

# Livestock, Dairy, and Poultry Outlook

Mildred M. Haley, coordinator

## Large Broiler Supplies Continue To Pressure Prices

**NOTE:** Due to uncertainties as to the length of bans on trade in ruminants and ruminant products because of the discovery of BSE in the United States and Canada, forecasts for 2006 assume a continuation of policies currently in place among U.S. trading partners. Subsequent forecasts will reflect any announced changes.

**Poultry:** Due to expected increases in the number of broilers slaughtered and the continued strong gains in the average liveweight at slaughter, the production estimate for fourth-quarter 2005 was increased by 100 million pounds to 8.85 billion pounds. Higher domestic production and weaker exports have led to increasing stocks and falling domestic prices for most broiler products. The estimate for fourth-quarter ending stocks was increased to 850 million pounds. Estimates for fourth-quarter exports were reduced by 125 million pounds to 1.35 billion pounds.

**Cattle/Beef:** The January *Cattle* inventory report, to be released January 27, is expected to verify that herd expansion is continuing, with higher total inventory numbers expected for the second year in a row. Winter pasture conditions, including winter wheat, have deteriorated significantly over the last several months, particularly in the Great Plains and continuing in many parts of the Northwest. Many feeder cattle have been moved into feedlots prematurely, some for backgrounding and some placed on finishing rations. The market continues to face unusually tight supplies of Choice cattle for this time of the year, with added pressure from the reopening of the Japanese market, which takes higher marbled beef from both high end and low end cuts.

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Tables will be released on  
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**Hogs/Pork:** The December *Quarterly Hogs and Pigs* reported inventory and farrowing intentions that were in line with earlier expectations. Prices of live equivalent 51-52 percent lean hogs are expected to average between \$44 and \$47 per hundredweight (cwt). U.S. hog packers and feeder pig finishers will likely increase imports of live swine from Canada in 2006, particularly if the recent duties imposed by the Government of Canada on U.S. corn are made permanent. Total pork exports in 2006 are likely to increase about 4 percent, despite the reopening of Japan, South Korea, and other markets to U.S. beef.

**Special Section:** With the recent announcement of foot and mouth disease outbreaks in beef- and pork-producing States of Brazil, most major foreign buyers have banned Brazilian red meat products. Beef is “the meat of choice” in Brazil, and pork consumption is relatively low. This section examines Brazilian pork demand and provides insight into low per capita consumption.

### ***Higher Broiler Production Expected in 2006***

Due to larger numbers of chicks being placed for growout and increases in average broiler liveweight at slaughter, the production estimate for fourth-quarter 2005 was increased by 100 million pounds to 8.85 billion pounds. As a result, the annual estimate for 2005 was raised to 35.3 billion pounds, a 3.6-percent increase from the previous year. Earlier in fourth-quarter 2005, when the broilers to be slaughtered in December were being placed, the number of chicks being placed for growout was averaging close to 2 percent higher than a year earlier. In addition to a greater number being available for slaughter, the average broiler liveweight at slaughter has been over 3-percent higher than the previous year in the last 2 months and is expected to again be at least 2 percent higher in December.

Broiler meat production in November was estimated at 2.933 billion pounds, up 4.9 percent from the previous year. Over the first 11 months of 2005 broiler meat production has totaled 32.4 billion pounds, 3.8 percent more than during the same period in 2004. The increase in meat production in November was due to both an increase in the number of birds slaughtered (718 million), up 1.3 percent from the previous year, and an increase in the average liveweight at slaughter (5.49 pounds), up 3.2 percent.

Higher domestic production and falling demand in some export markets have caused stocks to increase and domestic prices for most broiler products to decrease. Overall, broiler products in cold storage at the end of November were estimated at 869 million pounds, up 13.5 percent from the previous year. While stocks have increased for several broiler products, much of the increase is due to higher stocks of legs (up 120 percent), leg quarters (up 39 percent), and wings (up 27 percent). These increases in cold storage holdings resulted in fourth-quarter ending stock estimates increasing to 850 million pounds. Quarterly ending stock estimates for 2006 were also significantly increased.

The 12-City composite price for whole broilers averaged 66.7 cents per pound in fourth-quarter 2005. This is down less than 2 cents from the previous year, but it is a decline of over a nickel (7.5 percent lower) from the previous quarter. Prices have also declined for a number of other broiler products. The December price in the Northeast market for boneless/skinless chicken breasts was \$1.01 per pound, down 21 percent from the previous year. Other broiler products that had similar large price declines were leg quarters, down 11 percent, and wings, down 25 percent. Prices for most broiler products are expected to remain depressed for the near future as a combination of strong production, weakness in demand, and high stock levels are expected to place downward pressure on those prices.

### ***Turkey Prices Higher, Stocks Down***

In December the price for whole hen turkeys in the eastern region averaged 83 cents a pound, about 7 cents higher than the previous year and about 15 cents higher than in December 2003. Prices for fourth-quarter 2005 averaged 84 cents per pound, up 8 percent from a year earlier. Prices for turkey parts have also been higher during the fourth quarter as supplies have tightened. Wholesale prices for whole turkeys and turkey parts are expected to remain above year-earlier levels through most of

2006 as stocks (whole birds and parts) are well below the previous year and the 2006 production forecast calls for only small growth in turkey production.

Turkey production in November was 483 million pounds, down marginally from the previous year. The decline in production was due to a 2-percent drop in the number of birds slaughtered. This was partially offset by higher weights as the overall average live weight at slaughter of 26.8 pounds was up 1.8 percent from November 2004. Over the first 11 months of 2005, turkey production has totaled approximately 5 billion pounds, less than 1-percent above the same period in 2004. Strong prices for most turkey products during the second half of 2005 has led to some gains in the number of poultts being placed for growout, and the estimates for fourth-quarter 2005 production have been increased slightly, to 1.425 billion pounds. The estimates for the first and second quarters of 2006 were increased by 10 million pounds each so that the total for 2006 is now 5.58 billion pounds, just over 1 percent higher than in 2005.

With only marginal increases in production in 2005 and strong demand in both domestic and export markets, stocks of whole turkeys and other turkey products have fallen. At the end of November, stocks of whole turkeys totaled 59 million pounds, down almost 50 percent from the same time in 2004. Stocks of turkey products were also lower, falling to 142 million pounds, a decline of 20 percent from November 2004. The forecast for ending stocks for 2005 were reduced to 200 million pounds, the lowest for at least the last 6 years. The estimates for quarterly ending stocks in 2006 were also reduced.

