

Economic Research Service

Situation and Outlook

LDP-M-272

Feb. 15, 2017

Contents

Cattle/Beef
Dairy
Pork/Hogs
Sheep/Lambs
Poultry
Contacts and Links

Tables

Red Meat and Poultry Dairy Forecast

Web Sites

Animal Production and Marketing Issues Cattle Dairy Hogs Poultry and Eggs WASDE

Tables will be released on February 28, 2017

The next Outlook Report release is March 15, 2017

Approved by the World Agricultural Outlook Board.

Livestock, Dairy, and Poultry Outlook

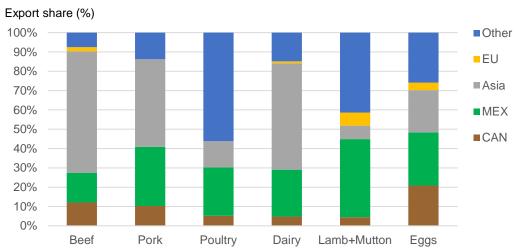
Mildred Haley, Coordinator mhaley@ers.usda.gov

Keithly Jones, Coordinator kjones@ers.usda.gov

2016 Trade Data Shows U.S. Animal Product Sector a Major Exporter

Latest-available trade data for red meat, poultry, and dairy trade show that foreign demand accounts for a significant share of U.S. animal products production. In 2016 beef exports accounted for 10.1 percent of commercial production. Asia was the largest export market last year, accounting for 63 percent of beef exports. In 2016, 21 percent of U.S. pork production was exported, with Asia (45 percent) and Mexico (31 percent) taking the largest share of exports. The U.S. poultry sector (broilers, other chicken, and turkey) exported 15.6 percent of production, with a large number of relatively small shipments ("Other") accounting for 56 percent of exports. The dairy sector exported 18.3 percent of production on a skim-solids milk equivalent basis, with Asia (55 percent) and Mexico (24 percent) the largest export destinations last year. Almost 4 percent of U.S. lamb and mutton production was exported in 2016. "Other"— which in this case consists of several Caribbean nations — accounted for 41 percent of exports, while Mexico accounted for 40 percent. The U.S. egg industry exported more than 3 percent of its production, with exports more or less equally distributed between Mexico (27 percent), Other (26 percent), Asia (22 percent), and Canada (21 percent).

2016 animal product export shares to major foreign destinations, by quantity



Source: Economic Research Service, U.S. Department of Agriculture.

Cattle/Beef: USDA National Agricultural Statistics Service (NASS) released its *Cattle* report January 31, 2017, which showed higher inventory numbers in many categories for the third consecutive year. Both beef production and beef exports were higher in 2016.

Dairy: With high beginning stocks and higher expected milk production in 2017, butter and cheese prices are expected to be lower than last month's forecast. However, dry whey price forecasts have been raised significantly due to recent price movements and higher demand expectations. The all-milk price forecast for 2017 is \$17.70-\$18.40 per cwt, 10 cents higher than last month's forecast at the lower end of the range.

Pork/Hogs: Restrained pork production in December and January and a surge in demand have driven hog prices to higher-than-expected levels early in 2017. First-quarter hog prices are expected to average \$45-\$48 per cwt, more than 5 percent greater than a year ago.

Sheep/Lambs: On January 1, 2017, the U.S. sheep industry registered a 2-percent decline in inventory, reversing a 2-year increasing trend. Breeding sheep inventory declined by 90,000 head. This included a 15,000-head decrease in replacement lambs under 1 year old. Attempts at returning to growth would likely result in tight supplies of lamb and mutton meat.

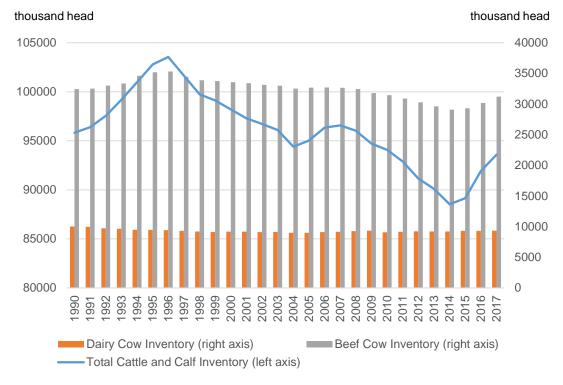
Poultry: Broiler and table-egg production in 2016 were above 2015 by almost 2 and 6 percent, respectively. Broilers were helped in late 2016 by resumed growth in weights, and the table-egg flock reached a record level. Recent exports of both commodities have generally improved. Broiler and egg price forecasts were increased for 2017. Turkey production grew in 2016, following a difficult 2015 that included the Highly Pathogenic Avian Influenza outbreak that resulted in the loss of over 7 million turkeys. Total production in 2016 reached 6.0 billion pounds, an increase of 6 percent over 2015 and 4 percent greater than 2014. Prices for whole frozen hens continued lower in January, averaging just under a dollar per pound. Prices for 2017 are now forecast to average 104-110 cents per pound.

Cattle Report Shows Expansion Continuing, but at Decreasing Rate

USDA National Agricultural Statistics Service (NASS) released its *Cattle* report January 31, 2017 which showed higher inventory numbers in many categories for the third consecutive year. The total cattle and calf inventory increased about 2 percent from 2016. Increases were seen in 27 States. States with the largest increases in all cattle and calves include Texas (+500,000 head), Missouri (+250,000 head), Oklahoma (+200,000 head), and Kansas and Colorado (+150,000 head each). The expansion was likely buoyed by a combination of strong cow-calf operator returns in 2014 and 2015 as well as improved pasture and range conditions in much of the Plains region. Beef cow numbers were 3 percent higher than the same period last year, but milk cow numbers were virtually unchanged

Total beef cows increased 3 percent, but a number of indicators suggest that although the expansion continues, the rate of expansion is slowing. Heifers for beef and milk cow replacement are often used as barometers of herd expansion or contraction rates. Heifers for beef cow replacement were 1 percent higher than last year but down from the 4 percent and 3 percent increases achieved in 2015 and 2016, the first 2 years of this expansion. Heifers for milk cow replacement show similar patterns, registering at 1 percent below 2016 levels, but were positive for the first 2 years of the expansion. Producers also indicated that they expect only 2 percent more beef heifers to calve during 2017, down from increases of 7 percent and 6 percent in 2015 and 2016.

Cattle report shows that expansion continues



Source: USDA, National Agricultural Statistics Service, Complied by the Economic Research Service.

Despite relatively cheap feed, returns to feeder cattle operations were negative, with losses widening during 2016. Despite expected improvements in cattle feeding returns, feeder

cattle supplies outside feedlots are above last year and prices will remain under pressure through much of 2017. Feeder cattle prices for 2017 are forecast to average \$131-139 per cwt, down about \$7 from 2016.

