

**2013 THE "BORLAUG DIALOGUE"**

October 18, 2013 - 7:30 a.m.

Breakfast Keynote: *H.E. Akinwumi A. Adesina*

**Ambassador Kenneth M. Quinn**

President - World Food Prize Foundation

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So good morning, good morning, everyone. So good to have you here with us this morning. Congratulations on getting up early after a late night last night.

So we have a couple of things to do at the beginning. I want you to enjoy your breakfast. But to start, we have a special message. You know, there's a marvelous connection from between the Philippines and the World Food Prize. Dr. M.S. Swaminathan is here, the first World Food Prize Laureate, and when he received the Prize for his work in India and with Dr. Borlaug, he was heading the International Rice Research Institute in the Philippines, and it was in 1986 and '87. And I only have one bone to pick with you, because I was the Deputy U.S. Ambassador then, and somehow we didn't meet each other. I was about to blame you, but of course it was my fault for not getting to know you.

But a very special moment when President Corazon Aquino, who is one of my personal heroes, who was so incredibly steadfast in the face of violent attempts to overthrow her democratically elected government, and she served on our Council of Advisors as well, and we're so thrilled to have a person of her great courage. So we have today with us the Agriculture Attaché of the Philippine Embassy, Josyline Javelosa, or as we all know her, Joy. So at this time I'd like to have you join with me in welcoming Joy Javelosa.

**Josyline Javelosa**

Agriculture Attaché - Philippine Embassy

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Good morning, everyone. I have the pleasure and honor to deliver a message from my government, particularly from the Philippine Department of Agriculture. It will be very short and brief and sweet.

We would like to thank Ambassador Quinn for the gracious invitation to convey a message on the occasion of this 2013 Borlaug Dialog hosted by the World Food Prize Foundation, where the late mother of our current president, Benigno Senhor Aquino, served as a member of the Council of Advisor in the late '80s. At that time, when Former President Corazon Aquino was with the Council of Advisors, the first World Food Prize was presented to Dr. M.S. Swaminathan, who I had the opportunity to sit beside today. Currently, the Laureate Selection

Committee Chair, for his role in developing a new rice variety named IR8, while he was serving as the head of the International Rice Research Institute in Los Baños, Laguna, Philippines.

You may recall that IR8 ushered in the so-called Green Revolution. It was the first of a long line of high-yielding rice varieties developed at IRRI and distributed not only in the Philippines but also to other rice-producing countries across the globe. What IR8 did was to fully convince farmers that rice productivity can be increased by adopting new varieties. Since the introduction of IR8, rice farmers have been very receptive of trying new rice varieties and new technologies developed at IRRI, International Rice Research Institutes, worldwide.

This year Dr. Swaminathan's committee selected three awardees whose work continues to push the technology frontier in order to better apply to farmers and the availability of food for consumers. We therefore wish to join you in congratulating the 2013 World Food Prize Laureates, Dr. Marc Van Montagu, Dr. Mary-Dell Chilton, and Dr. Robert Fraley for their work in modern agricultural biotechnology that is contributing to improvements to the quality, quantity and availability of food worldwide.

It has been the Philippine Government's policy to promote the safe and responsible use of modern biotechnology as one of the means to achieve food security, equal access to health services, a sustainable and safe environment, and industry development. The Philippines was able to benefit from this technology with the adoption of our farmers of BT corn since the year 2003. Adoption of BT corn allowed farmers to increase corn yields, plantings and incomes. In the year 2012 alone about 400,000 small farmers benefited from increased incomes attributed to BT corn adoption.

We are also looking forward to potential approvals of pending agricultural biotechnology crops, such as golden rice, so that this may help address the micronutrient deficiencies of our population whose staple food is rice.

In the same way that the work of the first World Food Prize laureate had made a lasting impact, we look forward to further benefits that could be harvested from the work of the three new laureates this year and hope that their contributions will open up more opportunities to support global food security and human development.

Our commendation goes to the World Food Prize Foundation as well for carrying out this tradition of recognizing the achievements of individuals who have advanced human development through agriculture. May this inspire further individuals in pursuit of improving food supply and eliminating hunger worldwide. So it's really great to have a lot of young people today to be inspired some more.

Thank you, and best wishes to all who are dedicating time and effort towards realizing a more food-secure world, especially in these times of climate volatility and sustainability of food production.