### *November Broiler Exports Are Down From a Year Ago*

November 2005 broiler exports were 440 million pounds, a decline of 5 percent from a year ago. A number of countries in Central and Eastern Europe and Asia have reduced their purchases of broiler meat. The two likely chief reasons for the fall were high leg-quarter prices and concerns about Avian Influenza (AI). Lower exports have increased broiler stock levels and pulled broiler prices down. During the early weeks of October, broiler leg-quarter prices in the Northeast market were as high as \$0.45 per pound, but by late December, prices had fallen to \$0.22 per pound. The second reason is consumer concerns and reactions to AI, particularly the H5N1 strain in key U.S. export markets. As reports of H5N1 cases expand geographically to parts of Turkey, it is possible that consumers in neighboring countries and nearby regions will exercise a higher level of caution about eating poultry. Because of expected lower broiler meat demand by some importing countries, projections for the first and second quarters of 2006 have been altered to reflect a reduction in U.S. broiler exports.

While Turkey is among the top 10 destinations of U.S. broiler exports, Turkey's neighbor Russia is the largest market for U.S. exports. Although Russia's new tariff-rate quota increased the U.S. allotment from 781.2 metric tons in 2005 to 841.3 metric tons in 2006, it is unknown whether Russia's demand for U.S. poultry meat will match the increase or not.

### *U.S. Turkey Exports Remain Strong*

November turkey exports were 50 million pounds, an increase of 6 percent from the previous year. The primary reason for strong U.S. turkey exports continues to be Mexico's growing economy and its increasing demand for turkey meat. From January to November, Mexico accounted for about 62 percent of U.S. turkey exports. Fourth-quarter 2005 turkey exports are estimated at 160 million pounds, up 19 percent from the previous year.

### ***Cow Herd Expansion To Enter Second Year***

The January *Cattle* inventory report, to be released January 27, is expected to verify that herd expansion is continuing, with higher total inventory numbers expected for the second year in a row. The beef cow inventory is expected to be up, as are replacement heifer inventories for both beef and dairy. Impetus for herd rebuilding remains strong with relatively tight beef supplies, particularly for Choice beef, and the reopening of the Japanese market for higher quality fed beef in December 2005. The Japanese market represented the United States' most important pre-BSE foreign market for beef, which combined with Mexico and Canada, accounted for two-thirds of pre-BSE U.S. beef exports. The South Korean market accounted for another nearly 25 percent of pre-BSE exports. The recent announcement of the reopening of the South Korean market will likely add demand strength to the U.S. beef market. Beef exports are expected to begin by late March for boneless beef from cattle under 30 months of age.

It likely will take several years to again regain pre-BSE levels of U.S. beef exports, as domestic supplies remain very tight. However, as herd expansion continues and more cattle are age-verified, exports will continue to expand. Present age restrictions and strong domestic demand for very tight supplies of Choice and Prime beef will keep prices high, slowing resumption of trade to the pre-BSE levels of 2002 and 2003.

Winter pasture conditions, including winter wheat, have deteriorated significantly over the last several months, particularly in the Great Plains, and many parts of the Northwest remain dry. Many feeder cattle have been moved into feedlots prematurely, some for backgrounding and some placed on finishing rations. Feeder steer prices continue strong and are running about 7 percent higher than a year ago, although they have slipped since November as the drought worsened.

About 40 percent of the cattle being imported from Canada are feeder cattle going directly to feedlots. The newly announced tariff (about US \$1.65 per bushel) on corn imported into Canada from the United States will likely result in additional movement of cattle into the United States from Canada. The degree to which the import duty affects feeder vs. slaughter cattle likely will depend on Canadian programs to refund the duty on cattle exported to the United States.

Unusually tight supplies of Choice cattle for this time of the year continue to present a problem, even more so with the opening of the Japanese and South Korean markets, which take higher marbled beef cuts. During the first half of January, the Choice-over-Select premium remained very wide. As a result, fed cattle prices have remained firm, with prices 7 percent over a year earlier.

### ***Deteriorating Pasture Conditions Push Cattle Into Feedlots***

The cow/calf /feeder sector continues to maintain its favorable profit picture, despite deteriorating pasture conditions and high energy prices. Calf prices at Oklahoma City were lower during the second week of January, likely reflecting the deteriorating pasture situation and to some extent rising protein meal prices. This makes supplemental winter feeding more costly, though still relatively favorable.

Fed cattle breakeven prices for spring are in the mid-\$90s and will need to remain in this range to provide feeder cattle price support. Grain prices remain below year-earlier levels, supporting placements and feeder cattle prices.

Cattle feeders are in the black with fed cattle prices currently in the mid-\$90 range, but prospects for this spring and summer as supplies increase are less favorable. Recent support has come from the recently opened Japanese, South Korean, Hong Kong, and other markets. Prospects for additional markets reopening, and the relative short supply of Choice cattle provide additional support. The quarterly *Cattle on Feed* report to be issued January 20 will likely indicate proportionally fewer heifers on feed, further signaling a continued buildup in the national cow herd. Improved grading prospects and larger numbers of cattle on feed will pressure the market, as will larger supplies of competing meats at relatively lower prices.

### ***Markets Continue To Chase Choice Beef***

During the first week in January, the Choice-over-Select premium was over \$15 per cwt, but has since declined somewhat. As a result, carcass prices are 6 percent over year-ago prices. Beef production and cattle slaughter through mid-January was running about 2 to 3 percent below a year earlier.

Consistent with cowherd inventory building, cow slaughter was down about 6 percent for 2005, compared with 2004. Although fourth-quarter cow slaughter is only down about 3 percent, it is sharply below 2003 levels. Similarly, 2005 heifer slaughter was about 6 percent below 2004 slaughter, and fourth-quarter slaughter was nearly 7 percent lower. These indicators will be born out as the January 1 inventories are published, indicating further inventory building. Calves from these inventory-building efforts will not begin exiting feedlots as fed/slaughter cattle until 2007. Thus, any significant increases in beef production will have to come from heavier slaughter weights, feeder cattle imports from Canada and Mexico, or fed cattle imports from Canada, all of which are dependent on adequate crop and pasture conditions during the remainder of 2006.

Calf slaughter, mostly made up largely of dairy steer calves, is about 17 percent below mid-January 2005 levels. Calf slaughter weights, averaging 40 to 50 pounds (about 14 percent) over January 2005 levels, are helping to maintain veal production at levels only about 3 percent below this time in January 2005. The number of bob veal calves slaughtered (those calves usually slaughtered at less than 150 pounds) is about 33 percent lower than year-earlier levels, while formula-fed calf slaughter (those calves usually fed to 300 to 450 pounds) is about steady with last year. These factors suggest more veal calves are being shifted to pasture or other backgrounding situations as feeder cattle eventually headed to feedlots, as is often the case when feeder calf prices are relatively high.