The number of cattle on feed in U.S. feedlots with a capacity of 1,000-plus head on January 1, 2017, was fractionally higher (*Cattle on Feed*, January 27, 2017). Cattle placed on feed in December 2016 were up 18 percent compared with December 2015. This was the second consecutive month that there was a year-over-year double-digit increase in cattle placements. It is likely that lower numbers of cattle grazing on small grains pastures was a contributing factor to the relatively large increase in placements. Winter wheat planted area was lower than 2016 in most of the country, and the estimate of cattle grazing small grain pasture in Texas, Oklahoma, and Kansas on January 1, 2017, was 5 percent below 2016. Fed cattle marketings in December 2016 were 7 percent above that of 2015, but the increased numbers of cattle on feed on January 1 2017, and the timing of their placement suggest that fed cattle marketings in the first half of 2017 will be larger than 2016. With 2 percent more cattle outside feedlots on January 1, placements in 2017 are expected to be above 2016. The timing of placements during the year will depend on a number of factors, including breeding herd decisions, producer decisions about winter wheat graze-out, and the availability of forage during the year.

Commercial beef production in 2016 came in at 6 percent above that of 2015. This is due to a combination of increased slaughter and slightly higher dressed weights. Weights were higher in the first half but fell below year-earlier as producers became more current with their marketings. Slaughter in 2017 is forecast higher as cattle placed in the later part of 2016 and first half of 2017 are marketed. Producers are expected to remain relatively current in their marketings during the year, which will limit increases in carcass weights. Beef production for 2017 is forecast at 3 percent above previous-year levels.

Fed cattle prices are expected to remain under pressure in 2017. Packers' margins are seasonally weak, which is will likely impact their willingness to bid up cattle prices over the next weeks. As increased supplies of fed cattle are marketed in the spring quarter, fed steer prices are likely to remain under pressure, averaging \$106-\$110 per cwt during the quarter. Large supplies of fed cattle will likely continue to pressure prices during the second half of the year. Fed steer prices are forecast to average \$109-\$116 per cwt for the year, down from \$120.86 in 2016

U.S. Beef Exports To Remain Strong in 2017

December trade data, along with annual totals, were released earlier this month. Total beef exports for December reached 254 million pounds, 30 percent higher year over year. Following weak 2015 beef exports, sales to a number of Asian trading partners (Japan, South Korea, and Taiwan) helped U.S. beef exports recover to 2.55 billion pounds in 2016. Preliminary data suggests higher near-term exports, and with expected higher U.S. beef supplies and more competitive prices, robust demand will likely support an export expansion during 2017 to 2.72 billion pounds.

U.S. beef imports for 2017 are projected to continue their decline from 2016 levels to 2.74 billion pounds in 2017, due to an expected increase in domestic supplies and expected tighter supplies from Oceania.

U.S. beef exports pick up steam U.S. beef imports continue slide 1,000 Pounds 1,000 Pounds **Forecast** 3.500.000 3,500,000 Forecast 3,000,000 3,000,000 2,500,000 2,500,000 2,000,000 2,000,000 1,500,000 1,500,000 1,000,000 1,000,000 500,000 500,000 0 0

Source: U.S. Dept. of Agriculture, Economic Research Service calculations using data from U.S. Dept. of Commerce, Bureau of the Census.

2012 2013 2014 2015 2016 2017

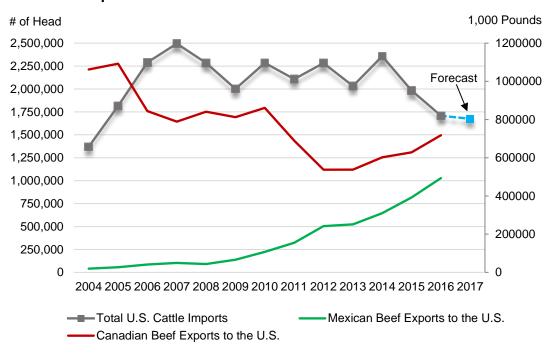
Live Cattle Imports Forecast Lower in 2017

2012 2013 2014 2015 2016 2017

Total U.S. cattle imports for 2016 were reported at 1.71 million head, down nearly 14 percent year over year. Since 2014 highs, cattle imports from Canada and Mexico are projected to decrease for a third straight year in 2017 to 1.68 million head. During 2016, higher U.S. cattle supplies and a decline in feeder cattle prices contributed to the decline in imports of feeder animals from both Canada and Mexico. Mexico continues to finish more animals in feedlots and sell increasing amounts of beef to the United States and the rest of the world.

For cattle exports, 2016 totals were down 4 percent from 2015 to 69,411 head. However, December 2016 exports followed November's record of the highest monthly total of live cattle exports since 2013. Exports for 2017 are expected to increase to 85,000 head.

U.S. cattle imports level out in 2017



Source: U.S. Dept. of Agriculture, Economic Research Service calculations using data from U.S. Dept. of Commerce, Bureau of the Census.

Authors: Keithly Jones, <u>kjones@ers.usda.gov</u>; Russell Knight, <u>Russell.H.Knight@ers.usda.gov</u>; Lekhnath Chalise, <u>Lekhnath.Chalise@ers.usda.gov</u>

Recap of 2016 Dairy Industry Situation

The all-milk price fell from an average of \$17.12 per cwt in 2015 to \$16.24 in 2016. It reached a low of \$14.77 per cwt in the second quarter before rising to \$17.67 in the fourth quarter.

The relatively low milk prices in 2016 largely reflect the global dairy situation. European Union (EU) milk production increased substantially after milk supply quotas ended on March 31, 2015 and remained above previous-year levels through May 2016, contributing to an abundant global supply. At the same time, global demand for dairy products grew at a relatively slow pace in some countries. For example, China's whole milk powder imports in 2016 increased over 2015 but remained well below 2014 levels. With continuance of the Russian trade ban, Russian imports are lower and the EU has been more competitive in alternative markets, including some of those traditionally supplied by the United States. In addition, the strong dollar has caused U.S. products to be less competitive in foreign markets.

Milk production in 2016 was a record 212.5 billion pounds, 1.7 percent higher than 2015 (adjusted for leap year). Milk cows averaged 9.333 million head, 16,000 higher than 2015 and the highest annual average since 1996. Average milk per cow was 22,770 pounds, 1.4 percent higher than 2015 (adjusted for leap year).

The increased milk production in 2016 can be attributed in part to relatively low feed prices in the latter part of 2015 (due to lagged supply response) and throughout 2016. In 2015, the benchmark 16-percent protein mixed dairy feed, as calculated by USDA National Agricultural Statistics Service (NASS), fell from \$8.57 per cwt in the first quarter to \$7.77 in the fourth quarter. The 2016 average was \$7.48 per cwt, 9.8 percent lower than 2015. Although the all-milk price fell from 2015 to 2016, the milk-feed ratio increased from 2.07 to 2.18.

Domestic use in 2016 was robust, especially on a milk-fat milk-equivalent basis (2.9 percent higher than the previous year). U.S. consumer perceptions regarding health effects of butterfat have likely changed due to media reports. On a skim-solids milk-equivalent basis, domestic use grew by 1.6 percent over the previous year.

