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**CHANGES IN AGRICULTURAL PRODUCTION AND CASH FARM INCOME
IN CACHE COUNTY, UTAH, 1909-1949**

by

LaVon S. Fife

**A thesis submitted in partial fulfillment
of the requirements for the degree**

of

MASTER OF SCIENCE

in

Agricultural Economics

1952

**UTAH STATE AGRICULTURAL COLLEGE
Logan, Utah**

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Laven S. Vile

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INTRODUCTION

During the period 1909-1949 many changes took place in agricultural production and cash farm income in Cache County, Utah. Important factors which caused changes in agricultural production and cash farm income during this period were technological developments in farm power and machinery, plant and animal breeding, changes in consumer demands, price changes, and climatic conditions. The influence of these factors on both production and income varied with the enterprise, the commodity, and the year studied.

It is recognized by agricultural leaders familiar with agriculture of Cache County that changes in production and income have taken place; however, the extent of the changes during the past forty-year period has never been determined.

In making this study, a method of procedure was developed and formulas were derived which, if used, will make similar studies in other counties of the state more simplified.

There is need for a study of this type being made in every county of the state. County agents, extension workers, and other county leaders base their program of activities, to a great extent, upon the trends which are developing. Farmers and business men make future plans on the basis of past and present trends in production and income.

Cache County was chosen for this study because of its convenient location, its importance as an agricultural area, and the abundance of available information.

OBJECTIVES

The objectives of this study are two-fold: (1) To develop methodology and technique for measuring and evaluating agricultural production and income by counties. (2) To measure change and determine trends in agricultural production and cash income in Cache County from 1907-1949.

DESCRIPTION OF AREA

Physical Characteristics

Cache County is located in the Northern part of Utah (Figure 1). The county is surrounded on the east, west, and south by mountain ranges which protect the area from damaging winds. About half of the county is mountainous; the other half is a broad valley. The topography of the valley area is fairly level with a few hills, several lake terraces and deltas. The average elevation of the valley is 4,400 feet above sea level. The climate is classed as semi-arid with an average annual precipitation of 16.9 inches in the valley. Precipitation in the mountains is considerably greater than that reported in the valley and thus provides an ample supply of water to the irrigated farms. The temperature varies from -20°F in the winter to 100°F in the summer, with an average annual mean temperature of 46.7°F. The average date of the first killing frost is October 8 and of the last spring frost, May 10.¹ The average growing season is 150 days.

Land Usage

The total area of the county is 752 thousand acres. One hundred fifty-nine thousand acres are devoted to crop production. Of this crop land 81,400 acres are irrigated and 78,200 acres are dry farmed (Table 1). Irrigated pasture land in the county amounts to 13,600 acres. The natural vegetation of the marsh land area of the county consists of a

¹ West, Q. H. Productivity of Crop Land in Cache County, Utah. Master's Thesis. Utah State Agricultural College. 1949. p 2

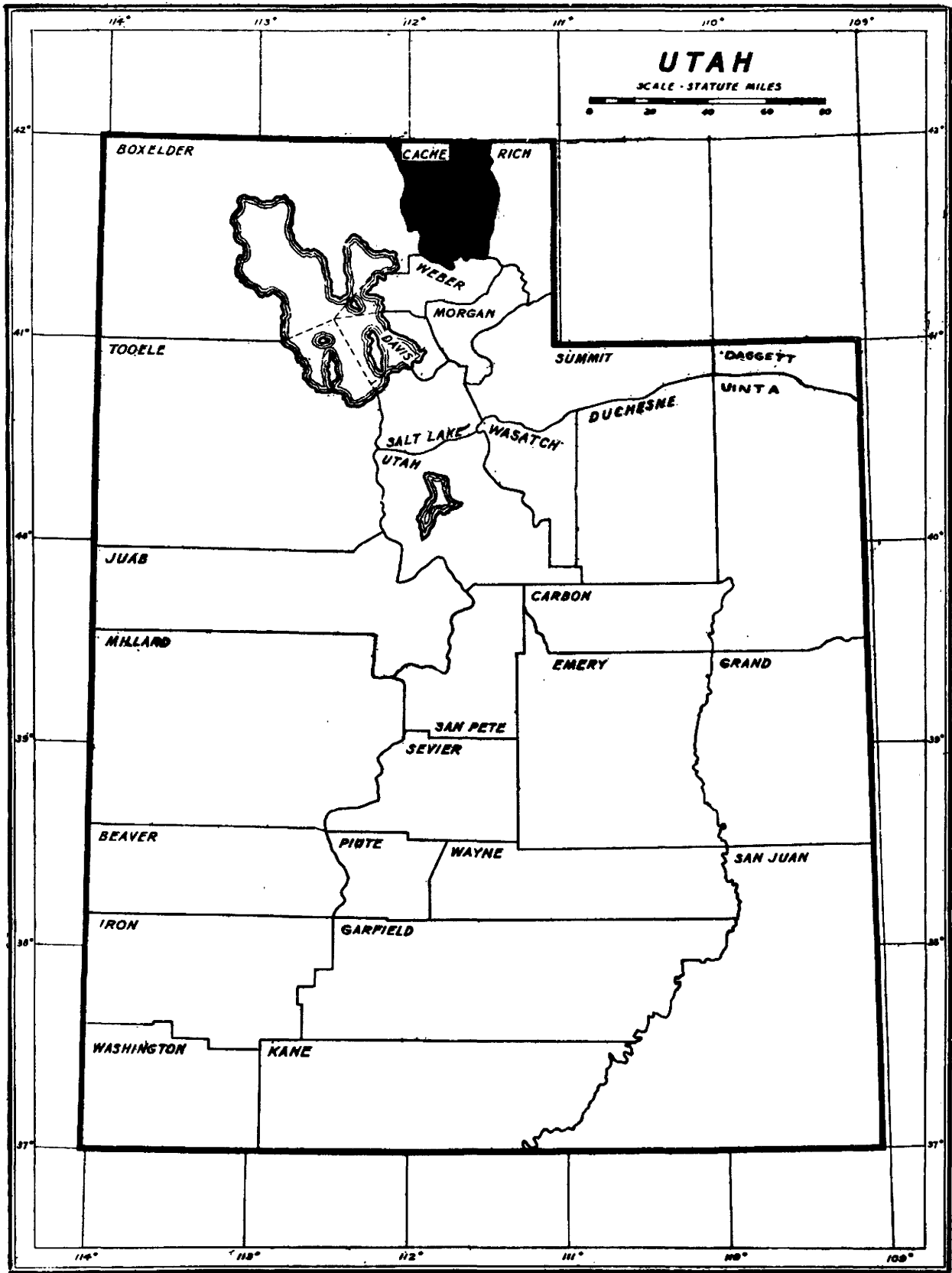


Figure 1. Geographical location of Cache County, Utah

Table 1. Land area of Cache County classified according to usage (1949)^{1/}

Land usage	Acres	
Crop land		159,600
Irrigated area	81,400 ^{2/}	
Dry farm area	78,200	
Range land open for grazing		530,000
Federal	245,500	
State	34,000	
Private	250,500	
Special use land ^{3/}		16,200
Other land not accounted for		16,200
Total county area		752,000

^{1/} Reuss, L. A. and Blanch, G. T.; Utah's Land Resources
Utah Agri. Exp. Sta. Special Report #4, 1951

^{2/} Includes 13,600 acres of irrigated pasture.

^{3/} Includes urban areas, railroad, highways—public and private.

heavy growth of grass upon which are grazed dairy cattle in the summer and range cattle in the winter. There are 530 thousand acres of range land in the county of which 245,500 acres are federally owned, 34 thousand acres are owned by the state and 250,500 acres are privately owned. The range lands are used for summer pasture for cattle and sheep.

Population and Settlement

Peter Maughan and other pioneers were called by the leaders of the Church of Jesus Christ of Latter-Day-Saints to go to Cache Valley in 1856 and settle. In July of that year they settled in what was called "Maughan's Fort" now known as Wellsville. The population increased from the few settlers in 1856 to 8,229 by 1870. In 1910 the county population was 23,062; 27,429 in 1930; and 33,496 in 1950 (Table 2).

Table 2. Population in Gache County, Utah. Census years, 1890-1950^{1/}

Year	County population
1860	2,605
1870	8,229
1880	12,562
1890	15,509
1900	18,139
1910	23,062
1920	26,992
1930	27,429
1940	29,797
1950 ^{2/}	33,496

^{1/} U. S. Census reports^{2/} PreliminaryAgricultural Development

According to the Census of Agriculture, there were 1795 farms in the county in 1900. The largest number of farms reported was 2483 in 1925. In 1950 the number of farms reported was 2085, a decrease of 17 percent from 1925 (Table 3).

Table 3. Number of farms in Gache County, Utah. Census years 1900-1950^{1/}

Year	Number of farm units	Land area in farms acres	Average size of farm acres
1900	1795	316,662	176
1910	1907	294,160	154
1920	2242	317,698	142
1925	2483	340,153	137
1930	2372	392,068	165
1935	2399	330,441	138
1940	2253	329,962	147
1945	2227	386,902	174
1950 ^{2/}	2085	389,030	187

^{1/} U. S. Census reports^{2/} Preliminary

While the number of farms has been decreasing, the acreage per farm has increased. In 1925 the average size farm in the county was 137 acres; in 1950 the size of the average farm increased to 187 acres (Table 3). This acreage includes all land in farms, whether under cultivation or not. There has been a trend toward larger cultivated acreages per farm. According to the Census of Agriculture, there were only 78 acres of cultivated land per farm in 1944 compared to 89 acres in 1949. The total farm valuation of the county in 1944 was almost 33 million dollars, or an average of 14,615 dollars per farm.^{1/} Preliminary reports of the 1950 Census of Agriculture show total farm land and buildings of the county valued at 43.4 million dollars or 20,834 dollars per farm.

Economic Development

Industries were established to process the agricultural production of the county. Four large milk processing plants are located in Cache County and process about 80 percent of the total milk produced. One of the largest pea canning factories in the West was built at Smithfield, Utah in 1918. Later a bean canning plant was built at Hyrum, Utah. These two plants process all of the peas, beans and corn grown commercially in the county. Four sugar factories were built in Cache County to process the large yearly production of sugar beets. Technological improvements in sugar manufacturing, coupled with reduced sugar beet production, have made it possible for one sugar factory to process the beets grown in the county.

^{1/} U. S. Census of Agriculture. Vol 1, Part 31, Utah and Nevada, Washington D. C. Bureau of Census. 1945.

SOURCE OF DATA

Basic data on acreage and production were taken from the U. S. Census of Agriculture decennial and mid-decennial census years 1910 to 1950.^{1/} Reports from the Bureau of Agricultural Economics on farm production, disposition, and value of commodities were used to supplement census data. Prices paid producers for commodities and rates of production were obtained from the Department of Agricultural Economics, Utah State Agricultural College and the Bureau of Agricultural Economics, Washington, D. C.

In cases where data on unit turn-off were not available, and where adjustments in census data were thought to be necessary, assistance was obtained from staff members in the production departments and the Agricultural Economics Department of the College.

^{1/} Only preliminary census reports were available for 1950.

DEFINITION OF TERMS

Livestock turn-off is the average number of pounds of growth produced per animal for each class of livestock during a one-year period.

Amount of farm production sold is that portion of the total county farm production that is sold from the farm where produced during one year.

Average seasonal prices are annual averages of monthly prices received by farmers weighted by estimated quantities sold during each month of the marketing season.

Value of products sold is determined by multiplying the unit average seasonal price of a commodity by the amount of that commodity which was sold from farms where produced during one year.

Cash farm income of the county is the total gross cash receipts resulting from the county farm production which was sold from the farms where produced during a one-year period.

METHOD OF PROCEDURE

United States Census of Agriculture data on crop acreage, production, livestock numbers and livestock production for Cashe County were recorded upon work sheets. When data were not obtainable from census reports because of incomplete enumeration, interpolations were made based on data of census year immediately preceding and following the year for which data was lacking. This procedure was followed when determining the production of alfalfa seed, cherries, pears, plums, strawberries, raspberries, and grapes for 1924 and 1934. These data were checked for consistency and reasonableness with yearly state production data published by the Crop Reporting Board of the Bureau of Agricultural Economics and with staff members familiar with production of these commodities during the years mentioned.

When differences of more than 5 percent occurred between state data reported by the Bureau of the Census and Bureau of Agricultural Economics, adjustments were made in county data. Because of trained statisticians and enumerators employed by the Bureau of Agricultural Economics, the data reported by that agency were considered to be more accurate than the data reported by the census enumerators. In most cases, however, the two agencies' data were in close agreement. Only minor adjustments were made in crop production data reported by the Bureau of the Census.

Greatest differences occurred in the number of livestock reported on farms by the Bureau of Agricultural Economics and the Bureau of the Census. Most of this discrepancy was the result of different dates of

enumeration. The Bureau of Agricultural Economics reports the number of livestock on farms January 1st while the Bureau of the Census reports number of livestock on farms April 15th, 1910; April 1st, 1930; April 1st, 1940; and April 1st, 1950. The date of enumeration for other census years was January 1st.

Adjustments in Cache County data were made by using the following formula:

$$\frac{\text{county census datum}}{\text{state census datum}} \times 100 = \text{county percentage of state}$$

$$\frac{\text{county percentage}}{100} \times \text{Bureau of Agricultural Economics state datum} = \text{adjusted county datum}$$

This method was used in making all adjustments in livestock numbers. Total milk and butterfat production was based on the average number of pounds of butterfat produced per cow during each of the years studied.

The amount of farm production sold was next determined. Crop and livestock production, disposition and income reports for Utah, published by the Bureau of Agricultural Economics, furnished the basic data. A percentage figure representing the amount sold of the total production was calculated. These data were not available for separate counties. State average percentages were adapted to Cache County on the basis of the quantity of production in relation to farm and home demands of the county compared to the state average. Staff members assisted in making this adaptation of data.

Livestock turn-off was determined for each class of livestock by dividing the total number of pounds of growth produced during one year by the inventory number of livestock on farms January 1st of the same year.

Average seasonal prices of items of production were used to determine the cash income from farm marketings. When different items of production were grouped together, a composite average seasonal price was determined based on the amount and price of each of the different items. Mixed grains were composed of equal parts of wheat, oat, and barley; thus the composite price was an average of the sum of the three grain prices. Beef cattle price was combined with veal price in a 95 and 5 percentage relationship to arrive at a composite price. These percentages were based on the calculated production of each class of livestock in relation to the combined total yearly production of beef and veal. Average seasonal prices were determined for dairy cattle by using beef cattle prices as a base and weighting the price according to the price paid for milk cows and the price paid for lower grades of beef. Prices paid producers for sheep and lambs represents a weighted price based on 12 percent of the total production marketed as sheep and the remainder, or 88 percent, marketed as lambs.

Value of farm production sold was determined by applying unit average seasonal prices to quantities sold. Yearly cash farm income for the county was determined by adding the value of all items of farm production sold during the year.

AGRICULTURAL PRODUCTION IN CACHE COUNTY

Crops

During the period 1909 to 1949 crop production in Cache County increased 29 percent. The trend in grain production has been upward since 1934 although climatic conditions have caused wide yearly fluctuation. Production of field crops increased 38 percent since 1909. Trends in production of certain crops such as sugar beets, alfalfa seed, and fruit has been downward since about 1919.

Wheat. Both irrigated and dry land wheat are grown in Cache County. Winter wheat is grown in the dry land area and spring wheat is generally planted in the irrigated area. More than three times as much acreage is devoted to winter wheat production as to spring wheat production. Winter wheat acreage has increased from 21 thousand acres in 1934 to almost 49 thousand acres in 1949, an increase of 129 percent (Table 4). During that same period, winter wheat production increased from 381 thousand bushels to 998 thousand bushels, or 162 percent.

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Table 4. Acreage, yield, and production of winter wheat in Cache County, Utah. Census years 1929-1949.

