

**AFRICAN DEVELOPMENT BANK ANNOUNCEMENT | TECHNOLOGIES FOR AFRICAN
AGRICULTURAL TRANSFORMATION (TAAT)**

Panel Moderator: *Jennifer Blanke*
October 19, 2017 - 9:40 a.m.

Introduction

Gordon Conway

Professor of International Development, Imperial College

This is a terrific panel. I don't think we've seen the like of a panel like this at the World Food Prize for a very long time.

We have at the far end Nick Austin who was seven years as the Director of the Australian Center for Agricultural Research and has just been made the head of agriculture at the Gates Foundation this year. We have Madam Haleh Bridi who has had a long career in the World Bank, particularly doing work in the Middle East and North Africa but others as well, and she's Director of Communications from the bank.

Next to her is my good friend, Agnes. Agnes was a brilliant Minister of Agriculture in Rwanda, and you can see the consequences of her influence in Rwanda today; and then she became the head of the Alliance for a Green Revolution for Africa, which is spearheading so much of the change in Africa.

Next, Rajiv Shah whom I've known for a long time when he was at the Gates Foundation, became head of agriculture at the Gates Foundation, became a chief scientist at USDA for a brief period when I was chief scientist in Britain – and then went on to become the Administrator of USAID and now is the president of the Rockefeller Foundation, and I am so delighted by that appointment because of personal connections I have with the Foundation.

Now, Jennifer, you are now a Vice-President of the African Development Bank, and you're going to moderate this panel – good. But to begin with, we have a ten-minute talk by my good friend, Chief Akinwumi Adesina who worked with me at the Rockefeller Foundation for seven years, went on to become the Minister of Agriculture in Nigeria and have an enormous impact; I mean, you can see that in particular with the great production of rice in Nigeria – and then became the president of the African Development Bank. That is quite in many remarkable because they've always, always had economists but I'm sure experts. And he's an agriculturalist. He's a man who knows about agriculture, and having somebody like that at the head of the African Development Bank is changing things already, dramatically. And, Chief, I want you to say a few words.

Akinwumi Adesina

President, African Development Bank

2017 World Food Prize Laureate

Thanks very much, Chief Gordon. He is the big chief. He hired me at Rockefeller Foundation, so he's the big chief. But about being an ag person, Pedro Sanchez always calls me an economist in a clover field.

Good morning, everyone, and welcome to this session. You know, when I was elected president of the African Development Bank in 2015, I made a decision to launch a Feed Africa strategy with very strong support from our board of directors. And our goal was pretty simple – to help to transform agriculture and unleash a new wave of prosperity all across rural Africa.

I knew that to succeed, Africa will need strategically and creatively and collectively to pull together a whole lot of institutions – and we have so many of them all over here today. We just heard from the USAID administration, my good friend, Rajiv Shah, who used to run USAID at that time as well.

We have had, as you all know, a lot of latent potential for change and development, but in the main our efforts have been dissipated. We simply have not operated at the scale needed for impact. So when I was elected president of the African Development Bank, I met my very good friend, Jim Kim, the president of the World Bank. We met in Washington in September of 2015, and we were talking about a CGIAR. Of course I spent a decade of my life in the CGIAR. And he was beginning to get quite discouraged about funding for the CGIAR. And he said to me, "Well, maybe it's time to pull the plug on that," because it wasn't really going as well as he wanted. And he and I had a little, you know, one on one and I said, "Well, look. I understand what you're saying, but when it was time to feed Latin America, the CGIAR was there. When it was time to feed Asia, he said, "Yeah, it was there." And it's time to feed Africa. The CGIAR has to be there.

So what we have to do differently is business as usual, not just business as usual. And I recalled to Jim a conversation that happened many, many years ago between Bob McNamara, and George Harrar, the president of the Rockefeller Foundation in Mexico. At the time Bob McNamara looked at a short wheat lines and said, of course, when Norman Borlaug walked in, he was so excited, he said, "You find me the technologies, and I'll find you the money." And that was how the deal was done. And this was the same deal that myself and Jim Kim agreed on we were going to do. We agreed that it was to rally the CGIAR system, working with the national and regional research institutions together with one common purpose – feed Africa by rapidly scaling up agricultural technologies to millions of farmers through a coordinated technology deliver platform.

