A Conversation with Dr. Vikram Mansharamani

The afternoon keynote speaker at the 2016 AgriGrowth Annual Meeting will be Dr. Vikram Mansharamani. Dr. Mansharamani is a global equity investor and lecturer at Yale University. He is a nationally renowned speaker and conference attendees will have the opportunity to hear him apply a multi-lens approach to help understand the rapidly-changing global economy, and the implications it has on Minnesota’s agriculture and food sectors.

In advance of his address at the Annual Meeting, AgriGrowth had a conversation with Dr. Mansharamani about some of the pressing topics facing the food and ag industries. The interview, which has been edited for length and clarity, is below.

Agrigrowth: what global economic trends should those in the ag and food sectors be watching in the next few years to position the sector for success?

Dr. Vikram Mansharamani: One of the most prominent, and I would argue most important, trends affecting agriculture is the simple demographics of the world. We have an aging population in the developed world, and in the emerging world, you have a young population that is growing very, very rapidly.

Another trend within this trend: within the emerging markets, there is a shift in diets taking place. Diets are getting more protein intensive and the protein intensive diets are far more grain intensive than grain-only diets, because obviously the livestock need to eat.

I think we have the potential for an exponential increase in demand through just those two trends.

But there are other trends to pay attention to.

One is technology and the explosion in productivity that I see happening in the world. This is happening to the world at a time when there is already too much supply and not enough demand. We have too much capacity and not enough demand for the goods that that capacity can produce. Productivity makes that problem worse. So technology in some ways is making that problem worse. We need to watch that. The food and

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agriculture sectors are not immune. Can you imagine prices going down significantly due to technological advancements? That is a possibility.

Another trend: the emerging market middle class is booming, but it is worth watching the negative impacts of the Chinese investment bubble bursting, as it washes over the world. Its slowing dramatically the growth of the middle class in places as varied as Chile and Brazil, Nigeria, India, and even Australia.

**AG**: How do we connect the emerging markets that are home to large, undernourished populations, with all the capacity we have in the Midwest to produce wheat, barley, soybeans, and corn?

**VM**: One other trend I see, a serious mega-trend overarching all other trends: I believe we are seeing early signs that globalization is in retreat. We’re seeing increasingly nationalist focused policies, with a protectionistic approach to trade policies rearing their head everywhere, in Europe, in Asia, in Africa and I look at both of our candidates for the presidency, and they both say similarly protectionistic things. I think it has to do in this world we are in—when capacity is exploding and prices are falling, you want to protect your local producers. That doesn’t necessarily help solve the problem in the long run.

Free trade I believe is the best way to get economic gains that help supply and demand meet most efficiently. In this protectionist rising world, it is not inconceivable that you can have extra supply, falling prices here in America and exponentially rising demand and high prices somewhere else and the two can’t meet because of political interference through regulations and other policies. That is one possible negative outcome of all of this internal focus.

Brexit is an indication that people want to look out for themselves before they look out for the group.

**AG**: We have talked about some of the challenges, and we are well aware that are currently facing an economic downturn in the ag sector in Minnesota—do you see any signs of optimism?

**VM**: Longer term, I am really bullish, and here’s why: the emerging market middle class is going to explode. Even if all these countries (China, Brazil, for example) grow at a slower rate, there is going to be an explosion in middle class consumption. The fastest growing countries in the world are also the fastest growing populations in the world. As they grow, there will be more mouths to feed, and there will be more protein put in mouths, and there is going to be a huge upside pressure on demand. In due time, that will come through to much higher prices throughout the ag economy in the United States. Because we continue to be the most productive agricultural land in the world.

