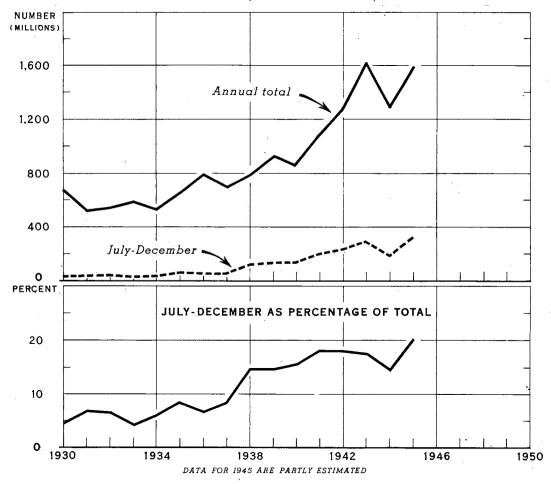
BUREAU OF AGRICULTURAL ECONOMICS
UNITED STATES DEPARTMENT OF AGRICULTURE

PES - 107

DECEMBER 1945

NUMBER CHICKS HATCHED BY COMMERCIAL HATCHERIES, ANNUAL AND JULY-DECEMBER TOTALS, AND JULY-DECEMBER AS A PERCENTAGE OF ANNUAL TOTAL, UNITED STATES, 1930-45



U. S. DEPARTMENT OF AGRICULTURE

NEG. 45720 BUREAU OF AGRICULTURAL ECONOMICS

Commercial hatchery output in 1943-45 was nearly three times the 1930-34 average and about double the 1935-39 average. This steady upward movement was due to a shift from farm hatching to commercial production of paby chicks, to expansion of the commercial broiler industry, and, during the war, to increases in chickens raised for flock replacement purposes.

The increase in commercial hatchery output has been more pronounced in the second half than in the first half of the year, reflecting a rapid growth of the commercial broiler industry. Late-hatched chicks are used almost exclusively for production of broilers.

The Poultry and Egg Situation at a Glance

74.00						
Item	Unit :	Month	Average 1934-43	1944	: 1945 :	: Comments about 1945
	<b>:</b>		Eggs			
Farm production	: Million dozen	Nov.	157.8	250.1	246.5	: Exceeded only in 1944.
Average number of layers on farms	: Million		321.0	#0# <b>*</b> 0	390.6	: : About normal culling during the : month.
Rate of lay per hen	: Number	*	5.8	7.4	7.6	: A record for the ninth consecutive : month.
Apparent civilian per capita consumption		Ħ	22	28	28	: : Supplies insufficient to meet full : demand.
Farm price	: Cents per dozen	<b>"</b>	32.2	43.4	47.1	: Equal to previous World War II : high of November 1943.
Farm price as percentage of parity	: : Percent	я	79	92	190	; ; ;
Retail price (BAE)	: :Cents per dozen	Oct.	38.8	56.9	59.1	: :
Egg-feed ratio 1/	: Pounds feed :	Nov.	16.9	15.3	15.9	: Not as favorable as other livestock- feed price ratios.
Stocks: 2/	:					:
Shell	: 1,000 cases	. #	1,915	1,045	309	: Commercially-owned stocks estimated : at 213,000 cases.
Frozefi	: 1,000 cases :		2,749	5,871	4,141	: About one-third are Government- : owned, part of which may be sold : in commercial channels.
Dried	: Million pounds	Ħ		110	25	: :
Chicks hatched	: Million :	*	18.5	31.0	39•3	: Exceeded any previous November. : Little decline in demand for : baby chicks apparent.
Potential layers on farms 2/	: Million	*	3/ 459.8	497.2	507.9	: :
Pullets not of laying age	:	,	3/ 96.9	80.0	100.0	* *
Farm price of laying mash	•			3.55		•
raim price or raying maker	i			J•95	, ,,,,,,	;
	:		ultry	<del></del>		: :
Farm price of chickens	:Cents per pound : : :	Nov.	15.6	24.0	23.9	: Near record supplies affected : price little.
Farm price as percentage of parity	: Percent		100	123	120	: : :
Retail price of chicken (BAE)	:Cents per pound	Oct.	32.9	. <del>///1</del> *0	45.2	
Farm price of turkeys	:Cents per pound :	Nov.	<u>3</u> / 22.3	.33.8	33.0	<ul> <li>Holiday demand especially for small</li> <li>birds, strong. Increase from</li> <li>October of 0.5 cents per pound,</li> </ul>
Farm price as percentage of parity	: Percent	*	109	137	131	; ;
Stocks: 2	:					1 •
Poultry, excluding turkey	: Million pounds	#	121.3	176.6	246.1	
Turkeys	: Million pounds	#	20.6	67.5	75.4	: Commercially-owned at record levels.
Chicken-feed ratio	: Pounds feed		8,2	8.5	8.0	•
Turkey-feed ratio	: Pounds feed	#	10.3	11.9	11.1	<b>:</b> :
Receipts of poultry at Central Western Primary Markets, per plant	:		32.3	28.8	34°0	: : Increase in young stock. Receipts : of fowl are below last year.

