



FarmNext

GIVING VOICE TO THE NEXT GENERATION OF FOOD PRODUCERS

**KEY FINDINGS AND SUMMARY
FROM THE 2015 LISTENING TOUR**

GLOBAL PRAIRIE

 YI | ADVISORS



Giving a Platform to the Voices of Farming's Future

When we first decided to create an initiative focused on Millennials studying or entering the agriculture industry, we had a theory. There seems to be a deepening polarization around the topics of food and food production – organic vs. conventional, rural vs. urban, technology vs. tradition – and these issues are also the same that characterize many of the attributes associated with the Millennial generation. Who better to help bridge the gap and bring new perspective to these complex topics than the demographic that stands at the very intersection of these issues themselves: young farmers?

This is a fascinating moment in the trajectory of the agriculture industry. With an aging class of primary operators, half a million are slated to retire between 2012 and 2030, we are seeing that more college students are majoring in agriculture studies than ever before – and at higher rates than in the last fifteen years. The face of this industry is undeniably changing, not only in age but also in diversity, location and discipline. Over the next twenty years, nearly half of the farmland in the U.S. will change hands while this generational shift continues to unfold.

As partners, we were mutually enthralled by these changes and by the opportunity to create a platform where the voices of Millennials entering farming and agribusiness could come together to have a series of conversations on the trends shaping the future of their industry. YI Advisors is one of the leading organizations in the U.S. dedicated to listening and talking with young adults about the issues closest to their heart and minds. Global Prairie, a global marketing firm and certified Benefit Corporation, deeply understands the agriculture industry and the power of research to help drive change in a rapidly evolving marketplace. Paired with the expertise of our sponsors, DuPont Pioneer, CHS Inc. and the American Seed Trade Association, as well as a long list of incredible supporting organizations, we were able to gather some of the brightest young people in the industry together in venues all over the country.

We are excited to share this report, which summarizes the key findings from our first-ever listening tour, which unfolded over the summer and fall of 2015. We were surprised, assured and encouraged by the many voices we heard throughout these conversations, and we look forward to watching where these young leaders take the agriculture industry next. While many questions remain about the future of our national and global food supply, one thing – to us – is quite certain. We're in good hands.



Tom Allison
AUTHOR



Catlin O'Shaughnessy Coffrin
EDITOR



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FarmNext is a joint initiative of YI Advisors and Global Prairie. This research was conducted from July–September 2015, with a culminating summit in Washington, D.C. on February 3, 2016. FarmNext was made possible thanks to the generous support of our sponsors, DuPont Pioneer, CHS Inc. and the American Seed Trade Association. There were many other organizations, individuals and institutions who graciously offered their time and resources to support this initiative.

Learn more on page 18 of this report and by visiting farmnextgeneration.org.

A photograph of a greenhouse filled with rows of wheat plants. The plants are green and have long, thin leaves. The greenhouse structure is visible in the background, with metal frames and translucent panels. The entire image has a green tint. A white rectangular box is centered in the middle of the image, containing the word "OVERVIEW" in white, bold, uppercase letters.

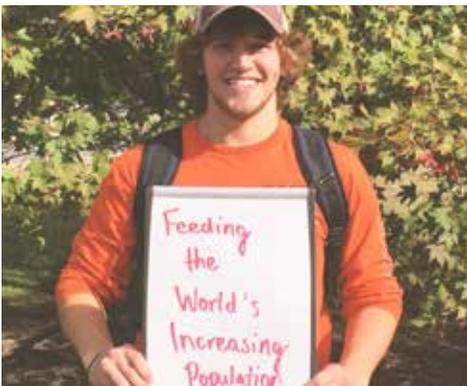
OVERVIEW

Learning Objectives

FarmNext was established to explore the perspectives of Millennials (currently ages 18-34) entering today's agriculture industry in an effort to better understand the trends shaping the future of the industry.

Specifically, our research was designed to do the following:

- ▶ Explore cultural trends that may have contributed to the rise in young adult farmers
- ▶ Evaluate postsecondary education's alignment with the challenges and opportunities in modern agriculture
- ▶ Assess how young adults in the agriculture industry view sustainability, climate change, food safety, technology and seed improvement when making decisions about their careers
- ▶ Examine what motivates young adults to pursue careers in agriculture
- ▶ Identify any regional or industry-based differences in how young adults conceptualize the agriculture industry, its practices and its future as an industry
- ▶ Identify similarities and differences between attitudes of young family farmers and Millennial farmers who are new to the industry