Commercial exports in 2016 were higher than 2015, but they did not reach the record levels of 2014. On a milk-fat basis, 2016 exports were 9.2 billion pounds, 4.4 percent higher than 2015 but 26.4 percent lower than 2014. On a skim-solids basis, exports were 38.9 billion pounds, 4.1 percent higher than 2015 but 0.5 percent lower than 2014. With competitive foreign prices, 2016 imports grew to 7.0 billion pounds on a milk-fat basis (23.1 percent higher than 2015) and 6.5 billion pounds on a skim-solids basis (9.5 percent higher than 2015). Stocks ended the year at a relatively high level, growing from 13.3 billion to 14.3 billion pounds on a milk-fat basis and from 13.9 to 14.8 billion pounds on a skim-solids basis.

¹ The price of commercial prepared dairy feed is based on current United States prices received for corn, soybeans, and alfalfa. The modeled feed uses 51 percent corn, 8 percent soybeans, and 41 percent alfalfa.

Recent Developments in Dairy Markets

According to the NASS *Milk Production* report, U.S. milk production was 17.9 billion pounds in December, up 2.2 percent above December 2015. The average number of milk cows in the United States was 9.358 million head, 11,000 more than November 2016 and 38,000 more than December 2015. However, according to the NASS *Cattle* Report, milk cows numbered only 9.349 million head on January 1, 2017.

Feed price forecasts for corn and soybean meal for 2016/17 are \$3.20-\$3.60 per bushel and \$310-\$340 per short ton, both unchanged from last month's forecasts at midpoints of the ranges. The alfalfa hay price decreased from \$130 per short ton in November to \$129 in December.

Recent price directions for dairy products, as reported in the USDA National Dairy Products Sales Report, have been mixed in recent weeks. From the week ending January 7 to the week ending February 4, prices declined for butter, 40-pound cheddar blocks, and 500-pound barrel cheese. While the dry whey price increased significantly, the nonfat dry milk (NDM) price increased only slightly. Higher production of whey protein isolate has led to a tighter market for whey protein, contributing to the rise in the dry whey price.

Dairy product prices (dollars per pound)

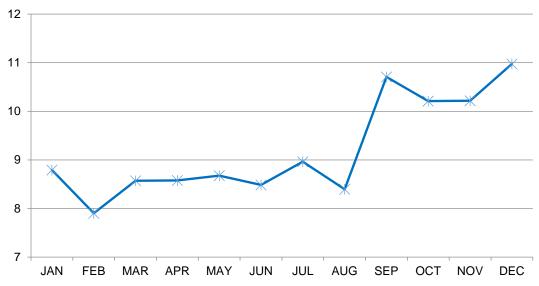
	For the w	For the week ending						
	January 7	February 4	Change					
Butter	2.274	2.229	-0.045					
Cheddar cheese								
40-pound blocks	1.743	1.719	-0.024					
500-pound barrels ¹	1.659	1.606	-0.053					
Nonfat dry milk	1.014	1.019	0.005					
Dry whey	0.425	0.469	0.044					

¹Adjusted to 38 percent moisture.

Source: U.S. Dept. of Agriculture, Agricultural Marketing Service, National Dairy Product Sales Report.

Production of whey protein isolate (protein content >= 90 percent)

Million pounds

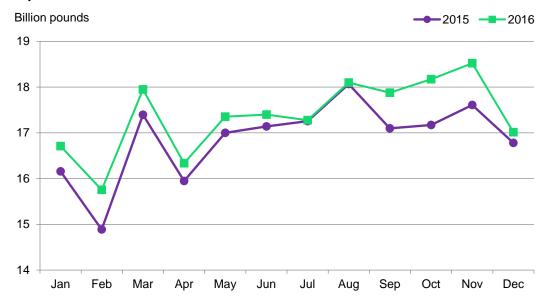


Source: U.S. Dept. of Agriculture, National Agricultural Statistics Service.

Ending stocks increased significantly from November to December for butter, cheese, and nonfat dry milk. On a milk-fat basis, 2016 ending stocks were 0.9 billion pounds higher than expected last month, and on a skim-solids basis they were 0.5 billion higher than expected.

Commercial use fell significantly from November to December for butter and cheese. As a result, commercial use for the fourth quarter of 2016 was 53.7 billion pounds on a milk-fat basis (0.9 billion less than expected) and 43.7 on a skim-solids basis (0.3 billion less than expected).

Commercial disappearance of milk in all products, milk-fat milk-equivalent basis



Sources: USDA, National Agricultural Statistics Service; USDA, Farm Service Agency; USDA, Foreign Agriculture Service; U.S. Department of Commerce, Bureau of the Census; and USDA, Economic Research Service calculations.

Trade data for the fourth quarter of 2016 were close to those expected last month. Notably, NDM exports decreased from November to December, and exports of whey products remained relatively strong.

Dairy Forecasts for 2017

With improving returns in late 2016 and early 2017, slightly higher growth in the milking herd is now forecast for 2017. The estimate for milk cows for the year has been raised by 5,000 to 9.370 million head, with most of the growth occurring in the second half of the year. The milk per cow forecast has also been raised to 23,195 pounds per head, 10 pounds higher than last month's forecast. These changes result in a forecast of 217.4 billion pounds, an increase of 0.3 billion pounds from last month's forecast.

The milk-fat basis import forecast has been lowered 0.4 billion pounds to 6.6 billion pounds for the year, largely due to more competitive U.S. butter prices versus. imported butter prices. The export forecast on a milk-fat basis is unchanged at 8.3 billion pounds. The domestic use estimate on a milk-fat basis has been lowered from 215.0 billion to 214.7 billion pounds. Year over year, domestic use on a milk-fat basis is expected to increase

3.0 percent. The ending stock forecast for 2017 on a milk-fat basis has been raised to 14.3 billion pounds.

The estimate for imports on a skim-solids basis is unchanged at 6.2 billion pounds. The export forecast for 2017 has been lowered 0.1 billion pounds to 40.1 billion pounds, but exports of NDM, whey, and other products should still increase from 2016. Domestic use in 2017 is expected to be 0.3 billion pounds lower than last month at 183.2 billion pounds. The ending stock forecast for 2017 on a skim-solids basis has been raised to 14.0 billion pounds.

Based on recent price data and increasing stocks, the cheese price forecast for 2017 has been lowered slightly, to \$1.660-\$1.730 per pound for the year. With the recent increases in dry whey prices and expectations of demand for high-protein whey products, the whey price forecast has been raised to \$0.455-\$0.485 per pound for the year. A recent uptick in butter imports and lower domestic use in December suggest pressure on prices; the butter price for 2017 is forecast lower than last month as a result, at \$2.045-\$2.145 per pound. As production overseas is still expected to show little growth for the year and export demand is expected to exceed 2016, the NDM price forecast is unchanged for the year, at \$0.990-\$1.050 per pound.

As the higher whey price forecast more than offsets the lower cheese price forecast, the Class III price forecast has been raised to \$16.45-\$17.15 per cwt, 10 cents higher at the lower end of the range. Due to a lower expected butter price, the Class IV price forecast has been lowered to \$15.10-\$15.90 per cwt. The all-milk price forecast for 2017 is \$17.70-\$18.40 per cwt, 10 cents higher than last month's forecast at the lower end of the range.