<sup>[]</sup> Correction: In last month's summary, the October 1945 egg-feed ratio was given as 19.5. This should have been 14.4. 2/ End of month. 3/ Average 1939-43.

#### THE POULTRY ANDEGGSITUATION

:	Contents	Page
:	Summary	_
: :	Outlook	_
: :	Changes in Commercial Hatchery Production	. 12
:		

#### SUMMARY

Under the 1946 price support program for eggs, purchases of dried whole, frozen and graded shell eggs are to be made so that prices received by farmers may average 29 cents per dozen during the flush production season. This average price is expected to return at least 90 percent of parity, as required by the Steagall Amendment. The new support program was announced by the U. S. Department of Agriculture on December 27.

Tentative national goals for poultry and egg production in 1946 were announced by the U.S.D.A. on December 5. These goals, compared with indicated 1945 output, call for a decrease of 15 percent in egg production, of 17 percent in number of chickens raised, and of 10 percent in number of turkeys raised. No production goals for commercial broilers were announced.

Because of the large late batch in 1945, egg production in 1946 probably will reach its seasonal peak somewhat later than in recent years. Farm egg production in the first quarter of 1946 probably will be larger than in the corresponding period of 1945, but by mid-year may begin to fall below 1945 levels. Civilian demand is expected to remain fairly strong, although it will be weaker than in 1945 when consumer incomes were at a record level and supplies of red meat were short. An excess of supply over demand at support prices will exist during the flush egg production season, unless export demand is much stronger than now indicated.

Larger civilian supplies of chicken meat will be available in the first half of 1946 than in any corresponding period. Commercial cold storage holdings on December 1 were the largest for that date in the 35 years of record. Commercial broiler output, at least for the first quarter of 1946, will be ahead of any corresponding period of record. Culling of hens on farms will be stepped up, if the prospective decline in egg prices takes place. Military procurement will be negligible compared with that in the war years.

Off-season turkey consumption (February through August) in 1946 will be the largest on record. Commercial cold storage stocks on December 1 totaled about 60 million bounds, far greater than December 1 stocks of any previous year. In addition, the number of breeder hens on farms January 1, 1946 may not be much different from the record number on hand a year earlier.

Supplies of poultry products available for civilians were at or near record rates during November. Marketings of chicken meat in November were the second largest on record for the month, being exceeded only in November 1943. The record turkey crop resulted in heavy marketings. Egg production in November was only 1 percent below the November 1944 record. Despite the large marketings during the month, wholesale and retail process were at or near ceiling levels for eggs, chickens, and turkeys, except for light-weight chickens and heavy tom turkeys.

- December 27, 1945

OUTLOOK

Egg Production in 1946 Probably

Will Reach its Peak Later

Than in Recent Years

Egg production in 1946 probably will reach its peak late because of the large late hatch of chicks for replacement purposes, especially in the Midwest. For the country as a whole, the seasonal peak in egg production usually is reached about mid-April. However, the northeast and West Coast have their seasonal peaks earlier than mid-April and the Midwest, usually has its peak somewhat later. The number of potential layers on farms