With the beef industry moving past the holiday season, retail markets are settling into more typical patterns. Retail prices for Choice beef continue to strengthen from late summer lows set in September at \$3.92 a pound. Prices averaged \$4.06 in December with fourth-quarter 2005 retail prices averaging \$4.02, still nearly 1 percent below a year earlier. There are indications, primarily in the form of boxed beef prices averaging above last year, and narrowing wholesale-to-retail price

spreads, that retail prices could be higher yet, particularly if higher grading cattle supplies continue tight. Large supplies of competing meats at relatively lower prices, particularly broilers, are also expected to pressure beef prices along with larger beef and total meat supplies in 2006.



### *The December Hogs and Pigs Report: No Fireworks*

The *Quarterly Hogs and Pigs* report, issued by USDA on December 28, 2005, (<http://usda.mannlib.cornell.edu/reports/nassr/livestock/php-bb/>) showed unexceptional first-half 2006 farrowing intentions and modest increases in December 1 breeding herd numbers. These two data series in particular have important implications for pork production this year. Producers reported that they intend to farrow 1 percent more sows in the first 6 months of 2006 than they did during the same period in 2005. With trend increases in pigs per litter and slightly higher slaughter weights, the U.S. pork sector is expected to produce more than 10 billion pounds of pork in the first half of 2006, and almost 11 billion pounds in the second half, for a record high total in 2006 of over 21 billion pounds, or 2.4 percent above 2005. Live equivalent 51-52 percent hog prices are expected to average between \$44 and \$47 in 2006, about 9 percent lower than last year, but above break-even prices for most U.S. producers.

Producers reported December 1 breeding herd inventories that were 1 percent greater than a year earlier, but unchanged compared with December 1, 2003. Modest increases in breeding herd numbers show continued restraint by producers toward expansion in the 23rd month of greater than breakeven prices, according to USDA's Estimated Returns (<http://www.ers.usda.gov/publications/ldp/>). It is worth noting again that recent production increases have been achieved largely via higher litter rates—that result from investment in human, as well as productive capital—and heavier average slaughter weights, rather than by additions to breeding herd inventories alone.

### *U.S. Imports of Canadian Swine Are Expected To Increase This Year*

Finishing imported feeder pigs is another way to increase U.S. pork production without building and populating new farrowing facilities. Over the past few years, the primary source of U.S. feeder pig imports has been Canada (see table). Last year, 2005 was the first year since the early 1990s when swine imports from Canada did not increase year-over-year. In 2005, U.S. feeder pig finishers and packers imported just over 8 million head of swine, according to USDA's Animal and Plant Health Inspection Service, a quantity 5 percent lower than 2004. Several factors likely contributed to lower swine imports last year, including temporary dumping penalties in place through March, disease problems in Québec, and slightly lower pig crops in major exporting Provinces.

This year, U.S. feeder pig finishers are expected to import 8.7 million animals, more than two-thirds of which are expected to be feeder pigs. Year-over-year increases are expected to occur in the middle quarters of 2006, and are expected to be largely attributable to dumping penalties and countervailing duties recently imposed by Canada on imports of U.S. corn. On December 15th the Canada Border Services Agency imposed provisional duties that amount to roughly \$1.65 (\$0.58 attributable to anti-dumping and \$1.07 to countervailing duties) per bushel on U.S. corn. The duties will reportedly add between \$16 and \$17 to the per-head cost of feeding hogs in Canada. Everything else equal, the effects of the duties will be to reduce incentives to finish hogs in Eastern Canada, given that Canadian prices of hogs and pigs are effectively tied to U.S. hog prices.

## U.S. swine imports, 1990-2005

	Total swine imports	Feeder pig imports	Feeder pig share of total
	Head	Head	%
1990	890,252	204,184	22.9
1991	1,057,685	226,303	21.4
1992	674,469	226,896	33.6
1993	840,050	280,813	33.4
1994	921,274	401,981	43.6
1995	1,750,138	651,096	37.2
1996	2,779,175	766,974	27.6
1997	3,179,578	987,359	31.1
1998	4,122,914	1,466,202	35.6
1999	4,136,943	2,083,454	50.4
2000	4,357,564	2,336,048	53.6
2001	5,337,688	3,163,962	59.3
2002	5,740,675	3,757,882	65.5
2003	7,438,254	4,971,044	66.8
2004	8,505,518	5,623,494	66.1
2005*	6,731,611	4,453,339	66.2

\* January-November  
Source: ERS,SDA.

### ***Canadian Duties on U.S. Corn Will Likely Impact North American Pork Sector***

A recent USDA/Foreign Agricultural Service (FAS) report titled *Provisional Dumping and Countervailing Duties on U.S. Corn Imports* (<http://www.fas.usda.gov/gainfiles/200512/146131782.pdf>) discusses the regional Canadian swine production impacts of the corn duties, along with long term implications for swine production in Canada, if the duties become permanent.

The USDA live swine import forecast of 8.7 million head in 2006—6 percent more than in 2005—assumes that the full effects of the duties are not felt until well into the second quarter for a number of reasons. First, Canadian investigative bodies will continue their examination of the case well into April. The Canadian Border Services Agency is expected to make its final determination by March 15 with respect to whether or not U.S. corn is illegally subsidized and/or dumped into Canadian markets. By April 18th the Canadian International Trade Tribunal will determine whether Canadian corn growers were/are injured by imported U.S. corn. It is doubtful that feeder pig producers will make significant changes in their business plans until the Canadian Government concludes its investigations. Second, it is also likely that any potential duty-induced shifts in flows of Canadian feeder pigs from Canada to the United States will be forestalled by adequate feed stocks in Eastern Canada. Ontario produced a large corn crop last year—8 percent

higher than in 2004—and there is abundant anecdotal evidence that on-farm feed stocks are adequate, at least through the first quarter. Lastly, it is likely that existing production and marketing contract arrangements hinder any abrupt shifts in flows of Canadian hogs and feeder pigs. Three factors, then—ongoing Canadian Government investigations, adequate feed supplies in Eastern Canada, and existing marketing/production contract arrangements—will likely shift duty-induced changes in Canadian swine exports to the later quarters of 2006.