It was when President Jim Kim agreed and said to me, "Well, Akin, you're an agi and so you lead and I will follow." And that's exactly what we've been doing since that time. Nothing calls one to action more than the now-famous words of our great mentor, Norman Borlaug, which still rings in one's ears, and you also have it echo in your mind all the time. *Take it to the farmers.*

Today, colleagues, we have African maize that's resistance to drought, developed by the CGIAR. And in fact my bosses at Rockefeller Foundation, Gary and Bob, they funded all that work, and Mary Ann is somewhere, I think – she did a lot of that work. But it can give you good yields on that drought, but they remain on the shelf. Cassava varieties exist that can give you

today 80 tons per hectare, compared to 20 tons per hectare the farmers are getting, but largely they remain on the shelf. Rice varieties – Monte Jones developed a new rice for Africa, NERICA rice. Of course, it can impact tremendously rice production, but lastly it's not been adopted at scale as we would like to see. And also, of course, we have the biofortified beans and orange fleshed sweet potato, which you all actually know, won it for the World Food Prize last year, you know, there and with a lot of potential to change everything and make sure we can end Vitamin A deficiency, stunting and malnutrition.

In short, Africa has more technologies today to help to transform its agriculture than Asia had before the Green Revolution. The technologies to feed Africa, therefore, already exist. What is needed is the wheel, the ability and the commitment to take the technologies to scale, for by so doing we will reach tens of millions of farmers.

Having seen the power of several of these technologies on farmers' field – and I helped to scale several of them up myself in my time of Minister of Agriculture in Nigeria – I know that we don't need to test these technologies on small-scale pilot scales anymore. See, Africa has so many pilots, we just don't have many planes taking off. So we need a lot of planes to take off on this.

So two weeks after I became president of the African Development Bank, I called for a meeting in Dakar, with all the ministers of agriculture, the ministers of finance, and the central bank governors. In fact, I can tell you it was the first time they all met together under that one roof. And my message was very clear – now, please don't look at agriculture as just that sector, but agriculture is central to how you have macro-economy and fiscal stabilization of countries. So therefore you have to look at agriculture in an entirely different way. And it was a meeting that made a difference. We decided that we had to change things. We had to change a trend of spending \$110 billion a year importing food by 2025. And that's how the Technologies for African Agricultural Transformation, otherwise called TAAT, was born out of this major consultation.

TAAT brings together global players in agriculture – the entire CGIAR system, the World Bank, the FAO, IFAD, the Bill and Melinda Gates Foundation, AGRA where Agnes is, the Rockefeller now with a new president, and national and regional agricultural and research systems. It's the biggest consolidation of efforts to accelerate agricultural technology update in Africa. TAAT is regional technology delivery infrastructure for agriculture, linking countries across agro-ecological zones.

For example, take a case of how varieties are released in Africa. You have to test them four years in one location, test them four years in another location. If you have to take the same variety in the same agro-ecological zone to ten countries, that would easily take you 40 years – and that's why we decided that the best thing to do is to take these technologies and take them across our agro-ecological zones. There is a rice belt. There is the cassava belt. There is a savanna belt. So you have the same technology, scale them all across the region, and then change all the regulatory involvement that makes it difficult to technologies go to scale with a much-needed regional change, And this is why we believe that TAAT will help to break these barriers down, because countries are simply a bunch of borders that people put across an agro-ecological zones, pretty much, and so we have to work across zones.

So what we've decided to do is that TAAT will be done through a collectively agreed central delivery platform coordinated by the International Institute of Tropical Agriculture and all the

other CGIAR centers with national, regional and international research centers and bilateral partners like USAID and the others.

Today I'm excited that 25 countries have written letters confirming their interest and readiness to support TAAT and to help us to transform agriculture in Africa. Just that tells you the extent of consultations that have already taken place on this major effort.

TAAT is a transforming partnership and landmark partnership effort. The African Development Bank, the World Bank, the Bill and Melinda Gates Foundation and the Rockefeller Foundation intends to mobilize one billion U.S. dollars to help us scale up technologies across Africa. Right now the African Development Bank is discussing this with our board of directors, and we hope that, once it is approved, we can begin the task of really taking agriculture technologies to scale.

The question to ask is – what will it do? We're trying to reach 40 million Africans out of extreme poverty. We believe that TAAT will help to produce an additional 120 million tons of food. So we are taking a bet, obviously a good bet – we're betting on Africa that Africa can feed itself. We're taking a bet that with agriculture as a business, Africa will unlock this massive agricultural potential. We are taking a bet that, as Africa embarks on an unprecedented agricultural industrialization, it will be able to unleash prosperity that will also lift millions out of poverty, creating new zones of prosperity to replace zones of economic misery that we have in Africa.

