

## CHAPTER III

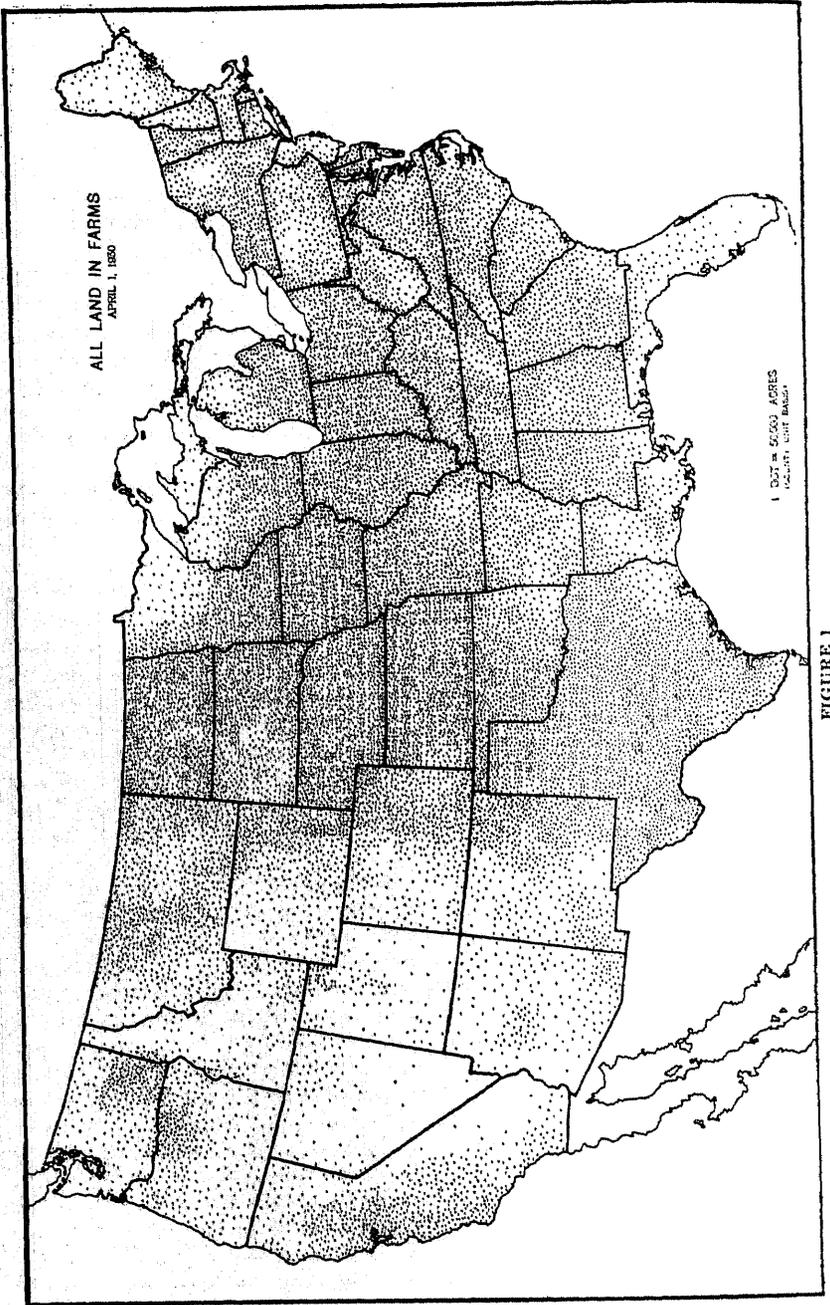
### GEOGRAPHY OF AMERICAN AGRICULTURE AND CHARACTERISTICS OF EACH TYPE OF FARMING

Of all lines of economic activity probably none is so dependent upon land area as is agriculture. A certain amount of space is necessary for the conduct of any business, but nowhere is the need so great as in farming. In a technical sense, land is usually considered to include the soil, its surface and topographic features, the subsoil and deposits underneath, as well as the climate overhead. Its various attributes, space, physical, chemical and biological elements, surface and climatological features determine, in large measure, the kind of agriculture practiced. In fact, these attributes have more to do with the way in which agriculture is geographically distributed than any other single group of factors. In studying types of farming in the United States, therefore, there probably is no better place to begin than with a consideration of the land resources and the way in which they are utilized.

**The use of land resources in the United States in 1929.**—According to the agricultural census of 1930, there are 1,903,216,640 acres of land in the United States. Of this area 986,771,016 acres, or 51.8 per cent, are in farms. Thus only a little over one-half of our total land area is utilized for agricultural purposes. The census did not obtain the acreage of improved land in the United States in 1930, but a rough approximation of the total may be made by adding the acres in plowable pasture to the total acres in crops. This does not take into consideration the land occupied by buildings and lots, however, and is, therefore, not exactly correct. Combining the 413,235,890 acres in crops with the 109,159,914 acres in plowable pasture, we obtain 522,395,804 acres, which roughly represent the improved area in the United States. Relating this acreage to the total land area we find that only slightly over one-fourth (27.4 per cent) of our total land area is improved and capable of producing crops. The remaining 70 odd per cent is in permanent pasture, forests, deserts, swamps, mountains, streams, roads, cities, etc.

The lack of agricultural development on such a large proportion of our land area is to be accounted for largely, by such factors as uneven or rough terrain, by low fertility, by lack of rainfall, by poor drainage, or by excessive temperature and evaporation. Economic forces also play a part. The level of agricultural prices, for example, has an important influence in determining not only the way in which the land area is utilized, but may be the final determinant in whether it is utilized at all.

The proportion of the land area utilized for farming purposes varies greatly in different parts of the United States. This variation is shown in Figure 1 and is a reflection of the differences in physical and economic conditions prevailing throughout the country. An examination of Figure 1, discloses that proportionately less of the total land is in farms in the Rocky Mountain and Pacific States; in Florida, Louisiana, Arkansas, southeastern Oklahoma, and Missouri; in the mountain sections of New York, Pennsylvania, West Virginia, Kentucky, Tennessee, and North Carolina; in western North Dakota and South Dakota; and in the cut-over areas in northern Minnesota, Wisconsin, Michigan, and northern New England. The heaviest concentration, on the other hand, is to be found in the central Mississippi Valley.



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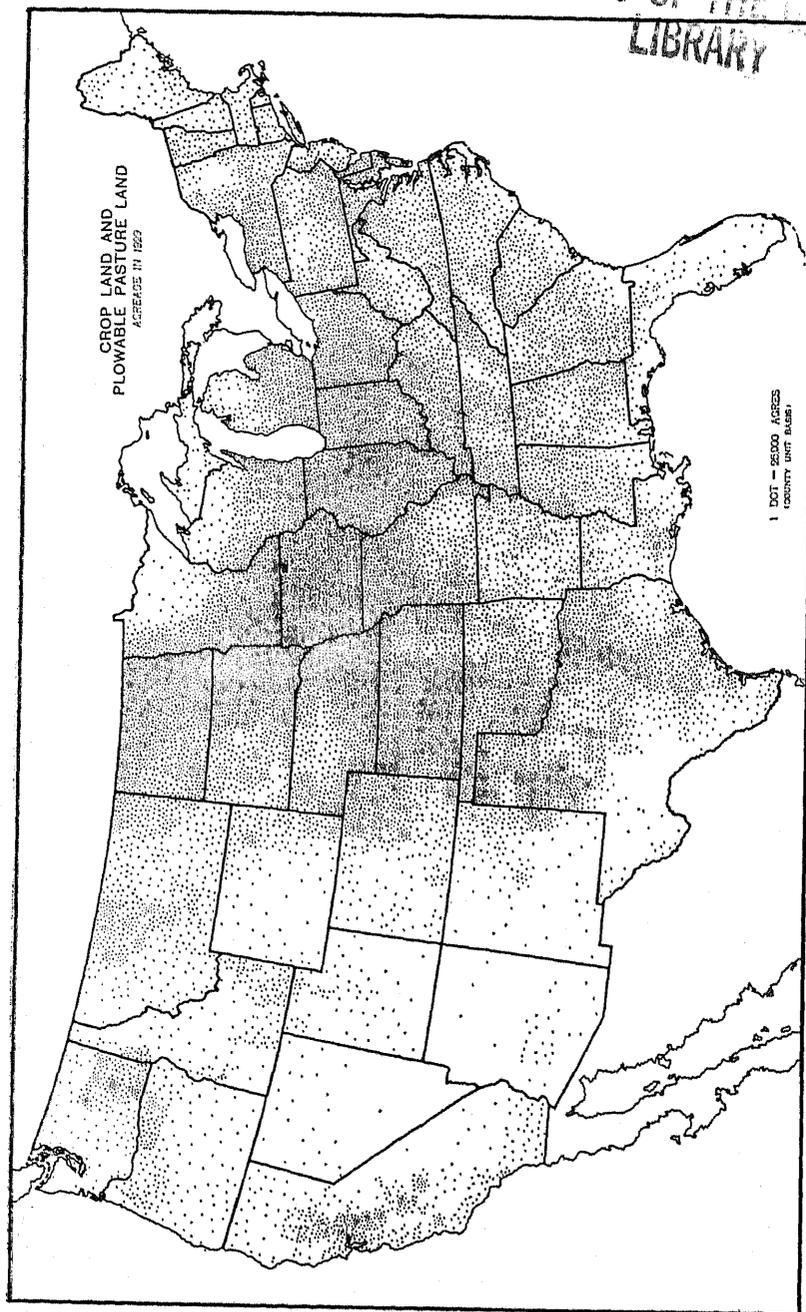


FIGURE 2

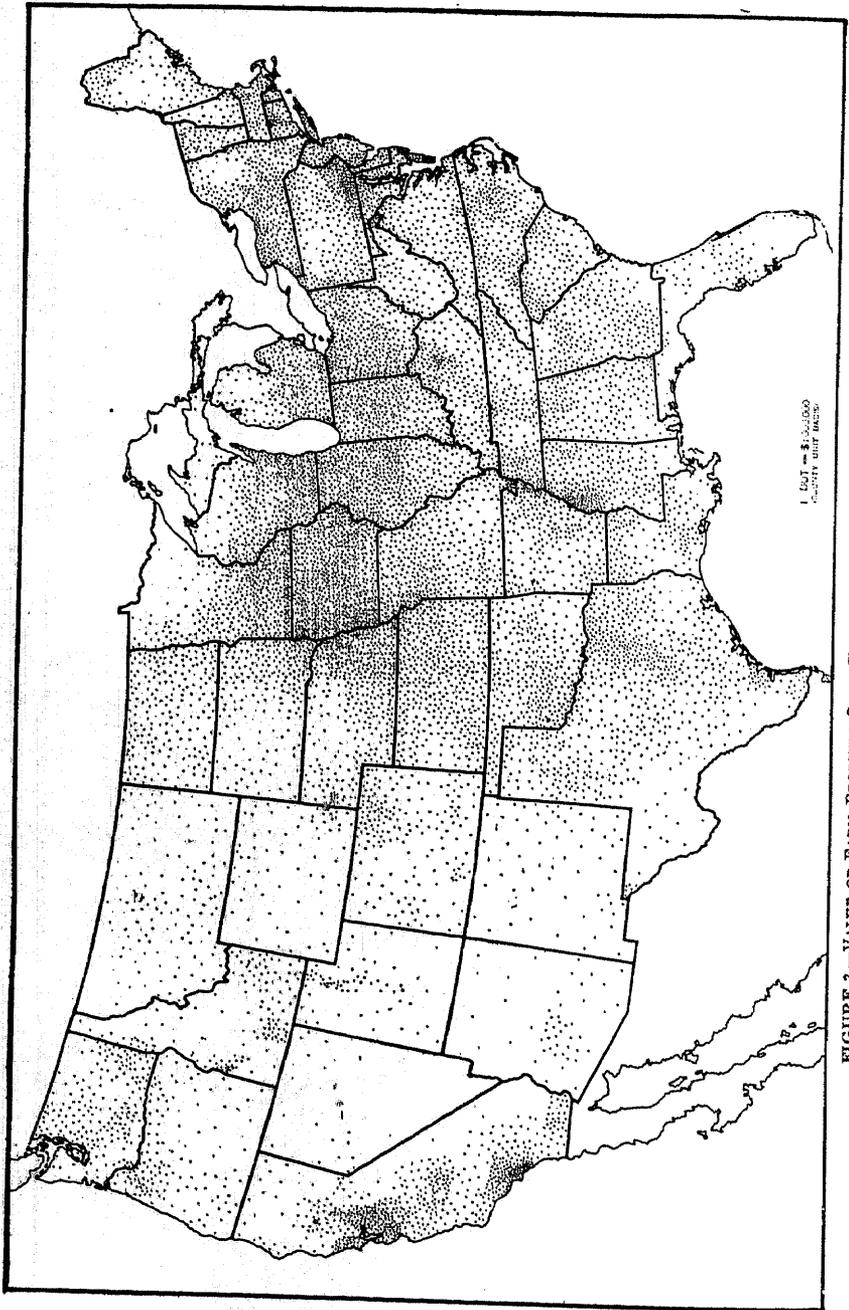


FIGURE 3.—VALUE OF FARM PRODUCTS SOLD, TRADED, OR USED BY OPERATOR'S FAMILY, 1929

The farming areas may be localized even more definitely by examining the distribution of the combined crop and plowable pasture acreage as shown in Figure 2. The heaviest concentration of crop and plowable pasture land is found in Iowa, the northern two-thirds of Illinois, southern Minnesota, eastern half of North Dakota, South Dakota, Nebraska, and Kansas, eastern Colorado, northwestern Texas, western Oklahoma, northern Missouri, the northern two-thirds of Indiana and Ohio, southern Michigan and Wisconsin, southeastern Pennsylvania, central and western New York, the delta region of Mississippi and Arkansas, the black belt of west-central Alabama, the black land prairie of east-central Texas, the Sacramento and San Joaquin Valleys in California, the Willamette Valley in Oregon, the Columbia Basin in Washington, Oregon, and Idaho, the Judith Basin in Montana, the Central Basin in Tennessee, and the blue grass region in north-central Kentucky. These areas are the important agricultural regions of the United States and within them most of the agriculture is carried on.

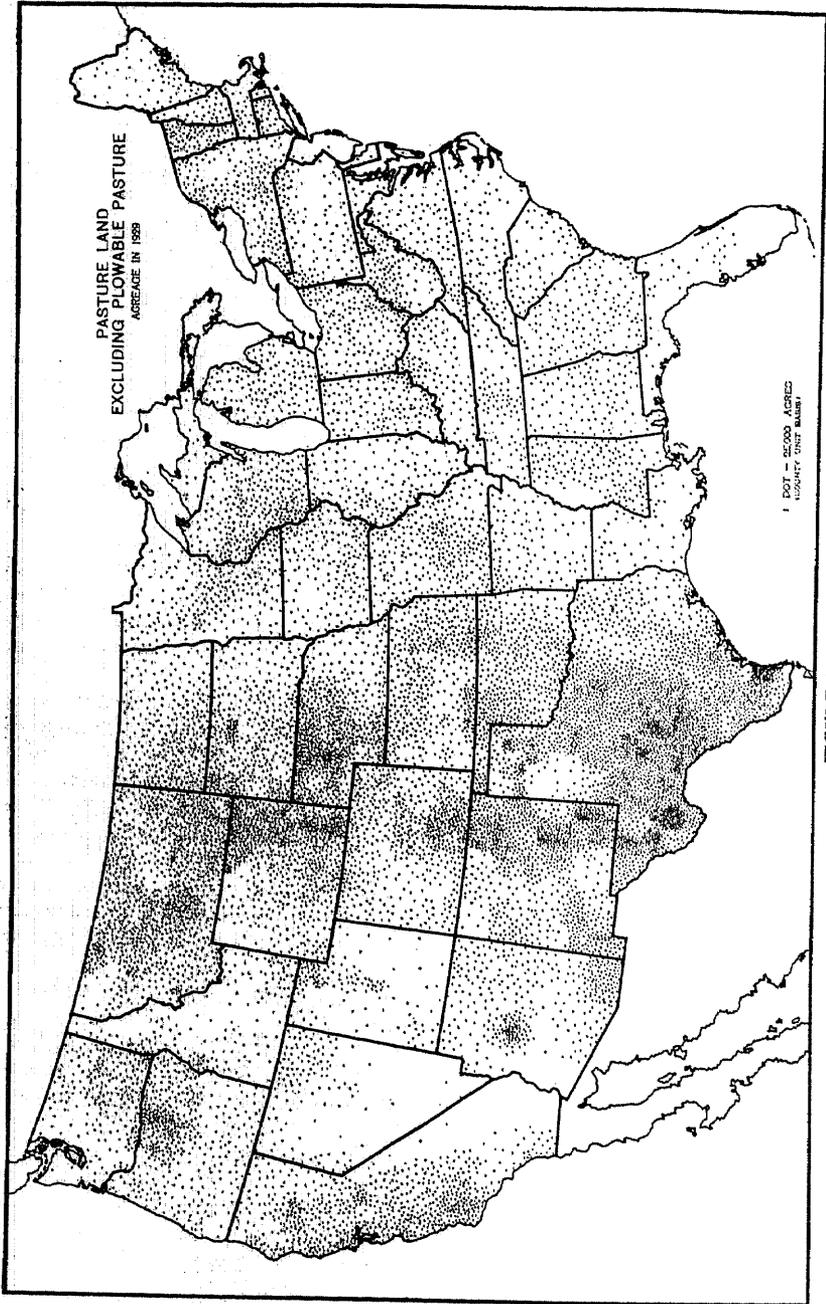
An even better portrayal of these agricultural areas is shown by Figure 3. In this dot map the gross value of farm products sold, traded or used by operator's family in 1929 is shown by counties. The areas of heaviest concentration of dots are those which had the largest value of farm products in 1929. Were the value of the products furnished the family by the farm left out of the total, and only the value of products sold shown, the concentration would be even more localized. As the chart stands, it will be noted that the concentration of dots is least dense in the Appalachian Mountain States; the Ozark region of Missouri and Arkansas; the Ouchita Mountain region of Arkansas and Oklahoma; the cut-over country of Minnesota, Wisconsin, Michigan, in parts of Florida, and in the more arid regions of the Western States. In these areas agricultural development is much less pronounced and they thereby contribute less relatively to the total agricultural income.

It would be misleading to assume, however, that these important cropping areas represent the entire agricultural development in the United States, since they leave out of account almost entirely the range livestock industry. As is well known, this industry is concentrated largely in the Western States. Figure 4 showing the distribution of the permanent pasture land (plowable pasture excluded), indicates quite accurately the general area wherein livestock production by grazing is practiced.

Localizing the agriculture of the United States still farther, we come to a consideration of the crops and livestock grown and the way in which they fit together into farming systems in particular areas. We shall begin with a consideration of the cropping system.

**The cropping system of the United States.**—If we think of a cropping system in a rotation or combination sense, there is no single one which will be typical for the entire United States. In the discussion at this point the purpose is not so much to discuss the way in which the various crop and livestock enterprises are combined into farming systems as it is to show the way each enterprise is geographically distributed. Later in this chapter, but particularly in Chapters IV and VII, this latter phase of the problem will be discussed.

The acreage in the five crops, corn, hay, wheat, cotton, and oats, comprised in 1929, approximately three-fourths (74.4 per cent) of the total crop land in the United States. The acreage in corn alone was almost one-fourth (23.7 per cent) of the total acreage in crops. The other three crops in relative importance from the standpoint of area were: Hay, 16.4 per cent; wheat, 15 per cent; and cotton, 10.5 per cent. No other crops, except barley, and land in orchard and subtropical fruits, vineyards, and planted nut trees represented so much as 1 per cent of the total.



The acreages in rye, flax, potatoes (Irish), grain sorghums, and vegetables harvested for sale, were of about equal importance ranging from 2,944,082 acres for potatoes to 3,521,903 acres for grain sorghums, or each on the average occupying approximately three-fourths of 1 per cent of the total crop area. Likewise, the acreage in tobacco, peanuts, soybeans (grown alone), and field-beans, were of about equal importance ranging from 1,558,865 acres in peanuts, to 1,961,549 acres in soybeans, or on the average occupying approximately one-half of 1 per cent of the total crop land.

An examination of Table 1 will show in detail this distribution of the total crop land in the United States according to its various uses.

TABLE 1.—UTILIZATION OF THE TOTAL CROP LAND IN THE UNITED STATES

ITEM	Acres	Per cent of total	ITEM	Acres	Per cent of total.
Crop land, total.....	413, 235, 800	-----	Crops harvested—Contd.		
Idle or fallow land.....	41, 287, 216	10.0	Sweet potatoes.....	649, 847	0.2
Crop failure.....	12, 706, 583	3.1	Cotton.....	43, 227, 488	10.5
Crop land harvested.....	350, 242, 091	85.9	Tobacco.....	1, 888, 365	0.5
Crops harvested:			Sugarcane.....	1 291, 447	0.1
Corn.....	97, 740, 740	23.7	Sugar beets.....	643, 797	0.2
Wheat.....	61, 999, 908	15.0	Sorghum for strup.....	136, 143	(?)
Oats.....	36, 525, 904	8.8	Sorghum for grain.....	3, 521, 903	0.9
Barley.....	12, 800, 772	3.1	Broom corn.....	311, 646	0.1
Rye.....	3, 032, 802	0.7	Hops.....	23, 302	(?)
Flax.....	2, 965, 635	0.7	Hemp.....	1, 644	(?)
Emmer and spelt.....	344, 324	0.1	Grass seed and millet...	3, 876, 889	0.9
Buckwheat.....	621, 854	0.2	Vegetables.....	2, 811, 715	0.7
Rice.....	740, 588	0.2	Small fruits.....	386, 064	0.1
Annual legumes, grown alone.....	6, 387, 591	1.5	Orchard and subtropical fruits, vineyards, and planted nut trees...	6, 086, 176	1.5
Hay, total.....	67, 827, 899	16.4			
Potatoes, Irish, or white.....	2, 044, 082	0.7			

<sup>1</sup> Not including the acreage of sugarcane for seed and other purposes not specified.

<sup>2</sup> Less than one-tenth of 1 percent.

CENTERS OF PRODUCTION OF EACH OF THE IMPORTANT CROPS.—The geographic utilization of land for cropping can best be shown by presenting a series of dot maps indicating the centers of production of the various crops. Dot maps for the more important crops are shown below.

FEED GRAINS AND HAY.—Corn stands first in acreage and value of all crops in the United States; 66 per cent or two-thirds of the farms in the United States reported growing corn in 1929. The geographic distribution of the total acreage in corn is shown by the dot map. (Fig. 5.)

This map indicates clearly, as is well known, that corn is not of equal importance in all parts of the United States. The areas of greatest concentration are in the Corn Belt States centering in Iowa, the northern and eastern third of Nebraska, southeastern South Dakota, southwestern Minnesota and northern and Eastern Kansas, northwestern Missouri, central and northwestern Illinois, central Indiana, and central and northwestern Ohio. The heaviest concentration occurs in central Illinois and west north central Iowa. In each of these areas considerable corn is sold for cash, to the extent that both have become known as cash-grain areas. Another area of concentration equally as heavy or heavier than those just mentioned is found on the alluvial soils along the Missouri River between the southern boundary of Minnesota and the northern boundary of Kansas.