### ***Reopening of Japan to U.S. Beef and Russian Ban on Brazilian Pork Affects 2006 Pork Exports***

When all 2005 trade data are finalized, it is likely that the United States will rank as the second-largest pork exporter in the world, after the exporters of the European Union-25 (i.e., Denmark accounts for 70 percent of European pork exports to countries outside Europe). Moreover, in each month of 2005 for which data are available, U.S. pork exports routinely exceeded same-month 2004 totals by double-digit percentages. So no two ways about it: in 2005 U.S. exporters shipped lots of pork, with Japan accounting for about 40 percent of exports, and Russia accounting for almost 4 percent. Thus, the reopening of Japan to North American beef products and Russia's ban on red meat imports from major pork-producing Brazilian States are very important events. In 2006, U.S. exporters are expected to ship almost 2.8 billion pounds of pork to foreign markets, or 3.6 percent more than in 2005. This forecast takes into account the recent events in both Japan and Russia.

Since Japan closed its borders to U.S. beef in December 2003, its imports of pork increased significantly as some Japanese consumers substituted pork for beef in their diets. Now that Japan has reopened to U.S. beef, demand for imported pork is expected to slowly resume past trading dynamics. With increased quantities of beef available to them in 2006, Japanese consumers are likely to demand a bit less pork. By extension, Japanese demand for U.S. pork is expected to begin a gradual decline from levels achieved in 2005.

On December 10, 2004, the Government of Russia issued a decree that sets 2006-2009 import volumes “eligible for the lower tariff in Russia's tariff-rate quota regime” for beef, pork, and poultry. (<http://www.fas.usda.gov/gainfiles/200512/146131752.pdf>). The decree allows Russian buyers to import 476,100 metric tons (mt) of pork in 2006, at tariff rates of up to 15 percent of customs value, but no less than 0.25 euro per kilogram (kg). Imports of greater than 476,100 mt would bear a tariff rate of up to 60 percent of the customs value, but no less than 1 euro per kg. Imports are allocated between the European Union-25(240,500 mt, or, 50.5 percent of the total), the United States (54,800 mt, or, 11.5 percent of the total), Paraguay (1,000 mt), and “Other countries” (179,800 mt, or 37.7 percent of the total).

Russia made a similar allocation of its pork imports in 2005, and Brazil accounted for the lion's share of the quantity earmarked to “Other countries”. The recent outbreak of foot and mouth disease (FMD) in major red meat producing States of Brazil, caused Russia to announce “a 1-year ban on all beef and pork products from Mato Grosso do Sul and Parana and a 6-month ban on six other nearby states.” (<http://www.fas.usda.gov/gainfiles/200512/146176465.pdf>)

The 2006 forecast for U.S. pork exports assumes that U.S. exporters will fill the U.S. allocation. With the bans on Brazilian pork, it is likely that Canada will export larger quantities of pork products to Russia this year, under the “Other countries” allocation. As has been seen in the past, increases in Canadian exports tend to create shortages of selected cuts/products on the domestic Canadian pork market. Thus, U.S. exports to Canada are expected to increase this year, in order to fill holes created by increased Canadian exports to Russia.

### *An Update on FMD in Brazil and a Look at the Pork Industry and Domestic Demand*

Animal disease outbreaks and resulting trade restrictions have affected both the composition of Brazilian meats (beef, pork, and poultry) traded as well as the degree of the meat processing. As a result, the Brazilian meat industry is searching for new consumers both in external and domestic markets. Marketing campaigns initiated in 2002 and jointly financed by the meat packers, exporters, and the Brazilian Government seek to expand not only the overseas sales of meats, but also to increase domestic consumption of fresh beef and pork.

#### *Trade Impacts of the 2005 FMD Outbreak: An Update*

The outbreak of Foot-and-Mouth Disease (FMD) in the state of Mato Grosso do Sul (MGS) (confirmed in October 2005) and in the state of Paraná (confirmed in December 2005) led to reduced exports of Brazil's beef, and to a lesser extent pork, during the last quarter of 2005 due to the bans imposed by major importers.

Exports of Brazilian fresh/frozen red meat in December 2005 totaled 105,000 tons, 28 percent below the level reported in September. Exports of fresh/frozen meat during the last quarter of 2005 totaled 347,000 tons, 8 percent below quantities exported during the same period in 2004. Despite the volume loss in the last quarter, total fresh/frozen beef exports in 2005 reached a record 1.1 million tons (17 percent over the 2004 level), and fresh/frozen pork exports totaled 579,000 tons in 2005 (23 percent above the 2004 figure). Trade statistics also reflect changes in the composition of trade, with a slight increase of 3 percent in exports of processed meats during the last quarter in 2005 (table 1). The value of total meat exports in 2005 of US\$8 billion is a 30-percent increase over a year earlier (Secretaria de Comércio Exterior, SECEX data).

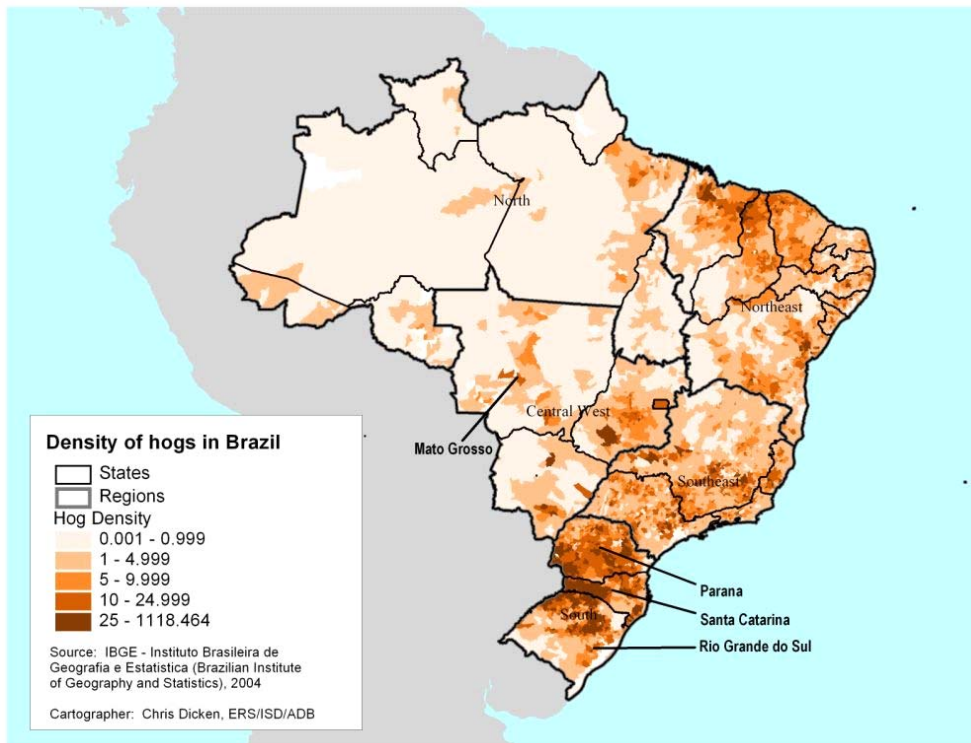
Early in 2006, Brazil successfully convinced some major importing countries to regionalize bans imposed following the new FMD outbreak and re-open their markets to products from states not being affected by FMD. Major meat importers include Russia, which has halted all beef, pork, poultry, and dairy product imports from MGS and Paraná, although Russia re-opened imports from six other states that were initially banned. Ukraine, another important market, has also regionalized its ban to MGS and Paraná. The European Union-25 (EU-25), the largest importer of Brazilian beef, regionalized the ban on beef imports from MGS, Paraná, and also included the neighboring state of São Paulo.

