



AgEcon SEARCH
RESEARCH IN AGRICULTURAL & APPLIED ECONOMICS

The World's Largest Open Access Agricultural & Applied Economics Digital Library

This document is discoverable and free to researchers across the globe due to the work of AgEcon Search.

Help ensure our sustainability.

Give to AgEcon Search

AgEcon Search
<http://ageconsearch.umn.edu>
aesearch@umn.edu

*Papers downloaded from **AgEcon Search** may be used for non-commercial purposes and personal study only. No other use, including posting to another Internet site, is permitted without permission from the copyright owner (not AgEcon Search), or as allowed under the provisions of Fair Use, U.S. Copyright Act, Title 17 U.S.C.*

SA 273 (1960)

USDA STATISTICAL BULLETINS

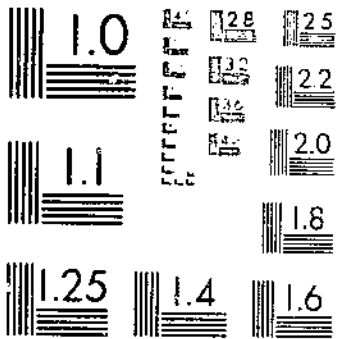
UPDATE

INDEX NUMBERS OF AGRICULTURAL PRODUCTION: BY REGIONS, 1939-1958

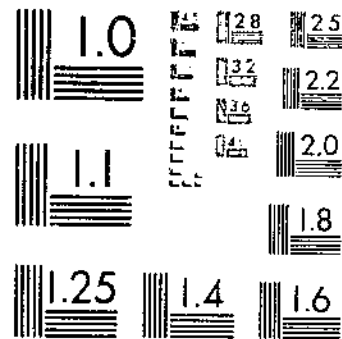
DUROST, D.D.

1 OF 1

START



MICROCOPY RESOLUTION TEST CHART
NATIONAL BUREAU OF STANDARDS-1963-A



MICROCOPY RESOLUTION TEST CHART
NATIONAL BUREAU OF STANDARDS-1963-A

INDEX NUMBERS OF AGRICULTURAL PRODUCTION

Les Statistiques Publiques

1960

1960

DO NOT WRITE

By Regions, 1939-1958

CONTENTS

	Page
SUMMARY.....	1
BACKGROUND.....	2
FARM OUTPUT.....	3
CROP PRODUCTION.....	7
LIVESTOCK.....	14
APPENDIX.....	18
Index of crop production.....	18
Index of livestock production.....	23
Index of farm output.....	24

Washington, D. C.

Issued December 1960

For sale by the Superintendent of Documents, U. S. Government
Printing Office, Washington 25, D. C. -- Price 25 cents

INDEX NUMBERS OF AGRICULTURAL PRODUCTION BY REGIONS, 1939-1958

Donald D. Durost, Agricultural Economist
Farm Economics Research Division, Agricultural Research Service

SUMMARY

The period since the beginning of World War II has been characterized as a period of revolution in agriculture. The combined production of crops and livestock in the United States has increased faster than has the population. From 1939-41 to 1956-58, farm output rose 43 percent compared with a 30-percent increase in population.¹

All major farm production regions contributed to the upsurge in production. The Northern Plains, Mountain, and Pacific States increased their volume of output by more than 50 percent. Favorable price relationships and patriotic incentives during the World War II period contributed to a faster rise in farm output during the 1939-41 to 1947-49 period than during the 1947-49 to 1956-58 period.

Farm output is weighted in large degree by total crop production. In 1956-58, crop production accounted for two-thirds of the farm output of the United States as a whole and of most regions. Only in the Northeast is livestock production as important as crop production in total farm output.

Feed grains and hay accounted for 47 percent of total United States crop production in 1956-58. Corn alone contributed nearly a fourth of the total. The predominant type of crop production varies by regions; feed crops predominate in the north-central, cotton and tobacco in the southern, and fruit and vegetables in the Northeast and the western regions.

The relative contribution of the individual regions to total crop production of the United States varied from 5 percent in the Delta States to 24 percent for the Corn Belt during 1956-58. The combined production of the three north-central regions accounts for

more than 45 percent of the United States total. Regional variations are due chiefly to differences in acreage of cropland among regions.

Total crop production increased 29 percent, or at an average annual rate of 1.5 percent, for the United States as a whole from 1939-41 to 1956-58. The important producing regions--the Corn Belt, Lake States, and the Northern Plains--increased production of crops at an annual rate of 1.6, 2.0, and 2.8 percent, respectively, during this period. None of the southern regions increased production as much as 1 percent annually.

Total change in crop production is a function of the change in acreage of cropland used and in crop production per acre. Acreages of cropland increased in the north-central and western regions but decreased in the Northeast and the southern regions from 1939-41 to 1956-58. For the United States as a whole, the acreage of cropland decreased slightly. But crop production per acre rose in all regions, varying from 1.1 percent annually in the Mountain States to 2.5 percent in the Southeast.

Crop production, as well as farm output, in the United States increased at a faster rate from 1939-41 to 1947-49 than from 1947-49 to 1956-58. All regions increased their total crop output during the earlier period. But in the second period, the four southern regions produced less in 1956-58 than in 1947-49. Crop production per acre for the United States increased at the same annual rate during both periods. But in general, the acreage of cropland used for crops decreased in the latter period. Regions that had increased their acreages in the earlier period either reduced their acreages or failed to increase them as fast in the latter period.

¹ Preliminary 1959 data are included in the appendix tables and the figures.

Livestock and livestock products account for a third of the total farm output. Production of meat animals accounted for half of the total livestock production in 1956-58. The rest is divided fairly evenly between poultry and dairy products.

The most notable change in livestock production in the last two decades has been the relative increase in poultry production. In 1939-41, poultry production accounted for only 17 percent of total livestock production. By 1956-58, it made up 24 percent. The chief reason for such a change was the rapid development of the broiler industry.

Production of meat animals is the major type of livestock production in 6 of the 10 regions. Dairy products lead in the Northeast and the Lake States, and poultry products lead in the Southeast and the Pacific States.

From 1939-41 to 1956-58, total livestock production rose more, percentagewise, than

crop production. Livestock production in 1956-58 was 40 percent greater than in 1939-41. Regional annual rates of increase varied from 0.8 percent in the Southern Plains to 5.3 percent in the Southeast. The Southeast and the Delta States had the greatest percentage gains in livestock production, but these gains were made from relatively small bases.

Unlike crop production and farm output, livestock production increased at a greater rate during the last half of the 1939-41 to 1956-58 period than in the first half, increasing by 2.3 and 1.6 percent annually, respectively.

The relative contribution of individual regions to total livestock production in 1956-58 varies from 4 percent in the Delta States to 28 percent in the Corn Belt. Again the three north-central regions make up by far the major producing area; they account for half of all livestock production.

BACKGROUND

Since the beginning of World War II, there has been a large movement of labor out of agriculture, the number of farms has decreased greatly, numbers of tractors and of modern farm machines have mounted, and use of fertilizer, more productive varieties of seed, and other improved production practices has increased substantially. The net result has been a much greater outturn of products from our farm plant. Farm output rose more than 40 percent in less than two decades with only a 4-percent increase in total inputs committed to agriculture by farmers.²

Measures of aggregate farm production provide a means of summarizing some of the broad changes in agriculture. Such measures can be used effectively also as research tools in analyzing major factors associated with trends in production.³ In a period of rapid change in farming, it is especially desirable to reappraise periodically the basis for constructing indexes of farm production--the weights used, regional breakdowns, and the availability of new or improved basic data. The farm output and related index series were reappraised re-

cently. As a result, new data were incorporated into the series and a new regional grouping of States was adopted.

This report is intended to describe and appraise the new regional indexes in a way that will enhance the value of the indexes as research tools and descriptive devices for others concerned with problems of agricultural adjustment. To this end, highlights of major changes in production during the last two decades are noted, some perspective is given on the relative importance of each region in agricultural production, and many of the basic data and factors used to construct the new indexes are presented.

New data on the feed fed to livestock in the base period were incorporated into the series,⁴ as was a feed efficiency factor for production of broilers and turkeys. Hatching eggs produced for production of broilers and chickens are now subtracted from gross livestock production when combining production of crops and livestock into farm output. This is done to avoid counting of hatching eggs in both production of broilers and chickens, and production of eggs.

In an ideal regional breakdown of farm output, areas with a high degree of homogeneity as to type of farming should be

²Loomis, R. A. and Barton, G. T. Productivity of Agriculture, United States 1870 to 1958. (In process.)

³Darost D. D. and Barton, G. T. Changing Sources of Farm Output. U. S. Dep. Agr. Prod. Res. Rpt. 36, Feb. 1960.

⁴See appendix, page 24.

grouped together. Such a grouping would involve a large number of regions that cut across State boundaries. Owing to lack of data and limitations on research resources, this ideal cannot be attained. Presentation of the farm output and related index series on the basis of 10 farm production regions is a definite improvement, however, as these regions are believed to have more agricultural homogeneity than the nine census geographic regions previously used. The new regions and the States included in each are as follows: Northeast - Maine, New Hampshire, Vermont, Massachusetts, Rhode Island, Connecticut, New York, New Jersey, Pennsylvania, Delaware, Maryland; Lake States - Michigan, Wisconsin, Minnesota; Corn Belt - Ohio, Indiana, Illinois, Iowa, Missouri; Northern Plains - North Dakota, South Dakota, Nebraska, Kansas; Appalachian - Virginia, West Virginia, North Carolina, Kentucky, Tennessee; Southeast - South Carolina, Georgia, Florida, Alabama; Delta States - Mississippi, Arkansas,

Louisiana; Southern Plains - Oklahoma, Texas; Mountain - Montana, Idaho, Wyoming, Colorado, New Mexico, Arizona, Utah, Nevada; Pacific - Washington, Oregon, California.

The index series for each region is available annually from 1939 to date. On a United States basis, the series are available annually from 1910 to date. For years prior to 1910, indexes of farm output were calculated for the United States at decade intervals back to 1870.

Important regional changes in production are hidden when farm output is measured on a national basis. Research workers and other interested persons will find this report useful as it gives a perspective of the relative importance of each region's contribution to total farm production of the United States. The importance of each commodity group in total livestock production and in total crop production is shown for each region, as well as for the United States.

FARM OUTPUT

Farm output, or the combined volume of production of crops and livestock for human use, has increased more than has population during the last two decades. In 1956-58, farm output in the United States was 43 percent greater than it was in 1939-41 compared with an increase of 30 percent in population (fig. 1).

All regions contributed to the upsurge in farm output, as is indicated in figure 2. The greatest increases occurred in the Northern Plains, Mountain, and Pacific Regions where production increased about 60 percent from 1939-41 to 1956-58 (table 1). In the Appalachian, Delta, and Southern Plains States, output did not increase as much as 30 percent during this period. A sharp decline in the acreages of cropland used for crops, along with a shift in the type of farming, occurred in the latter regions.

Owing chiefly to favorable price-cost relationships during and following World War II, farm output increased at a much faster rate from 1939-41 to 1947-49 than from 1947-49 to 1956-58. Annual rates of change in farm output varied among regions--from 1.61 to 4.56 percent in the earlier period and from 0.33 to 2.78 percent in the latter period. The significance of these rates of change is reflected in the time required to double the volume of output. At a 1-percent annual rate of growth,

volume will double in 70 years, but at a 3-percent rate, only 24 years are required to double output.

The shift from animal to mechanical power that occurred was an important source of increased farm output. Fully a fifth of the increase in output from 1939-41 to 1956-58 was associated with the reduction in number of horses and mules on farms. Numbers of horses and mules decreased 11 million from 1939-41 to 1956-58. As a result, large amounts of land, labor, and capital were released from production of animal power to production of livestock and crops for market. More than 35 million acres of cropland alone were released. This is equivalent to 10 percent of the total acreage of cropland used in 1956-58.

Crop production far outweighs livestock production in the composition of farm output.⁵ In 7 of the 10 production regions, as well as for the United States as a whole, crop production accounted for 65 percent or more of farm output in 1956-58 (table 2). Crops accounted for more than 70 percent of output in the Northern Plains and Pacific States. Only in the Northeast was livestock production as important as crop production.

⁵See appendix for an explanation of the methodology used to construct the series on farm output.

FARM OUTPUT AND POPULATION

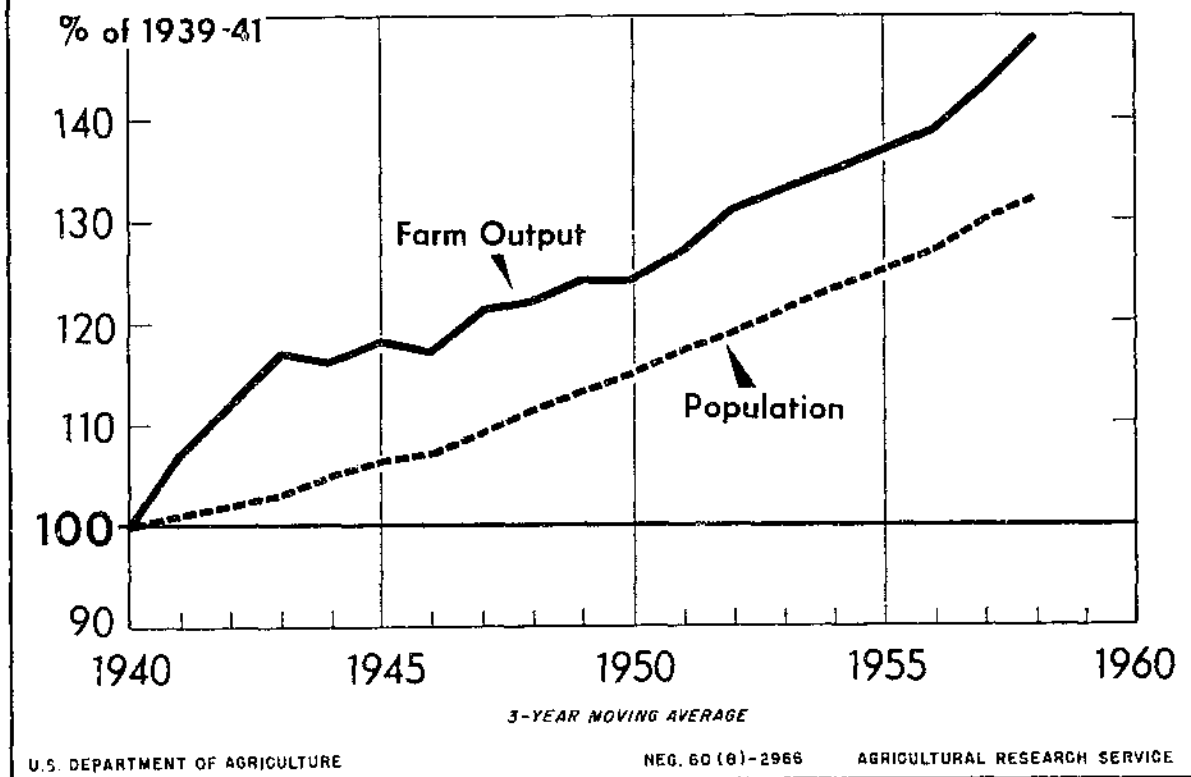
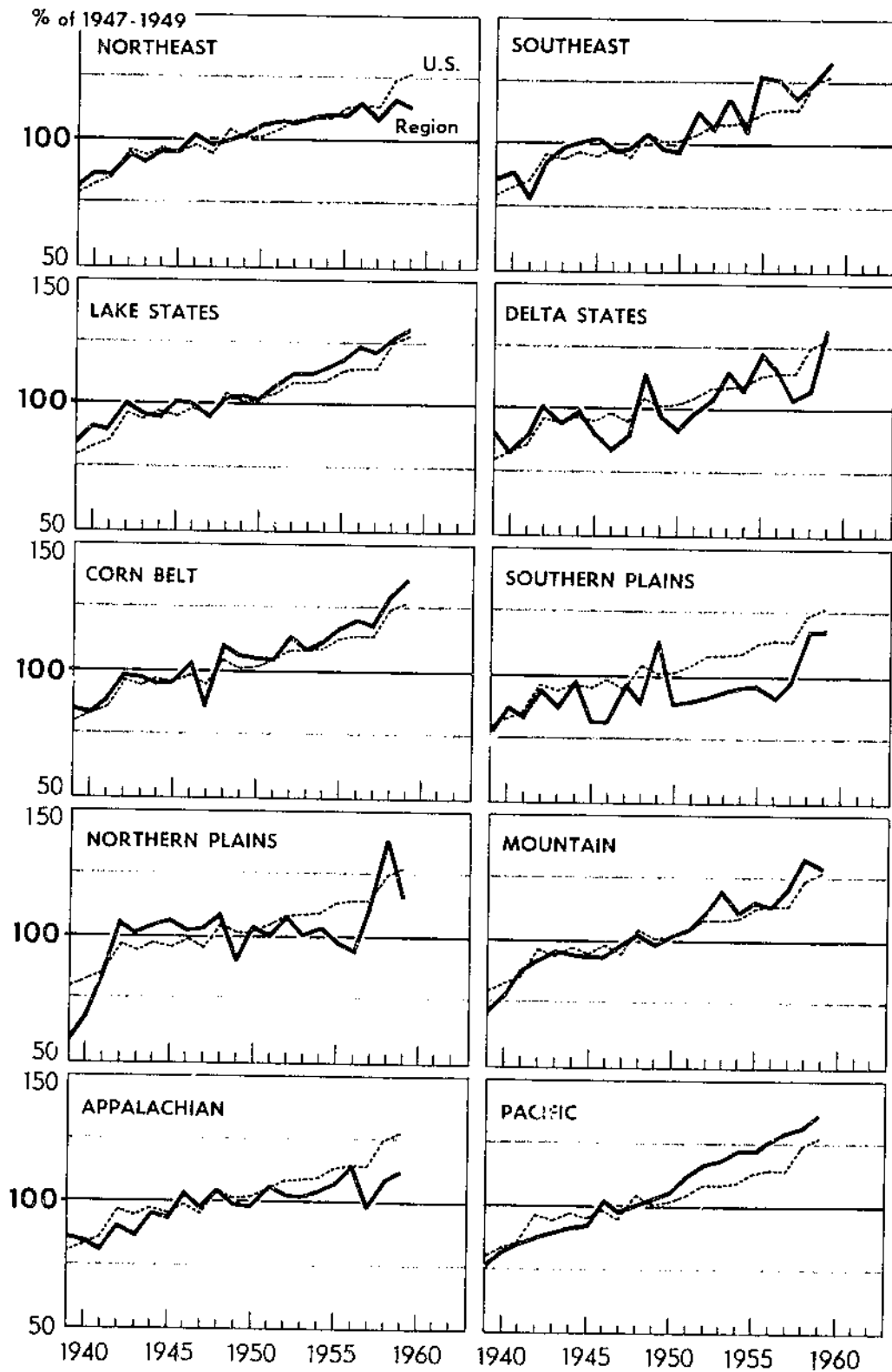