Year	Acreage harvested	Yield per acre	Production
	<u>acres</u>	<u>bushels</u>	<u>bushels</u>
1929	34,177	18.8	640,921
1934	21,196	18.0	381,140
1939	29,766	17.8	529,351
1944	35,998	24.3	874,337
1949 ¹	48,634	20.5	998,372

¹/ Adapted from U. S. Census reports.

²/ Preliminary

Yields of winter wheat have averaged 19.9 bushels per acre during the past twenty years while spring wheat yields have averaged 28.3 bushels per acre during that same period. The harvested acreage of spring wheat changed from 10,548 acres in 1929 to 8,436 acres in 1939. In 1949, 13,074 acres were harvested (Table 5).

Table 5. Acreage, yield, and production of spring wheat in Cache County, Utah. Census years 1929-1949^{1/}

Year	Acreage harvested	Yield per acre	Production
	acres	bushels	bushels
1929	10,548	26.8	283,030
1934	10,882	25.2	274,761
1939	8,436	29.0	244,513
1944	8,845	30.9	273,152
1949 ^{2/}	13,074	29.7	388,070

^{1/} Adapted from U. S. Census reports.

^{2/} Preliminary

Production of spring wheat was 283 thousand bushels in 1929 and 388 thousand bushels in 194, an increase of 37 percent. Prior to 1929, only total wheat acreage and production were reported for the county.

Total wheat acreage, yield, and production data are given in Table 6. In 1919 total wheat area harvested amounted to almost 57 thousand acres. By 1934 only 32 thousand acres were harvested. However, by 1949 the area increased to almost 62 thousand acres. The trend in acre yields of wheat has been upward since 1919 (Figure 2).^{1/} Total wheat production amounted to only 595 thousand bushels in 1924. By 1949 production was increased to 1.4 million bushels, an increase of 133 percent.

^{1/} Due to severe frost during the 1919 crop year, acre yields of many crops were considerably below normal.

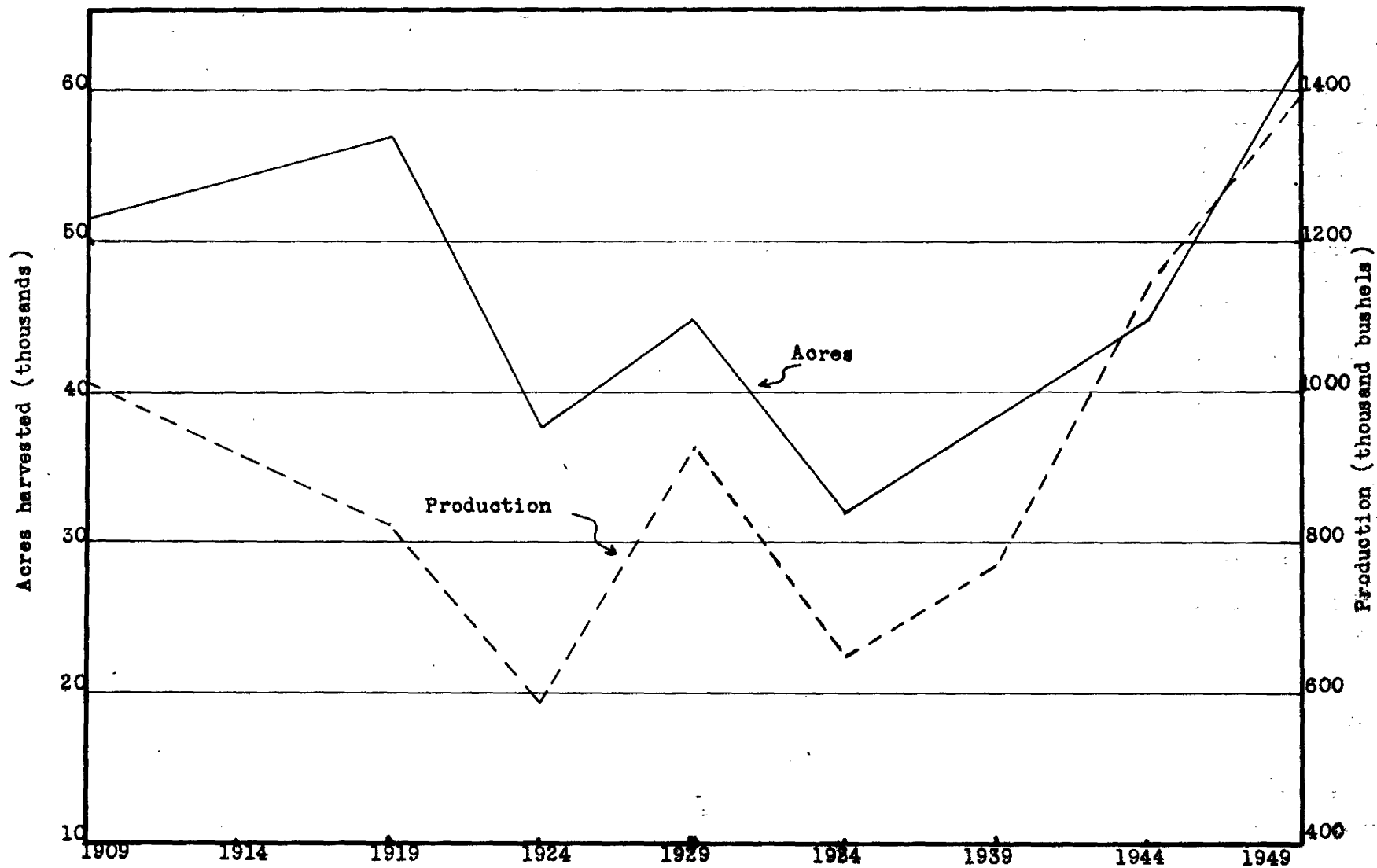


Figure 2. Changes in acreage and production of wheat, Cache County, Utah, census years 1909-1949

Table 6. Acreage, yield, and production of all wheat in Cache County, Utah. Census years 1909-1949^{1/}

Year	Acres harvested	Yield per acre	Production
	<u>acres</u>	<u>bushels</u>	<u>bushels</u>
1909	51,112	20.5	1,049,910
1919	56,816	10.5	824,688
1924	37,543	15.8	594,896
1929	44,725	20.6	923,951
1934	32,078	20.4	655,901
1939	38,202	20.3	773,864
1944	44,843	25.6	1,147,489
1949 ^{2/}	61,708	22.5	1,386,442

^{1/} Adapted from U. S. Census reports.

^{2/} Preliminary

Oats. The trend in acreage and production of oats in Cache County is decidedly downward (Figure 3). The area harvested varied from 6,383 acres in 1909 to 2,343 acres in 1949. Production was reduced from 285 thousand bushels in 1909 to almost 130 thousand bushels in 1949 (Table 7).

Table 7. Acreage, yield, and production of oats in Cache County, Utah. Census years 1909-1949^{1/}

Year	Acres harvested	Yield per acre	Production
	<u>acres</u>	<u>bushels</u>	<u>bushels</u>
1909	6,383	44.7	285,191
1919	3,044	34.9	106,144
1924	4,899	30.0	146,970
1929	2,791	44.3	123,530
1934	2,156	43.7	94,214
1939	2,432	50.5	122,850
1944	2,569	55.0	141,299
1949 ^{2/}	2,343	55.3	129,690

^{1/} Adapted from U. S. Census reports.

^{2/} Preliminary

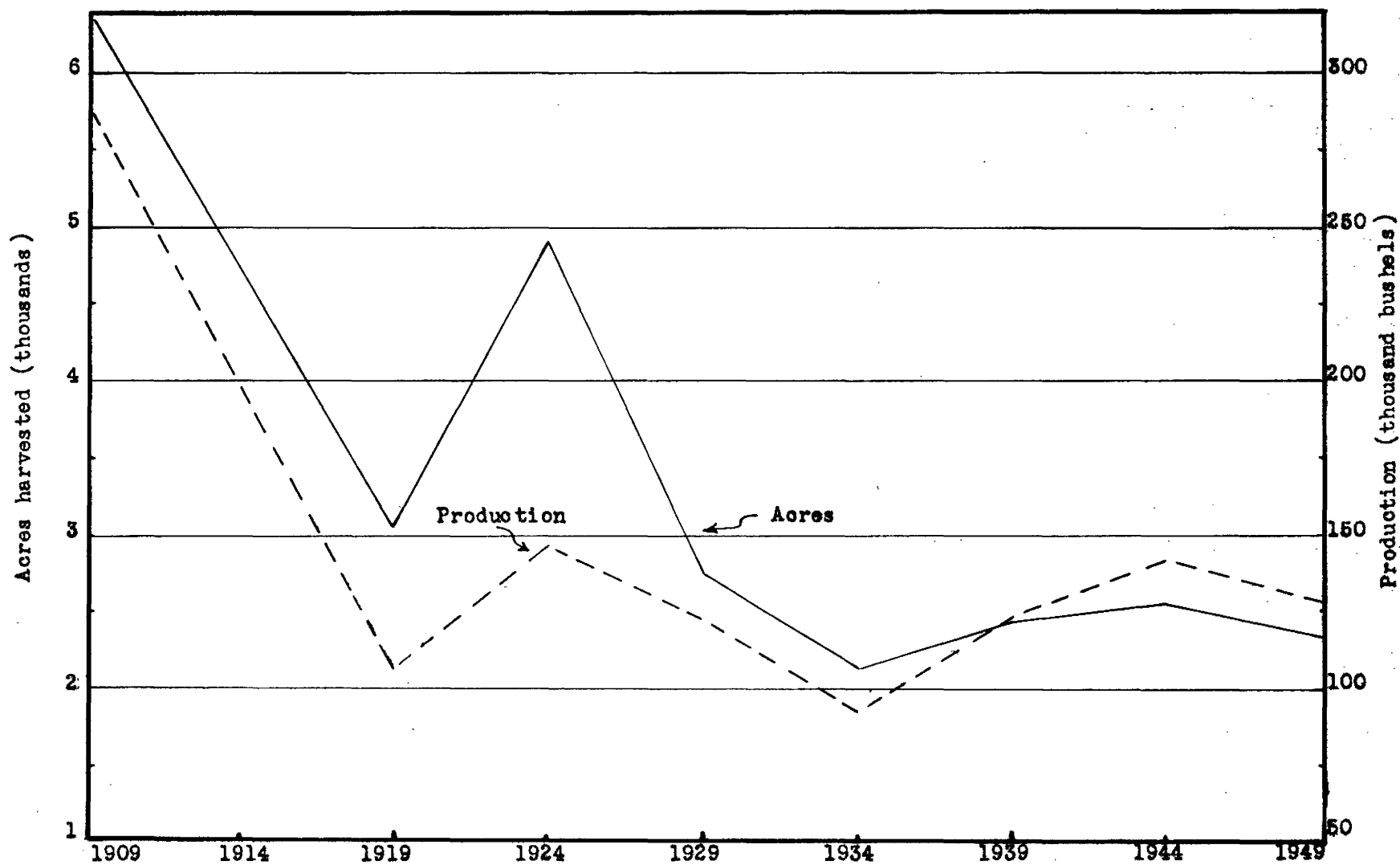


Figure 3. Changes in acreage and production of oats, Cache County, Utah, census years 1909-1949

Acres yields of oats have been upward since about 1924. An oat yield of 30 bushels per acre was reported in 1924 compared to 55.3 bushels per acre in 1949.

Barley. The trend in barley acreage, yield, and production has been upward (Figure 4). In 1909, only 1,497 acres were harvested. By 1934 the acreage was increased to 4,176. However, by 1939, almost 14 thousand acres were grown. The largest acreage for any year studied was 23,417 reported in 1944. This represents an increase of over 1400 percent since 1909 (Table 8).

Table 8. Acreage, yield, and production of barley in Cache County, Utah. Census years 1909-1949.

Year	Acres harvested	Yield per acre	Production
	<u>acres</u>	<u>bushels</u>	<u>bushels</u>
1909	1,497	21.0	31,370
1919	1,313	15.4	20,213
1924	2,208	23.2	51,140
1929	4,399	33.5	147,171
1934	4,176	35.9	150,127
1939	13,812	44.6	616,026
1944	23,417	48.9	1,145,113
1949 ^{1/}	20,968	47.2	991,090

^{1/} Adapted from U. S. Census reports.

^{2/} Preliminary

The increase in barley production was more pronounced than acreage due to greater acre yields. In 1909, 31 thousand bushels were produced. By 1944, barley production had increased to more than 1 million bushels, or an increase of 3550 percent. Increased demand for carbohydrate feed, due to increased poultry and dairy numbers, as well as increased acre yields, are the principal factors causing the greatly increased barley production in the county. Practically all the barley is grown in the irrigated area of the valley.

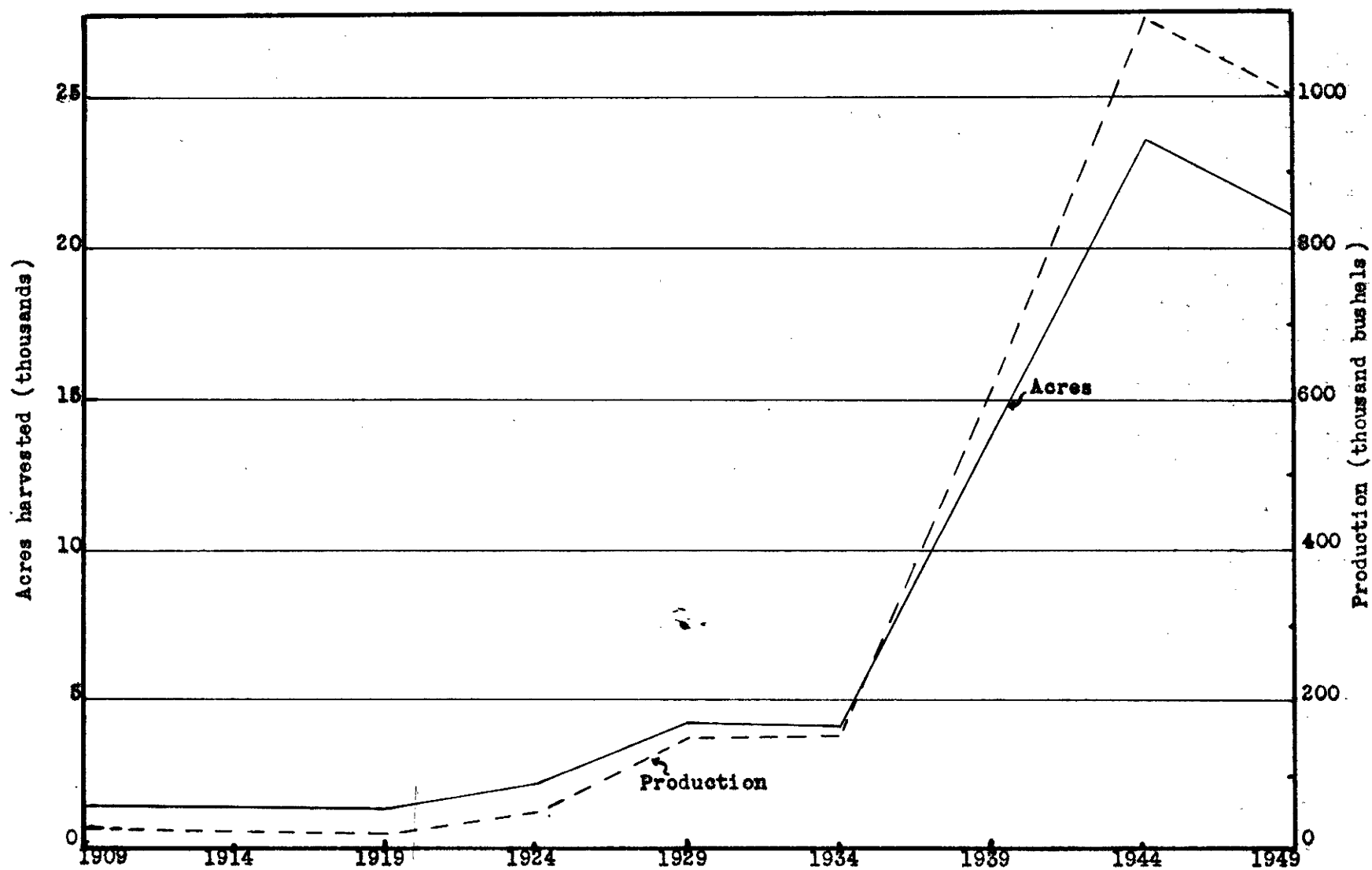


Figure 4. Changes in acreage and production of barley, Cache County, Utah, census years 1909-1949

Alfalfa hay. Of all the forage crops grown in Cache County, alfalfa hay production has been most important. In 1909 more than 29 thousand acres of alfalfa hay were harvested. By 1934, alfalfa hay acreage was increased to 49,653. Since that time alfalfa hay acreage has declined slightly with 39,134 acres reported in 1949 (Table 9).