**Table 1. Brazil red meat exports in 2005**

	January-July	August	September	October	November	December*
	thousand tons					
Fresh/Frozen Beef	657.4	125.5	93.8	71.9	70.9	66.0
Processed Beef	158.0	25.6	26.3	25.6	22.7	24.0
Fresh/Frozen Pork	329.6	59.1	52.2	61.0	38.1	39.4

\* Preliminary trade data

Source: Ministério do Desenvolvimento, Indústria e Comércio Exterior, SECEX.



### *The Brazilian Pork Industry*

Pork production in Brazil has been expanding, driven by strong export market demand as substitution of pork for other sources of animal protein followed declines in global beef and poultry trade due to disease-related bans (BSE and FMD affecting beef and avian influenza (AI) affecting poultry). As a result, the Brazilian pork industry accounts now for 15 percent of the value of meat production in the country. In 2005, pork production in Brazil exceeded 2.7 million tons, and is forecast to increase by 4 percent in 2006 (FAS/USDA). Pork exports generated over US\$1.1 billion or 14 percent of total meat export revenues in 2005 (Secretaria de Comércio Exterior, SECEX data).

Pork production occurs throughout the country (fig. 1). The **Northern** and **Northeastern** regions have, respectively, 7 percent and 20 percent of the swine herd, with smaller operations sparsely spread over 16 states in those regions. Over 17 percent of the swine herd remains in the **Southeastern** region, a result of the modernization of production technology in the state of Mato Grosso do Sul. Over the past 7 years, following the increase in corn and soy production and aided by state and local tax incentives, large-scale commercial production of swine in the **Center-West** region now accounts for 12 percent of the herd. However, the bulk of pork production is in the **Southern** region of the country, where the industry initially located three decades ago. Over 44 percent of the swine herd (14.6 million head of swine) is located in that region, which includes the important producing states of Santa Catarina, Paraná, and Rio Grande do Sul (RGS).

Santa Catarina is Brazil's largest pork producing and exporting state, with 5.7 million head of swine (equivalent to 17 percent of Brazil's swine herd), accounting for 46 percent of Brazilian pork exports (232,000 tons in 2004). Paraná is the

second-largest pork producing state, with 4.6 million head of swine (over 13 percent of the country's swine herd) and is the third-largest pork-exporting state in 2004, supplying 65,000 tons or 13 percent of Brazil's pork exports. Rio Grande do Sul (RGS) is Brazil's third-largest swine producing state with 4.6 million head of swine, or 13 percent of Brazil's swine herd in 2004, but is the second-largest pork exporting state, accounting for 25 percent of pork exports or 127,000 tons in 2004 (ABIEPCS – Brazilian Pork Packaging and Export Association).

Both domestic and foreign investments have led to a transformation of the pork industry over the past decade, resulting in a more concentrated and vertically integrated industry (although to a lesser extent than the integration of the Brazilian poultry industry). The pork packing sector includes 200 plants slaughtering 29.6 million head of swine in 2004 (FAS PS&D online). The 2004 slaughter represents an increase of over 21 percent since 2000, indicative of the significant growth of the pork sector in the past 5 years.

Pork utilization in Brazil is estimated at 70 percent for industrial/processing uses and 30 percent for fresh consumption. The most significant obstacle faced by the industry as it attempts to sell more pork domestically remains sanitary issues. Less than 60 percent of total slaughter is currently inspected and certified, with inspected meat going mostly to the export market (ABIEPCS).

Brazil is dependent on Russia for most of its export sales. In 2005 (January-November) Russia accounted for 70 percent of the value of Brazilian pork exports (US\$739 million). Other important markets during this period include Hong Kong (US\$63 million), Ukraine (US\$33 million), and Argentina (US\$30 million).

### ***Income Distribution and Purchasing Power***

Disposable income determines food purchases, and increases in purchases of higher-value products, such as meats, will likely depend on increases in the purchasing power of Brazilian consumers. With a population of 170 million, Brazil is categorized by the World Bank as a lower-middle income country with per capita gross income of US\$3,300 in 2004. However, poverty and hunger are still major problems: 46 million Brazilians are estimated to live on less than US\$1 a day, located mostly in urban non-metropolitan areas (Instituto Cidadania).

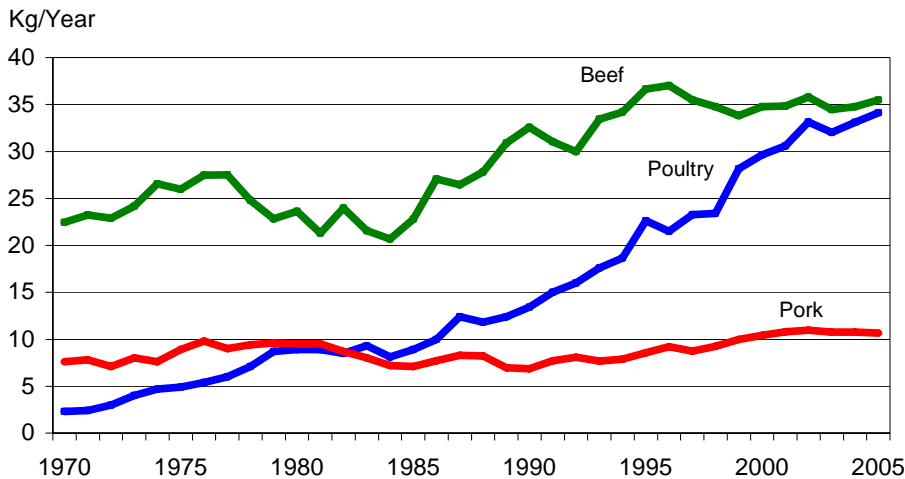
Brazil's average per capita calorie consumption has grown steadily over the last three decades at an annual rate of 0.7 percent; it reached 2,985 calories per day in 2004. Grains account for the largest share of daily caloric intake—about one-third—and wheat and rice are the most popular cereals. Meat consumption accounts for 11 percent of the diet and sugar consumption 19 percent.