Authors: Jonathan Law jonathan.law@ers.usda.gov, Jerry Cessna jgcessna@ers.usda.gov

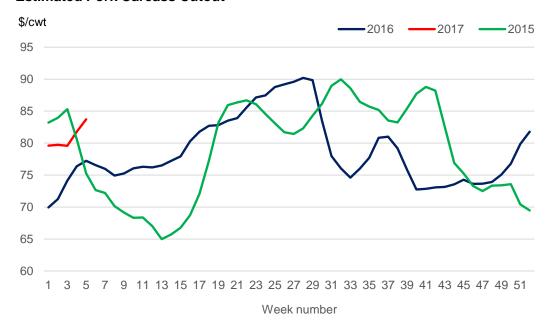
Pork / Hogs

Limited Production and Surging Demand Drive Hog Prices Above Year-Ago Levels

A surge in pork demand in late 2016 coupled with restrained pork production in December and January have driven hog prices to higher than earlier-expected levels. The figure below shows the estimated wholesale value of the pork carcass for 2016 increasing sharply after the first week of December (week 49). The 2016 cutout finished the year almost 18 percent higher than a year earlier. Pork prices likely spiked because December pork production was limited by one less slaughter day during a period of stout holiday-related domestic demand and very strong export demand. Pork prices through early February continue to exceed year-earlier prices, driven by year-over-year lower pork production through early February and by demand, both domestic—in part to replenish year-end depleted stocks—and continued-solid foreign demand.

Average first-quarter 51-52 percent lean live equivalent hog prices are expected to be \$45-\$48 per cwt, more than 5 percent greater than a year ago. ERS composite retail pork prices for the first half of 2017 are expected to average in the mid-\$3.60s, whereas last-year retail prices averaged in the high \$3.70s.

Estimated Pork Carcass Cutout



Source: Agricultural Marketing Service, U.S. Dept. of Agriculture.

2016 U.S Pork Exports Finish Strong

U.S pork exports finished the year on a strong note: December shipments, at 493 million pounds, were more than 15 percent higher than volumes of a year earlier. Fourth-quarter exports of 1.5 billion pounds were 14 percent higher than the same period in 2015, and for the year, total pork exports were 5.2 billion pounds, 4.5 percent above exports in 2015. The table below summarizing the 10 largest foreign destinations shows that Mexico accounted for the largest share of U.S exports, for the second year in a row. Well-priced U.S. hams were certainly a factor that drove late-year exports to Mexico. Generally lower

U.S. pork product prices during the fourth quarter likely helped to offset effects of the high peso-U.S. dollar exchange rate, accelerating late-year flows of U.S pork to Mexico.

U.S. pork exports: Volumes and export shares of the 10 largest foreign destinations, 2015, 2016.

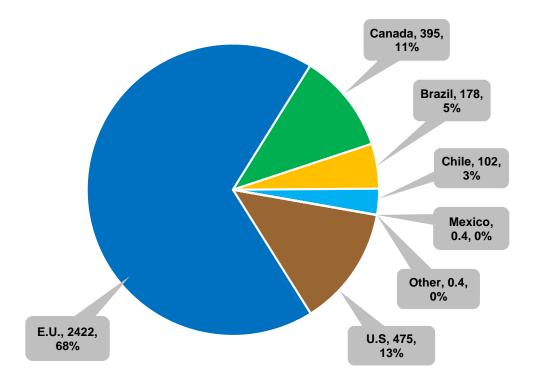
	Country	Exports 2015	Exports 2016	Percent change	Export Share 2015	Export Share 2016		
		(mil. lbs)	(mil. lbs)	(2016/2015)	%	%		
	World	5,009	5,233	4.5				
1	Mexico	1,553	1,604	3.2	31	31		
2	Japan	1,274	1,212	-4.9	25	23		
3	China\Hong Kong	377	646	71.1	8	12		
4	Canada	528	537	1.6	11	10		
5	South Korea	494	407	-17.7	10	8		
6	Colombia	176	187	6.0	4	4		
7	Australia	110	119	9.0	2	2		
8	Honduras	72	76	4.9	1	1		
9	Chile	66	75	13.9	1	1		
10	Dominican Republic	64	75	17.1	1	1		

Source: U.S Dept. of Agriculture, Economic Research Service.

It is certainly significant that China\Hong Kong ranked as the third largest export market for U.S. pork in 2016, with exports increasing more than 70 percent year-over-year, and its export share increasing by 50 percent compared with 2015. It is also significant that European pork accounted for an out-sized share of Chinese imports of foreign pork in 2016 (see figure below). With European costs of production typically higher than U.S. costs, the Chinese market presents a case where the exchange rate value of the U.S. dollar likely made U.S pork less competitive than that of its higher production-cost competitor.

U.S. pork exports in 2017 are expected to be about 5.4 billion pounds, an increase of 4 percent above exports last year.

China pork imports, major exporting country shares, 2016



Source: U.S. Dept. of Agriculture, Economic Research Service, using data from the Global Trade Atlas.

2016 U.S. Pork Imports: Little Change

The source countries for U.S. pork imports are summarized in the table below. Imports were about 1.1 billion pounds in 2016, a bit more than 2 percent below imports last year. U.S. pork imports accounted for 5.2 percent of U.S. disappearance last year, down from 5.4 percent the previous year. Two things are worth noting with respect to major-source countries for U.S. pork imports, however. First, Poland has supplanted Denmark as the second-largest source of U.S. imports, for the second year in a row. Production costs in Eastern Europe tend to be somewhat lower than those of the older-E.U. member states. While the low-valued euro likely encouraged U.S. buyers to increase imports from the E.U., somewhat lower costs of production in Poland likely supported purchases of Polish pork. A second notable entry in the table is the appearance for the first time of Brazil. Brazil gained access to the U.S. market in 2014. Its rich endowment of agricultural resources has made it a powerhouse in international grains and oilseeds markets. USDA ranked Brazil as the fourth largest pork exporting country in 2016 and forecasts that Brazil's total 2017 pork exports will increase about 4 percent to 2.1 billion pounds.

U.S. pork imports in 2017 are expected to be about the same as in 2016: about 1.1 billion pounds.

Volumes and import shares of 10 largest source-countries for U.S pork imports in 2015 and 2016.

	Country	Imports	Imports	Percent	Import Share	Import Share	
		2015	2016	change	2015	2016	
		(mil. lbs)	(mil. lbs)	(2016/2015)	%	%	
	World	1,116	1,092	-2.1			
1	Canada	855	788	-7.8	76.6	72.2	
2	Poland	80	101	25.3	7.2	9.2	
3	Denmark	73	67	-8.6	6.6	6.1	
4	Mexico	24	31	26.7	2.2	2.8	
5	Italy	23	23	-0.6	2.1	2.1	
6	Netherlands	12	19	54.9	1.1	1.7	
7	United Kingdom	15	18	23.7	1.3	1.7	
8	Spain	10	15	46.2	0.9	1.4	
9	Ireland	15	14	-6.2	1.3	1.3	
10	Brazil	0.5	7	1436.6	0.0	0.7	

Source: U.S Dept. of Agriculture, Economic Research Service.

Author: Mildred Haley, mhaley@ers.usda.gov.