Want to learn more about Dr. Mansharamani before hearing him speak at the Annual Meeting? Read weekly comments from him on LinkedIn, see videos of other speeches on YouTube, and follow him on Twitter at twitter.com/mansharamani
PURIFIED WATER REUSE PILOT PROJECT AT GNP COMPANY

Demonstrating the Leadership of Minnesota Agriculture

For those of us who have been immersed in Minnesota culture long enough, there’s no denying these certainties: when we lose a loved one, a hotdish shows up at the door; if our car gets stuck in a snowbank, a fellow Minnesotan, ready equipped with emergency shovel and can-do attitude is right there to help; and when our neighbors need a hand, we’re there to lend it, kids and all. Quite frankly, to be Minnesotan means having a pull-together spirit and hardiness that’s the envy of many other States. AgriGrowth is a perfect example of this spirit, with disparate agricultural sectors mobilizing and working together for the good of our industry and all of Minnesota. But it’s not alone. That same spirit is also reflected in business and partly explains why Minnesota is home to so many Fortune 500 companies, particularly in the agricultural and food spaces.

Though not yet a Fortune 500 company, Minnesota born-and-raised GNP Company—makers of the premium natural chicken brands Gold’n Plump and Just BARE Chicken—thinks like one. This past summer, the company demonstrated its innovative spirit when it showcased ground-breaking, cutting-edge water purification technology at the company’s Cold Spring, Minnesota processing plant. With equipment provided by two other Minnesota companies, GE Osmonics and Nanostone Water for the pilot, the goal was simple: to demonstrate in a reliable, consistent, repeatable, and transparent way to the Minnesota Department of Health that water purification technology can effectively scrub used water to a standard which exceeds that of drinking water. Using ultra-filtration technologies and a multi-barrier approach to treating wastewater to an extremely high standard, this technology could potentially allow companies like GNP Company to reduce groundwater withdrawals by up to 80 percent and reuse water in its processing plant up to 5 times. With a million gallons of water used each day at this single location, most would agree that the potential water savings and positive impact for the environment are astounding.

The potential water savings and positive impact for the environment are astounding.

GNP Company plans to continue to collaborate and work alongside regulators in the hopes of creating better, more relevant food safety regulations for reuse that fit today’s current reality. And the company is optimistic that there’s a feasible solution to this challenging, yet entirely crossable, hurdle. This is because when food safety regulations were created decades ago, groundwater quality was much better and water purification technology wasn’t where it is today. But the dramatic transposition of these factors are now game-changers. Additionally, there is the hurdle of consumer education and acceptance for this type of reuse, because without consumer confidence in our products, we lose our purpose and promise. However, with consumers being increasingly concerned about food production’s impact on the environment and awareness of their own impact, receptivity to new, innovative water purification technology for this purpose may meet with more acceptance. Another reason for optimism.

For our AgriGrowth stakeholders, we offer this: for individuals and organizations who are interested in being a part of this solution, advancing awareness or collaborating further, we invite you to contact Lexann Reischl, Public Relations & Advocacy for GNP Company at lreischl@gnpcompany.com or 320-240-6290 for more information. With Governor Dayton’s recent announcement of Water Quality as a key State initiative and focus, along with growing pressure on municipalities and industry to source and develop more sustainable water solutions, this is an excellent opportunity for Minnesota to blaze a new trail with innovative thinking, technology and agriculture. And to demonstrate the leadership of Minnesota Agriculture. Together.
A Conversation with Dr. Margaret Zeigler

The Morning Keynote Address at the 2016 AgriGrowth Annual Meeting will be delivered by Dr. Margaret Zeigler on the topic of "Agricultural Sustainability in an Uncertain Season." Dr. Zeigler is the Executive Director of the Global Harvest Initiative. GHI is a private-sector voice for productivity growth throughout the agricultural value chain to sustainably meet the demands of a growing world. AgriGrowth talked recently with Dr. Zeigler about some of the issues related to the mission of GHI—that conversation, which has been edited for length, is below.

AGRI GROWTH: You have said that the U.S. needs to increase our investments in agricultural research—how is research related to agricultural productivity and sustainability?

DR. MARGARET ZEIGLER: Farmers can innovate and make their farms more productive in many ways. But due to the high cost of research and long-term time horizons required, governments are better suited to invest in multi-year research programs that deliver new innovation to a wide number of users.

Productivity in agriculture goes hand in hand with research and has resulted from a collaborative and sustained commitment by many sectors of U.S. society—including farmers, the U.S. federal and state governments, entrepreneurs and agribusiness companies, financial institutions, land-grant colleges and universities and extension agents—that together deliver science-based innovation and best practices. Research for agriculture provides public benefits that private-sector companies can then adapt and add further value for specific producers in local agricultural conditions.

