PRESENTATION: *Rodger Voorhies* October 14, 2016 – 11:00 a.m.

Introduction

Ambassador Kenneth M. Quinn President - World Food Prize Foundation

So let me invite Rodger Voorhies to come to the stage. Rodger Voorhies is the Director of Agricultural Development, Financial Services for the Poor, Water Sanitation and Hygiene Teams within the Global Development Program at the Bill & Melinda Gates Foundation. So we're so proud of the connection we have to the Gates Foundation. So on this stage —I don't think it's the same chairs — but on this stage in 2006 when Raj Shah was just beginning to put the strategy together, he came and said, "Can you put me together with people?" So he was here with Norman Borlaug, Catherine Bertini, Gordon Conway and Chen Zhangliang, all from our stable of laureates and advisors. And after that, invited me to come to Seattle, and we had like a six-year-long partnership.

So I'm so pleased that you're here in your position with your remarkable background. You have to be the only person who is doing microfinance and opportunity banks in Serbia and Malawi. Who else has that connection?

So Rodger Voorhies is going to give an overview of what's happening with the Gates Foundation, and then we're going to invite Jeff Raikes and our laureates up to continue the conversation. Rodger.

Rodger Voorhies

Managing Director of the Agricultural Development, Financial Services for the Poor, and Water, Sanitation and Hygiene teams, Global Development Program, The Bill & Melinda Gates Foundation

Thanks very much. Ambassador Quinn, honored guests, ladies and gentlemen, thank you for the warm welcome and the privilege of joining you today. I'm thrilled to be here. As Ambassador Quinn said, I entered Africa, wow, and raised my kids there for well over a dozen years in a time of famine. And so today's meeting and the laureates who stand, or sit at this point, sit up here soon, it's a really personal issue to me, because many of you in this room had a huge impact on changing my life and my experience as I watched people go from hunger to abundance, who went from malnutrition to nutrition, and we saw new business models develop. So I am thrilled to be here and personally honored to get a chance to speak to you today. I want to extend the Bill & Melinda Gates Foundation's heartfelt congratulations to the 2016 World Food Prize Laureates. Since the establishment of the World Food Prize, we've come a long way together in this fight, and it's been more than six years, as Ambassador Quinn said. There are now over 200 million fewer hungry people today than 20 years ago. And the percentage of chronically undernourished children has declined; although, unfortunately, it remains unacceptably high at nearly one in four.

And while there may be, to quote the late Norman Borlaug himself, "no miracles in agricultural production," investing in agriculture has proven to be quite miraculous in driving deep and lasting GDP growth both at the national level and resiliency at the smallholder farmer level. In fact, agricultural transformation generates at least four times greater poverty reduction than growth in other sectors, proving that agriculture is not only a good investment for families but a vital driver of prosperity and abundance.

Norman Borlaug understood this importance of shoring up global food supplies long before rapidly growing population, changing diets and climate change began placing greater pressure on the world's food reserves and on its poorest people. These pressures only add to the challenge of achieving Sustainable Development Goals and ending hunger by 2030 and the meeting of the six World Health Assembly Nutrition Targets by 2025.

Over the course of this week, we have heard agriculture is the nexus between malnutrition, poverty, climate and, even more so now, security. But this intersection between agriculture and human health has not always been so clearly understood. It took the work of scientists and champions like the laureates we celebrate today and many of you in the room, to demonstrate that we cannot improve agriculture without considering nutrition. And we cannot improve the world's food systems without supporting smallholder farmers.

More than ten years ago, the Foundation began investing in the work of CIP and HarvestPlus. Initially, it was through our global health program those early investments and innovative improvements in humble, staple crops to deliver more and better nutrition for farmers and communities, helped lay the groundwork for our nutrition and agricultural programs, which today, combined, invest more than half a billion dollars every year out of the Foundation.

These programs help to show us and the world that solutions to malnutrition and poverty could be found using robust science innovations, that were adapted to local needs, and thoughtful approaches to delivery, education and outreach to ensure adoption. Ladies and gentlemen, access alone is not enough. We have to get usage. That is where we see the transformation at the household level.

Today we are both proud and inspired to see these long-time partners recognized as World Food Prize laureates and honored as pioneers who, like Norman Borlaug, saw an opportunity to improve the food security and nutrition of millions of the world's poor through agricultural innovation.

