ANGUS MEANS BUSINESS CONVENTION

his is the best time — ever — to be in agriculture. There's never been a better time to be in agriculture: Phenomenal time!" exclaimed Lowell Catlett. The animated Angus University keynote speaker, known as an exciting futurist, addressed an Angus crowd in Kansas City, Mo., Nov. 5 at the Angus Means Business National Convention & Trade Show hosted Nov. 4-6 at the KCI Expo Center in Kansas City.

Catlett is a Regents Professor in agricultural economics, agricultural business and extension economics and the Dean of the College of Agricultural, Consumer and Environmental Sciences at New Mexico State University.

As an economist, Catlett told his attentive listeners, it was his father's understanding that economists exit college dumber than when they first entered. Openly agreeing with his father, he told his audience, "Somebody went back and checked my profession last year. They found out very quickly we'd made 7,000 forecasts in the last 10 years. We forecast everything from what an individual stock will do to unemployment rate to what meat consumption would be. You name it, we

"The accuracy turned out to be 47% ... You can flip a coin and beat us by 3%," he noted, pausing for the fact to sink in. "Nobody can forecast, nobody knows the future."

While we know we cannot predict the future, Catlett continued, we can, with some degree of accuracy, make a plan for the future. He referred to the state of the world in 1970.

"In 1970 the world had 3.6 billion people. 1970 was the year that the United States became the world's first \$1 trillion economy. The world in 1970 produced slightly less than \$4 trillion," he said. "Guess what? We could not provide those 3.6 billion people 2,450 calories on average for normal bodyweight and maintenance per day."

In 2013, 43 years later, the world produced \$70 trillion, Catlett explained. The United States became the world's first \$17 trillion economy. The population has grown to 7.2 billion people. Now, the world's

The Beef Business: It's Never **Been Better**

Additional consumers and new technology are making the future bright for beef.

by Paige Nelson, field editor

agriculture can feed itself. In fact, he said in the last 10 years, agriculture has produced, for every man, woman and child on the earth, 2,900 calories per day.

"That is phenomenal — that's never happened in history," emphasized Catlett.

Economic growth

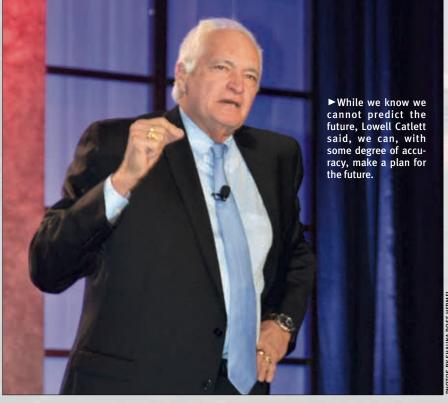
He told his audience that China, India and Brazil housed half of the world's population in 1970. The second-largest economy then was the United Kingdom (UK) at \$250 billion.

The entire output of China, India and Brazil in 1970 was less than the output of the second-largest economy, the UK," he

said. Since that time, all three countries have experienced impressive economic growth. China has witnessed a 19-fold increase; India, a 13-fold increase; and Brazil, a ninefold increase.

Meat protein consumption has increased sevenfold in China and fivefold in India. Surprising due to its cultural and religious beliefs, India has doubled its beef consumption in the last five years. Catlett explained that the first thing people do when they exit impoverishment is change their diet by adding more meat protein.

"So, we think that by 2050 we will have 9 billion people. That's a forecast, we don't know, but we do know this: If it goes to





▶The panel consisting of (from left) John Butler, CEO of Beef Marketing Group; Dan Moser, president of Angus Genetics Inc.; Ron Rowan, director of customer development and grain procurement for Beef Northwest; and Rick Sibbel, director of U.S. Cattle Technical Service at Merck Animal Health, encouraged producers to be lifelong learners when it comes to technology.

9 billion people and incomes keep rising, and they are, we will have to double meat production," he said.

Doubling meat production

In Catlett's view meat production cannot be doubled through pastoral agriculture.