Figure 1

TABLE 1.--Change in farm output, by regions, specified periods, 1939-58

Region	Percentage increase			Annual rate of growth		
	1939-41 100-1941	1941-49 100-1949	1939-49 100-1949	1939-41 50-1941	1941-49 50-1949	1939-49 50-1949
	Percent	Percent	Percent	Percent	Percent	Percent
Northeast.....	27	14	34	2.7	1.47	1.94
Lake States.....	14	23	37	1.41	2.33	1.91
Corn Belt.....	27	23	50	2.69	2.33	2.50
Northern Plains..	22	15	37	2.20	1.50	1.90
Appalachian.....	27	11	38	2.36	.90	1.51
Southeast.....	12	22	34	1.20	2.23	2.12
Delta.....	10	8	18	1.00	.86	1.22
Southern Plains..	22	3	25	2.21	.33	1.3
Mountain.....	28	23	51	3.15	2.33	2.71
Pacific.....	23	27	50	2.30	2.78	2.73
United States..	22	17	39	2.21	1.76	2.11

FARM OUTPUT



U.S. DEPARTMENT OF AGRICULTURE

NEG 60(81)-2967

AGRICULTURAL RESEARCH SERVICE

Figure 2

TABLE 2.--Components of farm output, by regions, average 1956-58¹

Region	Farm output	Net livestock ²		Net crop ³	
		Amount	Percentage of farm output	Amount	Percentage of farm output
	Million dollars	Million dollars	Percent	Million dollars	Percent
Northeast.....	2,697.4	1,359.7	50.4	1,337.7	49.6
Lake States.....	3,660.1	1,421.2	38.8	2,238.9	61.2
Corn Belt.....	7,815.6	3,705.4	34.6	4,110.2	65.4
Northern Plains.....	3,663.7	967.9	26.4	2,695.8	73.6
Appalachian.....	2,655.2	860.6	32.4	1,794.6	67.6
Southeast.....	2,148.0	766.5	35.7	1,381.5	64.3
Delta.....	1,635.7	539.7	33.0	1,096.0	67.0
Southern Plains.....	2,658.8	922.3	34.7	1,736.5	65.3
Mountain.....	2,191.7	751.7	32.0	1,440.0	65.7
Pacific.....	3,361.3	952.2	28.3	2,409.1	71.7
United States.....	32,487.5	11,197.2	34.5	21,290.3	65.5

¹ Production expressed in 1947-49 dollars.

² Gross livestock production other than horses and mules minus hay and concentrates fed and hatching eggs.

³ Gross crop production minus hayseeds, pasture seeds, cover-crop seeds, and the hay and concentrates fed farm horses and mules.

The relative contribution of the individual regions to total farm output changed very little between 1939-41 and 1956-58 (table 3). The Corn Belt is the major producing area of the country; it contributes close to a fourth of the total farm output. In 1956-58,

the three north-central regions produced 47 percent of the total output, compared with 8 percent for the Northeast, 28 percent for the four southern regions, and 17 percent for the two western regions.

TABLE 3.--Average distribution of farm output, by regions, specified periods, 1939-58¹

Region	1939-41		1947-49		1956-58	
	Amount	Percentage	Amount	Percentage	Amount	Percentage
	Million dollars	Percent	Million dollars	Percent	Million dollars	Percent
Northeast.....	2,011.9	8.8	2,377.5	8.6	2,697.4	8.3
Lake States.....	2,620.8	11.5	2,965.9	10.7	3,660.1	11.3
Corn Belt.....	5,432.8	23.8	6,386.9	23.1	7,815.6	24.1
Northern Plains...	2,235.0	9.8	3,191.3	11.5	3,663.7	11.3
Appalachian.....	2,065.5	9.1	2,493.2	9.0	2,655.2	8.2
Southeast.....	1,490.2	6.5	1,756.2	6.3	2,148.0	6.6
Delta.....	1,319.4	5.8	1,511.7	5.5	1,635.7	5.0
Southern Plains...	2,131.0	9.3	2,590.0	9.4	2,658.8	8.2
Mountain.....	1,401.6	6.1	1,786.8	6.4	2,191.7	6.7
Pacific.....	2,114.9	9.3	2,626.3	9.5	3,361.3	10.3
United States...	22,823.1	100.0	27,685.8	100.0	32,487.5	100.0

¹ Production expressed in 1947-49 dollars.

CROP PRODUCTION

The index of crop production measures the gross volume of crops produced during the year regardless of its eventual disposition.

A wide variety of crops is produced in the United States owing to its large size and wide variation in weather and soils. Each region also produces many crops, although usually one type of crop production predominates. The north-central regions tend to produce grains, the southern regions cotton and tobacco, while in the Northeast and the western regions, crop production tends to be weighted heavily by vegetables and fruits (table 4).⁶

The importance of livestock and livestock products in our national diet is reflected in the dominance of production of feed grains and hay, which accounted for 47 percent of the total crop production of the United States in 1956-58. Corn, the principal feed crop, accounted for a fourth of the total crop production. This production was greater than the combined production of fruits, nuts, vegetables, and sugar crops. The combined production of food grains and oil crops was

responsible for about a fifth of our total crop production. Tobacco and cotton contributed 4 and 10 percent, respectively, of the total.

Regional contributions to total crop production in 1956-58 varied from 5 percent in the Delta States to about 24 percent in the Corn Belt (table 5). A large part of this variation is due to differences in amount of cropland available for crops in each region. The north-central regions, which produced 47 percent of the total crop production in 1956-58, had more than 55 percent of the total acreage of cropland used for crops. Close to a fourth of the cropland in the United States is in the South, which produced 29 percent of the total crop outturn. The Northeast and the West contributed 6 and 18 percent, respectively, of the total crop production.

Regional contributions to total crop production during the last two decades have shifted only slightly. The Northeast and the South contributed less of the total in 1956-58 than they did two decades earlier.

Because of the relative weight of crop production in farm output, the general trend

TABLE 4.--Composition of crop production, by regions, average 1956-58

Region	Feed crops ¹	Food grains ²	Vegetables ³	Fruits and nuts ⁴	Sugar crops ⁵	Cotton ⁶	Tobacco	Oil crops ⁷	Seed crops ⁸	Miscellaneous crops ⁹	Total
	Percent	Percent	Percent	Percent	Percent	Percent	Percent	Percent	Percent	Percent	Percent
Northeast.....	49.0	5.1	28.2	9.7	0.5	0	4.4	1.4	0.2	1.1	100.0
Lake States.....	70.7	5.6	9.4	3.1	1.2	0	1.2	8.5	1.5	1.0	100.0
Corn Belt.....	70.5	7.3	1.6	.7	.1	1.0	.3	10.5	.5	1.4	100.0
Northern Plains..	55.2	34.1	1.0	.1	.7	0	0	6.8	.5	1.7	100.0
Appalachian.....	35.4	2.8	4.4	3.2	.1	7.2	34.5	6.3	.1	1.2	100.0
Southeast.....	25.8	1.2	10.8	15.0	.8	17.4	9.7	8.4	.7	3.0	100.0
Delta.....	19.3	11.3	3.2	2.1	4.0	43.3	0	11.4	.5	4.3	100.0
Southern Plains..	39.4	17.4	4.6	1.1	0	40.3	0	1.1	.5	1.2	100.0
Mountain.....	31.0	25.0	17.1	1.8	5.1	12.1	0	.2	1.4	1.1	100.0
Pacific.....	23.6	12.6	20.6	13.8	2.8	11.0	0	.3	2.0	1.1	100.0
United States..	47.4	12.1	9.7	5.0	1.2	9.7	3.1	7.7	1.9	2.3	100.0

¹ All corn, oats, barley, sorghum grain, all hay, sorghum forage, and sorghum silage.

² All wheat, rye, buckwheat, and rice.

³ Potatoes, sweet potatoes, dry edible beans, dry field peas, vegetables for processing, and vegetables for fresh market.

⁴ Fruit, berries, and tree nuts.

⁵ Sugar beets, sugarcane for sugar and seed, sugarcane sirup, cottonseed sirup, maple sirup, and maple sirup.

⁶ Belt lint and cottonseed.

⁷ Soybeans, peanuts, pitted and shelled, peanuts legged, flaxseed, and linseed.

⁸ Dry beans, pasture seeds, and cover-crop seeds.

⁹ Farm gardens, clovers, hays, br. vetch, alfalfa, peppermint, and spearmint.

⁶As used in this report, the north-central regions include the Lake States, Corn Belt, and Northern Plains; the southern regions include the Appalachian, Southeast, Delta States, and Southern Plains; and the western regions include the Mountain and Pacific States. The Northeast is in itself a farm production region.

of crop production in the United States follows closely the trend in farm output. Annually, there is considerably more fluctuation in the index of crop production than

TABLE 5. --Average distribution of crop production, by regions, specified periods, 1939-58¹

Region	1939-41		1947-49		1956-58	
	Amount	Percentage	Amount	Percentage	Amount	Percentage
	<u>Million dollars</u>	<u>Percent</u>	<u>Million dollars</u>	<u>Percent</u>	<u>Million dollars</u>	<u>Percent</u>
Northeast.....	1,267.0	7.6	1,358.4	6.9	1,357.3	6.3
Lake States.....	1,726.1	10.3	1,853.4	9.4	2,258.0	10.4
Corn Belt.....	3,706.8	22.2	4,235.4	21.4	5,149.0	23.8
Northern Plains..	1,694.5	10.2	2,446.4	12.4	2,717.4	12.5
Appalachian.....	1,747.3	10.5	2,005.6	10.2	1,873.8	8.6
Southeast.....	1,322.6	7.9	1,478.1	7.5	1,430.8	6.6
Delta.....	1,168.1	7.0	1,270.1	6.4	1,126.1	5.2
Southern Plains..	1,532.9	9.2	1,857.4	9.4	1,757.0	8.1
Mountain.....	942.5	5.7	1,267.4	6.4	1,529.3	7.1
Pacific.....	1,573.0	9.4	1,980.1	10.0	2,482.2	11.4
United States..	16,680.8	100.0	19,752.3	100.0	21,680.0	100.0

¹ Production expressed in 1947-49 dollars.

in the farm output index because of the unstabilizing effect of weather on crop production (fig. 3).

Total crop production is a function of the acreage of cropland used for crops and of crop production per acre. The national acreage of cropland has remained virtually unchanged since 1939 (fig. 4). The flat trend resulted from compensating changes in the cropland bases of the various farm production regions. In general, the Northeast and the South had a downward trend, while the north-central and western regions had an upward trend in acreage of cropland.

Crop production per acre in the United States has trended upward since 1939 (fig. 5). All regions except the Northern Plains and the Mountain States have had persistent upward trends. If, for the Northern Plains and the Mountain States, the terminal years of the period are excluded, the overall trend in crop production per acre has been downward in these regions.

Adoption of improved farming practices has been the chief factor behind the upward trend in crop production per acre. The lag between the time a new farming practice is proved to be economically feasible and its general adoption by farmers seems to be decreasing. In 1955, for example, very little hybrid sorghum seed was used. In 1959,

hybrid seed was used on about two-thirds of the sorghum acreage. This is in sharp contrast to hybrid corn, which required 13 years to attain the same degree of use of hybrid seed.

From 1939-41 to 1956-58, total crop production in the United States increased 29 percent, or at an annual rate of 1.53 percent (table 6). Greater crop production per acre was chiefly responsible. Crop production per acre increased at an annual rate of 1.64 percent (table 7). Total acreage of cropland used for crops, however, remained relatively constant (table 8).

The important producing regions - the Lake States, Corn Belt, and Northern Plains - increased their total crop production at an annual rate of 1.61, 2.01, and 2.83 percent, respectively, in the period. In general, increases in both crop production per acre and acreage of cropland contributed to the overall rise in total crop outturn in these regions.

The Northeast and the Southern States had the smallest change in total crop production from 1939-41 to 1956-58; only in the Southern Plains did crop production increase at a rate of more than one-half of 1 percent annually. Here, as in the Northern Plains, variations in weather may influence greatly the implied rate of change. The Northeast

CROP PRODUCTION

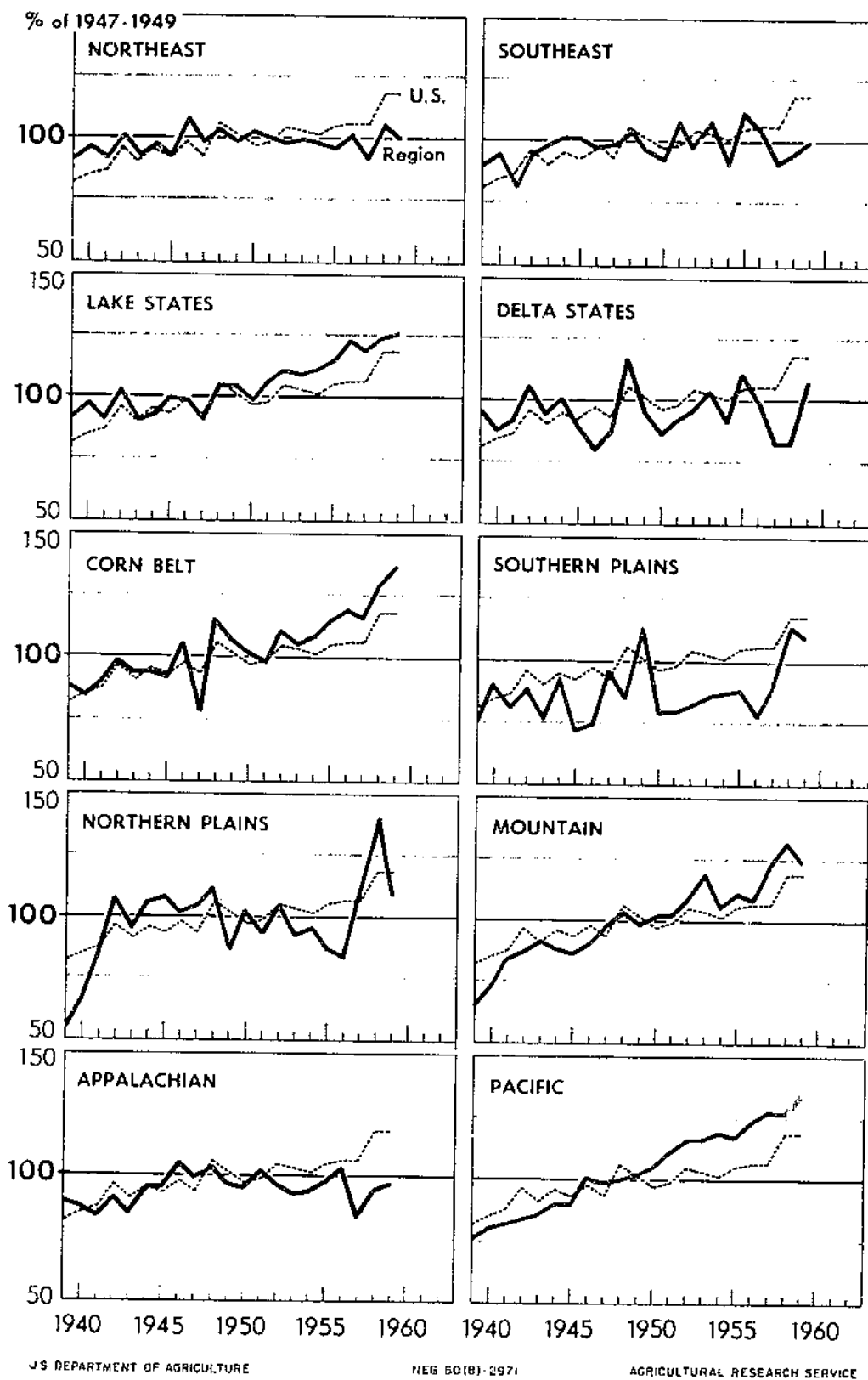
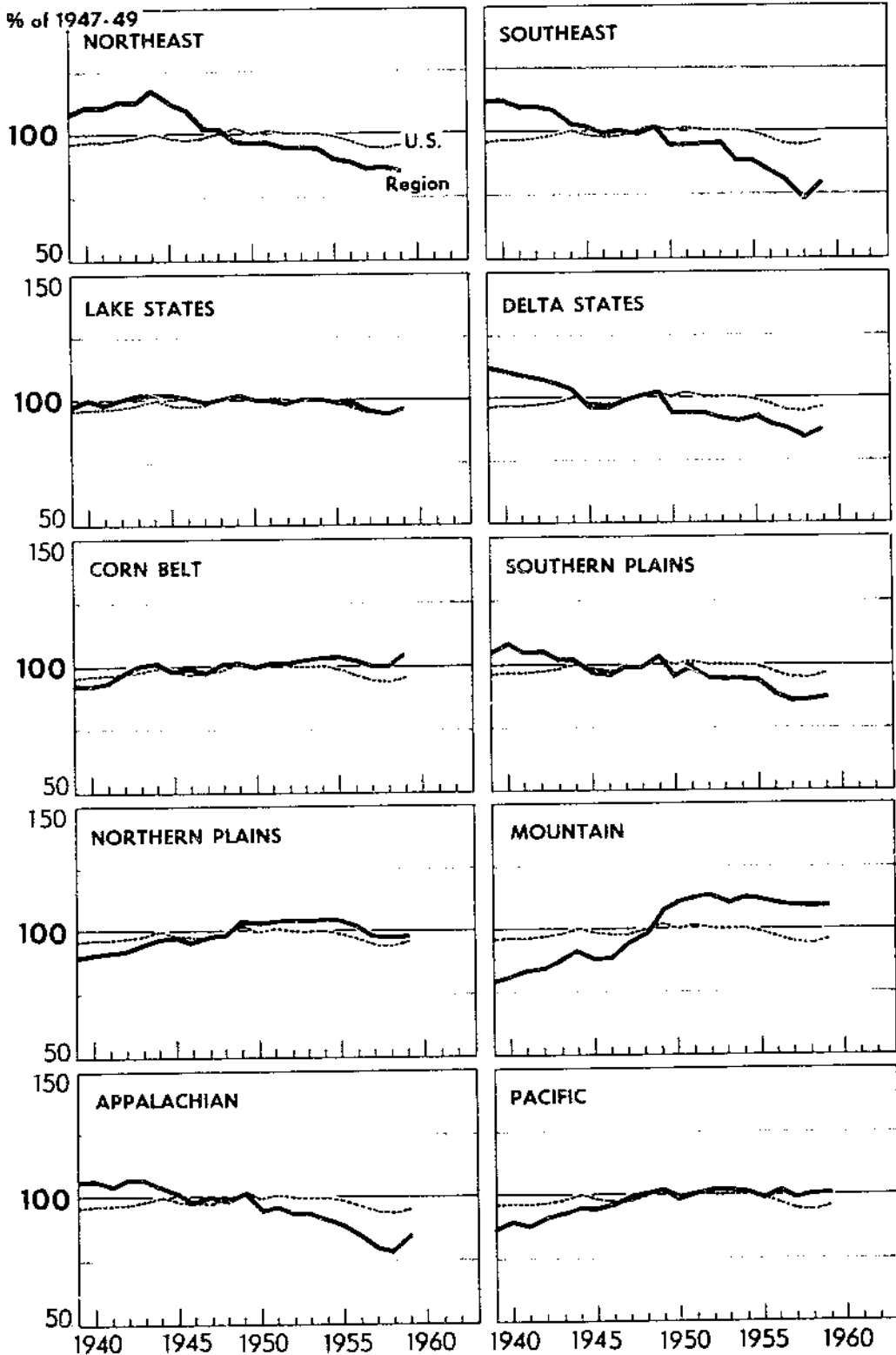


