of the Corn Belt and because of some rather important differences in the natural features and conditions of production from one part to another, the Corn Belt has been divided into five parts, or regions, for the purpose of this analysis and report (fig. 2).

Eastern Corn Belt.—The soils of most of the Eastern Corn Belt were developed under forest conditions. They usually are acid, with a rather thin organic top layer, and they are inherently less productive than the prairie soils to the west. The southwestern part of this region includes some hilly and relatively less productive land in addition to the alluvial soils of the Wabash and Ohio River Valleys. The average annual precipitation ranges from 45 inches in the southwestern to 35 inches in the northern part of the region. Commercial fertilizer and lime are used more extensively than in any other part of the Corn Belt.

More than half the commercial farms in this region have less than 140 acres of land. This region has been settled and farmed longer than most of the rest of the Corn Belt. Corn is the leading crop but occupies a smaller percentage of the cropland than in areas to the west. Wheat is grown on a larger percentage of the farms than in any other region of the Corn Belt. Soybeans for beans are grown to the largest extent in the northeastern and northwestern parts of this region.

Central Corn Belt.—The topography of most of the Central Corn Belt is level to slightly rolling. The most level portions are in east-central Illinois and in central Iowa. These are the areas where cash-grain farming is most concentrated. The central portion of this long diagonal region contains the largest proportion of rolling land, and in this area livestock farms predominate.

The soils over most of this region were developed from prairie vegetation and are deep, fertile, and rich in organic matter. Average annual precipitation ranges from 40 inches in the eastern end to 25 inches in the extreme western part, and it is usually well distributed through the growing season. The principal crops are corn, soybeans, and oats. Yields of crops are relatively high.

Northern Corn Belt.—In the Northern Corn Belt the topography and rainfall vary considerably from east to west. In the eastern part the rainfall is greater and the topography is rougher than in the western part. Soil erosion is a relatively serious problem in the eastern part, and some soils in this area have difficult drainage problems. Forage production, and hence beef and dairy production, are much more important in the eastern than in the western part of the region. Cash-grain farms are relatively most numerous in the western part where the land is more level and rainfall is more limiting for forage production. The principal crops, in addition to forage, are corn, oats, and soybeans.

The primary limiting factor determining the northern boundary of the Corn Belt is the length of the growing season. Development of hybrid corn adapted to a shorter growing season has pushed the northern boundary of the Corn Belt northward during the last 20 years.

Western Corn Belt.—The western boundary of the Corn Belt is determined principally by the supply of moisture, and particularly by the amount of rainfall during the growing season. Westward from the zone of 25 inches of average annual precipitation, corn rapidly loses its dominant position in the cropping system, and is replaced by grain sorghum and wheat. The Corn Belt merges into the regions of wheat production and range livestock. Wheat is able to make better use of fall, winter, and spring moisture, and coming to maturity in the hot and relatively dry part of the summer, it has a relative advantage over corn at the western border of the Corn Belt. In the western part of the Western Corn Belt, because of the uncertainty of rainfall, farmers tend to understock with livestock to avoid the hazard of insufficient feed in dry years. Therefore, more corn is sold from this part of the region than in the eastern half of the Western Corn Belt.

In the loessial or wind-blown soil areas bordering the Missouri River most of the land is characteristically rolling, and a large percentage can be used only for permanent pasture. To protect the cropland from soil erosion and to maintain organic matter in the soil, relatively large acreages of grasses and legumes are grown. Cattle feeding and hog production are important in this part of the region.

Southern Corn Belt.—Land in the Southern Corn Belt is generally more rolling and most of the soils are less productive than in the areas bordering it on the north, east, and west. This region has large areas of silt loam soils that have heavy subsoils or claypans, making for difficult soil drainage and interfering with root development and growth of crops. The scarcity of good cropland is reflected in the relatively large acreage of pasture and the