As we have heard, our four World Food Prize laureates have worked tirelessly to develop and deliver staple crops like the orange flesh sweet potato and rice, maize, cassava and beans

enriched with critical vitamins and minerals that are missing from the diets of over two billion people around the world suffering from hidden hunger.

Such micronutrient malnutrition disproportionately affects pregnant women and young children in developing countries, leading to stunting, cognitive development challenges, blindness, lower resistance to disease, and increased risk during childbirth and premature death. Such public health problems come at a huge cost both to poor families who are not given the chance to live their full potential and to communities and nations.

The Foundation is driven by the belief that all lives have equal value, but unfortunately not all lives have equal opportunity. At the Gates Foundation, we have come to the conclusion that so much of what is being grappled with today in public health and nutrition stems from the fact that our global food system falls short in our global vision and commitment to nutrition for all.

We must take the lead from today's laureates and see agriculture innovation as a means for providing high-quality, affordable and adequate diets to all. Breeding staple crops for improved nutritional value is exactly the kind of breakthrough innovation that demonstrates the inextricable linkage between agriculture and nutrition, and it provides immediate proof of what agriculture can do for child and mental health.

There is of course no single solution to ensure that everyone has the nutritious food they need to live a healthy life. But the biofortification methods pioneered by HarvestPlus and CIP are a powerful and sustainable tool, producing staple crops that are richer in vital nutrients and ensuring higher yield for smallholder farming families. For example, in India the consumption of bread made from high-iron pearl millet reversed iron deficiency and improved physical activity and cognitive performances in children age 12 to 16 within four months of its introduction.

And the mighty orange sweet potato has increased maternal and child vitamin A intake and improved health indicators across Africa. Follow-up studies in Uganda and Mozambique showed that children who ate OSP experienced significant reduction in the prevalence and duration of diarrhea, one of the primary under-five killers.

The proof of effectiveness of these crops is their rapid and sustained uptake. More than a hundred varieties of 13 biofortified staple crops are now available in over 30 countries in Africa, Asia and Latin America. And this came about because these laureates paid as much attention to delivery as they did to product development. They made sure to connect their critical research to national partners to provide seed companies and social marketing groups to ensure that new varieties once created were delivered, promoted and adopted by rural families. And today millions of poorer farmers and families across the globe are benefiting from the work. We see the magic happen when these come together, but we see the difference at the household level.

The fact that nutrition-related factors still account for 45% of all under-five child deaths motivates us at the Gates Foundation to work together with our partners and governments to scale what works, like promoting good maternal health, immediate and exclusive breastfeeding for the first six months of the child's life, adequate micronutrient intake, particularly for children and women of reproductive age through supplementation, fortification, education and of course biofortification.

And while the research developing and delivering new agricultural-based nutrition solutions that place women and girls at the center, evidence demonstrates that, as farmers, caregivers, educators, breadwinners, and as we heard just now, entrepreneurs and scientists, women are instrumental in building a future free from malnutrition. And I would go further, that the evidence tells us that women differentially suffer in times of scarcity. And agricultural productivity helps drive away that, so that women can thrive.

And we know that sometimes the limits of what can be achieved through conventional breeding alone and that a whole range of new tools are needed to accelerate and extend the improvements we have seen in recent years. We can realize the potential of new transgenic varieties, like golden rice, high-zinc cassava, the golden banana, if we continue to support innovative agricultural research and smart delivery channels.

There is still much to be learned and evidence brought to bear. Tracking specific indicators like the prevalence of undernourishment, consumption of unproduction, income from agriculture, and women's empowerment will provide vital feedback.

What we do know is the kind of ambition and dedication shown by our laureates is what's needed to transform our global food systems to ensure that families everywhere have year-around access to nutritious and affordable food. Imagine – what if smallholders were viewed as a source of productivity rather than a drain on the national economy? What if women fully realized their productivity? What kind of a world would we live in then? And what if hidden nutrition was banished so that children could reach their full potential? We have new scientists, new GDP, new innovation sitting on the shelf, waiting for us to be good stewards of what we've been given.

Therefore, on behalf of the whole Gates Foundation, and on behalf of me personally, I want to congratulate Dr. Maria Andrade, Dr. Robert Mwanga, Dr. Jan Low, and Dr. Howdy Bouis for their outstanding contribution to this field. Congratulations.

Thank you.