Facing Challenges, Feeding the World

Animal agriculture can turn challenges into opportunities.

Winston Churchill once said, "A pessimist sees the difficulty in every opportunity; an optimist sees the opportunity in every difficulty." Speakers at the annual conference of the National Institute for Animal Agriculture (NIAA) in Denver, Colo., March 27-28, identified the opportunities in the challenges faced by those in animal agriculture and stressed the importance of feeding the world despite the challenges ahead.

"We can, and will, feed the world," says economist Terry Barr, senior director of CoBank's Knowledge Exchange Division. "The question is what the level of relative prices for land, water and food will be required to achieve that goal in a sustainable manner and what will be the inherent volatility that will surround those relative prices.

"That will tell us about the likely structure of the global and regional markets that will evolve. It will also indicate the size of the required balance sheet, the amount of liquidity, the risk management tools and the human capital that will be needed to be competitive."

With experts predicting the human population to jump by about 3 billion people during the next 40 years, Barr said world meat production will need to increase by 73% and grain production must increase by 49% to meet demand by the year 2050.

Among Barr's list of constraints that could affect this emerging demand were land availability, water supply, technology and efficiency, climate variability, energy availability and cost, and government domestic and trade policy. He urged agricultural nations to invest heavily in research and development toward increased productivity to offset constraints.

Zero in on common ground

Colorado State University President Tony Frank agreed with Barr, pointing out that dwindling agricultural land and resources call for continued, heavy-hitting research and development. Frank advised those in animal agriculture to look at the consumer side and understand consumer concerns and perceptions that can lead to regulatory pressures and oversight.

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— Gary Sides

Acknowledging consumers "are less literate about where food is coming from," Frank asked producers in animal agriculture to zero in on the common ground shared by animal agriculture, consumers and regulators.

Three items on his "common ground" list included

- ►producing/eating a safe product;
- ►being environmentally conscious; and
- ►caring about animal welfare and well-being.

Frank appealed to animal agriculturalists to be proactive, to work with elected officials rather than to wait for regulations and react to them, and to talk and interact with consumers rather than "talk past them."

Universities should get involved by providing neutral, science-based solutions, Frank said, adding, the question every university should be asking is "What more can we be doing?"

Finding a new generation

A Tuesday evening highlight was an upbeat presentation by Miss America 2011, Teresa Scanlan, who set the stage by reminding the audience that "not everybody farms, but everybody eats."

Scanlan articulated that "one of the biggest problems we are facing is bridging the gap between those who are involved in agriculture and those who are three generations or more removed from agriculture." She contends that connecting the generations in various parts of the country can help right the "huge misunderstandings regarding agriculture."

Noting that today's farm operators average between 45 and 65 years of age, Scanlan said a new generation of producers will be needed to replace the nearly 100,000 farmers who will retire in the next decade. In addition, she said there is a "thin, green line standing between affordable, available safe food and our total dependence on foreign countries for food."

"To protect it, we need to raise a new generation of farmers and ranchers, educate and inform the public about the misinformation of modern production agriculture and fight for strong farm policy," Scanlan asserted.

Three rights

During NIAA's Annual Conference closing general session, Brian Rittgers, director of Global Management Development, Elanco, noted that other countries look to the United States as "a country that produces safe, affordable food."

To illustrate his point, Rittgers pointed out that 100 years ago, 50% of U.S. consumers' income was spent on food; whereas, today, that percentage has dropped to just 10%.

Rittgers credited technology with this striking drop, adding that technology does not need to be groundbreaking.

"Technology enables three rights: food, choice and sustainability," Rittgers said. He called food "a basic human right," choice "a consumer right" and sustainability "an environmental right."

He warned those in animal agriculture not to get caught up in the 1% of what he called "the fringe — those who seek food bans and want to dictate what and how you produce." The focus should be on the 99% of food buyers identified by an International Consumer Attitude Study who care about taste, cost and nutrition.

Presentations by Gary Baise, attorney with Olsson Frank & Weeda, Washington, D.C.; Marie Audet, dairy producer from Bridport, Vt.; and Tom Kourlis, sheep and cattle rancher and past Colorado Commissioner of Agriculture, zeroed in on regulations and how animal agriculture can be proactive rather than reactive. All agreed that American animal agriculture is changing but that with change comes opportunity.

Gary Sides, Pfizer Animal Health, closed the conference with a message that resonated across the room. He didn't mince words, noting that, without modern agriculture, "we have no choices." Thanks to modern agriculture, "we have choices."

"Because today U.S. agriculture takes just one person to feed 155, others can pursue careers outside of agriculture," Sides stated, noting that in 1940, one person in U.S. agriculture could feed only 19 people. They become engineers, computer programmers, researchers who discover new cures, doctors who heal more children, and teachers who educate today's children, etc.

"If technology was frozen in the year 1955, it would require an additional 450 million acres — the total land mass of Texas, Colorado, Kansas, New Mexico and Oklahoma — to produce the beef we are producing today," Sides commented. "Globally, if we still achieved yields of 1960, an additional 15-20 million square miles of farmland would be needed to produce today's food supply."

In 1961, the United States population was close to 184 million people. In 2006, that number was greater than 300 million people. Relating those numbers back to 1960, he explained, "If agriculture technology today was the same as 1960, we would have to either expand acres by 63% or decrease food consumption by 63%."

Sides underscored that farming technology enables U.S. agriculture to produce 70% more corn from each pound of fertilizer, use 50%-80% less water, decrease soil erosion by 43% in the last 20 years and produce 18% of the world's total food supply on only 10% of the world's land mass.

An advocate for animal agriculture, Sides commented on the disconnect between science and what's reported in the popular press. Delivering example after example, he recommended that those in animal agriculture "educate yourself, engage and be involved in public policy decisions."

Opening and closing general session presentations, as well as the presentation by Scanlan and a majority of NIAA's council and committee meeting presentations, are available online at *www.animalagriculture.org.*

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Editor's Note: *This article was provided by NIAA, a nonprofit, membership-driven organization that unites and advances animal agriculture. It is dedicated to programs that work toward the eradication of diseases that pose risk to the health of animals, wildlife and humans; promote a safe and wholesome food supply for our nation and abroad; and promote best practices in environmental stewardship, animal health and well-being.*