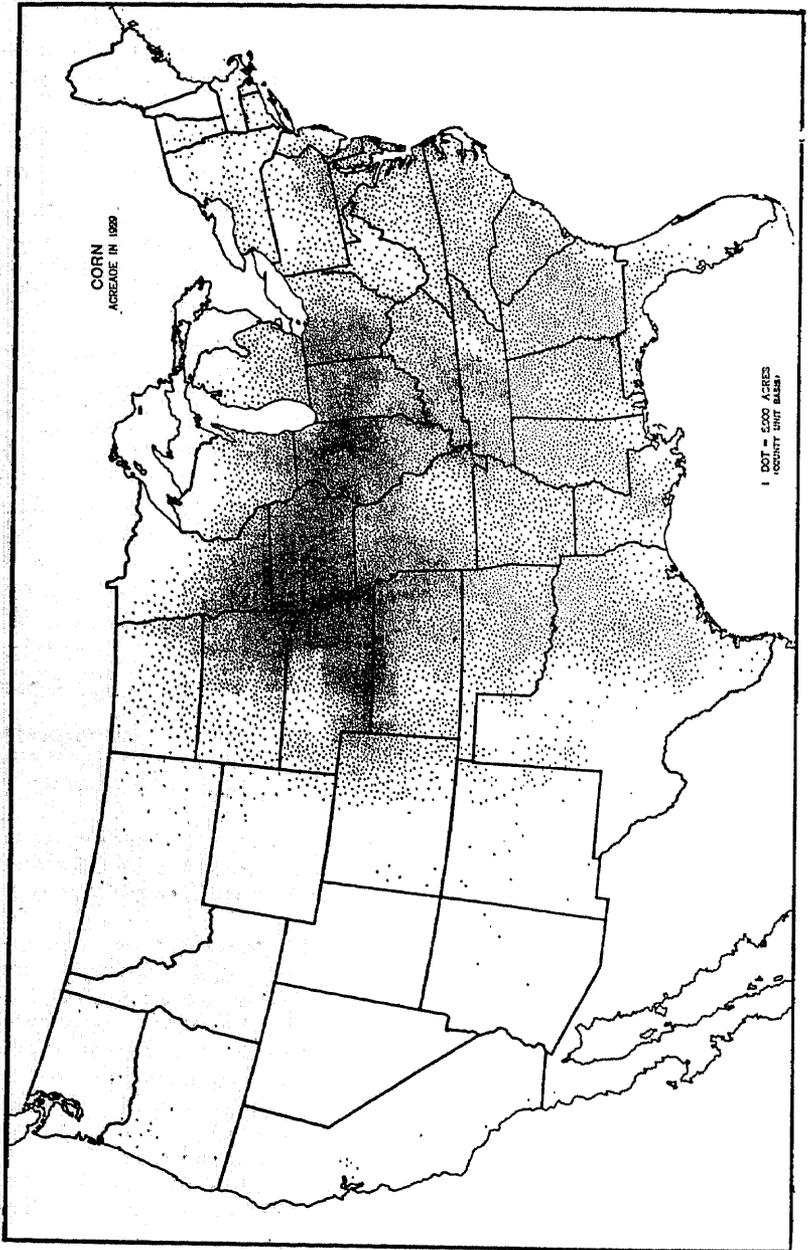


FIGURE 5

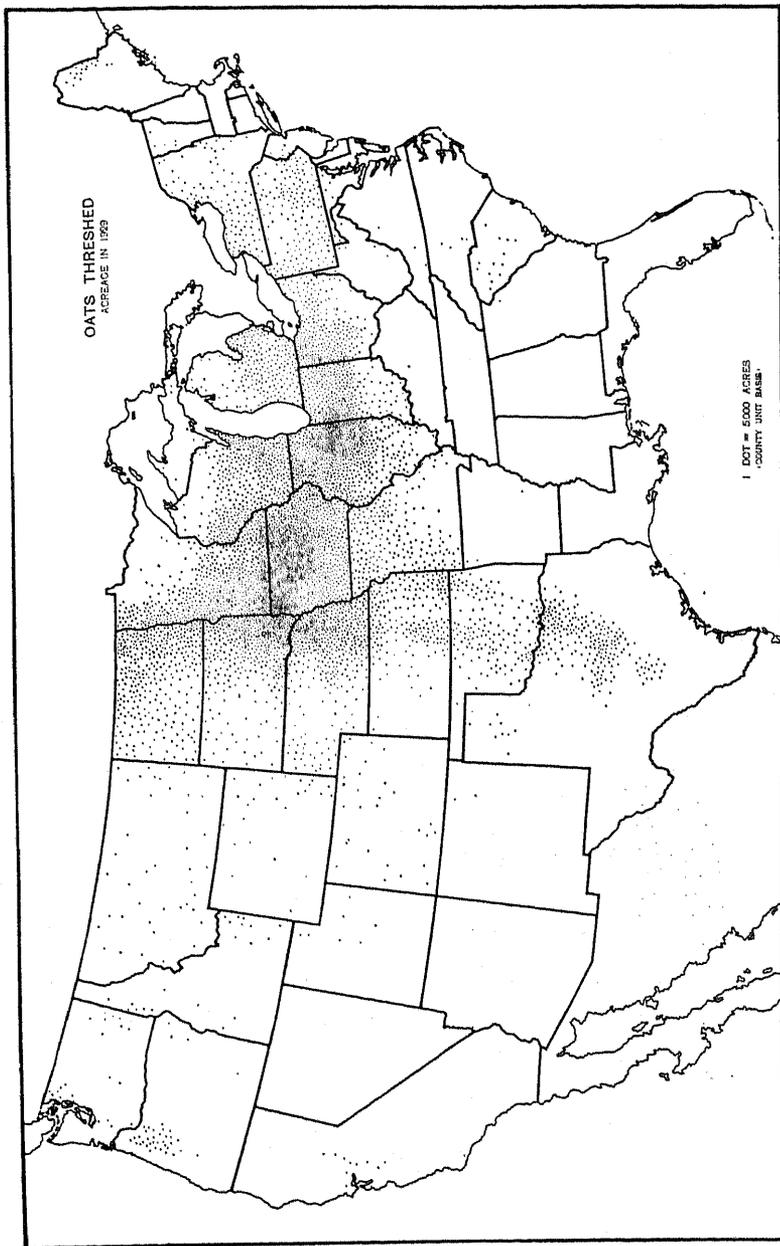


FIGURE 6

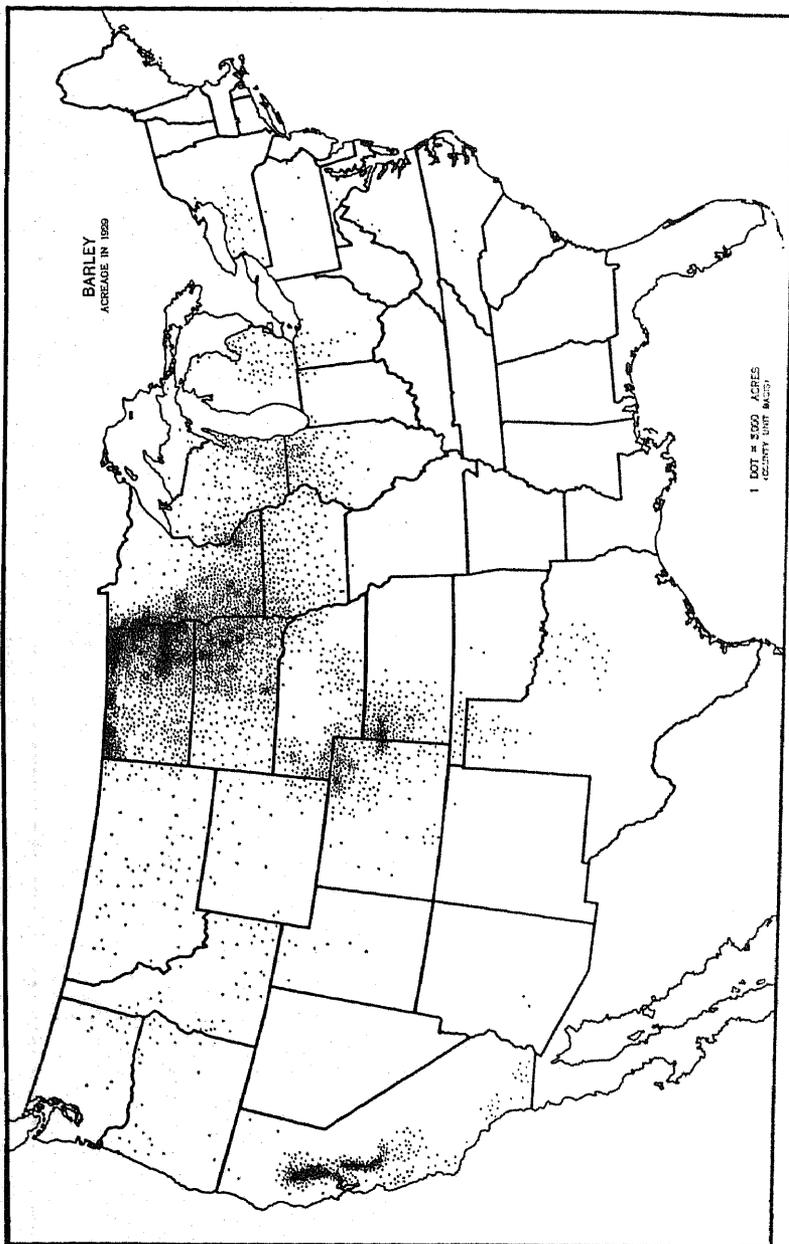


FIGURE 7

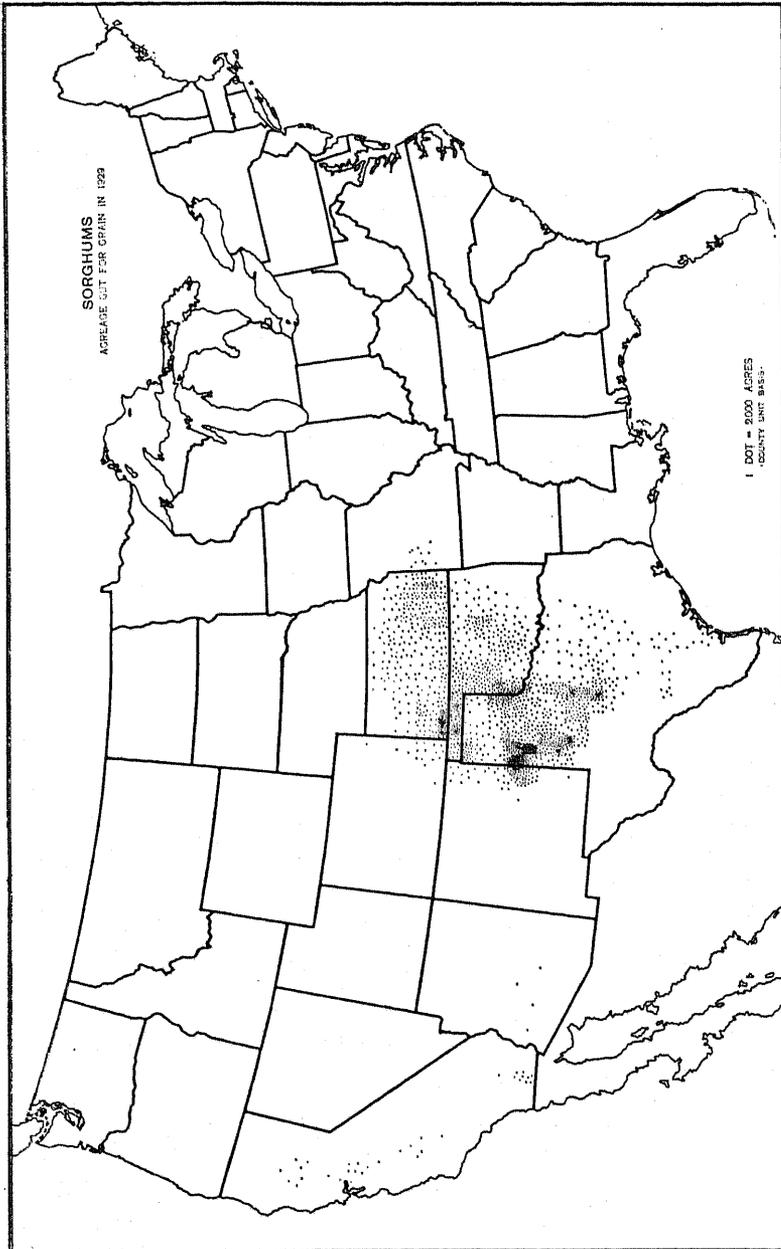
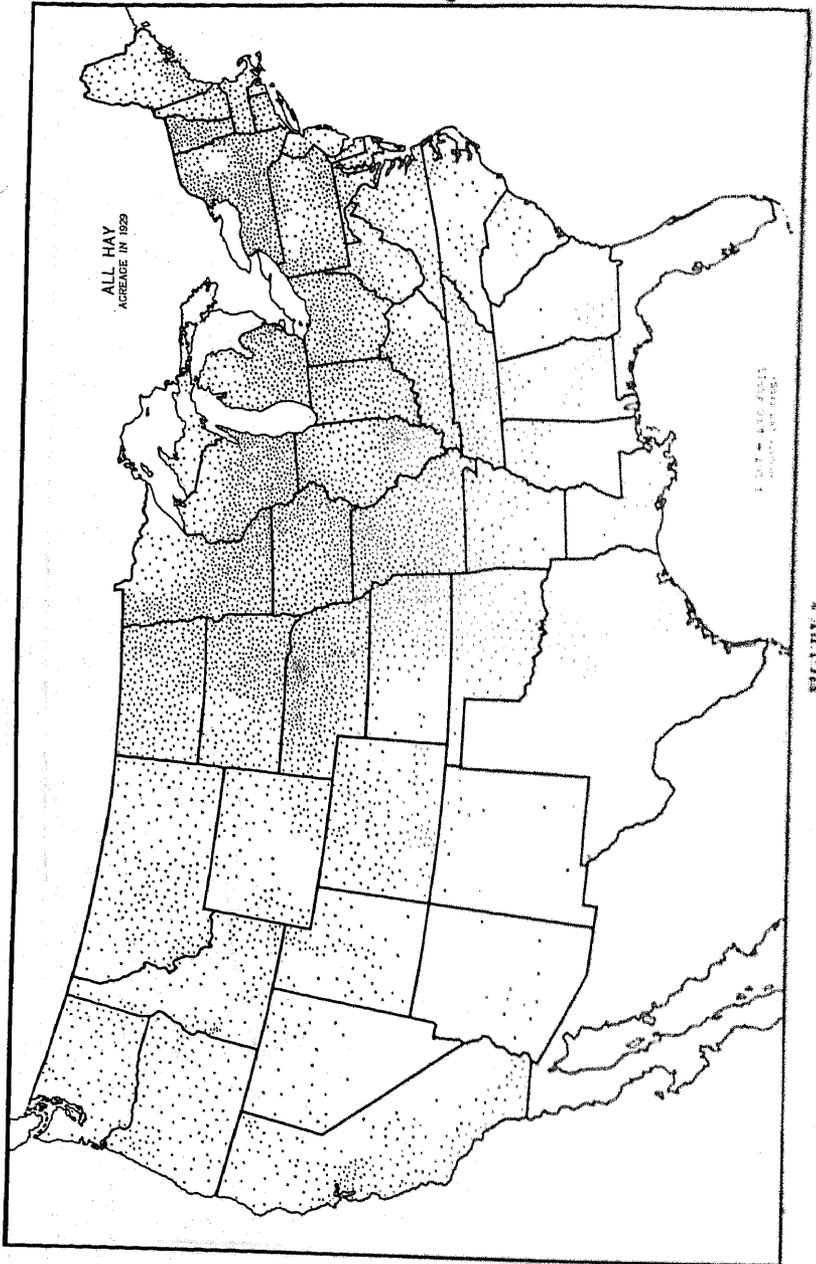


FIGURE 8



In the Corn Belt States the corn crop is utilized largely in the production of meat animals, hogs, beef cattle, and sheep. This results in a very close correspondence between the geographic distribution of certain of these livestock, particularly hogs, and the corn acreage as will be pointed out later on.

In other parts of the country corn is, relatively, of much less importance. In the Southern States it is largely grown as a maintenance crop, occupying with cotton, the larger proportion of the crop area. In the dairy area of the Lake, Middle Atlantic, and New England States, the crop is an adjunct of the dairy industry, supplying a considerable portion of the roughage in the form of silage and corn fodder. In southeastern Pennsylvania, particularly in Lancaster County, corn production is heavier than in any other of the northeastern States. The crop is utilized in much the same way as in the Corn Belt States, the area being a fairly heavy feeding area. Due to climatic limitations but little corn is grown west of the one-hundredth meridian.

**Oats.**—In general oats production is concentrated in the Corn Belt States centering in Iowa, Illinois, North Dakota, South Dakota, Nebraska, southwestern Minnesota, southern Wisconsin, and Michigan, central and northern Indiana and Ohio (see fig. 6); 24.2 per cent of the farms in the United States reported growing oats in 1929. The areas of heaviest concentration appear in the cash-grain areas of east central Illinois, and west north central Iowa. These latter are coextensive with the heavier corn producing areas. The oats crop being very susceptible to dry weather and high temperature conditions, is grown only in a limited way in the Southern States. These states usually produce winter oats that grow during the cool growing season. The area of heaviest concentration of oats for grain in the Southern States is found in the black prairie of Texas and in central Oklahoma.

**Barley.**—From the standpoint of acreage barley occupies only a little over 3 per cent of the land in crops in the United States, 8.6 per cent of the farms reported growing the crop. Barley is grown largely in the territory north of the best corn areas, centering in the Dakotas, Minnesota, Wisconsin, northern Illinois and Iowa, northwestern Kansas, northeastern Colorado, and south central and southwestern Nebraska and the Sacramento Valley of California. Other minor areas are found in southeastern Michigan, west central New York, in north central Texas, and the Panhandle of Texas and Oklahoma, and in Montana, Wyoming, Idaho, and Washington. (See fig. 7.)

Barley replaces corn as the principal feed crop in the areas where the corn crop is limited in production due to lack of rainfall, excessive evaporation, or too short a growing season.

**Grain sorghums.**—Another crop which is of a great deal of importance as a feed crop in the areas where corn, oats and barley are of limited importance is grain sorghum. Grain sorghums are grown principally in northwest Texas, central and western Oklahoma, and in most of Kansas, southeastern Colorado, eastern New Mexico and California. The crop is used both for grain and hay, the production for the two uses being confined to the same general area (see fig. 8); 2.7 per cent of the farms in the United States reported growing grain sorghums for grain in 1929. Texas leads all other States in the production of grain sorghums. This was a pioneering crop for west Texas and its introduction resulted in the development of large areas of land, which because of limited rainfall, had to be devoted to a crop which could withstand extremes in temperature and rainfall.

**Hay.**—Next to corn, hay occupies the largest proportion of the crop land. In general the areas of heaviest concentration are found in the New England, Middle Atlantic, and East and West North Central States. (See fig. 9.) In much of this area, particularly in New England and the Middle Atlantic States, the conditions of soil, topography and climate make this especially adapted to the

growing of hay. In general the New England and Middle Atlantic States are deficient in plant food elements and the yields are not high enough to warrant a heavy production of the cereal crops. Furthermore, the growing season is too short and the extremes in temperature too great for the best growth of cereals. On the other hand, the comparatively high rainfall and cool growing season are ideal for the growth of pasture and hay crops. All these factors have contributed to the heavy concentration of hay crops in this general region. Hay is also important in Western United States where it is grown largely under irrigation. Alfalfa is the predominant kind of hay grown in these areas. Alfalfa is also grown rather extensively in the more humid areas further east where the soil is sufficiently alkaline to permit a profitable growth.

Timothy, timothy and clover mixed, and red, alsike, and mammoth clover are the principal kinds of hay grown in the Middle Atlantic and East and West North Central States. In the Southern States hay is of only limited importance, in fact, the climatic conditions that have made this region a great cotton region have been unfavorable for the best production of grass and hay crops. Dependence has to be placed to a large extent, upon annual legumes, such as, cowpeas, soybeans, and velvetbeans. Bermuda and Johnson grass are also grown and peanut hay is likewise used. On soils of limestone origin or on soils having generous quantities of lime, alfalfa is grown to a limited extent. In the cash-grain sections of the Western States, particularly in California, Washington, Oregon and Idaho, and to a lesser extent in Montana, North Dakota, South Dakota, Wyoming, and Colorado, small grains cut for hay are the principal hay crops. But dependence is also placed upon alfalfa and wild hay in these same areas. The areas of heaviest concentration of wild hay, however, are found in the western half of Minnesota, the eastern half of North Dakota and South Dakota, north-central Nebraska, southeastern Kansas, and northwestern Oklahoma.

This indicates briefly, the principal areas wherein feed grains and hay are predominant. The relation between these feed crops and the geographic distribution of livestock and livestock products will be discussed presently. We turn now to a discussion of the cash grains and the special crops, such as, cotton, tobacco, potatoes, etc.

**Cash grains.**—The cash grains as herein discussed, include wheat, flax, rye, buckwheat and rice.

**Wheat.**—Wheat from the standpoint of total acreage stands third in relative importance of all crops. Approximately 15 per cent of the total land in crops in the United States in 1929 was devoted to the production of wheat, and 19.2 per cent of the farms reported growing wheat. In Figure 10 it will be observed that wheat production is concentrated in four or five main areas. The most important of these areas, from the standpoint of acreage involved, occurs in Kansas, Nebraska, northeastern Colorado and northwestern Texas and Oklahoma. This is the center of the hard winter wheat belt in the United States. The areas of heaviest concentration are in central and southwestern Kansas and northwestern Oklahoma, particularly in the area around Enid. In the hard-winter wheat belt a very simple cropping system is found, consisting principally of wheat in combination with grain sorghum, corn, or barley as feed crops. Production is on a fairly large scale, particularly in the Panhandle of Texas and Oklahoma and southwestern Kansas.

Another area of heavy concentration centers in North Dakota, South Dakota, Minnesota, and Montana. This area is known as the hard spring wheat belt of the United States. Hard spring wheat is grown in combination with durum or macaroni wheat, with flax, oats, and barley. In Montana less emphasis is placed upon oats, barley, and durum wheat, hard spring wheat being the primary crop grown; flax is also of less significance.