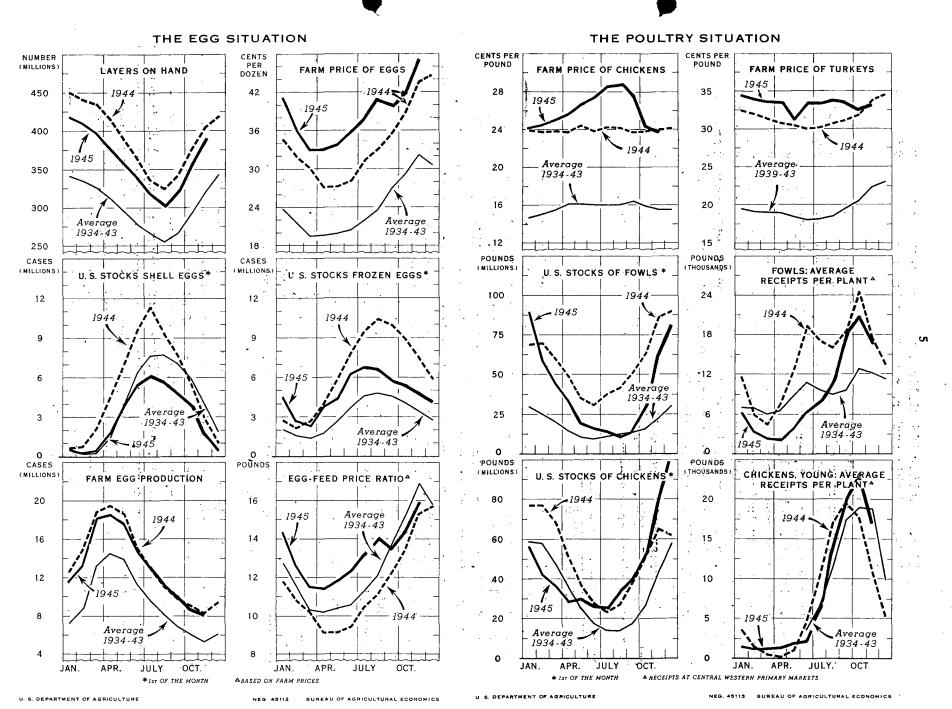


FIGURE 1

December 1, 1945, totaling 508 million, was 2 percent larger than on December 1, 1944. Of this number, a much larger proportion than in 1944 were pullets.

Egg production during the first quarter of 1946 probably will exceed that in the first quarter of 1945 and in the second quarter may about equal that in the comparable period of 1945. However, when the flush production season is past, production probably will begin to drop below 1945 levels. Prices received by farmers in the first half of 1946 will be lower than in the corresponding period of 1945, unless export demand is considerably stronger than now indicated, and prices paid for feed will be at least as high as then. The egg-feed price ratio will be less favorable for egg production than in 1945, and below the long-time average, which will cause more intensive culling of hens than usual. As result, egg production after mid-1945 probably will be smaller than in the latter half of 1945.

The prospective change in egg-feed price ratio also may affect the rate of lay. In 1945, egg production per layer was at a record level—about 20 percent above pre-war—due in part to intensive feeding.

#### Civilian Demand for Eggs Moderately Below 1945

Civilian demand for eggs in 1946 is expected to be weaker than in 1945, reflecting some decline in consumer purchasing power as well as the increase in meat supplies. The supply of meat in 1946 is expected to be fairly well in balance with demand at ceiling prices. During the first half of 1945, when egg prices were generally near ceilings, per capita egg consumption was at an annual rate of well over 400 eggs per person, with some replacement of eggs for meat taking place at that time. As meats become more plentiful, the per capita consumption of eggs probably will decline moderately from levels reached in the first half of 1945. In October and November 1945, tentative data indicate an annual rate of egg consumption of 340 to 360 eggs per person. However, the seasonally-low egg supplies were not fully sufficient to meet demand at the ceiling prices.

Through most of the first quarter of 1946, the civilian supply of eggs probably will be fairly well in balance with demand, at prices somewhat above support levels. After the first quarter, the supply is likely to exceed demand, and Government measures probably will be necessary to support prices at 90 percent of parity. The purchase program to effect such support already has been announced.

The decline in requirements of the armed forces from 1945 levels will bring a reduction of about 70 percent in military procurement of eggs in 1946, compared to 1945 when about 400 to 500 million dozen eggs went for military use. However, this reduction will have relatively small effect upon the total volume of demand, as demobilization of military personnel willingease the size of the civilian market. Per capita disappearance of eggs and egg products for the military forces was about one fourth greater than for the civilian population, but a large portion of the military consumption, probably about one—third, was in the form of dried eggs. Thus, there will be a shift in demand on the part of demobilized military personnel from concentrated egg products to fresh shell eggs.

