U.S. Ambassador Richard Verma's Remarks at Tamil Nadu Agricultural University
Coimbatore, Tamil Nadu Monday, August 24, 2015

I would also like to thank TNAU Vice Chancellor Dr. Ramaswamy, the faculty of TNAU, and the student body for the invitation to speak with you today—it is an honor. I would like to start this morning by congratulating you, the students and faculty of Tamil Nadu Agriculture University, for choosing to study and to develop a career in an area so vital to our future. Some of the most innovative technologies, business opportunities, and possibilities to contribute to the well-being of this planet exist in the agricultural sector.

All of you are engaged in this field at a pivotal time. The challenges we face in ensuring the world produces enough safe, affordable, and widely available food in the 21st century demand our attention. According to the UN, by 2050, the world's population will reach 9.1 billion. In order to feed this larger, more urban, and more prosperous population, food production must increase by 70 percent. This will require a significant investment in agricultural research. We will need innovative, new technologies to improve yields, enhance productivity, and strengthen supply chains and storage systems. We will also need to encourage the sustainable use of our land and water resources. And, of course, we must address the challenges posed by climate change.

By choosing to be at TNAU, you are placing yourself at the center of a lively and important discussion on India's, and the world's, future. For example: How can we support rural job and income growth as a pathway to economic security? How do we overcome the resistance to innovative technology in food production? How can countries better integrate themselves into the global agricultural market and its network of producers, processors, and traders to improve global food security?

These are tough questions and I firmly believe that by investing in agriculture, working together, and harnessing our unique strengths, the United States and India will be able to address many of the challenges that both our countries and the world face.

Tackling these types challenges together will not be unprecedented. In fact, we have a rich history of furthering human progress together. Take the example of Dr. M.S. Swaminathan, who is credited with breakthroughs in high yield rice and wheat that led to India's Green Revolution and helped change the course of human history. Dr. Swaminathan studied at the University of Wisconsin and collaborated with the famous U.S. researcher, Dr. Norman Borlaug, whose research on wheat helped catalyze the Green Revolution. After Dr. Borlaug received his Nobel Peace Prize, he created the World Food Prize. The first recipient to receive that award, of course, was Dr. Swaminathan. Since then, six more Indian researchers have received the World Food Prize.

Moving Forward

We are already leveraging these ties and doing great things together. For example, we have developed a peer-to-peer partnership that harnesses the strengths and capabilities of both our countries. Proven Indian innovations and best practices are shared across Asia and Africa through trilateral and regional cooperation programs. The 'U.S.-India-Africa' Triangular Training Program is training agriculture professionals from Kenya, Malawi, and Liberia in solutions proven to reduce poverty and hunger that participants are using to advance national food security efforts in their countries.

However, how do we move forward and face the challenges I alluded to earlier? What's next? First, we need to work together to create a holistic framework to tackle these challenges. In fact, the U.S. experience can provide some context. In 1862, President Lincoln established USDA, the U.S. Department of Agriculture. More importantly, he also created the Land-Grant University system, which was specifically designed to ensure that working class citizens have equal access to higher education, with a focus on farming and mechanical skills. For those of you agricultural history buffs in the audience, this was about the same time, 1868, that the Tamil Nadu Agricultural University had its genesis as an agricultural school at Saidapet.

In subsequent years, the U.S. government provided for the co-location of research and experiment stations at Land-Grant institutions and established an agricultural extension service. These actions solidified the bonds between academics and institutions, agricultural stakeholders, and the federal government by tying together research, education, and extension. Today, the United States has more than 100 Land-Grant institutions that are actively finding new and improved ways to feed, clothe, and shelter all people, all around the world. Moreover, scientists at these institutions are addressing the challenges of food security, climate change, natural resource and environmental sustainability, bioenergy, nutrition, and youth development, as well as food safety, plant, and animal health.

Institutions that do this important work, like TNAU, create opportunities that will pay dividends for generations to come. Let's work together and ensure that these opportunities continue to expand. We are already doing great work in this area. For example, take the partnership Cornell University has with TNAU in agricultural biotechnology and agribusiness management. Moving forward, in 2016, the United States will support fellowships here in India that explore plant and animal health, post-harvest treatment, biological control, biotechnology, and agricultural marketing.

Second, as two of the world's largest agricultural producers, the United States and India should not only collaborate on the research front, we need to work together to ensure global trade continues to bring food security and prosperity to the rest of the world. One example is the way the U.S. soybean industry, hoping to develop a market for U.S. soybeans, partnered with India's aquaculture sector to adopt best practices for sustainable production of fish and shrimp. This effort helped meet the growing protein needs not just of India's consumers, but of consumers around the world. Putting India's natural advantages in aquaculture to best use, this partnership is developing new technologies and management practices that increase the efficient and

productive use of soybeans as a feed source, helps control waste, and limits the use of antibiotics while enabling thousands of Indian residents to earn a living income.

Third, in looking ahead to new research frontiers in agriculture and the kinds of innovative food production technologies that will allow us to meet global demand, we need to acknowledge the importance of agricultural biotechnology. While some still question the value of genetically modified crops, we believe it is one of the tools necessary to overcome the global challenge of feeding, clothing, and sheltering people as our land and resource base is increasingly constrained. A few minutes ago, I saw the work being doing at your Center for Molecular Biology. I applaud your efforts and affirm our interest in working closely with India to develop an appropriate and acceptable pathway for these new technologies to be used by farmers in India.

Finally, let's not shy away from having difficult discussions together, especially with regard to both of our government's role in promoting agriculture. Like all good friends, of course, we have our disagreements. For example, we encourage the Government of India to ensure its agricultural support policies are aligned with the challenges you face and the goals you want to achieve. We will continue to do the same in the United States as well. Regardless of our disagreements, however, let's continue to debate and try to learn from each other. We are firmly committed to working with India in the WTO and other venues to agree to appropriate support programs that facilitate innovative research, strengthen rural economies, link to the global economy, and address food security, food safety, and sustainability concerns.

We also stand ready to support you by sharing our own experiences. For example, the U.S. government devotes a large amount of money to a program usually called the Farm Bill. In fact, about 60-65 percent of the Farm Bill provides direct support to U.S. consumers. The goal is to ensure consumers, especially children, infants, and mothers, get proper nutrition. Through this program, consumers make their own choices on what to purchase and farmers respond to market signals to produce a wide variety of products.

Closing

The recommendations I have laid out above are unreservedly optimistic and ambitious. However, I firmly believe that if we continue to expand our agricultural cooperation, both of our countries, and the world, will be stronger. In closing, I would like to quote the great Dr. Swaminathan, who said: "if you are an educated person, do something which can help improve the lives and livelihoods of your fellow people." I challenge all of you to be ambitious and thought-provoking researchers in order to fulfill Dr. Swaminathan's challenge. Thank you.