

**ADAPTING
TO NEW TECHNOLOGIES
AND USING FEWER
RESOURCES
FOR BACON-LOVERS
EVERYWHERE.**



FARMERS AND RANCHERS DO MORE THAN BRING HOME THE BACON. THEY ARE FEEDING THE WORLD.

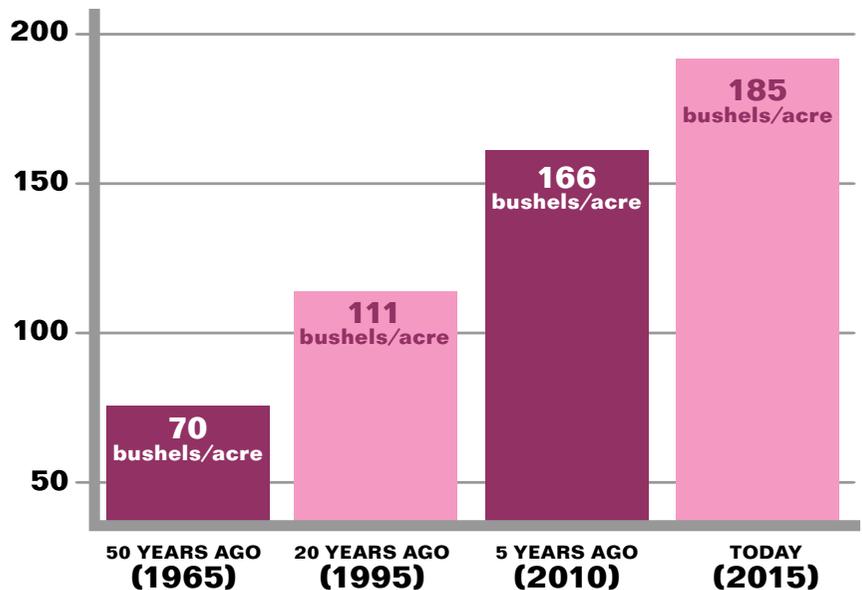
NOW AND THEN¹

In 1961, the U.S. population was about 184 million. By 2006, it had increased by 63 percent to approximately 300 million. If agriculture was no more productive today than it was in 1961, more land would be required or the food supply per person would be reduced 63 percent!

Just as we expect technology to provide us with smarter phones, faster Internet access, fuel-saving cars and energy-wise appliances, farmers and ranchers need to leverage advances in agriculture. As nostalgic as it may be, farmers and ranchers can't meet consumer demand operating the same way as even just one or two generations previous.

Raising food looks much different today than it did 50, 20 — or even five — years ago, with corn production more than doubling since 1965.²

Corn Yields²



The farmers and ranchers of today combine generations of lessons with new technologies and solutions to support their families, and nourish yours.

ADAPTING FOR THE FUTURE

Thanks to advances in technology, American farmers and ranchers are feeding more people using fewer resources. In fact, the average farmer or rancher supplies food for approximately 155 people in the U.S. and abroad, compared with about 26 people in 1960.³

Proper animal care leads to the production of high-quality meat, milk and eggs. Improvements in livestock diets, clean and dry living conditions, regular veterinary care and advances in animal and plant breeding help farmers and ranchers do more with less.

Today's livestock farms and ranches offer animals advanced care. Here are just a few examples:

- **Regulate temperatures during periods of extreme cold and heat**
 - Sufficient warmth is provided to protect animals from the stress of huddling and shivering
 - Efficient fans and misters keep animals cool to avoid heat fatigue or death
 - Advanced ventilation systems keep air circulating
- **Implement innovative equipment.** Automatic milking machines, for example, can cut milking time in half, improve the quality and safety of milk, and reduce stress on cows
- **Develop veterinarian-approved animal-health programs and provide prompt, targeted medical care when needed**
- **Maintain appropriate biosecurity measures to help keep livestock free from disease**
- **Follow best transport practices to avoid undue stress from overcrowding or improper handling**

Pork Production:

HOUSING

Then

vs.