# Off-season Turkey Meat Consumption to be a Record

Supplies of turkey meat from February through August are largely from two sources, (1) slaughter of breeder hens during the spring months, mainly April and May, and (2) cold storage stocks. Cold storage stocks in 1946 are expected to yield a much larger than usual quantity of turkeys. Civiliah consumption of turkey will be at the highest rate on record for the February-August period. A large portion of this consumtpion will be in restaurants and institutions.

The supply of turkey meat available from breeder hens in the coming spring probably will be about as large as the record supply in the spring of 1945. The good returns from turkey production in the last 3 years will induce growers to keep a large number of breeders on farms through the winter. The number of breeder hens on farms January 1, 1945 was 4.7 million hens compared with 4.4 million on January 1, 1944 and the January 1, 1939-43 average of 4.1 million.

Turkey meat supplies to be available from cold storage in February through August will be the largest on record, the total probably exceeding 60 million pounds. Commercial stocks in cold storage on December 1 were more than 60 million pounds, a total larger than in any recent year and almost double the prevar average stocks for that date. In years immediately before the war, there were indications of increased turkey-meat consumption during the off season. The net storage out-movement was increasing, and in the early 1940's the out-of-storage movement in this season totaled over 50 million pounds, 12 percent of the previous year's production. The net out-movement in the late 1930's averaged only about 20 million pounds. In 1943, 1944 and 1945, the off-season movement was limited by Government actions.

Table 1.- Turkeys: Net out-movement, production, and net out-movement as percentage of previous year's production

		•			•	
:		:	: Net out	-::	:	: t Net out-
:	•	•	: movement	::	•	: movement
:	${ t Net}$	:Production	: as per-	:: .	: Net	:Production: as per-
Year:	out-	: (dressed				: (dressed: centage of
: :	movement		: previous		:movement	: weight) : previous
:		:	: year's		•	: year's
:		•	:productio			: production
<u>:</u>	Mil. 1b.	Mil. 1b.	Percent		: Mil. lh	. Mil. lb. Percent
		***** ***		. • •	•	
1929 :	10 8	212.7	***	::1938	24.2	354.8 7.0
1930 :	11.6	215.9	5•5	::1939	: 20.3	422.3 5.7
1931 :	6.2	214.0	2.9	::1940		
					. 22-	
1932 :	13.2	264.4	6.2	::1941	57.1	467.6 11.8
1933 :	15.1	297.5	5•7	::1942	: 51.6	496.3 11.0
1934 :	18.2	283.8	6.1	::1943	32.5	466.2 6.6
1935 :	19.9	267.3	7.0	<b>::1</b> 944	: 26.0	.5 <sup>11</sup> 7 <b>.1</b> 5.6
1936 :	16.4	361.4		::1945	56.3	<u>1</u> /675.0 10.3
1937 :	35,6	345.5	9.9	<b>!</b> · <b>!</b>	•	• .
· ·				<b>::</b>	: ^	

<sup>1/</sup> Tentative indication.

#### Chicken Meat Supply to be Large; Prices about unchanged

The supply of chicken meat available for civilians in the first half of 1946 probably will be the largest on record for the 6 months, with the possible exception of those in that period of 1943. Cold storage stocks are now larger than in any previous year. Because of lower egg prices, culling in 1946 probably will be much larger than usual. Commercial broiler output will continue large and may equal the 1945 record.

Commercial hatchery output during November of 39 million chicks exceeded that of any previous November and was 27 percent above the total for November 1944. These chicks are primarily for meat purposes. Hence, output of commercial broilers in 1946, at least through the first quarter of 1946, will be larger than in 1945. There was a slight recession in the number of chicks placed in broiler houses immediately following VJ-Day. Since early September, prices received by growers have strengthened and hatchings have been maintained at a relatively high level. Returns to commercial broiler growers, though less than in the earlier months of 1945, are about equal to those in comparable months of 1944.

Commercial stocks of chicken meat as of December 1 were the largest on record for that date. Total poultry meat stocks, excluding turkeys, amounted to 250 million bounds, of which about 25 million bounds were Government-owned. The remaining 225 million bounds of commercially-owned stocks were about double the average of brewar holdings. A large portion of these holdings—about 45 percent—consisted of broilers, fryers, and roasters, and probably are being held chiefly for restaurant and institutional use and for processing.

