Potato Growers Can Keep Profitable Prices by Thinking of the Industry First

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The pattern broke four years ago.

The old pattern was that fresh potato growers made healthy profits every sixth year (1989, 1995, 2001). In most other years, according to my research, growers either lost money or broke even.

After the 2001 crop was marketed, prices fell for four consecutive years. Losses mounted, forcing some out of the industry and pushing others to the brink of survival.

Then prices jumped up and stayed there. For the 25-month period from July ‘03 through July ‘05 the average monthly price for Idaho growers was above $4 five times. During the next 43 months, there were only five months when the price was BELOW $6 (Figure 1).

Never before, in more than a century of United States Department of Agriculture records, have potato prices remained high for four consecutive crops. With the old pattern it would have taken 24 years to get that many profitable fresh potato crops.

Prices have been on a higher plateau because growers avoided an old problem – excess supplies. Grower decisions will determine if the problem will re-appear in 2009.

**Growers control plantings**

The U.S. fresh potato industry faces some challenges. One is how to manage success. After four years of keeping supply at profitable levels, it may be hard to do it again.

There is a powerful urge to plant more potatoes in 2009. Wise growers may show restraint but other people could jump in. Record high prices ignited enthusiasm for planting potatoes.
Several other factors will have some impact. High production cost and price risk could restrain potato plantings. Alternative crop prices are giving mixed signals. Lower grain prices tend to increase potato plantings, but high hay prices have the opposite impact.

Several economists have developed econometric models to forecast potato plantings. I built one years ago for my doctoral research, but it is now outdated. Bruce Huffaker, who publishes North American Potato Market News, built a similar model. In January, he used his model to predict an 8.2 percent increase in U.S. 2009 potato plantings.

Expert opinion can also be a good forecasting tool. I collected some at potato industry presentations I made recently. When I asked growers for a show of hands about several planting scenarios, most raised their hands for an increase in the range of zero to 5 percent.

**Yields increase steadily**

Plantings are only part of the potato supply puzzle. Yields make up another important part. In my yield trend research, I found a consistent pattern that has not been broken.

Potato growers have continued to increase yields at a steady rate for the last half century. For the U.S. as a whole, yields have gone up at the rate of 4.4 hundredweight per year.

Oregon and Washington growers have been increasing yields at the rate of 7 hundredweight per year. In Colorado, Idaho and Wisconsin the increase has been 4 to 5 hundredweight per year.

Yields in 2008 were below the trend in the U.S. and in most states. If 2009 yields go back to the trend, 2009 potato supplies be up 2 percent in Idaho, 10 percent in Oregon and 1 percent in the U.S. (Table 1).

**Supply controls prices**

Fresh potato demand is inelastic. Small changes in supply cause big changes in price. I found a 7-to-1 relationship. For each 1 percent change in supply, prices change 7 percent in the opposite direction. I used this relationship to predict price impacts in two scenarios.

*Scenario One: Plantings – up 4 percent & Yields -- up 1 percent*

This combination of yield and plantings would boost supplies 5 percent. That would lead to a 35 percent decline in fresh potato prices.

*Scenario Two: Plantings – up 8 percent & Yields -- up 1 percent.*

An estimated 8 percent increase in plantings and a return to the U.S. yield trend would cause supplies to increase 9 percent. That translates to a 63 percent decrease in fresh potato prices.
Under either scenario money-losing prices would return to the industry. There is a way to prevent the red ink from flowing – reduce potato plantings.

An economic concept – ‘the fallacy of composition’ – says that what is true for an individual is not true for a group. In the potato industry it means that growers who try to increase profits by planting more potatoes, make prices drop for all growers. This spring growers can keep prices profitable if they think about the industry rather than themselves.
Figure 1. Idaho grower-level fresh potato prices ($/cwt)

Table 1. U.S. and selected state potato yields (cwt/acre)

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