ENHANCING PRODUCER RETURNS:
THE UNITED POTATO GROWERS ASSOCIATION

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Introduction

Facing the prospect of continuing excess supplies and depressed market prices, Idaho potato growers formed a cooperative, the United Potato Growers of Idaho, in November, 2004. These leaders soon began mounting an effort to broaden the development of supply management programs into other major potato producing states, in order raise market prices by better matching potato supplies with demand. Several regional cooperatives were formed quickly. In March, 2005 the United Potato Growers of America (UPGA) was created as a federation of these regional cooperatives.

UPGA is structured as a 501c3, not-for-profit organization. As of November, 2007, UPGA has eight member cooperatives, that include growers from California, Colorado, Idaho, Kansas, Montana, Nebraska, New Mexico, Oklahoma, Oregon, Texas, Washington, and Wisconsin. These members produce approximately 70% of the nation's fresh market potatoes. United Potato Growers of Canada, which represents 96 percent of Canadian potato acreage, was formed in 2006 in conjunction with UPGA, and participates with UPGA through a memorandum of understanding and through At Large individual memberships.

As a young organization, UPGA provides a classic demonstration of the power of producer collaboration through the cooperative structure. It is developing strategies and implementing programs to increase and stabilize grower returns. UPGA's objectives and programs are reviewed below, followed by an examination of the economic forces associated with this progressive effort. To better understand the framework surrounding UPGA, a brief overview of the US potato industry is provided first.

Overview of US Potato Industry

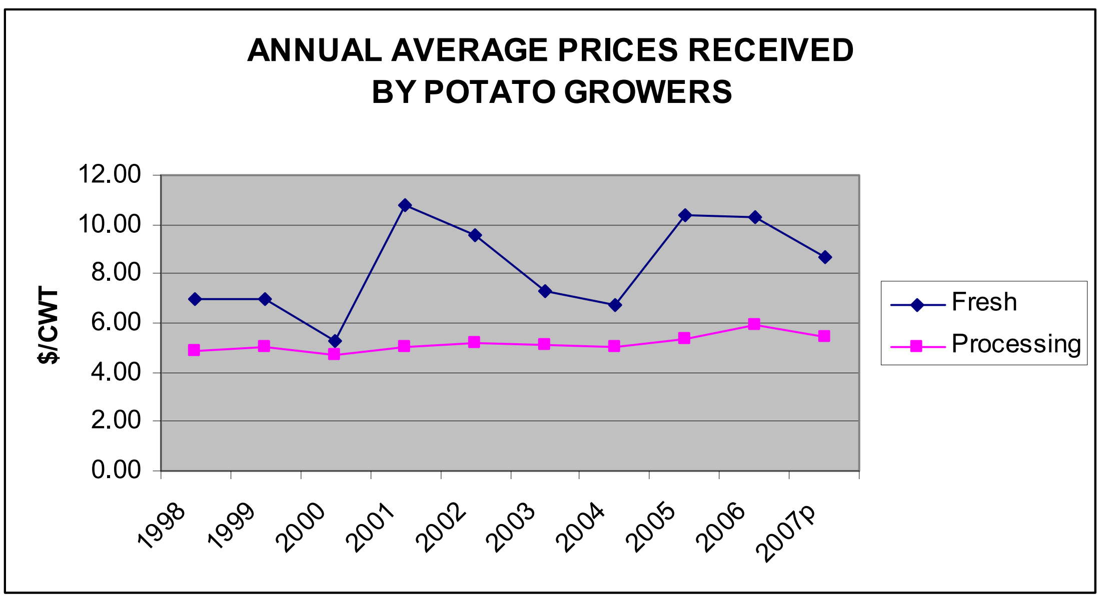
Idaho is the nation's leading producer of potatoes, with 29% of total production in 2006. Nine other states—Washington, Wisconsin, North Dakota, Colorado, Minnesota, Oregon, Maine, Montana and California--produced an additional 59% of the nation's potato crop. Nationally, yields have soared, rising from 231 hundredweight per acre in 1971 to 393 hundredweight per acre in 2006.

Between 1971 and 1996, per capita consumption of potatoes rose from 117.8 pounds to 145.0 pounds; much of this growth was attributable to sales of french fries in the fast food sector. Since then, per capita potato consumption has since declined to 130.2 pounds in 2006. Potato consumption has shifted from fresh to processed forms. In 1959, only 19 percent of potatoes were processed while fresh use dominated potato utilization. In 2005, annual U.S. per capita use of frozen potatoes was 56 pounds, 45 pounds for fresh potatoes, 17 pounds for potato chips, and 16 pounds for dehydrated products.