Table 9. Acreage, yield, and production of alfalfa hay in Cache County, Utah. Census years 1909-1949¹

Year	Acres harvested	Yield per acre	Production
	acres	tons	tons
1909	29,492	1.0	87,602
1919	22,444	1.8	41,418
1924	38,281	2.4	91,874
1929	49,227	2.5	125,223
1934	49,653	1.9	93,980
1939	45,322	2.3	104,941
1944	49,266	2.4	117,360
1949 ²	39,134	2.5	99,512

¹ Adapted from U. S. Census reports.

² Preliminary

Alfalfa hay production varied with acreage and yield. A production of only 41 thousand acres was reported in 1919. However, by 1929 increased acreage and per acre yields caused production to increase to 125 thousand tons, an increase of over 200 percent during that ten-year period. Since 1924, alfalfa hay production in Cache County has remained relatively constant with an average annual production of 105.5 thousand tons for the years studied. In relative importance, timothy, clover, and wild hay production has declined since 1909 (Figure 5). An average annual production of 21 thousand tons of hay other than alfalfa was reported by the census from 1909 through 1924;

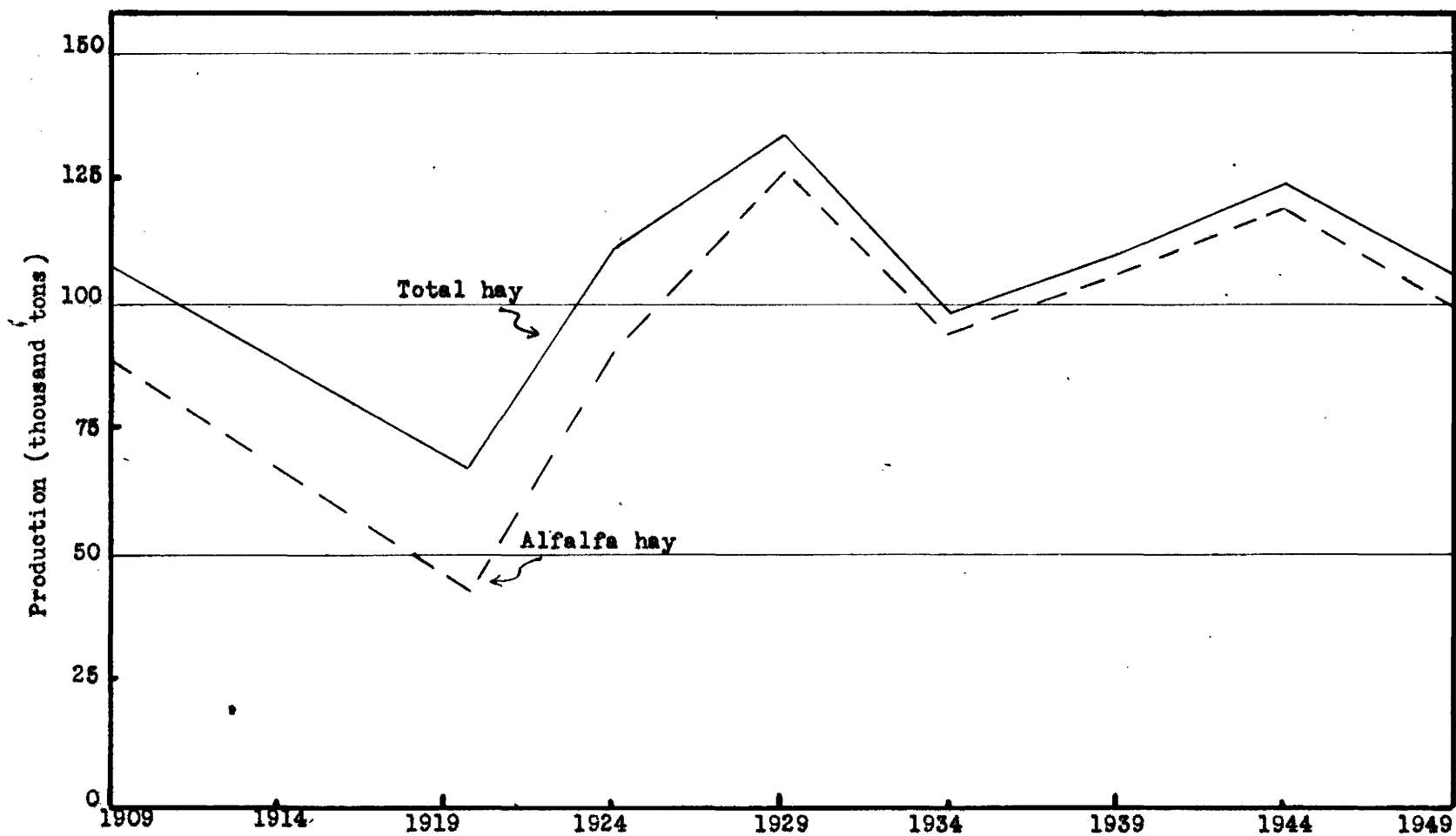


Figure 5. Changes in alfalfa hay production in relation to total hay harvested, Cache County, Utah, census years 1909-1949 .

compared to only 5.5 thousand tons reported as the average annual production during the census years 1939 through 1949 (Table 10).

Table 10. Acreage, yield, and production of hay other than alfalfa hay in Cache County, Utah. Census years 1909-1949^{1/}

Year	Acreage harvested	Yield per acre	Production ^{2/}
	acres	tons	tons
1909	10,842	1.8	19,387
1919	12,226	2.0	24,511
1924	7,481	2.5	19,326
1929	4,823	1.5	7,214
1934	4,018	1.2	4,622
1939	3,673	1.3	4,933
1944	4,528	1.3	5,718
1949 ^{3/}	3,709	1.6	5,956

^{1/} Adapted from U. S. Census reports.

^{2/} Includes timothy, clover, and wild hay.

^{3/} Preliminary

An increasing amount of corn for silage purposes was grown in the county during the past ten years. In 1939, 496 acres and approximately 5 thousand tons of corn silage were produced compared to 1,771 acres and over 23 thousand tons of corn silage produced in 1949.

The increased production of silage crops has tended to compensate for the reduced alfalfa hay production in the county during the last few years.

Alfalfa seed. Alfalfa seed production in Cache County has been declining since 1929. That year over 10 thousand bushels of seed were harvested. In 1939, production was reduced to 4,796 bushels and by 1949 alfalfa seed production was reduced to 2,157 bushels. Most of the alfalfa seed was grown in the dry land areas of the county.

Potatoes. There has been wide fluctuation in acreage yield and production of potatoes in the county since 1909. Over 12 hundred acres were harvested in 1909, but only 508 acres in 1929. During 1939 and 1944, the potato area harvested in Cache County was over 12 hundred acres. In 1949 the harvested acreage was reduced to 655. Acre yields have ranged from 111 bushels in 1934 to 274 bushels per acre in 1949. Potatoes harvested ranged from 108 thousand bushels in 1929 to almost 235 thousand bushels in 1944 (Table 11).

Table 11. Acreage, yield, and production of potatoes in Cache County, Utah. Census years 1909-1949^{1/}

Year	Acreage harvested	Yield per acre	Production
	<u>acres</u>	<u>bushels</u>	<u>bushels</u>
1909	1,215	175	213,135
1919	948	163	154,726
1924	798	166	132,622
1929	508	213	108,445
1934	1,092	111	121,467
1939	1,281	165	211,578
1944	1,254	187	234,970
1949 ^{2/}	655	274	179,703

^{1/} Adapted from U. S. Census reports.

^{2/} Preliminary

Sugar beets. The trend in sugar beet acreage and production is decidedly downward (Figure 6). The greatest acreage and production was reported in 1919 with 18,494 acres producing over 241 thousand tons. Ten thousand acres were harvested in 1939 but in 1949 the sugar beet acreage was reduced to only 3,119. This acreage is only 1/6 of that harvested in 1919. Production has been reduced from over 241 thousand tons in 1919 to 51 thousand tons in 1949 (Table 12).

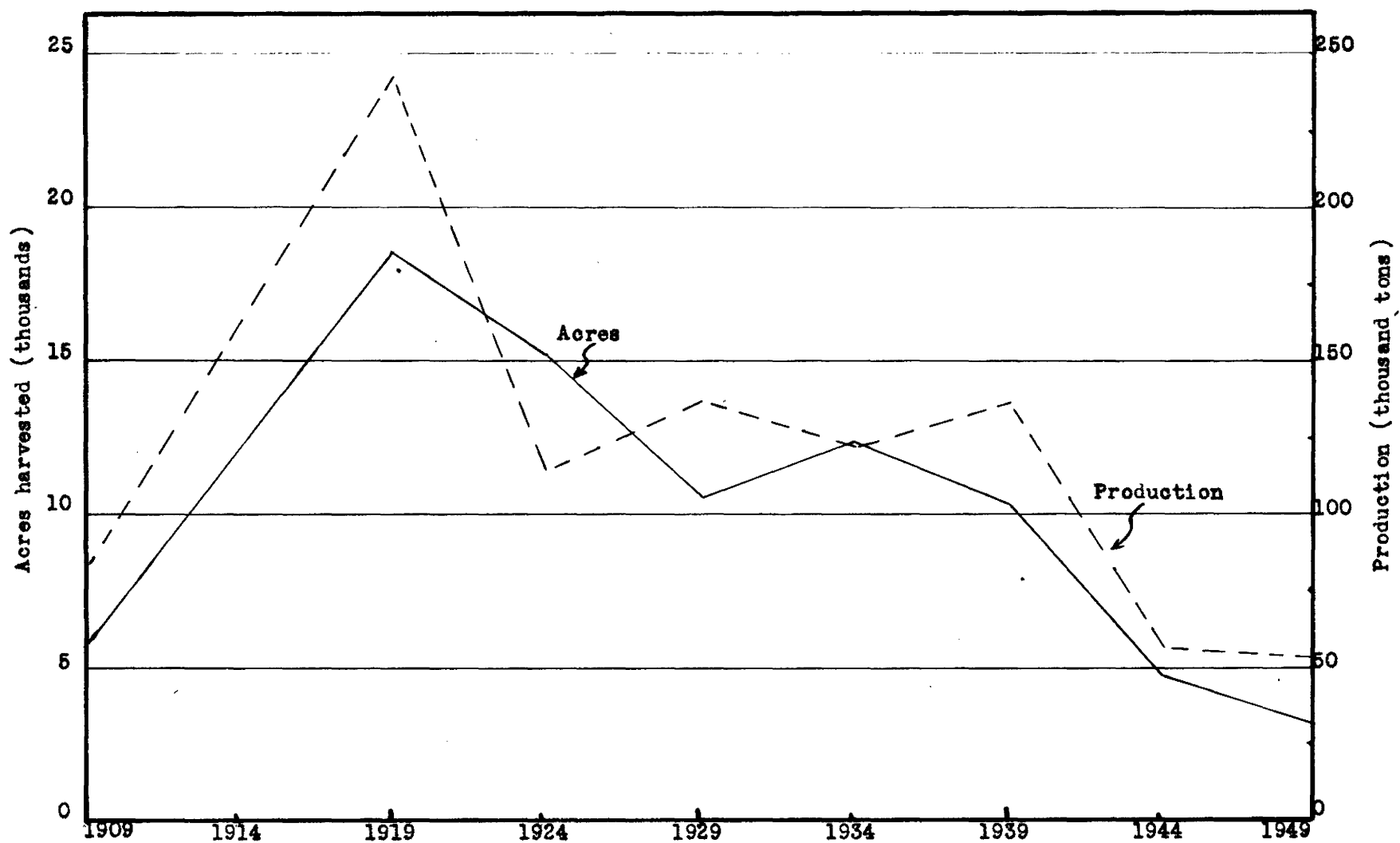


Figure 6. Changes in acreage and production of sugar beets, Cache County, Utah, census years 1909-1949

Table 12. Acreage, yield, and production of sugar beets in Cache County, Utah. Census years 1909-1949^{1/}

Year	Acreage harvested	Yield per acre	Production
	<u>acres</u>	<u>tons</u>	<u>tons</u>
1909	5,948	14.2	85,323
1919	18,494	13.5	241,401
1924	15,169	7.5	114,247
1929	10,687	12.9	137,636
1934	12,371	9.9	122,044
1939	10,307	13.2	135,520
1944	4,880	11.8	57,526
1949 ^{2/}	3,119	16.3	50,996

^{1/} Adapted from U. S. Census reports.

^{2/} Preliminary

Acre yields have ranged from 7.5 tons in 1924 to 16.3 tons in 1949 with an average of 12.4 tons per acre for all the years reported.

Canning peas. There was a slight upward trend in acreage, yield, and production of canning peas grown in Cache County during the period from 1929 through 1949. Eighteen hundred and fifty acres were grown in 1929, 2,176 in 1944, and 1,917 in 1949. Average acre yields of peas were 2,850 pounds in 1929, 2,997 in 1944 and 3,434 in 1949 (Table 13).

Table 13. Acreage, yield, and production of canning peas in Cache County, Utah. Census years 1929-1949^{1/}

Year	Acreage harvested	Yield per acre	Production
	<u>acres</u>	<u>pounds</u>	<u>1000 pounds</u>
1929	1,850	2,850	6,555
1934	1,500	2,400	3,600
1939	1,800	2,800	5,040
1944	2,176	2,997	6,521
1949	1,917	3,434	6,583

^{1/} From annual reports of the California Packing Corporation, Smithfield Branch, Smithfield, Utah.

Six and a half million pounds of canning peas were harvested in 1929. During the depression years, low acreage and low yield caused only 3.6 million pounds of peas to be produced. In 1949, the production of canning peas in Cache County amounted to 6.6 million pounds.

Canning corn. The most recent development in vegetable crop production has been the canning corn industry. In 1946, the California Packing Corporation installed equipment for processing corn in their Smithfield canning factory. Since that time corn production has become important in Cache County. In 1946, 717 acres of canning corn were grown in the county with an average per acre yield of 3.92 tons (Table 14).

Table 14. Acreage, yield and production of canning corn in Cache County, Utah. 1946-1949^{1/}

Year	Acreage harvested	Yield per acre	Production
	<u>acres</u>	<u>tons</u>	<u>tons</u>
1946	717	3.92	2,811
1947	1,484	4.31	6,396
1948	1,532	4.20	6,434
1949	1,625	5.21	8,466

^{1/} From annual reports of California Packing Corporation, Smithfield Branch, Smithfield, Utah.

In 1949, Cache County was the second most important county in the state in the production of canning corn. It had 25 percent of the corn producing farms and 27 percent of the corn acreage.^{1/} Over 16 hundred acres of canning corn were harvested in the county in 1949 with an average acre yield of 5.21 tons.

^{1/} Kearl, W. G. Cost and Efficiency of Producing Canning Corn in Cache County, Utah, 1949. Master's thesis, 1951, p. 1.