Prices received by farmers for chickens during the first half of 1946 are expected to remain about at present levels. "These prices, therefore, are expected to be below the record peaks reached in the spring and summer of 1945, when sales at above-ceiling prices were reported. The increase in civilian supply of chickens for 1946 compared with 1945 will first result in increased consumption without much change in price. The average price received by farmers for chickens in the first 6 months of 1945 was 25.6 cents a pound compared with 15 cents per pound, the 1935-39 average for January-June.

#### RECENT DEVELOPMENTS

### Egg Production 1 Percent Less Than Last Year

Farm egg production during November was 246 million dozen, 1 percent below November 1944, but otherwise the largest on record for November. In the first 11 months of 1945, egg production aggregated 4.3 million dozen, a total 5 percent below that in the corresponding period of 1944. The average number of layers on farms during the first 11 months of 1945 was 308 million, which is 7 percent less than the 11 month total for 1944. But the rate of lay, at 143 eggs per layer, was 2 percent above that in 1944. The record rate of lay was due partly to favorable egg prices and a favorable egg-feed price ratio during most of the year. Also, feed supplies were ample, permitting a liberal rate of feeding. The long run influence of improvements both in the type of birds and in poultry husbandry practices, contributed to the high rate of lay. In addition, the weather was favorable for egg production during most of 1945.

# Prices Received by Farmers for Chicken and Eggs not so Favorable When Compared with Feed Prices

Average prices received by farmers in mid-November for eggs, chickens and turkeys showed about the usual seasonal changes from mid-October. The average price farmers received for eggs was 47.1 cents per dozen, 3.7 cents more than on the previous November 15, and equal to 100 percent of parity. Farm chicken prices per pound declined from 24.3 cents to 23.9 cents in the 30-day period ending in mid-November. On that date the average price of chicken meat was 0.1 cent per pound less than on November 15, 1944. The price received for turkeys increased 0.5 cent per pound from October 15 to November 15, but at 33.0 cents it was 0.8 cent below that of the previous year.

In general, wholesale and retail prices of poultry products in November, except for heavy-weight turkeys and light-weight chickens, were at or near ceiling levels. A strong demand prevailed, reflecting the high level of consumer purchasing power and some shortages of red meats.

Compared with feed prices, prices received by farmers for eggs and chickens in mid-November were not as favorable as those for other livestock enterprises and were below the long-time averages. As recently as last summer, this relationship was at least as favorable to production of eggs and chickens as to other types of livestock production.

Table 2.- Livestock-feed price ration. specified dates

:	Aver:	age 1/	10	945	: 1945 as :percentage of average			
Item :	July 15:	November 15	: July 15	November 15	: : July 15: November 1			
::				·	Percent Percent			
Egg-feed:	11.3	16.9	13.1	15.9	116 94			
Chicken-feed:		8.2	9.8	3.0	117 • 98			
Turkey-feed:	8.3	10.3	11.5	11.1	139 108			
Milk-feed:			2/ 1.35	2/ 1.49	117 106			
Butterfat-feed .:		26.7	2/ 27.5	2/ 29.1	123 109			
Hog-corn:		12.8	12.5	12.8	109 100			
•		Ç•						

<sup>1/</sup> For egg-feed and chicken-feed, the average is for 1934-43, others 1924-43.
2/ Including dairy production payments.

### Marketings of Poultry Large

Slaughter of chicken meat during November and early December was, with the possible exception of that in 1943, the largest on record for the period. Receipts of live poultry at the Midwest Primary Markets for the 4 weeks ended December 14, on a per-plant basis, 28,000 pounds, was 13 percent larger than in that period of 1944, and was exceeded only in the corresponding period of 1943. Receipts of dressed poultry at the 4 principal markets were the largest on record for the four weeks.

The large marketings of farm chicken meat reflected the near-record numbers of chickens raised during 1945, totaling 821 million. The total raised in 1945 was 10 percent larger than that in 1944 and is exceeded only by the 934 million raised in 1943. In addition, commercial broiler production in 1945 set a new high record.