Figure 3

CROPLAND USED FOR CROPS



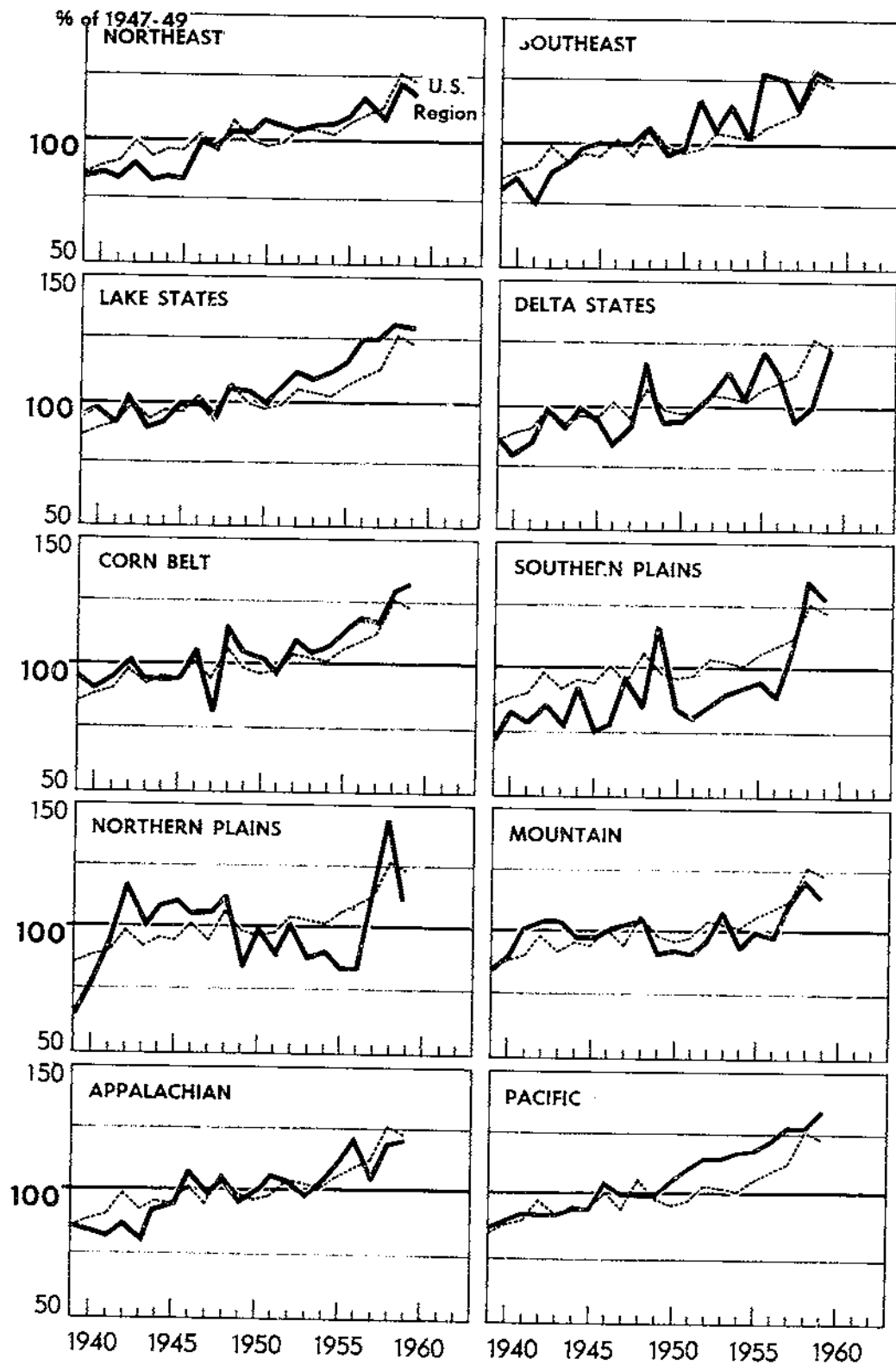
U.S. DEPARTMENT OF AGRICULTURE

NEG 60(8)-2970

AGRICULTURAL RESEARCH SERVICE

Figure 4

CROP PRODUCTION PER ACRE



U.S. DEPARTMENT OF AGRICULTURE

NEG. 60 (8)-2969

AGRICULTURAL RESEARCH SERVICE

Figure 5

TABLE 6.--Percentage change in crop production, by regions, specified periods, 1939-58

Region	Percentage change			Annual rate of change		
	1939-41 to 1947-49	1947-49 to 1956-58	1939-41 to 1956-58	1939-41 to 1947-49	1947-49 to 1956-58	1939-41 to 1956-58
	Percent	Percent	Percent	Percent	Percent	Percent
Northeast.....	8	0	2	0.11	0	0.43
Lake States.....	8	22	31	0.91	2.23	1.61
Corn Belt.....	15	22	40	1.70	2.23	2.01
Northern Plains...	45	11	11	4.70	1.11	2.83
Appalachian.....	15	-	-	1.76	-0.80	0.39
Southeast.....	12	-3	9	1.47	-0.34	0.11
Delta.....	9	-11	-3	1.00	-1.29	-0.20
Southern Plains...	20	-5	14	2.36	-0.50	0.80
Mountain.....	38	21	64	3.83	2.14	2.93
Pacific.....	27	25	52	2.99	2.51	2.74
United States...	18	10	29	2.05	1.56	1.79

TABLE 7.--Percentage change in crop production per acre, by regions, specified periods, 1939-58

Region	Percentage change			Annual rate of change		
	1939-41 to 1947-49	1947-49 to 1956-58	1939-41 to 1956-58	1939-41 to 1947-49	1947-49 to 1956-58	1939-41 to 1956-58
	Percent	Percent	Percent	Percent	Percent	Percent
Northeast.....	18	15	35	2.05	1.56	1.79
Lake States.....	8	26	34	0.91	2.60	1.74
Corn Belt.....	15	21	29	1.78	2.14	1.90
Northern Plains...	32	13	49	3.49	1.37	2.36
Appalachian.....	20	14	37	2.36	1.47	1.88
Southeast.....	20	22	52	2.83	2.23	2.51
Delta.....	20	2	23	2.36	0.22	1.22
Southern Plains...	28	11	42	3.15	1.17	2.15
Mountain.....	9	18	20	1.05	1.80	1.00
Pacific.....	11	25	37	1.33	2.51	1.95
United States...	18	10	32	1.81	1.56	1.68

and each of the southern regions had increases in crop production per acre ranging from 1.22 to 2.51 percent annually. However, the acreages of cropland used for crops in these regions in 1956-58 were smaller than in 1939-41. The Southeast had the greatest decrease in acreage of cropland of any region, decreasing 29 percent, or 1.98 percent annually from 1939-41 to 1956-58. But the rise in crop output per acre more than offset the decline in acreage. Only in the Delta States did the decrease

in acreage more than offset greater crop production per acre, thus reducing total crop production slightly.

The western regions had the greatest overall increase in total crop production from 1939-41 to 1956-58. The Mountain and Pacific States showed annual increases of 2.93 and 2.74 percent, respectively. These regions tend to have less year-to-year fluctuation than other areas partly because of the extensive use of irrigation.

TABLE 8.--Percentage change in acreage of cropland used for crops, by regions, specified periods, 1939-58

Region	Percentage change			Annual rate of change		
	1939-41	1947-49	1939-41	1939-41	1947-49	1939-41
	to	to	to	to	to	to
	1947-49	1956-58	1956-58	1947-49	1956-58	1956-58
	Percent	Percent	Percent	Percent	Percent	Percent
Northeast.....	-9	-13	-21	-2.18	-1.54	-1.37
Lake States.....	1	-3	-2	.13	-.34	-.12
Corn Belt.....	8	1	9	.91	.11	.09
Northern Plains..	13	-1	1	1.17	-.12	.00
Appalachian.....	-9	-13	-22	-.61	-2.18	-1.44
Southeast.....	-10	-21	-29	-1.30	-2.18	-1.98
Delta.....	-10	-13	-22	-1.13	-1.54	-1.43
Southern Plains..	-6	-14	-19	-.72	-1.66	-1.22
Mountain.....	23	9	35	2.00	.96	1.76
Pacific.....	14	0	14	1.01	0	.76
United States..	3	-3	-2	.50	-.11	-.12

Additions to both crop production per acre and the acreage of cropland contributed to the greater total crop production. The Mountain States had the greatest regional increase in acreage of cropland from 1939-41 to 1956-58, but it had also the smallest change in crop production per acre. However, the net result of these changes in the Mountain States resulted in the greatest regional increase in total crop production.

In short, all regions except the Delta States had increases in total crop production between 1939-41 and 1956-58. Each region had increases in crop production per acre. But the acreage of cropland used for crops increased in the north-central and western regions, while it decreased in the Northeast and the southern regions.

Total crop production in the United States increased twice as fast in the 1939-41 to 1947-49 period as in the 1947-49 to 1956-58 period. The difference in the rates of increase was due to changes in acreage of cropland used, as the rate of change in crop production per acre was about the same in the both periods.

Rates of change in crop production were not consistent throughout all of the two decades in the various regions. Because of the wartime demand and the low level of production in the Plains States in 1939-41, crop production increased at a much faster rate in the first half of the period

than in the last half. From 1939-41 to 1947-49, the annual rate of increase in crop production varied from 0.91 percent in the Northeast and the Lake States to 4.75 percent in the Northern Plains. It varied from an annual decrease of 1.29 percent in the Delta to an increase of 2.51 percent in the Pacific Region from 1947-49 to 1956-58.

During the last half of the period 1939-41 to 1956-58, only the Corn Belt and Lake States attained larger increases in total crop production than in the previous period. The Northeast had the same volume of crop production in 1956-58 as in 1947-49. But all of the southern regions produced a smaller volume in 1956-58 than in 1947-49.

Crop production per acre increased in all regions in both parts of the 1939-41 to 1956-58 period. Most regions increased at a faster rate in the first half than in the second half of the period. The Corn Belt, the Lake States, and the Pacific Region were the only regions that showed a greater increase in crop production per acre in the last half of the period. However, they are important producing regions, and their influence made possible an increase in United States crop production per acre at about the same rate in both parts of the period.

The total acreage of cropland used for crops in the United States increased by less

than one-half of 1 percent annually during the first half of the 1939-41 to 1956-58 period, but decreased by one-half of 1 percent annually in the second half. Part of the decrease was due to the Soil Bank Program, which was in effect in 1956-58. Compared with the earlier half of the period, the decrease during the second half was general for all regions of the United States. Regions that had a downward trend in

acreage of cropland during the first half of the period decreased at a faster rate in the second half. Regions that had increased their acreages during the first half either reduced their acreages or failed to increase as fast in the last half of the period. Only the Corn Belt and Mountain States increased their acreages of cropland in both halves of the period.

LIVESTOCK

The index of production of livestock and livestock products measures the gross volume of livestock and livestock products other than horses and mules produced during the calendar year.

Livestock and livestock products are produced in all 10 regions, but they tend to be concentrated in the north-central regions. It is in these regions that a large part of our national supply of feed crops is produced. The combined production of the north-central regions accounted for half of the 1956-58 livestock output for the country as a whole (table 9). The southern regions produced about a fourth of the total, while the combined output of the Northeast and the western regions accounted for the remaining fourth.

The relative contribution of the individual regions to total livestock production in the United States varied from 4 to 28 percent. Only three regions produced more than 10 percent each of the total livestock output. The Corn Belt is by far the leading livestock-producing area. In 1956-58, it supplied 28 percent of the total livestock production. The Northeast and the Lake States are the second largest producers of livestock and livestock products. Each of these regions produced 13 percent of the total.

The regional distribution of livestock production in the United States changed very little between 1939-41 and 1956-58. The greatest increase occurred in the Southeast, which increased its share of the

TABLE 9.--Distribution of livestock production, by regions, specified periods, 1939-58¹

Region	1939-41		1947-49		1956-58	
	Amount	Percentage	Amount	Percentage	Amount	Percentage
	Million dollars	Percent	Million dollars	Percent	Million dollars	Percent
Northeast.....	1,764.8	12.2	2,123.8	12.8	2,546.1	12.6
Lake States.....	2,054.7	14.2	2,244.0	13.6	2,650.2	13.1
Corn Belt.....	4,295.7	29.6	4,807.3	29.2	5,586.4	27.7
Northern Plains..	1,413.9	9.7	1,645.9	10.0	1,883.8	9.3
Appalachian.....	1,052.8	7.3	1,298.8	7.9	1,619.0	8.0
Southeast.....	511.2	3.5	666.7	4.0	1,242.8	6.2
Delta.....	462.1	3.2	535.1	3.2	782.3	3.9
Southern Plains..	1,130.2	7.8	1,173.1	7.1	1,292.0	6.4
Mountain.....	884.4	6.1	948.8	5.7	1,128.8	5.6
Pacific.....	928.4	6.4	1,379.0	8.5	1,461.6	7.2
United States..	14,497.3	100.0	16,520.1	100.0	20,193.0	100.0

¹ Production expressed in 1947-49 dollars.

United States total from 3.5 percent in 1939-41 to 6.2 percent in 1956-58. The Corn Belt's share decreased 2 percent, while the share of the Lake States and the Southern Plains decreased 1 percent in the two decades. The share of the remaining regions fluctuated by less than 1 percent.

Production of meat animals--cattle and calves, hogs, and sheep and lambs--is by far the chief type of livestock production in the United States, accounting for half of the total livestock production in 1956-58 (table 10). Dairy products and poultry products each made up about a fourth of the total.

In 1939-41, production of meat animals also accounted for half of the total livestock output, but dairy production accounted for 30 percent and only 17 percent came from poultry production. The development of the broiler industry has been mainly responsible for the relative increase in poultry products. In 1939-41, the United States produced 426 million pounds of broilers, but by 1956-58, production had increased to 11 times this amount.

Production of meat animals is the chief type of livestock production in 6 of the 10 regions. The exceptions are the Lake States and the Southeast, where it is the second ranking type of livestock production, and

the Northeast and Pacific States, where it is in third place.

Dairy production is the leading type of livestock production in the Northeast and the Lake States. In the Northeast, however, poultry production is a close second in relative importance. In 1939-41, poultry production rated second only in the Northeast and third in all other regions. It is now the leading source of livestock production in the Southeast and the Pacific States. The Pacific States are unique in that the three major types of livestock production--meat animal, dairy, and poultry--are of about equal importance.

Total livestock production increased sharply in all regions during the World War II period (fig. 6). This was due mainly to the great increase in hog production, which rose from 17 billion pounds in 1940 to 25 billion pounds in 1943. By the late forties, total livestock production had decreased to a postwar low. This again was due chiefly to the decrease in hog production, which dropped to 18 billion pounds in 1948. Since 1949, most regions have had a persistent upward trend in total livestock production.

Livestock production fluctuates less from year to year than does crop production.