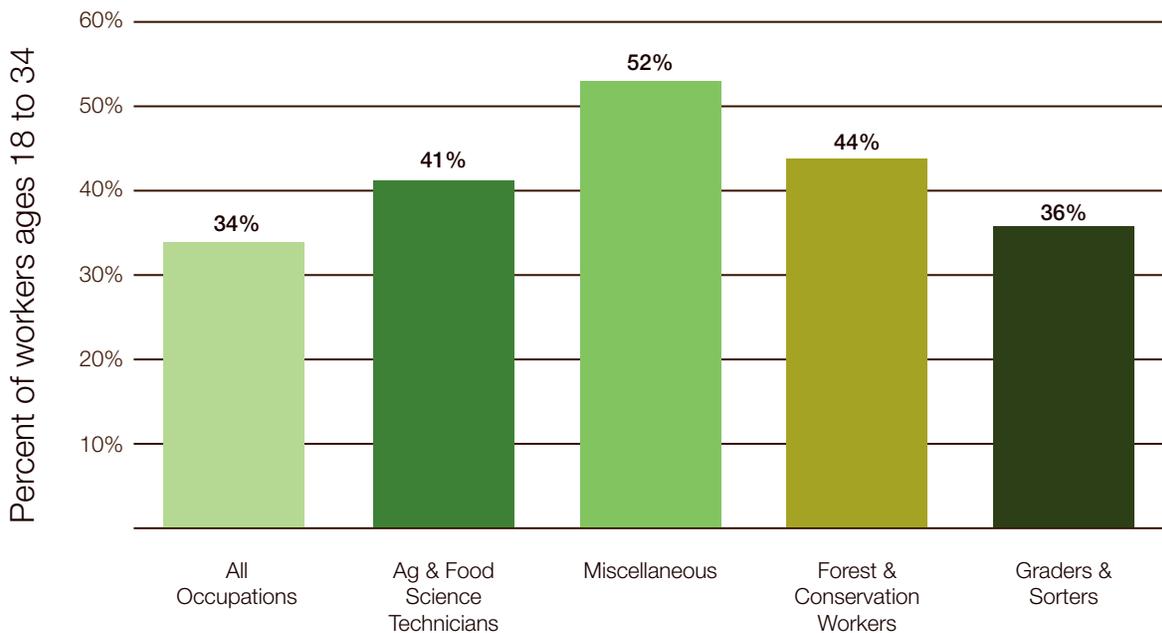
Background

AMERICAN AGRICULTURE IS IN TRANSITION

The American farmer is aging, as the median age reached 58 years old in 2012, continuing a 30-year upward trend.¹ The number of principal operators over the age of 55 increased five percent between 2007 and 2012, making up 62 percent of the group. Not surprisingly, between 2012 and 2030, half a million (one-quarter) farmers will retire.² This leaves American agriculture on the precipice of a historic transition.

Despite the trends of the American farmer, young adults and the Millennial generation demonstrate a renewed interest in food and food production. Looking to the future, an estimated 400 million acres will change hands—totaling nearly half of the farmland in the country, over the next 20 years.³

Young Adults Working in Agriculture



Young Adults are ages 18-34
Source: Bureau of Labor Statistics

¹ U.S. Department of Agriculture, Census of Agriculture, “U.S. Farms & Farmers” (USDA, Washington, D.C.: 2012), 3, http://www.agcensus.usda.gov/Publications/2012/Preliminary_Report/Highlights.pdf

² National Young Farmer’s Coalition, “Building a Future with Farmers: Challenges Faced by Young, American Farmers and a National Strategy to Help Them Succeed”, 9, http://www.youngfarmers.org/reports/Building_A_Future_With_Farmers.pdf.

³ Lukas Ross, “Down on the Farm: Wall Street: Americas New Farmer” (Oakland Institute, Oakland, CA: 2014), 6, http://www.oaklandinstitute.org/sites/oaklandinstitute.org/files/OI_Report_Down_on_the_Farm.pdf.

A quarter of all current principal operators are beginning farmers, meaning they've been on their current operation for 10 years or fewer.⁴ While principal operators trend higher in age, “third operators” trend much lower: 46 years old in 2012.⁵ As secondary operators are often spouses, this third tier of operator is possibly making the business and ecological decisions of the farm. Furthermore, other occupations in the agriculture space are significantly represented by young people: 46 percent of “Farming, fishing, and forestry occupations” are held by workers under 35 years old.⁶ Workers under 35 make up only 34 percent of the workforce as a whole. Occupations like “Agricultural and food science technicians” and “Forest and conservation workers” are very popular with Millennial workers (41 and 44 percent respectively). Young Invincibles recently awarded “Agriculture and food scientist” occupations as one of the “Best Jobs for Millennials,” for its above average median income (\$58,610), projected nine percent growth by 2022, and the high share of young workers as cited above.⁷

America’s college students are also majoring in agriculture studies more than ever before, and at higher rates than in the last fifteen years.⁸ Bachelor’s degree recipients majoring in agriculture grew 39 percent in a five-year period (2008-2013), over double the rate of bachelor’s degrees as a whole.⁹ Agriculture majors outpaced majors like computer science, engineering and public administration.