So I would like in closing to thank the World Bank leadership, to thank AGRA's leadership, the Bill and Melinda Gates Foundation, who have placed substantial amounts of contributions towards this initiative. We'll welcome partners to join us in this major drive to take technologies to farmers and to transform Africa's agriculture. Let's rise up and feed Africa. The solution is at our fingertips. The answers are in our hands. The vision can and will become a reality, by God's grace, in our lifetime. Thank you very much.

Jennifer Blanke

Panel Moderator

Thank you very much, Mr. President, boss, and I think that that is a very exciting call for action, and I think the USAID administrator, when he made his call for action that we collaborate, co-design and co-finance didn't know that we'd be up here afterwards, already talking about that. So I think that that's quite exciting.

I mean, this is really about bringing together the best thinking, the best technology, the best minds and the best institutions to take the technology that already exists around the world in terms of agricultural knowledge, the right kinds of seeds, the right kinds of tilling, milling, etc., and getting them to the farmers. And as the president said, you know, these things exist; and there's so much more of them now than existed during the previous Green Revolution. So what's stopping us, you know? And some of the things that do stop us are borders, and so on and so forth.

The other thing I just wanted to mention before we kick off with, I think, some very interesting remarks is this whole question of the fall armyworm, which a lot of us have been discussing quite a lot since we've been here. If we're able to sort of break down those barriers that the

president was talking about across the different countries, it will help us also in terms of resilience. Because if you look at pests, as we were saying this morning in the fall armyworm meeting, pests don't have passports and they don't wait for visas – they just move right over the border. And so if we don't take a cross-border approach to technological dissemination and creating this resilience, then we're all going to be somewhat stuck.

Panel Members

H.E. Akinwumi Adesina	President, African Development Bank
Jennifer Blanke	Vice-President, Agriculture, Human and Social Development, African Development Bank
Agnes Kalibata	President, The Alliance for a Green Revolution (AGRA)
Rajiv Shah	President, The Rockefeller Foundation
Nick Austin	Director of Agricultural Development, Bill & Melinda Gates Foundation
Haleh Bridi	Director for External Communications in the Africa Region, World Bank

Jennifer So with that, what I'd like to do is move directly to the panel, and I'll kind of move about this way. First is Nick. I think we welcome the fact that the Bill & Melinda Gates Foundation is contributing to the central mechanism for PAT and especially the clearing house. And you're also providing obviously for quite some time support to the CG centers, which is important then; it's the backbone of a lot of what we're doing. What will success of working this way to roll out technologies to Africa's farmers look like for you at the Gates Foundation?

A Thank you, Jennifer, and thank you for the opportunity to be here on this panel with such esteemed leadership. Let me first recognize Dr. Adesina's leadership exemplified with the TAAT and his achievements recognized as the 2017 World Food Prize Laureate. We're very proud to partner with the African Development Bank and the TAAT initiative through our support with CGIAR centers and with as a vital scaling partner in Africa for technologies.

We know, as Dr. Adesina has said, that the technologies exist to drive fundamental prosperity and lift large numbers of smallholders out of poverty in Africa. Inclusive agricultural transformation is the unifying vision within the Gates Foundation and fully aligned with the vision of Feed Africa and the TAAT initiative to make those technologies available to smallholder farmers.

Those technologies exist, so what's failing? The system's failing. We know that yields are in Africa, cereals, for example, at 1.3 tons a hectare, are less than half of the equivalent in South Asian and perhaps around about a quarter of what we can see in China. So the potential is there with existing technologies without us investing in additional technologies. We also know that, incongruously, the majority of the

world's poor are smallholder farmers, particularly so in Africa as we see the increased concentration of extreme poverty unless we get these initiatives right.

So the possibilities are there, waiting to be grasped, the ability to drive that journey to prosperity. We know that economic growth or growth in the agriculture sector is so much more effective at lifting people out of poverty than growth in other sectors. So what's not working?

It is complex. How do we break the complexity down into ways that matter? And the technology needs, obviously, evolve as the journey to prosperity evolves and as economies transform and smallholder farmers engage in new ways. So, clearly, the focus on staple crop production for subsistence farmers is paramount. We have smallholders who aren't engaged formally in markets. To do so, we need better varieties, better fertilizers to overcome the constraints, soil fertility, crop and pest disease – the fall armyworm, examples that we've heard.