TABLE 10. --Composition of livestock production, by regions, 1956-58

Region	Meat animals ¹	Dairy products ²	Poultry products ³	Miscellaneous ⁴	Total
	Percent	Percent	Percent	Percent	Percent
Northeast.....	12.4	46.2	41.2	0.2	100.0
Lake States.....	39.1	43.5	16.9	.5	100.0
Corn Belt.....	67.9	16.9	14.9	.3	100.0
Northern Plains.....	75.0	12.2	12.1	.7	100.0
Appalachian.....	39.9	27.7	31.8	.6	100.0
Southeast.....	33.1	19.7	46.6	.6	100.0
Delta.....	42.4	22.1	35.3	.2	100.0
Southern Plains.....	59.2	17.9	20.4	2.5	100.0
Mountain.....	70.5	15.2	9.7	4.0	100.0
Pacific.....	30.8	33.6	34.3	1.3	100.0
United States.....	49.3	26.1	23.8	.8	100.0

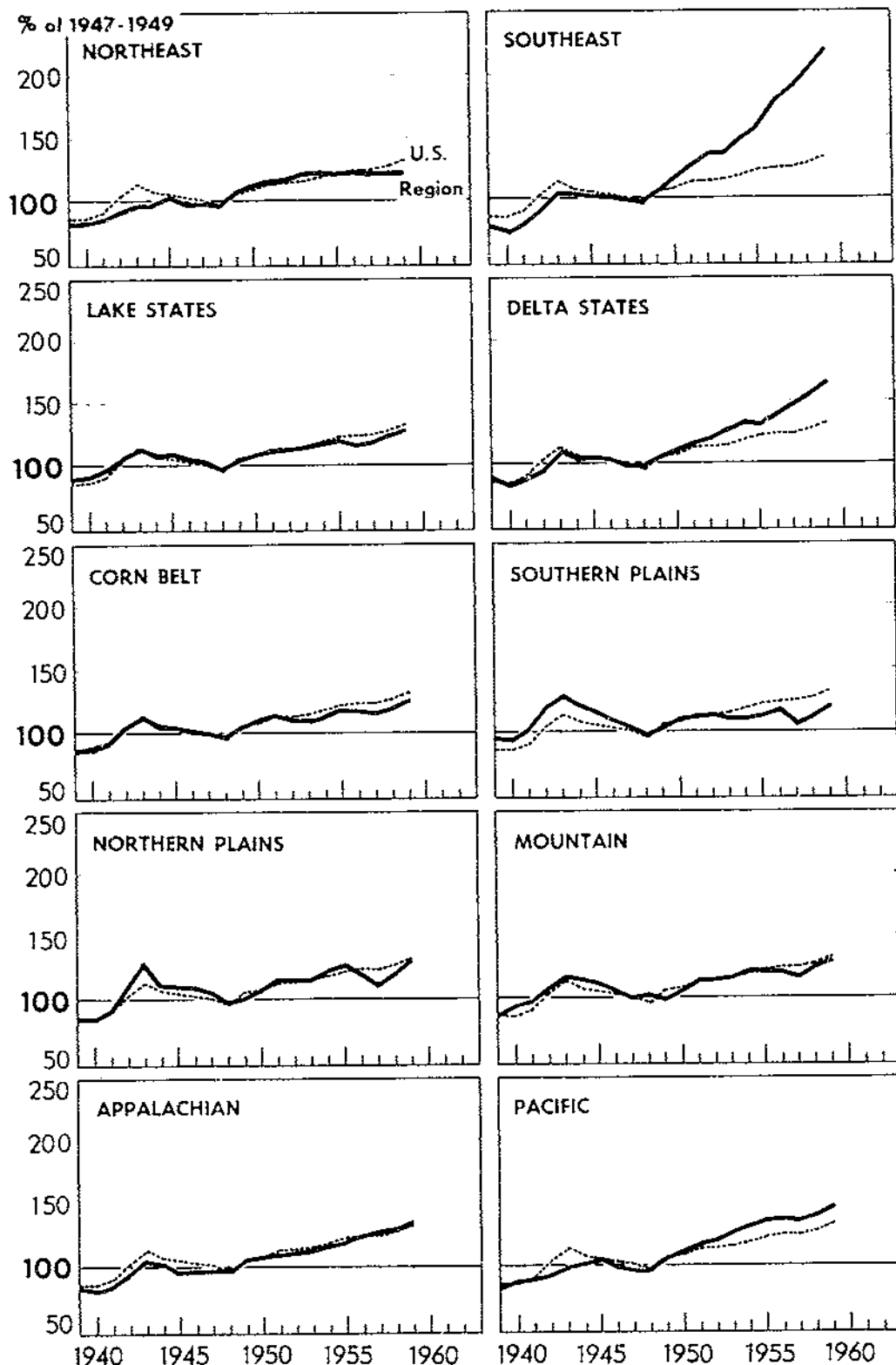
¹ Cattle and calves, sheep and lambs, and hogs.

² Butter, butterfat, wholesale milk, retail milk, and milk consumed on farms.

³ Chicken eggs, commercial broilers, chickens, and turkeys.

⁴ Includes clipped wool, mohair, honey, and beeswax.

LIVESTOCK PRODUCTION



U.S. DEPARTMENT OF AGRICULTURE

NEG 601(8)-2968

AGRICULTURAL RESEARCH SERVICE

Figure 6

Variations in weather generally influence livestock production to a lesser extent than crop production. From 1939-41 to 1956-58, livestock production in the United States increased at a faster rate than crop production. It increased at an annual rate of 1.99 percent, or 40 percent in total, compared with an increase of 29 percent in total crop production (table 11).

During the two decades, the number of animal breeding units increased 10 percent. Livestock output per breeding unit--milk per cow, eggs per hen, and pigs per sow--averaged a fourth more in 1956-58 than in 1939-41.

The greatest percentage increase in livestock production from 1939-41 to 1956-58 occurred in the Southeast, where it rose at an annual rate of 5.35 percent. The Delta States, which showed an increase of 3.16 percent annually, had the second greatest change in overall livestock production. The increases in these regions, however, were made from a relatively small production base. The outstanding increase in livestock production in these regions was due chiefly to increased production of

broilers. In 1939-41, for example, the Southeast produced 26 million pounds of broilers but by 1956-58, it produced more than 1,240 million pounds.

Largely because of variations in weather, the smallest overall increase in livestock production was in the Southern Plains. A series of dry years in this area in the early fifties made it necessary to reduce the number of livestock on hand. Thus, the normal or expected livestock cycle that might have been expected with average weather did not materialize.

Unlike crop production, livestock output for the United States increased faster in the last half of the 1939-41 to 1956-58 period than in the first half. The annual rate of change was 1.61 percent in the first half and 2.33 percent in the second half of the period. Only the Northeast, the Northern Plains, and the Appalachian Region increased livestock production at a faster rate in the 1939-41 to 1947-49 period than in the 1947-49 to 1956-58 period. However, the decline in the rate of change in these regions during the latter period was relatively small.

TABLE 11.--Percentage change in livestock production, by regions, specified periods, 1939-58

Region	Percentage change			Annual rate of change		
	1939-41 to 1947-49	1947-49 to 1956-58	1939-41 to 1956-58	1939-41 to 1947-49	1947-49 to 1956-58	1939-41 to 1956-58
	Percent	Percent	Percent	Percent	Percent	Percent
Northeast.....	20	20	45	2.36	2.05	2.19
Lake States.....	9	18	28	1.05	1.86	1.47
Corn Belt.....	12	16	30	1.47	1.66	1.57
Northern Plains..	10	14	33	1.90	1.47	1.67
Appalachian.....	23	25	54	2.67	2.51	2.58
Southeast.....	30	87	143	3.32	7.20	5.35
Delta.....	10	40	70	1.90	4.29	3.16
Southern Plains..	4	10	15	.51	1.06	.80
Mountain.....	7	19	28	.78	1.95	1.46
Pacific.....	16	35	57	1.90	3.39	2.69
United States..	14	23	40	1.61	2.33	1.99

APPENDIX

An important objective of the indexes of farm output and of crop and livestock production is to measure changes in the aggregate physical volume of production. The heterogeneity of agricultural production makes it necessary to aggregate unlikes, such as oranges and eggs. There is no unique way of combining these unlikes, but some common denominator for weighting purposes is necessary. A common denominator may be calories, man-hours, value (price), or some other unit of measurement.

Price was used as the common denominator in each of the production index series. A major limitation of using price weights is the failure of the series to reflect changes in quality of production over time. However, use of regional price weights, differentials that partially reflect differences in quality of individual products, provided a means of reflecting some quality changes in the indexes of production for the United States as a whole.

The following sections of this report give a brief description of the methodology and data used to compute the major production indexes.

Index of Crop Production

The index of crop production measures the yearly changes in the gross volume of crop production. Production data for the crop year are used in calculating the index. All crop production is included regardless of its final disposition. However, in the case of production of vegetables and fruits and nuts, quantities not harvested or utilized because of economic conditions are excluded. Pasture consumed by livestock is excluded also. Therefore, the index of crop production cannot be used as an indicator of changes in crop and pasture production from total farmland. Rather, the index measures production of crops harvested from cropland used for crops.

The index is calculated by the familiar weighted aggregate method. The index number formula used may be expressed symbolically as follows:

$$I = \frac{\sum q_1 p_0}{\sum q_0 p_0} \times 100$$

The I refers to the index number for any given year. Production of an individual crop in any given crop year is denoted by q_1 , and its average production in the reference, or base, period by q_0 . The p_0 refers to the weighted average price received by farmers for an individual crop in the weight period.

The indexes are computed for each of the 10 farm production regions from 1939 to date and for the United States from 1910 to date.¹

Average 1947-49 prices received by farmers were used as weights for 1939 and subsequent years. The regional price weights are the prices received by farmers within each region. The price weights used and the specific crops included in the index of crop production are shown in table 12.

Except in a few instances, the average prices were calculated directly from data obtained from the Agricultural Estimates Division, American Marketing Service. The chief exceptions were for some crops in the vegetable and fruits and nuts groups for certain regions. In these instances, the price weights were estimated by using the relationship between prices of the particular crop and a similar crop in another region. Prices of fresh market vegetables were used as price weights for farm gardens.

The quantity data for a given year are the amounts of each crop produced during the crop year. Except for farm gardens, the source of production data is the Agricultural Estimates Division, AMS. The quantity-price aggregates for each region were obtained by multiplying production in the crop year by the appropriate price weight. The United States aggregate is the sum of the quantity-price aggregates of the 10 regions. Table 13 shows the average 1947-49 quantity-price aggregates for the crops included in the index of crop production for each of the 10 regions and the United States. Data presented give a picture of the relative importance of the various crops and crop groups included in the index.

Quantity data for production of farm gardens were estimates made in the Statis-

¹For methodology used to construct the United States indexes prior to 1939, see Major Statistical Series of the United States Department of Agriculture, U.S. Dept. Agr. Agr. Handbook, No. 118, Volume 2, 1957.

TABLE 12.--Prices used in calculating the index of crop production, farm production regions, average 1947-49

Crop ¹	Unit	North-	Lake	Corn	Northern	Appala-	South-	Delta	Southern	Mountain	Pacific	United
		east	States	Belt	Plains	chian	east	States	Flains			States ²
		Dol.	Dol.	Dol.	Dol.	Dol.	Dol.	Dol.	Dol.	Dol.	Dol.	Dol.
Feed grains:												
All corn.....	Bushel	1.67	1.46	1.48	1.44	1.58	1.58	1.59	1.55	1.63	1.94	1.50
Oats.....	do.	.89	.79	.77	.77	.97	1.03	1.02	.87	.83	.96	.80
Barley.....	do.	1.27	1.47	1.29	1.35	1.31	1.63	1.38	1.22	1.14	1.32	1.30
Sorghum grain.....	do.	--	--	1.41	1.36	1.25	1.37	1.29	1.35	1.33	1.71	1.36
Hay and forage:												
All hay.....	Ton	25.17	21.68	20.84	17.01	27.17	25.52	24.01	21.08	22.85	25.08	22.35
Sorghum forage.....	do.	--	8.25	9.45	7.66	14.48	20.57	15.23	19.45	15.01	15.06	15.43
Sorghum silage.....	do.	--	2.65	2.29	2.46	4.13	4.57	3.50	5.21	2.18	5.47	2.97
Food grains:												
All wheat.....	Bushel	3.10	2.12	2.04	2.11	2.14	2.20	2.11	2.01	1.90	2.05	2.06
Oye.....	do.	1.69	1.65	1.73	1.66	1.97	2.47	--	1.67	1.65	1.60	1.69
Rickwheat.....	do.	1.34	1.37	1.55	1.37	1.55	--	--	--	--	--	1.38
Rice.....	Cwt.	--	--	4.90	--	--	--	4.88	5.35	--	4.57	4.94
Vegetables:												
Fresh market:												
Artichokes.....	Cwt.	--	--	--	--	--	--	--	--	--	8.72	8.72
Asparagus.....	do.	12.70	14.17	14.21	14.33	8.45	10.50	9.61	8.98	10.90	11.47	12.23
Beans, lima.....	do.	7.31	10.11	10.35	10.35	7.17	8.00	8.19	7.51	8.31	8.31	8.28
Beans, snap.....	do.	6.88	8.47	7.23	8.33	6.31	8.30	7.52	7.68	7.68	8.20	7.52
Beets.....	do.	2.12	1.93	2.57	2.16	5.43	5.75	3.89	1.24	3.53	3.24	2.29
Broccoli.....	do.	8.37	7.74	9.98	--	9.98	7.83	7.31	10.25	9.94	7.31	9.57
Brussels sprouts.....	do.	11.07	--	--	--	--	--	--	10.27	10.27	11.54	11.54
Cabbage.....	do.	1.78	1.66	2.13	1.64	2.01	2.11	2.03	1.01	1.55	1.75	1.74
Cantaloupes.....	do.	3.13	4.74	2.61	2.99	2.31	2.31	1.60	4.60	3.47	4.14	2.97
Koneyball melons.....	do.	--	--	--	--	--	--	--	--	5.51	5.51	5.51
Kenya melons.....	do.	--	--	--	4.49	--	--	--	4.33	4.33	4.23	4.23
Okra.....	do.	2.91	1.83	2.64	1.81	3.54	3.81	4.88	1.57	4.48	4.09	4.15
Onionflowers.....	do.	3.12	5.24	6.77	5.24	5.66	5.66	5.32	4.19	3.17	4.19	3.58
Peas.....	do.	3.77	4.1	4.12	2.18	4.84	4.84	4.55	2.79	4.24	4.24	4.21
Peas, sweet.....	do.	2.65	3.12	3.15	1.98	4.70	4.87	3.59	3.27	2.28	3.84	1.59
Peas, green.....	do.	3.04	4.48	4.37	4.46	3.45	5.80	3.81	5.84	2.93	3.49	4.60
Potatoes.....	Cwt.	3.23	4.23	3.36	3.16	6.15	5.64	4.53	6.78	3.23	3.17	4.24
Radishes.....	do.	2.95	2.94	5.85	2.89	6.14	5.17	4.81	4.56	4.35	4.71	4.41
Rutabaga.....	do.	1.49	3.16	2.34	--	1.81	4.11	4.11	--	--	4.11	3.73
Lettuces.....	do.	4.26	1.70	7.79	7.13	5.83	4.85	8.68	4.32	4.14	4.44	4.42
Spinach.....	do.	3.45	3.4	4.56	4.4	3.79	3.35	4.03	4.31	2.71	2.82	3.21
Leafy greens.....	do.	3.10	--	3.92	3.62	3.10	3.61	4.79	4.79	4.07	4.08	3.29
Peppers, green.....	do.	4.73	4.25	4.96	4.64	6.09	11.43	9.19	8.33	1.17	7.44	8.56
Peppers, red.....	do.	--	--	--	--	--	--	7.10	--	--	--	7.17
Pumpkins.....	do.	4.53	3.45	4.59	4.33	4.31	7.70	4.58	4.60	4.83	3.47	4.64
Tomatoes.....	do.	4.44	4.70	4.70	4.67	3.70	4.93	4.64	4.75	3.12	4.63	5.78
Watermelons.....	do.	1.19	1.76	1.23	1.41	1.19	1.31	1.77	1.77	1.92	1.79	1.74
Carrots.....	do.	--	--	--	--	--	--	3.56	17.71	11.97	12.87	17.79
Minor vegetables.....	do.	3.95	3.95	3.95	3.95	3.95	3.95	3.95	3.95	3.95	3.95	3.95
Processing:												
Asparagus.....	Ton	169.79	152.28	170.71	157.28	150.34	150.38	217.12	--	157.14	162.90	154.27
Beans, lima.....	do.	141.62	134.80	123.70	104.03	118.64	118.64	147.97	157.80	181.69	171.13	144.63
Beans, snap.....	do.	113.74	113.19	94.99	100.20	113.89	113.89	121.69	87.41	91.89	120.11	112.74
Beets.....	do.	25.39	17.88	18.25	--	18.76	--	29.24	19.61	17.14	23.95	21.17
Cabbage.....	do.	14.76	12.43	14.57	--	16.43	16.43	--	20.00	12.59	19.47	14.17
Corn, sweet.....	do.	22.77	19.41	21.14	17.94	22.79	--	18.82	18.65	22.11	26.77	21.39
Cucumbers.....	do.	1.54	1.43	1.36	1.36	1.50	1.67	1.47	2.01	1.51	1.31	1.44
Peas, green.....	do.	89.32	87.91	97.45	73.33	86.18	86.18	83.03	87.09	87.30	88.81	88.41
Plantings.....	do.	--	--	--	--	17.23	17.23	--	--	--	59.98	66.76
Pumpkins.....	do.	10.99	26.35	--	--	80.64	61.67	61.67	47.57	--	25.39	44.66
Tomatoes.....	do.	30.50	23.57	24.90	21.77	28.53	25.44	25.05	26.10	21.32	26.37	27.04
Others:												
Beans, dry.....	Cwt.	8.85	7.81	--	7.27	--	7.57	--	--	7.57	10.60	8.49
Peas, dry.....	do.	--	5.40	--	4.34	--	--	--	--	4.71	4.85	4.79
Potatoes.....	do.	2.38	2.37	2.87	3.32	2.68	3.14	2.68	2.37	2.36	2.59	2.44
Sweet potatoes.....	do.	4.98	--	4.33	4.14	3.37	4.04	3.47	4.25	--	7.49	3.94
Fruits and nuts:												
Fruits:												
Apples.....	Barrel	1.71	1.43	1.77	2.15	1.59	1.44	1.44	1.44	1.48	1.90	1.75
Apricots.....	Ton	7.92	6.71	77.98	94.11	69.03	63.49	63.49	63.49	61.71	77.07	76.68
Avocados.....	do.	--	--	--	--	--	169.89	--	169.89	414.67	414.67	371.45
Cherries.....	do.	221.87	183.26	235.76	183.26	235.76	203.12	203.12	203.12	253.12	213.52	202.38
Cranberries.....	Barrel	12.02	12.35	--	--	--	--	--	--	--	10.50	11.99
Dates.....	Ton	--	--	--	--	--	--	--	119.42	119.42	119.42	119.42
Figs (fresh).....	do.	--	--	--	--	133.75	133.75	133.75	133.75	133.75	53.85	54.32
Grapes.....	do.	106.67	94.46	94.33	84.67	160.44	175.09	89.74	89.74	116.44	34.95	38.46
Nectarines.....	do.	92.98	92.98	92.98	--	92.98	--	--	92.98	92.98	92.98	92.98

See footnotes at end of table.