Sheep / Lambs

NASS Sheep and Goat Report Shows a Reversal of Expansion

On January 1, 2017, the U.S. sheep industry registered a 2- percent decline in inventory, reversing a 2-year increasing trend. The NASS *Sheep and Goats* report estimated that the inventory of all sheep and lambs in the United States on January 1, 2017, totaled 5.20 million head, down 2 percent, a 100,000-head decline from 2016. The largest declines were seen in Colorado (-40,000 head), Texas (-25,000 head) and South Dakota (-15,000 head). California (+10,000) head and Wyoming (+5,000 head) were the only large sheep producing States that registered increases. Breeding sheep inventory decreased by 90,000 head. This included a 15,000-head decrease in replacement lambs under 1 year old. Market sheep and lambs declined (-10,000 head) from January 1, 2016.

Tight Lamb and Mutton Supplies Expected To Continue in 2017

Given the large drop in the sheep inventory, lamb and mutton meat supplies for 2017 are expected to be tight. Commercial lamb and mutton production totaled 150 million pounds in 2016, less than 1percent below that of 2015. Given a smaller lamb crop in 2016, (-25,000 head), and fewer market sheep, lamb and mutton production is likely to decline in 2017. Production is forecast at 148 million pounds.

Imports Expected To Weaken in 2017

In 2016, U.S. lamb and mutton imports were up 1 percent from the same period in 2015. Tight domestic supplies and the strength of the dollar likely contributed to this increase. Imports in December totaled around 18.58 million pounds, resulting in lamb and mutton imports for the fourth quarter of 52 million pounds and a total of 216 million pounds for 2016. With abundant supplies of meat throughout the red meat and poultry complex, lamb and mutton meat imports are likely to be tempered in 2017. First-quarter 2017 imports are forecast to be around 52 million pounds, with full-year imports totaling 197 pounds, about 9 percent below 2016.

Lamb and mutton exports in 2016 totaled 5.38 million pounds, up 21 percent from 2015. December 2016 exports came in at 585,852 pounds, with a fourth-quarter total of 1.851 million pounds. First-quarter 2017 exports are forecast at 2 million pounds, equaling the same period in 2016. Tight supplies are likely to limit the amount of meat available for exports.

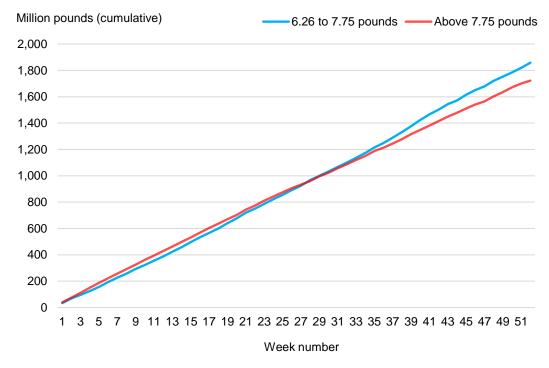
Author: Keithly Jones, kjones@ers.usda.gov

Broiler Industry

December production was 3.3 billion pounds, 4 percent above December 2015 on a per day basis. Preliminary data indicated January production was 2 percent above January 2016, while the placement of chicks for growout was also higher. These recent developments, as well as the recent resumption of growth in average weights, contributed to increased expectations for first-quarter production. The forecast was raised 50 million pounds above the previous first-quarter forecast.

Broiler weights at slaughter through December indicated the third month of year-over-year increases since September and August, when weights were below the previous year. Slaughter numbers for 2016 suggest that birds grown to the largest size category (above 7.75 pounds) have decreased relative to the production of birds sized 6.26–7.75 pounds (see figure below). This appeared to develop in the second half of 2016 and contrasted with the previous 2 years' patterns. The later 2016 trend may have resulted from efforts to resolve quality concerns associated with a breast muscle myopathy ("wooden breast"), a condition that may impact large birds to a greater extent than others. To the extent producers limit production of birds at very heavy weights, increases in average bird weights during 2017 may be affected.

Slaughter of largest broilers slowed in 2016



Source: U.S. Dept. of Agriculture, Agricultural Marketing Service.

Broiler exports performed well in December, reaching 613 million pounds, the highest level since October 2014. December exports to South Africa were record-level, possibly due to supply disruptions related to recent and continuing outbreaks of highly-pathogenic avian influenza (HPAI) in Europe and elsewhere. The Philippines has also placed HPAI-related trade restrictions on suppliers that compete with the United States, but has not had any notable increase in U.S. broiler exports. It remains unclear whether U.S. exports will

experience a net increase as a result of HPAI-based trade restrictions on competing suppliers.

Stocks of broiler meat in cold storage as of December 31 were 783 million pounds. This was 6 percent below a year earlier, but 3 percent above November, largely due to a higher breast meat total. Year-ending stocks for 2017 were increased 30 million pounds.

Weekly prices for whole-broilers (national composite) neared 84 cents per pound for the week ending February 4th. This contributed to a higher expected price for the first quarter, with the forecast updated to 82-84 cents per pound. The price forecast for 2017 was increased to 82-87 cents per pound.

Egg and Egg Product Industries

December data for the average number of table-egg layers in the national flock was the highest since the series began in 1984. This contributed to higher-than-expected production for the fourth quarter, at 1.9 billion dozen. As of January 1st, the table-egg flock was 314 million birds, a record level for that date. Additionally, the flock's eggs per 100 chickens hit 80.6, an all-time record that followed last month's record. This contributed to higher forecast production for table eggs in 2017.

Egg and egg product exports in the fourth quarter slightly outperformed expectations, reaching 78 million dozen. Exports in 2017 are forecast to reach 325 million dozen, a 16-percent increase above 2016. Exports would still be significantly below 2014, due largely to decreased reliance by Mexico and Canada on U.S. egg exports (see next figure below).

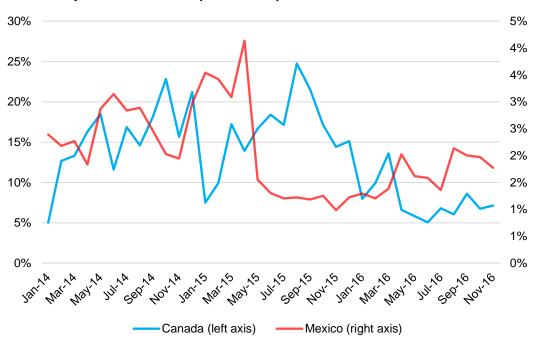
Export demand for U.S. eggs and egg products is expected to be relatively strong in 2017 due to avian influenza in some important markets. South Korea approved U.S. shell eggs last month, and recently approved U.S. liquid eggs that meet certain specifications, including heat treatment and labeling requirements. The Korea Rural Economics Institute recently forecast 2017 egg prices to be 62 percent higher than 2016 prices in producing areas. The forecast was \$1.54 per 10 extra-large eggs, according to an ERS conversion to dollars using exchange rates for February 10th. The United States had shipped nearly 1.5 million dozen shell eggs to Korea through February 4th. Other countries exporting to Korea include Australia, New Zealand, and Spain.