### ***Pork Consumption and Domestic Demand***

Seventy-three percent of Brazil's pork production—2 million tons—is consumed domestically in Brazil. That makes Brazil the sixth largest pork consumer market in the world after China (48.6 million tons), the EU-25 (19.3 million tons), the United States (8.6 million tons), Japan (2.5 million tons), and Russia (2.4 million tons).



**Figure 2. Brazil's per capita domestic meat consumption**



Source: FAS, USDA, PS&D Official Statistics.

Annual per capita consumption of pork meat in Brazil is estimated at about 24 pounds, a small figure compared with the consumption of pork in other countries. In the United States the per capita consumption of pork is 71 pounds, and in Europe it reaches 143 pounds. In Brazil, beef is the preferred meat, with per capita beef consumption at 79 pounds, followed closely by chicken meat at 75 pounds. Consumption of poultry meat has experienced rapid growth in recent years compared with pork consumption. Beef consumption is stable (fig. 2).

The rapid growth in poultry consumption is associated with lower retail prices for whole chickens compared with top quality (rump) and second-class (forequarter) cuts of beef. The Food Expenditures Survey for Brazil indicates that income increases led to higher consumption of higher quality meats, with lower levels of income associated with less expensive cuts. At income levels of R\$3,000 (US\$1,500) consumers are able to purchase more of the top quality beef cuts, while decreasing consumption of both poultry and pork meats (fig. 3).

Most of the pork consumed in Brazil is processed (70 percent) with the remainder being “fresh/and frozen” meat despite higher processed meat prices. Higher consumption of processed pork products occurs in the regions with higher disposable incomes: South, Southeast, and the Center-West regions (table 2).

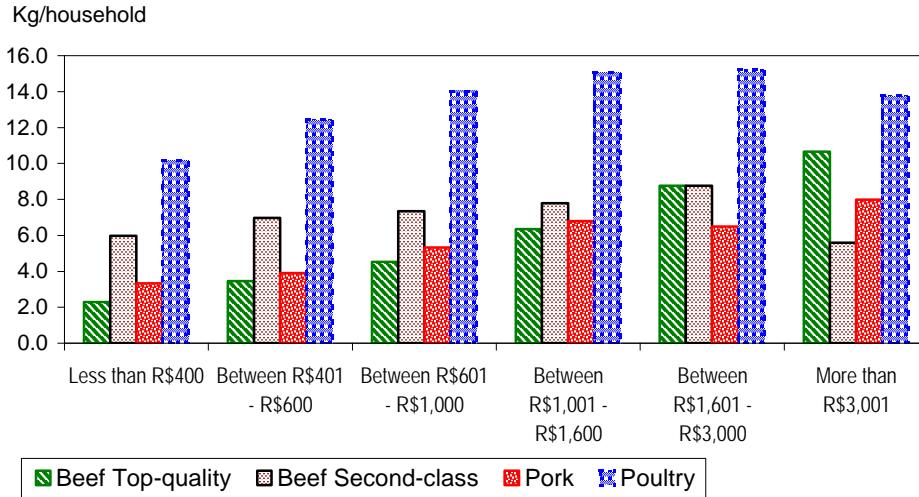
Due to a moderate increase in population, total demand for pork will likely continue to grow in Brazil. In addition, reductions in regional poverty levels will add to demand for pork, increasing per capita consumption slightly. However, to increase domestic per capita consumption of pork significantly, consumer perceptions regarding quality and safety of pork will have to be addressed.

*by Constanza Valdes, email [cvaldes@ers.usda.gov](mailto:cvaldes@ers.usda.gov), 202-694-5234*



**Figure 3. Per capita household meat consumption**

Monthly disposable income in Reals \$



Source: IBGE, Income and Expenditure Survey 2002-2003. ERS calculations.

**Table 2. Per capita meat consumption by region**

Regions	South	Southeast	Center-West	North	Northeast
<b>BEEF</b>	<b>21.1</b>	<b>14.4</b>	<b>17.1</b>	<b>23.1</b>	<b>16.7</b>
Beef -top quality	4.2	4.8	4.0	4.8	2.2
Beef -second class	6.3	4.4	4.7	5.4	2.5
Other fresh/frozen	10.6	5.2	8.5	12.9	12.0
<b>PORK</b>	<b>10.7</b>	<b>6.1</b>	<b>4.5</b>	<b>4.0</b>	<b>3.2</b>
Fresh/frozen	6.8	2.7	2.9	2.5	1.4
Processed	3.9	3.4	1.6	1.5	1.8
<b>CHICKEN</b>	<b>16.2</b>	<b>13.1</b>	<b>11.9</b>	<b>16.6</b>	<b>12.4</b>
Fresh/frozen	6.2	5.1	2.0	3.1	2.2
Whole chickens	10.0	8.0	9.9	13.5	10.2

SOURCE: IBGE, Pesquisa de Orçamentos Familiares 2002-2003. Aquisição alimentar domiciliar *per capita*

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## Contacts and Links

### Contact Information

Mildred M. Haley (coordinator)	(202) 694-5176	<a href="mailto:mhaley@ers.usda.gov">mhaley@ers.usda.gov</a>
David J. Harvey (poultry)	(202) 694-5177	<a href="mailto:djharvey@ers.usda.gov">djharvey@ers.usda.gov</a>
Ron Gustafson (cattle)	(202) 694-5174	<a href="mailto:ronaldg@ers.usda.gov">ronaldg@ers.usda.gov</a>
Monte Vandever (beef trade)	(202) 694-5158	<a href="mailto:montev@ers.usda.gov">montev@ers.usda.gov</a>
Keithly Jones (sheep and goats)	(202) 694-5172	<a href="mailto:kjones@ers.usda.gov">kjones@ers.usda.gov</a>
Mildred M. Haley (hogs/pork)	(202) 694-5176	<a href="mailto:mhaley@ers.usda.gov">mhaley@ers.usda.gov</a>
Jim Miller (dairy)	(202) 694-5184	<a href="mailto:jjmiller@ers.usda.gov">jjmiller@ers.usda.gov</a>
LaVerne Williams (statistics)	(202) 694-5190	<a href="mailto:lwilliam@ers.usda.gov">lwilliam@ers.usda.gov</a>
Laverne Creek (web publishing)	(202) 694-5191	<a href="mailto:lmcreek@ers.usda.gov">lmcreek@ers.usda.gov</a>
Christopher Davis (poultry trade)	(202) 694-5167	<a href="mailto:chrisdavis@ers.usda.gov">chrisdavis@ers.usda.gov</a>
Fawzi Taha (eggs)	(202) 694-5178	<a href="mailto:ftaha@ers.usda.gov">ftaha@ers.usda.gov</a>