Potatoes can be marketed interchangeably in both the fresh and processing markets because of their physical characteristics and storage advantages. Fresh market potatoes are sold mostly on the open market, while processing potatoes, such as the Russet Burbank for French fries, are typically contracted to commercial fryers before planting. The contracts specify the potato variety, volume, and price based on quality requirements. The Potato Marketing Association of North America (PMANA) represents producers in their bargaining negotiations with processors; its member bargaining associations include producers from Washington, Southern Idaho, North Dakota, Wisconsin, Minnesota, Maine and several Canadian provinces. Dehydrated potatoes are typically sold as the "offal" of the fresh market.

Under normal market conditions, prices are highest in the fresh market (Figure 1). Since 1980, real prices (in deflated 2000 dollars) declined from \$12.12 to \$5.04 per hundredweight in 2006. Guenther determined that Idaho fresh growers averaged a loss of \$2.67 per hundredweight on their production in 2000, when fresh market prices averaged \$5.27 per hundredweight. Such poor market conditions forced producers to seek ways to improve prices.

FIGURE 1



source: USDA-Economic Research Service.

UPGA's Objectives and Programs

UPGA was created to enhance the profitability of US potato growers. Its mission statement states: **"**We bring order and stability to the North American potato growing industry and increase our member potato growers' economic potential by the effective use of cooperative principles.**"**

UPGA is an information sharing cooperative, one of the four cooperative types previously described in the article, The Power of Producer Collaboration, beginning on page 23. The leaders of UPGA developed an information-based strategy to control supplies in order to restore orderly marketing conditions. They recognized that they had to better match supplies with demand.

There are three main components of UPGA's program:

- Planting controls
  Acreage reduction programs were developed by all member cooperatives. UPGA members are randomly audited to verify compliance with adopted planting guidelines.
- Market data reporting and analysis
  UPGA maintains an online data reporting system where members report shipments and prices received. Seven years of data have been used to predict the effect of shipments of future prices.
- Product flow controls
  Transitions between seasons are managed by balancing storage volumes and new crop estimates in order to protect fresh crop values. UPGA adopted a transition pack plan to better manage supplies of potatoes stored in the fall which overlap with the newly harvested crop that is shipped directly from the field. In a recent newsletter, its marketing committee chair advised members that "Everyone's desire to ship at once often results in a rapid downward price spiral…prices drop over 50 percent in three weeks or less", resulting in estimated revenue losses of at least $50 million, as well as having serious price implications on the next season's fall crop.

UPGA's Chief Operating Officer, Buzz Shahan, describes the members' weekly meetings as a "market conversation"; he emphasizes the importance of collaboration through information sharing to restore market power for producers.

Economic Forces Affecting UPGA's Program

There are several economic factors that affect UPGA as an organization. Consolidation in the grocery, foodservice and food manufacturing sectors have contributed extensively to growers' loss of market power. According to Guenthner (2004), three processors—Lamb Weston, McCain and Simplot—represented 83 percent of the total frozen potato market in 2000, compared to a 55% market share for the top three processors in 1980. The top three firms in the grocery sector had a 28% market share in 2003.

Given the highly concentrated nature of the potato processing industry (Katchova, Sheldon and Miranda), individual potato growers and shippers have less market power than their large customers. As noted in the previous article, the Capper Volstead Act provides authority for farmers to join together in cooperative associations to gain countervailing market power without violating antitrust laws. Cooperatives enable producers who are facing imperfect markets to gain countervailing market power by collaborating with, rather than competing against, each other when dealing with processors and distributors.

Guenthner noted that it has become easier for potato growers to organize themselves, due to their declining numbers. For example, the number of potato farms in Idaho decreased from 1,435 to

818 between 1997 and 2002, while average acreage increased from 229 to 445 acres. It was easier to promote collaboration among this smaller population of potato growers.

Information is critical for efficient economic markets. The improved information flow that UPGA has developed enables producers to allocate their production resources more efficiently, as well as allowing buyers and sellers to make transactions with less product waste and lower costs of capital and labor. This economic result is demonstrated by the following statement from UPGA's Chief Operating Officer: "Information changes behavior." In this case, the improved information flow affects growers' and shippers' future marketing transactions.

The interrelated nature of the various potato market sectors makes the improved information flow even more valuable. For example, UPGA's planting guidelines assist seed potato producers in determining how much they need to grow. The cooperative structure facilitates this improved information flow.

The inelastic demand for numerous staple commodities, including potatoes, has been well documented. This concept is essential to UPGA's use of supply controls. When demand for a commodity is inelastic, restricting supply is a classic economic tool used to raise grower prices and revenues. This is true because the increase in revenue, as a percentage, is larger than the decrease in demand that results from the price increase. UPGA's acreage restrictions apply only to its members, which can limit their effectiveness. Alternatively, producers could approve a marketing order to have a regulatory mechanism for imposing such restrictions on all growers.

There are five basic supply control mechanisms that can be implemented by cooperatives or through marketing orders:

- production controls
- market flow controls
- reserve pools
- market allocation programs, and
- grades and standards.

UPGA is utilizing production controls through acreage limitations; it conducts field audits to ensure compliance. Similarly, fruit producers have participated in "tree pull" programs to reduce crop production.