-Continued

TABLE 12.--Prices used in calculating the index of crop production, farm production regions, average 1947-49--Continued

Crop ¹	Unit	North-	Lake	Mid-	Northern	Appala-	South-	Delta	Northern	Mountain	United	United
		east ²	Water	West	Plains	chian	east ³	Water	Plains		States	States ⁴
		Dol.	Dol.	Dol.	Dol.	Dol.	Dol.	Dol.	Dol.	Dol.	Dol.	Dol.
Fruits and nuts⁵--Continued												
Fruits:												
Apples.....	do.	---	---	---	---	---	---	---	---	---	---	---
Peaches.....	Bushel	1.14	1.03	1.04	1.01	1.11	1.07	1.07	1.07	1.04	1.04	1.04
Pears.....	do.	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04
Prunes.....	do.	---	---	---	---	---	---	---	---	---	---	---
Raspberries.....	do.	---	---	---	---	---	---	---	---	---	---	---
Strawberries.....	do.	---	---	---	---	---	---	---	---	---	---	---
Oranges.....	do.	---	---	---	---	---	---	---	---	---	---	---
Lemons.....	do.	---	---	---	---	---	---	---	---	---	---	---
Limes.....	do.	---	---	---	---	---	---	---	---	---	---	---
Grapes and Tangerines.....	do.	---	---	---	---	---	---	---	---	---	---	---
Nuts:												
Almonds.....	Ton	---	---	---	---	---	---	---	---	---	---	---
Peanuts.....	do.	---	---	---	---	---	---	---	---	---	---	---
Walnuts.....	do.	---	---	---	---	---	---	---	---	---	---	---
Sugar crops:												
Sugar beets.....	Ton	---	---	---	---	---	---	---	---	---	---	---
Sorghum.....	do.	---	---	---	---	---	---	---	---	---	---	---
Wheat.....	do.	---	---	---	---	---	---	---	---	---	---	---
Barley.....	do.	---	---	---	---	---	---	---	---	---	---	---
Oats.....	do.	---	---	---	---	---	---	---	---	---	---	---
Maple syrup.....	do.	---	---	---	---	---	---	---	---	---	---	---
Maple sugar.....	do.	---	---	---	---	---	---	---	---	---	---	---
Other crops:												
Cotton.....	Bale	---	---	---	---	---	---	---	---	---	---	---
Tobacco.....	do.	---	---	---	---	---	---	---	---	---	---	---
Oil-bearing crops:												
Soybeans.....	Bushel	---	---	---	---	---	---	---	---	---	---	---
Peanuts.....	do.	---	---	---	---	---	---	---	---	---	---	---
Flaxseed.....	do.	---	---	---	---	---	---	---	---	---	---	---
Sunflower.....	do.	---	---	---	---	---	---	---	---	---	---	---
Seed crops:												
Alfalfa.....	Ton	---	---	---	---	---	---	---	---	---	---	---
Red clover.....	do.	---	---	---	---	---	---	---	---	---	---	---
White clover.....	do.	---	---	---	---	---	---	---	---	---	---	---
Lucerne.....	do.	---	---	---	---	---	---	---	---	---	---	---
Timothy.....	do.	---	---	---	---	---	---	---	---	---	---	---
Miscellaneous crops:												
Broccoli.....	Ton	---	---	---	---	---	---	---	---	---	---	---
Cucumbers.....	do.	---	---	---	---	---	---	---	---	---	---	---
Peppers.....	do.	---	---	---	---	---	---	---	---	---	---	---
Tomatoes.....	do.	---	---	---	---	---	---	---	---	---	---	---
Beans.....	do.	---	---	---	---	---	---	---	---	---	---	---
Onions.....	do.	---	---	---	---	---	---	---	---	---	---	---
Garlic.....	do.	---	---	---	---	---	---	---	---	---	---	---

¹ Prices of crops are shown for region in which crops are grown.
² Price weights for the United States are used only in calculating preliminary indexes for the current year.
³ In several instances, no official price data were available for individual vegetables and fruits for certain regions.
⁴ Price weights were estimated by using the relationship between prices of the particular crop and similar crops in another region.
⁵ The average United States price per hundredweight of all other vegetables are used as the value per hundredweight of minor vegetables for all regions.
⁶ The price shown for the various regions is the weighted average price of cotton lint and cottonseed per bale. The United States price is equivalent to \$10.00 per lint per bale and \$4.00 per ton of cottonseed.
⁷ Based on estimated cost of production excluding harvesting costs.
⁸ Price weights of 1% minor hay seeds, pasture seeds, and cover-crop seeds are not shown.
⁹ Farm gardens are included, using fresh market prices as weights.

tical and Historical Research Branch, AMS, in connection with revisions of data on per capita consumption of farm products. Quantity estimates were available for each region for census years. Data for intervening years were derived chiefly by interpolation.

The index of crop production for any given region or the United States is calculated by dividing the total quantity-price aggregate in the given year by the average of the quantity-price aggregates for the reference period 1947-49.

TABLE 13.--Quantity-price aggregates used in calculating index of crop production, by farm production regions, average 1947-49

Crop	North-east	Lake States	Corn Belt	Northern Plains	Appalachian	South-east	Delta States	Southern Plains	Mountain	Pacific	Other
	Million dollars	Million dollars	Million dollars	Million dollars	Million dollars	Million dollars	Million dollars	Million dollars	Million dollars	Million dollars	Million dollars
Feed grains:											
All corn.....	209.1	613.1	2,756.7	568.5	433.1	203.3	131.2	104.5	34.8	8.1	4,546.2
Oats.....	66.7	214.2	1,000.0	176.5	21.7	28.8	16.4	35.4	25.8	19.9	1,326.0
Barley.....	13.7	66.7	6.0	114.7	9.1	1.0	.2	4.1	74.6	82.8	362.9
Sorghum grains.....	--	--	1.1	34.8	.4	1.1	.4	113.8	15.0	2.6	164.2
Total.....	289.5	914.0	2,671.3	894.5	464.3	234.2	148.2	253.7	150.2	113.4	6,199.3
Hay and forage:											
All hay.....	362.7	32.0	338.0	260.1	227.9	52.0	63.4	34.0	268.5	222.4	1,911.1
North-east.....	--	.1	1.7	18.7	1.0	2.1	1.5	1.1	1.1	--	11.1
Lake States.....	--	1.1	.3	6.0	.2	.4	.4	2.7	.4	--	2.0
Corn Belt.....	362.7	30.8	316.0	235.4	224.9	50.0	61.9	32.9	267.0	222.4	1,898.0
Hay and forage.....	362.7	34.0	338.3	266.2	228.9	54.0	64.9	36.7	274.0	222.4	1,913.1
Oil seeds:											
All seeds.....	16.4	11.7	360.0	1,010.7	16.7	11.7	1.3	36.0	373.7	11.7	2,581.7
Flax.....	1.0	3.0	--	1.0	2.0	.3	--	1.0	1.3	1.0	6.3
Soybeans.....	4.3	1.7	2.0	2.0	.7	--	--	--	--	--	3.3
Rapeseed.....	--	--	(1)	--	--	--	36.1	34.7	--	36.1	12.1
Total.....	15.7	12.4	362.0	1,015.7	17.4	12.0	1.3	37.7	375.0	12.7	2,593.4
Vegetables:											
Field crops:											
Asparagus.....	--	--	--	--	--	--	--	--	--	2.4	2.4
Beans, snap.....	1.3	0.4	1.0	1.3	(1)	--	(1)	(1)	0.3	8.3	11.4
Beans, snap.....	2.3	.2	.3	(1)	.4	3.3	.4	.4	(1)	(1)	1.1
Beans, snap.....	1.0	1.7	2.0	2.0	1.7	1.7	2.0	2.0	1.7	4.3	22.9
Beans.....	1.3	.1	.3	(1)	.4	.2	.1	.1	.2	.6	4.3
Broccoli.....	2.3	.3	(1)	--	2.3	--	--	1.7	1.6	7.1	14.6
Brussels sprouts.....	.6	--	--	--	--	--	--	(1)	(1)	4.5	5.1
Cauliflower.....	10.1	3.7	3.1	.7	6.2	.6	2.1	3.6	2.1	3.6	21.7
Cauliflower.....	1.2	2.4	2.2	--	1.2	2.4	--	1.1	9.5	21.1	33.0
Cucumbers.....	--	--	--	--	--	--	--	--	(1)	.4	.4
Cucumbers.....	--	--	--	--	--	--	--	--	(1)	1.9	1.9
Eggplant.....	3.8	2.1	2.1	(1)	.3	.2	.2	3.9	8.9	24.7	40.4
Green beans.....	3.6	1.4	.4	(1)	.3	.2	.2	1.3	1.7	8.7	12.8
Green beans.....	3.6	3.1	2.8	(1)	.7	1.2	(1)	3.3	23.6	23.6	41.3
Green beans.....	13.3	.2	.2	.2	1.1	3.3	1.2	3.2	3.3	3.3	41.7
Green beans.....	4.1	.4	1.2	1.4	1.4	1.4	.3	1.1	1.1	1.1	11.3
Green beans.....	.6	.1	.1	(1)	(1)	.2	.2	(1)	(1)	.3	2.0
Green beans.....	.3	(1)	.4	(1)	(1)	.1	.4	(1)	(1)	.4	3.2
Green beans.....	.3	(1)	.1	--	.3	.1	(1)	--	--	(1)	1.4
Green beans.....	1.3	1.7	2.1	(1)	.3	1.3	.1	1.7	25.7	18.4	113.7
Green beans.....	13.7	21.2	21.2	1.1	.3	1.3	.2	3.2	11.7	11.7	64.3
Green beans.....	.7	--	(1)	(1)	.3	1.2	.2	.4	1.3	1.3	1.8
Green beans.....	.7	.2	.6	(1)	1.5	15.6	1.2	1.4	.1	1.7	25.3
Green beans.....	--	--	--	--	--	--	--	--	--	--	.3
Green beans.....	4.7	.3	1.2	.1	.7	.1	.2	4.6	.3	1.7	14.1
Green beans.....	14.1	4.3	6.7	1.2	6.7	1.6	2.3	14.6	1.2	29.2	154.1
Green beans.....	.7	.7	1.6	.6	.7	14.0	1.3	7.1	1.4	4.3	33.0
Green beans.....	--	--	--	--	--	--	(1)	.1	(1)	1.7	1.8
Green beans.....	14.3	5.7	7.7	.7	6.9	23.8	5.5	11.7	3.7	11.3	92.6
Total.....	123.8	43.8	41.3	5.1	42.4	17.0	25.3	67.7	79.0	264.1	832.1
Processing:											
Asparagus.....	3.3	1.0	1.6	(1)	(1)	(1)	(1)	--	(1)	9.6	19.4
Beans, snap.....	4.2	1.1	.6	(1)	.5	1.2	.2	(1)	.1	4.4	11.1
Beans, snap.....	1.4	2.6	.1	(1)	1.5	1.2	1.5	1.2	.7	7.4	23.6
Beans.....	.9	.9	--	--	(1)	--	(1)	.1	(1)	.4	2.3
Beans.....	1.0	.5	.3	--	.1	(1)	--	(1)	.1	.2	2.2
Beans, snap.....	5.3	9.7	.7	.1	.1	--	(1)	.1	1.4	2.3	26.7
Beans, green.....	1.4	6.7	.9	(1)	1.1	1.0	.8	.7	.9	1.6	15.7
Beans, green.....	4.6	13.8	2.4	.1	.2	(1)	(1)	(1)	2.7	3.3	33.3
Beans, green.....	--	--	--	--	(1)	1.3	--	--	--	.1	1.4
Beans, green.....	1.0	(1)	--	--	.2	(1)	--	1.0	--	.8	3.6
Beans, green.....	22.9	1.6	1.3	(1)	3.0	.5	.6	1.3	2.4	29.9	77.4
Total.....	52.8	31.1	29.1	.2	7.3	4.0	3.7	4.4	8.3	66.0	212.8
Other:											
Beans, snap.....	1.3	32.3	--	8.7	--	(1)	--	--	50.0	48.9	155.8
Beans, snap.....	--	.2	--	--	--	--	--	--	6.7	11.9	19.2
Beans, snap.....	233.7	57.6	2.5	65.7	41.1	18.5	1.6	6.6	91.7	100.9	609.7
Beans, snap.....	.7	--	2.9	.3	23.8	27.8	24.2	7.4	--	4.5	74.4
Total.....	236.4	92.7	25.9	67.7	144.7	46.3	35.8	16.0	148.4	166.2	884.1
Total vegetables.....	412.2	176.7	37.4	69.2	116.6	105.1	51.8	88.1	235.7	496.3	1,935.0

See footnotes at end of table.

-Continued

TABLE 13.--Quantity-price aggregates used in calculating index of crop production, by farm production regions, average 1947-49--Continued

Crop	North-east	Lake States	Wm Belt	Northern Plains	Appalachian	South-east	Delta States	Southern Plains	Mountain	Pacific	United States
	Million dollars	Million dollars	Million dollars	Million dollars	Million dollars	Million dollars	Million dollars	Million dollars	Million dollars	Million dollars	Million dollars
Fruits and nuts:											
Fruits:											
Apples.....	18.8	27.5	1.7	37.7	1.7	1.8	0.7	8.6	2.1	10.1	101.4
Apples (1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)
Apricots.....	---	---	---	---	---	---	---	---	---	---	---
Avocados.....	---	---	---	---	---	---	---	---	---	---	---
Cherries.....	0.1	1.7	0.9	1.1	1.0	(1)	(1)	1.1	3.1	17.4	33.2
Cranberries.....	0.3	2.5	---	---	---	---	---	---	---	---	10.4
Dates.....	---	---	---	---	---	---	---	(1)	(1)	1.4	1.0
Figs (fresh).....	---	---	---	---	(1)	0.3	0.2	0.1	(1)	5.9	0.5
Grapes.....	7.4	1.3	3.0	1.2	1.2	0.9	1.0	0.2	0.9	96.3	113.2
Kiwifruit.....	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	1.4	1.5
Lemons.....	---	---	---	---	---	---	---	---	---	---	---
Limes.....	---	---	---	---	---	---	---	---	---	---	---
Lives.....	---	---	---	---	---	---	---	---	---	---	---
Peaches.....	1.7	0.8	9.3	0.4	9.2	15.5	0.0	3.3	0.1	45.1	112.9
Pears.....	1.5	1.1	1.1	0.2	0.9	0.8	0.8	0.6	1.1	49.9	50.4
Persimmons.....	---	---	---	---	(1)	(1)	(1)	(1)	(1)	0.2	0.2
Pineapples.....	---	---	---	---	(1)	(1)	(1)	(1)	(1)	---	(1)
Plums and prunes.....	0.8	0.7	0.5	0.1	0.2	0.1	0.5	0.5	1.8	0.3	46.1
Pomegranates.....	---	---	---	---	(1)	(1)	(1)	(1)	(1)	0.1	0.1
Raspberries.....	1.1	13.0	13.8	1.9	16.0	0.3	15.7	1.5	3.7	17.0	106.8
Rasp (fruit).....	---	---	---	---	---	---	---	---	---	---	---
Rasp (seed).....	---	---	---	---	---	---	---	---	---	---	---
Strawberries.....	---	---	---	---	---	---	---	---	---	---	---
Tangerines.....	---	---	---	---	---	---	---	---	---	---	---
Oranges and tangerines.....	---	---	---	---	---	103.4	0.0	5.5	1.4	7.1	189.0
Total.....	110.3	60.5	55.3	5.9	96.2	159.5	36.2	22.5	27.8	51.3	1,037.5
Nuts:											
Almonds.....	---	---	---	---	---	---	---	---	(1)	16.5	16.5
Filberts.....	---	---	---	---	---	---	---	---	(1)	2.0	2.0
Pecans.....	(1)	---	0.6	0.1	0.8	9.0	4.2	10.1	0.5	(1)	25.3
Walnuts.....	(1)	(1)	(1)	---	(1)	(1)	(1)	(1)	(1)	---	28.4
Total.....	---	---	0.6	0.1	0.8	9.0	4.2	10.1	0.5	40.9	72.2
Total fruits and nuts.....	110.3	60.5	55.9	5.0	97.0	168.5	30.4	32.6	28.3	561.2	1,109.7
Sugar crops:											
Sugar beets.....	---	15.0	3.5	12.2	---	---	---	0.4	66.3	47.5	145.4
Sugarcane (sugar and seed).....	---	---	---	---	---	7.4	39.0	---	---	---	46.4
Sugarcane sirup.....	---	---	---	---	---	7.5	0.0	0.3	---	---	13.8
Sorghum sirup.....	---	---	1.1	0.1	3.1	2.4	2.2	0.0	---	---	9.7
Maple sirup.....	0.6	0.9	0.7	---	---	---	---	---	---	---	8.2
Maple sugar.....	0.2	(1)	(1)	---	---	---	---	---	---	---	0.2
Total.....	0.8	16.1	5.3	12.3	3.1	17.3	47.2	1.3	66.8	47.5	223.7
Cotton².....	---	---	73.4	---	208.1	426.7	725.7	797.1	101.3	179.0	2,534.3
Tobacco.....	27.2	8.2	17.8	0.1	687.8	134.6	0.1	---	---	---	321.3
Oil-bearing crops:											
Soybeans.....	5.2	41.9	344.1	9.5	24.8	4.4	18.6	0.3	---	---	348.6
Peanuts (threshed).....	---	---	---	---	55.5	115.6	1.2	46.7	1.0	---	230.0
Peanuts (hogged).....	---	---	---	---	1.2	21.9	0.4	1.8	---	---	25.3
Flaxseed.....	---	87.8	7.5	106.3	---	---	---	6.5	9.5	22.0	239.1
Tungnuts.....	---	---	---	---	---	1.0	3.0	---	---	---	0.0
Total.....	5.2	129.7	351.6	115.8	61.7	142.9	23.2	55.3	10.5	24.0	1,017.5
Seed crops:											
Major seeds:											
Alfalfa.....	---	3.2	0.5	0.7	---	---	---	0.0	10.0	3.1	30.1
Alsike clover.....	(1)	1.3	0.7	---	---	---	---	---	0.9	1.3	6.4
Lespedeza.....	---	---	3.8	0.2	7.0	---	---	---	---	---	13.0
Red clover.....	1.0	0.4	17.7	0.1	1.1	---	---	---	---	1.7	36.1
White clover.....	---	1.3	0.9	1.9	---	---	---	---	---	---	5.7
Timothy.....	---	0.3	8.8	---	---	---	---	---	---	---	9.1
Total.....	1.9	16.9	29.7	16.5	7.1	0.9	1.0	0.9	16.7	6.1	94.4
Minor seeds.....	---	0.4	0.0	0.0	0.2	0.0	1.1	2.3	0.0	1.9	6.0
Total seed crops.....	1.9	17.3	30.1	16.5	7.3	0.9	2.1	3.2	16.7	8.0	100.4
Miscellaneous crops:											
Brassicas.....	---	---	0.1	0.1	---	---	---	0.1	0.0	---	0.2
Cowpeas.....	---	---	0.1	0.1	---	---	---	0.0	---	---	0.1
Hops.....	---	---	---	---	---	---	---	---	---	---	---
Peppermint.....	---	1.0	0.0	---	---	---	---	---	---	---	0.1
Spearmint.....	---	0.2	0.0	---	---	---	---	---	---	---	0.0
Sage.....	---	0.1	1.8	---	---	---	---	---	---	---	0.0
Farm gardens.....	---	66.9	66.9	30.4	66.0	66.0	66.0	66.0	10.0	27.0	327.8
Total miscellaneous.....	---	68.4	68.8	31.5	66.0	66.0	66.0	66.0	10.0	27.0	327.8
Total all crops.....	1,037.5	1,037.5	1,037.5	1,037.5	1,037.5	1,037.5	1,037.5	1,037.5	1,037.5	1,037.5	1,037.5

¹ Less than 0.05.