So how can systems be unblocked, systematic bottlenecks? They drive varieties on the smallholder farms and bring with that fertilizers as inputs that enable surpluses to be reduced. And of course as we all know, then moving from surplus to engaging markets opens new opportunities both on farm and off farm. Off-farm and confirm economic pursuits, so critical as we heard in the youth panel discussion this morning. But on-farm in relation to diversification bringing with it new technology needs as smallholders then move into systems that aren't just driven through stable crop production but bring in legumes into rotations, bring in livestock, bring in higher-value commodities. So, too, demanding new technologies – vaccines, animal health products, genetics in livestock.

We also see the benefits flowing through nutrition, particularly for women and girls as these systems diversify by on and off farm and bring benefits to the economy more broadly. So to your question, Jennifer – What does success look like? – locally relevant varieties, locally relevant technologies, locally relevant solutions to smallholder farmers. And TAAT is positioning to play a key role in bringing the best technologies available from the CGIAR system and beyond and supporting in new ways their delivery to farmers. So we're delighted and excited to be part of this initiative.

Jennifer Thank you, Nick. So really breaking down the complexity, making it easier to allow this adoption to happen, and I suppose also ensuring confidence among the farmers that they can do this, which will require quite a lot of support as well. So turning to you, Haleh, from the World Bank's perspective... And you guys are going to be a huge partner in this effort, particularly on getting all of what is needed in terms of the soft and hard infrastructure in the country so this can be absorbed. From the World Bank's perspective, why is transformative technology for African agriculture so important?

Haleh Let me also start before I answer you, to congratulate Dr. Adesina for the Prize, and I think it's the best and the biggest prize in agriculture. So heartfelt congratulations, not just from me but from the whole management of the World Bank for you, Dr. Adesina. And thanks, Jennifer, for inviting us.

The reason why we give so much importance to the technology is because we see the technology as an accelerator, as an enabler. And ultimately what we all want to achieve is more incomes for the poor, better resilience and productivity, better nutrition, and more employment – these are the four objectives we want to pursue.

And in order to achieve these four objectives, agriculture is central. In Africa you cannot achieve poverty alleviation without agriculture development, without major strides in agricultural development. So it's a central part of the whole development debate is to get to the bottom of the agricultural development issue. And technology is a way to boost that, to accelerate that. So it's very... You know, our vision of this is very, very clear. And that's why we very much support the spirit and the objectives of the TAAT program. And as you know, we are already, as Dr. Adesina mentioned, we're already very closely collaborating, and I'll mention more about what we plan to do specifically.

So now how do we want to work on these four areas? On the question of employment, Africa is expected to see one third of a billion new entrants in the job market by 2030. Our estimates are that about 25% of these people will get wage jobs, and they're the best, most optimistic scenarios. How about the other 75%? What are they going to do? And agriculture, where most employment in Africa is today, is the best solution. But to look at agriculture not as pure farming but to look at it was the whole value chain of agriculture from the farm to the market – that's where we see a lot of the future employment of Africa coming from, is through agriculture value chains. So we have to emphasize. We have to sort of work on that.

The second strand is resilience and productivity, improving resilience and productivity. Since the 1960s, most of the agricultural growth has been by expanding the land, expanding the area and clearing forests or bush lands to plant. Today we have reached... You know, we can't expand that further, because we will damage the ecosystems. So what we need to do is to improve productivity on those same plots of land, like lots of Asian countries have achieved. It is doable, and a lot of African countries have achieved. It is doable; we just have to scale it up and implement it, and technology can be a big booster there. So that would be the second.

The third is on incomes. This relates very closely to the value chain issue that I mentioned earlier because a lot of the jobs of the future would come from post-farm activities, you know, the coffee shop, the restaurant, the little restaurant, the little shop – these are going to be owned by young people. And the link to the market, the link to the farm, from the farm to that market, is going to be very important and a generator of income.

And fourth is nutrition. If you look at the current productivity of agriculture in Africa and you project that into the future, you see that Africa will have to import a third to half of its food needs by 2030. That represents about \$200 billion of import bill per year. So if that capacity to produce is local, then you can spend your \$200 bill on more productive things to basically grow your economy through other ways. So it is essential to get that nutrition and to basically be able to feed Africa. For Africa to feed Africa is what Dr. Adesina always says, so that goes to the point that Dr. Adesina always mentions.

I think in order for these four objectives to be achieved, there are a few prerequisites. One is that the policy environment is the correct one. I think we very often disregard the importance of policy. And what I mean there is, for example, public expenditure policies. You look at spending and agriculture, and you see that a lot of the spending... There's no issue necessarily with the volume of money going to the agriculture sector. It's very often the way that money is allocated and how that the distribution of money is done with a country's budget. So, to look at public expenditure within the agriculture sector and how these monies are distributed is quite important.

