

Twenty First Century Careers in Food & Agriculture: No Longer Just Cows and Plows

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What most people think of when they hear the word "agriculture"



In REALITY, twenty first century agriculture is:

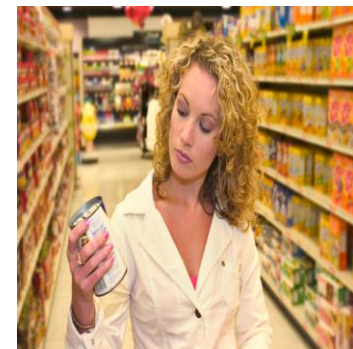
Food systems
Environment
Natural Resources
Supply chain
sustainability
Technology
Marketing
Consumer Science /
psychology
Economics
Risk and crop protection
Research
Training
Trade
Education

Increasingly operated by Women

Today, women farm 76% more
land than they did in 1978.

Female farmers control 7% of U.S.
Farmland & account for 3% of
sales.

Women run one-third of U. S.
horse operations and ¼ of
sheep and goat operations.



Science labeling trade sales insurance law banking/loans public policy marketing energy
 Waste management water media consumer science/psychology security engineering sustainability



The Challenge?



An age-old
perception about
farming still exists



The reality: Agriculture has solid career opportunities

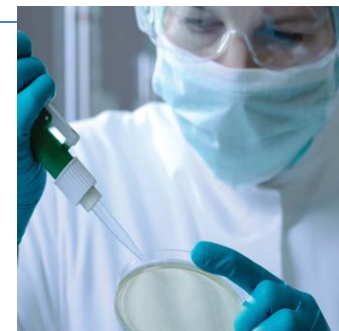
54,400 annual openings

for individuals and baccalaureate or higher degrees in
food, and renewable energy
between 2010 and 2015.

29,300 graduates available to fill them



The largest numbers of scientists, **84 percent** of the total, are needed in the disciplines of plant sciences, plant breeding/genetics, and plant protection



Domestic life science companies need to hire at least

1,000 trained ag scientists!

1/2 need to hold doctoral degrees



– According to a 2013 study by the Coalition for a Sustainable Agricultural Workforce.



#1 Parent worry is...



Are we missing an opportunity?

Parents are most concerned about their child choosing a degree field they can actually be employed in.

“Farmers have become so good at increasing their production that consumers have accepted the perception that food just appears.”

Farming - The Hidden Profession



In 1930:

Families spent 25% of income on food;

In 2014:

Families spend 10% of income on food;

In 1930

22% of US workforce worked in agriculture;

In 2014 2% of US workforce works in
agriculture

In 1930 1 farmer fed 10 people;

In 2014 1 farmer feeds 155 people

Areas of Need

College of Food, Agriculture, & Natural Resource Sciences
at the University of Minnesota reports
shortages in the following career fields:

Mechanics, Engineering, Robotics/Sensors/IT

Regulatory Sciences

Plant Sciences

Farm Management and Farm Labor

Environmental Sciences

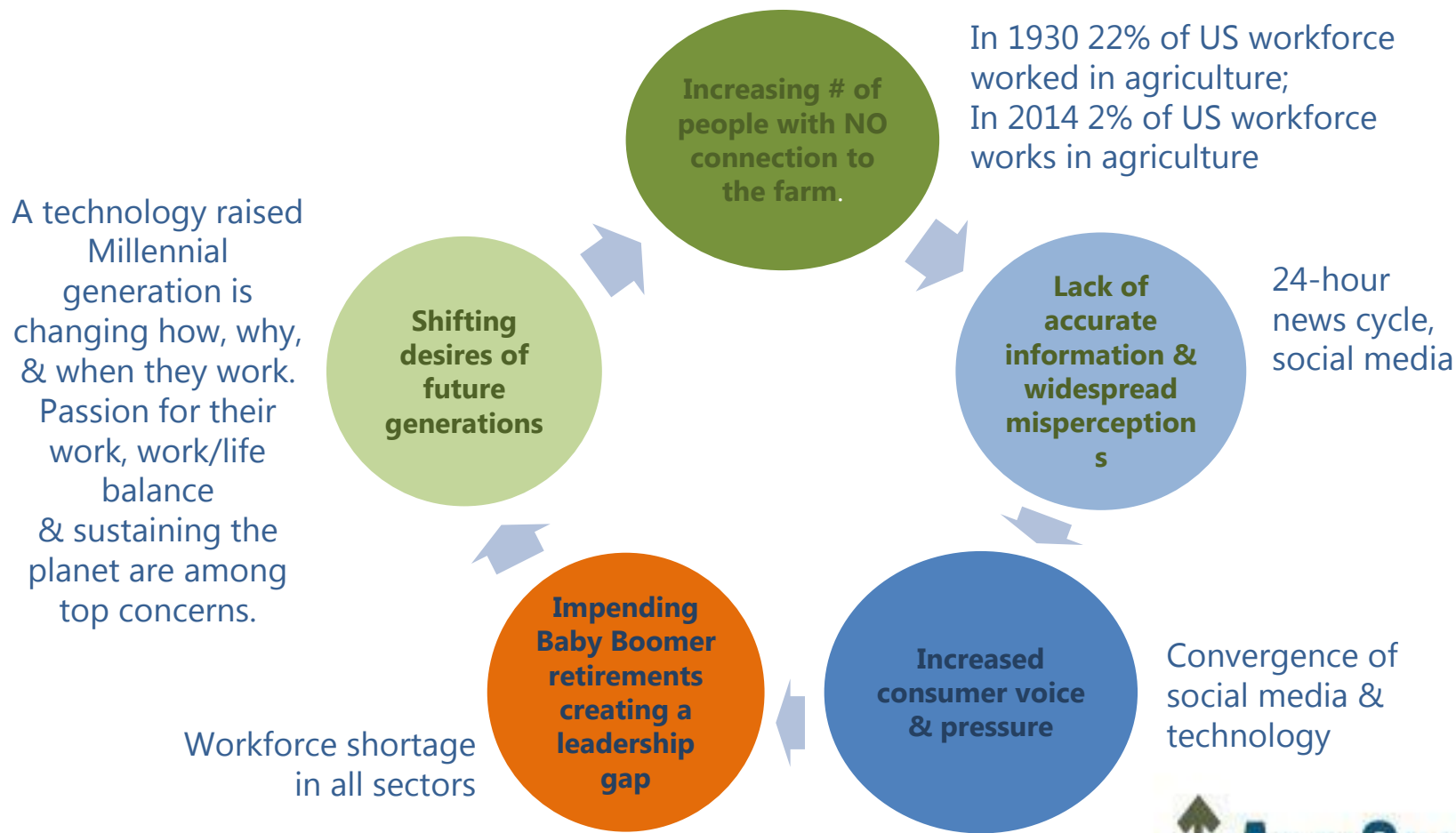
Agricultural Education / Communications

Food Technology and Food Safety

April 2015



The Perfect Storm driving the workforce shortage



What do we know?

We need ag education teachers.
We need food scientists.
We need geneticists.

“We hear from major industries all the time that they’re concerned about where they are going to get their next pipeline of future employees and we need teachers to help create that pipeline.”

Gossen

“There are more than 300 jobs related to agriculture, and farming is just one.”

“This challenge is all the more critical due to the need to double the global food supply to meet the needs of a growing population,” the coalition said in a news release. “The agriculture field is also challenged with limited water and arable land, climate variation, and lower budgets for research.”

Four major factors shape the market for graduates between 2010 and 2015:

1. Global market shifts in population, income, food, and energy



2. Macroeconomic conditions & retirements



3. Consumer preferences for nutritious and safe foods



4. Food, energy, & environment public policy choices



Current strategies for talent acquisition in food and ag jobs

College-age

- Internship programs
- Essay or case study contests
- College scholarships
- Talent Acquisition
- Apprentice Programs

High School and younger

- Research paper
- Scholarships
- Youth Leadership
- Apprentice Programs
- Ag in the Classroom

Why does it matter?



"If we fail on food,
we fail on everything."

Ecologist Charles Godfray

Expected 9 billion people on earth by 2050

Challenges Ahead



Primary issue of the decade



Shortage of large animal vets



Need for Innovation



Feeding a world population



Bio security & food safety



Transportation



Sustainability



Habitat



Productivity



What should we be asking?

Are we asking the right questions?

Could we be working together more effectively to leverage resources?

Are our industry silos (competition) perpetuating the problem?

Are we targeting our career opportunities to the right people?

Is agriculture a danger to itself?
Meaning, do we write people off as credible who didn't grow up on a farm or already have farm experience?

Does a coordinated & comprehensive plan for challenging misperceptions exist?

Are existing strategies for talent acquisition making an impact?

What strategies are being used around the world to address misperception, consumer confidence and workforce shortage?

Is our education system equipped to prepare students for our agricultural needs?

What else is being done?

How do we reach parents?



What is unique about AgriGrowth's work?

Since 1968 AgriGrowth has been devoted to safeguarding and growing Minnesota's robust food and ag industry, earning us the reputation as a **credible public voice for Minnesota's food and agriculture sector**.

AgriGrowth is a nonprofit, nonpartisan member association which serves as a **trusted resource** for policymakers, media, key industry stakeholders, consumers and our members;

AgriGrowth provides **opportunities for networking, relationship building, and collaboration** among our diverse membership of food and agriculture businesses and the service sectors that support them;

AgriGrowth has a public policy director **dedicated to lobbying on behalf of our membership** 365 days a year; and

AgriGrowth **fosters dialogue** between agribusiness, farmers, state agencies, higher education and policymakers, allowing them to be a **well-informed and neutral voice** for policy makers, key influencers and the consumer.



Why become a member of AgriGrowth?

The only organization in Minnesota whose diverse membership and public policy work is **solely devoted** to ensuring a pro-business environment for the food and agriculture sector.

A **point of contact** for sharing your story and informing policy makers about the issues impacting your business and the business climate. AgriGrowth works to know and understand our members' stories which strengthen our position as we work to inform consumers, policymakers and the general public about the value of Minnesota's ag and food industry to our state's economy.

A trusted go-to-source for timely industry information; available only to members.

Membership provides access to **unparalleled opportunities for networking, relationship building and collaboration** with leaders throughout the food and agricultural industry in Minnesota and beyond.

Minnesota's **rich agricultural history, water transportation system and political climate** make it a state to watch as a way to monitor and anticipate federal policies and regulations.



For membership information or presentations

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