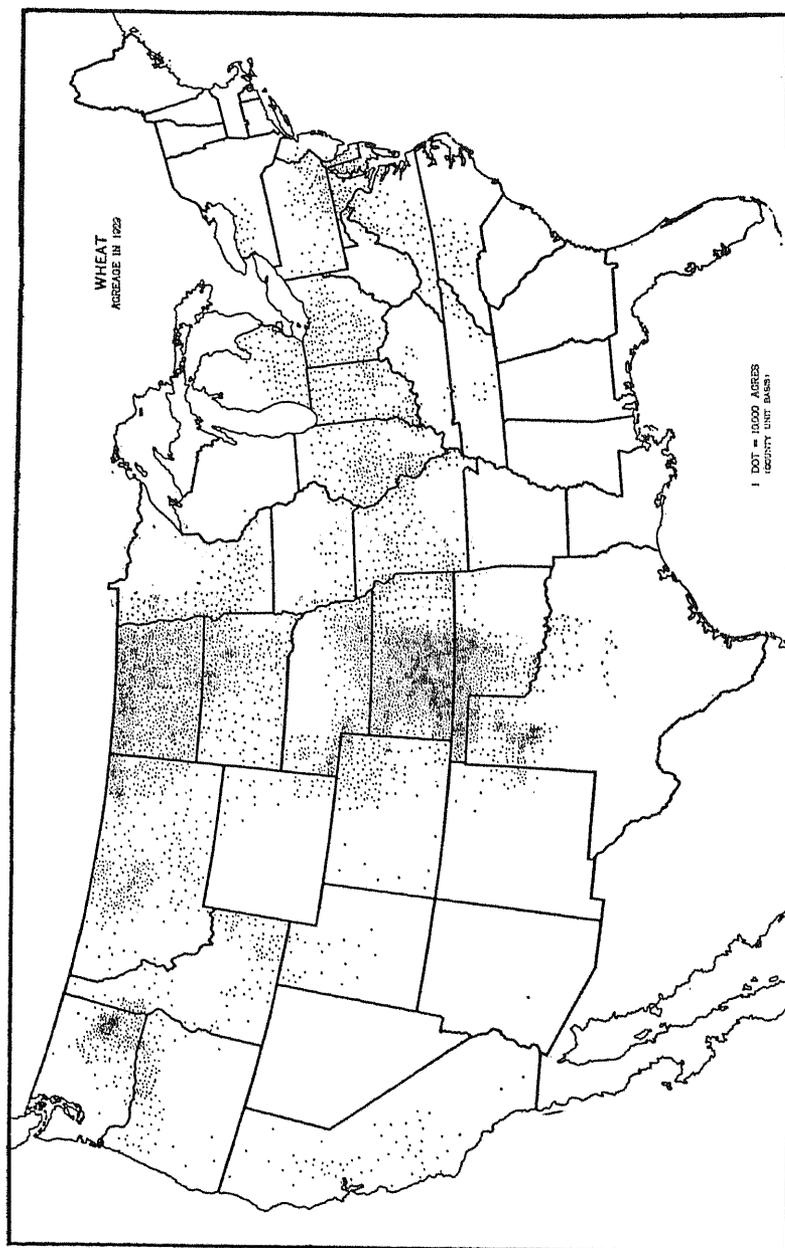
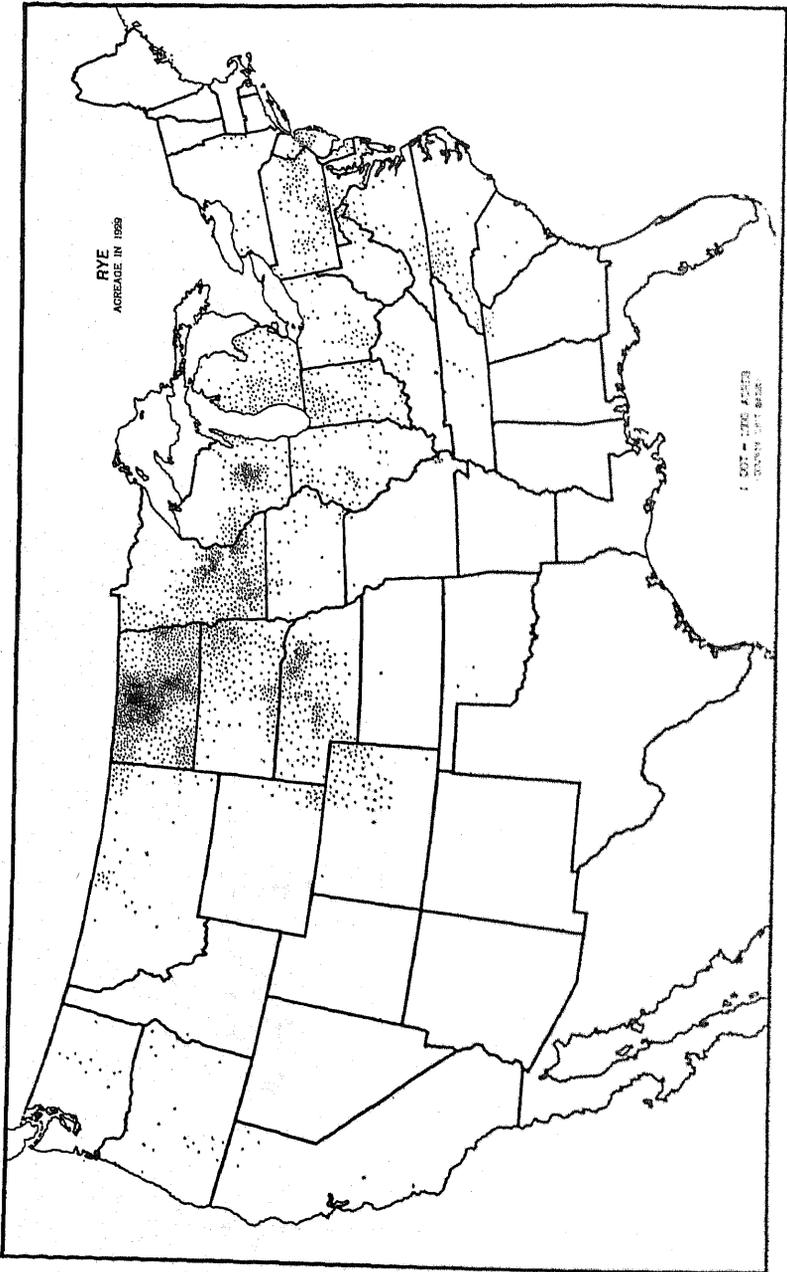


FIGURE 10



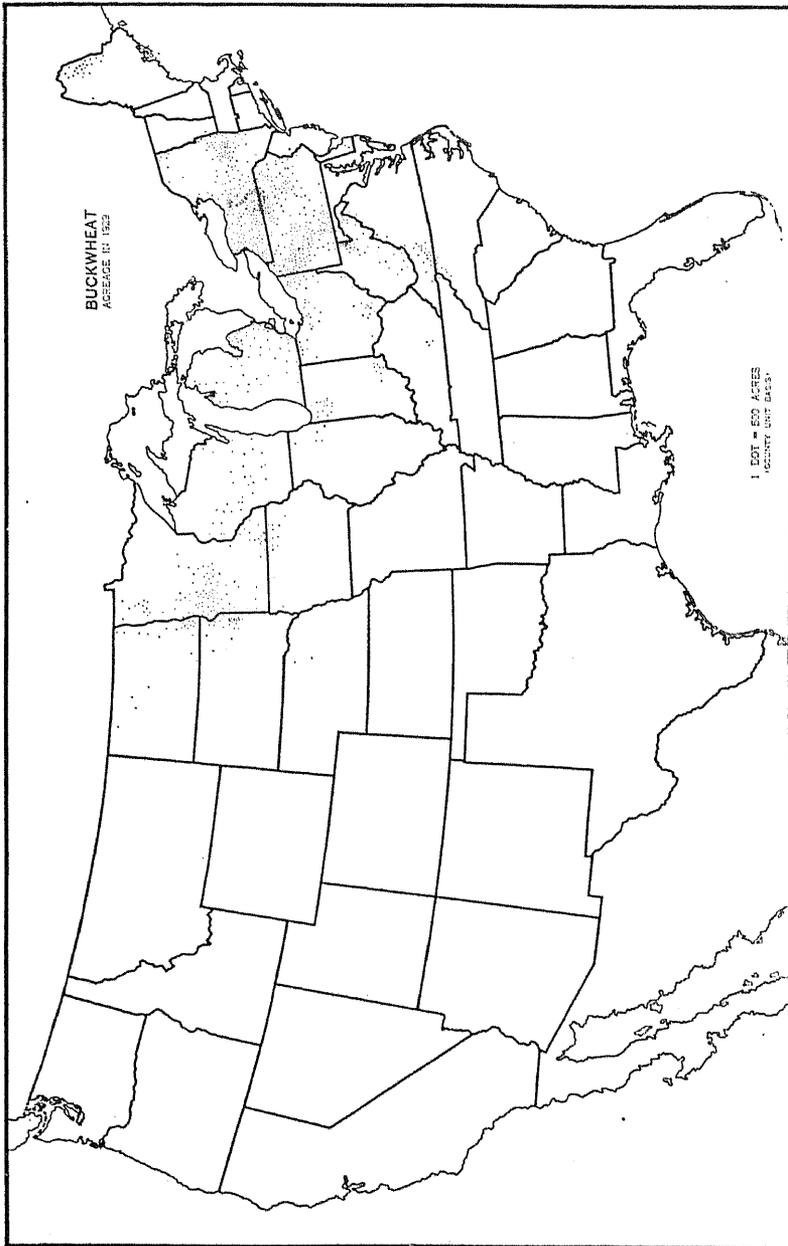
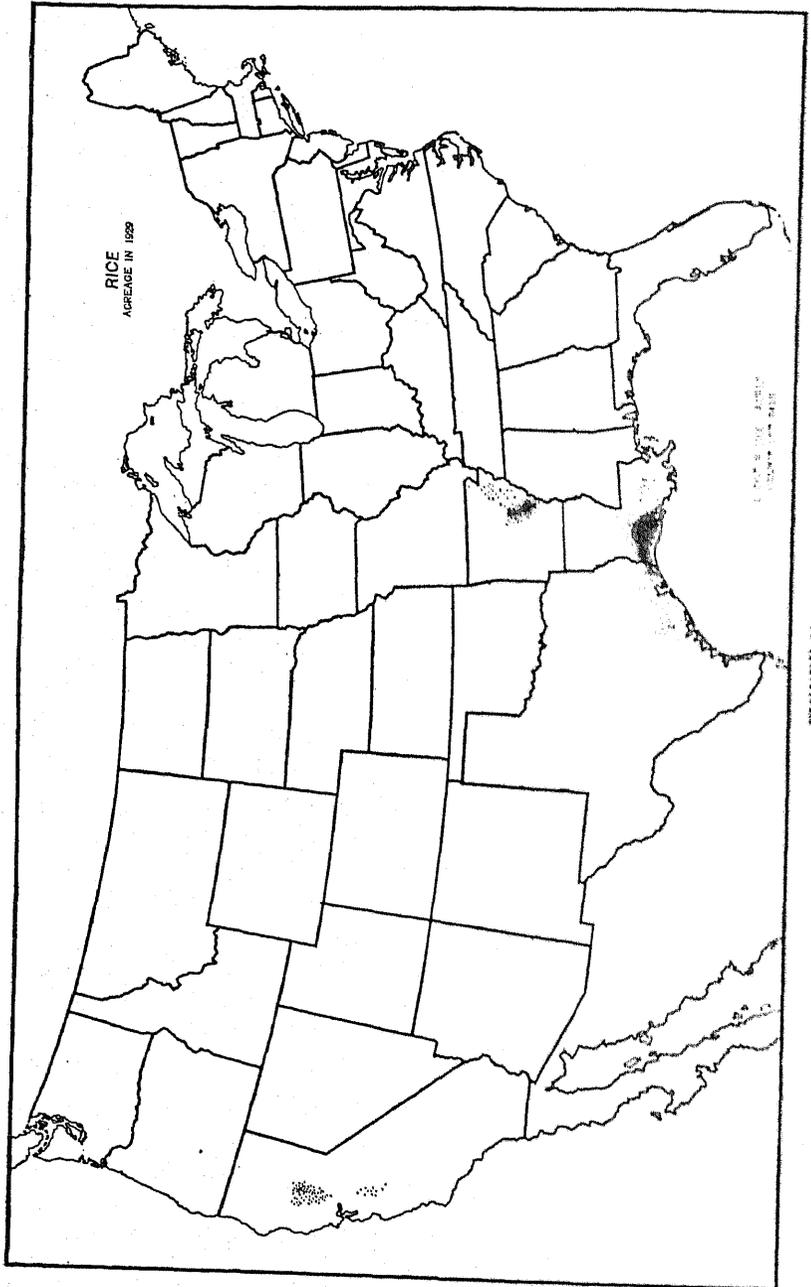


FIGURE 12



A third important wheat area is found in Washington, Oregon, and Idaho, centering in the Columbia Basin. In this area wheat is the dominant crop grown and is usually found alternating with summer fallow. The organization is very simple, consisting of wheat one or two years followed by summer fallow and then wheat again. White wheat is the dominant class of wheat grown and is seeded in both spring and fall, the ratio of fall to spring seeding varying with climatic conditions.

The fourth important area of wheat production occurs in the Corn Belt States centering in Illinois, Indiana, Ohio, and Missouri. This is one of the main areas producing soft red winter wheat. Wheat is grown in combination with corn, oats and hay. The scale of operation in this area is considerably smaller than that practiced in the other three areas discussed.

A fifth area is found in the Appalachian Plateau centering in southeastern Pennsylvania, Maryland, Virginia and North Carolina. The class of wheat grown in this area is also a soft winter wheat, and the area is relatively of less importance than the other areas. Other minor areas appear in New York, Michigan and California.

**Rye.**—Only 2.8 per cent of the farms in the United States reported producing rye in 1929. The acreage produced represented less than one per cent (0.7 per cent) of the total land in crops. Production centered largely in North Dakota, South Dakota, Minnesota, Nebraska, eastern Colorado, east central Wisconsin, Michigan, Indiana, Illinois, Pennsylvania, Maryland, Virginia, and North Carolina (see fig. 11). The heaviest concentration occurred in north central North Dakota in McHenry and adjacent counties. In these areas rye is found largely on sandy soils.

**Buckwheat.**—Buckwheat is of minor importance from the standpoint of the total United States, inasmuch as only 1.6 per cent of the farms reported growing the crop. It is, however, of considerable importance in the areas where grown. The important centers of production occur in New York, Pennsylvania, north-eastern Ohio, and West Virginia. (See fig. 12.) Some also is grown in Michigan, Wisconsin, and Minnesota, and a small amount in Iowa, Indiana, Illinois, Kentucky, and Virginia.

**Rice.**—Rice is highly concentrated in three areas in the United States. (See fig. 13.) The most important center of production is found in southwestern Louisiana and along the Gulf Coast of Texas. The second area is located in Arkansas, and the third in California. Rice, both from the standpoint of acreage and number of farms producing the crop, is of relatively little significance. The acreage in rice in the United States in 1929 represented only 0.2 of one per cent of the total acreage in crops and one-tenth of the farms in the United States reported growing the crop.

**Flaxseed.**—No dot map is available showing the distribution of flaxseed production in the United States. Approximately 95 per cent or more of the acreage is found in the west north central and mountain States centering largely in North Dakota, South Dakota, Minnesota, and Montana. A small amount is grown in Iowa, Nebraska, and Kansas, and a little in Missouri, Oregon, Wisconsin, and Michigan. Only 87,002 farms reported growing the crop in 1929, or 1.4 per cent of all farms in the United States.

**SPECIAL CROPS.**—The special crops discussed include cotton, tobacco, potatoes (Irish or white), sugar crops, vegetables harvested for sale, orchard and subtropical fruits, vineyards, and planted nut trees, and crop combinations.

**Cotton.**—The acreage in cotton in 1929 represented 10.46 per cent of the total land in crops in the United States. Thus, it ranks fourth in this respect. There were 1,986,726 farms which reported growing cotton in 1929, or 31.6 per cent of the total. As is well known, cotton production centers almost entirely in the southern part of the United States and in selected irrigated areas in New

Mexico, Arizona, and California. The northern extent of cotton production is limited sharply by temperature and length of growing season. The heaviest centers of concentration appear in the Mississippi and Arkansas deltas, in the black prairie of east central Texas, the upper piedmont and coastal plain areas of North Carolina, South Carolina, Georgia, Alabama, and Mississippi. (See fig. 14.) Other concentrated areas are found in southwestern Oklahoma and on the high plains of west Texas. This general area has increased in importance relative to the old belt east of the Mississippi River. The principal irrigated areas appear in southern New Mexico, Arizona, and California.

**Tobacco.**—In 1929, 432,975 farms reported growing tobacco in the United States. The areas of heaviest concentration, as will be seen by referring to Figure 15, appear in Kentucky, northwestern Tennessee, southern Virginia, northern and eastern North Carolina, eastern South Carolina, southeastern Georgia, and northern Florida. Other areas appear in the Connecticut Valley, southeastern Pennsylvania, southern Maryland, western Ohio, and southern Wisconsin. These different areas do not generally produce the same kind of tobacco. Thus in central and southern Kentucky the principal type of tobacco grown is burley; while in southwestern Kentucky and northwestern Tennessee it is fire-cured; in the Carolinas and Georgia it is flue-cured; in the Connecticut Valley and in one section of Florida it is shade tobacco; and in Ohio and Wisconsin it is cigar filler.

**Potatoes (Irish or white).**—Reference to Figure 16 will show that, in general, Irish potatoes are concentrated in the New England, Middle Atlantic, and North Central States. Other important areas are found in the irrigated sections of the West particularly in Idaho, Washington, Oregon, Utah, and Colorado. The areas of heaviest concentration occur in Aroostook County, Me., northeastern, central, and western New York, southeastern Pennsylvania, northeastern Ohio, northern Indiana, eastern and central Michigan, east central Wisconsin, east central and western Minnesota, eastern North Dakota and South Dakota, northwestern Nebraska, in Weld County, Colorado, and the San Luis Valley of the same State; the Twin Falls, Black Foot, and Idaho Falls areas in Idaho, Yakima area in Washington, Willamette and Cowlitz Valleys in Washington and Oregon, and selected areas in California. Other important areas appear in Florida, on the eastern shore of Virginia and Maryland, and the Norfolk area in Virginia and North Carolina.

**Sugar Crops.**—Under this heading is discussed sugar beet (for which a dot map is available, Fig. 17), sugarcane, maple sugar and sirup, and sweet sorghum for sirup. *Sugar-beet* production in the United States is highly concentrated in a few areas. In the United States as a whole only 35,155 farms reported growing sugar beets in 1929. The areas of heaviest production occur along the Platte River in Colorado and Nebraska; the Arkansas Valley of southeastern Colorado and western Kansas; in Scotts Bluff and adjacent counties in Nebraska and Wyoming; western South Dakota around Belle Fourche; along the Yellowstone River in southern Montana; in northern Wyoming; the Black Foot, Idaho Falls and Twin Falls areas of Idaho; the Salt Lake, Cache, San Pete, and Sevier Valleys of Utah; Saginaw Valley of east central Michigan; northwestern Ohio and Minnesota; northeastern North Dakota; southern Minnesota; and northern Iowa. *Sugarcane.*—As is well known, the production of sugarcane centers largely in southern Louisiana, only 6,717 farms reported growing sugarcane for sugar in 1929. *Sweet sorghums for sirup* are grown largely in the Southern States centering in North and South Carolina, Georgia, Alabama, Mississippi, Tennessee, Kentucky, Arkansas, Missouri, eastern Oklahoma, and Texas. *Maple sugar* is grown largely in the New England and Middle Atlantic States, Vermont, New York, and Pennsylvania being the heaviest producers. Only 35,341 farms in the United States reported maple sugar and sirup in 1929.