Second is the question of trade and regional integration. If you don't address regulations and liberalization of trade and boost regional integration, that whole market provision and export capacity of African countries would not be there. So you need to do all these things in parallel with the four things I mentioned earlier.

Third, as we talked already about, is all the policies that will boost productivity increase, like targeted subsidies, things like that.

And fourth is policies for inclusion. We talked about youth, the importance of bringing youth in, the importance of bringing women in, but also refugees. We have a huge refugee crisis in Africa, and you have to integrate. One of the main sources of integrating these refugees into this country is through agriculture. So again, policies that will help them integrate. So the policy environment is very important. Second, partnerships are important, because no single agency would be able to do this alone. And the work that you have started at the African Development Bank under Mr. Adesina's leadership is crucial because you are creating a platform where all of us, whether from the foundation world, from the sort of [inaudible], are all working in AGRA on working together towards the same objective. I think this is extremely, you know, it's sine qua non – we can't do it without that. And fourth, I think we need to look also beyond Africa to learn experiences. Asia has made amazing strides in this area, and we have to have an open mind and really invite those success stories from Asia and other parts and Latin America to bring them forward to Africa. And China, I think all of these countries and regions have a lot of lessons to offer that we need to bring in and learn from and benefit from.

So this is why we are involved in the TAAT program. And just in terms of the specific support that we are bringing, we are envisaging this current fiscal year. We were envisaging contributions of about \$500 million dollars to programs in Africa which were in line with the TAAT program. And I'm happy to say that we have revisited our numbers, and we believe that this year we will be able to implement \$700 million of projects in the TAAT sector. So we're with you, and we look forward to continuing and extending this collaboration. Thank you.

Jennifer That's excellent, and I think, you know, if you look also at the opportunity, by some estimate the agriculture sector will represent a market of about one trillion by 2030. So I think clearly that's why we're basing our Feed Africa strategy very much on a lot of the things that you were talking about, because it's a big challenge when you look at the imports, the net imports, but also a massive opportunity if we do the right thing. And we tend to look at it in two pillars – you have to increase the productivity, and then you have to move up the value chain. And so this is very

much about increasing the productivity, producing more in a smaller space so that we can really reap the benefits.

So, Agnes, turning to you, moving on down the line. And obviously this is kind of your bread and butter and why I think you were probably even, you know, after the World Bank, the next partner that came in and say that you guys were keen to work together closely on this. The AGRA input dealer network has grown across the continent over the years, and that can be a really important basis for all of this. How do you see PAT working with the AGRA dealer networks to reach the tens of millions of farmers with modern technology? Because if we don't get this out to them, then it will be sort of a moot point, so how do you see that happening?

Agnes Thank you, thank you, Jennifer. I just wanted to say that I'm very excited about the launch of the TAAT and the fact that IITA was my first job. And I worked at IITA to clear up to my PhD, so I left IITA to go to government. But for me the excitement then comes from that, the link between what I learned at IITA and then what I got to learn in government. I got to understand that there are so many technologies out there, so many good people out there in CG centers, and there was so little on the side of government. In terms of the technology flow, but also in terms of the capacity support from the government to drive forth what they were doing

So for me it's very critical that we have a place where technologies are looked at and technologies are passed to people that need them the most. Yesterday – and I'll keep saying it – I talked about the zinc rice. I've just got to believe that that zinc rice is not on the plates of farmers that need them. So TAAT really does present that opportunity.

Now, a good agro-dealership model started by the Rockefeller Foundation in 1997 an Indian business process, they thought about how they could get these pumps, irrigation pumps, to smallholder farmers in India. And that has since taken off. And when Akin was at AGRA, definitely really put a lot of effort in pushing and showing that these dealerships were developed to actually take seeds to farmers and fertilizers to farmers. So it's become a very important model of how we do business.

Now, what TAAT is going to have to do is to work with the governments. We have lots of national institutions that are waiting for these technologies. Talk to the governments to ensure that the technologies that become available, that the technologies are ready to go, become available to country development. And they need information, right, the information that actually when the dealerships, those businesses get the technologies, they know what to do and they become the proper extension agents that they need to be. So there's a lot of information that need to be passed around at that point. These people are extremely important. They put capital on the table. They put their own big sticks on the table. They put capital on the table. They connect farmers to businesses in places where there is no infrastructure. They know what technologies work and then what technologies are not working. So they're really your biggest line of how to get to farmers. And they're the most important people in the value chain.