Civilian supplies of boultry meat in the late fall were probably at record levels. Procurement by the armed forces for this part of the year was far less than in any comparable period of the war years.

## Into-Storage Movement of Poultry Sets a New Record in November

Reflecting the large marketings of chickens and turkeys, the intostorage movement of poultry during November was the largest for any month in the 35 years of record. Total in-movement of all poultry during November was 82.5 million rounds, three-quarters of a million pounds more than the large Uctober-movement. The prewar average in-movement for November was about 40 million pounds.

Total stocks of frozen coultry on December 1, excluding turkeys and ducks, amounted to 242 million counds, of which less than 25 million counds were Government-owned. Commercially-owned stocks were greater than in any previous year and more than double the prewar average.

#### Shell Egg Stocks Negligible

Cold storage holdings of shell eggs on December 1, amounting to 309,000 cases, were equivalent to only one-third of the holdings on December 1, 1944 and to about one-fourth of the average prewar December 1 holdings. This stock position is as low as that usually reached at the seasonal low point in February or March. The into-storage movement of eggs last spring was below normal, and stocks at the seasonal peak on June 1 were less than half as large as the average prewar stocks on that date. The strong demand for shell eggs this fail was responsible for the large out-movement.

Frozen-egg withdrawals during November totalled 27 million pounds, which is more than in any November prior to 1942 but is less than in November of 1942, 1943 and 1944, when withdrawals of frozen eggs for dehydration were large. Total frozen egg stocks on December 1, at 155 million bounds, were almost double the 1935-39 average. However, more than 50 million bounds of these eggs were Government-owned.

### THE 1946 POULTRY AND EGG GOALS AND EGG PRICE SUPPORT PROGRAM

The 1946 price support program for eggs was announced by the United States Department of Agriculture on December 27. In the flush-production season, prices are to be supported so as to provide an average return to farmers of 29 cents per dozen. Regional differentials will prevail and support prices will be lower in the Midwest than in coastal areas. The 29-cent average price is expected to reflect at least 90 percent of parity as required by the Steagall Amendment.

PES-107 - 11 -

The prices will be supported through Government procurement of dried whole, frozen, and graded shell eggs. In the Midwest the program will be carried on primarily through purchases of dried whole and frozen eggs, although purchases of graded shell eggs are to be made in localities where processing facilities are not available.

Tentative national goals for coultry products in 1946 were announced by the Department of Agriculture December 5. Compared with indicated production in 1945, the 1946 goals call for reductions of 15 percent in egg production, 17 percent in the number of chickens raised in farm flocks, and 10 percent in the number of turkeys raised. No goal was established for commercial broilers.

The goal for egg production was based on the following assumed requirements: Civilian consumption of somewhat more than 340 eggs per capita; hatching requirements; requirement for the armed forces; but no requirements for dried eggs for export. Egg-production goals have been exceeded in actual performance each year since the institution of goals in 1942. The production goal for turkeys was based primarily on a civilian requirement of slightly over 4 pounds per capita.

Table 3.- Goals and production, poultry and eggs, United States, 1942-46

	Year .	of eggs	Chickens:	Commercial : broilers :	Turkeys raised	Hens and pullets on farms Jan. 1
,		Mil. doż.	Thous,	Thous.	Thous.	Thous.
1942	Goal		<u>1</u> / 1/		37,002 33,110	426,226
r 1943	Goal		872,026 933,965	251,360	-38,699 -32,970	455,337 487,837
1944	Goal	: 4,823.	892,983 749,643	201,392 231,086	32,041 36,397	540,812 518,582
1945	Goal	4600 4.577	700,000 821,353	213,000 310,000	35,666 44,150	420,000 469,161 <i>43</i> /
1946	Tentative goal Percentage	; ; 3,910 ;	630,000		39,700	408,063
	1946 goal is of 1945	<b>8</b> 5	83		90	87

I/ Slaughter from farm production including broilers, expected goals, 3,420 million bounds live weight, and actual production, 3,142 million bounds live weight.

### CHANGES IN COMMERCIAL HATCHERY PRODUCTION

# Commercial Hatchery Industry Has Shown Steady Growth Since 1930

During the past 15 years the commercial hatchery industry has grown steadily. This growth has been accompanied by changes in the seasonality of commercial chick production, larger proportion of the output now coming in the later months of the year than formerly.