Major challenges today include creating a more nutritious, safe, and affordable food supply and conserving water and soil while minimizing the release of carbon in agricultural production. Research also must center upon how to reduce food and agriculture waste and losses along the production chain.

AG: What impact would the approval—or failure—of the Trans Pacific Partnership (TPP) have on the agricultural industry in the United States?

MZ: The TPP is a regional trade agreement among 12 countries, including the U.S., that account together for 36 percent of the world’s GDP. Strong economic benefits are expected to accrue from implementing the TPP to all the countries involved.

By 2030, the increase in annual real incomes from the TPP in the U.S. alone would be $131 billion; and much of our exports will be agricultural goods, given the U.S. advantage in productive, efficient agriculture systems and the rising demand for food in Asia. USDA estimates that the value of U.S. agricultural exports to TPP partners in 2025, just nine years from now, would be five percent ($2.8 billion) higher than without the TPP agreement. In particular, producers of cereals, dairy and meat would benefit from the TPP agreement due to the greater market access provided by the agreement.

What’s more, the TPP keeps labor and the environment in focus by harmonizing standards. TPP enhances the ability of countries to enforce laws on wildlife and labor protection, and would improve global efforts to abolish child labor and gender discrimination. On the energy front, the TPP boosts the adoption of clean energy by cutting tariffs on renewable energy technologies.

AG: From your perspective, what is the biggest challenge to meeting the demands of feeding a growing world, and what can farmers and food companies in Minnesota do to help meet that demand?

MZ: If we are going to sustainably produce the food, feed, fiber and fuel we need for 9.7 billion people in 2050, we need policies and public sector investments that prioritize productivity and stimulate innovation.

A recently published report found that since 2003, Africa countries who made significant investments in agriculture have seen farm productivity rise by an average of 6 percent; those that did not invest in agriculture, saw almost no productivity growth. According to Global Harvest Initiative’s annual GAP Report®, Africa is a food-deficit continent and will need even greater productivity gains in all countries and agricultural sectors to satisfy its rapidly growing demand.

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In the U.S., public investments in agricultural research and extension are the primary driver behind the extraordinary productivity of American farmers and food producers. Even so, U.S. public sector investments in ag R&D have declined 6 percent since 2000. R&D investments have a long gestation period and require steady investment to bear fruit and to reach agricultural producers with proven practices and technologies. We need to reverse this trend to ensure that our farmers and food companies have the tools they need to be more productive and sustainable, and to remain competitive in a global agricultural marketplace.

Minnesota farmers and food companies are some of the most productive and efficient producers in the world. They can be powerful advocates for increasing and improving public agricultural R&D investments. They can also be effective partners in places like Africa, and support the development of productive value chains for food and agricultural products.

Learn more about Dr. Zeigler and the Global Harvest Initiative at globalharvestinitiative.org and on Twitter at twitter.com/harvest2050
TRENDS IN AGRICULTURE HIRING AND RECRUITMENT

Survey Results and Job Analyses Suggest Industry Shift

Contributed by RealTime Talent

All signs point to a need to elevate the agriculture related workforce needs and opportunities that exist in Minnesota as well as the U.S. Dramatic mechanization in agriculture has increased efficiency and reduced the need for farm labor over the past century and opened the door to new types of jobs in agriculture, including more high-tech and high-wage opportunities. Agriculture companies, trade associations, and higher education in Minnesota have witnessed this shift, but in many cases these employment opportunities have not effectively reached the general public.

According to the USDA, the nation will see an average of 57,900 food, agriculture, renewable natural resources, and environment job openings every year between 2015 and 2020—that’s about 231,600 openings over the next four years—the result of a wave of retirement that has begun to roll through the U.S. labor force. Unfortunately, we only expect to see an average of 35,400 new U.S. graduates trained in food, agriculture, and natural resources. If they all go straight into work, only 61 percent of those expected openings will be filled.1

This job gap is already presenting workforce challenges for many companies, which started to post job openings online in greater numbers starting in the summer of 2013. Job posting volume in this sector has been creeping up ever since, with agriculture industry job banks, like AgCareers.com, seeing posts in the Midwest rise as much as 49 percent between 2014 and 2015.2

In the first six months of 2016, AgriGrowth member organizations had 47,837 open positions that required experience or knowledge of food, agriculture, farming, the environment, or natural resources, matching similar counts from 2015.3

About 7,000 (or 15 percent) of these jobs were in Minnesota. While AgriGrowth members consistently sought drivers, sales workers, production supervisors, and engineers over the past decade, the majority of job postings in Minnesota during the first six months of 2016 were for marketing managers, management analysts, and financial positions. The demand for these kinds of workers is growing.