Growth in Bachelor’s Degrees by Field of Study (2008-2013)

All Bachelor’s Degrees	18%
Health Professions & Related Programs	62%
Agriculture & Natural Resources	39%
Public Administration & Social Services	36%
Computer and Information Sciences	32%
Engineering	26%
Biological and Biomedical Sciences	26%
Communications	11%
Business	8%
Education	2%

Source: U.S. Department of Education

⁴ U.S. Department of Agriculture, Census of Agriculture, 2012 Census Highlights, “Beginning Farmers”, http://www.agcensus.usda.gov/Publications/2012/Online_Resources/Highlights/Beginning_Farmers/

⁵ U.S. Department of Agriculture, Census of Agriculture, 2012 Census Highlights, “Farm Demographics”, http://www.agcensus.usda.gov/Publications/2012/Online_Resources/Highlights/Farm_Demographics/Highlights_Farm_Demographics.pdf

⁶ U.S. Department of Labor, Bureau of Labor Statistics, “Employed persons by detailed occupation and age”, <http://www.bls.gov/cps/cpsaat11b.htm>.

⁷ Konrad Mugglestone and Tom Allison, The Best Jobs for Millennials, (Washington D.C., Young Invincibles: 2015), http://younginvincibles.org/wp-content/uploads/2015/08/8.27_Young-Invincibles_Best-Jobs-for-Millennials1.pdf.

⁸ U.S. Department of Education, Digest of Education Statistics, Table 322.10. Bachelor’s degrees conferred by postsecondary institutions, by field of study: Selected years, 1970-71 through 2012-13, http://nces.ed.gov/programs/digest/d14/tables/dt14_322.10.asp?current=yes.

⁹ Ibid.

Methodology:

The FarmNext Listening Tour

To explore the forces behind these trends, and to identify the challenges and opportunities facing young food producers, YI Advisors and Global Prairie launched FarmNext Generation: a nationwide listening tour with young farmers and agriculture students. We held organized roundtables, conducted site visits, and listened in on workshops and club meetings, capturing insights from hundreds of people over a three-month period. Working with our wide variety of industry partners, FarmNext drew on the combined strength of our team and the insights of our partners to structure an approach that would take a fresh look at the trends shaping the future of agriculture.

We took an even-handed approach, identifying a diverse cross-section of American agriculture, avoiding pre-judgment or priority of one ideology, size, or type of agriculture over another.

- ▶ We talked to young farmers with operations ranging in size from 5,000-acre corn and soybean farms in the Midwest to five-acre organic produce farms close to urban markets.
- ▶ We talked to entrepreneurs implementing cutting-edge technologies to start their own businesses as well as military combat veterans using the natural rhythms of nature to heal from wounds from the battlefield.
- ▶ We talked to 6th generation farmers planning on handing the operation down to the 7th generation, and a recent liberal arts degree graduate who went on to manage successful organic CSA operations.

This paper attempts to elevate and celebrate the diverse voices among today's and tomorrow's young food producers. We also recognize that this is just the beginning of the conversation, barely scratching the surface of the complex and intertwined trends of modern agriculture. But at the end of the day, **we feel confident that while the new generation of food producers faces unprecedented economic, social, and technological challenges, they are also uniquely prepared to address them.**





FINDINGS

Public Perception

YOUNG FARMERS WANT TO CORRECT PUBLIC MISCONCEPTIONS

In virtually every conversation across the country, participants expressed concern over the media narrative and public perception of agriculture. Farmers and students alike felt that the public fundamentally misunderstands the challenges and realities of farming, and generally does not see farmers as good people trying to make the best decisions for their families, their land and their customers.

Others specifically described the public as unaware of the technological and scientific skills and competencies necessary for modern farming. Along similar lines, farmers said they feel that the public misunderstands their independence and assumes they are beholden to large companies, an insinuation “that we’re not very smart.” A Virginia dairy farmer concurred: **“People are still shocked we don’t milk our cows by hand.”**

Most participants we spoke with agreed that the farming community should and can play a better role in modernizing its public image by moving beyond “preaching to the choir” and “talk[ing] within our own circles.” Specific suggestions included a concerted media campaign, writing blogs about their operations or inviting the community onto their work sites through structured visits. When asked whether more facts and education needed to be disseminated to clear up misconceptions, many agreed, but also cited the importance of including an emotional component as well.

FARMERS THINK THEY’RE SEEN AS “JEKYLL AND HYDE”

Young farmers discussed the perception that the public sees them in extremes: as either the embodiment of American values and heritage or the perversion of it, bent on making a profit with no regard to the land, produce, or animals. The young farmers we spoke with wished the public better understood how difficult their work is, and how the romanticism is quickly dissipated through blood, sweat and tears. At the same time, farmers were consistently frustrated with the negative perceptions of farmers as “poisoning the land” and “abusing their animals.”

Participants specifically cited the “God Made a Farmer” Super Bowl ad for Dodge trucks numerous times as an inspiring example of reaching new audiences with the both a realistic and emotional message.

“*There’s a Jekyll and Hyde perception: that you’re either really noble or you’re ruining the environment.*”

– CALIFORNIA FARMER

SOCIAL MEDIA: A DOUBLE-EDGED SWORD

Many young farmers embrace social media and actively use these channels to share about life on the farm. For instance, one female dairy farmer in Virginia runs a popular blog and Facebook page “Milking in Mascara,” and enjoys sharing her story and posting other blogs and articles. We also heard numerous stories of updates or posts going viral and generating floods of negative comments from around the world. As an example, another farmer posted an update of one of her cows birthing triplets, only to receive a flood of personal attacks accusing her of “playing God.” The woman was even concerned about her parents living near the entrance to the farm, and their safety in case one of the online commenters approached the farm. So while social media gives farmers a platform to tell their story, it also allows often uninformed and overtly negative criticism in.