### **Ambassador Quinn**

Thank you, Joy. Now, you know, you brought a message to us, so I need everybody in the room to help me. We want to send a message back. You know, when you're a diplomat, I know you

write messages back and send them, and then they get read by the foreign minister or maybe at the presidential palace. So the message we want you to send back is how thrilled we would be to have President Aquino, the current President Aquino, come next year, 2014, on our 100th anniversary of Dr. Borlaug, as part of his centennial. And, you know, the son is always going to be good when it's about his mom – right? Just, they happen to both be presidents of a major country. But that we would love to have him, and this is the invitation. Now, you know, if it's just from Ambassador... but if it's from everybody in the room... (applause). That's right, so you agree with me. And I used to embellish some of my messages, just, you know, like saying everyone was clamoring for the President to be here. Anyway, we would be thrilled.

But speaking about being here or not being here, one of the previous speakers at this event was Dr. Rajiv Shah. You know, the U.S. Government has been closed for a while, back open again; but they had to cancel all of their travel here. But Raj sent us a video to see. And so, while you're enjoying your breakfast, we'll show the video. And then we'll take a little break and then I'll be back up to introduce our main speaker and main guest of honor this morning. So here's the video, and then enjoy your breakfast.

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## **BREAKFAST**

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### **Ambassador Quinn**

Hope you've enjoyed your breakfast. You know, I should note there, so look on your little menu card that it says "Belgian waffle," and of course we did that in honor of our laureate from Belgium. And then I was going to ask him about – Well, is this like a real Belgian waffle, and he said, you know, now that I'm a laureate, I have to be more diplomatic. But it still tasted great, so I hope you enjoyed that.

So I want to begin by asking... We have two of our 2013 laureates here, and Marc Montagu, Rob Fraley, could you please stand up and we could once again now honor you and show our great admiration for you. So now after last night you have all the full powers of being a laureate.

We have one other laureate who's here who also has just recently won an award, and that's Dr. Hans Herren, who is now the head of the Millennium Institute in Washington, and he is the recipient of the Right Livelihood Award, which some refer to as the alternative to the Nobel, just like we talk of us being the Nobel Prize for food and agriculture. Hans, would you stand up so we could... I was thinking, except for Dr. Swaminathan, I think you may be the most senior, you know, you're the vice dean of the laureate corps here. Have I got that right?

And I hope you liked the video. I'll just say, I knew Raj Shaw, the head of USAID, was exercising quite a bit of power in Washington. And it's clear he can get people to narrate his videos.

So I just want to very briefly, though, share a story with you that I was sharing at the head table, about Feed the Future. In 2008, during the American presidential contest, Dr. Borlaug was still, you know, he was vigorous to the end but kind of weak, but from home he wrote a letter to both presidential candidates, Senator Obama and Senator McCain, urging them, if you're elected, to give emphasis to international development. Because frankly Dr. Borlaug was despairing of whether the world was going to carry on. He saw his challenge was to be there, leading the way; and he was hoping, he realized that his mortality was clear. And he got a letter back from Senator Obama, a wonderful note, indicating that he would take that seriously.

The next June, 2009, I think June the 12<sup>th</sup>, it was a Friday, we had our announcement of Dr. Gebisa Ejeta as our 2009 laureate, who's here, at the State Department. And Secretary of State Hillary Clinton announced the principles upon which Feed the Future would be built, at the World Food Prize Laureate Award Ceremony. And it's been developed ever since and is now, as you saw, a great initiative. So we are so very proud to have the World Food Prize, and of course Dr. Borlaug, to have played a part in that and have it as part of his and our legacy.

Now, this breakfast is one of our three main forums, our great moments, where we have presentations made by people who are at the center of things. Raj Shah was here and gave this address. Mike Mack, the CEO of Syngenta was here; Chad Holliday, Chairman of DuPont, has been here. But today we have a truly special opportunity.

I was going to introduce the minister as saying my favorite minister, but I can't do that, because I have two favorite ministers in Africa. No, no - I just have two, two pinups I have on my wall. One is Florence Chenoweth - Florence, thank you so much, the Minister of Agriculture of Liberia - and the other is our featured speaker this morning, Dr. Akinwumi Adesina, whom I call when we're alone and friends, Akin. And we really made a connection in Ghana and got to know each other there. And I found that in great leaders you have the people who have the intellectual thought and the vision; they have the communication skills; and they have that energy and drive and focus.

And we had breakfast, so fitting that we're having breakfast again now. And I just came away from it stunned by his vision and by the way he was able to articulate it. And that was reinforced when he was here and received the CAST Communications Award, one of the great communicators in all of agriculture and in international development. Received the YARA Prize in Oslo for his leadership in pioneering innovative approaches to improving access to farmers to agricultural inputs. And, you know, Norm believed fertilizer was so critical - those inputs were so dramatic.