Canning beans. Canning beans have been grown in the county since about 1924 when the bean canning plant was built at Hyrum, Utah. In 1929, the first year for which data are available, 125 acres were grown, with an average yield of three tons per acre. Two hundred acres of canning beans were grown in 1944 with an average yield of five tons per acre. Only 150 acres were grown in 1949, but the average yield per acre increased to 6.5 tons. Blue Lake beans were the only variety grown for commercial canning purposes after 1938.^{1/}

Fruit. Acreage and production of fruit in Cache County has declined since about 1919. About 1000 acres of land in the county were used in producing fruit in 1924.^{2/} Bearing and non-bearing fruit acreage reported for Cache County was 461 in 1929, 348 in 1939, and 355 in 1949.^{3/} Apples, peaches, and strawberries were the most important fruits grown in the county. Because of the frost hazard, wide yearly fluctuation in production occurred.^{4/}

Livestock

The livestock industry is of primary importance to the agriculture of Cache County. Dairy farms characterize the most common type of farming carried on in the valley area. According to preliminary U. S. Census reports of 1950, there were 735 dairy farms in the county, 159 poultry farms and 132 livestock farms other than dairy and poultry.

^{1/} Based on information furnished by C. W. Clark, President of the California Packing Corporation, Smithfield plant.

^{2/} Peterson, William, Dir. Utah Exp. Sta. and UAC Extension Service. Special report to Chamber of Commerce. September 1, 1924

^{3/} U. S. Census reports.

^{4/} See appendix, tables 1-8

Dairy cattle. Cache County is the leading dairy producing area in the state. Over twice as many pounds of milk and butterfat were produced in Cache County than in any other county in the state in 1945.^{1/} Dairy cows in the county increased in number from about 9 thousand in 1910 to over 15 thousand head in 1925. The number remained fairly constant at about 15 thousand head during the next 15 years (Table 15). Since 1940, the trend has been gradually upward. In 1949, 17,445 milk cows were reported on farms in the county (Figure 7).

Of even greater significance than the increase in the number of dairy cattle was the increase in dairy production. Dr. W. E. Carroll, describing conditions at the time the first cow testing association was organized, reported that in 1911 the estimated butterfat production per cow was from 120 to 140 pounds annually.^{2/} In 1945 an average of 292 pounds of butterfat was produced per cow in Cache County, the highest of any county in the state.^{3/} The average annual milk production per cow in Cache County increased from 4,300 pounds in 1909 to 8,400 pounds in 1949, an increase of 95 percent. Because of the increased number of milk cows and the increased production per cow, total milk produced in the county has increased over 300 percent since 1909 (Table 16).

Beef cattle. Beef cattle decreased in relative importance during the period studied. In 1910, beef cattle made up 45 percent of all the cattle in Cache County, about 11 thousand head. The number of

^{1/} Rich, Lyman H. Dairy Production on Utah Farms. Utah State Agricultural College Extension Service. N.S. 147, p. 2. January 4, 1947.

^{2/} Carroll, W. E. Report of the Richmond-Lewiston Cow Testing Association. UAC Exp. Sta. Bul. 127, p. 200. Logan, Utah. 1913

^{3/} Rich, Lyman H. Dairy Production in Utah, 1945. Utah State Agricultural College Ext. Ser. N.S. 676, p 2. January 4, 1947.

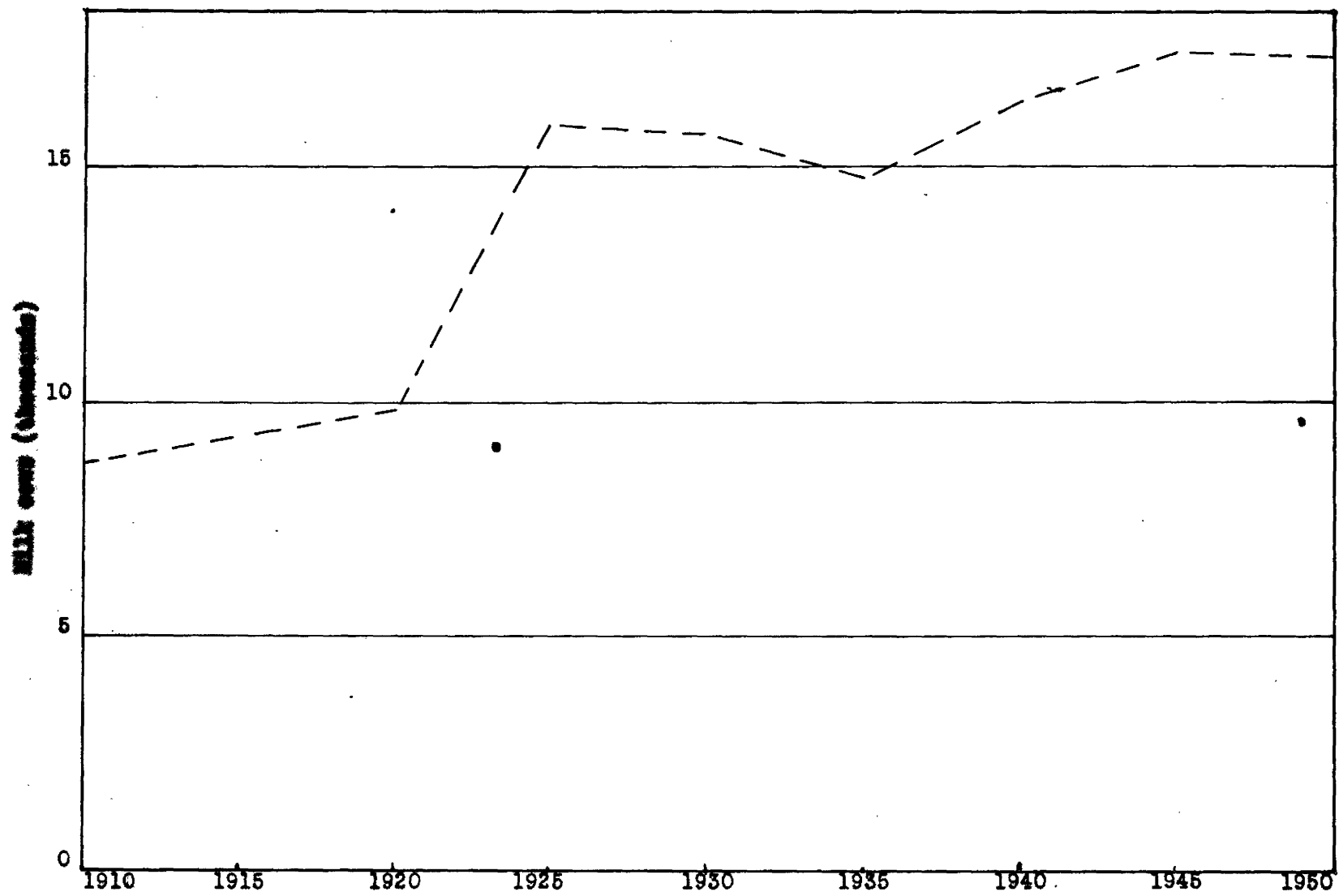


Figure 7. Changes in the number of milk cows on farms, Cache County, Utah, census years 1910-1950

dairy cattle increased rapidly during the early twenties, but the number of beef cattle had decreased to about 4 thousand head by 1925. The number of beef cattle increased again to 11 thousand head in 1930, but the depression years of the early thirties caused beef cattle numbers to be reduced to less than 4 thousand head. The number was again increased during the years of World War II and the post war years. In 1950, beef cattle made up 32 percent of the total number of cattle in Cache County (Table 15).

Sheep. The trend in sheep numbers in Cache County was upward from 1910 to 1930. During this time the number of sheep and lambs increased from 15 thousand to almost 80 thousand head, a 433 percent increase (Figure 8). After 1930 the number of sheep in the county decreased. In 1940 there were about 34 thousand and in 1950 only 24 thousand head (Table 15). Most of the sheep were fed on the range land; relatively few were kept on the valley farms.

Wool production followed the same general trend as did sheep numbers. The amount of wool shorn increased from about 84 thousand pounds to 528 thousand pounds during the period from 1909 to 1924. After 1924, wool production declined and followed that downward trend until 1944 during which year 159 thousand pounds of wool were shorn. By 1949, the amount of wool shorn had increased to 183 thousand pounds (Table 16).

Hogs. The number of hogs in Cache County are relatively few. In 1910, 4,323 were reported; in 1925, 5 thousand; but only 2,405 in 1935. There were over 7 thousand hogs on farms in 1940 and in 1945. However, preliminary U. S. Census reports for 1950 show only 4,821 head of hogs in the county (Table 15).

Table 15. Number of livestock on farms in Cache County, Utah. January 1st census years 1910-1950^{1/}

	1910	1920	1925	1930	1935	1940	1945	1950 ^{2/}
Beef cattle ^{3/}	10,779	11,334	3,698	11,075	3,889	5,931	11,826	12,279
Dairy cattle ^{4/}	13,020	14,796	23,882	23,652	23,117	25,471	26,250	25,781
Total cattle	23,799	26,130	27,580	34,727	27,006	31,402	38,076	38,060
Milk cows	8,680	9,864	15,921	15,768	14,914	16,433	17,500	17,445
Sheep & lambs	15,091	25,904	55,162	79,543	51,259	33,787-	23,701	24,587
Hogs	4,323	5,703	5,089	3,711	2,405	7,760	7,096	4,821
Chickens	65,523	81,359	121,916	169,869	139,230	196,156	222,213	210,098

^{1/} Adapted from U. S. Census reports.

^{2/} Preliminary

^{3/} Includes beef calves.

^{4/} Includes milk cows, hieifers, and airy bulls.

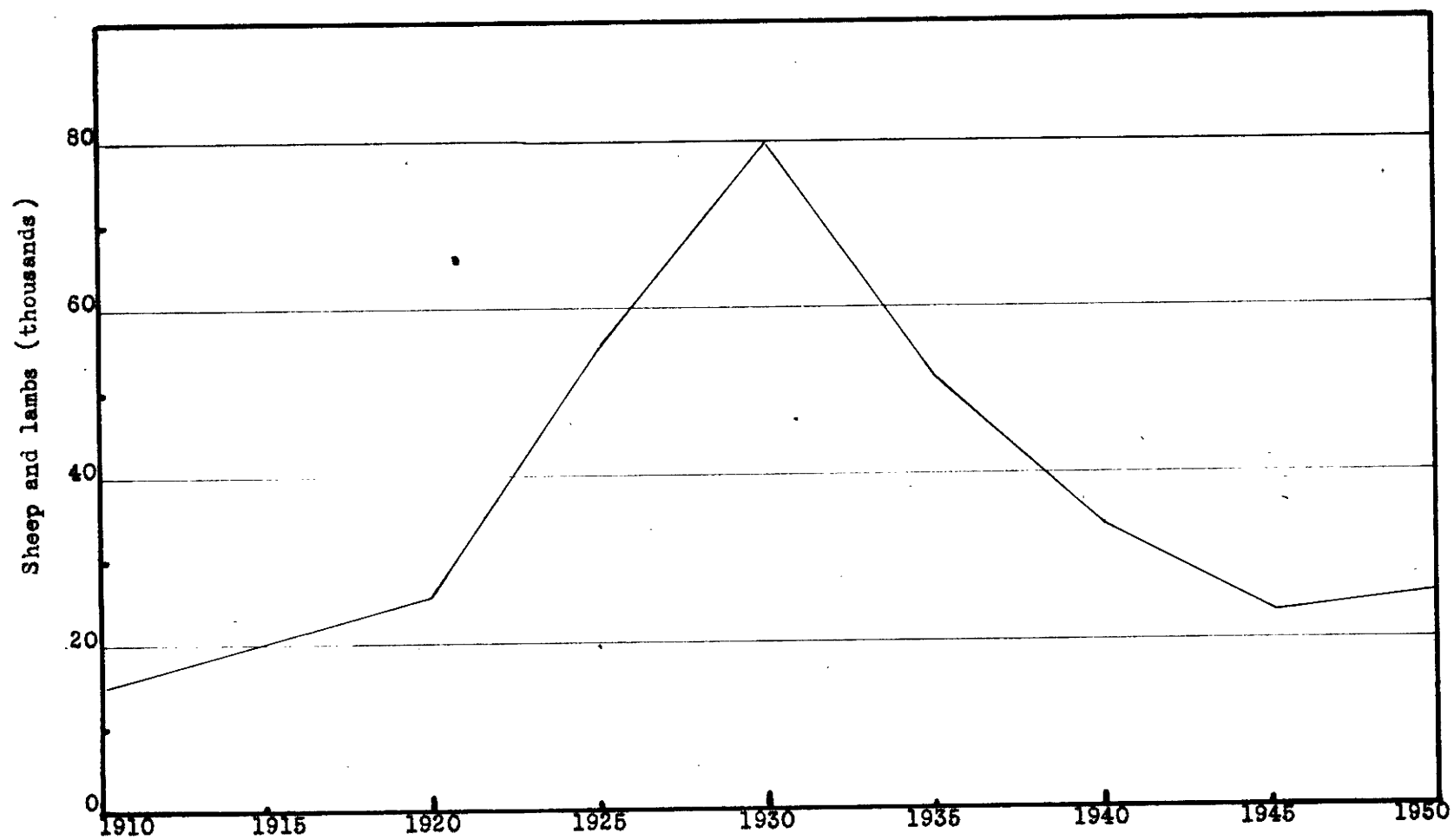


Figure 8. Changes in the number of sheep and lambs on farms, Cache County, Utah, census years 1910-1950

Chickens. The poultry industry in Cache County has expanded greatly during the past forty years. The number of chickens on farms January 1st, most of which were laying hens, increased from 65 thousand birds in 1910 to over 222 thousand birds in 1945, an increase of 239 percent. Preliminary reports of 1950 U. S. Census show 210 thousand birds on farms in Cache County (Table 15).

The trend in egg production has been upward since 1909. During that year nearly 444 thousand dozen eggs were produced. By 1929, 1,718 thousand dozen eggs were produced, an increase of 288 percent over 1909. The production of eggs in Cache County increased to over 2 million dozen in 1949 (Table 16). Average annual egg production per hen in Cache County increased from 82 eggs in 1909 to 121 eggs in 1949, an increase of 49 percent during that period.

The broiler industry, though gaining in importance, is still relatively unimportant in Cache County. Most of the chickens sold for meat purposes were either cull hens or old hens sold at the time replacements were made to the laying flock.

Turkeys. Commercial turkey production in Cache County was of little importance before 1938. The number of turkeys raised on county farms increased from 22 thousand in 1939 to over 189 thousand in 1949, an increase of 758 percent (Table 16).

Table 16. Production of livestock products in Cache County, Utah. Census years 1909-1949^{1/}

Livestock products	1909	1919	1924	1929	1934	1939	1944	1949 ^{2/}
Milk - gal.	4,369,127	6,958,187	13,356,543	14,349,425	13,623,861	15,656,937	17,999,929	17,103,940
Eggs - doz.	443,873	502,404	1,176,318	1,718,045	1,591,106	1,761,218	1,941,561	2,115,940
Wool - lb.	83,512	180,492	528,231	454,410	344,425	286,524	159,098	183,100
Chickens raised	64,592	76,557	194,180	279,134	123,368	212,021	361,500	202,044
Turkeys raised	^{3/}	^{3/}	^{3/}	8,705	^{3/}	22,034	126,728	189,047

^{1/} Adapted from U. S. Census reports.

^{2/} Preliminary

^{3/} Enumerated data not available.

INCOME FROM FARM MARKETINGS IN CACHE COUNTY

Total cash income from farm marketings in the county varied from 2.1 million dollars in 1909 to 11.8 million in 1949, an increase of 461 percent during that forty-year period. There was considerable year-to-year fluctuation in cash farm income, due primarily to the variation in farm prices and agricultural production in the county. In 1919, total cash farm income amounted to over 6.5 million dollars for the county. However, by 1934, the cash farm income was reduced to 2.8 million dollars. During the war and post war years, total cash farm income in the county increased from 3.9 million dollars in 1939 to 9.9 million dollars in 1944 and 11.8 million dollars in 1949 (Table 17).