UPGA has implemented market flow controls (pro-rates) during season transitions to ensure that oversupplies in the market do not put downward pressure on current and future prices; prorates have been used extensively in the citrus industry.

Reserve pools involve setting aside a portion of the crop to be returned to the primary market when demand and supply conditions are more favorable; the raisin and prune industries have used such provisions.

Market allocation programs limit the volumes to primary markets, such as the domestic fresh market, with the balance of supplies permitted to flow freely to secondary markets, such as export. UPGA could use this mechanism in export markets to ease oversupply conditions.

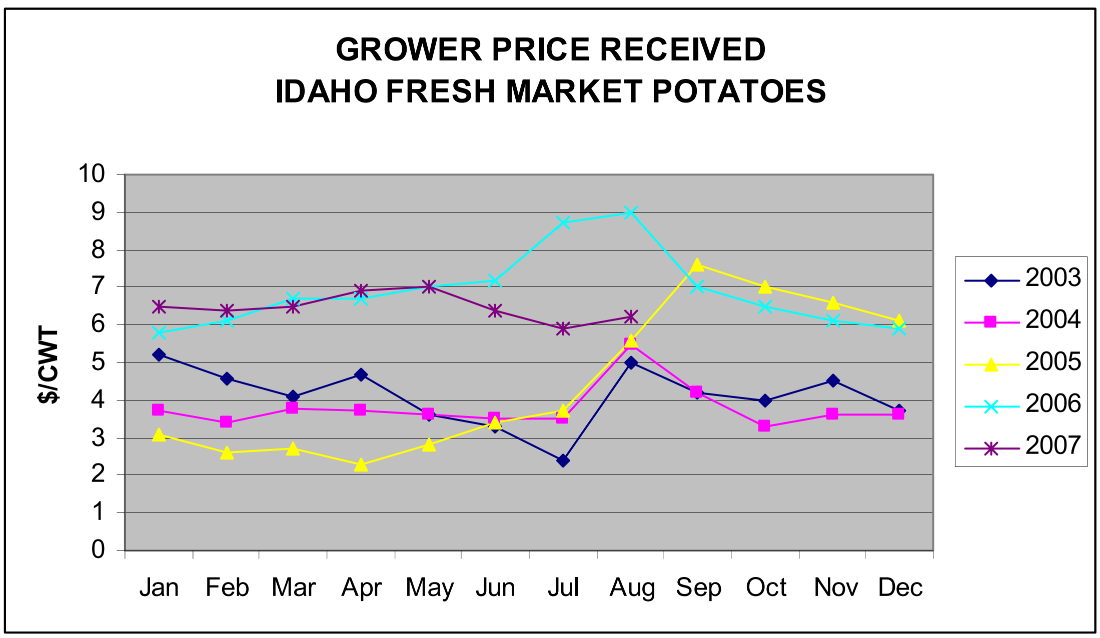
Establishing more rigorous grades and standards reduces potential market supplies and should increase buyers' willingness to pay higher prices due to improved product quality. Some member cooperatives have increased minimum size requirements in the fresh market.

The overall welfare of the US potato industry depends on performance in all of the major market sectors—fresh, frozen, chip, dehydrated and seed. Thus, it is essential for UPGA to collaborate with growers, processors and industry organizations involved in these sectors. UPGA has already convinced dehydrators to contract for most of their potatoes, rather than gambling on culls diverted from the fresh market. Such efforts enable UPGA to better control overall potato plantings. As previously noted, UPGA recognizes the importance of international alliances; it mentored the formation of the United Potato Growers of Canada, which is now a UPGA member.

Conclusions

UPGA quickly developed and implemented an information-based supply management program. The results of its efforts are displayed in Figure 2. Monthly average prices received by Idaho growers in the fresh market are higher and noticeably more stable than before supply controls were implemented in Fall 2005.

FIGURE 2



source: USDA-National Agricultural Statistics Service

Because it is a voluntary organization, UPGA is facing the free rider problem. Nonmember producers benefit from the higher and more stable prices achieved, without having to reduce their acreage and control their sales flows. UPGA's leadership is striving to impress upon nonmembers the need for compliance and the significant additional benefits that could be derived by all producers from such cooperation. It is seeking to broaden its membership to other important fresh market states, such as Maine. As its supply management efforts are finetuned, UPGA plans to also engage in strengthening the industry's demand creation efforts.

Supply management through expanded information sharing is a powerful economic tool for enhancing the welfare of agricultural producers. The cooperative structure is an accepted organizational structure for implementing such programs. When market prices plummeted after California's citrus marketing orders were eliminated, industry leaders organized themselves into a cooperative to legally share information and regain market power. UPGA has shared its experiences with egg, mushroom, and lettuce producers. Hopefully, more commodities will also explore forming information sharing cooperatives as a means of joint action to improve their market conditions.

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