¹ For more information, see: https://www.fsis.usda.gov/wps/portal/fsis/topics/international-affairs/exporting-products/requirements-for-processed-egg-products/korea-egg-products.

² Korea Rural Economic Institute. 2017 Agricultural Outlook Conference. January 21, 2017.

³ https://fred.stlouisfed.org/series/DEXKOUS.

Canada and Mexico decreased U.S. egg imports as a percentage of their domestic production totals (2014–2016)



Source: U.S. Census Bureau, Statistics Canada, Servicio de Información Agroalimentaria y Pesquera (SIAP).

January egg prices were stronger than expected, finishing the last week of the month at 90 cents per dozen on the New York wholesale market. Prices dipped somewhat in early February. The first-quarter price forecast was increased to 84-86 cents per dozen.

Turkey Industry

Turkey production grew in 2016 after a difficult 2015 that included the Highly Pathogenic Avian Influenza outbreak with the loss of over 7 million turkeys. Total production in 2016 reached 6.0 billion pounds, an increase of 6 percent over 2015 and 4 percent greater than 2014. The 2017 production forecast is unchanged at 6.12 billion pounds, a projected increase of 2 percent. Year-ending stocks reached 279 million pounds to close out 2016, the highest since 2012. As a result, 2017 ending stocks were increased to 300 million pounds.

Prices for whole frozen turkey hens continued lower in January, averaging just under one dollar per pound. 2017 prices are now forecast to average 104-110 cents per pound.

2017 turkey hen prices begin the year below 2016 levels

Wholesale frozen turkey hen prices in recent years

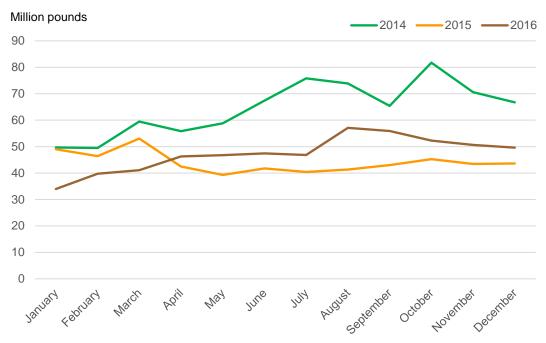


Source: USDA, Economic Research Service Meat and Livestock Domestic Data.

Exports in 2016 reached a total of 568 million pounds, a 7-percent increase compared with 2015 but still 27 percent lower than 2014. The lingering effects of the 2015 HPAI-induced trade restrictions, along with a strong U.S. currency relative to competitors, resulted in a slow start for 2016 exports, but trade increased as the year went along. Second-half 2016 exports were 22 percent greater than the first half of the year, indicating some recovery in the market. The forecast for 2017 exports remains unchanged at 630 million pounds, an increase of 11 percent over 2016.

2016 exports show signs of recovery, but still lag 2014 levels

Monthly turkey exports



Source: USDA, Economic Research Service Meat and Livestock International Trade Data.

Authors: Sean Ramos, sean.ramos@ers.usda.gov; Alex Melton, awmelton@ers.usda.gov

Contact	Informatio
Mildrod M	Holoy (coore

Contact Information		
Mildred M. Haley (coordinator)	(202) 694-5176	mhaley@ers.usda.gov
Keithly Jones (coordinator)	(202) 694-5172	kjones@ers.usda.gov
Keithly Jones (Cattle/beef)	(202) 694-5172	kjones@ers.usda.gov
Lekhnath Chalise (Cattle/beef)	(202) 694-5371	lekhnath.chalise@ers.usda.gov
Russell Knight (Cattle/beef)	(202) 694-5566	russell.h.knight@ers.usda.gov
Mildred M. Haley (hogs/pork)	(202) 694-5176	mhaley@ers.usda.gov
Sean Ramos (poultry, poultry trade,	(202) 694-5443	sean.ramos@ers.usda.gov
eggs)		
Alex Melton (Turkey)	(202) 694-5409	awmelton@ers.usda.gov
Jerry Cessna (dairy)	(202) 694-5171	jgcessna@ers.usda.gov
Jonathan Law (dairy)	(202) 694-5544	jonathan.law@ers.usda.gov
Keithly Jones (sheep and lamb)	(202) 694-5172	kjones@ers.usda.gov
Carolyn Liggon (web publishing)	(202) 694-5056	cvliggon@ers.usda.gov

Subscription Information

Subscribe to ERS e-mail notification service at

https://www.ers.usda.gov/subscribe-to-ers-e-newletters/ to receive timely notification of newsletter availability.

Data Products

Meat Price Spreads, https://www.ers.usda.gov/data-products/meat-price-spreads/, provides monthly average values at the farm, wholesale, and retail stages of the marketing chain for selected animal products.

Livestock and Meat Trade Data, http://www.ers.usda.gov/data-products/livestock-and-meat-international-trade-data/, contains monthly and annual data for imports and exports of live cattle and hogs, beef and veal, lamb and mutton, pork, broilers, turkey, and shell eggs.

Livestock & Meat Domestic Data, http://www.ers.usda.gov/data-products/livestock-meat-domestic-data/, contains domestic supply, disappearance, and price data.

Dairy Data, https://www.ers.usda.gov/data-products/dairy-data/, includes data from multiple sources concerning supply, demand, and prices for the dairy industry.

Related Websites

Livestock, Dairy, and Poultry Outlook.

http://www.ers.usda.gov/publications/?page=1&topicId=0&authorId=0&seriesCode=LDPM&sort=CopyrightDate&sortDir=desc

Animal Production and Marketing Issues,

https://www.ers.usda.gov/topics/animal-products/animal-production-marketing-issues/

Cattle, https://www.ers.usda.gov/topics/animal-products/cattle-beef/

Dairy, https://www.ers.usda.gov/topics/animal-products/dairy/

Hogs, https://www.ers.usda.gov/topics/animal-products/hogs-pork/

Poultry and Eggs, https://www.ers.usda.gov/topics/animal-products/poultry-eggs/ WASDE.

http://usda.mannlib.cornell.edu/MannUsda/viewDocumentInfo.do?documentID=1194

The U.S. Department of Agriculture (USDA) prohibits discrimination in all its programs and activities on the basis of race, color, national origin, age, disability, and, where applicable, sex, marital status, familial status, parental status, religion, sexual orientation, genetic information, political beliefs, reprisal, or because all or a part of an individual's income is derived from any public assistance program. (Not all prohibited bases apply to all programs.) Persons with disabilities who require alternative means for communication of program information (Braille, large print, audiotape, etc.) should contact USDA's TARGET Center at (202) 720-2600 (voice and TDD). To file a complaint of discrimination write to USDA, Director, Office of Civil Rights, 1400 Independence Avenue, S.W., Washington, D.C. 20250-9410 or call (800) 795-3272 (voice) or (202) 720-6382 (TDD). USDA is an equal opportunity provider and employer.

E mail Notification

Readers of ERS outlook reports have two ways they can receive an e-mail notice about release of reports and associated data.