Table 17. Total cash income and cash income per farm in Cache County, Utah. Census years 1909-1949

Year	Number of farm units	Total county cash farm income	Cash income per farm
	<u>number</u>	<u>dollars</u>	<u>dollars</u>
1909	1,907	2,131,718	1,118
1919	2,242	6,582,864	2,936
1924	2,483	4,228,984	1,703
1929	2,372	5,571,283	2,349
1934	2,399	2,752,202	1,147
1939	2,253	3,929,111	1,744
1944	2,227	9,955,383	4,470
1949	2,085	11,810,272	5,664

The trend in cash income per farm was decidedly upward during the forty-year period studied, even though considerable yearly fluctuations occurred (Table 17). In 1909 the average cash income from farm marketings

amounted to 1,118 dollars. Higher prices and increased production caused the cash income per farm to increase to 2,936 dollars in 1919. Both weather conditions and farm prices were unfavorable in 1934, causing the cash income per farm to be reduced to 1,147 dollars. The most rapid increase took place during the 1939-1944 period when the average cash income per farm increased from 1,744 dollars in 1939 to 4,470 dollars in 1944. In 1949, cash income per farm amounted to 5,664 dollars, an increase of 407 percent over 1909 and 225 percent over the income for 1939.

During the period studied, considerable change took place in the quantity and kind of farm production marketed. The quantity of all crops marketed was greatest during 1919 with an index of 119, 1939 crop marketings taken as 100 (Table 18).

Table 18. Index of quantity of farm marketings by sources in Cache County, Utah. Census years 1909-1949 (1939=100)^{1/}

Year	Crop marketings	Livestock & livestock product marketings	Total farm marketings
	<u>index</u>	<u>index</u>	<u>index</u>
1909	77	29	52
1919	119	49	83
1924	85	74	79
1929	100	98	98
1934	76	79	81
1939	100	100	100
1944	90	156	127
1949	96	133	117

^{1/} Indexes calculated by (1) adjusting cash income from groups of marketings for changes in price level during the period studied, and (2) by taking 1939 adjusted cash incomes as a base of 100 and calculating other years in relation to the base year.

The quantity of crops marketed decreased to an index of 90 in 1944 and 96 in 1949. Farmers of Cache County have changed gradually to marketing their farm produce in the form of livestock and livestock products. The quantity of livestock and livestock products marketed increased from an index of 29 in 1909 to an index of 156 in 1944 with a slight decline in 1949 to an index of 133 (Table 18).

The total quantity of farm marketings increased from an index of 52 in 1909 to an index of 127 in 1944 and declined in 1949 to an index of 117, 1939 total county marketings taken as 100.

Crops

Cash income from crop marketings in the county decreased in relative importance during the period studied. In 1909, 66.7 percent of the total cash income was the result of crop sales. In 1944, this percentage was reduced to 32.7 percent of the total cash income (Table 19).

Table 19. Percentage of total cash farm income by sources in Cache County, Utah. Census years 1909-1949

	1909	1919	1924	1929	1934	1939	1944	1949
	%	%	%	%	%	%	%	%
Livestock	15.8	11.3	13.0	19.8	10.0	17.0	21.1	27.2
Livestock products	17.5	21.1	40.0	39.0	40.6	39.6	46.2	38.0
Total livestock & livestock products	33.3	32.4	53.0	58.8	50.6	56.6	67.3	65.2
Crops	66.7	67.6	47.0	41.2	49.4	43.4	32.7	34.8
Total	100	100	100	100	100	100	100	100

The trend in total cash income from crop sales was upward during the forty-year period (Figure 9). In 1909, cash income from crop sales was slightly over 1.4 million dollars. However, more than 4.1 million

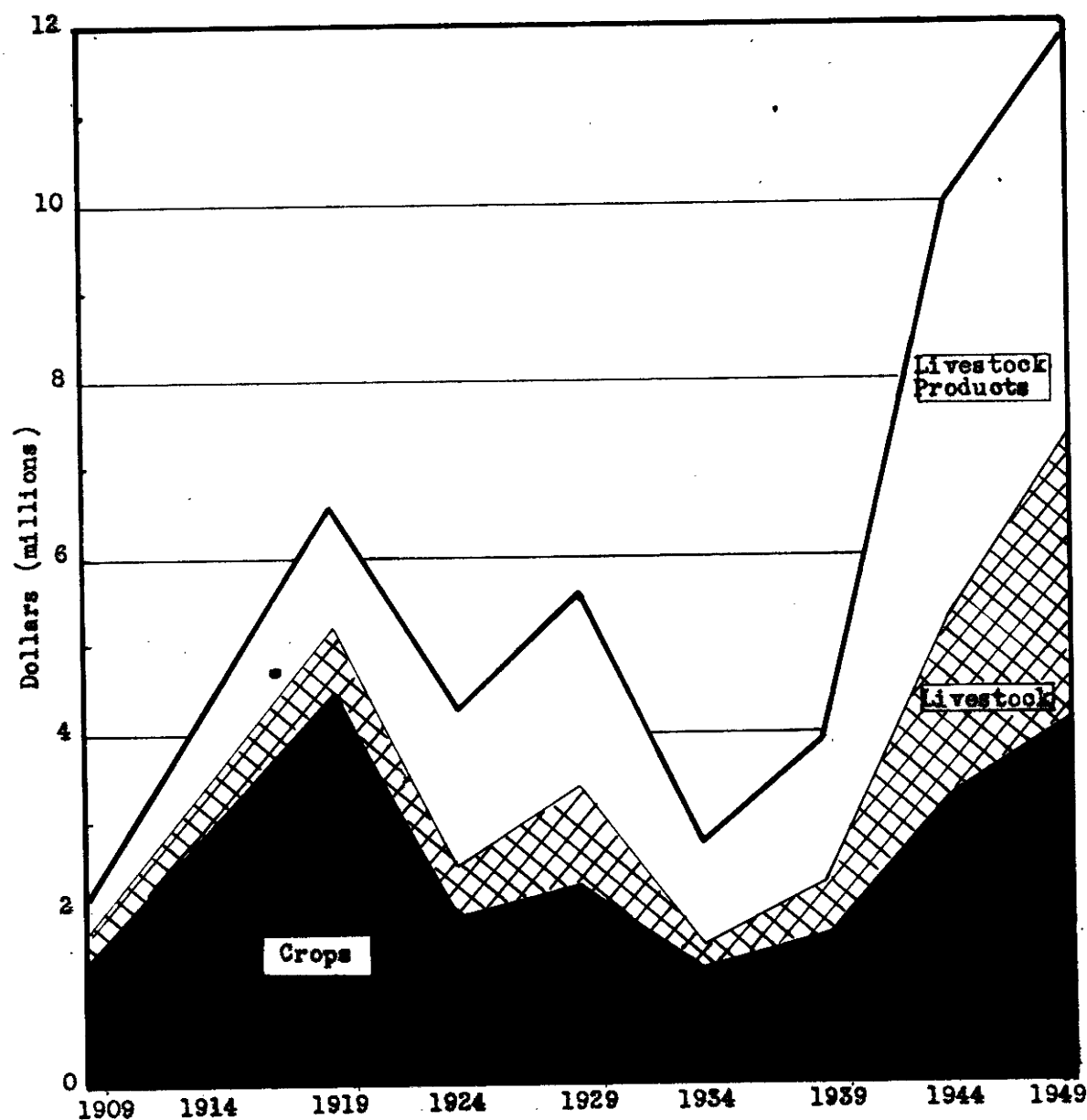


Figure 9. Changes in cash farm income by sources, Cache County, Utah, census years 1909-1949

dollars were received from crop sales during 1949. The largest amount of cash income was received in 1919 during which year crop sales amounted to nearly 4.5 million dollars.

Changes in income from groups of crops are shown in Figure 10. Cash income from grain sales increased from 583 thousand dollars in 1909 to over 2.2 million dollars in 1949 (Table 20). This increase was the result of both increased production and price. Cash income from the sale of forage crops was relatively small when compared to the total value of forage crops harvested. In 1909, forage crop sales amounted to about 235 thousand dollars compared to the total forage crop valued at 986 thousand dollars. In 1949, 369 thousand dollars were received from the sale of forage crops compared to a total harvested value of 3.1 million dollars. Cash income from commercial vegetable production increased from about 60 thousand dollars in 1909 to 450 thousand dollars in 1949, an increase of 650 percent.

In contrast to the upward trends described above, the trend in cash receipts from sugar beet sales has been decidedly downward since 1919. That year sugar beet sales amounted to over 2.6 million dollars (Table 20), or 59 percent of the total cash income from all crops. In 1949 the sale of sugar beets amounted to only 708 thousand dollars or 17 percent of the cash income from crops and 5.9 percent of the total cash farm income. Cash income from fruit sales fluctuated violently (Table 20). Only 36 thousand dollars were received by farmers in the county from fruit sales in 1909, but in 1919 fruit sales amounted to over 138 thousand dollars. Since 1919, the trend in cash income from fruit sales has been downward with only 58 thousand dollars received in 1949.

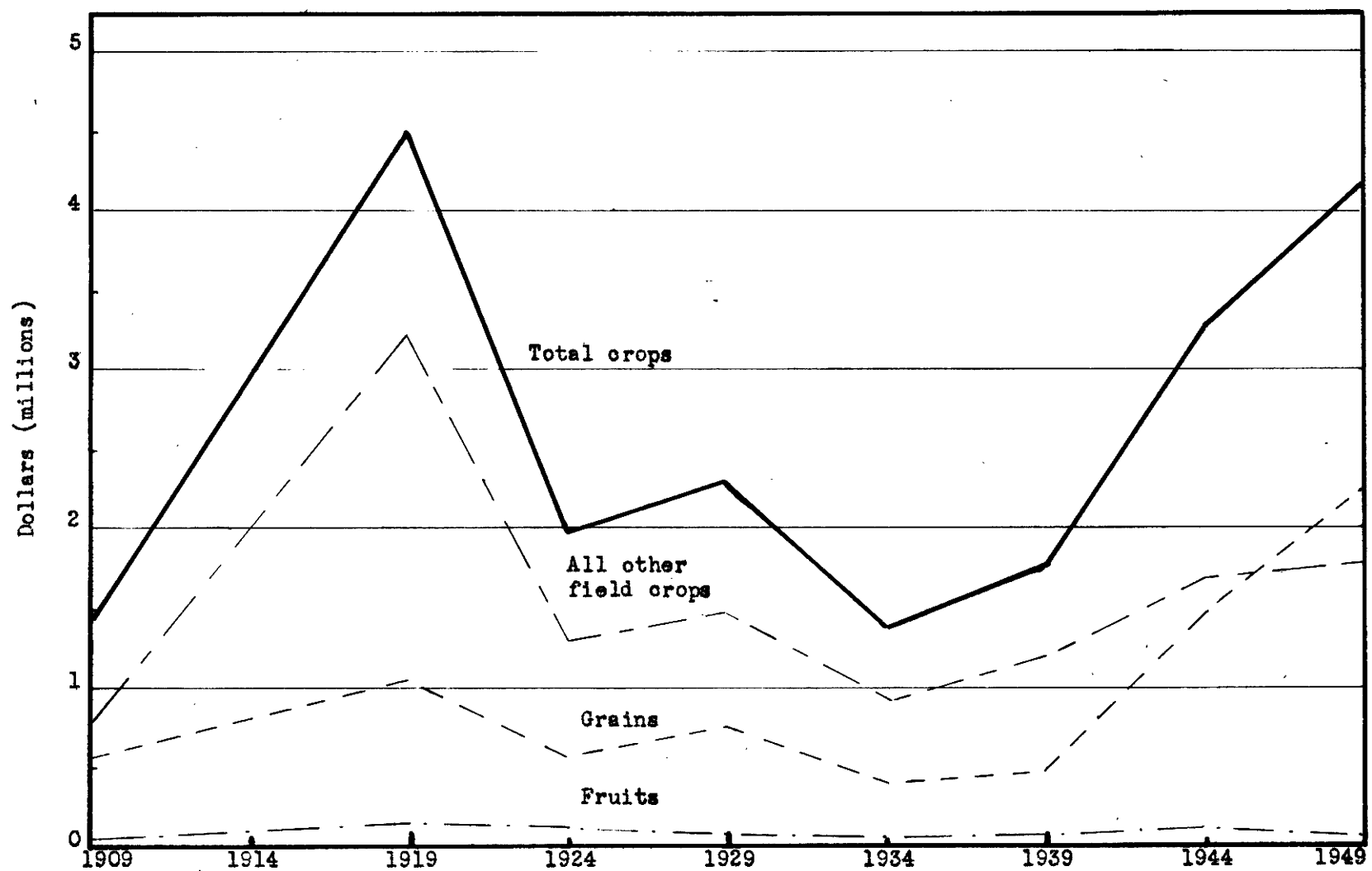


Figure 10. Changes in cash farm income from marketings of groups of crops, Cache County, Utah, census years 1909-1949

Table 20. Cash income from farm marketings of individual crops grown in Cache County, Utah.
Census years 1909-1942^{1/}

	1909	1919	1924	1929	1934	1939	1944	1942 ^{2/}
	dollars	dollars	dollars	dollars	dollars	dollars	dollars	dollars
Wheat	557,513	1,063,731	541,355	699,892	364,747	371,455	1,172,504	1,996,477
Oats	18,823	20,804	17,989	16,306	8,668	10,074	15,684	10,505
Barley	7,152	5,114	11,056	27,374	20,718	75,771	260,742	206,147
Others ^{3/}	287	984	1,003	4,273	1,332	1,133	1,884	3,320
<u>Total all grains</u>	583,775	1,090,633	571,403	747,845	395,465	458,433	1,450,814	2,216,449
Alfalfa hay	201,927	160,528	165,372	195,343	176,213	135,373	317,224	352,277
Other forage ^{4/}	33,702	58,233	19,946	4,222	2,837	2,419	9,294	17,232
<u>Total forage</u>	235,629	218,761	185,318	199,565	179,050	137,792	326,518	369,509
Alfalfa seed	38,160	86,824	75,000	108,433	53,820	50,490	52,140	47,232
Potatoes	85,254	141,101	94,427	82,960	45,064	81,458	254,144	235,662
Sugar beets	377,767	2,648,169	790,589	970,334	536,994	806,968	730,580	708,844
Commercial vegetables ^{5/}	60,000	120,000	150,000	101,890	100,000	110,000	304,195	450,000
<u>Total field crops</u>	561,181	2,996,094	1,110,016	1,263,617	735,878	1,048,916	1,341,059	1,394,506
<u>Total all crops</u>	1,380,585	4,305,488	1,866,737	2,211,027	1,310,393	1,645,141	3,118,391	4,027,696
Apples	23,518	71,387	73,175	51,803	21,959	12,251	49,228	18,707
Peaches	306	27,083	8,011	524	2,957	4,994	11,690	10,916
All other fruit ^{6/}	12,141	39,780	25,594	14,794	17,369	29,455	43,861	28,514
<u>Total all fruit</u>	35,964	138,250	106,780	67,121	42,285	46,701	104,779	58,137
Miscellaneous ^{7/}	7,000	10,000	15,000	15,567	8,000	15,000	29,160	30,000
<u>Total crops and fruits</u>	1,423,550	4,453,738	1,988,517	2,293,715	1,360,678	1,706,841	3,252,330	4,115,833

^{1/} Appendix tables 1-8. ^{2/} Based on preliminary production reports and 1949 average seasonal prices.

^{3/} Includes all mixed grain, rye, corn for grain, field peas, and beans. ^{4/} Includes timothy, all clover, and all other wild hay and grasses. ^{5/} Includes canning peas, beans, corn and fresh tomatoes.

^{6/} Includes apricots, cherries, pears, plums, strawberries, and raspberries. ^{7/} Includes horticultural specialties, blackberries, currants, nuts, and other crops not enumerated.