And so if Norm's dream is going to be fulfilled and the Green Revolution is coming to Africa, it will take visionaries like the Honorable Minister of Agriculture and Rural Development of Nigeria. And so, when I spoke with him I said, you have to come, you have to be here, you have to once again show everyone that passion, that vision, that energy. And you're about to see it.

Please welcome the Minister, my friend, Akin Adesina.

## **BREAKFAST KEYNOTE**

### **H.E. Akinwumi A. Adesina**

Minister of Agriculture and Rural Development - Nigeria

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I'll wait for my friend to sit. Ambassador Quinn, thank you so very much for the honored invitation to be here at the World Food Prize Norman Borlaug Dialogue. I see John Ruan III. You normally don't see him - he doesn't like to talk much - but I want you to know that what you're really doing with your family to keep Norm's dream going is really well appreciated by all of us around the world.

Borlaug family, Professor Swaminathan, the World Food Prize laureates - and there are many of you today - distinguished guests, ladies and gentlemen, good morning. It's so kind of you and so wonderful of you to be here so early for a breakfast session, and I can see that, you know, food is very important to everybody. It's such a great pleasure for me to return to the American Heartland to celebrate the centennial anniversary of Dr. Norman Borlaug's birth.

Norm has joined the "cloud of witnesses," as we normally say. One of my most favorite scriptures is that saying that you are, "surrounded by a great cloud of witnesses. Let us patiently run the race that is set ahead of us." Norm, I know that you have joined that crowd of witnesses and that you're looking down at us, but I want you to know, Norm, that the race is still a hectic race ahead to feed the world, but I can guarantee you, by God's grace that we will get that job done.

I am delighted to be here to join you at the World Food Prize Foundation as the World Food Prize Foundation honors three outstanding 2013 World Food Prize recipients - Marc Van Montagu, Mary-Dell Chilton, and Robert Fraley - whose efforts have helped to advance the role of modern agriculture and biotechnology in feeding our world. I say congratulations to each one of you for your well-deserved awards.

Feeding the world with more nutritious food, while depending less on chemicals, is important. Through biotechnology, biofortified crops, such as orange-flesh sweet potatoes, pro-vitamin A cassava, draught-tolerant maize now holds great promise for feeding Africa. Africa must not miss out on the Gene Revolution. Others cannot make that decision for us. We must make those decisions for ourselves. I believe very strongly that Africa should accelerate the pace of views of modern biotechnology and put in place appropriate biosafety regulations.

The American Midwest is the dynamic breadbasket that feeds not only the United States but provides a rich bounty for others around the globe. It holds a special importance to me personally, because much of what I do today as Minister of Agriculture in Nigeria is rooted in the world class training that I received near here as a PhD student at Purdue University in the early 1980s.

During my studies here, I saw firsthand how the U.S. transformed its agriculture, linking research and development, private sector and farmers, turning the nation into the largest producer and exporter of food and agricultural commodities. I dreamed that one day Africa will become a breadbasket for the world. After all, 60% of the world's available uncultivated arable land is actually not in Asia, it is not in Latin America, it is in Africa.

Much is said about rising Africa on the global economic stage, and that is true. Today 10 of the fastest-growing economies in the world are actually in Africa. My country, Nigeria, happens to be the fourth fastest-growing economy in the world. To be sure there is new energy, there is new dynamism across our continent, it can be seen in the imagined middle class. When I was here, actually I saw the fantastic scientist from Kenya that was honored here, and I was so sorry that I missed your award. But I think that's the kind of new Africa that you've seen today.

There's improved governance and heightened interest by foreign investors. But amidst all of that excitement, there remains a disturbing paradox. Africa is a continent with enormous potential for agricultural growth, yet one where food insecurity and malnutrition are widespread and persistent. As I dreamed, providence brought me in touch with Dr. Norman Borlaug, Nobel Peace Prize winner for agriculture, and the man who fed the world. He became my mentor.

Several years ago we were walking together to a conference in New York City. We were discussing the need for Africa to develop, not its own Green Revolution, but most of you that knew Norm, he was old at the time, but you could still find it difficult to catch up with him mentally. He was constantly thinking about how to solve problems. I told him that Africa had the resources. I mean, as I had dreamed, we were talking several years. We were discussing that need, and I told Norm - Africa has the resources to do that. We have the land, we have the water, the people to grow more food. But there was a lack of confidence to make it happen.