So I think that assuring that they have the right breath of knowledge and assuring that they get the flow of technologies that they need, because they're business people, that they need is going to be very important.

Right now at AGRA we are focusing mostly on two things – strengthening systems, and, see if you are looking at the seed, how is the seed system working from the time of seed leaves in a research institution to when the time it gets to the farmer and would welcome working with TAAT on that to assure that these technologies is getting to the farmers faster.

We are also working with the governments so that governments actually become the type of big programs that they want to drive and prioritize those programs and look at what is going to be impactful. Right? What is going to be impactful in terms of driving agriculture? What is going to be transformative. And again we welcome working with TAAT on that. But again we're ensuring that the dealership where they are sitting is making a business. It's a business, as Akin always says. This is supposed to be a business. And the only way we can take these technologies to farmers is if there is value built into the business. Thank you.

Jennifer So let us not forget our mantra, which is, *Agriculture as a business, not a way of life*. All right, as we roll this out, it's true. And the president does keep talking about the fact that the private sector role in this will be critical if it's going to be sustainable. And I think we know that that's true, I think, throughout everything that we're trying to do in this sphere.

So, Rajiv, turning to you – last but not least. So given all of the agricultural activities that Rockefeller has been sort of carrying out and involved in over the years, as well as your central role in the Green Revolutions that have taken place in the past... And actually if you look at the documents that we've prepared for our board, we are very much putting it in a historical perspective. And clearly your role has been so central in this. How would you or your foundation particularly like to see this rolled out for maximum impact in order to really get the technologies where they need to go, given that you have such longstanding experience in this area?

Rajiv Well, thank you, Jennifer, and thank you for having me here. I am honored to be with real Rockefeller leaders like Akin and Gordon and others and won't yet pretend that I can speak on behalf of that really powerful history, especially in this room. But I do want to make a few comments about the point you raised.

You know, it would be easy to come in this room and believe that the world is angry and divisive, that assistance levels for the priorities we care about are diminishing and that it's hard enough to keep our politics together for any responsible engagement around the world, much less an ambition that is so bold that it's designed to truly see through to the final success, the next Green Revolution in Africa.

And so I think it is special and important that we all come here with that bold aspiration at a time when the world desperately need success stories for global cooperation designed to help lift people up, not put them down. And in that context,

I think there are three reasons I'm very excited and want to be all in on this effort and this vision forward.

The first is – This is an African-led vision. As Akin and others know, in 2003 Kofi Annan with your leadership brought people together in Maputo, brought the African heads of state together. This is now 15 years almost after that, and we have a very concrete, very specific vision led by the president of the African Development Bank. I want you all to appreciate how unique it is that the president of the African Development Bank just defined the nation's state as a bunch of lines and borders that split up agra-ecological zones. That's fairly unique, and we should take advantage of having such a committed agronomist in this role to change the world.

But we also have AGRA, and we have more than a decade of effort of building, I would argue, the premier institution, technically on the ground in Africa reaching 50 million farm households, putting all these new seed varieties there. It's no longer safe to say that we don't know how to get this done, because Agnes has done in government, Agnes has done it in the public/private partnership, the team she leads; and the networks they represent have worked with all of you to deliver practical outcomes that we can measure and report on. And we have the African heads of state that have backed this vision for years and years and years. So now we have powerful, unique African leadership that it is our duty to all get behind.

Second, we actually have an important opportunity in the United States. You know, Mark Green is a special leader, and it made me really proud to see him wear the USAID logo on his lapel today, because this is tough politics in America. And American leadership on food and hunger, most crystalized by Dr. Borlaug and by this stage in many ways, is so powerful – but it is a threat. And the fact that Mark Green is saying – “I'm going to fight for Feed the Future. I'm going to fight for America's role in the world. I'm going to fight for our efforts. To be part of these efforts, I want to do it in partnership, and I got your back.” – means a lot. And I think we all in this room owe it to ourselves to find ways to partner with and support... They could be public/private partnerships or otherwise, Mark, at this unique point in time. The politics he has to deal with are a lot tougher than the politics I had to deal with. I'll leave it at that. But I saw the power of conservation Republicans holding hands with liberal Democrats to say – “Let's project America's leadership around the world for good and on behalf of the vulnerable, and let's do it with passion and commitment and faith and partnership.” And you heard all that from Mark today, so that's the second task at hand, is we've got to get behind a vision of engagement that is positive and effective.

And by the way, that includes, Nick, you, because the Gates Foundation is easily the largest of agricultural development in the private philanthropic space. And, you know, Bill used to say that he started Microsoft during a recession in the same way you have the opportunity, I think, to re-imagine the future of your engagement in agricultural development during a period of time when folks wonder what American leadership is going to look like.

