

## Dairy Outlook Overview

Milk price is driven by simple economics of supply and demand. United States milk supply continues to increase over time with increased milk output per cow and an expanding cow herd. Demand outlook for dairy products in 2012 is not favorable due to increased global milk supply and minimal growth in national demand. Producer profit margin outlook is marginal for 2012 due to suppressed milk prices and feed commodity markets remaining strong.

**Milk Supply:** Production continued to increase in 2011 with annual production closing out at 196,057 million pounds, 1.76 percent increase from 2010. Annual Iowa milk production ended the year at 4.345 million pounds, up 0.18 percent from 2010. Milk production per cow continues to increase at an average of 1.7 percent per year. For 2011, production per cow equaled 21,335 and 21,305 pounds for the U.S. and Iowa, respectively (approximately 73 pounds per cow per day tank average). Annual gain of milk production per cow comparison across states, Iowa ranked second among the 23 dairy states at 560 pounds behind Texas at 820 pounds.

The total number of milk cows in the U.S. is just under 9.2 million cows in December 2011, up 80 thousand cows from the year prior. Growth in cow inventory occurred in the southern high plains, western, and upper northwest regions. Replacement heifer inventory is down one percent at 4.5 million head. The largest two-year increase in heifer inventory since the early 1980's occurred in 2009-2011, at a gain of 250,000 head. Those heifers started to enter the cow herd in 2011 and those heifers will be freshening through mid-year.

Figure 1 Iowa Milk Cow Inventory vs. Annual Milk Production

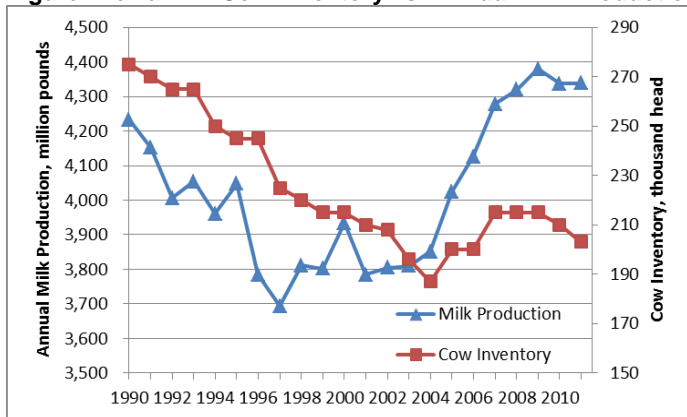


Figure 1 shows milk production and cow inventory for Iowa over time. Annual milk production has increased in the last decade with a slight decline after 2009. Cow inventory has subsided in the past few years to 203,000 head at the end of 2011; however increased milk production per cow has allowed milk production to remain steady.

Continued growth in milk production per cow, strong heifer inventory, and expected growth in cow inventory could increase U.S. milk production by up to 3 billion pounds. Factors that may decrease this influx in milk supply include current feed quality and availability across regions and weather cycles that will affect 2012 feed crops.

**Milk Product Demand:** Demand for milk commodities in 2011 was strong due to increased activity in the export markets; leading export markets are Mexico, Southeast Asia, and Canada. Total exports equaled \$3.96 billion in export product; total export products are equivalent to over 13 percent of the milk solids at the farm level. Drivers behind export demand in 2011 were decreased global milk supply due to New Zealand and Australia experiencing drought conditions early in the year, increasing population and middle class in Asian countries, opportunities to enter into markets based on foreign policy decisions (South Korea market), and a weak dollar value. Protein enriched products and associated global demand from Asian countries in late summer months helped to drive dairy product prices and milk price received by producers.

The stated factors will continue to affect global demand into 2012. However, Australia and New Zealand are recovering from the drought and supplying more milk into the global market while the strength of the Euro and economy of the EU continues to be in question causing uncertainty in the strength in global exports for 2012. Product innovation for convenience, nutrition, and consumer needs in new markets may be vital to increase demand both nationally and globally to meet the increase in milk supply entering the market.

**Dairy Profitability:** The U.S. All Milk Price for January was \$19.60 per hundredweight; a record high was set in August at \$22.00. Iowa producers saw a \$0.10 gain on All Milk Price at \$19.70 in January. Iowa producers typically see about a \$2.00 positive basis between All Milk Price and Announced Milk Price, based on CME closing futures price. Milk futures have taken a negative turn for 2012 in the past few weeks with prices in the \$16-17 range. These milk prices with corn prices rallying in the \$5.50-\$6.50 range and reduced hay stocks will create tight margins for dairy producers in 2012. Producers may experience marginal positive gains on a cash basis, but net returns including debt, depreciation, and opportunity cost on investments may result in negative margins based on ISU Dairy Budget calculations. Margin management and maintaining or improving production levels will be important for producers to remain profitable in 2012.