He asked me if I was a fan of soccer. I said, sure, yes. He told me that in the game of soccer, scoring the first goal can give a team the confidence it needs to lead them to victory. "Just call the first goal for agriculture in Africa," he told me. Putting his hands around me, he said, "Great things will result from that." To me the advice was simple, yet profound. Africa must achieve success at the scale of millions of farms. For that to happen, we must change the lenses with which we view agriculture. For decades Africa has looked at agriculture through the wrong lenses, seeing agriculture as a development program, run by governments. We see challenges, we see poverty, and we devise solutions for managing poverty. Poverty cannot be a comparative advantage for Africa, because poverty is not tradable.

We need to see the enormous opportunities and rapidly unlock the potential of creating wealth through agriculture. Agriculture, ladies and gentlemen, is a business, not a charitable development program. Therefore, we must get the private sector to unlock the potential of agriculture on the continent. What is needed is creating opportunities for millions of farmers to connect to markets. We need private, agribusinesses that add value to what they produce to propel them out of poverty into wealth.

Nigeria, my country was largely self-sufficient in food in the 1960s. They were also a major global producer and exporter of cocoa, crude palm oil, cotton, and shelled groundnuts. In fact, for many of you that will remember the stories of Nigeria, you remember it because of the groundnut pyramids that we used to have. Then we discovered oil. We soon became too dependent on this resource, as the economic driver our growth, export income and development.

Now you're here this morning for this breakfast session. Let me ask you a question. How many of you drank oil this morning? No, nobody drinks oil, but everybody eats food. So our tragic

result of Nigeria's dependence on oil was an abandonment of our nation's farmers and food processors. Yields stagnated. Procurement of seeds and fertilizers was tainted by government corruption. Investments in infrastructure were redirected. Rural communities slid into poverty and unemployment. We soon became a food-importing country, spending \$11 billion buying basic things like wheat, rice, sugar and fish alone.

When the current government came into office two years ago, we quickly realized that this situation was neither sustainable fiscally or economically, in fact it was not sustainable even politically. Therefore, when I was appointed minister, we took stock of the fundamental resources that Nigeria is blessed with, to support agribusiness. And please note I chose the word "agribusiness" on purpose.

Our first decision was to stop looking at agriculture as a government-run, charitable development program across rural Nigeria. Instead, we needed to begin to think of agriculture and instill in others the concept of agriculture as a business, a business with risks and rewards, a business with profits and loss, a business where some policies, programs and innovation could spur growth, jobs and income, and a business where some unsound policies would only lead to further economic decline and dependence.

Our fundamental resources include the abundance of land and water and human capital. First, Nigeria has an estimated 84 million hectares of arable land, yet no more than 40% of that is actually cultivated. And in fact if we look at it in terms of optimal utilization of new technologies, no more than 10% of that is actually utilized optimally.

Secondly, we are home to two of the largest rivers in Africa, River Niger and River Benue. You know, water is not Nigeria's problem. Managing water is the problem.

The third issue is that we have a large and young workforce to support agricultural intensification, a workforce which we need to create jobs for and to expand opportunities for. We have a population of 167 million people. As I certainly don't drink oil and eat food, the problem is the 167 million people have actually been eating food that's imported from other parts of the world. In other words, we're getting markets for others while we are actually creating joblessness at home as we decimate our own agricultural sector and our rural economy.

To unlock the combined potential of these three fundamentals, we needed a major transformation of Nigeria's agriculture sector. The change had to come across the entire value chain, from the field to the mill to the table. And therefore in 2011 when President Goodluck Ebele Jonathan launched the agricultural transformation agenda, we set for ourselves a very clear goal. And that goal is to add 20 million metric tons of food to our domestic food supply by 2015. And in the process we'll add 3.5 million jobs through agriculture and food-related industries.

Our focus will be on creating ecosystems in which small and medium and large-scale farmers will not only coexist but they will flourish together. We will do more than plant more fields, we will also create value-added food stocks from our staple crops through an aggressive import substitution program and policies that will encourage new investment in food production and promote agriculture sustainability and resilience. Of course, much of what I know today in terms of resilience was taught to me by Gordon Conway when he was my boss

at the Rockefeller Foundation. I also see another boss of mine, Bob Herdt. These are the folks who taught me quite a lot of things that I knew very early in my life. You can give it up to them – they're great. I tell them they are chiefs and chiefs never get old.