“*I think we bring a fresh perspective to the industry. [Telling our story is] one of the most essential things we could do. This is one of the first opportunities I’ve ever had specific to production agriculture to share my story so I appreciate that.*”

– FARMNEXT PARTICIPANT WHO PLANS TO RETURN TO HIS FAMILY FARM AFTER GRADUATION

IMPLICATIONS

- ▶ The media and industry need to do a better job of telling young farmers’ stories.
- ▶ There is a need for a more realistic perception of the profession, showing the many facets of the job and making it more relatable.



Technology & Innovation

YOUNG FARMERS ARE TECHNOLOGY LEADERS

Most participants were excited about technological developments in the agriculture industry and their potential to improve yields, reduce risk and save money. Furthermore, many saw technology not as an aspirational hope for the future, but a very real, modern part of their operation. **Technology has “created its own industry within the industry...it’s giving people new jobs and made things easier for the farmer,”** said a Virginia farmer.

Farmers on intergenerational operations also see themselves as technological leaders: “We grew up with it. We know the technology. And that’s how we’re furthering the operation.” They cited the intuition that comes with being digital natives: “We figure it out just by playing with it.” Another added: “We’re a generation used to doing tech support for our parents. The farm tech works the same way.” Considering the generational shifts about to occur in principle operators of farmland, **the adoption of technology seen today is just the tip of the iceberg.**

Students at UC Davis were particularly excited about advances in genetics reducing inputs and enhancing environmental conservation, as well as breeds of crops specially adapted to climates in the developing world. While many graduate students felt their studies incorporated the cutting-edge research on campus, many undergraduates felt disconnected from the university’s technological resources and research. “We don’t really have access to that stuff,” said one student referring to his campus’ most advanced technologies.

Other examples of exciting advances cited included seed technology, hydraulic chutes, drone applications, irrigation systems and robotic dairy systems.

“*Tech is making agriculture sexy again.*”

– YOUNG IOWA FARMER

Many of the roundtables referred to seed technology as a significant advance—the ability to find and address the limiting factors for crop yield and know exactly where to place everything has significant implications. “Right now it’s becoming the littlest things – micronutrients that only have two parts per million – and that could be the limiting factor for another 20 bushels of corn which could make a big difference. It’s finding out what those things actually are that will be the next step for a lot of movement in the future.”

The vast majority of students and young farmers alike embraced genetically modified organisms, or GMOs. Many of the students were actively researching or studying advances in GMOs. **Virtually all of the farmers used or knew someone who had used GMOs, praising them for their reliability, efficiency and yields.**

Respondents recognized consumers' concern over GMO products, and in many cases were sympathetic to the confusion that exists in the consumer marketplace. For the most part, participants attributed these concerns to a lack of understanding of the scientific evidence, and an under-appreciation of their benefits and role in ecologically friendly agriculture.

Beyond the operation of the farms themselves, **technology has the potential to connect retiring or transitioning farmers with young farmers who often lack the capital to purchase land on the open market.** Many respondents expressed positive reactions with state-based networks and programs that connect aspiring farmers with current operators wanting to sell their land, but ensure it stays in operation. These programs also often offer mentoring, training and financial assistance programs.

Also of note, some farmers expressed frustration over subscription pricing from various vendors of technology and services, such as predictive analytics, database services, GPS uplinks, and others that come on top of the sunk cost of the hardware. Services that charge per acre “can add up pretty quickly” summarized one Iowa farmer. He continued: “All this technology that lets us interpret the crap out of farming, it costs money. It’s pretty easy to let it eat up any profit...we’ve got salesman knocking on our doors every day trying to sell us some fancy new thing.” Clearly young farmers are feeling that the price of new technologies is a formidable obstacle.

Young farmers still working under the stewardship of their parents suggested it still took some persuading to adopt new technologies in their operations, but at the end of the day, **an assured positive impact on the farm’s bottom line was the most important factor in an operator choosing to adopt a new technology.**

TENSION EXISTS BETWEEN MODERNITY AND NOSTALGIA

Some farmers called out consumers' nostalgia for simpler agricultural methods as misguided. One Iowa farmer described a troubling contrast between the encouragement in the industry to embrace advances in technology while also promoting an outdated nostalgia associated with farming methods from generations ago.

To explain this further, many farmers appreciated how modern techniques like no-till practices have helped them to become more ecologically responsible. One farmer offered an example to contrast modern practices with that of the 1930's: “We had the same drought a few years back, but no Dust Bowl.” **Farmers see technological innovations, like GPS applications, GMOs, and precision-planting as essential avenues to more sustainable and environmentally friendly farming,** particularly contrasted with the rudimentary techniques of generations past.

LINGERING CONCERNS REMAIN OVER POTENTIAL FOR LOSS OF SKILLS

Students and farmers alike expressed concern over the loss of skills due to automation and technology. One graduate student, supervising a lab with underclassmen, said younger students need more explicit directions, and referenced the use of GPS technologies as an example of technology's unintended consequences: “They don't know how to read a map. They don't know the lay of the land. They don't know how to troubleshoot.”

