



## 2012 Agricultural Outlook Forum

# Dairy Outlook

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## **OUTLOOK FOR U.S. DAIRY**

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The U.S. dairy industry enters 2012 in an environment of falling dairy product prices and rising feed costs. These high feed costs and the declining milk prices are pressuring returns to dairy farmers. Corn prices forecast to rise to \$5.80 to \$6.60 a bushel in the 2011/2012 crop year. Soybean meal prices are forecast to fall slightly to \$290 to \$320 per ton in 2011/2012. Consequently, the 16 percent protein ration, which averaged just over \$10.50 per cwt in 2011, is expected to climb to near \$11.00 per cwt in the first half of 2012.

Unfortunately, as dairy farmers' feed costs are rising, their milk prices received are falling. Increasing milk production has pressured milk prices since their peak in the third quarter of 2011 and milk prices are staged to fall further during the first half of 2012. The milk-feed price ratio, which was last above 2.0 in the first quarter of 2011, will likely average below 2.0 again in 2012. Lower corn and hay prices in the second half of 2012 are expected to bring some feed cost relief. Some modest recovery in the fourth quarter milk-feed price ratio is expected as feed prices fall with the next harvest. The milk-feed price ratio could decline to 1.6 during the first half of 2012, the lowest since 2009.

### 2012: Ultimately, Herd Retrenchment

Farm business income projections from USDA's Economic Research Service show that average net cash income per dairy farm recovered significantly in 2011 -- to a record \$239,800, up from \$158,100 in 2010. The outlook for 2012 is for average net cash income to drop by 27 percent to average \$175,500 per farm. Although dairy farms are projected to experience the largest year-over-year income decline among major livestock producers, this forecast, if realized, would still be the third highest since 2007. The recovery in 2011 net cash income allowed many producers to rebound financially after 2009. In 2012, dairy producers will likely continue to adjust production practices to lessen the impact of higher costs, especially for feed.

The improved financial performance of dairy farms in 2011 contributed to a modest expansion in cow numbers and the expansion is likely to continue into early 2012. Despite high feed prices and a forecast decline in net cash income from record highs, incomes should be strong enough to buoy continued expansion during the early part of this year. However, based on expectations of weakening milk/feed price ratios during 2012, some decline in cow numbers by the end of 2012 is expected.

Average cow numbers for 2012 will be slightly lower than last year's 9.19 million head. Output per cow is expected to rise in 2012 by 1.4 percent because of milder winter weather and the leap year adding a day of production, compared to a 0.9 percent rise last year. Milk production is forecast to rise to 199 billion pounds in 2012.

## Domestic Demand Expected to Continue to Improve

Economic recovery is expected to continue this year, but demand for dairy products is not keeping pace with production increases. Economic growth is forecast at about 2 percent for 2012. Real disposable income is projected to climb by less than 3 percent over the course of the year. The National Restaurant Association's *Restaurant Performance Index* has shown strength in recent months and should portend stronger dairy product sales. The general upturn in the economy supports increasing total domestic commercial use by 1.4 percent in 2012, on a fat basis, compared to 2011's 0.8 percent rise. On a skim-solids basis, domestic commercial use is forecast to climb by about 2.2 percent in 2012, with preliminary estimates showing growth of 1.8 percent last year. However, this increase in usage is expected to come only with lower dairy product prices.

## World Demand, Especially in Asia, Will be Strong

In early 2011, China had absorbed a significant portion of the additional milk supplies on global markets through the substantial purchase of whole milk powder (WMP) thus underpinning international dairy prices. Chinese imports of WMP are forecast at 827 million pounds in 2012, a 7 percent increase from last year. This upward trend is likely to continue into the foreseeable future as China's expanding population enjoys a steady rise in disposable income. In addition food safety concerns (a residual of the Melamine disaster) and the subsequent decline in domestic production, have resulted in tight Chinese supplies. Chinese imports of skim milk powder (SMP) rose at an annual 22 percent rate from 2005 to 2009 and are expected to total over 300 million pounds in 2012, a 19 percent increase from 2011.

The 2012 fiscal year forecast value of dairy exports has recently been increased by \$400 million due to stronger than anticipated exports of cheese, whey, lactose and nonfat dry milk (NDM) due to strong import demand from Asia and Mexico. The \$4.4 billion dairy export total for 2012 is down slightly from the record \$4.5 billion reached in 2011.

## International Prices Weaken

Dairy product prices have been falling recently, down 3 percent from the previous trading session (two weeks earlier) and down 20 percent from a year ago (overall trade weighted index by Global Dairy Trade). Strong prices from 2011 and good weather are expected to lead to higher world production of milk and dairy products in 2012. The strongest production increases are expected to occur in Oceanic countries, Asia, and South America in 2012. Although herd size is expected to fall in North America and the EU, output will be maintained by improved yield per cow. Since Australia and New Zealand rely more on pasture and less on manufactured feed than the United States, their production is more seasonal and that effect is reflected in both world and U.S. prices.