And finally and perhaps the most importantly, we have a set of results here that we can be concrete and specific about – 120 million metric tons of additional production, 40 million people moved out of poverty, country by country, a set of concrete

outcomes for getting varieties into the hands of smallholders, and the yield impacts that that means, and the impact on women's incomes with that then results in.

And we have a discipline now about measuring and reporting on those results. So I think we have to maintain that. I think we have to come back here every year and Ken will commit ourselves to doing that, to come back every year. But we've got to report on the results. How much more progress have we made year after year after year, because people have to see and believe that we can get there.

So we're all in. We will do whatever we can at Rockefeller to support a vision and a community and a set of partners who have been at this for a long time. But this is a unique point in time, and I think if we can show the world we can do something wildly positive and impactful at a time when people wonder what the future of globalization looks like, we will have done something even more powerful than our core objectives.

Jennifer Thanks, Rajiv. So we will task ourselves to work together well in the sandbox and also measure what we do. And I mean I would even say, you know, I hope that this is... We work together a lot in many different areas, but in terms of your call to arms, let us make sure that this is going to be the way we do business together in the future.

Q&A

Jennifer We have a lot of people, I'm sure, in the room who are maybe surprised, excited, interested by the fact that all of us have come together for such a big initiative to get the latest technologies to Africa's farmers and to do it quickly and at scale. Let me open up to the floor for any comments or questions if there's anyone who has a burning... And I believe that there are microphones here, so if you get in line, you can go ahead and get in line, and I believe that there's one over there as well. So please. And introduce yourself and then ask away, and let us know if there's someone in particular that you have the question for. Please.

Q Good morning, everybody. My name is [inaudible]. I'm from Nigeria. Congratulations, President. It's really an honor to be here. I'm a farmer, so I am a farmer participant that was specially invited for this occasion.

You talked about TAAT, and you talked about bringing a lot of development partners to the table to buy in. My question is—are you looking, or did you have a master plan for engaging the youth, the African youth and explaining TAAT to them? Because I believe that when they understand fully that it is their future that we are talking about here, if they understand, they can pressure policymakers to take the technology from shelves and put it to plates. That is the first thing.

Secondly, this one is a comment. Usually when we talk about smallholder farmers in Africa, we still have the picture of old women and old men farming in villages. That demographic is changing, and I think that our strategies will be to engage the increasing number of young people that are entering the farming sector; because

they are educated, and if they understand everything that is happening, they can better drive policies and engage their leaders to make better choices for them. Thank you.

Jennifer Maybe I'll just start quickly to answer that one and then see if you would like to... As you probably know, we have a big effort. If you look at our Feed Africa strategy, at least at the African Development Bank, we have a number of efforts that sort of come together to create a whole of adjusting many of the different challenges and also those things that would strengthen the agriculture sector in Africa. And one of them is called "Enable Youth," and we had a big event, side event all morning yesterday to really look at that. And this is about taking young graduates and getting them excited about agriculture, teaching them how to do business plans and really training them up, and then also getting them the financing that they need to build or start their businesses. And so I say certainly it's incumbent upon us to make sure that we make sure that there are synergies between everything that we do. And I think TAAT and Enable and all these things will be of a piece. That's certainly true in our own area. I don't know if, Mr. President, you would like to add anything to that.

Akin Well, I just want to say that you're absolutely right. You know, we have to very quickly change the labor composition of the agricultural sector, because the average age of farmers in Africa today is probably about 60, 65. So in another 20 years, we may not have farmers left if we don't start right now, which means we have to change the perceptions of young people in agriculture. We have to make them to understand agriculture is a wealth-making sector. It's not a sector to managing poverty; it's a sector for creating wealth. And I'm delighted that so many young people are in this hall today and all week that I hear about that message. That's a very, very important message, you know, and so I think that's why the bank, we put in last year almost, close to \$800 million to support young people, creating a new generation of young entrepreneurial, dynamic guys, getting in agriculture. And we hope to do, I think over the next ten years, probably an average of \$1.5 billion a year, supporting young people in agriculture. And we also try to create some better private equity funds that will actually allow them to not only have great idea but also grow their businesses. You know, we want these guys to be the future millionaires and billionaires of Africa coming out of agriculture. And so I think that's a very important thing to look at.