² Includes production of cotton lint and cottonseed.

Index of Livestock Production

The index of gross production of livestock and livestock products measures the yearly change in outturn of livestock and livestock products exclusive of horses and mules. This series is a subgroup of farm output. Production is measured on a calendar-year basis and has four major subgroups--meat animals, dairy products, poultry and eggs, and miscellaneous livestock products.

The indexes of livestock production are computed by the same general formula used to compute the index of crop production. Regional price weights and production are used, and these aggregates are added together to arrive at aggregates for the United States. The indexes calculated for the United States from 1910 to date,¹ and for the 10 farm production regions from 1939 to date.

Table 14 shows the weights used and the commodities included in the index in each region. Because of the lack of data, production of rabbits, ducks, and geese was not included. However, inclusion of production of these miscellaneous livestock would affect the total index very little.

¹See footnote 7.

The importance of the various livestock items and livestock groups included in the index is indicated by the data in table 15. Hog production is the most important single livestock item in the United States; it accounted for nearly a fourth of all gross livestock production in 1947-49. Four livestock products--hogs, beef cattle, wholesale milk, and eggs--made up more than 75 percent of the total.

Production data and farm prices of livestock were obtained from official reports of the Agricultural Estimates Division, AMS. The production data for livestock relate to net production within the calendar year, and within each farm production region. For example, net live-weight production of cattle and calves in a region for any given year was the sum of: (1) The live weight of calves saved during the year plus the live weight added as a result of feeding the calves until the end of the year or until they were slaughtered or shipped out of the region; (2) the live weight added as a result of feeding cattle shipped into the region; and (3) the live weight added to the inventory weight of cattle on hand at the first of the year in the region. Production of cattle and calves was thus net for the calendar year and net within the region.

TABLE 14.--Prices used in calculating the index of gross livestock production, farm production regions, average 1947-49

Commodity	Unit	North- east	Lake States	Farm Belt	Northern Plains	Appala- chian	South- east	South States	Southern Plains	Mountain	Pacific	United States ²
		1947	1947	1947	1947	1947	1947	1947	1947	1947	1947	1947
Meat animals:												
Beef cattle.....	Wt.	18.76	19.74	21.87	23.87	19.38	18.19	20.75	18.39	20.32	19.62	19.97
Veal calves.....	do.	24.43	24.34	24.17	21.61	24.35	18.63	21.62	18.71	21.79	22.56	22.37
Sheep.....	do.	4.39	4.21	4.03	4.28	4.93	3.75	4.23	3.23	3.70	4.02	4.26
Lambs.....	lb.	22.77	21.79	22.95	21.37	24.22	17.23	22.79	20.11	21.49	21.76	21.81
Hogs.....	do.	22.91	22.93	21.79	21.49	21.91	21.13	21.43	21.92	22.39	23.73	21.65
Dairy products:												
Farm butter sold.....	Pound	1.71	1.73	1.79	1.74	1.91	1.51	1.64	1.60	1.74	1.73	1.72
Butterfat.....	do.	1.18	1.23	1.21	1.26	1.28	1.16	1.23	1.24	1.24	1.23	1.21
Wholesale milk.....	do.	10.75	10.71	10.14	10.25	10.79	10.67	10.77	10.51	10.43	10.41	10.36
Retail milk.....	Quart	1.18	1.14	1.10	1.16	1.17	1.19	1.18	1.17	1.17	1.18	1.18
Milk consumed on farms...	Pound	1.524	1.36	1.371	1.317	1.479	1.27	1.424	1.252	1.414	1.473	1.456
Poultry and eggs:												
Eggs.....	Dozen	1.51	1.63	1.48	1.71	1.97	1.56	1.61	1.61	1.74	1.53	1.68
Broilers.....	Pound	1.39	1.43	1.32	1.31	1.31	1.18	1.14	1.22	1.35	1.36	1.31
Chickens.....	do.	1.31	1.34	1.23	1.21	1.23	1.10	1.10	1.13	1.28	1.29	1.27
Turkeys.....	do.	1.07	1.07	1.00	1.01	1.07	0.94	0.94	0.96	1.06	1.07	1.06
Miscellaneous livestock products:												
Honey.....	Pound	1.19	1.17	1.16	1.14	1.22	1.23	1.19	1.17	1.19	1.15	1.13
Beeswax.....	do.	1.43	1.47	1.46	1.49	1.42	1.40	1.45	1.42	1.41	1.45	1.41
Wool (unspined).....	do.	1.03	1.07	1.06	1.03	1.01	1.09	1.07	1.03	1.03	1.09	1.05
Mhair.....	do.	--	--	1.11	--	--	--	--	--	1.04	1.04	1.08
Horses and mules (all ages) ²	Head	25.25	133.1	134.19	134.79	173.34	176.52	163.04	126.53	111.36	143.14	143.29

¹ Price weights for the United States are used only in calculating preliminary indexes for the current year.

² Data shown are values of farm-produced power per head. These include estimated value of feed and pasture consumed plus the value of product added in converting feed and pasture into farm-produced power.

TABLE 15.--Quantity price aggregates used in calculating index of livestock production, by farm production regions, average 1947-49

Commodity	North-east	Lake States	Corn Belt	Northern Plains	Appalachian	South-east	Delta States	Southern Plains	Mountain	Pacific	United States
	Mill. dol.	Mill. dol.	Mill. dol.	Mill. dol.	Mill. dol.	Mill. dol.	Mill. dol.	Mill. dol.	Mill. dol.	Mill. dol.	Mill. dol.
Meat animals:											
Beef cattle.....	139.8	207.8	817.4	651.3	167.8	73.5	75.8	344.2	401.1	197.8	3,166.3
Veal calves.....	22.5	24.2	129.3	46.1	55.2	26.3	50.2	147.2	68.5	49.4	689.9
Sheep.....	1.5	1.7	1.8	1.7	1.0	(1)	.2	10.9	4.1	.9	23.1
Lamb.....	3.0	17.4	47.9	27.9	31.4	.2	.5	12.9	89.6	32.6	253.1
Pigs.....	107.2	471.9	2,137.9	431.5	304.3	180.2	116.3	150.0	69.5	61.5	4,030.3
Total.....	363.0	872.9	3,115.4	1,258.5	549.7	280.2	243.4	665.2	632.8	742.2	8,162.7
Dairy products:											
Farm butter sold.....	6.2	.7	2.1	.7	6.4	5.2	1.6	3.5	.7	.7	27.8
Butterfat.....	1.3	116.4	198.2	123.9	22.8	1.2	7.5	25.6	24.6	15.6	542.1
Wholesale milk.....	83.4	777.2	3,551.4	571.1	1,741.8	70.4	63.0	119.9	94.4	321.7	3,090.3
Retail milk.....	13.2	28.9	51.4	21.1	45.6	28.8	16.3	29.6	22.2	49.5	388.8
Milk consumed on farms.....	11.9	46.9	95.7	37.4	151.4	100.9	77.5	84.4	24.0	24.5	704.4
Total.....	126.0	880.7	4,318.8	239.6	400.2	206.5	165.9	263.0	165.9	410.0	4,753.4
Poultry and eggs:											
Eggs.....	47.5	268.5	508.4	167.3	192.8	84.8	59.3	137.4	63.9	177.4	2,116.3
Broilers.....	169.0	11.3	37.4	2.5	59.4	46.2	30.4	15.5	1.8	33.1	383.2
Chickens.....	164.1	72.1	184.5	54.2	69.2	37.5	32.7	37.1	20.3	40.1	690.4
Turkeys.....	31.3	35.2	48.5	13.3	17.5	7.1	1.9	16.6	20.8	61.9	254.1
Total.....	701.9	377.1	780.8	239.3	338.9	175.6	124.3	206.6	106.8	312.5	3,444.0
Miscellaneous livestock products:											
Honey.....	4.9	7.1	8.4	1.7	5.2	4.2	1.1	2.1	4.1	3.9	42.7
Beeswax.....	.2	.3	.4	.1	.1	.2	(1)	.1	.2	.2	1.8
Wool (clipped).....	1.4	4.3	12.7	6.7	4.1	(1)	.4	28.7	38.8	10.7	107.8
Manure.....	--	--	--	--	--	--	--	7.4	.2	.1	7.7
Total.....	7.5	11.7	23.5	8.5	9.4	4.4	1.5	38.3	43.3	14.9	160.0
Total livestock and products.....	2,126.2	2,761.3	11,828.7	1,498.1	1,298.8	660.7	535.1	1,173.1	948.8	1,079.6	16,520.1

Source: Bureau of Economic Analysis.

Index of Farm Output

The index of farm output measures year-to-year changes in the combined volume of crop and livestock production available for eventual human use. Farm output includes crops produced during the crop year exclusive of hayseeds, pasture seeds, cover-crop seeds, and hay and concentrates fed to horses and mules on farms. Farm output also includes the "net" production of livestock other than horses and mules. Net livestock production is gross production of livestock during the calendar year minus the hay and concentrates fed to livestock. Hatching eggs for broilers and chickens raised also are excluded in calculating net livestock production. These calculations are made to avoid counting feed crops in production of both livestock and crops and to avoid counting hatching eggs as part of poultry meat production as well as egg production.

Conceptually, gross production of livestock and livestock products includes the

value of hay, concentrates, and pasture consumed plus the value of all other inputs necessary for production such as labor, bedding, stabling, veterinary cost, profit, interest on investment, and so on. These inputs may be grouped into three overall groups: (1) Feed other than pasture (table 16), (2) pasture, and (3) all other inputs, or product added. Product added is thus the value added in the conversion of feed and pasture into livestock and livestock products.

In the actual calculation of the quantity-price aggregates of farm output, gross livestock production was divided into two major parts: Product added including pasture consumed and feed other than pasture. As pasture production is not included in crop production, it is included with product added.

Net livestock production (product added by livestock plus pasture consumed) in each region was derived by subtracting the estimated value, measured in constant

TABLE 16.--Factors used in estimating feed, other than pasture, consumed by livestock, farm production regions, average 1947-49¹

Item	North-east	Lake States	Corn Belt	Northern Plains	Appalachian	South-east	Delta States	Northern Plains	Mountain	Pacific	United States
	Percent	Percent	Percent	Percent	Percent	Percent	Percent	Percent	Percent	Percent	Percent
Beef cattle and veal calves..	65	43	48	41	50	46	12	17	36	40	40
Sheep, lamb, and wool.....	57	42	43	40	40	50	40	22	25	23	31
Hogs.....	59	54	56	58	56	55	60	52	58	51	56
Dairy products.....	55	47	54	63	48	31	40	39	50	34	49
Egg production.....	31	40	45	52	48	45	52	49	38	29	41
Chickens raised.....	45	64	62	65	67	56	52	61	54	46	57
Broilers ²	32	32	30	36	31	28	30	31	28	27	31
Turkeys ²	30	37	37	44	31	34	32	47	41	41	38
Mohair.....	--	--	17	--	--	--	--	11	12	18	10
Horses and mules ³	57	52	48	42	56	62	53	43	41	49	51

¹ The data in the table show the proportion that feed, other than pasture, is of gross livestock production.

² Varied annually; regional variation based on national changes in efficiency of feed use.

³ Reduced annually until 1959 in all regions except the Southeast and the Delta States, where the minimum level of feed fed is assumed to be reached in 1964.

dollars, of feed other than pasture consumed by each class of livestock from gross livestock production measured in constant dollars.

Feed, other than pasture, is calculated as a constant proportion of gross production of each kind of livestock, as is shown in table 16. The proportions used varied among regions. The basic data used to compute the feed factors are based primarily on three reports.³ The factors are in terms of the proportion of total value of livestock production, at 1947-49 average price. Feed excludes the nonfarm inputs, such as transportation and processing, that are included in the value of commercial mixed feeds. Except for broilers and turkeys, the same feed factors were used each year for each class of livestock in each region. Available data indicate that, except for broilers and turkeys, efficiency of feed use by livestock has shown little improvement. A trend in efficiency of feed use was incorporated into the calculations for broilers and turkeys.

Hatching eggs were subtracted from gross production of poultry to avoid double counting. To derive the number of hatching eggs, a rate of hatchability of 70 percent was used and divided into the average number of broilers and chickens raised in each region during the given year.

³Jennings, R. A. Feed Consumed by Livestock, 1941-42, by States, Washington, D. C., U. S. Bur. Agr. Econ., April 1946. [Mimeographed.] Relative Use of Feeds for Livestock Including Pasture, by States, U. S. Dept. Agr. Statis. Bul. 153, 1955; and Feed Consumed by Livestock, Supply and Disposition of Feeds, 1949-50, by States, U. S. Dept. Agr. Statis. Bul. 145, 1954.

Conceptually, farm output does not include the production of "producer goods." These are goods produced on farms and used in further production of products for human use. They include such items as seed and farm-produced power of horses and mules. Production of farm-produced power, for example, is equivalent to farmers' producing their own tractors, gasoline, and oil. Therefore, when production of crops and livestock are combined into the measure of farm output, seed crops and feed fed to horses and mules are subtracted from gross crop production. As horses and mules are not included in gross livestock production, it is necessary to exclude only the feed other than pasture consumed by horses and mules on farms.

In theory, any crop grown for farm seed purposes should not be included in the index of farm output. Hayseeds, pasture seeds, and cover-crop seeds are not included. Because of the lack of necessary data, however, no deductions are made for other types of seeds.

The constant dollar value of farm-produced power of horses and mules was based on published estimates of feed and pasture consumed per head in 1942 and 1949 and on unpublished estimates of the total cost of maintenance per head for the year 1934. The constant dollar value of farm-produced power was assumed to be equal to the annual cost of keeping horses and mules. This cost includes value of feed, housing, chore labor, net depreciation, and interest on investment.

Data on the quantities of feed and pasture consumed per head of horses and mules in

1942 and 1949 were multiplied by the average 1947-49 price per unit of feed in each farm production region. The feed value per head thus obtained was expanded in each region to the total farm-produced power per head on the basis of the proportion that total costs of feed and pasture were of the total cost of maintenance. In calculating the total cost of maintenance or feed fed to horses and mules, the appropriate per head values in 1942 and 1949 were multiplied by the number of horses and mules of all ages in each region in each of the two years. In all regions, value per head trended downward between the two benchmark years. In developing values per head for individual years in each region, the trend was extended backward from 1942 to 1939 and forward from 1942 through 1959. Except in the Appalachian Region and the Southeast, no downward trend is projected after 1959 owing to the small numbers still on farms. The Appalachian Region and the Southeast still depend on horses and mules to a greater extent than other regions. The minimum value per head in the latter two regions was projected to be reached in 1964.

Although only the feed other than the pasture portion of total farm-produced power is necessary in calculating farm output, the total farm-produced power aggregate is useful in certain types of analysis. The number of horses and mules on farms has decreased rapidly since the peak of 27 million head was reached in 1917. In 1959, there were only 3 million head. In the past, reduction of farm-produced power has been an important factor in the increase in farm output. In the future, this factor will be of only nominal importance.

To summarize, the index of farm output measures changes in the volume of farm commodities available for eventual human use. Production is measured in the year the products are produced, rather than in the year the products are marketed. The indexes of crop and livestock production are indexes of gross production, and therefore, conceptually, cannot be added together to arrive at farm output. The basic production aggregates used to construct the index of farm output and related series in the reference period for the United States are as follows:

1947-49
(million dollars)

A. Crop production:

Seeds (hayseed, pasture seed, cover-crop seed).....	144.1
All other.....	<u>19,608.2</u>
Total.....	19,752.3

B. Livestock and livestock products other than horses and mules:

Hatching eggs	55.8
Feed other than pasture consumed.....	9,192.6
Product added plus pasture consumed	<u>8,760.1</u>
Total.....	18,008.5

C. Farm-produced power:

Feed other than pasture consumed.....	682.5
Product added plus pasture consumed	<u>650.4</u>
Total.....	1,332.9

There are two alternative methods of farm output. These alternatives are as combining the production aggregates into follows:

1947-49
(million dollars)

Method A:

Total crop production.....	19,752.3
Plus product added and pasture consumed by livestock..	8,760.1
Minus seeds (hayseed, pasture seed, cover-crop seed)..	-144.1
Minus feed other than pasture fed to horses and mules..	<u>-682.5</u>
Total farm output	27,685.8

Method B:

Total crop production.....	19,752.3
Plus livestock and livestock products.....	18,008.5
Minus livestock feed other than pasture consumed.....	-9,192.6
Minus hatching eggs.....	-55.8
Minus feed other than pasture fed to horses and mules..	-682.5
Minus seeds (hayseed, pasture seed, cover-crop seed)..	<u>-144.1</u>
Total farm output	27,685.8

The farm output indexes and related series are developed for each of the 10 farm production regions. Quantity-price aggregates of the regions are added together to arrive at the United States aggregate and index of farm output for 1939 to date. The index is calculated annually for the

United States from 1910 to date and at 10-year intervals from 1870 to 1910. Tables 17 to 26 show the indexes of farm output, total livestock and total crop production, and the commodity subgroups, by regions, from 1939 to 1959.