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*Did the Mandatory Requirement Aid the Market? Impact of the Livestock Mandatory Reporting Act*, <http://www.ers.usda.gov/Publications/LDP/Sep05/ldpm13501/> compares the mandatory price reporting system developed by USDA's Agricultural Marketing Service in 2001 with the previous voluntary reporting system. The trend toward formula purchases has slowed since mandatory price reporting was implemented, and market forces have likely contributed to an increase in the volume of cattle moving under negotiated purchases.

*Market Integration of the North American Animal Products Complex*, <http://www.ers.usda.gov/Publications/ldp/may05/ldpm13101/> The beef, pork, and poultry industries of Mexico, Canada, and the United States have tended to become more economically integrated over the past two decades. Sanitary barriers, which are designed to protect people and animals from diseases, are some of the most significant barriers to fuller integration of meat and animal markets.

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**Red meat and poultry forecasts**

	2003		2004			2005					2006				
	Annual	I	II	III	IV	Annual	I	II	III	IV	Annual	I	II	III	Annual
<b>Production, million lb</b>															
Beef	26,238	5,838	6,253	6,360	6,097	24,548	5,727	6,192	6,566	6,210	24,695	6,050	6,725	6,825	25,925
Pork	19,945	5,130	4,897	5,047	5,435	20,509	5,136	5,022	4,999	5,525	20,682	5,210	5,100	5,250	21,185
Lamb and mutton	199	53	46	46	50	195	49	46	45	48	188	51	53	49	205
Broilers	32,749	8,195	8,492	8,839	8,537	34,063	8,571	8,941	8,931	8,850	35,293	8,825	9,125	9,300	36,325
Turkeys	5,650	1,309	1,366	1,390	1,389	5,454	1,320	1,393	1,375	1,425	5,513	1,335	1,405	1,410	5,575
Total red meat & poultry	85,476	20,687	21,220	21,858	21,676	85,441	20,964	21,770	22,086	22,221	87,041	21,638	22,580	23,011	89,911
Table eggs, mil. doz.	6,225	1,556	1,574	1,598	1,637	6,365	1,585	1,580	1,603	1,650	6,418	1,600	1,625	1,640	6,540
<b>Per capita consumption, retail lb 1/</b>															
Beef	64.9	16.0	16.9	16.9	16.3	66.1	15.6	16.8	17.0	16.0	65.4	16	17.3	17.5	66.8
Pork	51.8	13.0	12.2	12.7	13.4	51.3	12.3	12.1	12.3	13.1	49.8	12.4	12.1	12.6	50.3
Lamb and mutton	1.2	0.3	0.3	0.2	0.3	1.1	0.3	0.3	0.2	0.3	1.1	0.3	0.3	0.3	1.1
Broilers	81.6	20.8	21.2	21.9	20.4	84.3	21.3	21.7	21.6	21.1	85.6	21.9	22.2	22.4	87.9
Turkeys	17.4	3.6	4.0	4.5	5.0	17.1	3.6	3.8	4.2	5.1	16.7	3.4	3.7	3.9	16.2
Total red meat & poultry	218.9	54.1	54.8	56.6	55.9	221.4	53.5	55.2	55.7	56.1	220.4	54.3	56.1	57.1	224.2
Eggs, number	254.7	63.7	63.9	64.1	65.5	257.2	63.3	62.9	63.8	65.4	255.5	63.2	64.2	64.7	257.8
<b>Market prices</b>															
Choice steers, Neb., \$/cwt	84.69	82.16	88.15	83.58	85.09	84.75	89.09	87.96	81.79	90.27	87.28	85-89	82-88	78-84	81-87
Feeder steers, Ok City, \$/cwt	89.85	87.98	104.58	116.27	110.19	104.76	104.05	113.36	111.50	114.84	110.94	105-109	99-105	95-101	98-104
Boning utility cows, S. Falls, \$/cwt	46.62	47.50	54.86	56.25	50.78	52.35	54.18	59.17	55.34	50.64	54.83	51-53	53-57	52-56	52-55
Choice slaughter lambs, San Angelo, \$/cwt	91.98	100.62	97.06	93.62	95.44	96.69	106.10	98.60	92.90	93.50	97.78	92-96	90-96	88-94	90-96
Barrows & gilts, N. base, l.e. \$/cwt	39.45	44.18	54.91	56.58	54.35	52.51	51.92	52.09	50.51	45.67	50.05	46-48	46-50	44-48	44-47
Broilers, 12 City, cents/lb	62.00	73.20	79.30	75.70	68.30	74.10	71.90	72.60	72.10	66.70	70.80	66-68	66-70	67-73	66-71
Turkeys, Eastern, cents/lb	62.10	62.10	66.60	73.10	77.10	69.70	65.90	67.70	76.50	83.60	73.40	66-68	68-72	72-78	70-75
Eggs, New York, cents/doz.	87.90	114.90	79.70	66.20	68.00	82.20	64.50	55.90	66.60	75.00	65.50	69-71	65-69	67-73	68-73
<b>U.S. trade, million lb</b>															
Beef & veal exports	2,518	36	120	138	167	461	130	189	150	175	644	205	245	270	975
Beef & veal imports	3,006	873	929	940	937	3,679	831	1,065	906	765	3,567	850	940	900	3,540
Lamb and mutton imports	168	62	47	34	38	181	41	52	39	47	179	44	47	40	175
Pork exports	1,717	523	546	486	624	2,179	630	699	629	700	2,658	640	725	665	2,755
Pork imports	1,185	275	265	291	268	1,099	245	245	257	255	1,002	245	240	260	1,000
Live swine imports	7,438	2,210	2,024	2,196	2,075	8,505	1,894	1,951	2,157	2,200	8,202	2,100	2,200	2,200	8,700
Broiler exports	4,920	1,024	1,008	1,250	1,486	4,768	1,199	1,347	1,315	1,350	5,211	1,175	1,300	1,415	5,405
Turkey exports	484	83	93	134	133	443	126	147	147	160	580	130	150	155	600

1/ Per capita meat and egg consumption data are revised, incorporating a new population series from the Commerce Department's Bureau of Economic Analysis based on the 2000 Census.