Similarly, a group of Iowa farmers talked about farmers becoming too reliant on auto-steer technology, and forgetting how to drive the tractors effectively. “There's an art to what they're doing and it's slowly being lost.” Many younger farmers and most students largely dismissed this concern however, and saw technological progress in the agriculture industry as a positive. Just as embracing other technologies like mobile navigation and online banking might come with some risks, fearing technology disruption was largely seen as a “doomsday” scenario.

ENTREPRENEURSHIP LARGELY UNTAPPED BUT MARKET IS CHANGING

Young farmers and agriculture students are inherently entrepreneurial, but current support systems and programs are insufficient to capitalize on all opportunities.

“We have so many ideas that could transform agriculture, but securing capital and realizing those ideas is tough,” said one California student. Another added: **“There are startup incubators in every city but in the food and agriculture space, there are very few.”** Venture capitalists actually invested more than \$1.4 billion in agriculture technologies the first three quarters of 2015, more than double the amount invested in 2014 and more than 17 times the amount invested in 2011.¹⁰ It is possible that this surge in investment still isn’t effectively reaching and supporting potential entrepreneurs like some of the ones we talked to.

¹⁰Amina Elahi, “The big money of changing food and agriculture tech”, Chicago Tribune, November 4, 2015.

ENTREPRENEURSHIP IN ACTION

Trevor Witt, a student at Kansas State University, started his own business providing unmanned aerial services to Kansas farmers.



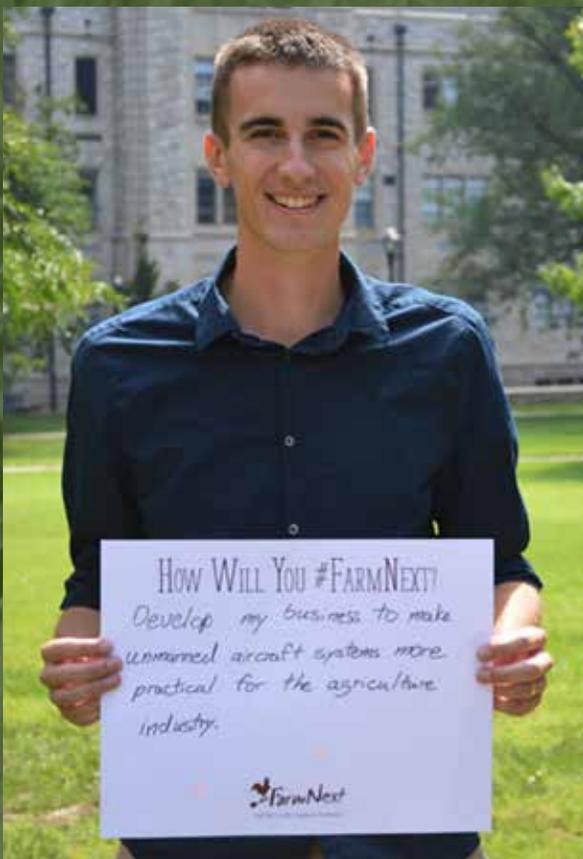
CHRIS PEAK
NATIONSWELL
SEPTEMBER 24, 2015

Trevor Witt, a third-year student at Kansas State University in Salina, spends most of his days flying unmanned aircraft systems, or drones. He’s involved in a project in the school’s entomology department — with “the bug guys,” as he says — studying techniques for early detection of invasive species. Witt spent the summer mapping sorghum fields, looking for evidence of an aphid that can ruin an entire harvest in just a few weeks. “If you can

IMPLICATIONS

- ▶ Young farmers are driving technological change in agriculture, and will continue to lead adoption and integrate new technologies in their work.
- ▶ Young farmers and agriculture students are inherently creative and solution-oriented, but many of their ideas might be untapped.
- ▶ Technology and environmental conservation go hand-in-hand, opening up potential for new allies and relationships.
- ▶ Many agriculture subscriptions are fragmented, suggesting potential for consolidation.

detect that aphid early on, you can spray that specific area to get rid of it,” Witt explains. With a camera shooting in high-resolution visuals and near-infrared imagery, Witt’s drone flies over fields of crops, looking for a shiny, sugar-dense resin on the top of leaves and a black underside — the telltale sign of this aphid’s infestation.



Witt, who dates his interest in unmanned aircraft to his high school shop class, says the primary goal of his research at K-State is “dealing with information overload.” His team is “translating all this data that we can collect and make actionable solutions,” he says. “Earlier, using satellites, the data pixel had a 15-acre resolution; now data pixel resolution is sub-centimeter. It just gets significant amounts of data even in the smallest field.”

For now, the farmer must take action against the infestation himself. But eventually, perhaps a decade from now, a grower won’t have to do a thing: he’ll have another drone or self-driven tractor that can automatically spray the area. “That’s the end goal when it comes to mapping,” Witt says. Unmanned aircraft systems aren’t the end-all solution, he concedes, but it’s “an extra tool in the toolkit.”