"I am telling you, if you want to double meat production, it's going to be in intensive animal operations. That's where the efficiency, the animal health, and that's where the least impact to the environment comes on board.

"The seedstock has to feed that. There's never been a better time to be in the meat business," he noted.

The meat business is good, but Catlett said the Angus business, especially the Certified Angus Beef LLC (CAB) business, has plenty of opportunity to get better.

"Last year when the world produced \$70 trillion, the *Federal Reserve* reported that the net worth of 121 million households in the United States was \$83 trillion," he said.

According to Catlett, in 2013 the secondlargest economy was China at \$7 trillion. The third-largest economy was Japan at \$6 trillion. The gap is worth more than the output of the second- and the third-largest economies in the world.

"We have more money than we know what to do with!" he pointed out.

He noted, however, money changes people. They have fewer children, and they change their diet. Those in the Angus business, said Catlett, saw those changes coming. He said, with money, consumers "start differentiating a segment in the market, and they do not want just a piece of meat or a piece of beef. They will now ask, 'Is it Angus or can it be certified?'"

In a world of increasing wealth, both in developed and developing countries, Catlett said a company's most important marketing ploy is differentiating and segmenting its market because it adds value to the product.

Complimenting the Business Breed's foresight, Catlett said, "Nobody's done it better in the meat business than you (Angus) folks. Keep on doing it because as we (in the United States) want more Angus beef, I guarantee, in a world that's getting richer, the world does, too.

"Folks, there's never been a better time to be in agriculture because the world has money now, and they want to spend on unbelievable amounts of differentiated and segmented food products," said Catlett, citing growth in organic and gluten-free markets.

Generational transfer

Adding a word of caution, Catlett turned the focus back to American wealth. He said of the \$83 trillion in the United States, two-thirds of it is controlled by the baby boomer generation. "You're going to see, in the next decade, the largest intergenerational transfer of wealth that's ever occurred in 6,000 years of recorded history," he stated.

Then, highlighting some surprising statistics, he added, only 20% of businesses survive second-generation takeover, and only 4% survive the third generation. Referring to

Generation X, the people born in the mid- to late-1960s through the mid- to late-1980s, Catlett reported that the entire generation consists of 44 million people. "When you fire the baby boomers, who [are] you going to replace us with, the smallest generation ever?" he asked.

"Let's talk about the one coming after them. They are the most fun, and you're going to want to pay attention to them because they are your workforce," he transitioned. "They're called Generation Y, though they prefer to be called the millennials. They were born in the late-1980s to the 2000s. They're 75 million strong ... They're the first generation that grew up totally mobile.

"They don't know life without this," he emphasized, holding up his cell phone. "This generation, if it ain't mobile they ain't doing it"

A high-tech world

From millennials, Catlett moved on to emerging technologies. "Do you remember the tricorder from Star Trek?" he asked. "It could do everything you wanted it to do."

A real-life tricorder is on its way, according to Catlett. A team competing for the Qualcomm Tricorder Xprize has produced a device that attaches to the back of a smartphone. Its purpose? It analyzes a drop of blood.

"It does an instant blood cell count of red blood cells, white blood cells. It does an instant reading of whether you're HIV

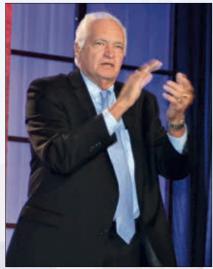
CONTINUED ON PAGE 188

positive or not. Folks, pick what thing you want to measure, it does it," he said. "It doesn't have to be a drop of human blood, either. It changes the face of diagnostics, the likes of which you cannot imagine."

Catlett explained two emerging trends pertinent for agriculture: big data from many different farms and "n of 1" — each individual in the population is unique. "The trend is every cow is a little different. You do a blood sample with your smartphone. Now you have data on that cow, that bull," he added.