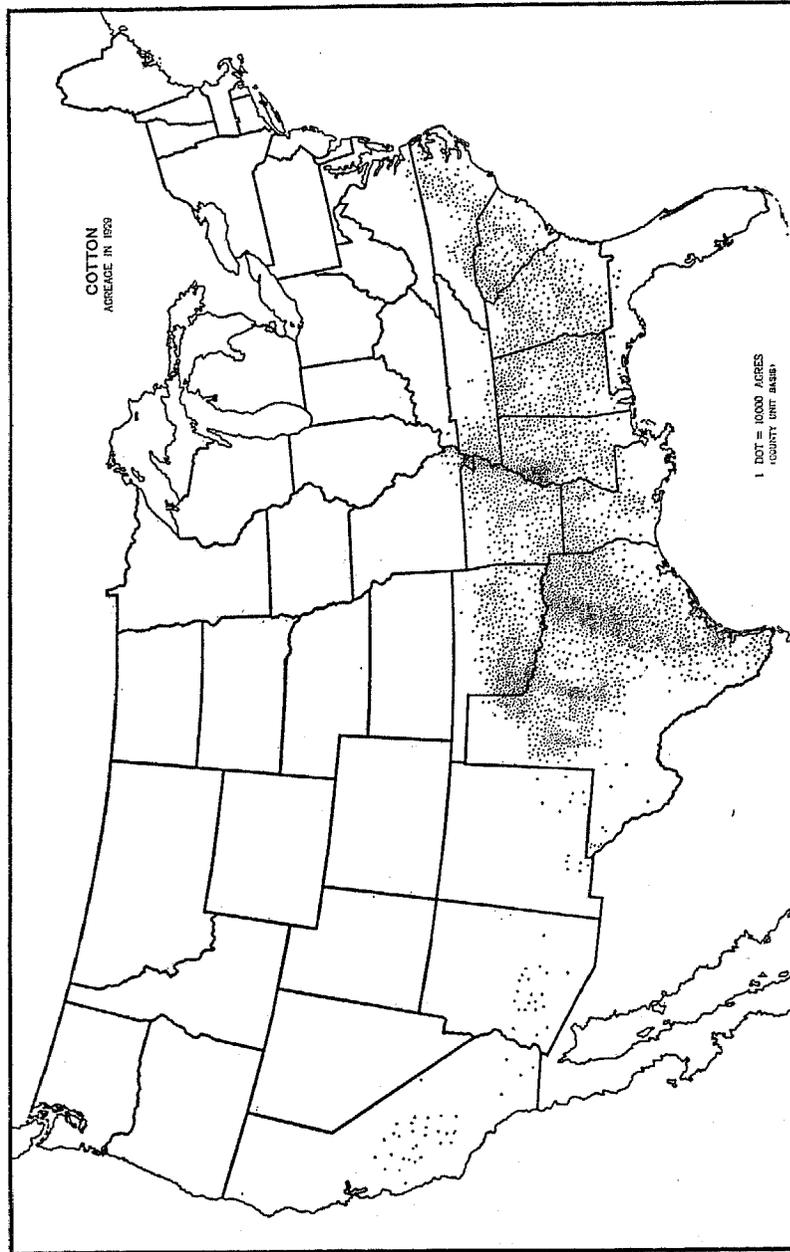


FIGURE 14

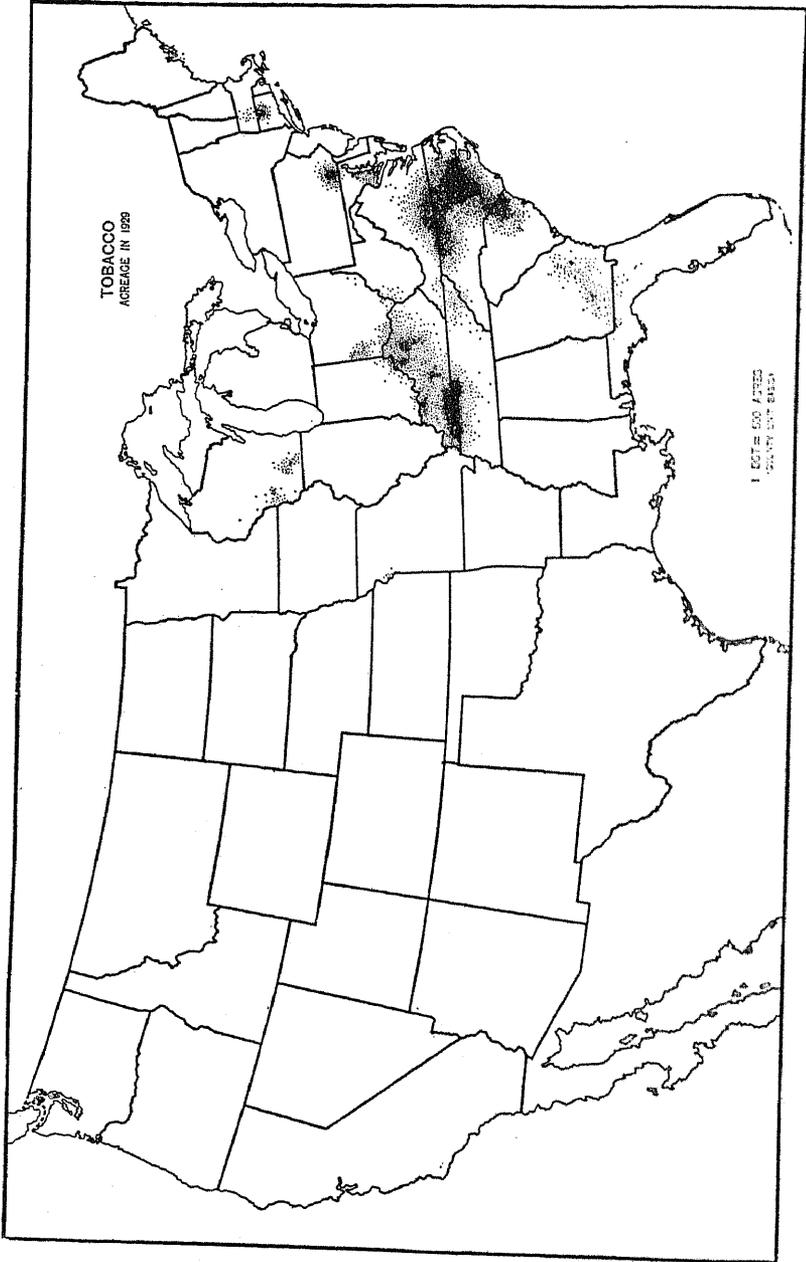


FIGURE 15

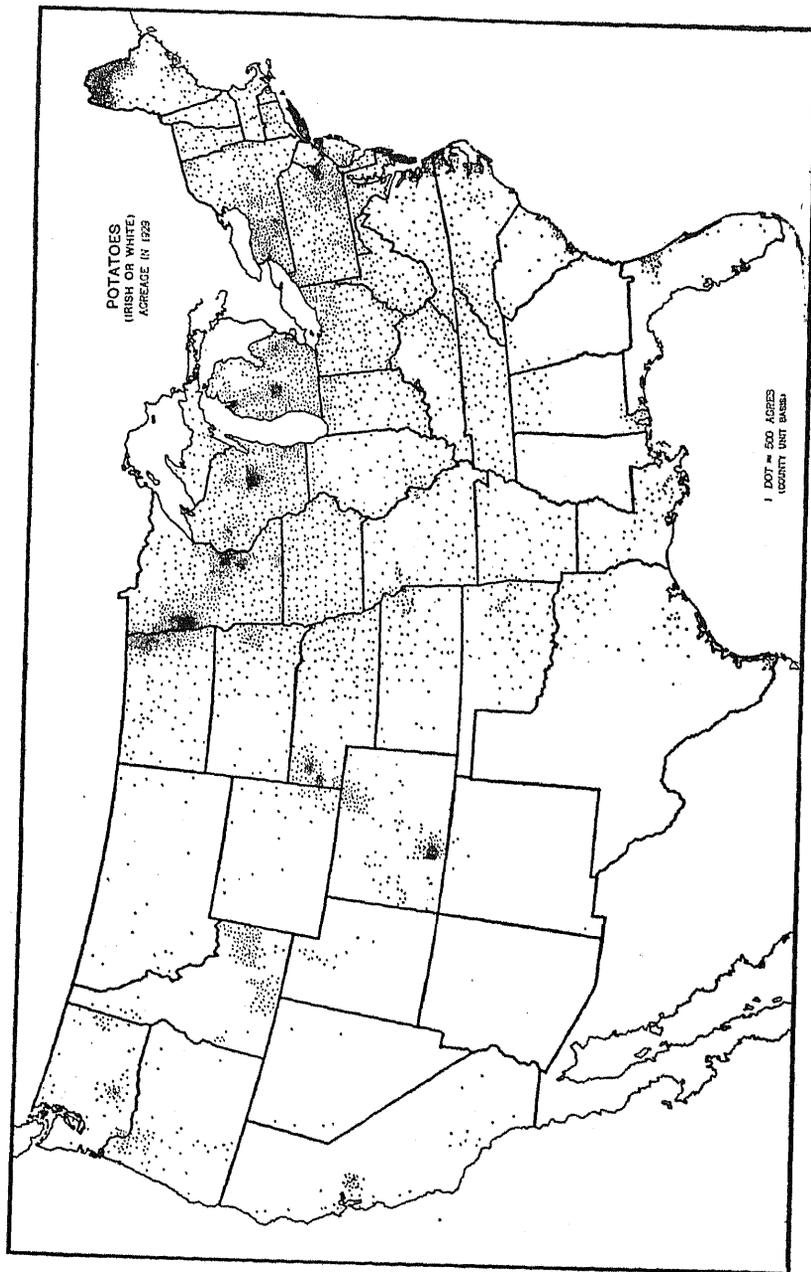


FIGURE 16

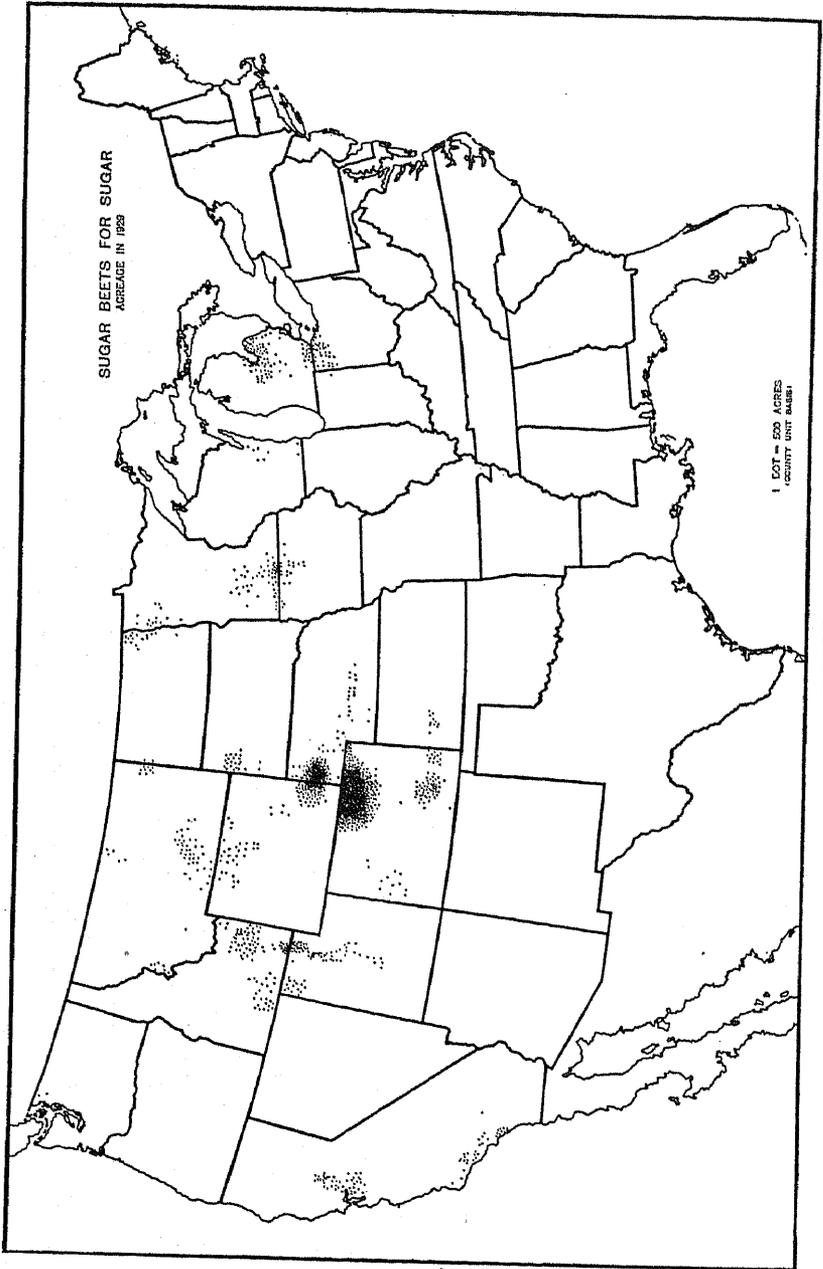


FIGURE 17

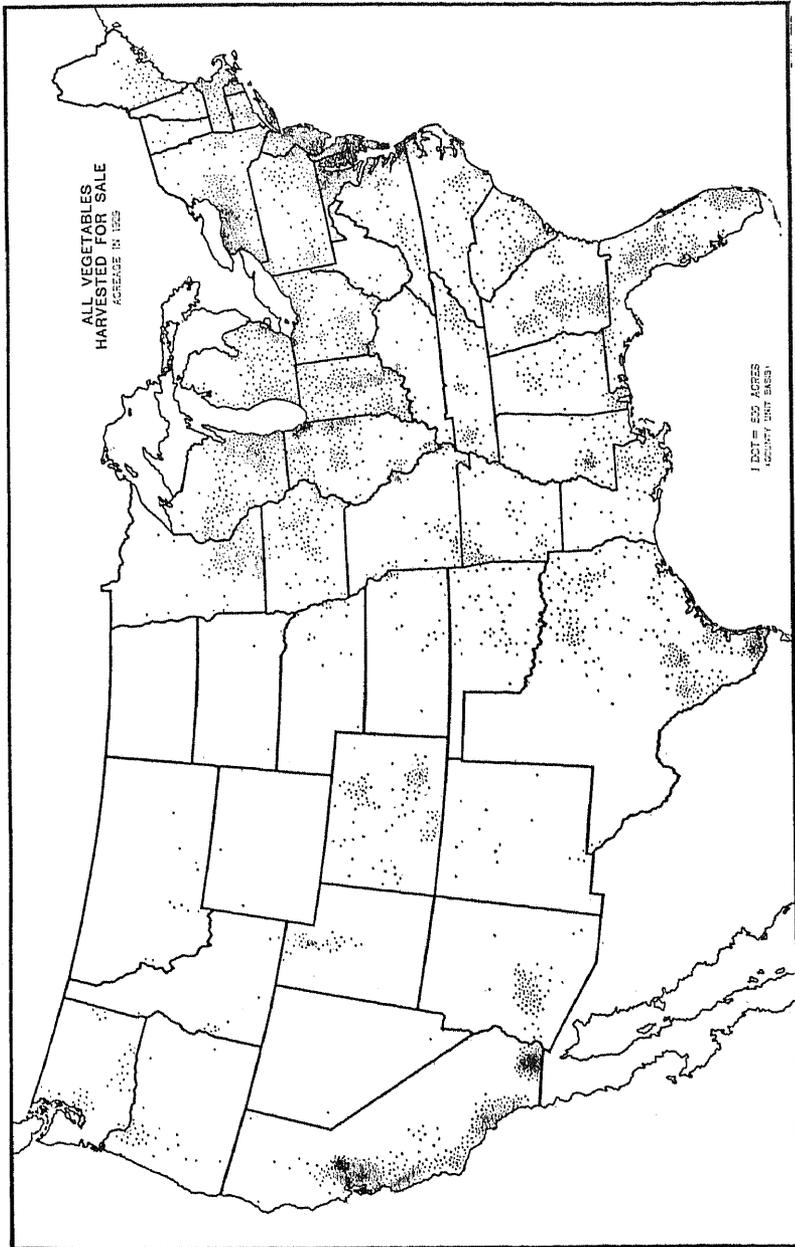


FIGURE 18

**VEGETABLES HARVESTED FOR SALE.**—In Figure 18, is shown the areas wherein vegetables harvested for sale or truck farming were most heavily concentrated in 1929. It will be noted that with the exception of North Dakota and South Dakota, Wyoming, and Nevada, most all States in the Union show more or less vegetables harvested for sale. The heaviest areas are found in California, Florida, Georgia, South Carolina, Virginia, Maryland, Delaware, New Jersey, New York, Ohio, Indiana, Illinois, Michigan, Wisconsin, Minnesota, Arkansas, Texas, Colorado, Utah, New Mexico, and Arizona. A more detailed discussion of truck farming occurs later in this chapter.

**ORCHARD AND SUBTROPICAL FRUITS, VINEYARDS, AND PLANTED NUT TREES.**—No map is available for showing the distribution of the acreage devoted to fruit and nut trees in the United States. There is a dot map (fig. 29), however, showing the distribution of fruit farms, which is discussed at length under the caption "Fruit farms". This concludes the discussion of the geographic distribution of the crops in the United States with the exception of some minor crops, such as broomcorn, hemp, hops, mint, and certain medicinal crops. All of these are relatively of little importance from the standpoint of the United States as a whole but are of some importance in local areas, as for example, broomcorn in Garvin County, Okla., and Coles County, Ill.; hops in Oregon; mint in northern Indiana and southern Michigan; and hemp in Wisconsin and Kentucky.

**CROP COMBINATIONS.**—Up to this point the cropping system has been discussed from the standpoint of the geographic localization of particular crops. Little attention has been given to the way in which these various crops fit together into cropping systems in a particular locality. An examination of the various dot maps will show that in general the following crop combinations are the prevailing ones in the different parts of the United States. In the Corn Belt States, corn, oats, and hay are the principal crops, supplemented in certain areas with wheat, rye, barley, and soybeans. In the hard spring wheat area of the Dakotas, Minnesota, and Montana, hard spring wheat is grown in combination with durum wheat, barley, flax, oats, corn, rye, and in certain localities sugar beets, potatoes, and beans. In the New England and Middle Atlantic States, the principal crops are hay, some oats and barley, some wheat and buckwheat, potatoes, small fruits, and truck crops. In the South, cotton and tobacco are the primary cash crops grown in combination with corn as the maintenance crop, annual legumes for hay, peanuts, vegetables, and fruits. In the Cotton Belt west of the Mississippi River in western Texas and Oklahoma, cotton is grown in combination with grain sorghums and wheat. In the ranching and irrigated sections of the western States the crop production is highly specialized on the irrigated land, the usual crops being cotton, truck, small fruit, sugar beets, potatoes, beans and hay. These crops may be grown alone or in various combinations with other crops, there being considerable diversity shown.

The cropping systems in different parts of the country, likewise, are found in varying combinations with livestock. The nature of these combinations and the geographic distribution of different classes of livestock and livestock products will not be considered.

**LIVESTOCK AND LIVESTOCK PRODUCTS.**—Inasmuch as horses and mules are primarily used as work-stock there is little reason for indicating their distribution. We shall begin, therefore, with a discussion of cows and heifers kept mainly for milk.

**Cows and heifers kept mainly for milk.**—There were 4,452,936 farms which reported cows and heifers kept mainly for milk production in 1930. Thus, approximately 71 per cent of the farms in the United States reported keeping some dairy cows. An examination of Figure 19 will show that in general the heaviest concentration of cows and heifers kept mainly for milk occurs in the New England, Middle Atlantic, and North Central States. Other important

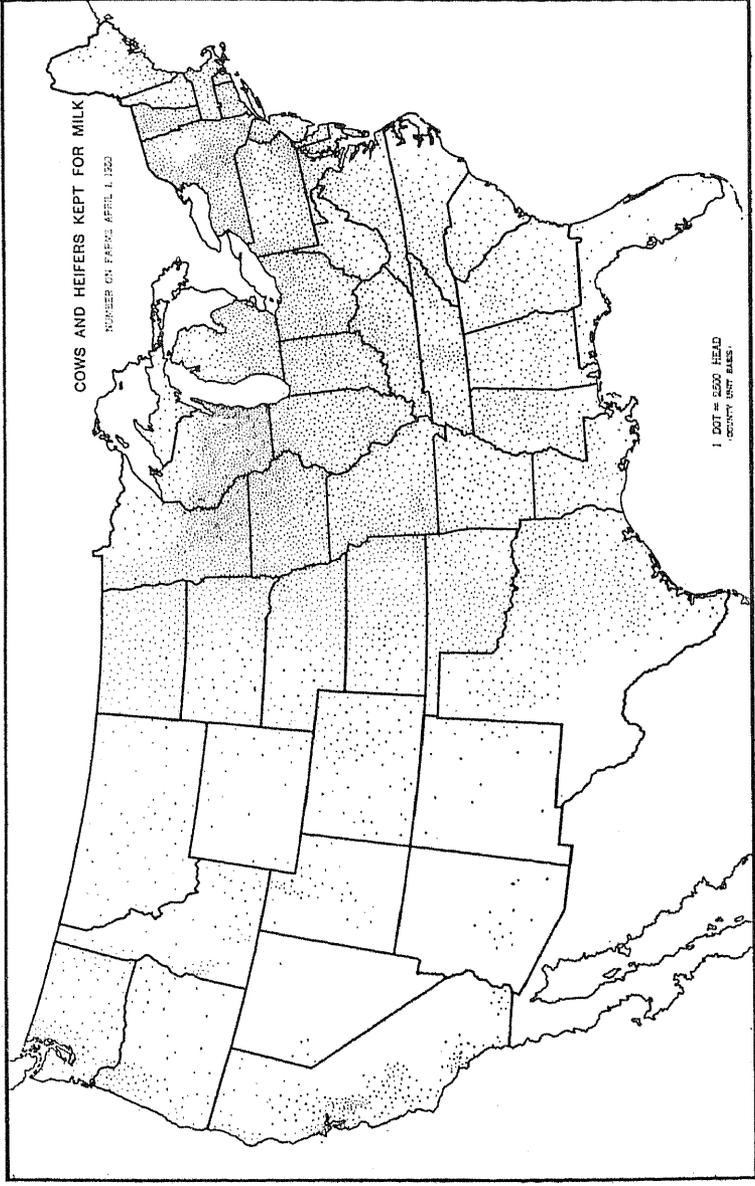
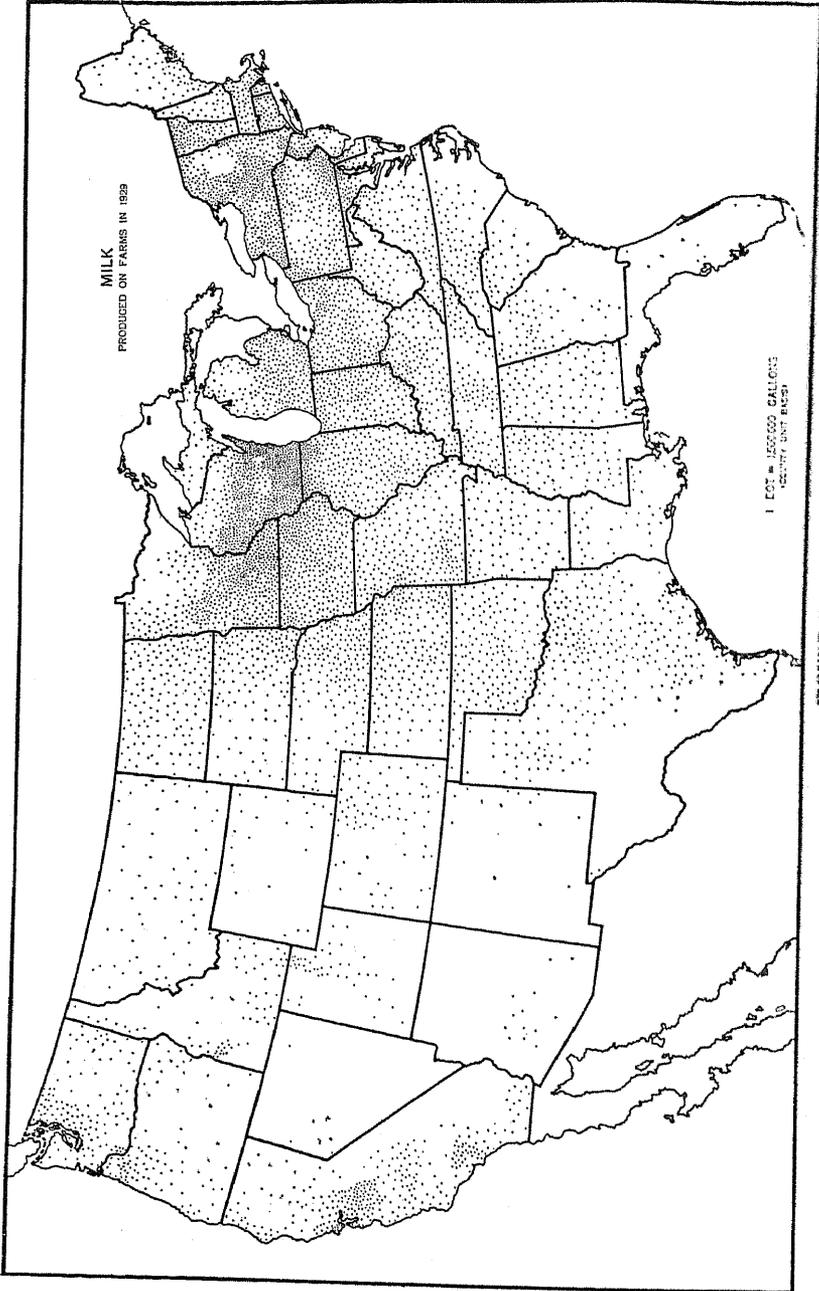