Economics

STUDENTS AND FARMERS ARE VERY OPTIMISTIC

Agriculture students are optimistic about the promise of the agriculture industry but are also pragmatic and clear-eyed about the future. Students were very confident about their ability to repay their student loans after graduation, due to the growth and sustainability of the sector. “Everyone’s got to eat,” said one student, “so it’s not going anywhere.”

Students in particular were excited about the growth and diversity of ways to get involved in agriculture. “No I won’t be involved directly in production, but I’ll find my niche. There’s so much to do on the business side, marketing, communications, science...”

At the same time, **access to capital was consistently cited as a major barrier to successfully entering the industry.** Young and aspiring farmers were very concerned about amassing the necessary cash and credit to purchase land and equipment. Other farmers felt comfortable with the sustainability of rented land, citing various advantages to going this route. Also significant, young farmers expressed a greater comfort with sharing equipment, bartering for goods and services, and generally working cooperatively to overcome the challenges in owning and operating on a more individual basis.

FIRST GENERATION FARMERS FACE HARDER CHALLENGES

Aspiring farmers from non-agricultural backgrounds understandably face steep challenges around accessing and securing the capital to get on and work the land. “If you didn’t grow up in agriculture you have almost zero chance right now in today’s world in getting in and starting and making a living doing it...the price of equipment is so astronomical, bankrolling someone like me at my age is impossible, and the land is so outrageously high,” said one Iowa farmer who inherited his family’s land.

“I can’t just start farming because of student debt,” said one student in California. Another added: “You have to commit to hobbling along with another job for five years to make farming work.”

YOUNG FARMERS SEE LACK OF SUFFICIENT RURAL ECONOMIC DEVELOPMENT

Young and aspiring farmers are very concerned about the broader economic sustainability of rural America. Keeping a farm in the family is difficult when there are fewer economic opportunities, particularly those outside of agriculture, for spouses, other family members or friends in a rural community. Current young farmers, in particular, were **vocal about the need to build up rural America and ensure access to broadband, schools, health care, and grocery stores.** “There [are] not a lot of jobs in areas where there’s farming, except farming.”

Young farmers and students alike saw the possibility or the need to leave home to work in other industries for a few years, before coming back to the family operation.

INPUT COSTS DO NOT REFLECT COMMODITY PRICES

Iowa farmers in particular felt that the price of seed reflected what farmers could pay. “Almost all the data is out there, you know the average rent for a farm the cost to plant the seed, the yield you’ll probably get, so they know what the margins are,” said one farmer.

That was not the case with other inputs. We heard a common story of when the price of corn was really high, the price of inputs went up to match the commodity prices. But when commodity prices declined, the price of inputs tended to lag behind, and aren't currently reflecting the new lower commodity price.

IMPLICATIONS

- ▶ Agriculture students are excited and optimistic about the longevity and sustainability of their future careers.
- ▶ Economic prosperity for farmers and farming communities requires rural economic development.
- ▶ First-generation farmers face unique and significant challenges, but the future of food production also depends on replacing retiring farmers.

PIEDMONT VIRGINIA COMMUNITY COLLEGE

Throughout the tour we heard about the value and need for technical skills that four-year institutions can at times fall short of providing. That's why we visited Piedmont Virginia Community College (PVCC) in Charlottesville, Virginia. In addition to more traditional certificate programs in small engine repair and welding, the school offers certificates in viticulture and enology, or grape growing and wine making. Led by Virginia-wine industry professionals, the program combines in-class instruction with hands-on learning in the local vineyards and wineries. Students range from current owners and operators looking to sharpen their skills, to novices looking to get involved in Virginia's growing wine industry.



Piedmont Virginia Community College Students processing grapes at Blenheim Vineyards, Charlottesville, VA

Workforce & Education

COLLEGES NEED TO ADOPT INTERDISCIPLINARY APPROACH

Students expressed frustrations in “disciplinary silo-ing” feeling that their programs do not offer enough cross-departmental education and training, and instead narrowly focusing on a given discipline. For instance, one recent agronomy graduate had started farming but didn’t take a single economics or business class. Many farming jobs require science, finance, and communications skills to be successful. “We’re sectioned off into our disciplines...it’s a missed opportunity.” “It seems less and less appropriate to draw divisions solely along the lines of content.” In fact, **one group of students were surprised they hadn’t met each other before the FarmNext roundtable, despite the fact they all attended the same university** and shared a common approach and aspirations in their studies.

INTERNSHIPS, APPRENTICESHIPS AND PRACTICAL SKILLS ARE NEEDED

While many participants saw higher education as a necessary prerequisite to careers in agriculture, others expressed skepticism in a college’s ability to provide practical skills and experience. Participants roundly praised programs like Future Farmers of America, particularly for their leadership skills development and networking with other young people, but also suggested they could incorporate more practical skills into their programming.