Now⁴

Indoor and outdoor housing; vulnerable to extreme weather, injury, predators and illness

Indoor housing; protected from the elements, illness and predators with comfortable temperatures all year round

FEED/NUTRITION

Unregulated diet including grass, clover and even table scraps

Strictly regimented rations including corn, wheat and soybean meal with added vitamins and minerals

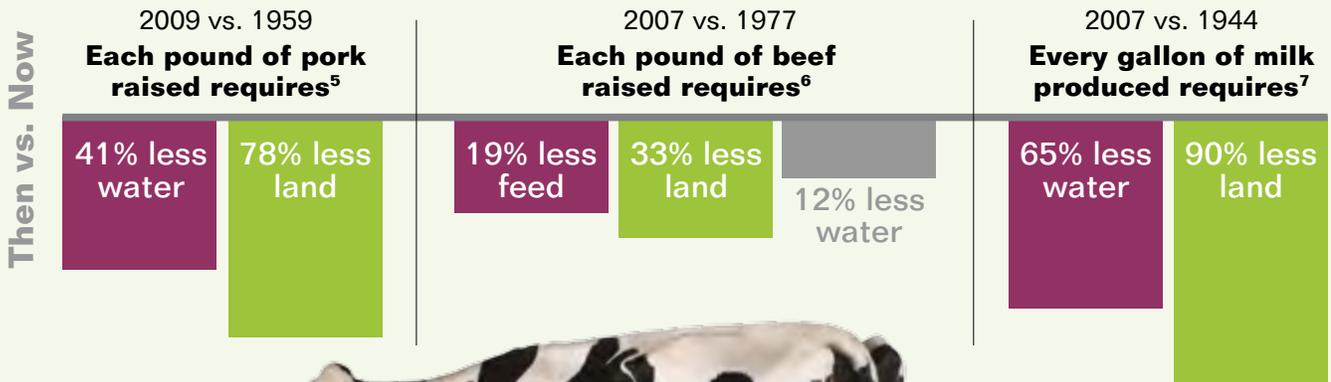
MANURE MANAGEMENT

Little manure containment and reuse; uncertain disposal

Sophisticated systems to capture, control and use manure as fertilizer

In addition, biotechnology helps grow higher yielding, disease- and drought-resistant crops with fewer resources, which in turn get used for livestock feed. Improvements in breeding allow farmers and ranchers to produce more high quality meat, milk and eggs with less feed, labor and resources.

DOING MORE WITH LESS



ANIMAL AGRICULTURE IS MORE THAN CRISPY BACON. IT'S ADAPTING TO CHANGES AND EMBRACING INNOVATION SO FARMERS AND RANCHERS CAN FEED 9 BILLION PEOPLE BY 2050.

Nebraska's livestock farmers and ranchers are a part of the community fabric, caring for the land and animals that feed their families, and yours.

As community leaders and economic contributors, Nebraska's livestock farm and ranch families are responsible neighbors invested in their heritage, their future and the health of the community.

Learn more about Nebraska's livestock farmers and ranchers at
www.farmersandranchersdeliver.com



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¹Midwest Dairy Association. 2014. "Sustainability and Dairy Farming Fact Sheet." Accessed November 2015. Retrieved from: <https://www.midwestdairy.com/wp-content/uploads/2015/08/SustainabilityFactSheet.pdf>

²USDA. National Agricultural Statistics Service, Quick Stats. "Corn, Grain – Yield, Measured in Bu / Acre." Accessed November 2015. Retrieved from: <http://quickstats.nass.usda.gov/#9E5E886B-952D-3592-9F9F-EB5E61D33396>

³Fuels America. 2014. "How Farmers Are Feeding and Fueling the Country." Accessed November 2015. Retrieved from: <http://www.fuelsamerica.org/facts/entry/how-farmers-are-feeding-fueling-the-country>

⁴National Pork Producers Council. We Care Initiative. 2015. "Modern Pig Farming Overview." Accessed November 2015. Retrieved from: <http://www.porkcares.org/our-practices/todays-farming/modern-pig-farming-overview>

⁵Pork Checkoff. 2012. "New Study Shows Today's Pork Production More Sustainable than 50 Years Ago." Accessed November 2015. Retrieved from: <https://www.pork.org/new-study-shows-todays-pork-production-sustainable-50-years-ago/>

⁶Cattlemen's Beef Board and National Cattlemen's Beef Association. 2010. "Beef's Shrinking Environmental Footprint Fact Sheet." Accessed November 2015. Retrieved from: http://www.explorebeef.org/cmdocs/explorebeef/beefs%20shrinking%20environmental%20footprint_fact%20sheet.pdf

⁷Capper, J.L., R.A. Cady and D. E. Bauman. 2009. "The environmental impact of dairy production: 1944 compared with 2007." Journal of Animal Science.