As Dr. Borlaug showed us during the Green Revolution, the backbone of modern agriculture is getting the right tools in the hands of farmers, starting with seeds and fertilizers – and that's where we began. For decades, successive governments in Nigeria controlled the purchase and distribution of fertilizers. The system was corrupt. It undermined private investment. From 1980 to 2010 Nigeria spent over \$5 billion in farm input subsidies, and yet only 11% of this went to farmers. The rest went to an elite group of wealthy and politically connected rent seekers at the expense of Nigeria's smallholder farmers. In fact, when you look at fertilizers, you say you have NPK, you have urea. Well, in Nigeria we had different kinds of fertilizers; they have hands and legs and they can walk, and they walk away from the farmers' fields. Nigeria for decades was subsidizing corruption. There was no subsidizing farmers.

But in my first 90 days as minister, we ended four decades of fertilizer sector corruption in the country. And let me just tell you that, when I was a graduate student at Purdue University, I had a fellowship. Gebisa Ejeta was one of the people actually who sat with my committee of my PhD thesis. For my master's thesis, I lived in Niger Republic in a place called Maradi, and you could see fertilizer moving out of Nigeria into Niger, and food was moving from Niger back to Nigeria.

And one day as I was doing my field research there was a military coup. Of course, we had a lot of military coups at a time in Nigeria. And I go to the border post, and I saw this man. He came out and had a big stomach, very huge stomach, and he walked in. And I was wondering – how come he's so fat. But in fact, he wasn't fat – it was a lot of money that was in there. So he took off his babariga, we call it, their babariga dress, and he put his hands in and he just took a lot of money out, and he flung it straight into the air. And I saw a lot of customs officers scavenging on the floor, just taking the money. And somebody gave a command, you know, "Barrier up!" and the barrier came up, and trailers and trailers were moving, filled with fertilizers coming out of Nigeria and going into Niger. So I saw that as a graduate student. So as a minister, I absolutely knew I had to solve that problem.

That old corrupt system of direct government procurement and distribution of fertilizers was scrapped within 90 days of my being appointed minister in Nigeria. The private sector seed and fertilizer companies today now sells their farm inputs directly to farmers instead of to government. To cut out the rent-seeking middlemen who for decades have cheated farmers, we launched an electronic wallet system. The system allows smallholder farmers to receive subsidized electronic vouchers with seeds and fertilizers directly on their mobile phones. In fact, in Nigeria we have more mobile phones than television sets. So it just made rational sense to me that that was thing that we had to do. Farmers would get electronic vouchers on their mobile phones that pay for their farm inputs directly from private sector agricultural input supplies.

The electronic farm input system was very successful. In the first two years the system reached over five million farmers and enhanced food security for 25 million persons in rural farm households. Women farmers who never got fertilizers and seeds for decades under the old, corrupt system of government procurement now have better yields with subsidized farm inputs

received on their own mobile phones. Dignity was finally returned to farmers. As Mrs. Lizzy Igbine, who is the chair of the Nigeria Federation of Women Farmers, said, "Now the men can no longer divert our fertilizers and seeds."

Our goal is to reach 10 million farmers by next year and impact on 50 million persons in rural areas. And I know that this is not something that as minister I was able to achieve alone. I have a number of commissioners that are in our country that are with me here today, and if they may stand: The Commissioner of Agriculture from Kano State, the Commissioner of Agriculture from Delta State, and the Commissioner of Agriculture from Anambra State.

Nigeria is the first country in Africa to develop an electronic wallet system for reaching farmers with subsidized farm inputs on mobile phones. The impact has already been felt way beyond our borders in Nigeria. Several African countries, Brazil, India and China have expressed an interest in adopting the electronic wallet system in their own agricultural sectors.

But how dramatic a change is this? Well, let me tell you. A country that many associate with corruption is now exporting transparency. Private-sector seed and fertilizer companies are rapidly responding to the bold policy reforms. According to the Seed Industry Association of Nigeria, the area cultivated on the improved varieties expanded from 400,000 hectares to 4 million hectares within the last two years. Foundation seed policy has been liberalized. We ended decades of monopoly control by a government on foundation seed. We opened up the space to the private sector. The number of private sector seed companies expanded from 10 to 70 within one year. The number of global seed industry players such as Syngenta, DuPont Pioneer, have now set up operations in Nigeria.

Within the last one year, Nigerian private sector firms, such as Dangote, Notore, Indorama, committed \$6 billion U.S. dollars to build fertilizer manufacturing plants to expand the fertilizer production for our own markets. Nigeria will soon become the largest producer of fertilizers in Africa – a positive development for Nigeria and other African countries.

But it's not just fertilizer production. The ability to actually have the right fertilizer blends is very, very important, and I want to really commend the work that IFDC is doing but also what Professor Pedro Sanchez's team at Columbia University is doing. That's something called "soil doctor," a small kit that allows you to rapidly test the quality of your soil, the level of nutrient deficiencies. And farmers can then determine what types of fertilizers they need. So I really want to say that this is a major development that we're already working with Columbia University on.