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

For further information, contact: Mildred Haley, (202) 694-5176, mhaley@ers.usda.gov

## Economic Indicator Forecasts

	2004		2005					2006				
	IV	Annual	I	II	III	IV	Annual	I	II	III	IV	Annual
<b>GDP, chain wtd (bil. 2000 dol.)</b>	10,897	10,756	10,999	11,092	11,193	11,282	11,142	11,385	11,477	11,568	11,660	11,522
<b>CPI-U, annual rate (pct.)</b>	3.4	3.4	2.4	4.2	5.1	3.9	3.9	2.4	2.3	2.4	2.4	2.4
<b>Unemployment (pct.)</b>	5.4	5.5	5.3	5.1	5.0	5.0	5.1	5.0	4.9	4.9	5.0	4.9
<b>Interest (pct.)</b>												
3-month Treasury bill	2.0	1.4	2.5	2.9	3.4	3.9	3.2	4.3	4.5	4.6	4.6	4.5
10-year Treasury bond yield	4.2	4.3	4.3	4.2	4.2	4.6	4.3	4.9	5.2	5.2	5.2	5.1

Source: Survey of Professional Forecasters, Philadelphia Federal Reserve Bank, November 2005.  
 For further information, contact: Jim Miller 202 694 5184, [jjmiller@ers.usda.gov](mailto:jjmiller@ers.usda.gov)

## Dairy Forecasts

	2004		2005					2006				
	IV	Annual	I	II	III	IV	Annual	I	II	III	IV	Annual
Milk cows (thous.)	9,019	9,010	8,996	9,034	9,054	9,055	9,035	9,070	9,090	9,115	9,150	9,105
Milk per cow (pounds)	4,655	18,958	4,807	5,054	4,859	4,825	19,545	4,965	5,140	4,910	4,900	19,915
<b>Milk production (bil. pounds)</b>	42.0	170.8	43.2	45.7	44.0	43.7	176.6	45.0	46.7	44.8	44.8	181.3
Farm use	0.3	1.1	0.3	0.3	0.3	0.3	1.1	0.3	0.3	0.3	0.3	1.1
Milk marketings	41.7	169.7	43.0	45.4	43.7	43.4	175.5	44.8	46.5	44.5	44.6	180.3
<b>Milkfat (bil. pounds milk equiv.)</b>												
Milk marketings	41.7	169.7	43.0	45.4	43.7	43.4	175.5	44.8	46.5	44.5	44.6	180.3
Beginning commercial stocks	9.9	8.3	7.2	9.4	11.2	9.6	7.2	7.6	10.0	11.5	9.6	7.6
Imports	1.3	5.3	1.3	1.1	1.1	1.2	4.7	1.2	1.2	1.2	1.3	4.8
Total supply	52.9	183.3	51.5	55.9	56.0	54.2	187.3	53.5	57.7	57.2	55.4	192.6
Ending commercial stocks	7.2	7.2	9.4	11.2	9.6	7.6	7.6	10.0	11.5	9.6	7.5	7.5
Net removals	0.0	-0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Commercial use	45.7	176.2	42.1	44.7	46.4	46.6	179.8	43.5	46.1	47.5	47.9	185.1
<b>Skim solids (bil. pounds milk equiv.)</b>												
Milk marketings	41.7	169.7	43.0	45.4	43.7	43.4	175.5	44.8	46.5	44.5	44.6	180.3
Beginning commercial stocks	9.5	8.5	8.2	8.4	9.6	8.9	8.2	8.5	8.7	9.9	9.0	8.5
Imports	1.3	4.8	1.2	1.0	1.2	1.3	4.6	1.0	1.2	1.1	1.4	4.7
Total supply	52.5	183.0	52.3	54.9	54.5	53.5	188.3	54.3	56.4	55.4	55.0	193.5
Ending commercial stocks	8.2	8.2	8.4	9.6	8.9	8.5	8.5	8.7	9.9	9.0	8.3	8.3
Net removals	0.0	1.3	-0.4	-0.3	-0.2	0.0	-1.0	0.0	0.1	0.2	0.4	0.6
Commercial use	44.3	173.5	44.3	45.6	45.8	45.1	180.8	45.6	46.4	46.3	46.3	184.5
<b>Milk prices (dol./cwt) 1/</b>												
All milk	16.07	16.05	15.67	14.83	14.97	15.10	15.14	14.30	13.00	12.70	13.55	13.40
								-14.70	-13.70	-13.70	-14.55	-14.20
Class III	15.06	15.39	14.31	14.10	14.08	13.69	14.05	12.70	11.90	11.80	12.00	12.05
								-13.10	-12.60	-12.80	-13.00	-12.85
Class IV	13.19	13.20	12.64	12.38	13.45	13.03	12.87	12.15	11.60	1.05	11.05	11.45
								-12.65	-12.40	-2.15	-12.15	-12.35
<b>Product prices (dol./pound) 2/</b>												
Cheddar cheese	1.610	1.643	1.531	1.507	1.481	1.431	1.488	1.335	1.270	1.275	1.305	1.295
								-1.375	-1.340	-1.375	-1.405	-1.375
Dry whey	0.235	0.232	0.248	0.263	0.287	0.314	0.278	0.305	0.265	0.245	0.235	0.260
								-0.325	-0.295	-0.275	-0.265	-0.290
Butter	1.778	1.824	1.570	1.459	1.646	1.487	1.540	1.330	1.285	1.280	1.295	1.295
								-1.400	-1.385	-1.410	-1.425	-1.405
Nonfat dry milk	0.862	0.841	0.899	0.923	0.957	0.984	0.941	0.955	0.910	0.855	0.845	0.890
								-0.995	-0.970	-0.925	-0.915	-0.950

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

2/ Simple averages of monthly prices calculated by the Agricultural Marketing Service for use in class price formulas. Based on weekly "Dairy Product Prices", National Agricultural Statistics Service. Details may be found at [http://www.ams.usda.gov/dyfmos/mib/fedordprc\\_dscrp.htm](http://www.ams.usda.gov/dyfmos/mib/fedordprc_dscrp.htm)

Source: World Agricultural Supply and Demand Estimates and supporting materials.

For further information, contact: Jim Miller 202 694 5184, [jjmiller@ers.usda.gov](mailto:jjmiller@ers.usda.gov)