A young farmer in Virginia wished he had more practical skills before getting started: **“When you’re the farmer, you’re the grower, the marketer, the accountant, the mechanic. We didn’t understand that getting in.”**

A Virginia farmer said he went back and forth over offering internships and apprenticeships because the experience “isn’t going to help them start a farm because they’re not making any money.” He added that for most operations “it’s just cheap labor.” At another convening, a farmer said most internships aren’t offering any real training in the science or business aspects of farming.

Most students appreciated the involvement of corporations’ support of campuses, through sponsored scholarships, guest lectures, and capital improvements, but felt that internship opportunities could be improved. Some students cited campus clubs as a good avenue for businesses to connect with like-minded students. However, one student felt exploited by her internship with a major agribusiness, where she performed menial work for long hours at a time, but didn’t feel like she learned a lot about the business.

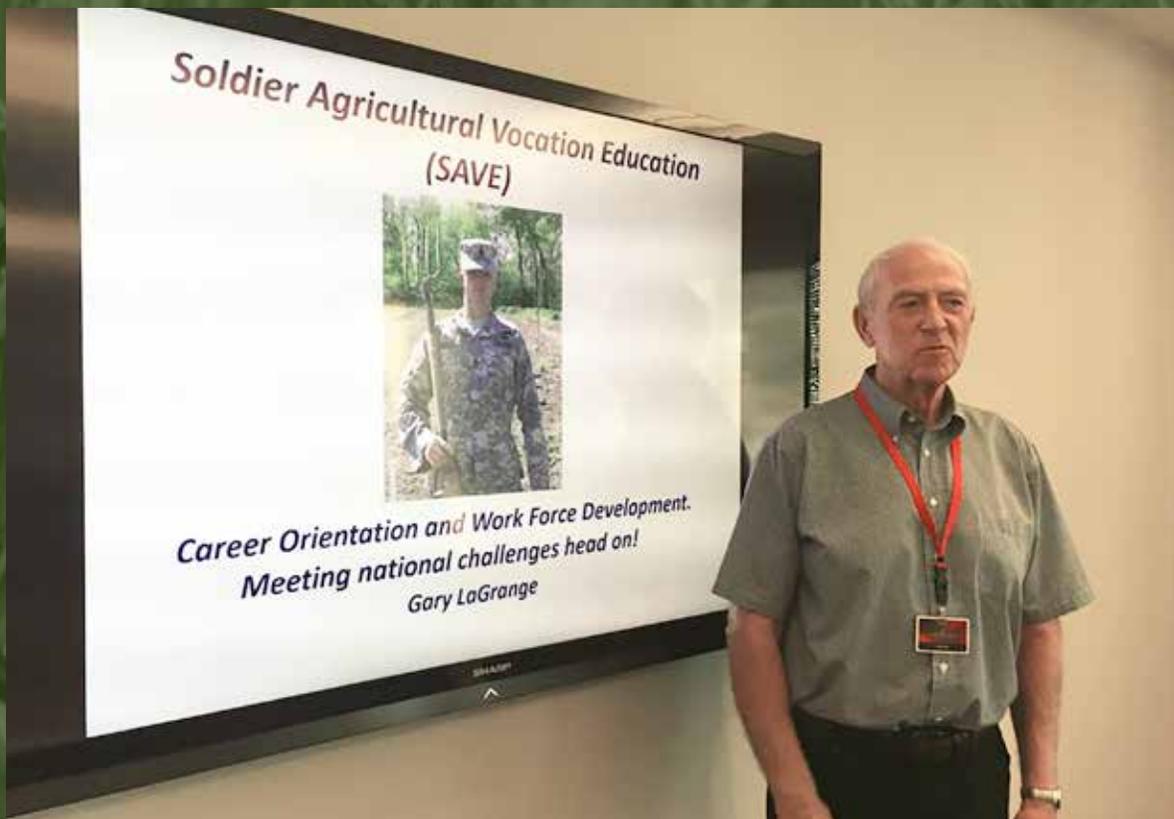
During the tour, numerous veterans and veterans groups shared their efforts and progress helping veterans start farming, but also noted the challenges around veterans securing access to land and coordinating all of the different programs around the country. “The problem is they’re so spread out,” said one veteran and farmer in Virginia.

COL. GARY LAGRANGE (RET.) AND THE SOLIDER AGRICULTURAL VOCATION AND EDUCATION (SAVE) PROJECT

According to the National Center of Homeless Veterans, about 1.5 million additional veterans are considered at risk for homelessness because of extreme poverty, lack of social supports, poor housing conditions and sub-standard housing. At the same time, 45 percent of veterans are from rural areas, and the United States Department of Agriculture has identified the need for 100,000 new farmers. So veterans need help transitioning, veterans largely come from rural areas, and America needs more farmers.

With these facts in mind, Col. Gary LaGrange (Ret.) is launching the Solider Agricultural Vocation and Education (SAVE) project. His vision: a 100 acre educational and working farm that pairs hands on experience with instruction to help our nation's veterans transition into farming. The first farm, near Manhattan, Kansas, could act as a model for land grant universities around the country, offering therapeutic rehabilitation and training in diverse food production like corn, beans, wheat and alfalfa, a dairy operation, cow/calf operations, and beekeeping. (It turns out that beekeeping has been used as therapy for returning veterans since World War I).