Beyond season fertilizers, we are working to address several core "imbalances" in our food sector. Nigeria is the world's largest importer of rice, behind China, but on our imports of 2.1 million metric tons of rice. Now, this is not a silver medal that I am proud of. We have set a goal to become self-sufficient in rice by 2015. We are providing quality seeds and other support for our rice farmers. In one year Nigeria unleashed a rice revolution and produced more than 50% of all our rice needs in main season in our dry season. Private sector responded with 14 new industrial-scale rice mills, making high-quality local rice available in our market. And I can tell you the rice we have from Nigeria tastes better than any rice that we are currently importing. A U.S. company called Dominion rice has invested \$40 million in one of our states in the North in

over 30,000 hectares that works with rural communities and agriculture growers within the system.

We are also working to reduce Nigeria's \$4 billion annual wheat imports. Our strategy here is twofold. First, we are expanding local wheat production in a competitive way. Science has opened up new opportunities for this. Nigeria's Lake Chad Research Institute, working with other CGIAR Centers such as CIMMYT and ICARDA, we've been able to release tropical wheat varieties that gives us a yield advantage of 5 to 6 metric tons per hectare. The last time we tried to do wheat was in the 1980s; the average yield was 0.8 tons per hectare, basically made no sense for us to do this. Well, this is not temperate wheat, this is actually tropical wheat, a major breakthrough for us.

So with massive support for our farmers, we expect to plant an estimated 450,000 hectares in these new tropical wheat varieties across Nigeria's wheat growing belt. Our goal is to produce 2.5 million metric tons of wheat in the next three years.

Second, we have shifted to the use of high-quality cassava flour in bread and confectionaries. We are the largest producer of cassava, of course as you know, in the world. Cassava bread wheat, 20% high-quality cassava flour, mixed with 80% wheat flour is rapidly expanding on our markets and the potential is enormous – that's \$1.5 billion that we will put in the hands of our farmers and of our processors. I can tell you that cassava bread tastes fantastic. I wish I had brought it here for breakfast for you all this morning. And this is just for me as a minister, but also I might just be a doctor with a permission to actually give advice. But it actually is very low in glycemic index, and so, if you're predisposed to diabetes, actually it's very good for you. But that's just from me as a doctor.

We're rapidly expanding private sector investments in industrial use of cassava. You know, cassava, when I became minister, 45% of the cassava in the country was on the ground; nobody knew what to do with it. And so it was clear to me that we had to rapidly create markets for the cassava. And so we had to look at derivatives from cassava, so cassava into starch, cassava into ethanol, cassava into sorbitol, cassava into dry cassava chips. Today we have 3.2 million metric tons of dry cassava chip export that we are actually pushing for China. And that will earn our farmers over \$835 million U.S. dollars. So it's really about creating markets for what we have and turning comparative advantage into competitive advantage.

We are also revamping our export crops. We used to have global dominance in the agricultural markets in cocoa, as I told you. Our target in cocoa is to double our production by 2015. We are distributing 114 million seedlings of high-yielding cocoa hybrids. I think I saw Dr. Aikpokpodion. Is he here? Yeah. You know, most times when we think of Africa, we think that we just have to borrow technology, but we have very bright, smart scientists throughout 20 local institutions. Now, Dr. Aikpokpodion, I didn't know him at all when I visited his institute. He's the one who developed the new hybrids for cocoa in Nigeria, released eight of them. These eight hybrids give you yields that are five times what farmers are currently getting. But in addition to that, they mature within two and a half years, compared to five years the traditional cocoa varieties will do.

So when I visited the institute to launch this, I looked at him and I said, "You are hired." So I hired him on the spot. So today he's leading our cocoa transformation work in Nigeria and is

doing a fantastic job. And that's what allowed our farmers last year to earn \$900 million in foreign exchange just from cocoa.

We are also recapitalizing our oil palm plantations. We are distributing 9 million high-yield seedlings of varieties to our farmers all across the country. Private-sector investments are rising rapidly in new palm oil producing plants.

So my colleagues are here from the livestock industry where we actually work in the livestock as well, aquaculture, inland fisheries and marine fisheries, to make Nigeria self-sufficient also in a few years in this particular area.

But I don't want to give the impression that all is rosy. Significant challenges exist in the agricultural sector, especially weak infrastructure, erratic power supply, poor road and rail networks, and limited access to affordable finance. And we must build institutions to sustain our reforms.