Livestock

Livestock sales accounted for a smaller percentage of the total cash farm income than either crops or the sale of livestock products. In 1909, livestock sales amounted to 337 thousand dollars, or 15.8 percent of the total cash farm income. Only 10 percent of the total cash income resulted from livestock sales in 1934. By 1949, however, livestock sales amounted to over 3 million dollars and represented 27.2 percent of the total cash farm income of the county (Table 19).

Income from different kinds of livestock is shown in Table 21. Cash receipts from the sale of beef and veal combined ranged from 38 thousand dollars in 1934 to over 762 thousand dollars in 1949. Dairy cattle sales resulted in greater cash returns to farmers in the county than did beef and veal sales. Cash receipts increased from 87 thousand dollars in 1909 to 888 thousand dollars in 1949. Total sheep and lamb sales ranged from 36 thousand dollars in 1909 to over 237 thousand dollars in 1929. Over 158 thousand dollars worth of sheep and lambs were sold in 1949.

Wide yearly fluctuations occurred in hog sales. During the depression year of 1934 hog sales in the county totaled only 10 thousand dollars. By 1939 hog sales increased to 105 thousand and during 1949 hog sales amounted to over 179 thousand dollars—still a relatively small amount when compared to the total cash farm income. Marketing of poultry products was of little importance prior to 1939. In 1909, only 16 thousand dollars were received from poultry sales and 105 thousand dollars in 1939. Because of the big increase in turkey production during war and post war years, the increased number of chickens on farms, and the increase in farm prices, total cash receipts amounted to 1.0 million dollars in 1944 and 1.2 million dollars in 1949 (Table 21).

Table 21. Cash income from marketings of different classes of livestock in Cache County, Utah
Census years 1909-1949^{1/}

	1909	1919	1924	1929	1934	1939	1944	1949 ^{2/}
	dollars	dollars	dollars	dollars	dollars	dollars	dollars	dollars
Beef cattle	151,741	276,151	53,198	269,113	38,573	111,846	368,226	762,404
Dairy cattle	86,813	180,251	200,838	365,069	120,545	245,043	454,200	888,119
Sheep and lambs	35,520	111,017	174,968	237,512	68,705	77,229	89,488	158,665
Hogs and pigs	47,233	136,232	39,825	43,299	10,011	105,486	179,841	179,266
Poultry (including turkeys)	15,934	42,055	84,408	189,047	36,670	128,543	1,013,397	1,226,136
Total all livestock	337,241	745,706	553,237	1,104,040	274,504	668,141	2,105,152	3,214,590

^{1/} Appendix tables 1-8

^{2/} Based on preliminary production reports and 1949 average seasonal prices.

Livestock Products

The sale of livestock products represented one of the most important sources of cash income to farmers in the county. In 1909 sales amounted to only 371 thousand dollars, but by 1919 livestock product sales amounted to nearly 1.4 million dollars. In 1924, 40 percent of the total cash farm income was from this source. During the period from 1924 through 1949, cash income from the sale of livestock products averaged 40.5 percent of the total cash farm income (Table 19). Although the amount of income fluctuated, the percentage of the total cash farm income derived from livestock product sales remained relatively constant. Cash receipts increased from 371 thousand dollars in 1909 to 4.5 million dollars in 1949. The greatest change occurred between 1939 and 1944 when cash receipts increased from 1.6 million dollars to nearly 4.6 million dollars in 1944. Changes in income received from different livestock products are shown in Figure 11.

The sale of milk represented the most important single source of cash income to farmers in Cache County. Cash receipts amounted to only 271 thousand dollars in 1909 but by 1919 had increased to over one million dollars. Increased production and farm prices caused cash receipts from milk sales to total over 3.8 million dollars in 1944 and 3.4 million dollars in 1949 (Table 22). Milk sales accounted for 38 percent of the total cash farm income of the county in 1944.

Increased egg production and prices caused a big increase in cash receipts during the forty-year period. Egg sales that amounted to only 69 thousand dollars in 1909 were increased to 927 thousand dollars in 1949, an increase of 1240 percent over 1909 (Table 22).

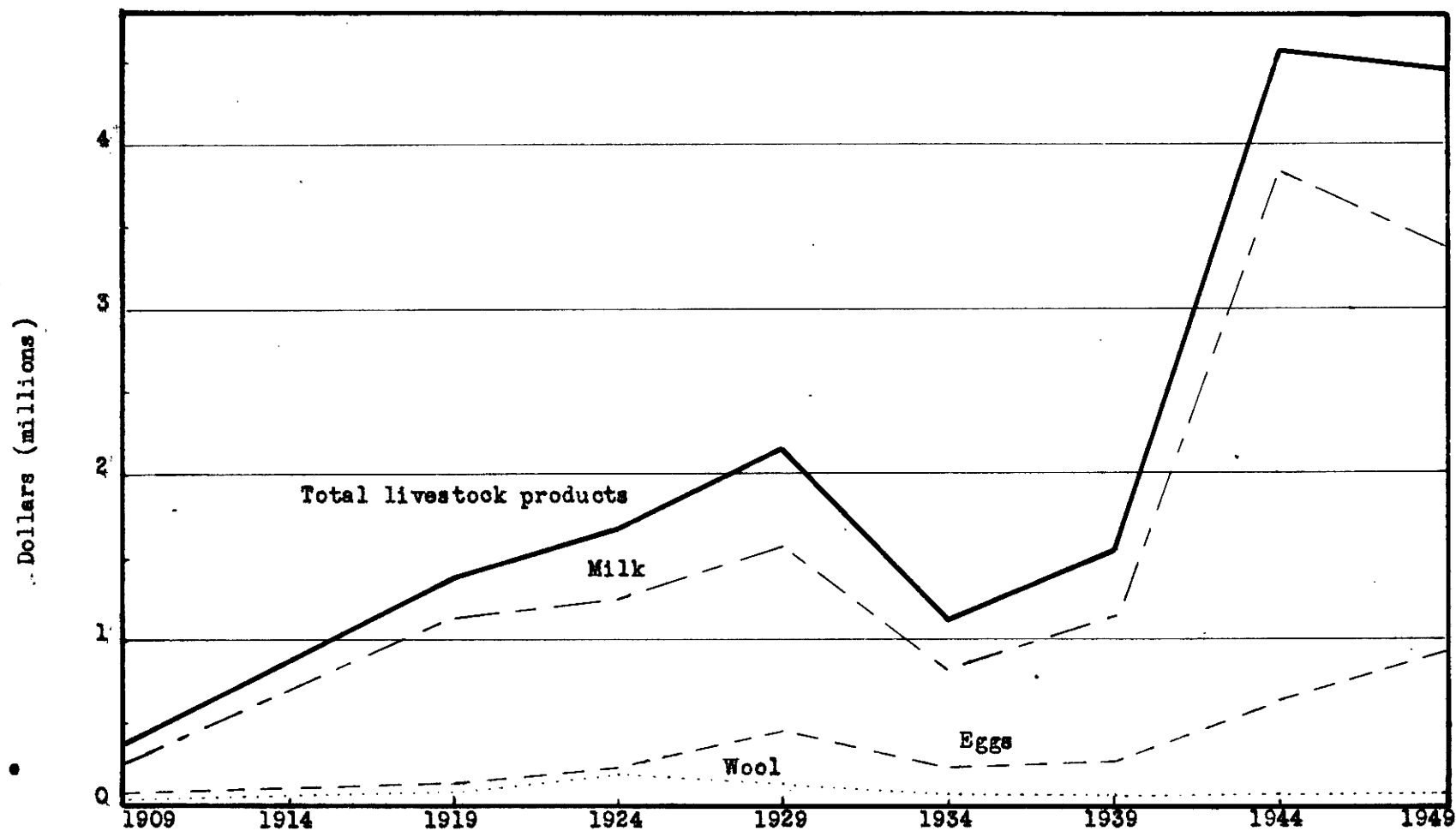


Figure 11. Changes in cash farm income from marketings of different livestock products, Cache County, Utah, census years 1909-1949

Table 22. Cash income from farm marketings of livestock products produced in Cache County, Utah.
Census years 1909-1949^{1/}

	1909	1919	1924	1929	1934	1939	1944	1949 ^{2/}
	dollars	dollars	dollars	dollars	dollars	dollars	dollars	dollars
Milk	270,816	1,138,373	1,250,000	1,581,743	812,658	1,155,256	3,845,275	3,392,316
Eggs	69,244	130,826	211,502	427,006	223,477	298,703	622,396	926,687
Wool	15,867	81,221	200,728	131,779	68,885	60,170	65,230	81,846
Miscellaneous ^{3/}	15,000	30,000	25,000	33,000	12,000	40,000	65,000	79,000
Total	370,927	1,380,420	1,687,230	2,173,528	1,117,020	1,554,129	4,597,901	4,479,849

1/ Appendix table 1-8

2/ Based on preliminary production reports and 1949 average seasonal prices.

3/ Includes income from the sale of all other livestock products, e.g., honey, beeswax, fur farms, etc.

Wool receipts ranged from 16 thousand dollars in 1909 to over 200 thousand dollars in 1924. Since 1924, average total wool receipts in Cache County amounted to 81.5 thousand dollars annually for the years reported.

Cash receipts from the sale of other livestock products, such as honey, beeswax, and furs, varied in total amount from 12 thousand dollars in 1934 to 79 thousand dollars in 1949 (Table 22).

SUMMARY AND CONCLUSIONS

This study has brought together census data supplemented by departmental data to measure the changes which have occurred in the agricultural production and cash farm income of Cache County, Utah from 1909-1949.

Formulas and techniques were developed which can be used when similar studies are made in other counties of the state. Livestock turn-off factors were calculated for each of the years studied, calculation being based on yearly live weight production and inventory numbers of livestock on farms. Average percentages of farm production sold were calculated for different kinds of agricultural production of the state, then adapted to Cache County production to determine the amount of farm produce sold in the county. Unit average seasonal prices of different items of production were applied to the amount of farm production sold to determine the value sold. Total yearly cash farm income was determined by adding the value of different items of farm production sold in Cache County during the year. Appendix tables contain a detailed presentation of calculations and methodology used.

There was a trend toward larger farm units but fewer farms in the county after 1925. In 1950 there were 2,085 farm units with an average of 187 acres per farm. Total farm land acreage increased 23 percent during the period studied.

Total agricultural production increased 85.8 percent in Cache County between 1909 and 1949. Crop production increased only 28.5 percent while the production of livestock and livestock products increased 279.9 percent during the period studied. Increased acre yields were largely responsible

for the increase in crop production. Increased livestock numbers and rates of production caused the tremendous increase in livestock production.

The trend in wheat acreage and production was upward after 1934. The greatest total wheat acreage and production was in 1949. Oat acreage in 1949 was reduced 65 percent from 1909 although acre yields increased. Reduction in the number of work horses in the county, together with the increased demand for barley feed, was the main factor responsible for the decreased production of oats.

Barley production increased more than any other grain grown in the county with an increase of 3000 percent during the period studied. Barley yields in 1949 increased 125 percent over 1909. Greatly increased demand for carbohydrate feed, resulting from increased livestock numbers, is an important factor responsible for the increase.

Alfalfa hay acreage and production remained fairly constant from 1924 to 1949, averaging 45 thousand acres and 105 thousand tons annually for the years reported. Only 15 percent of the alfalfa hay produced in the county was sold. There was a reduction in acreage and production of timothy clover and wild hay, but an increase in the acreage and production of silage crops.

Sugar beet acreage in 1949 was only 17 percent of that reported for the county in 1919. Total sugar beet production in the county in 1949 was 21 percent of that reported in 1919.

Canning pea acreage remained fairly constant, averaging 1,850 harvested acres annually. Weather conditions and insect damage caused production to vary from 3.6 million pounds in 1934 to 6.6 million pounds in 1949.

Canning corn production was started in 1946 when 717 acres were grown.

In 1949 Cache County was second most important county in the state in canning corn production.

The trend in fruit acreage and production was downward after 1919. Apples, peaches and strawberries were the most important fruits grown for sale. Spring frosts caused wide yearly variation in production.

The livestock industry is of primary importance to the agriculture of Cache County. Dairy farms made up 35 percent of the total farms of the county in 1949. Eighty percent of the farms reported milk cows. Total milk production in the county increased 291 percent during the forty years studied. The number of milk cows increased 101 percent during that same period. Milk production per cow increased 95 percent.

The number of sheep and lambs on farms in 1950 was 70 percent lower than the number reported in 1930. The total number of hogs on farms in the county averaged 5,100 annually for the years reported. The number of laying hens on farms increased 218 percent and the total number of eggs produced increased 376 percent during the period studied. The number of turkeys raised increased 758 percent between 1939 and 1949.

A notable change occurred in the form of agricultural marketings in the county. A smaller percentage of crops were marketed while the quantity of livestock and livestock products marketed increased 359 percent during the period studied.

Total cash income from farm marketings increased 454 percent between 1909 and 1949. Utah farm prices increased 145 percent while the quantity of farm production marketed increased 125 percent. The average cash income per farm in Cache County was 1,118 dollars in 1909 but had increased to 5,664 dollars per farm in 1949.

Crop sales accounted for 66.7 percent of the total cash income in 1909, but only 34.8 percent in 1949. The sale of sugar beets accounted for 59 percent of the income from crops in 1919 and 40 percent of the total cash farm income of the county. In 1949, 17.2 percent of the crop income, or 6 percent of the total cash farm income, was received from sugar beet sales.

Livestock sales in 1909 amounted to 15.8 percent of the total cash farm income, but in 1949 had increased to 27.2 percent of the total cash farm income. Cash income from the sale of livestock products made up 17.5 percent of the total in 1909. Income from livestock product sales averaged 40.6 percent of the total cash farm income from 1929 to 1949.

The sale of milk was the most important single source of cash farm income from 1924 to 1949. Milk sales in 1924 made up 29.3 percent of the total cash farm income and in 1949 accounted for 28.7 of the cash farm income received for the county.

Income from egg sales increased 1243 percent during the period studied and in 1949 made up 20.6 percent of the cash income received from the sale of livestock products, or 7.8 percent of the total cash farm income of the county.

It would be desirable to have similar studies made in all the counties of the state to determine the relative importance of each county in agricultural production. Such a study would make comparisons in yields and production possible between counties. Significant changes in agricultural production which develop in areas could be easily measured. A more detailed picture of change, and rate of change, could have been shown if yearly data had been available. The magnitude of yearly fluctuations would have been indicated more accurately.

In spite of limitations placed upon this study by the lack of yearly data, the author hopes to have made a contribution to people who are interested in the growth and development of agriculture in the county by showing what changes and trends have developed in the agricultural production and cash farm income of Cache County, Utah.

APPENDIX

Table 1. Cash income from crop, livestock, and livestock products marketings in Cache County, Utah 1909

Commodity	Units	Total production	Percent sold percent	Amount sold	Price per unit dollars	Value sold dollars
Field crops						
Grains						
Wheat	Bu.	1,049,930	59	619,459	.90	557,513
Oats	Bu.	285,191	20	57,038	.33	18,823
Barley	Bu.	31,370	35	10,980	.65	7,152
Rye	Bu.				.70	
Corn	Bu.	5,198	4	208	.87	181
Dry Beans	Bu.	51	95	48	2.21	106
Forage						
Alfalfa hay	Ton	87,602	25	21,901	9.22	201,927
Other hay ^{1/}	Ton	19,226	19	3,653	9.22	33,680
Other forage ^{2/}	Ton	140	4	7	3.07	22
Alfalfa seed	Bu.	6,790	94	5,443	5.98	38,160
Potatoes	Bu.	213,135	80	170,508	.50	85,254
Sugar beets	Ton	84,323	100	84,323	4.48	377,767
Commercial veg. ^{3/}		6/				60,000 ^{5/}
Fruits						
Apples	Bu.	36,804	62	22,818	1.03	23,518
Apricots	Bu.	14	0			
Cherries	Bu.	884	91	804	2.93	2,360
Peaches	Bu.	323	87	281	1.09	306
Pears	Bu.	495	72	356	1.35	481
Plums	Bu.	3,822	70	2,675	.45	1,204
Strawberries	Qt.	61,547	70	43,083	.10	4,308
Raspberries	Qt.	36,249	55	19,937	.19	3,788
Other ^{4/}	Qt.					7,000 ^{5/}
Total						1,423,550

^{1/} Includes clover, timothy, grasses and wild hays.