This increasingly need for management and financial professionals is consistent with the message AgriGrowth has heard from the companies it works with. This summer, AgriGrowth partnered with RealTime Talent in a comprehensive survey of member organizations. The survey sought to identify the greatest challenges and opportunities in agriculture hiring, recruitment, and workforce planning. When asked to indicate their top three most difficult positions to fill, the word “manager” was the most frequent. Service technicians, animal care providers, and sales associates ranked as the most challenging positions to fill, with 23 percent of all organizations anticipating hiring new employees in sales, business development, management, or information technology between April and October.

There are simply not enough applicants to fill vacancies, and that those who do apply lack either the soft skills, character traits, or experience in agriculture necessary to do the work.

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More than half of companies said the biggest problem is that there are simply not enough applicants to fill vacancies, and that those who do apply lack either the soft skills, character traits, or experience in agriculture necessary to do the work. Most companies feel neutral or satisfied with their ability to find candidates with relevant education or certifications, but candidates still tend to lack necessary experience and skills.

There is consensus on the reasons positions are difficult to fill, but the workforce challenges faced by agriculture companies are extremely diverse. The concerns expressed by companies vary by size, type, and whether or not the company has staff designated to human resources activities. The top three workforce concerns among large companies—particularly those with human resources departments—are employee acquisition, perceived drops in youth interest in agriculture jobs, and employee retention. Agribusiness and food companies of all sizes are also particularly concerned about local non-agriculture competition when it comes to finding future candidates. Farms and smaller companies without human resources professionals on staff are less focused on future recruitment and tend to focus on current workforce gaps, targeting efforts in employee retention, compensation and benefits, and training.

All of these insights allow AgriGrowth to better understand the workforce needs of its membership. "This survey was extremely useful in helping AgriGrowth better understand the various workforce challenges facing our members in recruiting and filling their employment needs" said AgriGrowth Executive Director Perry Aasness.

Judy Barka, Program Manager at AgCentric, says that the survey findings remind her of conversations she has had with employers around the state. "I have been hearing from a variety of Agriculture Industry partners about the importance of soft skills. This report confirms everything that I have heard in the field," Barka said. She asks agriculture companies "if lack of youth interest in jobs in agriculture was identified as a top workforce concern, what are you doing about it and how can we work together on this issue?" AgCentric and the Southern Minnesota Center of Agriculture have used the findings from AgriGrowth’s survey to guide discussions around what the agriculture industry wants from graduates, to help Future Farmers of America (FFA) encourage high school students to explore jobs in agriculture, and to develop new partnerships with the Department of Agriculture.

The Centers of Excellence and other academic partners were pleased to learn that about 80 percent of AgriGrowth members participating in internship or dual training programs report that candidates that come to them through these programs are "consistently better" than those who do not.

It appears that internships, on-the-job experience while undergoing training, and direct referrals from schools lead to the greatest employer satisfaction with candidates—second only to internal employee promotions.

With these findings, the future work of RealTime Talent will focus on developing career pathways in agriculture that match changing industry needs, reviewing curriculum to incorporate important experiential and soft-skill elements, and improving the connections between employers of all sizes and skilled, experienced candidates. As a result of this survey, AgriGrowth has a stronger understanding of the talent needs of its membership and a renewed energy to drive the public message of the agriculture industry’s important place in our growing economy.