When Ambassador Quinn talked about our meeting in Ghana, one thing that I told him yesterday was that he didn't realize how impactful that meeting was for me later when I became minister. He told me his experience when he was ambassador in Vietnam. And he said in Vietnam he saw that all the areas that had good roads were the areas where incomes were much higher. Poverty was much lower, and food security was much lower. The areas that they didn't have the infrastructure were the opposite.

So when I became minister, I gave a lot of thought to that. And I said - Well, look in Africa the problem that we have is that we are producing in areas of high production - our processing plants are far away from those areas. And because of high transport costs, we have high post-harvest losses; it takes a lot of time to get it there. And weren't not creating jobs in the rural area, we're just extracting commodities out of rural areas.

So we decided to address the issue of infrastructure through what we call staple crop processing zones. Basically, what a staple crop processing zone is, is we are attracting the private sector to come into areas of high food production to get up food manufacturing plants, to process and add value to all of our commodities there. Therefore, you don't have to take commodities out. The infrastructure density is going to be provided; we are providing roads, power and water around these particular areas. And so these are the areas that we are now using for rapid transformation of our agricultural sector in the rural areas.

To improve financial access for our farmers, we have also taken bold steps. When I was vice president of the Alliance for a Green Revolution in Africa, we set up a risk-sharing facility to reduce the risk of lending by banks to the agriculture sector. Last year in Nigeria banks lent to the agriculture sector. And when I brought the bankers together, bankers will always tell you, "We're not going to lend," and so on. I ask them, "How much money did you lose lending to the agriculture sector?" One banker after the other, they said zero percent. That facility this year is going to be lending \$400 million to seed and fertilizer companies. Our goal is to be able to leverage \$3.5 billion in commercial lending all across the agricultural value chains - not from money from outside the country. We've got excess liquidities sitting on the balance sheets of our banks. Now, we've got to be smart about how we actually leverage that into agriculture, not to other sectors.

We are also pursuing land reforms to allow our farmers, especially women, to have titles to their lands and to ensure that community land rights are protected. Improvements in land titling and registration will give farmers a reason to invest in their land, which in turn leads to productivity improvements. They will be empowered with potential investors. Land reform also means there will be no land-grabbing in Nigeria. Farmers will not be displaced from their land.

To allow our farmers to adapt to climate change and reduce their vulnerabilities, we are developing affordable crop insurance schemes. As I said yesterday that the United States, when it has hailstorm, whatever, the farmer is protected. When it comes to Africa, we pray in the morning, we pray in the afternoon, we pray at night. I love prayers, but I think God gave you wisdom to know how to do things. And so we decided that we have to actually not abandon our farmers, we must support them with affordable crop insurance schemes.

To secure our food supply and reduce our vulnerability and stabilize food prices, we have completed 10 new silos; we've expanded our silos' capacity by 400% in the last two years. We are now using those silos to be privatized by the private sector to build world-class agricultural commodity exchanges.

The reforms that we have made are improving the prospects for Nigerian farmers, but they are also capturing the attention of external investors. Over the past 24 months we have attracted \$4 billion U.S. dollars in executed private sector letters of commitment to invest in the agricultural sector. We are structuring deals with many of the world's largest agricultural business brands - Nestlé, Cargill, Unilever and Alcoa, to name a few - and they will bring additional billions of investment to the agricultural sector.

We have also received \$3 billion in support from the World Bank, the Africa Development Bank, the International Bank for Agricultural Development, as well as government agencies, USAID, and the Bill and Melinda Gates Foundation, Bill in particular. Bill Gates has been fantastic. He sits on the group of eminent advisors to our President of Agriculture, and he and Kofi Annan, and we really appreciate Bill's support, tremendous support for the agricultural transformation in Nigeria.

Well, what does all this mean? The result of all our combined efforts means that we will meet our food production targets. In the first year of our agricultural transformation agenda, our farmers produced nine million metric tons of additional food - that is 45% of our 2015 production target in just one year. We are on target to realizing our job targets of 3.5 million jobs; we created over 2 million jobs within the last one year - that is 63% of our target that we set for 2015.

Ladies and gentlemen, as I travel across Nigeria, I'm constantly amazed by the resilience of our farmers. I've seen disabled people in the plains of Kogi State, rush in dry season rice production, defying all odds. I have met a rice farmer, Hagi Aladi Maladi. She cultivates one hectare of rice while she takes care of 23 orphans. From the harvest of her rice farm, she was able to build herself a house, a house that she's rightfully very proud of and that I am also very proud of.