- Receive timely notification (soon after the report is posted on the web) via USDA's Economics, Statistics and Market Information System (which is housed at Cornell University's Mann Library). Go to http://usda.mannlib.cornell.edu/MannUsda/aboutEmailService.do and follow the instructions to receive e-mail notices about ERS, Agricultural Marketing Service, National Agricultural Statistics Service, and World Agricultural Outlook Board products.
- Receive weekly notification (on Friday afternoon) via the ERS website. Go to http://www.ers.usda.gov/subscribe-to-ers-e-newletters/ and follow the instructions to receive notices about ERS outlook reports, Amber Waves magazine, and other reports and data products on specific topics. ERS also offers RSS (really simple syndication) feeds for all ERS products. Go to http://www.ers.usda.gov/rss/ to get started.

U.S. red meat and poultry forecasts

o.s. rea meat and pountry forecasts	2013					2014					2015					2016					2017				
	I	II	Ш	IV	Annual	I	П	III	IV	Annual	I	II	Ш	IV	Annual	I	II	III	IV	Annual	I	II	III	IV	Annual
Production, million lb																									
Beef	6,175	6,513	6,609	6,423	25,720	5,866	6,184	6,179	6,021	24,250	5,665	5,856	6,068	6,109	23,698	5,935	6,187	6,468	6,623	25,212	5,980	6,645	6,700	6,675	26,000
Pork	5,775	5,516	5,622	6,274	23,187	5,784	5,504	5,424	6,131	22,843	6,162	5,925	5,958	6,457	24,501	6,230	5,962	6,099	6,647	24,939	6,420	6,365	6,415	6,970	26,170
Lamb and mutton	38	41	40	38	156	37	43	38	38	156	38	39	37	37	150	38	39	36	37	150	36	38	36	38	148
Broilers	9,144	9,466	9,683	9,537	37,830	9,299	9,618	9,835	9,814	38,565	9,718	10,021	10,372	9,937	40,048	10,039	10,253	10,334	10,060	40,686	10,225	10,450	10,500	10,350	41,525
Turkeys	1,459	1,486	1,440	1,420	5,806	1,332	1,428	1,478	1,517	5,756	1,429	1,389	1,352	1,458	5,627	1,435	1,520	1,515	1,511	5,981	1,445	1,525	1,550	1,600	6,120
Total red meat & poultry	22,743	23,183	23,563	23,844	93,333	22,469	22,934	23,111	23,671	92,185	23,157	23,382	23,940	24,150	94,630	23,831	24,117	24,611	25,030	97,589	24,250	25,181	25,362	25,793	100,586
Table eggs, mil. doz.	1,733	1,746	1,775	1,829	7,083	1,794	1,823	1,852	1,894	7,364	1,809	1,711	1,646	1,700	6,866	1,761	1,796	1,830	1,904	7,291	1,855	1,835	1,840	1,890	7,420
Per capita disappearance, retail lb 1/																									
Beef	13.7	14.5	14.3	13.9	56.3	13.1	14.0	13.7	13.4	54.1	13.1	13.6	13.9	13.3	53.9	13.6	13.9	14.0	14.0	55.4	13.2	14.6	14.4	14.1	56.3
Pork	11.5	11.3	11.4	12.7	46.8	11.2	10.8	11.0	12.8	45.8	12.2	11.8	12.1	13.5	49.7	12.6	11.8	12.1	13.5	50.0	12.6	12.4	12.6	13.9	51.6
Lamb and mutton	0.3	0.2	0.2	0.2	0.9	0.2	0.2	0.2	0.3	0.9	0.2	0.3	0.2	0.3	1.0	0.3	3.0	0.2	0.3	1.0	0.2	0.2	0.2	0.2	0.9
Broilers	20.0	20.3	21.0	20.5	81.8	20.3	20.8	21.2	21.1	83.3	21.4	22.1	23.3	22.1	88.9	22.5	22.7	22.7	21.7	89.5	22.6	22.9	22.7	22.3	90.4
Turkeys	3.7	3.6	4.0	4.8	16.0	3.4	3.5	3.9	5.0	15.8	3.5	3.6	3.9	4.9	16.0	3.6	3.9	4.2	4.9	16.7	3.7	3.8	4.3	5.1	16.9
Total red meat & poultry	49.5	50.2	51.3	52.4	203.5	48.5	49.7	50.3	52.9	201.6	50.8	51.8	53.7	54.5	210.8	52.9	52.9	53.5	54.7	214.1	52.6	54.3			
Eggs, number	64.2	63.3	64.5	66.0	258.0	65.5	66.1	67.1	68.4	267.1	65.2	62.2	61.1	64.5	252.9	66.1	66.0	66.8	69.5	268.4	66.7	66.1	66.5	67.7	267.0
Market prices																									
Choice steers, 5-area Direct, \$/cwt	125.52	124.95	122.30	130.77	125.89	146.34	147.82	158.49	165.60	154.56	162.43	158.11	144.22	127.71	148.12	134.81	127.68	113.26	107.69	120.86	115-119	110-116	106-114	104-112	109-116
Feeder steers, Ok City, \$/cwt	141.36	133.12	152.08	161.69	147.06	168.49	188.64	220.90	234.25	203.07	210.31	219.65	208.11	173.59	202.92	155.83	146.49	140.66	128.30	142.82	128-132	128-134	134-142	138-146	132-139
Cutter Cows, National L.E., \$/cwt	77.87	77.46	78.36	76.55	77.56	89.12	98.57	111.27	109.21	102.04	107.61	109.50	103.34	77.80	99.56	73.50	75.87	73.16	57.75	70.07	59-63	60-66	59-67	60-68	59-66
Choice slaughter lambs, San Angelo, \$/cwt	107.53	91.72	94.26	150.97	111.12	166.69	148.99	156.02	162.69	158.60	147.17	140.09	146.23	142.52	144.00	133.33	136.15	137.52	131.88	134.72	133-137	127-133	128-136	128-136	129-136
Nat'l base cost, 51-52 % lean, live equivalent, \$/cwt	59.03	65.46	70.59	61.11	64.05	68.69	85.40	83.30	66.74	76.03	48.47	53.20	54.59	44.66	50.23	44.63	53.71	49.26	37.02	46.16	48-50	42-44	43-47	36-38	42-45
Broilers, 12 City, cents/lb	103.50	108.60	93.90	92.80	99.70	98.40	113.70	104.60	102.80		97.00	104.20	83.70	77.20	90.50	84.60	93.00	81.7	78.00	84.30	82-84	83-89	83-89	81-87	82-87
Turkeys, Eastern, cents/lb Eggs, New York, cents/doz.	96.00 126.90	97.70 109.90	99.90 119.00	105.40 143.00	99.80 124.70	100.70 142.70	105.60 134.60	110.20 129.30	113.90 162.70		99.60 146.90	108.50 170.30	126.40 235.70	130.10 174.10	116.20 181.80	114.70 121.50	116.50 67.90	120.7 71.60	116.60 81.70	117.10 85.70	100-104 84-86	101-107 87-93	104-112 93-101	109-119 106-114	104-110 93-98
U.S. trade, million lb																									
Beef & veal exports	557	636	716	680	2,588	583	667	679	643	2,572	523	607	542	594	2,265	534	621	659	736	2,550	625	680	710	700	2,715
Beef & veal imports	590	629	515	516	2,250	597	767	765	818		878	990	890	613	3,371	793	832	751	640						
Lamb and mutton imports	49	44	36	44	173	46	49	45	55		53	56	46	59	214	68	55	41	52						
Pork exports	1,216	1,225	1,205	1,341	4,986	1,399	1,342	1,146	1,205		1,223	1,338	1,173	1,274	5,009	1,223	1,320	1,236	1,454						
Pork imports	208	210	229	233	880	213	241	257	301	1,011	279	266	270	300	1,116	293	257	266	276		280	•			•
Broiler exports	1,752	1,865	1,855	1,874	7,345	1,827	1,834	1,858	1,779	7,298	1,624	1,713	1,487	1,496	6,321	1,573	1,607	1,736	1,731	6,647	1,660	1,730			*
Turkey exports	1,732	179	192	195	7,343 741	159	182	215	219	7,278	148	123	125	132	529	115	140	160	153	•	,	-	•	•	630
Live swine imports (thousand head)	1,326	1,285	1,223	1,113	4,948	1,195	1,216	1,264	1,272		1,309	1,541	1,371	1,519	5,740	1,475	1,405	1,375	1,414						
Note: Forecasts are in hold	1,320	1,403	1,443	1,113	7,740	1,175	1,410	1,404	1,414	7,241	1,309	1,541	1,3/1	1,317	3,740	1,77	1,703	1,373	1,714	3,009	1,770	1,575	1,700	1,770	3,013