Total milk production in Australia is forecast to increase by 3 percent above 2011. Australian producers will likely continue to rebuild their drought-ravaged herds, although the total herd size is expected to be well below the peak attained in 2001/02. New

Zealand's milk production is expected to rise by 4 percent. New Zealand's herd is expanding. Normal weather and improved genetics and management underpin the rise. Much of Australia and New Zealand's production is exported, which will compete strongly with the U.S. ability to export dairy products.

U.S. milk equivalent exports in 2012 are forecast at 8.62 billion pounds on a fats basis and 32.29 billion pounds on a skim-solids basis. Both export totals for 2012 are forecast below 2011, adding to the pressure on domestic dairy product prices.

#### Cheese

U.S. cheese exports for 2011 were record high and 29 percent above 2010. U.S. cheese exports are expected to remain near the level of 2011 in 2012. Although Australia's 2012 cheese exports are projected to climb 2 to 3 percent for the second year in a row, their cheese export total would still be below their 5-year average of 402 million pounds. New Zealand's exports are expected to shrink 2 percent in 2012 to the lowest level since 2008 as their exports of butter, skim-milk powder and whole-milk powder increase. EU exports are expected to grow 3 percent because domestic consumption is not expected to grow as rapidly as cheese production.

With increased consumption and exports, U.S. cheese stocks were 6 percent below a year earlier at the end of 2011. Softening the price outlook for U.S. cheese is increased production in late 2011 and higher expected 2012 production in the U.S., Oceania and Europe. USDA currently forecasts cheese prices to average \$1.61 to \$1.68 per pound, 10 percent below 2011.

#### Butter

Strong butter prices and low butter stocks going into 2011 encouraged production, with U.S. butter production increasing 15 percent in 2011 from the depressed level of 2010. The higher fat content of U.S. milk in 2011, up from the low levels in 2010, also contributed to higher butter production.

U.S. butter exports continued to increase in the first half of 2011 and totaled 140 million pounds for the year. The slower export pace in the last half of 2011 is expected to carry over into 2012 with butter exports for the year expected to be down about 10 percent.

A small increase in EU butter production is expected to be absorbed domestically and by continued strong demand from Russia. New Zealand's butter exports are expected to climb by 6 percent this year, pressuring U.S. exports.

With butter exports likely to be lower in 2012, and U.S. stocks starting the year 29 percent above a year ago, butter prices are expected to continue the decline that began in September 2011. This decline is expected to last through early 2012. But, butter prices are expected to increase later in 2012 if lower farm income slows milk production and the value of cheese and whey relative to butter and nonfat dry milk favors production of the

former products. USDA forecasts the price of butter to average \$1.57 to \$1.67 per pound this year, down 17 percent from the 2011 average of \$1.9498.

#### Nonfat dry milk / skim milk powder

Powder prices will also likely be lower in 2012 than last year. USDA forecasts NDM prices averaging \$1.36 to \$1.42 per pound for 2012, 8 percent below the \$1.51 per pound price in 2011. Weaker world prices and a 5 percent drop in U.S. exports will pressure domestic prices for milk powders. Generally, the EU will be less of a factor in the powder market as its exports are expected to decline by 7 percent, as Australia and New Zealand increase market share. Imports of SMP by major importing countries are expected to expand by only 1 percent this year, following last year's record pace.

#### Milk Price Outlook

Reflecting the projected softening in dairy product prices, farm milk prices will likely be lower in 2012 than last year. The all-milk price is forecast by USDA to average \$18.00 to \$18.70 per cwt in 2012, compared to \$20.14 per cwt for 2011. Both Class III and Class IV prices are expected to be lower in 2012 than last year. The Class IV price could average below the Class III price after having been higher in both 2010 and 2011.

Declining milk prices and increasing feed costs could trigger Milk Income Loss Contract (MILC) Program payments for February milk production. Final data for calculating the payment rate will not be available until the end of March. Payments could also be triggered for March through June production. MILC program payments are currently expected to total \$180 million in 2012.

Given projected income forecasts, 2012 could be a challenging year for those U.S. dairy producers who rely on purchased feed and have high debt levels. Price formation in the U.S. dairy industry is becoming more dependent on events in global markets. The result is likely to be greater variability in prices for dairy products and milk.

Additional information about the 2012 dairy forecasts is available at:

#### Livestock, Dairy and Poultry Situation and Outlook

[www.ers.usda.gov/publications/ldp](http://www.ers.usda.gov/publications/ldp)

#### Dairy: World Markets and Trade

[www.fas.usda.gov/dlp/dairy/dairy.asp](http://www.fas.usda.gov/dlp/dairy/dairy.asp)

#### World Agricultural Supply and Demand Estimates

[www.usda.gov/oce/commodity/wasde/index.htm](http://www.usda.gov/oce/commodity/wasde/index.htm)