FIGURE 19



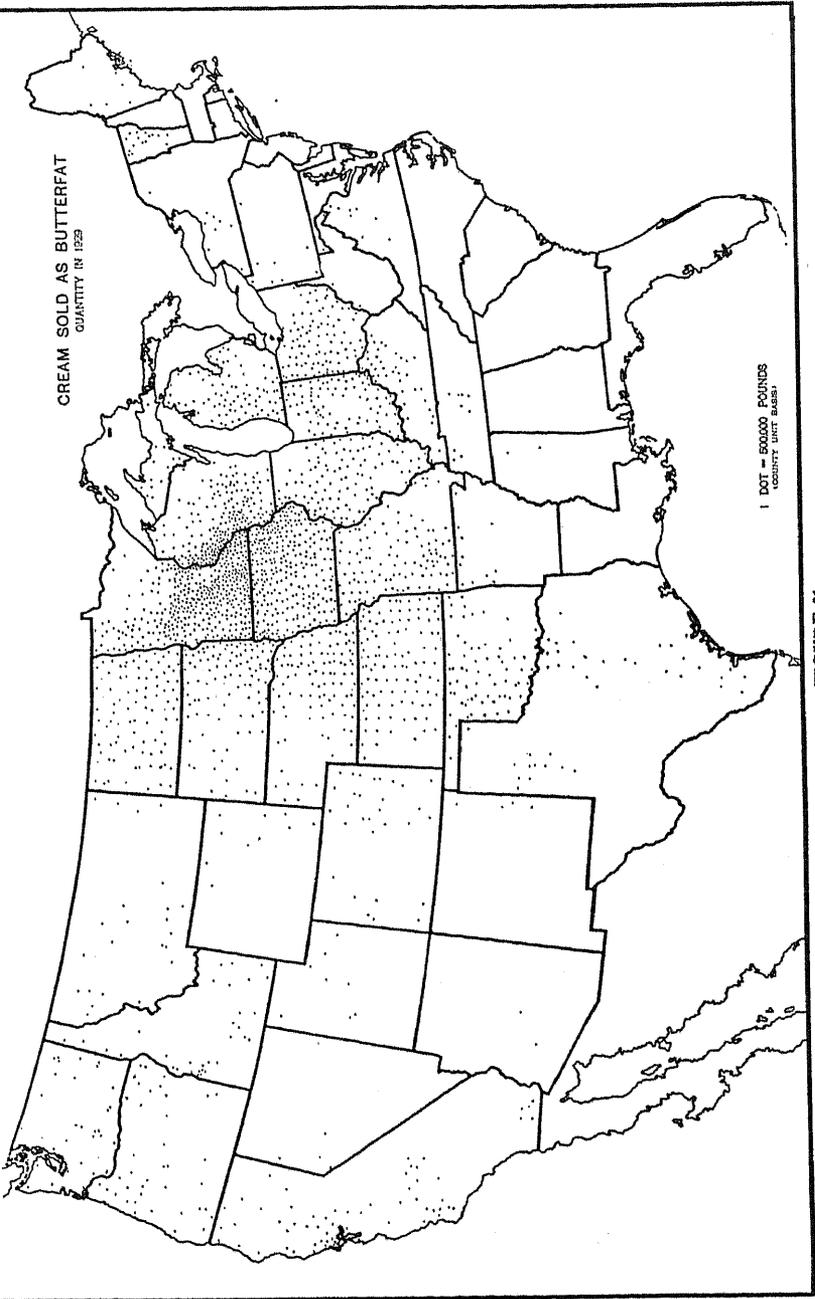


FIGURE 21

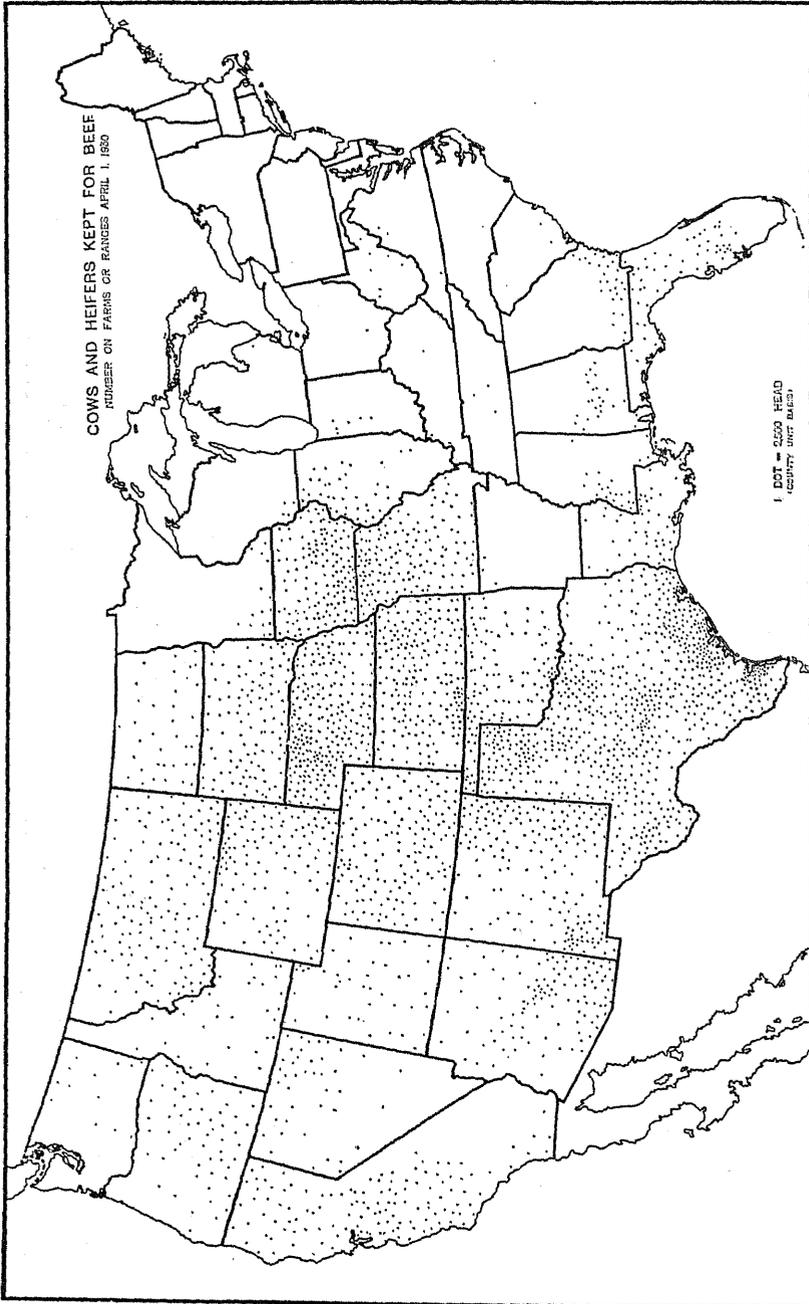


FIGURE 22

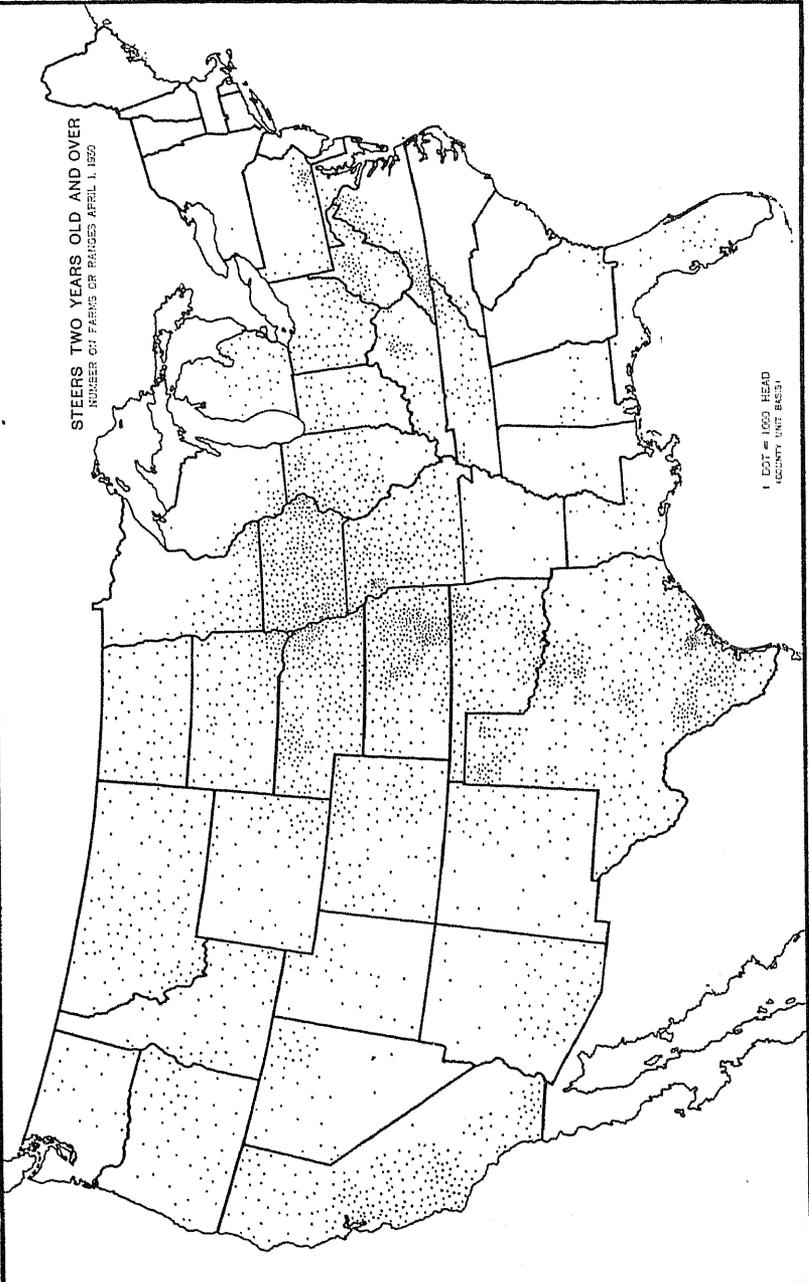


FIGURE 23

areas occur in California, around Puget Sound in Washington, in the Willamette Valley in Oregon, and selected localities around urban centers in some of the other States.

A comparison of Figure 19 with Figure 9 will show a fairly close correspondence between the distribution of the dairy cattle population and the distribution of the hay acreage. The large amount of cheap forage in the form of hay and pasture, and to a lesser extent of corn fodder and silage, in the northeastern part of the United States has seemed to have found its most economic outlet through the dairy industry. To this group of natural conditions favoring dairying is to be added the influence of industrial development with its concentration of large populations. The influence of this latter factor is indicated in Figure 20 which shows the important fluid-milk areas in the United States.

It will be observed that these areas are located in proximity to urban centers—in southern and eastern Wisconsin, northern Illinois, and northwestern Indiana, around the important urban area of which Chicago, Milwaukee, and northern Indiana cities are the center; in southwestern Illinois around St. Louis; central and eastern Michigan around Detroit; northeastern and west central Ohio around Cleveland, Youngstown, Columbus, Dayton, and Springfield; and in western, southeastern, and northern Pennsylvania; northeastern Maryland; northwestern New Jersey; New York State; and New England.

In addition to the foregoing other important fluid-milk areas are found around San Francisco and Los Angeles, Portland, Seattle and Tacoma, Denver, Kansas City, and to a lesser extent around practically every urban center of any considerable size.

This urban influence loses most of its force, however, in the localization of the production of dairy products in the form of butterfat. (See fig. 21.) Butterfat production it will be noted, is centered largely in the Corn Belt States, remote from the important urban centers. The areas of heaviest concentration occur in southern Minnesota, western Wisconsin, and Iowa, and to a lesser extent in the Dakotas, Nebraska, Kansas, Oklahoma, and Missouri.

**Cows and heifers kept mainly for beef.**—In Figure 22 is shown the geographic distribution of cows and heifers kept mainly for beef. In the main, as would be expected, these are found in the Range States west of the Mississippi River and in the Corn Belt States. Much of the territory in western United States receives insufficient rainfall for successful crop production. About the only way portions of it can be utilized is by herbivorous animals. Cattle probably are more generally found, but both sheep and goats are important in certain areas.

In the Corn Belt, their distribution likewise is largely a question of physical conditions. In the dot map it will be noted, for example, that there is a heavier concentration of beef cows and heifers in southern Iowa than is found in other parts of the State. This is to be accounted for largely by the fact that more of this part of Iowa has to be kept in pasture than is true in other parts of the State. The same is true of portions of western Illinois and northern Missouri.

The utilization of feed is also a factor in their localization. Corn, as is well known, is the primary crop of the Central States; also, that corn is a fat-producing feed. The utilization of this crop centers around the production of meat animals of which beef cattle and hogs are the important representatives. An examination of Figures 23 and 5 will disclose the close correspondence between the localization of corn production in 1929, and the number of steers two years old and older, on April 1, 1930. The steers in the Corn Belt probably in the main represent those on feed at the time of the census enumeration. In the Flint Hills of Kansas and the other grazing areas the situation is different as will be explained at greater length in Chapter V.

**Swine.**—Figure 24 shows the distribution of swine on farms April 1, 1930. The areas of heaviest concentration, as is well known, appear in the Corn Belt

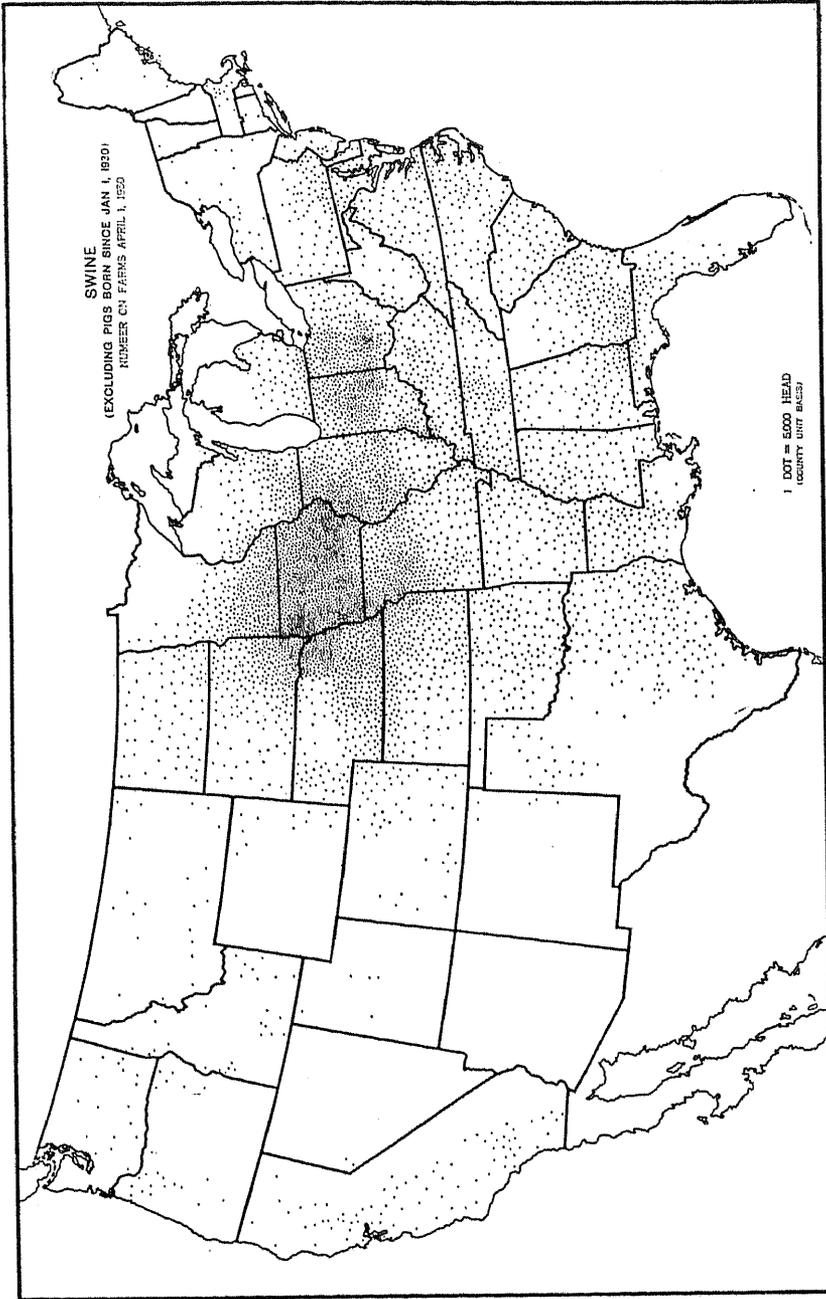
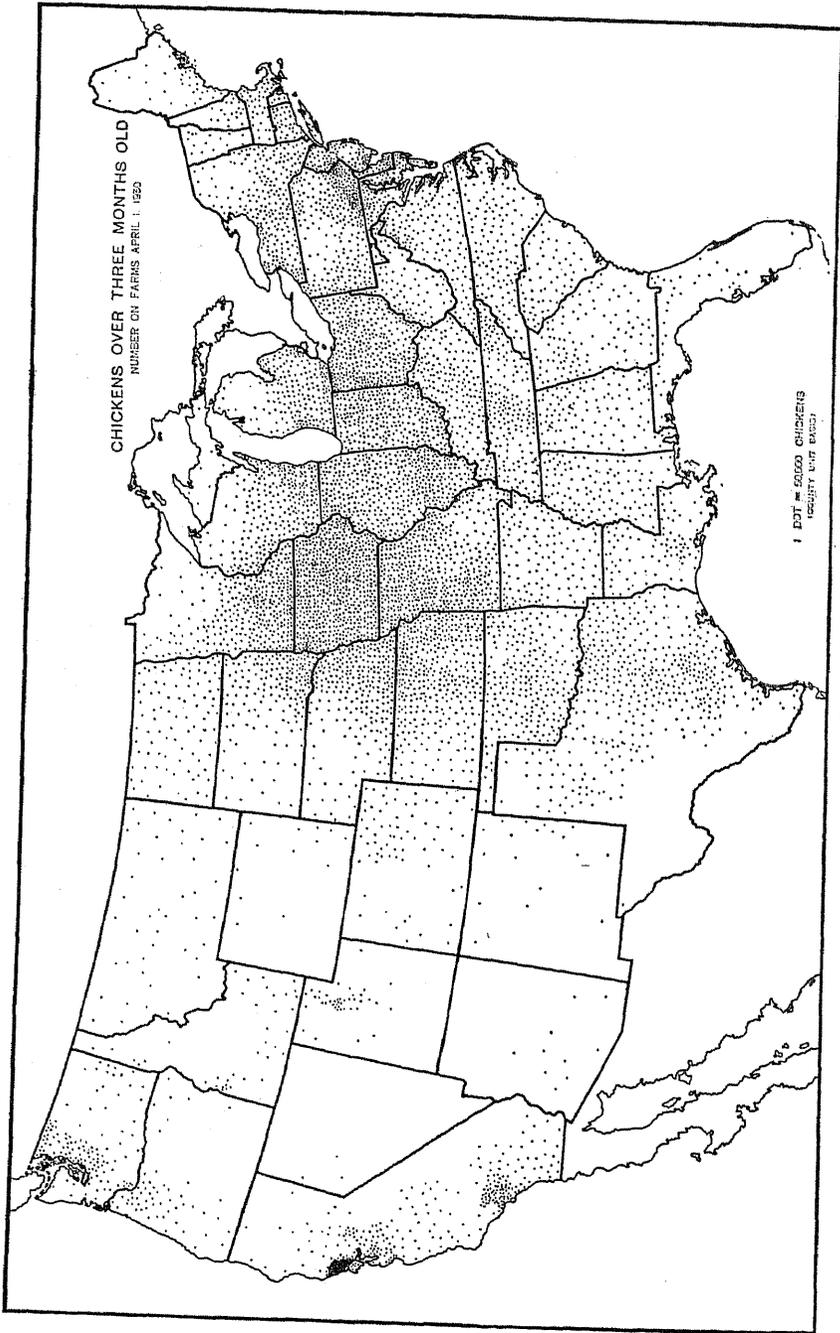


FIGURE 24



States where the heavy corn production occurs. A comparison of Figure 24 with Figure 5 will show a very close correspondence between the distribution of the corn acreage and of the hog population. An analysis of these maps will disclose, in general, that there is a close correspondence between the two enterprises, yet the areas of heaviest hog production do not always follow the areas of heaviest corn production. For example, east central Illinois and west north central Iowa, are among the heaviest corn-producing areas in the United States, yet neither has many hogs, inasmuch as considerable of the grain is sold for cash. In general, the heaviest areas of hog production occur in the western part of the Corn Belt. This results, in part, because of heavy corn production, but also is due to its being more economic to feed the corn to hogs and ship the more concentrated product which has a higher value per unit of weight. This question will be developed more fully when we come to consider the causal factors lying back of and determining types of farming.

**Sheep and goats.**—No dot map is available showing the geographic distribution of sheep and goats in the United States. On April 1, 1930, 583,578 farms (or 9.3 per cent) of the total reported having sheep, and 112,864 (or 1.8 per cent) reported goats and kids. Approximately 37 per cent of the sheep in the United States in 1930 were reported in the Mountain States and approximately two-thirds, or 65 per cent, were found in the West South Central, Mountain, and Pacific States. The areas of greatest concentration in other parts of the country appeared in Ohio, Kentucky, Michigan, Indiana, Iowa, Missouri, and South Dakota. In these States the sheep were handled as farm flocks on family size farms. In the West they are handled under range conditions.

Of the 4,821,294 goats and kids in the United States on April 1, 1930, 3,142,321 were in Texas. New Mexico and Arizona were the next in relative importance. The goats in Texas are concentrated largely in the Edwards Plateau, and are grazed in combination with sheep and cattle on the same ranch. The Edwards Plateau is a high dry plateau; much of it is rough, broken and stony and can not be used for farming purposes. A wide range of vegetation is grown, including live oak and shin oak brush, Mesquite grass and weeds, all of which afford excellent browse and feed for goats.

**Chickens over 3 months old.**—In Figure 25 is shown the geographic distribution of chickens over 3 months old. With the exception of the Mountain States, chickens are fairly well distributed throughout the country. They are most heavily concentrated in the Corn Belt States, in southeastern Pennsylvania, northeastern Maryland, Delaware, and New Jersey. Highly concentrated areas are also found around Puget Sound in Washington, and around San Francisco and Los Angeles in California.

**CROP AND LIVESTOCK COMBINATIONS.**—The way in which the various crop and livestock enterprises fit together varies widely in different parts of the country. The nature of some of these combinations has already been discussed incidental to the discussion of the general geographic distribution of the important crops and livestock. At this time we wish to push the discussion somewhat further, but will defer final treatment until we come to consider the factors instrumental in determining the localization of types of farming in the United States.

Probably the best way to acquaint the reader with the nature of these combinations is to present a series of dot maps showing the distribution of types of farming in the United States as determined by the 1930 census classification. The dot maps represent actual farms which have first been classified by type and then plotted according to their geographic location. They thus present in summary form the actual combinations of crops and livestock enterprises made by approximately 6,000,000 farmers in the United States in 1929.

**GEOGRAPHIC DISTRIBUTION AND GENERAL CHARACTERISTICS OF THE DIFFERENT TYPES OF FARMS.**—Of the several types of farms distinguished, some are

represented rather generally throughout the United States, while others are to be found only in restricted regions or areas. Reference to the accompanying series of dot maps will indicate the exact distribution of each of the different types of farms.