Note: Forecasts are in bold.

1/ Per capita meat and egg disappearance data are calculated using the Resident Population Plus Armed Forces Overseas series from the Census Bureau of the Department of Commerce.

Source: World Agricultural Supply and Demand Estimates and Supporting Materials.

For further information, contact: Mildred M. Haley, mhaley@ers.usda.gov

Updated 2/13/2016

Dairy Forecasts

	2015			2016		2017								
	Annual	I	II	III	IV	Annual	ı	II	III	IV	Annual			
Milk cows (thousands) 1/	9,317	9,319	9,327	9,336	9,347	9,333	9,350	9,365	9,380	9,390	9,370			
Milk per cow (pounds)	22,394	5,692	5,828	5,632	5,620	22,770	5,760	5,945	5,750	5,740	23,195			
Milk production (billion pounds)	208.6	53.0	54.4	52.6	52.5	212.5	53.9	55.7	53.9	53.9	217.4			
Farm use	1.0	0.2	0.2	0.2	0.2	1.0	0.2	0.2	0.2	0.2	1.0			
Milk marketings	207.7	52.8	54.1	52.3	52.3	211.5	53.6	55.4	53.7	53.7	216.4			
Milk-fat (billion pounds milk equiv.)														
Milk marketings	207.7	52.8	54.1	52.3	52.3	211.5	53.6	55.4	53.7	53.7	216.4			
Beginning commercial stocks	11.2	13.3	15.6	18.0	16.6	13.3	14.3	15.5	17.8	16.0	14.3			
Imports	5.7	2.1	1.6	1.7	1.6	7.0	1.6	1.6	1.6	1.8	6.6			
Total supply	224.6	68.3	71.3	72.0	70.5	231.9	69.5	72.5	73.1	71.4	237.3			
Commercial exports	8.8	2.2	2.2	2.2	2.5	9.2	2.0	2.1	2.1	2.0	8.3			
Ending commercial stocks	13.3	15.6	18.0	16.6	14.3	14.3	15.5	17.8	16.0	14.3	14.3			
Net removals	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
Domestic commercial use	202.5	50.4	51.1	53.3	53.7	208.5	52.0	52.6	55.0	55.1	214.7			
Skim solids (billion pounds milk equiv.)														
Milk marketings	207.7	52.8	54.1	52.3	52.3	211.5	53.6	55.4	53.7	53.7	216.4			
Beginning commercial stocks	13.1	13.9	14.7	15.3	14.9	13.9	14.8	14.0	14.4	14.2	14.8			
Imports	6.0	1.6	1.6	1.6	1.7	6.5	1.5	1.5	1.5	1.6	6.2			
Total supply	226.7	68.3	70.4	69.2	68.9	231.9	69.9	71.0	69.6	69.4	237.3			
Commercial exports	37.3	8.5	9.7	10.2	10.4	38.9	9.8	10.1	10.3	10.0	40.1			
Ending commercial stocks	13.9	14.7	15.3	14.9	14.8	14.8	14.0	14.4	14.2	14.0	14.0			
Net removals	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
Domestic commercial use	175.5	45.2	45.4	44.0	43.7	178.3	46.2	46.5	45.2	45.4	183.2			
Milk prices (dollars/cwt) 2/														
All milk	17.12	15.70	14.77	16.83	17.67	16.24	18.30	17.35	17.40	17.85	17.70			
, u	2			. 0.00			-18.60	-17.95	-18.30	-18.85	-18.40			
Class III	15.80	13.75	13.20	16.18	16.33	14.87	16.65	16.45	16.40	16.35	16.45			
							-16.95	-17.05	-17.30	-17.35	-17.15			
Class IV	14.35	13.18	13.18	14.58	14.13	13.77	15.65	14.95	15.00	14.75	15.10			
							-16.05	-15.65	-16.00	-15.85	-15.90			
Product prices (dollars/pound) 2/														
Cheddar cheese	1.645	1.517	1.454	1.735	1.714	1.605	1.685	1.660	1.655	1.650	1.660			
		-					-1.715	-1.720	-1.745	-1.750	-1.730			
Dry whey	0.380	0.243	0.252	0.288	0.366	0.288	0.450	0.455	0.455	0.455	0.455			
bly whey	0.500	0.243	0.232	0.200	0.300	0.200	-0.470	-0.485	-0.485	-0.485	-0.485			
Butter	2.067	2.067	2.080	2.206	1.958	2.078	2.170	2.005	2.020	1.985	2.045			
							-2.230	-2.095	-2.140	-2.115	-2.145			
Nonfat dry milk	0.902	0.766	0.760	0.860	0.931	0.829	0.995	0.995	0.995	0.985	0.990			
Normat dry milk	0.302	0.700	0.700	0.000	0.301	0.023	-1.025	-1.045	-1.065	-1.055	-1.050			
							1.020	1.0-13	1.000	1.000	1.000			

^{1/} Simple averages of monthly prices. May not match reported annual averages.

Sources: U.S. Dept. of Agriculture: National Agricultural Statistics Service, Agricultural Marketing Service, Foreign Agricultural Service, and World Agricultural Outlook Board. For further information, contact Jerry Cessna, 202-694-5171, jgcessna@ers.usda.gov, or contact Jonathan Law, 202-694-5544, jonathan.law@ers.usda.gov. Published in Livestock, Dairy, and Poultry Outlook, http://www.ers.usda.gov/publications/ldpm-livestock,-dairy,-and-poultry-outlook.aspx.

^{2/} Simple averages of monthly prices calculated by the Agricultural Marketing Service for use in class price formulas. Based on weekly U.S. Dept. of Agriculture, *National Dairy Products Sales Report*.