People with money like to tell you if your cattle are happy or not, said Catlett. He described a French car company that has a camera in the rearview mirror of every 2015 model. The camera senses the driver's mood, and then plays the appropriate music. Now, imagine a drone, he said, that flies through your cattle herd, looks at a cow's eye, and records whether she's happy or not.

"You put all that data together and you've got a heck of an argument," he emphasized. "You're going to have tools now, folks, that will help you manage [your herd] in ways you never dreamed possible."



► Catlett predicted that one day, through the use of 3D printing, ranchers will be able to print their own tools and parts.

Speaking of tools, Catlett predicted that one day, through the use of 3D printing, ranchers will be able to print their own tools and parts. "We now have the ability to manufacture things in people's garages," he said

Home Depot wants to sell you a device similar to a 3D printer, Catlett told his listeners. They will also sell you the raw materials and digitized blueprints to make parts. He explained, "You won't have to go to Home Depot anymore. If you need a No. 5 washer, you just make it."

How else does this apply to ranchers? Catlett answered that three years ago in Amsterdam, Netherlands, a 3D printer printed hamburger meat. Two years ago leather was printed and experts couldn't tell the difference between the printed version and the genuine.

How else? 3D printers can print vaccines, said Catlett. It's being done.

He concluded, "What a time to be in agriculture. It's going to be tied to everything that makes life better for everybody. And everybody wants what you in this room have, and it's called the highest quality of beef that's ever been produced on this planet."

Editor's Note: Paige Nelson is a freelance writer and cattlewoman from Rigby, Idaho.

Aj

Future of beef industry involves technology

Now is a great time to be in the cattle industry. Markets are high and demand is up. Technology has already played a large role in beef industry success, and it will continue to do so, agreed a panel of industry leaders addressing the role of technology at Angus University Nov. 5, during the Angus Means Business National Convention & Trade Show in Kansas City, Mo.

The panel consisting of John Butler, CEO of Beef Marketing Group; Dan Moser, president of Angus Genetics Inc. (AGI); Ron Rowan, director of customer development and grain procurement for Beef Northwest; and Rick Sibbel, director of U.S. Cattle Technical Service at Merck Animal Health, was moderated by Larry Corah, retired vice president of Certified Angus Beef LLC (CAB).

Technology has already played a large role in the beef industry, especially within recent years. Moser noted the immense advancements in genomic technology and access to data. Genomic evaluation applications and reports show up on his phone now. American Angus Association members can access genomic data online or through their smartphones.

Smartphones have been excellent in education and information dissemination, Butler noted. Rowan added that little things affect many big things. He cited electronic ID (eID) as an example. Those tags track everything about the calves in his feedyard, which lets him pay attention to factors affecting quality.

Sibbel mentioned that the sum total of change in medicine is high. Analysis of a virus, for example, now can tell its origin, how long the calf has had it and how best to treat it. There are huge opportunities with technology to know more about your herd.

Technology helps with communication on all levels, and the panel noted two major themes. Communication between beef industry segments is necessary, and so is communication with consumers.

Said Butler, "We must do a better job of sorting cattle with our available tools to make consumers satisfied. They will pay for quality. It takes an enormous amount of commitment to harmonize each segment. What happens is when a challenge comes in the market, and our commitment leaves, it becomes segmented again."

Sibbel emphasized that it is a great time to be in the animal ag industry. Cattlemen must continue to evolve, improve and differentiate their product, and technology can help with that.

Moser concluded that all cattlemen have the challenge to process new information and technology, but he urged everyone to be lifetime learners and ask questions.

"There is the opportunity to take advantage of technology around the corner to be very profitable. Just take the time to learn about it," Moser said.

The panel presented Wednesday, Nov. 5, during the Angus University program featuring "A Story of A Steak." This extension of the award-winning series of articles in *High Plains Journal* and segments on *The Angus Report* was sponsored with the support of Merck Animal Health. For more information about the Angus Means Business National Convention & Trade Show or to listen to presentations, visit www.angusconvention.com.

- by Kasey Brown, associate editor

188 ■ **ANGUS***Journal* ■ February 2015