In a general way farms of a given type within the same county or area will have the same broad characteristics, but may differ considerably from those in some other county or area. A brief discussion of the distribution of each type of farm and some of the differences in characteristics of the same type follow:

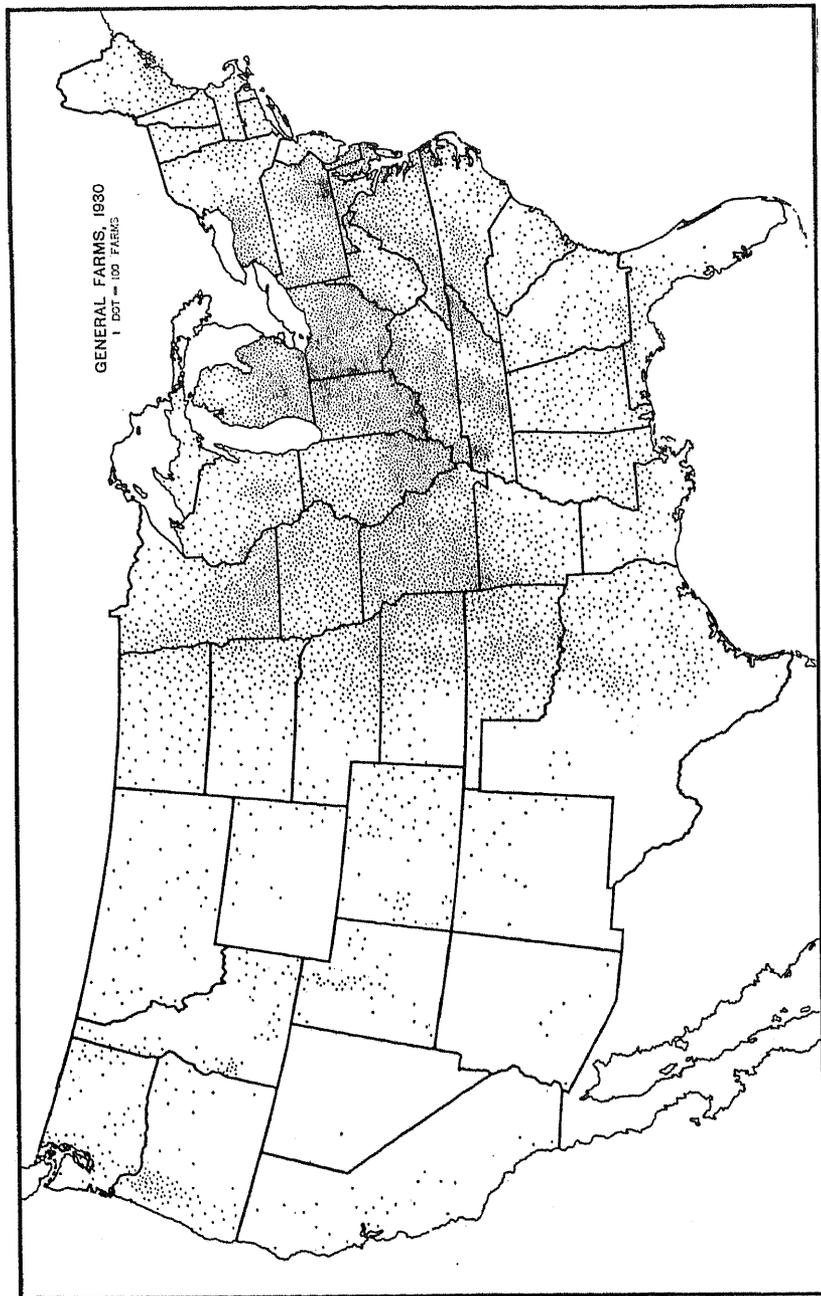
**General farms.**—General farms are most heavily concentrated in the North Central and Middle Atlantic States, centering particularly in Ohio, Indiana, southern Illinois, Missouri, eastern Kansas, Nebraska, southern Minnesota, Michigan, west central New York, and southeastern Pennsylvania. (See fig. 26.) Other areas of rather heavy concentration occur in Kentucky, central and eastern Tennessee, southwestern Virginia and in parts of Arkansas, Oklahoma, and Texas. By definition, no one source of income for general farms represents so much as 40 per cent of the total value of products of the farm. There is, however, a wide difference in the enterprises contributing to the income of general farms. In certain parts of the country there are but three or four important sources of income while in other areas a large number of sources of more or less equal importance are found. In regions representing a transition from one type of farming to another frequently a number of general farms appear, the source of income of which is a combination of products characterizing the two adjacent types of farming.

The general farms in Ohio have dairy, poultry, and livestock as their principal sources of income. In parts of southern Indiana, Illinois, and Missouri, livestock, poultry, dairy products, and family living are the principal sources of income. Throughout most of the southern part of all of these States the income is low and family living comprises a relatively large proportion of the total. In Michigan the principal sources of income on general farms are dairy and poultry products, beans, and potatoes, while in western New York they are beans, potatoes, cabbage, fruit, poultry, and dairy products. In the Southern States the principal sources of income on general farms are contributed by cotton, tobacco, peanuts, strawberries, peaches, and sweetpotatoes in varying combinations. In southern Minnesota, small grains, hogs, dairy, and poultry products comprise the principal sources of income, while in southeastern South Dakota, eastern Nebraska, and Kansas, livestock and grain are the principal sources of income.

**Cash-grain farms.**—Cash-grain farms are found mainly in the West North and West South Central States; in Illinois, Indiana, Ohio, Montana, Idaho, Washington, Oregon, and California. (See fig. 27.) The kinds of grains grown vary very widely within regions and also within the same region. In west north central Iowa and eastern central Illinois corn and oats are the principal cash grains; in central Kansas, winter wheat; in southwestern Kansas and in the Panhandle of Oklahoma and Texas, winter wheat and grain sorghums; northwestern Kansas, barley, corn and winter wheat; in North Dakota, various combinations of durum and other spring wheats, rye, flax, barley, and oats; in Louisiana, Arkansas, and southern Texas, rice is the important cash grain grown; in Washington, Oregon, and California, white wheat is the principal cash grain.

In eastern Oregon and Washington, Idaho, Montana, western Kansas, and Nebraska, Oklahoma, and Texas large scale grain farming is practiced, while throughout the East North Central States the grain farming is on a much smaller scale. This variation in size of unit should be taken into account when considering the relative importance of grain farms in different areas.

**Cotton farms.**—Cotton farms are located mainly in the Southern States, the remainder being found in the irrigated districts of southern California, New



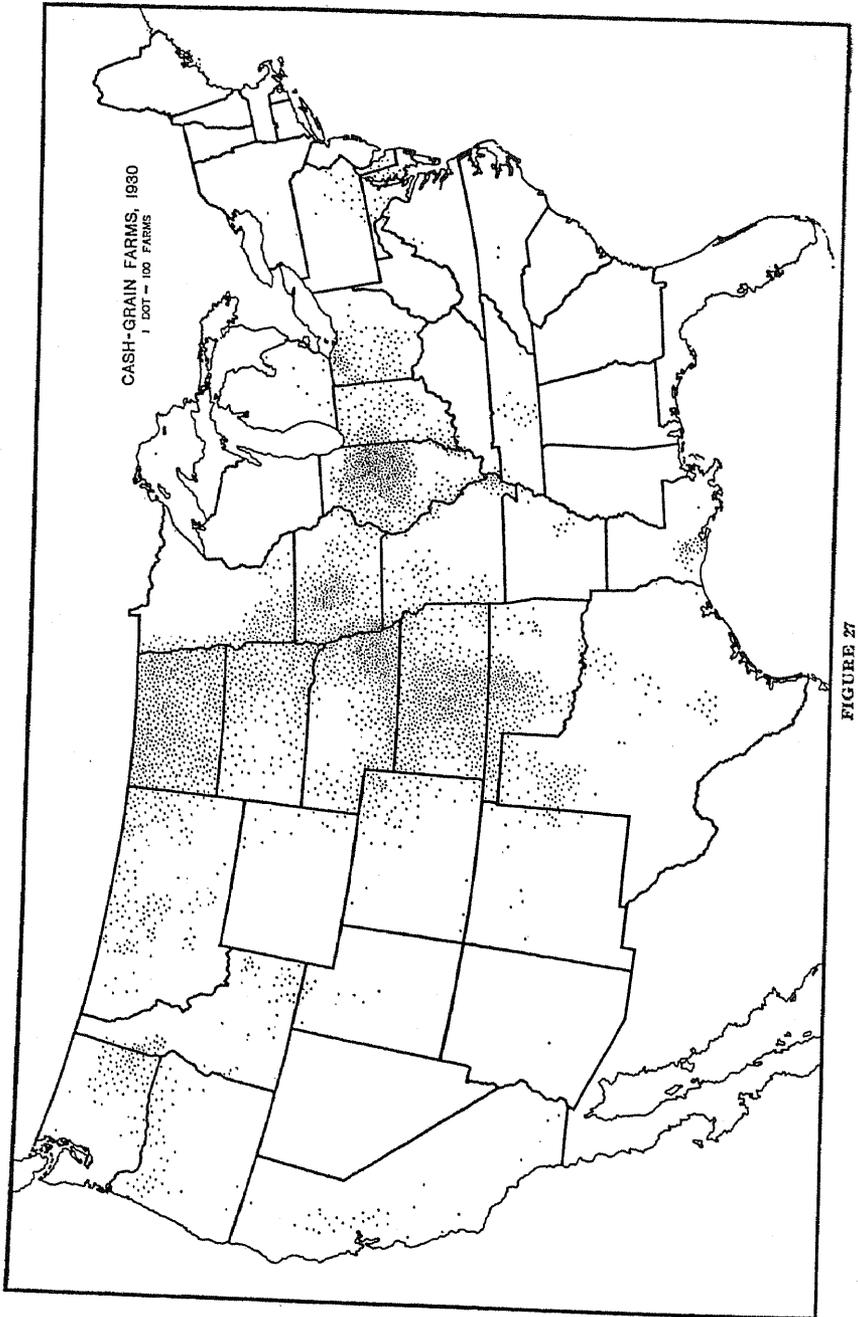


FIGURE 27

Mexico, and Arizona. (See fig. 28.) Long staple cotton is the principal type grown in irrigated districts but is also found in the Delta region along the Mississippi River. Short staple cotton is grown mainly in the other sections. Throughout the old South the cropper system of farming is dominant, the plantation system being commonly found in Mississippi, Arkansas, and Louisiana. In western Oklahoma and in the high plains and Corpus Christi areas of Texas large scale cotton farming prevails. Because of this difference in size of farm units the relative distribution of the number of cotton farms, shown on the accompanying dot map, fails to show adequately the relative importance of cotton farming from the standpoint of acreage and production.

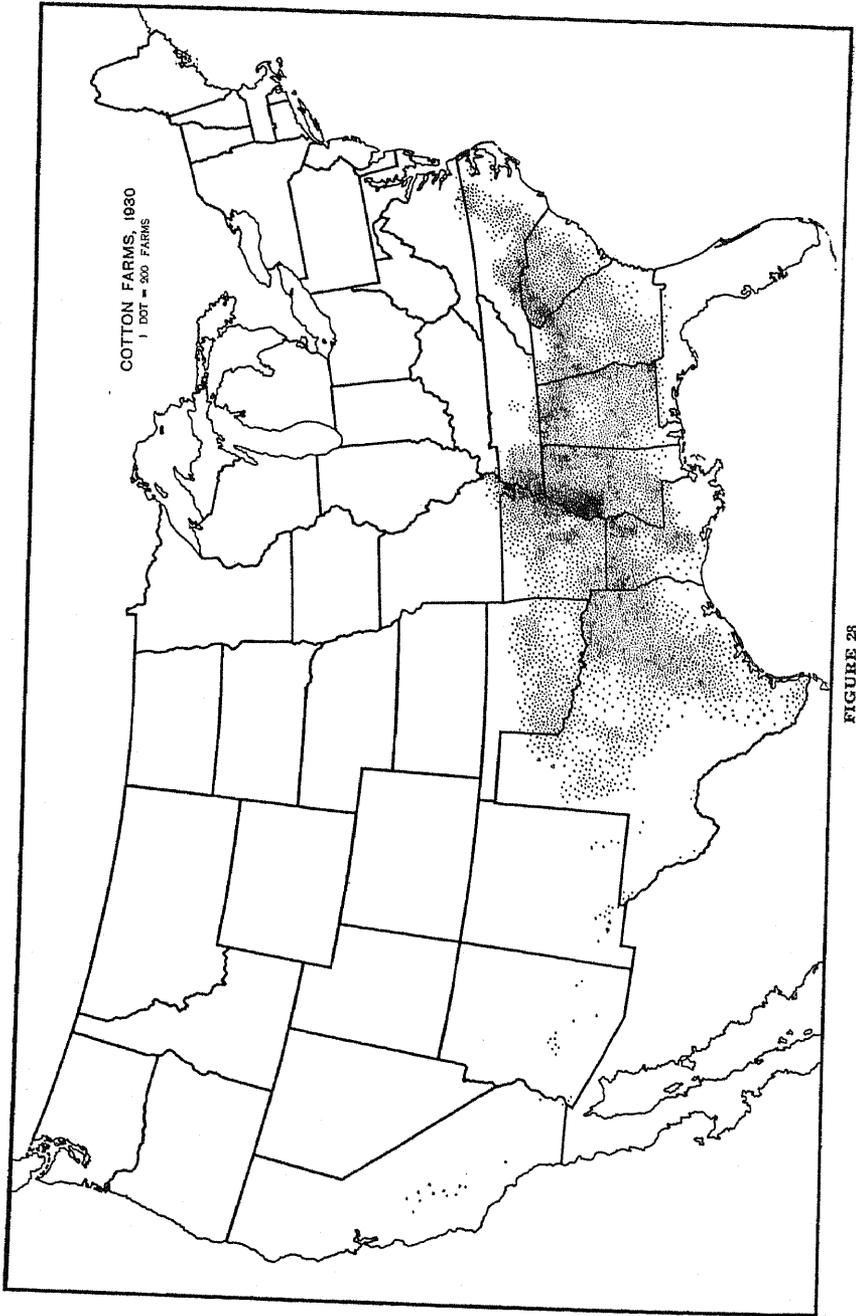
**Fruit farms.**—Fruit farms represent various kinds and combinations of fruit. These farms as will be observed from the dot map (see fig. 29) are concentrated in rather definite localities. The principal fruit regions are in western New York around the Finger Lakes and along Lake Ontario; along the south shore of Lake Erie; in western Michigan; the Pacific Coast States; certain irrigated areas in the Mountain States; the Ozark region of Missouri and Arkansas; the Gulf Coast; Georgia; the Atlantic Coast States; the Shenandoah-Cumberland region; and several other minor regions.

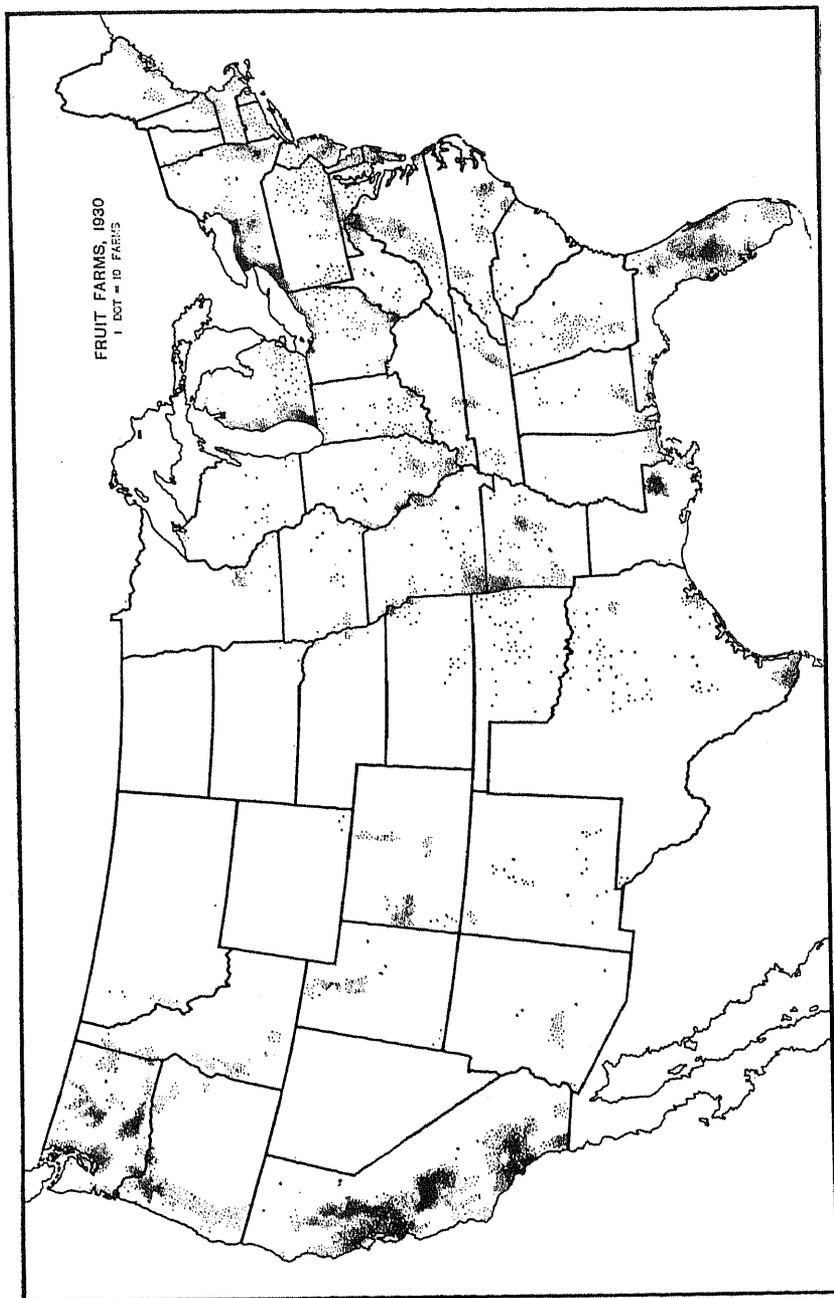
In western New York around the Finger Lakes and the shore of Lake Ontario, apples and grapes are the principal fruits grown; grapes are the principal fruit around Lake Erie; grapes, small fruits, apples, peaches and cherries are the principal fruits in Michigan. On the fruit farms in the Pacific Northwest and northern California a large variety of orchard and small fruits such as apples, pears, prunes, cherries, grapes, walnuts, strawberries, loganberries, and raspberries are grown separately and in varying combinations; in southern California citrus fruits, principally oranges and lemons, olives, grapes, walnuts, almonds, peaches, and apricots also are grown separately and in combination. Apples are the principal fruit in the Mountain States, and in the Ozarks apples, peaches, and strawberries are the principal fruits grown. Citrus fruits, consisting mostly of grapefruit and oranges, predominate along the Gulf coast, with Florida and southern Texas being the principal centers of production; strawberry production is of importance in Florida, Louisiana, and eastern Texas. In Georgia peaches are the principal fruit and are grown in the central part of the State. Pecans are grown in the southern and apples in the northeastern part of the State. Along the Atlantic coast strawberries are the principal fruit; blueberries are important in Maine, cranberries in Massachusetts, peaches in New Jersey, and early apples in Delaware. In the interior of the Atlantic Coast States apples are the principal fruit except in North Carolina and South Carolina where peaches are the most important. Apples are the predominant kind of fruit in the Shenandoah-Cumberland region and are of considerable importance throughout the Appalachian States.

In the other regions mention should be made of apples in southeastern Ohio and the adjacent counties of West Virginia; apples and peaches in southern Illinois; peaches in eastern Tennessee; strawberries around Paducah and Bowling Green in western Kentucky, and in Arkansas; oranges, grapefruit, and apricots in the Salt River Valley of Arizona.

In addition to the variation of fruits grown on fruit farms, there is also a difference in the form in which the fruit is sold. In most regions the fruit is sold as fresh fruit, in other regions, especially in California, much of the fruit is dried and sold in that form; in still other regions the fruit is sold to canneries.

**Truck farms.**—As will be noted from the accompanying dot map (see fig. 30) truck farms are found in greatest numbers along the Atlantic coast, especially Long Island, New Jersey, Delaware, Maryland, and Virginia; in Florida and the Lower Rio Grande Valley of Texas; California; around urban centers; and in rather restricted areas in other parts of the country.





Vegetables for canning are produced for the greater part in the North Central and the Middle Atlantic States. Truck farms producing vegetables for shipping are to be found in southern California, the Gulf and South Atlantic States, Michigan, western New York, and to a lesser extent in many other regions. Of these shipping areas, California, and the Southern States, particularly Florida, south Texas, and southern California, produce most of the fresh winter vegetables. The truck farms producing for a local market generally grow a large variety of vegetables; those producing for shipping or canning, relatively few.

**Crop-specialty farms.**—A number of specialized crops characterize crop-specialty farms, many of which are grown in rather restricted districts. The kind and distribution of the more important crop-specialty farms are shown on the accompanying map. (See fig. 31.) In interpreting this map, it should be understood that the location of the particular crop-specialty farm on the map indicates only that this particular type of crop-specialty farm is dominant in that locality, and is not found to the exclusion of other crop-specialty farms. A comparison of this map with dot maps showing the distribution of the various crops characterizing crop-specialty farms will show a very close correspondence, and will give some indication of the relative importance of these crops in a particular locality. The crop-specialty type, therefore, lacks definitiveness when considered from the standpoint of the United States as a whole, or even for one State, but for a particular area or locality it is quite definite and significant. It should be recognized, of course, that the different crops characterizing the crop-specialty farm have but few characteristics in common. The only reason they were thrown together was due to the inability of giving each of them a separate code, obviously, it would have been much better had they been kept distinct.

**Dairy farms.**—Dairy farms are most heavily concentrated in the New England States, New York, Pennsylvania, New Jersey, Delaware, Maryland, northeastern Ohio, northern Indiana, and Illinois and in most of Michigan, Wisconsin, and Minnesota and along the Pacific coast. (See fig. 32.) There is, also, to be noted a distinct tendency for dairy farms to be concentrated around urban centers. They are also found in large numbers in the southern Ozark region of southwest Missouri. The production and sale of fluid milk as has been pointed out is the predominant practice in the New England States, in the Middle Atlantic States, in Ohio, Michigan, northern Indiana, and Illinois, and southeastern Wisconsin, and in the Pacific Coast States. In other parts of the country, except around urban centers where the production and sale of fluid milk prevails, the dairy farms represent largely income from sale of butterfat, cheese, or butter, or the sale of whole milk for the production of these and other dairy products.

**Animal-specialty farms.**—Animal-specialty farms center in the Corn Belt of the middle West. The heaviest concentration appears in central Ohio, Indiana, northwestern Illinois, the greater portion of Iowa, northern Missouri, north-eastern Kansas and Nebraska, southeastern South Dakota, and southwestern Minnesota. (See fig. 33.) Other important centers are in Michigan, the Blue Grass region of Kentucky, the central basin of Tennessee, and the Shenandoah Valley of Virginia. Income on animal-specialty farms comes largely from the sale of hogs, cattle, and sheep. To a large extent the hogs are raised on the farms where fattened, but the cattle and sheep are frequently shipped in as feeder stock from the range areas farther west.