“I appreciate the time many AgriGrowth members took to fill out the Real Time Talent Survey”, said Aasness. “Enhancing our awareness of the workforce recruitment and hiring challenges facing our members will enable AgriGrowth to better represent the needs of our sector as we continue to work with the Real Time Talent board and staff. AgriGrowth looks forward to continuing to work with Real Time Talent and its other collaborators in support of private/public efforts to better align workforce development efforts that will benefit and support the needs of Minnesota’s agriculture and food sector.”

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1. The full article by the United States Department of Agriculture (USDA) can be accessed here: https://www.purdue.edu/usda/employment/
3. Counts of online job postings are from the real-time data source TalentNeuron Recruit, which extracts data on skills, certifications, salary, and other requirements from jobs posted online. For further information on this data, contact erin@realtimetalentmn.org or visit www.wantedanalytics.com.

To read the full report on AgriGrowth’s membership survey, visit RealTime Talent’s website at realtimetalent.org/research/reports

RealTime Talent is a public-private collaborative hub for labor market data innovation and exploration. RealTime Talent works at the intersection of Minnesota’s public agencies, private industry, higher education, and workforce development, identifying new tools that bring efficiency to the education-to-employment process and offering customer-centered labor market research in Minnesota’s core industries. AgriGrowth’s Executive Director, Perry Aasness, is a founding member of RealTime Talent’s governing board of directors.
NOTES FROM PERRY
Perry Aasness, Executive Director

2016 ELECTIONS
With all 201 Minnesota legislative seats up for election this year, no statewide races, and the unpredictable and unusual presidential campaigns, 2016 is shaping up to be a very interesting year in politics! We want to make sure that food and ag issues don’t get lost in the noise of the campaigns, and that is why AgriGrowth has again joined the coalition of like-minded organizations that make up A Greater Minnesota (AGM). AGM has developed a 5-point GROW MN FOOD Plan and asked all legislative candidates to sign on in support of all good Minnesota farms, food and jobs. You can view find additional information regarding the GROW MN FOOD Plan and candidate responses at: farmandfoodmn.org

It is more important than ever that we make our voices heard, so candidates and elected officials learn about and understand what we need to remain a vital industry in Minnesota: support for all good Minnesota farms, new investments in research, policies that will help rural Minnesota grow, smarter regulation and addressing large issues related to water quality.

I urge you to visit farmandfoodmn.org to learn more about AGM and find out how you can get involved. There is too much at stake in this election to stay on the sidelines—now is the time to get engaged!

“There is too much at stake in this election to stay on the sidelines—now is the time to get engaged!”

POLICY MEETINGS
We appreciate the AgriGrowth members who attended one of our regional meetings across Minnesota over the past few weeks. It’s extremely helpful for me and AgriGrowth public policy director Cory Bennett to hear directly from members about the issues and concerns they are dealing with in their day-to-day business. Hearing firsthand from members helps us develop AgriGrowth’s policy priorities for the 2017 legislative session. Have an idea or concern, but didn’t get a chance to attend a meeting? Please feel free to contact me at 651-905-8900, or paasness@agrigrowth.org.

ANNUAL MEETING
We are looking forward to our 49th Annual Meeting on November 10th at the St. Paul River Centre. Leading off our conference will be USDA Chief Economist Robert Johansson. The afternoon keynote address will be presented by Dr. Vikram Mansharamani, who will be speaking on the topic of “A Global Economy; An Unconventional Outlook.” Dr. Margaret Zeigler will offer the morning keynote address on the topic of “Agricultural Sustainability in an Uncertain Season” and Carl Casale, CEO of CHS will be our luncheon keynote speaker.

The speakers at this year’s Annual Meeting will deliver thought-provoking content on the most relevant issues we face in the industry. And, as always, there will be plenty of opportunities for networking and connecting with colleagues across Minnesota’s diverse agriculture and food sectors. Reserve your spot today! Registration information and full conference agenda can be found at: agrigrowth.org
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Minnesota AgriGrowth Council is a non-partisan, non-profit member organization representing the agriculture and food systems industry. Our strategic approach to policy development, issues management, collaboration and awareness fosters long-term sustainability, competitiveness and business growth. AgriGrowth’s diverse membership provides an informed and respected perspective for key influencers and consumers. AgriGrowth’s industry-wide perspective is essential in a state where agriculture and food is the second largest economic driver.