^{2/} Silage, grains for hay.

^{3/} Includes peas, tomatoes, beans, etc. sold fresh and for processing.

^{4/} Includes horticultural specialties, blackberries, currants, nuts and other crops not enumerated.

^{5/} Estimates

^{6/} Breakdown of production not available.

Table 1. (continued) Cash income from crop, livestock, and livestock products marketings in Cache County, Utah 1909

	Livestock on hand ^{7/} 1 Jan. 1910	Turnoff per head	Meat produced 1909	Per- cent sold ^{8/}	Amount sold	Price ^{9/} per unit	Value sold
	number	lbs.	lbs.	percent	lbs.	dol.	dol.
Livestock							
Beef cattle	10,779	260	2,802,540	96	2,690,438	.0564	151,741
Dairy cattle	13,020	145	1,887,900	96	1,812,384	.0479	86,813
Sheep & lambs	15,091	35.7	538,479	95	511,812	.0694	35,520
Hogs & pigs	4,323	221.4	957,112	70	669,978	.0705	47,233
Production							
Chickens, No. Head	64,092	4.0	256,368	50	128,184	.12	15,502
Turkeys, No. Head	500 ^{10/}	12	6,000	40	2,400	.18	432
Butterfat^{11/} products^{11/} lbs.							
Livestock products							
Milk - gal.	4,369,127		1,302,000	65	846,300	.32	270,816
Eggs - doz.	443,873			65	288,517 ^{12/}	.24	69,244
Wool ^{13/} - lbs.	83,512			100	83,512	.19	15,867
Other ^{14/}							15,000 ^{15/}
Total							708,168

^{7/} All livestock numbers, turnoff and production of livestock products adapted from U. S. Census reports.

^{8/} Adapted to Cache County from calculated state percentages.

^{9/} 1909 state average seasonal price.

^{10/} Interpolated from other years production.

^{11/} Based on 3.5 percent average butterfat production and 150 lbs. average yearly butterfat production per cow.

^{12/} Borden

^{13/} Unwashed

^{14/} Includes fur farms, fish farms, pelts, beeswax and other livestock and livestock products not enumerated.

^{15/} Estimate

Table 2. Cash income from crop, livestock, and livestock products
marketings in Cache County, Utah 1919

Commodity	Units	Total production	Percent sold <u>percent</u>	Amount sold	Price per unit <u>dollars</u>	Value sold <u>dollars</u>
Field crops						
Grains						
Wheat	Bu.	824,688	65	536,047	1.98	1,063,731
Oats	Bu.	106,144	20	21,229	.98	20,804
Barley	Bu.	20,213	16	3,234	1.58	5,114
Rye	Bu.	603	31	187	1.38	258
Corn	Bu.	12,027	4	481	1.51	726
Forage						
Alfalfa hay	Ton	41,418	19	7,869	20.40	160,528
Other hay ^{1/}	Ton	19,187	16	3,070	18.50	56,795
Other forage ^{2/}	Ton	5,324	4	213	6.75	1,438
Alfalfa seed	Bu.	7,670	95	7,210	11.92	86,824
Potatoes	Bu.	154,726	80	123,781	1.14	141,101
Sugar beets	Ton	241,601	100	241,401	10.97	2,648,169
Commercial veg. ^{3/}		<u>6/</u>				120,000 ^{5/}
Fruits						
Apples	Bu.	54,913	75	41,185	1.73	71,387
Apricots	Bu.		75		1.02	
Cherries	Bu.	1,566	91	1,425	5.41	7,705
Grapes	lbs.	808	80	646	.033	21
Peaches	Bu.	16,718	95	15,882	1.70	27,083
Pears	Bu.	877	80	702	2.50	1,754
Plums	Bu.	3,100	70	2,170	.83	1,801
Strawberries	Qt.	150,288	75	112,716	.21	23,746
Raspberries	Qt.	39,284	55	21,606	.22	4,753
Other ^{4/}		<u>6/</u>				10,000 ^{5/}
Total						<u>4,453,758</u>

^{1/} Includes clover, timothy, grasses and wild hay.

^{2/} All silage, grains cut for hay and fodder.

^{3/} Peas, beans, tomatoes, corn sold fresh or for processing.

^{4/} Includes horticultural specialties, blackberries, currants, nuts and other crops not enumerated.

^{5/} Estimate

^{6/} Breakdown of production not available.

Table 2. (continued) Cash income from crop, livestock, and livestock product marketings in Cache County, Utah 1919

	Livestock on hand/ 1 Jan. 1920	Turnoff/ per head	Meat produced 1919	Per- cent sold	Amount sold	Price/ per unit	Value sold
	number	lbs.	lbs.	percent	lbs.	gal.	gal.
Livestock							
Beef cattle	11,334	270	3,060,180	96	2,937,773	.940	276,151
Dairy cattle	14,796	150	2,219,400	96	2,130,624	.844	180,251
Sheep & lambs	25,904	35.7	924,773	97.6	902,578	.123	111,017
Hogs & pigs	5,703	221.4	1,262,644	73.9	933,094	.116	136,232

Production

Chickens, No. Head	76,557	4.2	321,539	65	209,000	.197	41,173
Turkeys, No. Head	50010	14.0	7,000	45	3,150	.28	882

Butterfat produced¹¹ lbs.

Livestock products							
Milk - gal.	6,958,187		2,073,540	75	1,555,155	.732	1,138,171
Eggs - doz.	502,404			64	311,602	.274	130,826
Wool ¹² - lbs.	180,492			100	180,492	.45	81,221
Honey							5,000 ¹³
Others ¹⁴							25,000 ¹⁵
Total							7,186,186

- 1/ All livestock numbers, turnoff and production of livestock products adapted from U. S. Census reports.
- 8/ Adapted to Cache County from calculated state percentages.
- 9/ 1919 state average seasonal price.
- 10/ Interpolated from other years production.
- 11/ Based on 3.5 percent average butterfat production and 210 lbs. average yearly butterfat production per cow.
- 12/ Dressed
- 13/ Unwashed
- 14/ Includes fur farms, pelts, beeswax, and other livestock and livestock products not enumerated, also fish farms.
- 15/ Estimate

Table 3. Cash income from crop, livestock, and livestock product marketings in Cache County, Utah 1924

Commodity	Units	Total production	Percent sold	Amount sold	Price per unit	Value sold
			<u>Percent</u>		<u>dollars</u>	<u>dollars</u>
Field Crops						
Grains						
Wheat	bu.	194,896	70	136,427	1.30	177,355
Oats	bu.	116,970	18	21,055	.60	12,633
Barley	bu.	51,140	23	11,762	.94	11,056
Rye	bu.	1,000	40	400	1.07	428
Corn	bu.	2,517	4	101	1.61	163
Dry beans	bu.	117	90	105	3.91	412
Forage						
Alfalfa hay	ton	92,874	15	13,781	12.00	165,372
Other hay ^{1/}	ton	19,326	10	1,933	10.00	19,330
Other forage ^{2/}	ton	5,118	3	154	4.00	616
Alfalfa seed	bu.	8,159 ^{3/}	94	7,669	9.78	75,000
Potatoes	bu.	132,622	80	106,098	.89	94,427
Sugar beets	ton	114,247	100	114,247	6.92	790,589
Commercial veg. ^{4/}		^{5/}				150,000 ^{6/}
Fruits						
Apples	bu.	70,361	90	63,325	1.15	72,815
Cherries	bu.	1,617 ^{7/}	89	1,439	4.20	6,044
Grapes	lbs.	3,314 ^{8/}	81	2,684	.03	81
Peaches	bu.	5,602	95	5,322	1.50	8,011
Pears	bu.	772 ^{9/}	83	641	1.88	1,205
Plums	bu.	2,004 ^{10/}	70	1,404	1.05	1,474
Strawberries	qt.	127,466 ^{11/}	70	89,226	.14	12,492
Raspberries	qt.	43,415 ^{12/}	55	23,878	.18	4,298
Others ^{13/}						15,000 ^{14/}
Total						1,988,517

- ^{1/} Includes clover, timothy, grasses and wild hay.
- ^{2/} Includes fodder, silage and grains cut for hay.
- ^{3/} Includes peas, lentils, beans and corn sold fresh and for processing.
- ^{4/} Includes horticultural specialties, blackberries, currants, nuts and other crops not enumerated.
- ^{5/} Interpolation based on other years production.
- ^{6/} Estimate
- ^{7/} Breakdown of production not available.

Table 3. (continued) Cash income from crop, livestock, and livestock product marketings in Cache County, Utah 1924

	Livestock on hand ^{8/} 1 Jan. 1925	Turnoff per head	Meat produced 1924	Per- cent sold ^{9/} percent	Amount sold lbs.	Price ^{10/} per unit dol.	Value sold dol.
	number	lbs.	lbs.				
Livestock							
Beef cattle	3,698	270	998,460	96	958,522	.0555	53,198
Dairy cattle	23,882	150	3,582,300	96	3,439,008	.0582	200,838
Sheep & lambs	55,162	30	1,654,860	97	1,605,214	.109	174,968
Hogs & pigs	5,089	167	849,863	66	560,910	.071	39,825

Production

Chickens, no. head	194,180	4.8	932,064	64	596,521	.131	78,144
Turkeys, no. head	3,000 ^{11/}	14.5	43,500	50	21,750	.288	6,264

Butterfat produced^{12/} lbs.

Livestock products							
Milk - gal.	13,356,543		3,980,250	74	2,948,113	.424	1,250,000
Eggs - doz.	1,176,318			77.5	911,646 ^{13/}	.232	211,502
Wool ^{14/} - lbs.	528,231			100	528,231	.38	200,728
Honey							5,000 ^{16/}
Other ^{15/}							20,000 ^{16/}
Total							<u>2,240,457</u>

^{8/} All livestock numbers, turnoff and production of livestock products, adapted from U. S. Census reports.

^{9/} Adapted to Cache County from calculated state percentages.

^{10/} 1924 State average seasonal price.

^{11/} Interpolated from other years production.

^{12/} Based on 3.5 percent average butterfat production and 250 lbs. average yearly butterfat production per cow.

^{13/} Dosen

^{14/} Unwashed

^{15/} Includes fur farms, fish farms, pelts, beeswax and other livestock and livestock products not enumerated.

^{16/} Estimate

Table 4. Cash income from crop, livestock, and livestock product marketings in Cache County, Utah 1929

Commodity	Units	Total production	Percent sold percent	Amount sold	Price per unit dollars	Value sold dollars
Field crops						
Grain						
Wheat	bu.	923,951	75	692,963	1.01	699,892
Oats	bu.	123,530	22	27,177	.60	16,306
Barley	bu.	147,171	25	36,793	.75	27,374
Mixed grain	bu.	10,160	5	508	.77	391
Corn	bu.	655	4	26	1.13	29
Dry beans	bu.	952	95	904	3.78	3,418
Dry peas	bu.	265	90	239	1.82	435
Forage						
Alfalfa hay	ton	125,223	15	18,783	10.40	195,343
Other hay ^{1/}	ton	7,784	6	467	8.50	3,970
Other forage ^{2/}	ton	2,416	3	73	3.45	252
Alfalfa seed	bu.	10,472	95	9,948	10.90	108,433
Other		68	95	65	8.72	567
Potatoes	bu.	108,445	75	81,334	1.02	82,960
Sugar beets	ton	137,636	100	137,636	7.05	970,334
Commercial veg. ^{3/}		6/				101,890 ^{5/}
Fruits						
Apples	bu.	48,414	90	43,573	1.19	51,803
Cherries	bu.	1,669	89	1,485	3.92	5,825
Grapes	lbs.	5,820	80	4,656	.024	111
Peaches	bu.	698	75	524	1.00	524
Pears	bu.	666	70	466	1.50	699
Plums	bu.	913	70	639	.60	383
Strawberries	qt.	94,650	70	66,255	.07	4,638
Raspberries	qt.	47,545	55	26,150	.12	3,138
Others ^{4/}						15,000 ^{5/}
Total						2,293,562

^{1/} Includes clover, timothy, grasses and wild hay.

^{2/} Includes fodder, silage and grains cut for hay.

^{3/} Includes peas, tomatoes, beans and corn sold fresh and for processing.

^{4/} Includes horticultural specialties, blackberries, currants, nuts and other crops not enumerated.

^{5/} Estimates

^{6/} Breakdown of production not available.

Table 4. (continued) Cash income from crop, livestock, and livestock product marketings in Cache County, Utah 1929

	Livestock on hand ^{7/} 1 Jan. 1930	Turnoff per head	Meat produced 1929	Per- cent sold ^{8/}	Amount sold	Price ^{9/} per unit	Value sold
	number	lbs.	lbs.	percent	lbs.	dol.	dol.
Livestock							
Beef cattle	11,075	290	3,211,750	98	3,147,515	.0855	269,113
Dairy cattle	23,652	175	4,139,100	98	4,056,318	.0900	365,069
Sheep & lambs	79,543	28.2	2,243,113	97.5	2,187,035	.1086	237,512
Hogs & pigs	3,711	206.8	767,435	62.0	475,810	.0910	43,299
Production							
Chickens, no. head	279,134	4.8	1,339,843	64	857,500	.186	159,495
Turkeys, no. head	8,705	14.2	123,611	75	92,708	.257	23,826
Other	818	7.0	5,726	50	2,863	.20	5,726
Livestock products							
Milk - gal.	14,349,425	289	4,146,984	78	3,234,648	.489	1,581,743
Eggs - doz.	1,718,045			86.6	1,487,827 ^{11/}	.287	427,006
Wool ^{12/} - lbs.	454,410			100	454,410	.29	131,779
Honey							8,000 ^{11/}
Other ^{13/}							25,000 ^{11/}
Total							3,277,568

^{7/} All livestock numbers, and production of livestock products adapted from U. S. Census reports.

^{8/} Adapted to Cache County from calculated state percentages.

^{9/} 1929 State average seasonal price.

^{10/} Based on 3.4 percent average butterfat production and 263 lbs. average yearly butterfat production per cow.

^{11/} Densen

^{12/} Unwashed

^{13/} Includes fur farms, fish farms, pelts, beeswax and other livestock and livestock products not enumerated.

^{14/} Estimate

Table 5. Cash income from crop, livestock, and livestock product marketings in Cache County, Utah 1934

Commodity	Units	Total production	Percent sold percent	Amount sold	Price per unit dollars	Value sold dollars
Field crops						
Grains						
Wheat	bu.	655,901	67	439,454	.83	364,747
Oats	bu.	94,214	17	16,016	.54	8,668
Barley	bu.	150,127	20	30,025	.69	20,718
Mixed grain	bu.	6,667	8	533	.69	367
Rye	bu.	3,885	31	1,204	.79	951
Corn	bu.	315	4	13	1.08	14
Forage						
Alfalfa hay	ton	93,980	15	14,097	12.50	176,213
Other hay ^{1/}	ton	4,633	5	231	11.00	2,541
Other forage ^{2/}	ton	3,548	2	71	4.17	296
Alfalfa seed	bu.	7,634 ^{5/}	94	7,176	7.50	53,820
Potatoes	bu.	121,467	70	85,027	.53	45,064
Sugar beets	ton	122,044	100	122,044	4.40	536,994
Commercial veg. ^{3/}		7/				100,000 ^{6/}
Fruits^{5/}						
Apples	bu.	31,500	69	23,115	.95	21,959
Apricots	bu.	400	86	344	1.15	396
Cherries	bu.	1,821	86	1,566	1.46	2,286
Grapes	lbs.	35,145	89	31,279	.024	751
Peaches	bu.	3,781	92	3,479	.85	2,957
Pears	bu.	1,956	83	1,623	.90	1,461
Plums	bu.	657	70	460	.60	276
Strawberries	qt.	192,827	70	134,979	.07	9,449
Raspberries	qt.	50,000	50	25,000	.11	2,750
Other ^{4/}						8,000 ^{6/}
Total						1,360,678

^{1/} Includes clover, timothy, grasses and wild hay.