**Stock ranches.**—Stock ranches are located mainly in the range area of the western half of the United States, the areas of heaviest concentration being in the Edwards Plateau of Texas, and the north central part of Texas, the Flint Hills of Kansas, the Sand Hills of Nebraska, western South Dakota, western North Dakota, Montana, Wyoming, Colorado, New Mexico, Arizona, Utah, and Nevada. (See fig. 34.) In parts of California, Oregon, and Washington, there also are rather heavy areas of concentration. Other minor areas are to be found

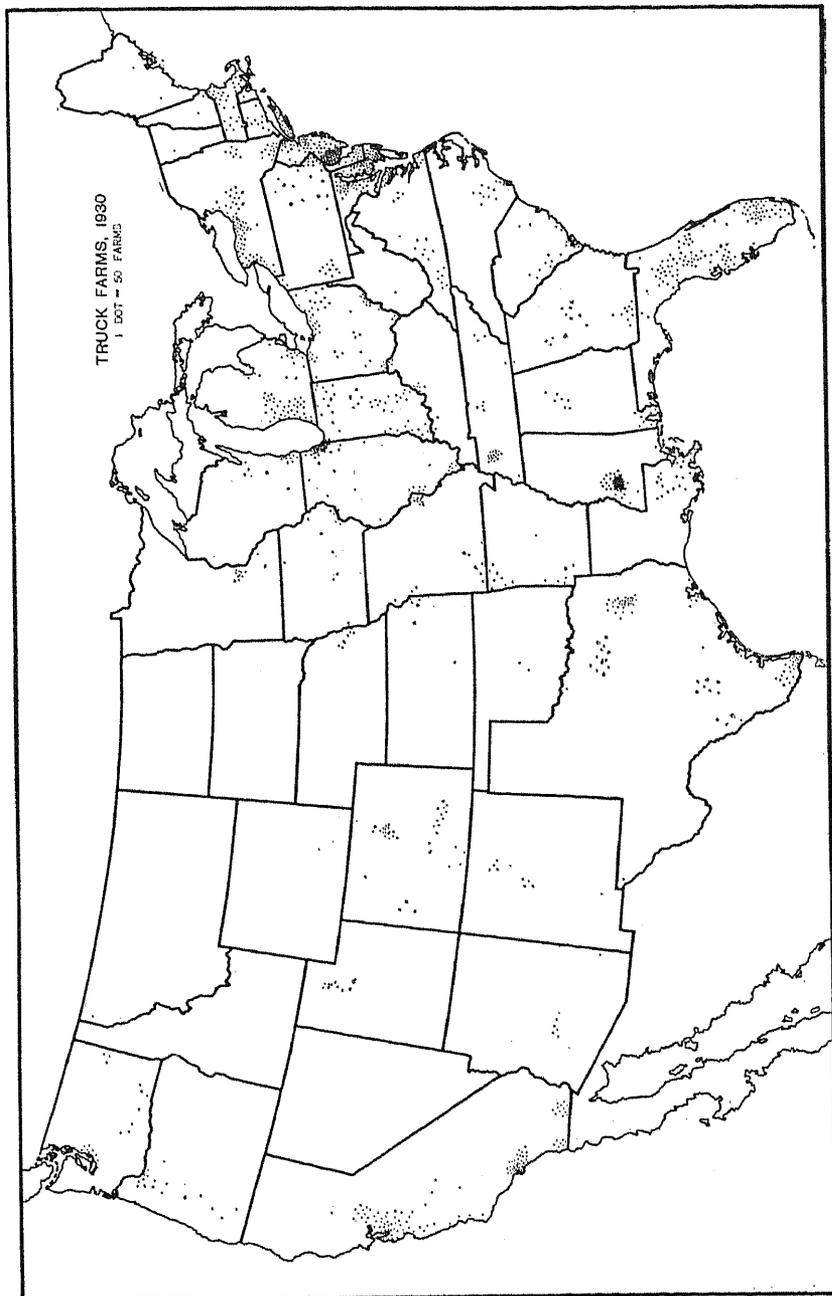


FIGURE 30



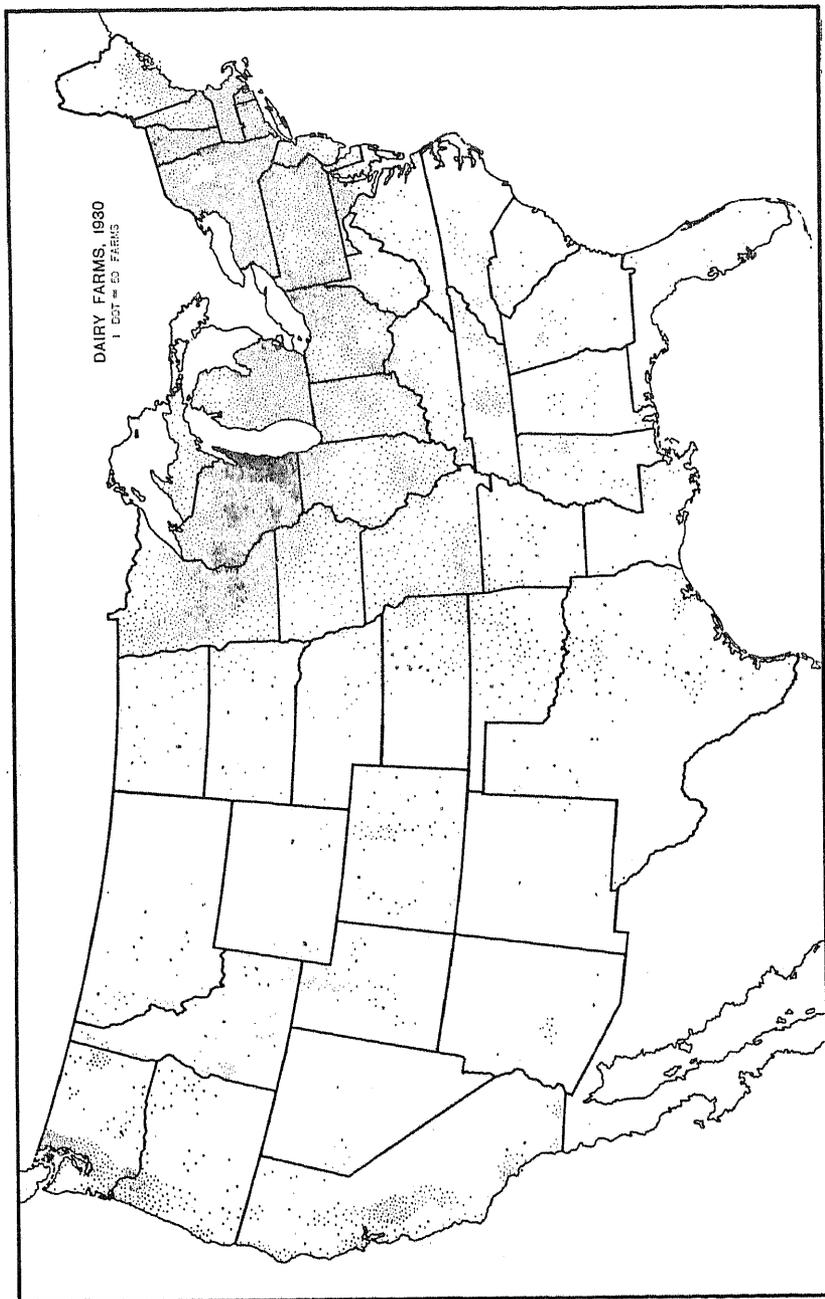
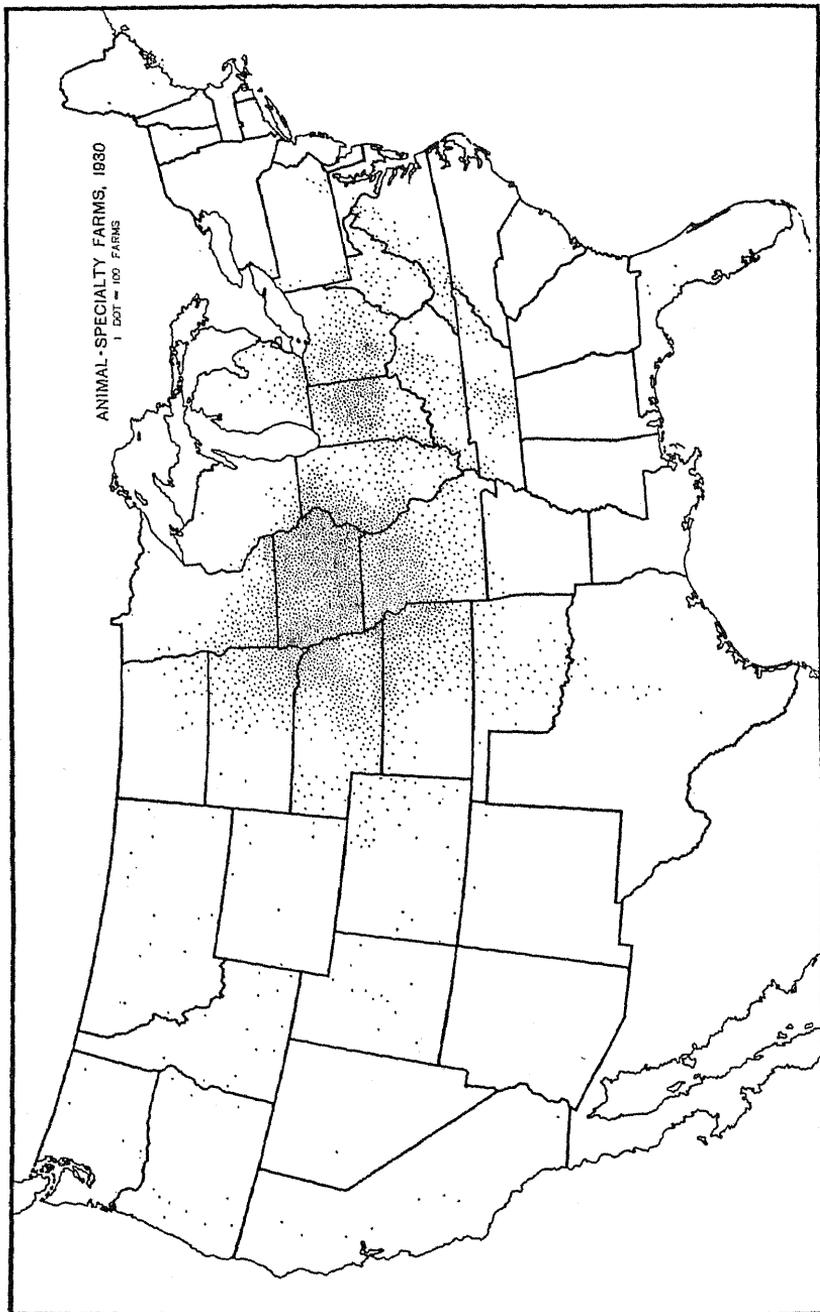


FIGURE 32



in West Virginia, the Shenandoah Valley of Virginia, the Blue Grass region of Kentucky, and along the coast of the Gulf States. The production of livestock through grazing is the thing which characterizes stock ranches and differentiates them from animal-specialty farms which produce livestock through feeding. This distinction results in a number of livestock-grazing farms in the East being classified as stock ranches.

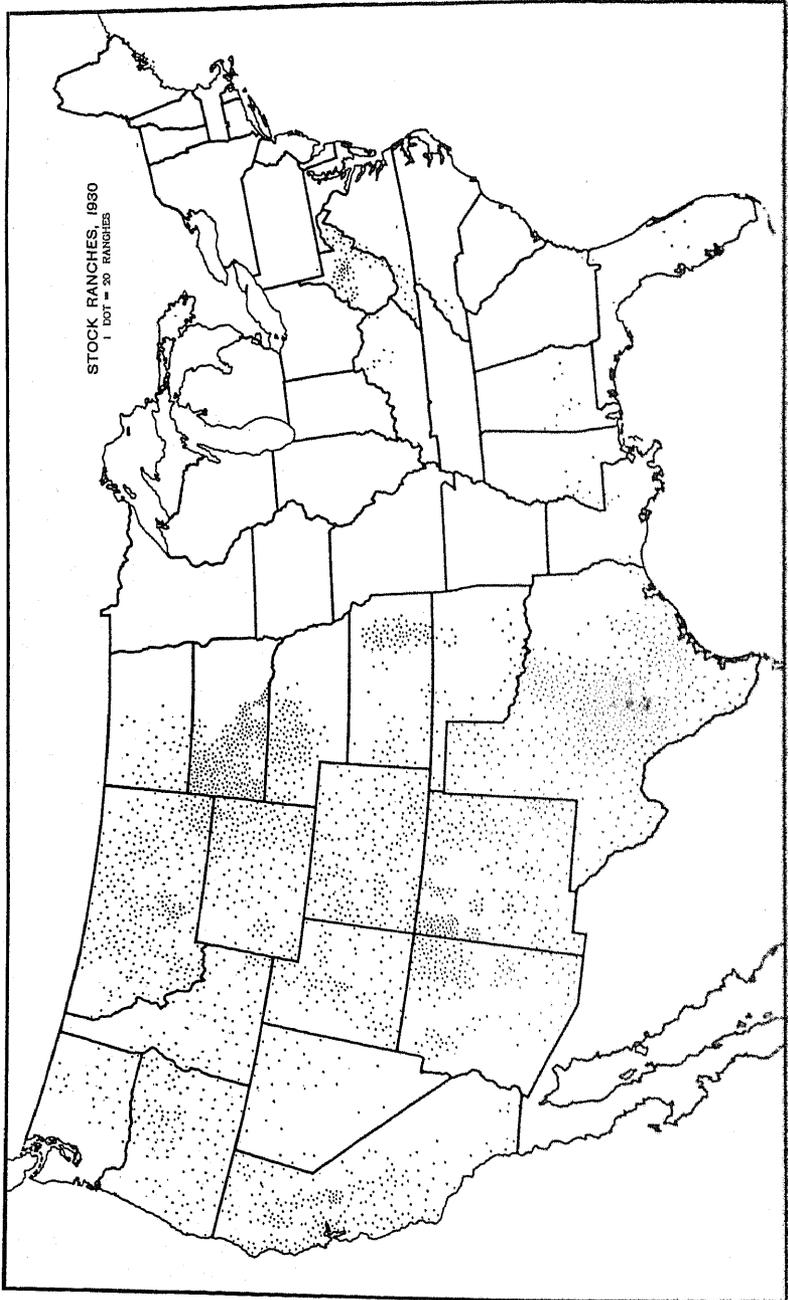
The nature of the ranching organization varies widely in different parts of the country, but as a general rule only one kind of livestock, either cattle, sheep or goats, is kept on the same ranch. In the Edwards Plateau of Texas, however, it is the common practice to have sheep, goats, and cattle on the same ranch. The prevailing kind of ranches found throughout the western areas are both cattle and sheep ranches. Goat ranches are confined mainly to Texas, New Mexico, and Arizona, while cattle are the main kind of stock kept on ranches in the eastern and Gulf areas.

**Poultry farms.**—Poultry farms are concentrated throughout the New England and Middle Atlantic States, in Ohio, Indiana, southern Michigan, southern Illinois, eastern Kansas, Missouri, northeastern Oklahoma, southeastern Texas, around Denver, Salt Lake City, and along the Pacific coast. (See fig. 35.) The raising of chickens and production of chicken eggs characterize most of the poultry farms in these areas, however, the production of broilers is also important as is the production of ducks on Long Island. In Texas and throughout the Mountain States of the West, turkeys are the primary source of income on many of the poultry farms. The most intensive poultry farming is practiced along the Pacific and North Atlantic coasts. In these intensive commercial areas large baby chick hatcheries are to be found. In the Central States poultry farming is less extensive and other enterprises of some importance are to be found on the same farm. The relatively heavy concentration of poultry farms in parts of Missouri probably results from poultry representing the main source of income on a large number of small farms which receive a little income from other sources, but on which the total income is low. These poultry farms are distinctly different from the specialized poultry farms found on the Pacific coast, which receive practically their entire income from the sale of poultry and poultry products.

**Self-sufficing farms.**—Self-sufficing farms are found in greatest numbers in eastern Kentucky and Tennessee, and western North Carolina, Virginia, and West Virginia. In fact, throughout the entire Appalachian region this type of farm is fairly heavily concentrated. (See fig. 36.) Other important areas are the cut-over country in the Lake States, New England, Pennsylvania, southeastern Ohio, southern Indiana, Illinois, and the Ozark regions of Missouri, Arkansas, and Oklahoma, as well as the Ouachita Mountain area in the latter two States; southeastern Kansas, east Texas, and parts of Louisiana, Mississippi, Alabama, Georgia, Florida, and the two Carolinas. Other minor areas are found in northern New Mexico, in scattered counties in southern South Dakota and parts of Oregon and Washington.

Self-sufficing farms in general represent small farms with simple organizations which usually supply a rather meager living to the operator and his family. The term, "self-sufficing farm," should not be interpreted to mean that the farms actually produce enough to supply the entire needs of the farmer and his family. They, rather are farms where there is little if any commercial agriculture. That is, they are farms upon which the sales are of minor importance and on which the family living comprises the major source of income. The self-sufficing farms noted in northern New Mexico and in southwestern and northwestern South Dakota are Indian farms.

**Abnormal farms.**—Reference to the dot maps (figs. 37 to 41) will show the distribution of each of the five subtypes of the abnormal farms.



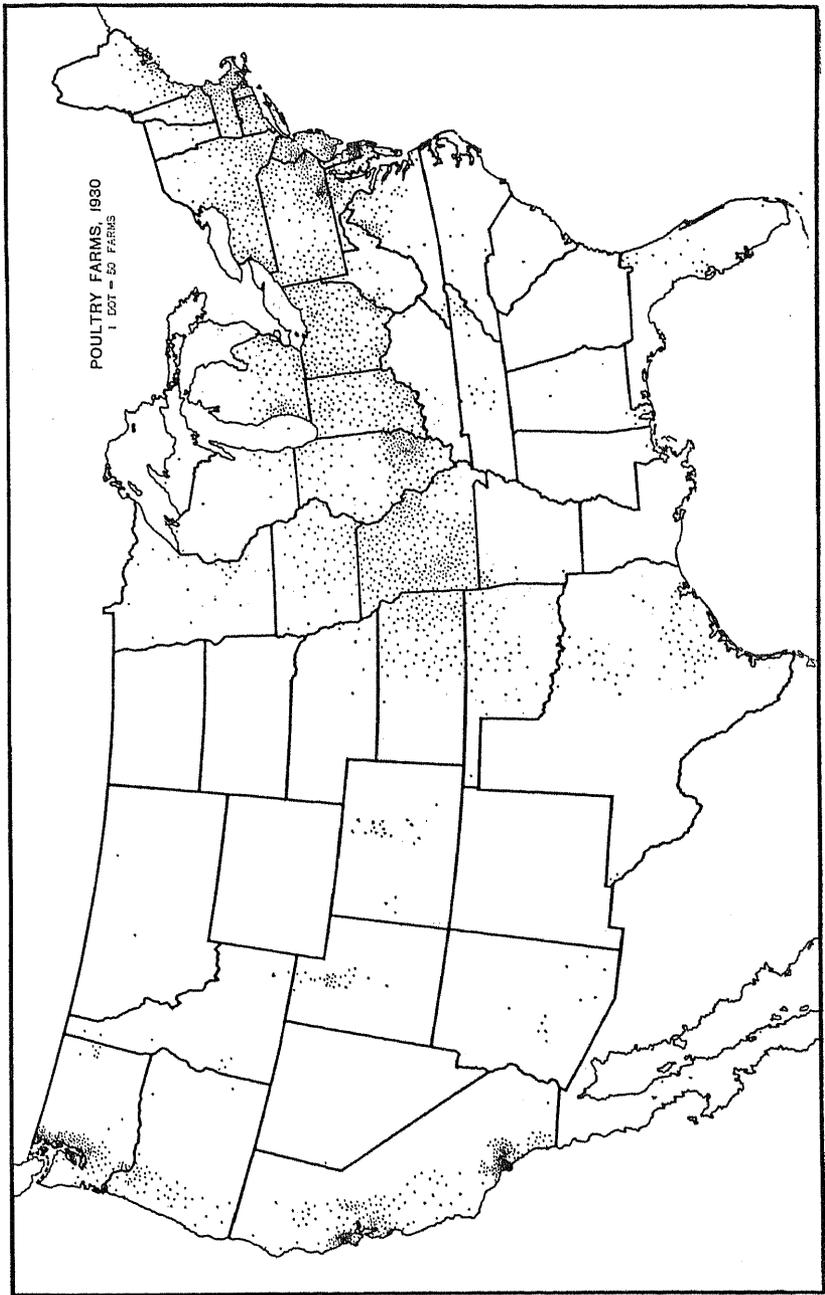
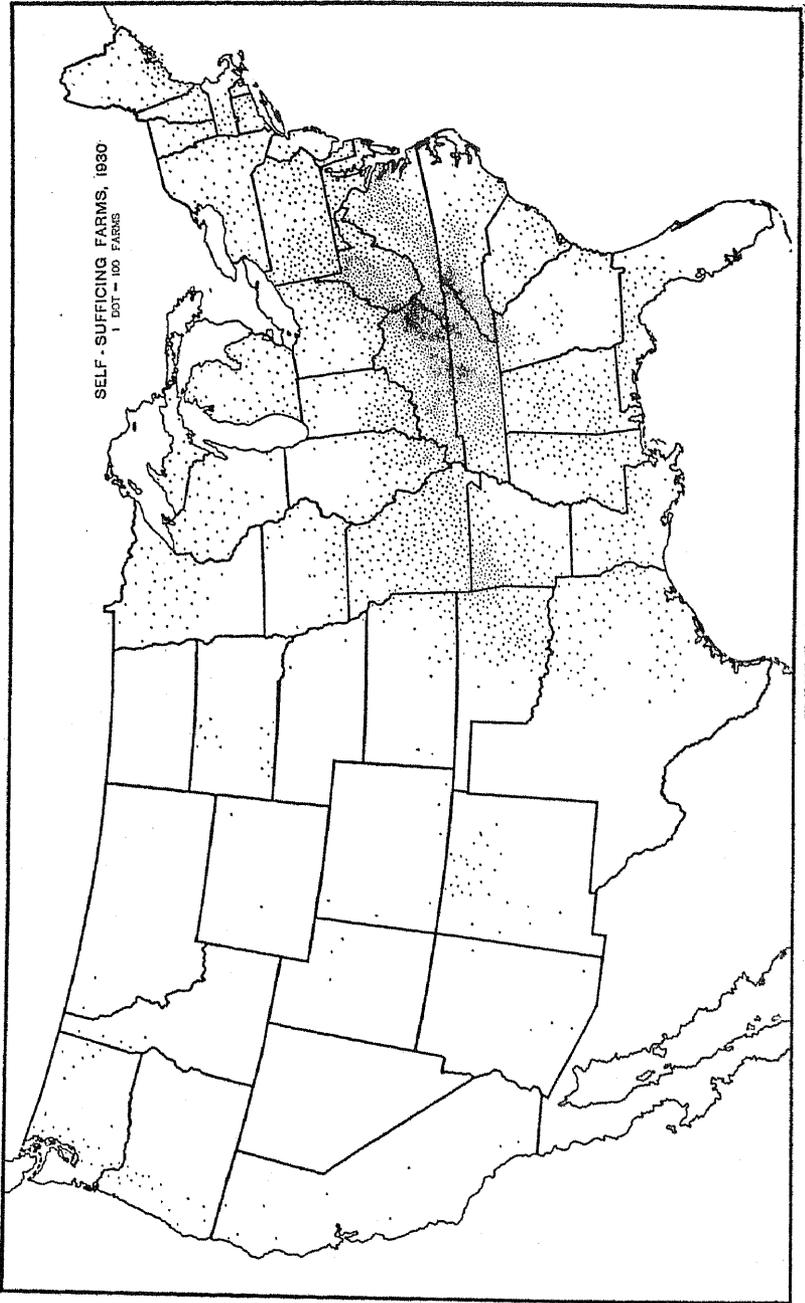