In the decade between 1930 and 1940, the increase in the number of chicks hatched by commercial hatcheries was due in large part to the shift from farm hatchings to commercial operations and also to increased broiler output. The number of chickens raised each year from 1930 to 1940 fluctuated between 600 and 750 million head. After 1940, the number of chickens raised increased to more than 900 million (1943), and commercial hatching rose sharply.

The 1938-40 average of 854 million chicks hatched in commercial hatcheries was almost 50 percent above the 1930-32 average. About one-third of the increase was due to the increase in broiler production. In 1945, commercial hatchings totaled 1,600 million chicks, about half of the increase after 1940 being accounted for by increases in broiler output. Practically all broilers are from commercially-hatched chicks.

In the early 1930's, the number of chicks hatched by commercial hatcheries was less than half of the total number raised; by 1940 this proportion reached about three-fourths of the number raised. In 1945, nearly 90 percent of chicks raised were commercially hatched.

Table 4.—Percentage of Chickens Raised
Hatched by Commercial Hatcheries 1/

-	*** * O C 2.1	ou by com	TH C T	OTCIT 11.20	1071077	.00 4/	
Year	:	Percent	:	Year	:	Fercent	٠,,
1938	:	70.3	-; -	1942	:	81.8	1
1939	:	72.4	:	1943	:	84.2	
1940	:	74.6	• 7	1944	:	86,4	•
1941	:	78.9	:	1945	:	88.6	_
•	<b>:</b> *	. ,	2	•	:		•

1/ Dat A for years prior to 1938 not available.

Growth of the commercial broiler industry has been primarily responsible for the changes that have come in the seasonality of hatchery production. In the early 1930's, only 4 to 6 percent of the total hatch was produced in the last 6 months of the year. Commercial broiler production in that period was negligible. In 1940, about 17 percent of the total number of chicks hatched by commercial hatcheries were hatched in the last six months of the year. In 1945, because of the strong demand for chicken meat, commercial hatchery output for July through December was approximately 30 percent of the total hatch. (See table 5.) More than 300 million broilers were produced in 1945, compared with 132 million in 1940 and less than 30 million in the early 1930's.

## Largest Increases and Changes in Seasonality on Eastern Seaboard

Of the various regions of the country, the South Atlantic region which contains the Del-Mar-Va area and which accounts for about 60 percent of the

FbS-107 - 13 -

commercial broiler production, has shown the largest increases and the greatest changes in seasonality of co mercial hatchery production. In this region, commercial hatchery production for the past three years has run about three times that of early 10.70.1s and about double the 19.75-79 average. The output from July through December has increased greatly in proportion to the total, until now almost two-fifths of the chick production comes in the last 6 months of the year, compared with less than one-fifth prior to 19.75. The North Atlantic region has shown trends that are similar but not as strong. This region supplies a number of chicks to the Del-Mar-Va area.

In areas where chick production is primarily for laying purposes, notably in the Central and the West-rn regions, hatchery production has doubled from the 1030-34 period and is about one-third above the immediate prewar average (1035-39). Some change in seasonality has taken place in the East North Central States mainly due to the increase in commercial broiler production. However, in the West North Central and South Central States, little change in seasonality has occurred. The smallness of the increase in commercial chick production in the West-rn States is probably due to the fact that egg production was largely a commercial affair in the early 1930's, and a large proportion of chicks raised were commercially hatched even then. Little change in total egg production has occurred in that region during the past 15 years, and the number of chickens raised has increased little.

#### Fostwar Outlook

For the next few years commercial hatchery output probably will decline from the unprecedented levels reached in 1943 and 1945, but may be equal to or larger than in the early 1940's. If a 10=to-20 percent downward readjustment in egg production occurs by 1947, the number of chicks raised on farms for flock replacement purposes will be approximately 600 million to 700 million, assuming continuation of the present ratio of pullets and hens. On that basis, the output of chicks by commercial hatcheries for egg laying purposes would total 700 million to 900 million chicks.

In addition, with a stronger demand for chicken meat than before the war and with a decrease in chicken meat production from general farm flocks, commercial broiler production in the next few years may remain about the same as or even increase from the high levels reached during the war. Commercial broiler production may be in the neighborhood of 700 million to 750 million bir's per year. This would require an additional 725 million to 775 million commercially-hetched chicks. Hence, hatchery output for the next few years may total a billion to a billion and a quarter of chicks, compared with 800 million chicks in the immediate pre-war years, and the 1,600 million record reached in 1945.