^{2/} Includes fodder, silage and grains cut for hay.

^{3/} Includes peas, tomatoes, beans and corn sold fresh and for processing.

^{4/} Includes horticultural specialties, blackberries, currants, nuts and other crops not enumerated.

^{5/} Interpolation based on other years production.

^{6/} Estimates

^{7/} Breakdown of production not available.

Table 5. (continued) Cash income from crop, livestock, and livestock product marketings in Cache County, Utah 1934

	Livestock on hand ^{8/} 1 Jan. 1935	Turnoff per head	Meat produced 1934	Per- cent sold ^{9/} percent	Amount sold	Price ^{10/} per unit dol.	Value sold dol.
	number	lbs.	lbs.		lbs.		
Livestock							
Beef cattle	3,885	290	1,127,810	98	1,105,254	.0349	38,573
Dairy cattle	23,117	170	3,929,890	98	3,851,292	.0313	120,545
Sheep & lambs	51,259	29.4	1,507,015	97	1,461,805	.047	68,705
Hogs & pigs	2,405	143	343,915	71	244,180	.041	10,011

Production

Chickens, no. head	123,368	4.3	530,482	70	371,337	.07	25,994
Turkeys, no. head	6,500 ^{11/}	15.0	97,500	75	73,125	.146	10,676

Butterfat
produced^{12/}
lbs.

Livestock products

Milk - gal.	13,623,861	.289	3,937,296	80	3,149,837	.258	812,658
Eggs - doz.	1,591,106			86.7	1,379,489 ^{13/}	.162	223,477
Wool ^{14/} - lbs.	344,425			100	344,425	.20	68,885
Honey							2,000 ^{16/}
Others ^{15/}							10,000 ^{16/}
Total							1,391,524

^{8/} All livestock numbers, and production of livestock products adapted from U. S. Census reports.

^{9/} Adapted to Cache County from calculated state percentages.

^{10/} 1934 State average seasonal price.

^{11/} Interpolated from other years production.

^{12/} Based on 3.4 percent average butterfat production and 264 lbs. average yearly butterfat production per cow.

^{13/} Dose

^{14/} Unwashed

^{15/} Includes fur farms, fish farms, pelts, beeswax and other livestock and livestock products not enumerated.

^{16/} Estimate

Table 6. Cash income from crop, livestock, and livestock product marketings in Cache County, Utah 1939

Commodity	Units	Total production	Percent sold percent	Amount sold	Price per unit dollars	Value sold dollars
Field crops						
Grains						
Wheat	bu.	773,864	75	580,398	.64	371,455
Oats	bu.	122,850	22	27,027	.37	10,074
Barley	bu.	616,026	25	154,007	.49	75,771
Mixed grain	bu.	21,638	5	1,082	.48	519
Rye	bu.	1,205	40	482	.60	289
Corn	bu.	905	4	36	.82	30
Beans	bu.	48	95	46	2.61	120
Peas	bu.	81	90	73	2.40	175
Forage						
Alfalfa hay	ton	104,941	15	15,741	8.60	135,373
Other hay ^{1/}	ton	4,933	5	247	7.00	1,729
Other forage ^{2/}	ton	7,667	3	230	3.00	690
Alfalfa seed	bu.	4,796	94	4,508	11.20	50,490
Potatoes	bu.	211,578	70	148,105	.55	81,458
Sugar beets	ton	133,163	100	133,163	6.06	806,968
Commercial veg. ^{3/}		6/				110,000 ^{5/}
Fruits						
Apples	bu.	18,647	90	16,782	.73	12,251
Apricots	bu.	845	60	507	.51	259
Cherries	lbs.	110,838	89	98,646	.03	2,959
Grapes	lbs.	64,471	80	51,577	.024	1,238
Peaches	bu.	6,864	97	6,658	.75	4,994
Pears	bu.	3,247	94	3,052	1.00	3,052
Plums	bu.	401	70	281	.55	155
Strawberries	qt.	291,004	60	174,602	.10	17,460
Raspberries	qt.	52,505	55	28,878	.15	4,332
Other ^{4/}						15,000 ^{5/}
Total						1,706,841

- ^{1/} Includes clover, timothy, grasses, and wild hay.
^{2/} Includes fodder, silage and grains cut for hay.
^{3/} Includes peas, tomatoes, beans and corn sold fresh and for processing.
^{4/} Includes horticultural specialties, blackberries, currants, nuts and other crops not enumerated.
^{5/} Estimates
^{6/} Breakdown of production not available.

Table 6. (continued) Cash income from crop, livestock, and livestock product marketings in Cache County, Utah 1939

	Livestock on hand/ 1 Jan. 1940	Turnoff per head	Meat produced 1939	Per- cent sold ^{8/}	Amount sold	Price ^{2/} per unit	Value sold
	number	lbs.	lbs.	percent	lbs.	dol.	dol.
Livestock							
Beef cattle	5,931	300	1,779,300	97	1,725,921	.0648	111,840
Dairy cattle	25,471	180	4,584,780	97	4,447,237	.0551	245,043
Sheep & lambs	33,787	34	1,148,760	98	1,125,780	.0686	77,229
Hogs & pigs	7,760	252	1,955,520	80	1,574,416	.067	105,486

Production

Chickens, no. head	212,021	4.1	869,286	72	625,886	.12	75,106
Turkeys, no. head	22,034	15	330,510	94	310,679	.172	53,437

Butterfat
produced^{10/}
lbs.

Livestock products							
Milk - gal.	15,636,927	4,519,075	83	3,750,832	.308	1,155,256	
Eggs - doz.	1,761,218		84.8	1,493,513 ^{11/}	.20	298,703	
Wool ^{12/} - lbs.	286,524		100	286,524	.21	60,170	
Honey						10,000 ^{11/}	
Other ^{13/}						30,000 ^{11/}	
Total						2,222,270	

- ^{7/} All livestock numbers, turn-off and production of livestock products are estimates based on 1944 production.
- ^{8/} Adapted to Cache County from calculated state percentages.
- ^{9/} 1939 state average seasonal price.
- ^{10/} Butterfat production based on 3.4 percent average butterfat test. Receipts are based on butterfat equivalent sold.
- ^{11/} Dozen
- ^{12/} Unwashed
- ^{13/} Includes all other cash income from sale of livestock, and livestock products not enumerated above, e.g., fur farms, fish farms, etc.
- ^{14/} Estimates

Table 7. Cash income from crop, livestock, and livestock product marketings in Cache County, Utah 1944

Commodity	Units	Total production	Percent sold <u>percent</u>	Amount sold	Price per unit <u>dollars</u>	Value sold <u>dollars</u>
Field crops						
Grains						
Wheat	bu.	1,147,489	78	895,041	1.31	1,172,504
Oats	bu.	141,299	15	21,195	.74	15,684
Barley	bu.	1,145,113	23	263,376	.99	260,742
Mixed grain	bu.	20,997	5	1,050	1.01	1,061
Rye	bu.	760	39	296	1.12	332
Beans	bu.	136	97	132	3.72	491
Forage						
Alfalfa hay	ton	117,360	15	17,604	18.02	317,224
Other hay ^{1/}	ton	5,718	5	286	16.00	4,576
Other forage ^{2/}	ton	15,864	5	793	5.95	4,718
Alfalfa seed	bu.	2,770	86	2,382	21.88	52,140
Other seeds ^{3/}	bu.	242	86	208	20.00	4,160
Potatoes	bu.	234,970	83.2	195,495	1.30	254,144
Sugar beets	ton	57,526	100	57,526	12.70	730,580
Commercial veg. ^{4/}		6/				304,195 ^{5/}
Fruits						
Apples	bu.	25,327	93	23,554	2.09	49,228
Apricots	bu.	1,170	75	878	2.81	2,467
Cherries	lbs.	75,695	92	69,639	.12	8,357
Grapes	lbs.	32,626	91	29,690	.06	1,781
Peaches	bu.	5,605	97	5,437	2.15	11,690
Pears	bu.	1,629	85	1,385	3.00	4,155
Plums	bu.	692	70	484	1.50	720
Strawberries	qt.	60,223	60	36,134	.48	17,344
Raspberries	qt.	41,079	55	22,593	.40	9,037
Others ^{6/}						25,000 ^{7/}
Total						3,252,330

- ^{1/} Includes clover, timothy, grasses and wild hay.
^{2/} Includes fodder, silage and grains cut for hay.
^{3/} Includes peas, tomatoes, beans and corn sold fresh and for processing.
^{4/} Includes horticultural specialties, blackberries, currants, nuts and other crops not enumerated.
^{5/} Estimates
^{6/} Breakdown of production not available.
^{7/} Includes red and yellow clover seeds.

Table 7. (continued) Cash income from crop, livestock, and livestock product marketings in Cache County, Utah 1944

	Livestock on hand ^{8/} 1 Jan. 1945	Turnoff per head	Meat produced 1944	Per- cent sold ^{2/}	Amount sold	Price ^{10/} per unit	Value sold
	number	lbs.	lbs.	percent	lbs.	dol.	dol.
Livestock							
Beef cattle	11,826	300	3,547,800	97	3,441,366	.107	368,226
Dairy cattle	26,250	180	4,725,000	97	4,583,250	.099	454,201
Sheep & lambs	23,701	33	782,133	101 ^{11/}	785,670	.1139	89,488
Hogs & pigs	7,096	225	1,596,600	88	1,405,008	.128	179,841

Production

Chickens, no. head	361,500	3.5	1,265,250	85	1,075,463	.234	251,658
Turkeys, no. head	126,728	17.9	2,268,431	92	2,086,957	.365	761,739

Butterfat
produced^{12/}
lbs.

Livestock products						
Milk - gal.	17,999,929	5,110,000	86	4,394,600	.875	3,845,275
Eggs - doz.	1,941,561		90.3	1,753,230 ^{13/}	.355	622,396
Wool ^{14/} - lbs.	159,098		100	159,098	.41	65,230
Honey						15,000 ^{16/}
Other ^{15/}						50,000 ^{16/}
Total						<u>6,703,053</u>

^{8/} All livestock numbers, and production of livestock products adapted from U. S. Census reports.

^{9/} Adapted to Cache County from calculated state percentages.

^{10/} 1944 state average seasonal price.

^{11/} Is accounted for by sale of some inventory stock.

^{12/} Based on 3.34 percent average butterfat test and 285 lbs. average yearly butterfat production per cow.

^{13/} Dozen

^{14/} Unwashed

^{15/} Includes fur farms, fish farms, pelts, beeswax and other livestock and livestock products not enumerated.

^{16/} Estimates

Table 8. Cash income from crop, livestock, and livestock product marketings in Cache County, Utah 1949

Commodity	Units	Total production ⁷	Percent sold percent	Amount sold	Price per unit dollars	Value sold dollars
Field crops						
Grains						
Wheat	bu.	1,386,442	80	1,109,154	1.80	1,996,477
Oats	bu.	129,690	10	12,969	.81	10,505
Barley	bu.	991,090	20	198,218	1.04	206,147
Mixed grain	bu.	25,617	10	2,562	1.22	3,126
Corn	bu.	847	5	42	1.70	71
Rye	bu.	200	40	80	1.54	123
Forage						
Alfalfa hay	ton	99,512	15	14,927	23.60	352,277
Other hay ^{1/}	ton	5,956	5	298	23.00	6,854
Other forage ^{2/}	ton	27,052	5	1,353	7.67	10,378
Alfalfa seed	bu.	2,157	89	1,920	24.60	47,232
Potatoes	bu.	179,703	83	149,153	1.58	235,662
Sugar beets	ton	50,996	100	50,996	13.90	708,844
Commercial veg. ^{3/}		6/				450,000 ^{5/}
Fruits						
Apples	bu.	13,410	90	12,069	1.55	18,707
Apricots	bu.	841	70	589	.96	565
Cherries	lbs.	103,722	90	93,350	.0855	7,981
Grapes	lbs.	43,009	91	39,138	.04	1,566
Peaches	bu.	7,660	95	7,277	1.50	10,916
Pears	bu.	2,237	85	1,901	2.00	3,802
Plums	bu.	398	70	279	1.05	293
Strawberries	qt.	35,807	60	21,484	.42	9,023
Raspberries	qt.	18,474	55	10,161	.52	5,284
Others ^{4/}						30,000 ^{5/}
Total						4,115,833

^{1/} Includes clover, timothy, grasses and wild hay.

^{2/} Includes fodder, silage and grains cut for hay.

^{3/} Includes peas, tomatoes, beans and corn sold fresh and for processing.

^{4/} Includes horticultural specialties, blackberries, currants, nuts and other crops not enumerated.

^{5/} Estimates based on preliminary U. S. Census reports, 1950.

^{6/} Breakdown of production not available.

^{7/} Preliminary U. S. Census reports, 1950.

Table 8. (continued) Cash income from crop, livestock, and livestock product marketings in Cache County, Utah 1949

	Livestock on hand ^{8/} 1 Jan. 1950	Turnoff per head	Meat produced 1949	Per- cent sold ^{9/} percent	Amount sold	Price ^{10/} per unit dol.	Value sold dol.
	number	lbs.	lbs.		lbs.		
Livestock							
Beef cattle	13,279	300	3,983,700	97	3,864,189	.1973	762,404
Dairy cattle	25,781	180	4,640,580	97	4,501,363	.1973	888,119
Sheep & lambs	24,587	33	811,371	97	787,030	.2016	158,665
Hogs & pigs	4,821	225	1,084,725	88	954,558	.1878	179,266
Production							
Chickens, no. head	202,044	3.5	707,154	85	601,081	.253	152,073
Turkeys, no. head	189,047	17.9	3,383,941	92	3,113,226	.345	1,074,063
Butterfat produced^{11/} lbs.							
Livestock products							
Milk - gal.	17,103,970		4,943,050	86	4,251,023	.798	3,392,316
Eggs - doz.	2,115,940			90.3	1,910,694	.485	926,687
Wool ^{12/} - lbs.	183,100			100	183,100	.447	81,846
Honey							14,000 ^{15/}
Other ^{13/}							65,000 ^{15/}
Total							7,694,439

^{8/} Livestock number and production of livestock products adapted from preliminary U. S. Census reports, 1950.

^{9/} Adapted to Cache County from calculated state percentages.

^{10/} 1949 state average seasonal prices.

^{11/} Based on 3.4 percent butterfat test and 290 lbs. average yearly butterfat production per cow.

^{12/} Dozen

^{13/} Unwashed

^{14/} Includes fur farms, fish farms, pelts, beeswax, and other livestock and livestock products not enumerated.

^{15/} Estimate based on 1950 U. S. Census preliminary reports.

Table 9. Cash income from marketing crops and livestock in Cache County, Utah. Census years 1909-1942^{1/}

	1909	1919	1924	1929	1934	1939	1944	1942 ^{2/}
	<u>dollars</u>	<u>dollars</u>	<u>dollars</u>	<u>dollars</u>	<u>dollars</u>	<u>dollars</u>	<u>dollars</u>	<u>dollars</u>
Livestock	337,241	745,706	553,237	1,104,040	274,504	668,141	2,105,152	3,214,590
Livestock products	370,927	1,380,420	1,687,230	2,173,528	1,117,020	1,554,129	4,597,901	4,479,849
Total livestock & livestock products	708,168	2,126,126	2,240,467	3,277,568	1,391,524	2,222,270	6,703,053	7,694,439
Crops	1,423,550	4,453,738	1,988,517	2,293,715	1,360,678	1,706,841	3,252,330	4,115,833
Total cash income	2,131,718	6,582,864	4,228,984	5,571,283	2,752,202	3,929,111	9,955,383	11,810,272

^{1/} Appendix tables 1-8

^{2/} Based on preliminary production reports and 1949 average seasonal prices.

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