FIGURE 35



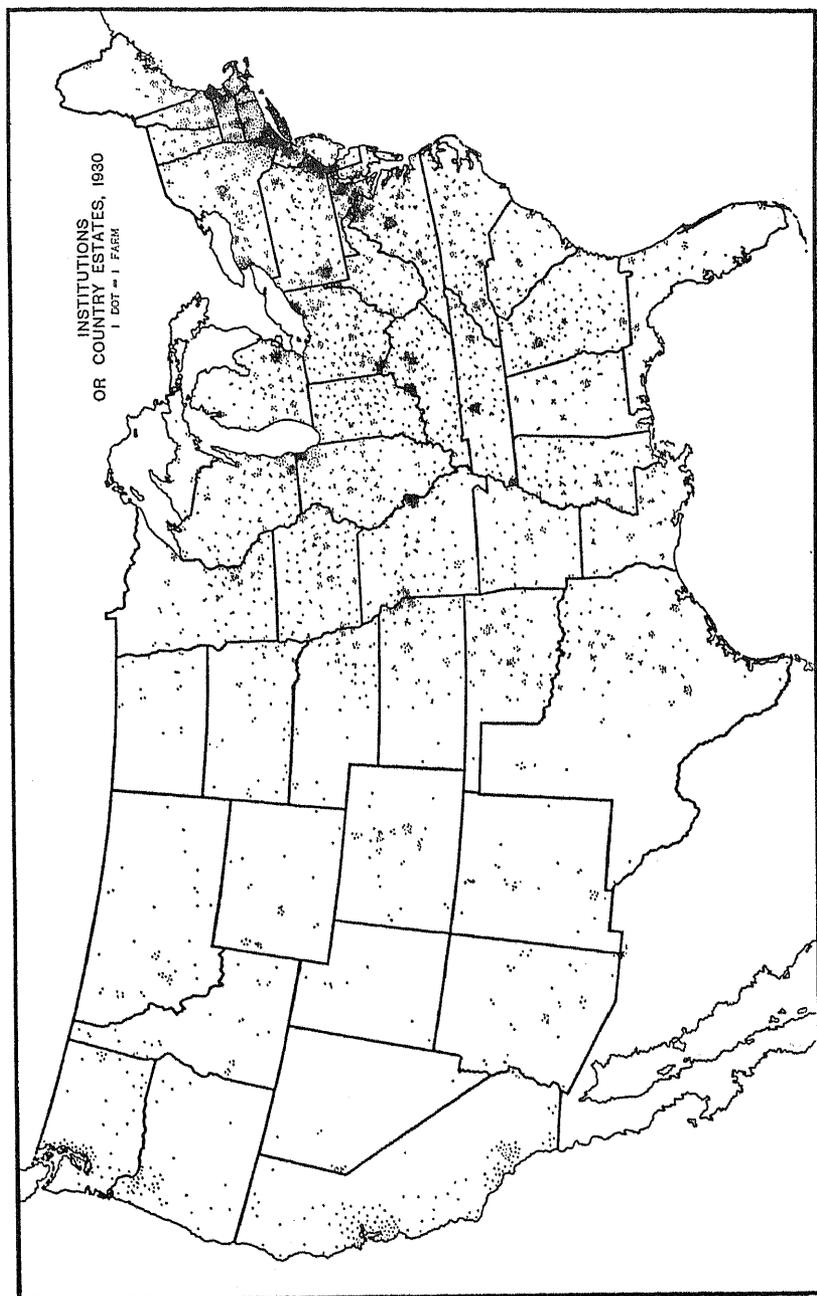


FIGURE 37

*Institution or country estates.*—Institution or country estates are most heavily concentrated around cities, although it will be noted that there is at least one in most every county, except in the 11 Western States and western part of adjoining States. (See fig. 37.) The heavy concentration of dots in New England and around New York represents mostly country estates; the same is true in Pennsylvania around Philadelphia and Pittsburgh; in Maryland and Virginia around Baltimore and Washington; in Michigan around Detroit; in Illinois and Wisconsin around Chicago and Milwaukee; in Minnesota around the Twin Cities; and in Missouri and Kansas around Kansas City, etc. The dots scattered throughout the country probably represent mostly institution farms.

*Part-time farms.*—The heaviest concentration of part-time farms is around urban centers and in the mining, oil, and timber districts. (See fig. 38.) These part-time farms are of a great deal of interest and apparently are becoming of more importance all the time. Two general situations are typified on these farms: Around cities they probably represent farms which are operated by operators whose occupation is other than farming and who, therefore, depend on other lines of business for their principal income. In areas remote from urban centers the farm operators on these farms generally report their occupation as farming, but supplement their income from work at jobs other than farming in their locality, such as in mines, on highways, in oil fields, on railroads, in lumbering and sometimes in factories in industrial centers at distant points.

*Boarding and lodging farms.*—This type of farm is not of a great deal of significance from the standpoint of numbers and is chiefly found in the New England States, New York, New Jersey, Pennsylvania, the Lake States, and on the Pacific Coast. (See fig. 39.) With the development of arterial highways such farms are probably increasing in importance. In the Rocky Mountain areas "dude" ranches comprise a large proportion of this group of farms.

*Forest-product farms.*—Forest-product farms are principally found in the cut-over sections of the Lake States, New England, New York, Pennsylvania, practically all of the South Atlantic States, southeastern Ohio, southern Indiana, southern Missouri, Arkansas, and the States in the East South Central group; also large numbers are found in northern Idaho, eastern Washington, and in the western part of Washington, Oregon, and north central part of California. (See fig. 40.) Minor areas are found in Arizona and New Mexico. In New England, cordwood is probably the major source of income on forest-product farms, while in certain parts of the Southern States, turpentine and resin form the basis for most of the forest-product farms; while in the mining sections of the Appalachian Mountains the production of mine timbers is the most important.

*Horse farms, feed lots, and livestock dealers.*—Horse farms, feed lots, and livestock dealers are found largely in the North Central, Middle Atlantic, New England States and in Kentucky, Tennessee, Virginia, and West Virginia, (See fig. 41.) In the central States they represent mostly feed lots and livestock dealers. In Kentucky and other eastern states they include many horse farms.

*Unclassified farms.*—Unclassified farms, as shown by the map, are found quite generally throughout the United States, but appear in greatest numbers in the Southern States. (See fig. 42.) They represent farms for which the information was so incomplete it was impossible to classify them. The majority of these farms probably would classify in the type which is dominant in the locality where they are found.

This concludes the discussion of the geography of American agriculture. The reader now has before him the areas in which the individual crop and livestock enterprises are concentrated, also, the way in which they are combined into farming systems as shown by the distribution of each type of farm. We now turn to a discussion of the relative importance of each of these enterprises in particular areas and how they may be differentiated into areas following similar types of farming.

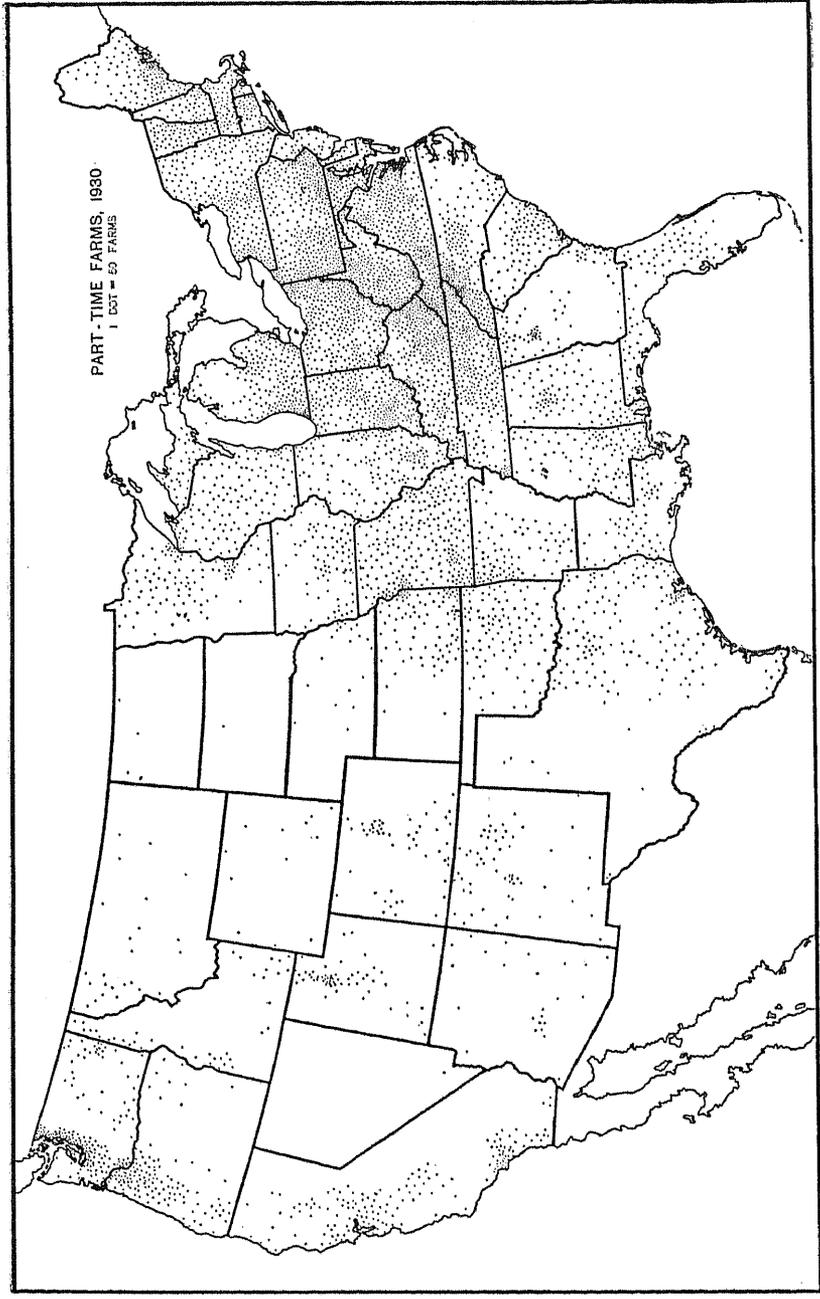
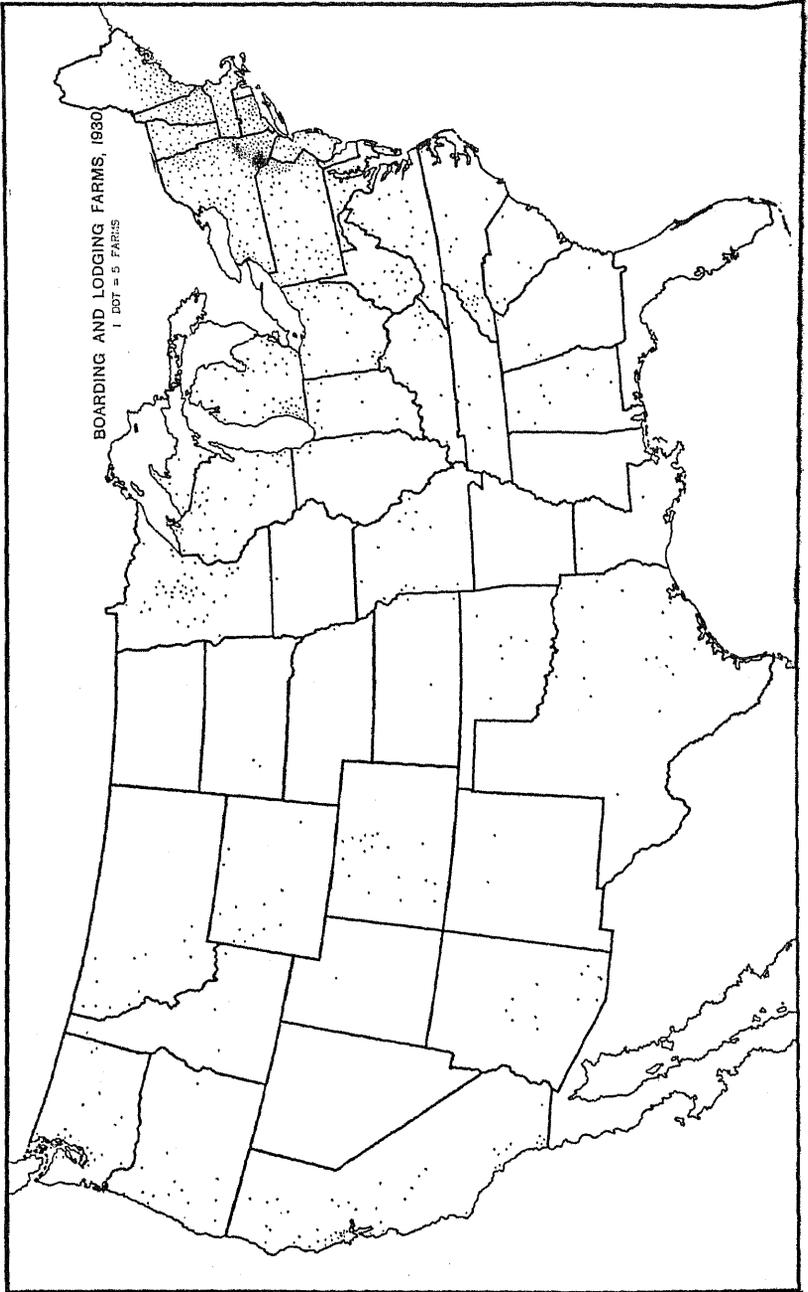


FIGURE 33



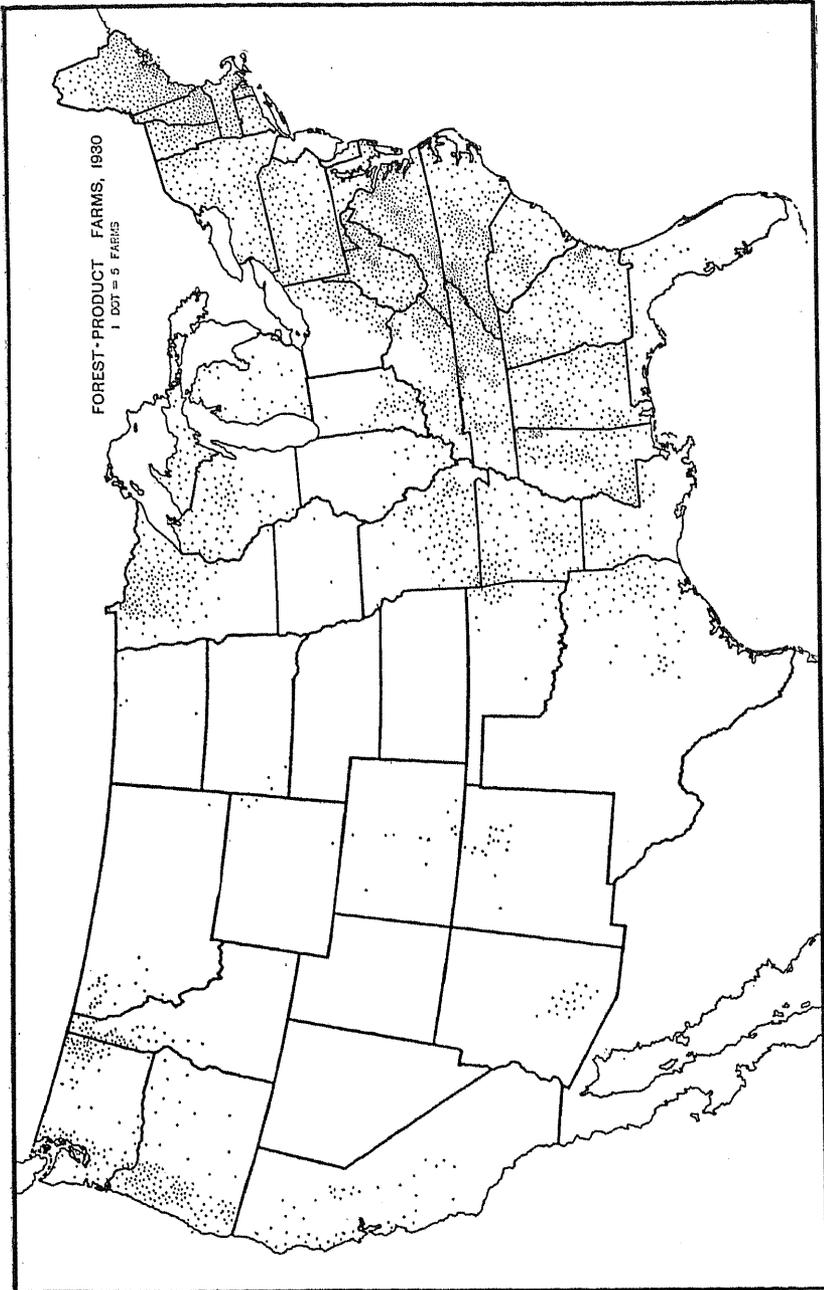


FIGURE 40

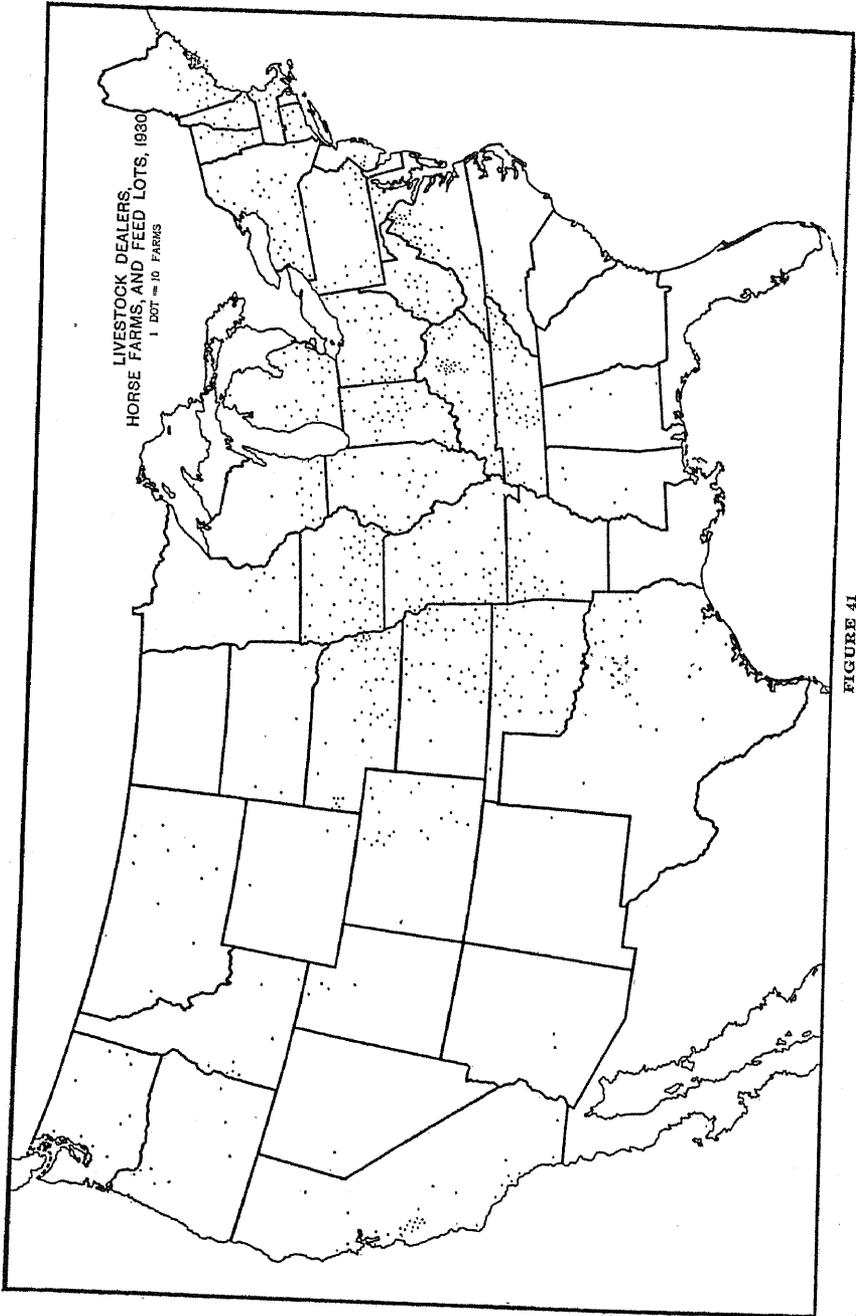


FIGURE 41

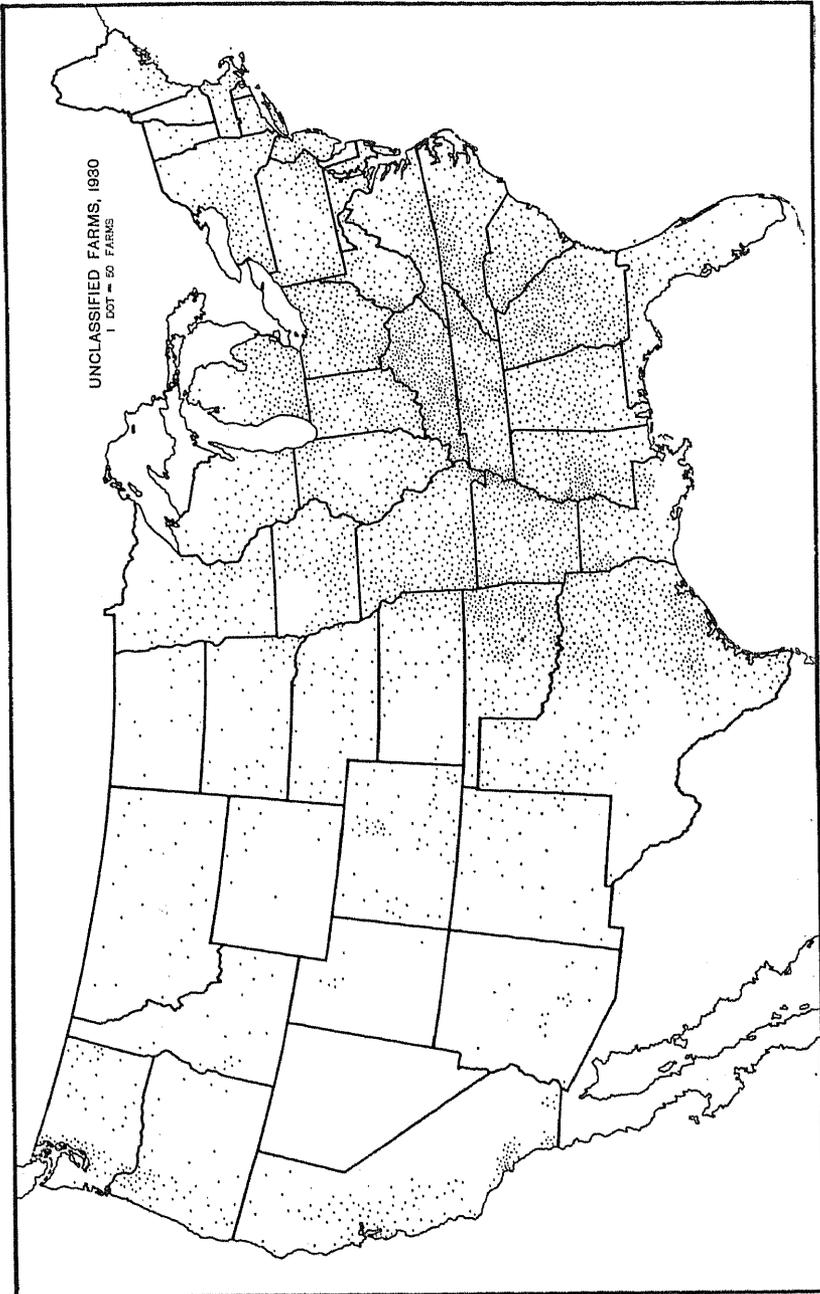


FIGURE 42