Table 17. --Farm production: Index numbers of total output, and gross production of livestock and crops, by groups, Northeast, 1939-59
(1947-49 = 100)

Year	Farm output	Livestock and products ¹				Crops										Feed used by farm horses and mules ¹⁴
		All livestock and products ²	Meat animals ³	Dairy products ⁴	Poultry and eggs ⁵	All crops ⁶	Feed grains ⁷	Hay and forage ⁸	Food grains ⁹	Vegetables ¹⁰	Fruits and nuts ¹¹	Sugar crops ¹²	Cotton	Tobacco	Oil crops ¹³	
1939.....	82	30	97	90	62	92	95	86	88	83	137	144	--	86	38	195
1940.....	86	33	95	94	65	96	94	100	92	88	115	156	--	87	44	190
1941.....	86	36	92	96	71	92	97	84	87	90	116	121	--	93	46	184
1942.....	94	92	99	98	82	101	102	107	82	93	127	191	--	75	113	175
1943.....	92	98	111	95	95	93	75	112	68	98	82	165	--	68	77	163
1944.....	96	99	108	97	97	97	92	101	103	92	105	157	--	91	67	150
1945.....	95	101	102	101	102	93	95	114	97	90	46	57	--	70	81	139
1946.....	102	96	100	97	93	103	105	111	90	112	106	85	--	103	88	127
1947.....	93	98	99	100	96	98	88	106	103	96	98	121	--	98	88	114
1948.....	100	97	100	97	95	103	108	103	96	106	89	90	--	99	95	100
1949.....	102	105	101	103	109	99	104	91	101	98	113	89	--	103	117	86
1950.....	107	109	108	105	115	103	112	97	94	100	119	119	--	103	135	73
1951.....	108	112	114	104	121	101	117	103	92	88	114	101	--	99	138	62
1952.....	107	113	121	105	120	98	117	99	98	88	89	91	--	84	156	52
1953.....	110	117	122	110	125	100	113	97	104	94	102	66	--	87	194	45
1954.....	111	118	116	111	126	99	120	97	92	86	114	97	--	96	227	38
1955.....	113	119	119	115	124	97	115	95	82	87	118	97	--	81	279	33
1956.....	115	121	107	117	133	102	130	95	79	98	98	90	--	81	413	30
1957.....	109	119	104	115	130	92	107	91	69	88	103	109	--	75	296	27
1958.....	117	120	103	116	132	106	137	104	81	94	121	84	--	73	412	24
1959 ¹⁵ ...	114	120	106	116	129	100	134	99	69	86	114	66	--	78	404	21

¹ Production of livestock and livestock products, horses and mules excluded.
² Includes clipped wool, honey, and beeswax. These items are not included in the separate groups of livestock and products shown.
³ Cattle and calves, sheep and lambs, and hogs.
⁴ Butter, butterfat, wholesale milk, retail milk, and milk consumed on farms.
⁵ Chicken eggs, commercial broilers, chickens, and turkeys.
⁶ Includes production of farm gardens; hay seeds, pasture seeds, and cover-crop seeds; and some miscellaneous crop production not included in separate groups of crops shown.
⁷ All corn, oats, and barley.
⁸ All hay.
⁹ All wheat, rye, and buckwheat.
¹⁰ Potatoes, sweetpotatoes, dry edible beans, truck crops for processing, and truck crops for fresh market.
¹¹ Fruits, berries, and nuts.
¹² Maple sugar and maple sirup.
¹³ Soybeans.
¹⁴ Hay and concentrates only.
¹⁵ Preliminary.

TABLE 18.--Farm production: Index numbers of total output, and gross production of livestock and crops, by groups, Lake States, 1939-59

(1947-49 = 100)

Year	Farm output	Livestock and products ¹				Crops										Feed used by farm horses and mules ¹⁴
		All livestock and products ²	Meat animals ³	Dairy products ⁴	Poultry and eggs ⁵	All crops ⁶	Feed grains ⁷	Hay and forage ⁸	Food grains ⁹	Vegetables ¹⁰	Fruits and nuts ¹¹	Sugar crops ¹²	Cotton	Tobacco	Oil crops ¹³	
1939....	85	87	99	84	68	92	89	106	77	101	109	145	--	105	51	295
1940....	91	91	104	88	70	97	90	118	98	102	99	150	--	115	73	283
1941....	89	97	108	93	77	90	80	118	70	107	96	139	--	98	66	270
1942....	100	105	120	98	90	101	98	127	75	106	94	154	--	90	77	254
1943....	96	111	130	97	106	91	84	125	56	115	64	59	--	83	69	229
1944....	95	105	112	97	107	93	93	118	79	101	85	89	--	93	38	202
1945....	101	106	106	103	113	100	100	124	89	101	47	102	--	113	66	175
1946....	100	104	102	104	107	99	99	105	92	107	101	124	--	131	63	148
1947....	95	101	100	102	102	91	85	107	96	89	95	91	--	113	93	121
1948....	102	96	96	97	95	105	109	95	104	102	96	86	--	92	113	99
1949....	103	103	104	101	103	104	106	98	100	109	109	123	--	95	94	80
1950....	102	106	113	99	105	99	97	106	85	97	121	157	--	97	94	63
1951....	108	109	120	99	108	105	102	133	94	95	98	120	--	70	88	53
1952....	112	110	120	101	108	110	113	128	96	97	98	106	--	67	91	43
1953....	112	111	117	106	109	109	108	124	107	100	114	123	--	61	98	34
1954....	115	115	123	107	118	111	114	123	74	100	88	160	--	70	128	27
1955....	118	118	128	109	117	114	117	127	73	97	105	157	--	63	128	22
1956....	123	115	115	114	120	123	124	133	87	116	114	142	--	61	156	18
1957....	121	117	117	118	116	119	121	134	80	99	122	169	--	60	138	15
1958....	126	121	123	120	120	124	126	120	118	113	120	194	--	67	151	13
1959 ¹⁵ ..	129	125	131	120	124	126	132	135	103	114	125	208	--	63	119	11

¹ Production of livestock and livestock products, horses and mules excluded.

² Includes clipped wool, honey, and beeswax. These items are not included in the separate groups of livestock and products shown.

³ Cattle and calves, sheep and lambs, and hogs.

⁴ Butter, butterfat, wholesale milk, retail milk, and milk consumed on farms.

⁵ Chicken eggs, commercial broilers, chickens, and turkeys.

⁶ Includes production of farm gardens; hay seeds, pasture seeds, and cover-crop seeds; and some miscellaneous crop production not included in separate groups of crops shown.

⁷ All corn, oats, and barley.

⁸ All hay, sorghum forage, and sorghum silage.

⁹ All wheat, rye, and buckwheat.

¹⁰ Potatoes, dry edible beans, dry field peas, truck crops for processing, and truck crops for fresh market.

¹¹ Fruits, berries, and nuts.

¹² Sugar beets, sorghum sirup, maple sugar, and maple sirup.

¹³ Soybeans and flaxseed.

¹⁴ Hay and concentrates only.

¹⁵ Preliminary.

TABLE 19.--Farm production: Index numbers of total output, and gross production of livestock and crops, by groups, Corn Belt, 1939-59
(1947-49 = 100)

Year	Farm output	Livestock and products ¹				Crops										Feed used by farm horses and mules ¹⁵
		All livestock and products ²	Meat animals ³	Dairy products ⁴	Poultry and eggs ⁵	All crops ⁶	Feed grains ⁷	Hay and forage ⁸	Food grains ⁹	Vegetables ¹⁰	Fruits and nuts ¹¹	Sugar crops ¹²	Cotton ¹³	Tobacco	Oil crops ¹⁴	
1939.....	84	85	86	89	74	88	89	103	88	134	144	206	103	108	49	294
1940.....	83	89	92	91	73	85	92	118	92	137	104	206	92	98	42	283
1941.....	88	94	97	96	81	89	88	105	84	145	127	217	113	85	59	271
1942.....	98	104	108	100	91	99	100	124	48	149	112	279	98	86	95	255
1943.....	98	112	119	98	103	94	97	107	45	121	70	94	69	81	100	230
1944.....	95	104	106	100	102	94	92	109	71	107	87	106	97	105	98	202
1945.....	95	103	101	105	106	92	90	111	84	115	69	106	42	96	96	178
1946.....	103	100	99	103	101	105	110	107	73	126	84	123	72	94	97	150
1947.....	85	100	99	101	100	78	70	102	87	95	102	90	73	82	86	121
1948.....	110	97	96	98	97	116	124	95	106	111	82	92	119	109	105	99
1949.....	105	103	105	101	103	106	106	103	107	94	116	118	108	109	109	80
1950.....	104	108	111	100	106	102	97	120	82	97	91	123	60	96	130	64
1951.....	104	112	117	97	106	98	94	126	70	97	88	72	72	99	121	52
1952.....	112	109	114	96	103	111	112	117	100	87	70	75	92	117	125	40
1953.....	109	109	113	101	103	106	104	111	131	86	63	87	105	93	113	31
1954.....	112	112	117	103	107	109	105	118	110	83	58	106	106	113	140	24
1955.....	117	117	124	103	103	115	113	123	111	83	51	115	96	83	143	19
1956.....	121	116	121	105	109	119	115	115	116	89	62	100	105	84	171	16
1957.....	119	115	121	105	105	116	112	128	88	83	65	113	42	78	184	14
1958.....	128	117	122	102	110	129	123	133	113	86	69	125	64	64	213	12
1959 ¹⁶ ...	135	122	132	99	108	137	143	119	91	90	60	142	119	87	193	12

¹ Production of livestock and livestock products, horses and mules excluded.

² Includes clipped wool, mohair, honey, and beeswax. These items are not included in the separate groups of livestock and products shown.

³ Cattle and calves, sheep and lambs, and hogs.

⁴ Butter, butterfat, wholesale milk, retail milk, and milk consumed on farms.

⁵ Chicken eggs, commercial broilers, chickens, and turkeys.

⁶ Includes production of farm gardens; hay seeds, pasture seeds, and cover-crop seeds; and some miscellaneous crop production not included in separate groups of crops shown.

⁷ All corn, oats, barley, and sorghum grain.

⁸ All hay, sorghum forage, and sorghum silage.

⁹ All wheat, rye, buckwheat, and rice.

¹⁰ Potatoes, sweetpotatoes, truck crops for processing, and truck crops for fresh market.

¹¹ Fruits, berries, and nuts.

¹² Sugar beets, sorghum sirup, and maple sirup.

¹³ Cotton lint and cottonseed.

¹⁴ Soybeans and flaxseed.

¹⁵ Hay and concentrates only.

¹⁶ Preliminary.

TABLE 20. --Farm production: Index numbers of total output, and gross production of livestock and crops, by groups, Northern Plains, 1939-59
(1947-49 = 100)

Year	Farm output	Livestock and products ¹				Crops										Feed used by farm horses and mules ¹⁵
		All livestock and products ²	Meat animals ³	Dairy products ⁴	Poultry and eggs ⁵	All crops ⁶	Feed grains ⁷	Hay and forage ⁸	Food grains ⁹	Vegetables ¹⁰	Fruits and nuts ¹¹	Sugar crops ¹²	Cotton	To-bacco ¹³	Oil crops ¹⁴	
1939.....	98	83	79	107	80	55	53	71	52	81	176	111	--	--	17	291
1940.....	67	83	78	111	78	67	69	82	60	96	208	144	--	--	32	275
1941.....	85	81	85	118	87	36	92	99	82	86	104	133	--	--	38	262
1942.....	106	110	107	124	107	107	123	107	98	102	130	137	--	--	72	248
1943.....	101	127	130	122	119	95	110	94	81	119	92	81	--	--	103	231
1944.....	104	110	108	115	114	105	132	111	86	98	114	80	--	--	48	207
1945.....	100	108	105	110	116	108	119	101	102	114	102	98	--	--	84	182
1946.....	101	106	104	102	110	101	110	85	102	107	102	124	--	--	47	152
1947.....	102	103	101	106	107	103	85	100	120	98	105	120	--	--	90	121
1948.....	108	97	97	99	95	111	122	100	106	106	93	84	--	--	119	99
1949.....	90	100	102	95	98	86	93	100	74	96	102	96	--	--	91	80
1950.....	103	105	107	96	100	102	114	110	88	99	72	124	--	--	118	66
1951.....	100	114	120	94	102	93	100	120	81	64	80	116	--	--	110	52
1952.....	108	113	121	91	95	104	99	106	111	72	60	132	--	--	97	39
1953.....	100	113	120	95	95	92	100	121	75	77	44	126	--	--	131	28
1954.....	103	120	130	97	95	95	108	128	69	81	38	142	--	--	152	24
1955.....	98	125	137	96	92	87	85	119	72	63	38	130	--	--	155	21
1956.....	95	116	125	97	95	84	78	112	71	82	26	150	--	--	181	18
1957.....	112	109	115	96	94	110	142	164	71	69	50	167	--	--	116	16
1958.....	138	117	125	93	96	141	157	146	127	89	52	166	--	--	175	14
1959 ¹⁶ ...	116	126	138	92	96	109	144	113	82	80	56	186	--	--	103	14

¹ Production of livestock and livestock products, horses and mules excluded.

² Includes clipped wool, honey, and beeswax. These items are not included in the separate groups of livestock and products shown.

³ Cattle and calves, sheep and lambs, and hogs.

⁴ Butter, butterfat, wholesale milk, retail milk, and milk consumed on farms.

⁵ Chicken eggs, commercial broilers, chickens, and turkeys.

⁶ Includes production of farm gardens; hay seeds, pasture seeds, and cover-crop seeds; and some miscellaneous crop production not included in separate groups of crops shown.

⁷ All corn, oats, barley, and sorghum grain.

⁸ All hay, sorghum forage, and sorghum silage.

⁹ All wheat, rye, and buckwheat.

¹⁰ Potatoes, sweetpotatoes, dry edible beans, dry field peas, truck crops for processing, and truck crops for fresh market.

¹¹ Fruits, berries, and nuts.

¹² Sugar beets and sorghum sirup.

¹³ Due to small quantity of tobacco produced, the index is not shown separately but is included in total crop production.

¹⁴ Soybeans and flaxseed.

¹⁵ Hay and concentrates only.

¹⁶ Preliminary.

TABLE 21. --Farm production: Index numbers of total output, and gross production of livestock and crops, by groups, Appalachian Region, 1939-59
(1947-49 = 100)

Year	Farm output	Livestock and products ¹				Crops										Feed used by farm horses and mules ¹⁵
		All livestock and products ²	Meat animals ³	Dairy products ⁴	Poultry and eggs ⁵	All crops ⁶	Feed grains ⁷	Hay and forage ⁸	Food grains ⁹	Vegetables ¹⁰	Fruits and nuts ¹¹	Sugar crops ¹²	Cotton ¹³	Tobacco	Oil crops ¹⁴	
1939.....	85	81	89	81	67	90	79	85	91	105	147	165	80	94	74	130
1940.....	83	79	85	82	66	88	82	89	107	110	143	181	110	71	91	131
1941.....	81	83	86	86	74	84	87	89	114	99	177	145	102	61	72	131
1942.....	90	94	100	91	87	92	90	102	106	112	153	232	120	70	92	131
1943.....	87	104	115	92	100	85	83	100	79	118	76	200	96	71	82	126
1944.....	96	101	107	94	98	96	79	84	132	101	141	174	112	99	89	121
1945.....	94	97	95	96	102	95	86	111	97	105	80	142	78	102	80	116
1946.....	103	98	99	97	96	105	94	103	93	118	141	223	84	117	85	111
1947.....	98	93	93	99	96	99	95	99	109	107	100	155	85	104	94	106
1948.....	103	99	100	98	96	104	107	97	101	107	107	87	118	100	111	100
1949.....	99	103	102	103	108	97	98	104	90	86	93	58	97	96	95	94
1950.....	98	105	104	105	109	95	100	99	79	91	105	52	51	101	106	88
1951.....	106	108	109	104	112	102	94	93	94	74	101	48	94	117	119	81
1952.....	103	110	110	103	121	97	73	85	103	68	106	42	106	114	116	72
1953.....	101	111	106	108	123	93	81	86	115	76	75	42	101	102	99	64
1954.....	103	114	110	108	128	94	77	82	99	70	104	52	80	114	95	57
1955.....	106	115	114	108	126	98	96	102	86	67	59	77	84	108	99	52
1956.....	113	122	116	112	144	103	104	95	108	66	109	61	83	110	146	47
1957.....	98	125	119	113	149	33	77	93	76	73	90	58	56	84	130	43
1958.....	108	127	118	110	163	94	100	111	81	76	115	65	59	88	154	40
1959 ¹⁶ ...	112	132	130	109	163	97	107	100	95	74	97	55	86	89	143	36

¹ Production of livestock and livestock products, horses and mules excluded.
² Includes clipped wool, honey, and beeswax. These items are not included in the separate groups of livestock and products shown.
³ Cattle and calves, sheep and lambs, and hogs.
⁴ Butter, butterfat, wholesale milk, retail milk, and milk consumed on farms.
⁵ Chicken eggs, commercial broilers, chickens, and turkeys.
⁶ Includes production of farm gardens; hay seeds, pasture seeds, and cover-crop seeds; and some miscellaneous crop production not included in separate groups of crops shown.
⁷ All corn, oats, barley, and sorghum grain.
⁸ All hay, sorghum forage, and sorghum silage.
⁹ All wheat, rye, and buckwheat.
¹⁰ Potatoes, sweetpotatoes, truck crops for processing, and truck crops for fresh market.
¹¹ Fruits, berries, and nuts.
¹² Sorghum sirup.
¹³ Cotton lint and cottonseed.
¹⁴ Soybeans, peanuts picked and threshed, and peanuts hogged.
¹⁵ Hay and concentrates only.
¹⁶ Preliminary.