With further increases in commercial broiler production some increase i hatchery output in the areas in and surrounding commercial broiler regions would occur. But this would be accompanied by sharp reductions in total output in areas where chicks are hatched primarily for flock replacement purposes. Also, the increased output of commercial broilers would tend further to even out the seasonality in the commercial hatchery industry.

Table 5. - Number of chicks hatched by commercial hatcheries, annual and July-December totals, and July-December as a percentage of annual total, U. S. and regions, 1970-45.

;	United States			North Atlantic			East !	Worth C	entral	West	Worth 3	Sentral
Year	Total	July- :as Dec. :ce	nly-Dec.; s per- ; entage ; f total ;	Total	July- : Dec. :	July-Dec: as per-: centage: of total:	10041	July- Dec.	July-Dec. ( las per- : centage : of total :	Total	July- Dec.	:July-Dec. :as per- :centage :of total
	Kila		Percent	Mil.	Mil.	Percent	M¥1.	M11.	Percent	Mil.	Mil.	Percent
1933 1934 1935 1936 1937 1938 1940 1941 1942 1943	671.6 516.2 537.4 584.5 525.9 649.7 790.7 687.6 785.7 916.4 859.3 1,093.3 1,280.3 1,280.3	29.1 34.8 34.3 23.7 31.2 53.9 51.1 56.2 113.7 131.6 133.8 194.5 229.4 281.3 183.8 320.0	374 6.4 5.5 6.5 14.6 17.5 17.5 17.5 17.5 17.5 17.5 17.5 17.5	88.6 74.9 82.0 89.9 86.2 101.7 124.1 108.3 119.9 131.7 120.4 155.5 185.2 235.3 190.2 260.0	5.2 4.4 5.1 10.6 11.4 25.2 27.3 49.4 49.4 70.0	5.6 8.3 5.8 6.0 11.7 12.4 9.2 13.7 21.4 22.5 26.6 26.7 24.0 21.7 27.0	194.9 139.4 166.5 181.5 151.2 196.8 233.8 199.1 222.8 247.5 235.7 291.7 323.8 310.9 400.0	6.2 6.2 10.6 10.5 10.5 10.5 25.7 29.4 45.4 56.3 70.0	4.4 6.4 3.4 5.5 5.6 11.6 12.5 14.0 14.1 9.0	194.2 163.0 165.7 184.2 177.3 205.8 246.7 196.9 229.1 268.1 249.9 311.4 367.2 446.0 365.8	1.8 3.1 3.2 6.9 5.3 5.0 17.1 29.6 38.1	1.9 2.1 9.3 2.1 9.3 2.5 7.7 6.8 8.1 8.6 8.6
:	South	Atlantic	:	Sout	h Çentra	1 :	W	estern				
1930 1931 1932 1933 1934 1935 1936 1937 1938 1939 1940 1941 1942 1943 1944	36.2 33.0 41.5 49.8 52.0 67.7 92.0 103.6 136.3 168.0 222.5 193.2	3.8 5.0 4.2 5.7 6.4 8.9 9.4 36.5 50.1 81.3 81.3 81.0	8.2 12.7 12.3 11.6 17.4 15.5 17.8 18.1 32.9 31.9 35.2 36.8 37.8 36.6 34.6 35.0	66.0 38.2 38.0 43.9 34.1 44.9 62.8 61.1 80.1 96.2 116.1 141.8 185.4 130.3 150.0	3.0 3.3 2.4 5.7 5.0 11.5 12.3 18.1 20.5 24.8 24.8	4.5 8.0 8.6 4.5 7.1 13.2 7.5 8.2 13.7 13.0 14.3 15.6 14.7 13.2 16.0	80.9 61.6 48.6 48.7 44.1 59.1 73.6 70.2 66.1 80.5 63.6 82.3 94.8 130.0	9.2 11.4 7.8 3.9 6.9 11.6 10.4 12.2 12.7 11.5 16.4 20.6 23.6 17.8	16.0 8.1 15.5 19.6 14.1 17.3 18.5 15.8 18.0 20.0 21.9 19.6 18.7			

1/ Data for 1945 partly estimated.