I have seen entire farming communities that were devastated by the historic floods that we had in 2012, determined to replant and determined to rebuild. The United Nations recently recognized Nigeria for meeting the Millennium Development Goal No. 1 of reducing by half, the population of hungry people – we met that target three years ahead of schedule. We did this by growing more food, raising farm incomes and creating jobs in farming and food processing, not simply by managing poverty. This is a new dawn.

These stories and many more inspire us every day to not only work harder but also to think smarter. The government's role is simple – to create the enabling environment and policies and incentives for a private sector-led transformation of agriculture to flourish. We must create higher incomes and jobs in farming and food processing, not simply manage poverty.

Today national governments, businesses, and millions of smallholder farmers are taking on the challenge of feeding Africa today and the world tomorrow. Different nations are moving ahead at different speeds, but across our continent one fact is certain. The Green Revolution has taken root in Africa. It must be not just a sharing of knowledge, the harnessing of tools and technologies, the unleashing of the power of private enterprise. It must be scaled up as success stories in one country are multiplied across others. It will benefit from new research conducted in Africa here and elsewhere and by future World Food Prize winners, discoveries that will unlock the key to growing more food or mitigating the impact of climate change.

This is Africa's time. I envision a future where Africa's vast savannahs are revived with highly productive crops, where large commercial and smallholder farmers coexist and both prosper, where railroad and port systems are improved, making it easier and less expensive to transport crops from the farm, to the factory, to the fork, where open international markets enable more food to move from places of surplus to places of need, where rising incomes bring millions of farmers in Africa into Africa's imagined middle class. I know the roadmap towards that vision in Africa is challenging. It is for Nigeria as well. But as Africa's most populous country and soon to become its largest economy, we are using the power of agriculture to create jobs, increase wealth, and promote private enterprise to ensure that growth is sustainable.

Ladies and gentlemen, at the beginning of this second Borlaug century, and for the first time in decades, there is today a strong political will to modernize and industrialize Nigeria's agriculture. This is the first goal scored for Nigeria's agriculture. And I believe, as Dr. Borlaug told me in our walk in New York City on the way to Rockefeller Foundation, when I have the confidence to achieve great results; for agriculture was Africa's past, and in agriculture, as a business, lies Africa's greater future.

Thank you very much.

## Ambassador Quinn

So, Honorable Minister, you used a very highly appropriate soccer metaphor, and I'm sure all Americans here understand it's difficult to call it soccer and not football. But to use another American sports idiom, you just hit a home run here. Let's have another round of applause.

But here's the story. When we look at Minister Adesina's background and you see he just didn't get here by accident. He had people and opportunities along the way, each time being nurtured and with Dr. Borlaug and others. And here's the outcome – one of the leaders who is transforming Africa and taking it into that future you described. And there are probably in this room or at this symposium or past ones others waiting to be inspired, waiting to be honored – Charity Mutegi, our Norman Borlaug Award winner who's here.

So I want to encourage everyone here and everyone who's seeing this on our webcast and everyone who receives word – we need to have nominations for the awards and prizes that are meant to recognize and inspire people to those great achievements. We need more nominations for the World Food Prize. When I came to the World Food Prize, we had never had a laureate from Africa. Now we have three, and there will be more. Who are these people doing this? So I urge you, nominate individuals who are making that great breakthrough in increasing the quality, quantity and availability of food.

And then for those, that next generation, for those under 40 who are out there emulating Dr. Borlaug, working out with producers and farmers – nominate them for our Norman Borlaug Award for Field Research and Application, Endowed by the Rockefeller Foundation. And Gordon Conway, our Council of Advisors, President of Rockefeller, Minister Adesina. Rockefeller has done such great things, and here is another opportunity.

And then yesterday with Former Prime Minister Tony Blair and Howard G. and Howard W. Buffett, the World Food Prize was so pleased to be part of the new 40 Chances Fellowship program. And it's available online. So let me remind you and give you the incentive – because this is meant to inspire just that kind of entrepreneurial activity in Rwanda, Malawi, Liberia and Sierra Leone. And you can go on to [40chances.com/fellows](http://40chances.com/fellows). And here's the reason to do that, if you're under 40 (you have to be under 40), because if you're back here next year when we announce and introduce the four 40 Chances Fellows who will be selected, the World Food Prize will be handing you a check or a voucher good for \$150,000; \$80,000 for your enterprise for the first year for that idea you have, and \$70,000 to pay your expenses for that first year. So this is a great initiative. We're looking for young people with young ideas. Nothing wrong with older people and their ideas, but this is the place, the World Food Prize, to inspire that next generation.