Considering 60 percent of veterans who retired from the military due to injury were under the age of 35, LaGrange's SAVE project is another great example of how agriculture and food production connects virtually every aspect of American life, including helping our veterans returning from the battlefield.



LaGrange spent 28 years in the U.S. Army and served as commander of Fort Riley during Desert Storm. He grew up on farms in Iowa and Minnesota and for the last five years has dedicated his time to helping veterans return to civilian life in agriculture.

LaGrange understands the unique problems facing veterans returning to civilian life: “They’ve been in an environment where they’re told when to go, where to go, how to do things and now they’re told to be independent.” It makes sense that agriculture, with its seasonal rhythms, could recalibrate veterans to a routine of peace and productivity.

LaGrange’s dedication and emotional investment in providing a better transition for returning veterans is clear, “These guys deserve it, you know? I just don’t want to happen to them what happened to a lot of us who came back from Vietnam when we were just sort of shucked aside and abused in some cases,” LaGrange said. LaGrange can tick off dozens of veterans who have already benefitted from participating in interim education and training programs, including one young man who previously attempted suicide but found peace and healing through beekeeping.

LaGrange has worked closely with Kansas State University to develop the project, including the business plan with agriculture finance professors, the agronomy department, and has even partnered with the school of architecture to help design the operation. Clayton Holthaus, the manager of the University student farm, is a specialist in agricultural therapy and is also involved.

To help fund the project, LaGrange processes and sells honey under the Golden Prairie Honey Farms label, stamped with USDA’s “Homegrown by Heroes” certification. Finding the capital to buy and start the farm will be a challenge, but LaGrange is optimistic:

“We spent \$3.1 billion to pay farmers to clean ditches out in Afghanistan so they can grow poppies more efficiently. If we can spend that kind of money in Afghanistan, for our wounded warriors we can do something with the money required here to do it.”

“This is something this country needs: farmers.”

IMPLICATIONS

- ▶ Colleges need to reform curriculums to be more interdisciplinary, reflecting the reality of modern farming.
- ▶ Corporations and farm operators need to offer more high quality internships and apprenticeships that state and local governments could incentivize.
- ▶ Our nation’s veterans carry tremendous potential to bring farming into the future.

General Attributes

OPPORTUNITY FOR COLLABORATION AND COMPROMISE

Millennials want to do business differently than the older generation and are much more comfortable with “shades of grey”—this came through in the ways they talked about technology, the ways they want to work with one another and band together as an industry, and their preferred approach to major policy issues like climate change.

Some, but not all, focus group participants noted that this generation is much more open to working together than their parents’ generation and that we’re likely to see the rise of cooperative business structures, particularly for capital-intensive purchases. Many are weary of drawing the same battle lines that older generations have drawn when it comes to environmental issues, animal rights issues and other hot button topics. Millennial farmers feel a big need to work to capture the hearts and minds of the “moveable middle” to bridge gaps with consumers. For instance, on climate change, some focus group participants noted the need for the industry to be ahead of the movement—not behind it.

INTEREST IN GLOBAL IMPLICATIONS

Young adults are very interested in the international dimensions of agriculture, particularly in the developing world. Students also appreciated studying alongside international students.

There was a unique sense of the value of collaborative and shared knowledge, particularly in the best practices research. One student working in conservation research said: “I’m doing this for the world. I’m getting chills just talking thinking about it...There’s so much potential.” Another student cited biotechnology as “something we can help Third World countries with.”

THE ENVIRONMENTAL IMPLICATIONS ARE READILY ON THE MINDS OF YOUNG FARMERS

Agriculture students are very conscious of the environmental impacts of agriculture, including soil degradation and climate change. Specific positions varied, but across ideological lines there was a strong sense of the farmer’s role as environmental steward.

Young farmers also care about the environment, and protect it for their families and their livelihood. One farmer commented: “We live on this land. We’re the first ones to drink the water from the well on the property.”

IMPLICATIONS

- ▶ Agriculture companies and agriculture schools should be prepared to quickly adapt to Millennials’ unique traits and approaches to working in food production.
- ▶ Modern farming transcends our domestic borders, opening up potential for international partnerships.
- ▶ Today’s young farmers are very environmentally conscious, which also reflects today’s young consumers.



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& OUR PARTNERS**



About FarmNext

FarmNext was launched in 2015 as a joint initiative between YI Advisors and Global Prairie with the aim of creating a platform to help elevate the voice of young farmers on a national scale at a time when farming, technology, and the source of our food is increasingly in the spotlight.

WWW.FARMNEXTGENERATION.ORG



YI Advisors

YI Advisors is a full-service social impact firm specializing in Millennials. As the consulting arm of Young Invincibles - the nation's largest youth advocate organization - we offer a full range of services to reach, activate, and serve our generation.

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This report was produced by a team including Tom Allison, Tobin Van Ostern, Clarissa Unger, Katie Keith and Sarah Schultz from YI Advisors, and Catlin O'Shaughnessy Coffrin, Kaylie Wallace, Dave Katzer, Rick Thaemert, Katie Mogul and Lisa Lorek from Global Prairie.

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