TABLE 22. --Farm production: Index numbers of total output, and gross production of livestock and crops, by groups, Southeast, 1939-59

(1947-49 = 100)

Year	Farm output	Livestock and products ¹				Crops										Feed used by farm horses and mules ¹⁵
		All livestock and products ²	Meat animals ³	Dairy products ⁴	Poultry and eggs ⁵	All crops ⁶	Feed grains ⁷	Hay and forage ⁸	Food grains ⁹	Vegetables ¹⁰	Fruits and nuts ¹¹	Sugar crops ¹²	Cotton ¹³	Tobacco	Oil crops ¹⁴	
1939.....	86	78	81	80	60	91	79	91	86	100	66	123	109	90	58	131
1940.....	89	74	72	87	60	95	93	98	95	90	73	102	117	64	90	130
1941.....	79	70	73	91	66	82	91	103	114	92	74	125	78	49	81	127
1942.....	93	90	93	95	78	96	90	109	121	100	88	119	105	61	102	125
1943.....	98	101	106	93	95	99	101	106	100	103	84	129	106	59	120	120
1944.....	100	101	107	100	93	101	90	92	106	97	84	131	114	87	101	117
1945.....	101	100	101	101	98	101	101	101	109	110	106	131	96	94	101	114
1946.....	98	100	104	102	91	98	95	97	86	116	98	121	88	108	93	109
1947.....	98	99	102	100	93	99	90	90	126	92	105	112	95	110	103	105
1948.....	104	98	99	98	95	105	102	101	102	97	102	99	120	88	110	100
1949.....	93	103	99	102	112	96	102	109	72	111	93	89	85	102	87	95
1950.....	97	113	110	106	125	93	113	94	66	117	107	84	63	98	95	89
1951.....	114	123	118	109	146	109	102	91	97	116	130	74	116	123	79	84
1952.....	100	131	120	107	165	98	77	94	118	119	120	79	97	117	65	74
1953.....	113	135	126	111	178	109	116	97	132	129	147	79	103	117	74	65
1954.....	105	147	132	110	214	90	76	87	109	123	133	66	79	109	45	57
1955.....	127	156	141	113	220	113	135	120	106	138	126	65	99	136	76	51
1956.....	126	174	144	118	286	105	124	102	165	132	145	64	78	117	84	47
1957.....	113	187	145	122	331	91	128	95	149	129	119	68	54	83	74	42
1958.....	124	200	152	117	374	95	148	116	137	103	133	68	46	86	95	38
1959 ¹⁶	133	213	165	121	420	100	140	102	151	109	139	86	70	98	85	33

¹ Production of livestock and livestock products, horses and mules excluded.

² Includes clipped wool, honey, and beeswax. These items are not included in the separate groups of livestock and products shown.

³ Cattle and calves, sheep and lambs, and hogs.

⁴ Butter, butterfat, wholesale milk, retail milk, and milk consumed on farms.

⁵ Chicken eggs, commercial broilers, chickens, and turkeys.

⁶ Includes production of farm gardens; hay seeds, pasture seeds, and cover-crop seeds; and some miscellaneous crop production not included in separate groups of crops shown.

⁷ All corn, oats, barley, and sorghum grain.

⁸ All hay, sorghum forage, and sorghum silage.

⁹ All wheat and rye.

¹⁰ Potatoes, sweetpotatoes, truck crops for processing, and truck crops for fresh market.

¹¹ Fruits, berries, and nuts.

¹² Sugarcane for sugar and seed, sugarcane sirup, and sorghum sirup.

¹³ Cotton lint and cottonseed.

¹⁴ Soybeans, peanuts picked and threshed, peanuts hogged, and tungnuts.

¹⁵ Hay and concentrates only.

¹⁶ Preliminary.

TABLE 23. --Farm production: Index numbers of total output, and gross production of livestock and crops, by groups, Delta States, 1939-59
(1947-49 = 100)

Year	Farm output	Livestock and products ¹				Crops										Feed used by farm horses and mules ¹⁶
		All livestock and products ²	Meat animals ³	Dairy products ⁴	Poultry and eggs ⁵	All crops ⁶	Feed grains ⁷	Hay and forage ⁸	Food grains ⁹	Vegetables ¹⁰	Fruits and nuts ¹¹	Sugar crops ¹²	Cotton ¹³	Tobacco ¹⁴	Oil crops ¹⁵	
1939.....	91	89	94	94	74	96	111	113	70	104	122	119	92	--	30	151
1940.....	83	82	83	90	70	88	130	125	66	92	106	76	79	--	33	152
1941.....	88	88	86	95	83	92	130	130	73	111	153	100	78	--	44	152
1942.....	101	95	96	98	90	106	125	122	84	121	146	112	99	--	101	152
1943.....	94	107	113	98	106	95	105	99	79	127	80	122	91	--	72	145
1944.....	99	102	105	103	97	100	110	116	86	128	88	114	97	--	63	138
1945.....	90	102	102	105	97	89	119	116	85	136	91	134	73	--	64	129
1946.....	83	101	105	101	93	80	100	111	86	131	106	115	63	--	90	119
1947.....	89	98	103	99	87	88	92	95	91	105	100	96	82	--	72	110
1948.....	114	98	98	100	96	117	113	105	106	107	107	106	125	--	108	99
1949.....	97	104	99	101	117	95	95	100	103	88	93	98	93	--	120	91
1950.....	92	109	104	101	128	87	115	106	98	95	88	105	70	--	235	81
1951.....	99	114	108	99	145	92	88	95	113	72	95	86	89	--	200	73
1952.....	104	118	116	98	150	96	65	77	118	70	76	106	99	--	240	63
1953.....	114	125	124	105	153	103	74	88	136	71	89	106	110	--	149	55
1954.....	106	129	129	105	161	92	75	79	183	72	64	106	86	--	184	47
1955.....	123	130	136	105	153	111	119	112	157	82	49	108	105	--	360	41
1956.....	116	140	135	107	194	100	109	93	140	73	90	91	89	--	437	36
1957.....	103	146	137	106	217	82	95	116	130	70	63	92	59	--	487	32
1958.....	106	153	136	100	256	83	94	119	123	72	80	93	54	--	740	28
1959 ¹⁷ ...	129	166	139	99	310	107	95	107	149	75	75	101	89	--	836	23

¹ Production of livestock and livestock products, horses and mules excluded.
² Includes clipped wool, honey, and beeswax. These items are not included in the separate groups of livestock and products shown.
³ Cattle and calves, sheep and lambs, and hogs.
⁴ Butter, butterfat, wholesale milk, retail milk, and milk consumed on farms.
⁵ Chicken eggs, commercial broilers, chickens, and turkeys.
⁶ Includes production of farm gardens; hay seeds, pasture seeds, and cover-crop seeds; and some miscellaneous crop production not included in separate groups of crops shown.
⁷ All corn, oats, barley, and sorghum grain.
⁸ All hay, sorghum forage, and sorghum silage.
⁹ All wheat and rice.
¹⁰ Potatoes, sweetpotatoes, truck crops for processing, and truck crops for fresh market.
¹¹ Fruits, berries, and nuts.
¹² Sugarcane for sugar and seed, sugarcane sirup, and sorghum sirup.
¹³ Cotton lint and cottonseed.
¹⁴ Due to small quantity of tobacco produced, the index is not shown separately but is included in total crop production.
¹⁵ Soybeans, peanuts picked and threshed, peanuts hogged, and tungnuts.
¹⁶ Hay and concentrates only.
¹⁷ Preliminary.

TABLE 24. --Farm production: Index numbers of total output, and gross production of livestock and crops, by groups, Southern Plains, 1939-59
(1947-49 = 100)

Year	Farm output	Livestock and products ¹				Crops										Feed used by farm horses and mules ¹⁵
		All livestock and products ²	Meat animals ³	Dairy products ⁴	Poultry and eggs ⁵	All crops ⁶	Feed grains ⁷	Hay and forage ⁸	Food grains ⁹	Vegetables ¹⁰	Fruits and nuts ¹¹	Sugar crops ¹²	Cotton ¹³	Tobacco	Oil crops ¹⁴	
1939.....	77	96	90	111	89	76	105	110	51	82	103	185	73	--	35	233
1940.....	37	93	85	111	88	90	136	151	53	85	118	215	87	--	51	275
1941.....	83	100	93	116	96	32	126	161	44	83	119	208	73	--	42	261
1942.....	94	116	115	120	111	89	120	143	63	101	99	208	81	--	103	247
1943.....	88	124	125	119	126	78	123	124	45	104	108	169	69	--	77	221
1944.....	99	118	114	119	126	94	142	134	89	116	129	146	71	--	83	196
1945.....	82	114	109	116	125	72	104	120	68	113	144	115	45	--	83	170
1946.....	82	106	103	110	108	74	109	110	81	125	120	100	42	--	103	146
1947.....	97	102	100	105	101	96	99	93	116	104	129	105	81	--	103	120
1948.....	89	97	97	98	94	86	93	109	88	93	95	105	76	--	96	99
1949.....	114	101	103	97	105	118	108	98	96	103	76	90	143	--	101	81
1950.....	89	108	112	101	106	80	148	104	44	96	71	77	69	--	98	68
1951.....	90	109	116	94	109	80	90	96	44	70	35	46	98	--	55	56
1952.....	92	110	118	91	114	82	71	80	86	81	42	31	88	--	43	46
1953.....	95	107	114	92	108	86	76	102	64	86	51	54	102	--	66	37
1954.....	96	108	115	91	109	87	121	86	71	88	40	23	91	--	37	31
1955.....	97	109	119	87	109	88	135	125	37	95	52	31	97	--	72	28
1956.....	92	114	122	89	127	78	103	73	60	93	46	31	83	--	42	24
1957.....	98	105	107	87	125	91	185	115	51	89	71	38	84	--	53	21
1958.....	118	111	115	87	130	115	224	108	104	92	60	31	99	--	80	19
1959 ¹⁶ ...	118	119	130	85	133	111	211	109	87	84	61	31	133	--	81	18

- ¹ Production of livestock and livestock products, horses and mules excluded.
- ² Includes clipped wool, mohair, honey, and beeswax. These items are not included in the separate groups of livestock and products shown.
- ³ Cattle and calves, sheep and lambs, and hogs.
- ⁴ Butter, butterfat, wholesale milk, retail milk, and milk consumed on farms.
- ⁵ Chicken eggs, commercial broilers, chickens, and turkeys.
- ⁶ Includes production of farm gardens; hay seeds, pasture seeds, and cover-crop seeds; and some miscellaneous crop production not included in separate groups of crops shown.
- ⁷ All corn, oats, barley, and sorghum grain.
- ⁸ All hay, sorghum forage, and sorghum silage.
- ⁹ All wheat, rye, and rice.
- ¹⁰ Potatoes, sweetpotatoes, truck crops for processing, and truck crops for fresh market.
- ¹¹ Fruits, berries, and nuts.
- ¹² Sugar beets, sugarcane sirup, and sorghum sirup.
- ¹³ Cotton lint and cottonseed.
- ¹⁴ Soybeans, peanuts picked and threshed, peanuts hogged, and flaxseed.
- ¹⁵ Hay and concentrates only.
- ¹⁶ Preliminary.

TABLE 25.--Farm production: Index numbers of total output, and gross production of livestock and crops, by groups, Mountain Region, 1939-59
(1947-49 = 100)

Year	Farm output	Livestock and products ¹				Crops										Feed used by farm horses and mules ¹⁵
		All livestock and products ²	Meat animals ³	Dairy products ⁴	Poultry and eggs ⁵	All crops ⁶	Feed grains ⁷	Hay and forage ⁸	Food grains ⁹	Vegetables ¹⁰	Fruits and nuts ¹¹	Sugar crops ¹²	Cotton ¹³	Tobacco	Oil crops ¹⁴	
1939.....	71	89	85	94	81	66	56	89	50	65	119	94	51	--	31	176
1940.....	77	93	89	99	79	73	63	96	55	75	105	112	54	--	60	176
1941.....	87	98	94	104	85	84	92	110	74	75	102	94	48	--	62	174
1942.....	92	106	103	109	99	87	104	109	73	84	86	104	51	--	160	173
1943.....	94	114	112	110	113	91	99	107	80	107	95	73	40	--	249	167
1944.....	95	111	109	111	114	89	105	111	74	100	109	69	42	--	110	154
1945.....	94	109	107	110	113	87	95	107	75	101	114	86	37	--	96	142
1946.....	94	104	103	106	105	90	85	101	82	107	100	102	50	--	51	127
1947.....	99	100	99	104	98	98	93	102	101	98	100	129	69	--	93	113
1948.....	102	101	102	100	96	103	103	99	110	106	96	80	94	--	136	99
1949.....	99	99	99	96	106	99	104	99	89	96	98	91	137	--	71	88
1950.....	101	103	104	97	107	101	106	101	97	100	67	110	110	--	48	79
1951.....	105	111	116	97	108	102	83	99	102	89	85	91	180	--	23	71
1952.....	112	112	119	90	101	110	81	116	108	94	100	85	214	--	16	63
1953.....	120	114	121	103	97	119	86	121	120	103	72	99	233	--	28	56
1954.....	111	118	124	108	103	105	115	110	80	96	96	99	205	--	45	51
1955.....	115	118	125	106	98	111	134	118	96	97	93	93	166	--	45	45
1956.....	114	118	125	100	102	108	114	119	85	102	89	103	189	--	31	41
1957.....	122	115	121	108	100	122	171	135	95	108	102	123	167	--	26	38
1958.....	132	123	132	109	105	132	165	129	124	123	95	124	174	--	31	36
1959 ¹⁶ ...	128	128	138	117	106	124	161	121	106	117	100	129	174	--	23	35

¹ Production of livestock and livestock products, horses and mules excluded.

² Includes clipped wool, mohair, honey, and beeswax. These items are not included in the separate groups of livestock and products shown.

³ Cattle and calves, sheep and lambs, and hogs.

⁴ Butter, butterfat, wholesale milk, retail milk, and milk consumed on farms.

⁵ Chicken eggs, commercial broilers, chickens, and turkeys.

⁶ Includes production of farm gardens; hay seeds, pasture seeds, and cover-crop seeds; and some miscellaneous crop production not included in separate groups of crops shown.

⁷ All corn, oats, barley, and sorghum grain.

⁸ All hay, sorghum forage, and sorghum silage.

⁹ All wheat and rye.

¹⁰ Potatoes, dry edible beans, dry field peas, truck crops for processing, and truck crops for fresh market.

¹¹ Fruits, berries, and nuts.

¹² Sugar beets.

¹³ Cotton lint and cottonseed.

¹⁴ Peanuts picked and threshed and flaxseed.

¹⁵ Hay and concentrates only.

¹⁶ Preliminary.

TABLE 26. -- Farm production: Index numbers of total output, and gross production of livestock and crops, by groups, Pacific Region, 1939-59

(1947-49 = 100)

Year	Farm output	Livestock and products ¹				Crops										Feed used by farm horses and mules ¹⁵
		All livestock and products ²	Meat animals ³	Dairy products ⁴	Poultry and eggs ⁵	All crops ⁶	Feed grains ⁷	Hay and forage ⁸	Food grains ⁹	Vegetables ¹⁰	Fruits and nuts ¹¹	Sugar crops ¹²	Cotton ¹³	Tobacco	Oil crops ¹⁴	
1939.....	77	83	95	84	63	76	80	93	67	68	91	87	44	--	48	169
1940.....	81	86	96	88	67	80	82	98	67	73	91	91	54	--	74	162
1941.....	84	90	101	91	71	82	80	101	86	74	95	68	40	--	85	157
1942.....	87	94	109	93	77	84	117	102	80	75	92	81	40	--	91	151
1943.....	89	99	117	94	88	86	105	110	78	89	93	42	34	--	122	145
1944.....	92	100	112	99	88	90	96	109	92	90	102	44	33	--	71	134
1945.....	93	103	104	101	103	90	90	110	88	92	101	59	35	--	49	126
1946.....	101	99	100	102	94	101	104	107	108	104	114	79	46	--	50	115
1947.....	98	98	99	102	91	99	95	106	95	99	105	109	77	--	71	108
1948.....	100	98	99	99	96	100	105	99	110	101	94	100	97	--	128	100
1949.....	102	104	107	99	113	101	100	95	95	100	101	91	126	--	101	92
1950.....	105	110	108	100	124	105	125	106	102	104	100	139	98	--	37	86
1951.....	112	116	118	99	135	111	96	99	114	111	100	98	176	--	45	76
1952.....	116	118	122	100	138	116	114	106	124	111	104	98	181	--	36	67
1953.....	118	125	127	108	144	116	115	110	128	115	98	127	176	--	19	59
1954.....	121	129	131	113	148	118	185	111	110	116	102	167	148	--	30	53
1955.....	121	133	141	116	146	117	189	113	91	124	108	124	120	--	45	47
1956.....	120	135	138	117	157	123	196	118	98	133	107	134	144	--	28	43
1957.....	129	134	129	122	158	127	235	120	104	130	105	163	153	--	33	39
1958.....	130	139	135	121	166	127	210	118	108	133	107	143	160	--	42	37
1959-60	137	147	147	126	175	134	221	114	115	132	114	177	192	--	44	34

1 Production of livestock and livestock products, horses and mules excluded.
 2 Includes clipped wool, mohair, honey, and beeswax. These items are not included in the separate groups of livestock and products shown.
 3 Cattle and calves, sheep and lambs, and hogs.
 4 Butter, butterfat, wholesale milk, retail milk, and milk consumed on farms.
 5 Chicken eggs, commercial broilers, chickens, and turkeys.
 6 Includes production of farm gardens; hay seeds, pasture seeds, and cover-crop seeds; and some miscellaneous crop production not included in separate groups of crops shown.
 7 All corn, oats, barley, and sorghum grains.
 8 All hay, sorghum forage, and sorghum silage.
 9 All wheat, rye, and rice.
 10 Potatoes, sweetpotatoes, dry edible beans, dry field peas, truck crops for processing, and truck crops for fresh market.
 11 Fruits, berries, and nuts.
 12 Sugar beets.
 13 Cotton lint and cottonseed.
 14 Flaxseed.
 15 Hay and concentrates only.
 16 Preliminary.

END