COLUMN FOR RELEASE

Media Contact: Myrannda Kleckner, (717) 346-0849;
mkleckner@centerfordairyexcellence.org

June 13, 2018

What Constraints and Opportunities Exist In Strengthening Pennsylvania's Dairy Industry

Editor's Note: This column is submitted by Chuck Nicholson, an Adjunct Associate Professor in the College of Agriculture and Life Sciences at Cornell University, and a former Clinical Associate Professor of Supply Chain Management at Penn State University. Nicholson is one of three economists who contributed to the 2017 "Study to Support Growth and Competitiveness of the Pennsylvania Dairy Industry," commissioned by the Pennsylvania Department of Agriculture and the Center for Dairy Excellence.

Harrisburg, Pa. – I recently read a book about the historic first flight to the moon of the Apollo 8 mission back in December 1968. The author describes how minor adjustments to the flight trajectory early on led to much larger differences in the location of the spacecraft later, which resulted in a safe return to Earth. The book highlights that to achieve this historic outcome, several planners and flight monitoring specialists were needed to coordinate with the astronauts and have access to real-time information. It might be a bit of a stretch, but I think this illustrates some relevant points about how to facilitate growth and change the trajectory of Pennsylvania's dairy industry.

At the request of the Pennsylvania Department of Agriculture and the Center for Dairy Excellence, my colleagues – Andy Novakovic at Cornell and Mark Stephenson at the University of Wisconsin – and I have been looking a wide variety of factors related to the growth and competitiveness of Pennsylvania's dairy industry. In a series of reports, we've evaluated past performance of the industry, estimated its economic impact to the state, identified benefits from investments in additional processing capacity, and made projections of future farm-level profitability. Although we believe these reports provide helpful information to industry decision makers, ultimately, we should come back to the main purpose of our work, which is to understand better why the performance of Pennsylvania's industry differs from that of other states and suggest what can be done by government and private industry to enhance growth and competitiveness.

As noted in the Phase I report, growth in Pennsylvania milk production has been limited for the past 15 years and milk per cow growth has been slower than in New York, Wisconsin or Michigan. Available data also suggest that growth in the volumes processed of many dairy products have also not grown as rapidly as in those states.

Reviewing the available information, we believe that several factors are not major constraints to growth. On the supply side, these include the basic nature of agronomic resources (i.e. soils and climate), the availability of inputs (i.e. agricultural credit and hired labor), supportive—if potentially improvable—educational and advising programs (i.e. Penn State Extension programs and the Center for Dairy Excellence), and regulation (i.e. environmental and pricing regulation under the PMMB).

Our view of the impact of processing capacity on growth is more nuanced in part because major investments in processing typically are made through collaboration between processors and milk suppliers, with a view to developing a dedicated milk supply. Capacity has clearly been a constraint in the past few years and is likely to be important going forward with absent additional investment. On the demand side, the proximity of Pennsylvania milk production to growing major Northeast markets and the potential for milk shipments to deficit regions to the south suggest that growth in demand that could be served by the Pennsylvania has also not been a major constraint to growth. As a reflection of demand, supply and transportation costs, Pennsylvania all-milk prices have been higher on average than for the US, by $1.57/cwt from 2000 to 2017, although costs of production are likely also higher.

Our assessment is that one likely constraint to growth during the past 15 years has been farm structure—the size and number of farms—interacting with incentives to invest in new processing capacity. Farm structure implies to several potentially important characteristics that affect the potential for growth. Smaller average farm sizes tend to be associated with higher costs of production, and lower profitability, access to inputs and higher costs of milk hauling. These characteristics can reduce both the interest in and ability for growth. We do not mean to imply that big farms are the main pathway to dairy industry growth. We firmly believe that "bigger is not always better, but better might imply bigger". That is, better managed farms of all sizes can support milk production growth if that is otherwise aligned with individual farm manager objectives.

Another potential constraint relates to the perspective of producers regarding the desirability of farm growth. In our Phase I summary, we reported survey results from CDE indicating that a) many farms intend to exit in the next five years and b) increasing both milk per cow and farm size were not considered important to improvement of farm business performance during the next five years. Several stakeholder comments indicated that greater focus on improving farm business management would be appropriate. Together, smaller average farm sizes and less interest in growth appear to be key factors that have resulted in slower growth in Pennsylvania milk production. This also affects the desirability of making processing investments in Pennsylvania, given the emphasis on arranging a dedicated milk supply to support utilization of new capacity.

What can be done to support growth and competitiveness? We see several potential actions. These include the following:

- Increasing support for dairy farm management education
- Increased collection and dissemination of information (i.e. costs of production

and profitability) relevant for decision making by farms, processors and supporting industries
- Increasing awareness and use of the resources to support improved management and expansion or diversification (i.e. economic development funds)
- Further exploration of opportunities to expand smaller-scale and value-added dairy processing and branding, and
- Continued efforts to highlight the benefits of processing investment and unique resources such as PhilaPort.

These actions can be supported by the Pennsylvania Department of Agriculture but would benefit from coordinated actions by other key industry stakeholders—cooperatives, dairy producer associations, dairy processor associations, agricultural input suppliers, consultants, and other state-related organizations. Expected improvements in farm-level profitability after 2018 will likely help to facilitate interest and implementation. Changing the "trajectory" of an industry takes time, but small efforts now can result in larger payoffs in the future.

To learn more about these findings, go www.centerfordairyexcellence.org and click on "Dairy Information." Then go to "Dairy Study 2017."

###

The Center for Dairy Excellence is a non-profit organization initiated by the Pennsylvania Department of Agriculture in 2004. Bringing together people from more than 40 different dairy organizations in Pennsylvania, the center's mission is to enhance the profitability of the dairy industry by empowering people, creating partnerships, and increasing the availability and use of resources. Learn more at **centerfordairyexcellence.org**.

Photo Caption: Dr. Charles Nicholson