The other thing that I wanted to say is that when we talk about the issue of young people, we always like to talk at the same time about what about what the bank is doing to support women in agriculture. You know, where would we all be without women? We'd be nowhere, you know. I try to look for birds. I'm still looking for a bird that has only one wing. Everybody bird has two wings, and so Africa will move much faster, and you have good, faster inclusive growth if you actually accelerate access into women and then access to property rights for women. And this is why at the bank we've actually launched a major effort that is called Affirmative Plan of Action for Women, which is to mobilize \$3 billion of support for women businesses alone in Africa. We say, "Men, I'm sorry, we can't help you right now but maybe later." But I know the World Bank also, Jim Kim also has a great program that he's

doing with Ivanka Trump also in supporting women. So I think we've got to get youth and women right.

Jennifer Anybody want to weigh in on that?

A Yes, maybe just a point on the World Bank is full of economists. I'm not one of those, but I keep hearing every day that I go to work about incentives and how incentives work. And I think that it's important to build the right incentives to give more access to all this financing to the youth. And I think targeted subsidies are important for youth, for women, for refugees, as I mentioned earlier, and so the policy angle is important. But also this value chain, you know, the work on value chains and bringing credits to SMEs; and these are cliché words that we use in every statement, that it's important to grow SMEs, but without that, you are not going to be able to bring all the youth in. So it's really important to involve them and interest them into creating businesses around agriculture.

A And I wanted to add that during the recently concluded AGRF that was in the Ivory Coast there, Jennifer, one of the things that we did for the first day was to organize youth actually in the Ivory Coast but also in five other countries where strife is abundant, actually engage the youth in each country for about one hour and had discussions really trying to inspire them around what is possible and how to use the whole idea and opportunity that the telephone system now creates and how to create businesses as young people today. The biggest thing that the AGRF that was very interesting where the fact that young people who had the ideas had an opportunity to compete with, had a whole day of competition where good ideas actually had funders. So that was something new that we did where ideas were being matched to my people who had the possibility to fund them. So I think that if we continue growing this but also look at where the technologies are taking us and the opportunity it's presenting, especially in agriculture, there's an opportunity to get young people. The one that I like the most, of course, is the tractor that we are now using in Nairobi and that AGRA is funding in a number of countries. Thank you.

Jennifer Now, I've just noticed that we're very popular. There's lots of people who want to ask questions, so maybe I'll take a few at a time. Maybe we'll go back and forth, maybe take four or so, and then we'll go back to the panel, so please.

Q Thank you. I'm John Magny from Opportunity International. I see a lot of unity amongst the development partners and also the private sector. The challenge I think we all have is that we need to get unifications in political leadership across Africa, because they are the ones who are going to make the policies and drive the legislations that will allow this to happen. And that's the area that I think I'm most concerned about, and I wonder how we're going to tackle that particular challenge.

Jennifer Thank you. Please.

Q Thank you very much for our distinguished panelists. I don't know if the audience paid attention, but last night at the governor's reception, in one of the rooms there was the name Ibn Awa and I was amazed to see that name there. It's one of the first agronomists worldwide from Africa who published one of the biggest books on

agricultural history in Andalusia, so I was very happy to see that name in the room. The reason I'm saying this is the crucial importance of technology has started in Africa and people believe in it. Just go to the library of Alexandria or Timbuktu library and you will find the evidence about that. My question is the following. What are the limitations of our distinguished panelists? What are the aspects of their intervention that they wish they could handle in order to have their future projects successful?

Second question. The World Bank issued the report in 2012 saying that one of the main reasons of our failure in many projects is the late inclusion of social scientists, anthropologists. The most evident example to think of, the so-called Arab Spring that started in North Africa, the Azawad Movement in Mali. And those countries witnessed huge investments, but then the sculptural transformations took place that tended to sweep away a lot of those investments. So how do you see integrating that?

Jennifer We'll take two more questions right now, and please kind of keep them short and only one question per, please. Thanks.

Q My name is Phil [Inaudible] I am president of GrainPro, and my question has to do with the issue of bringing to scale, which this panel emphasized. If you look at the food chain and the Green Revolution, what is the neglected part of that food chain? I would propose strongly that it is storage, which comes between production and consumption. And the problem of bringing to scale available technology which can reduce losses to less than 1% per year in storage is there. The fight against aflatoxins, which grow like crazy in hot climates, can be eliminated also by appropriate technology without the use of pesticides. And my question – With the possible exception of the Gates Foundation, which has done very important work on the front end of storage, why is this the neglected part of the food chain improvement?

Jennifer And one more on the side, and then we'll go back to the panel. Please.

Q I'm an Andrew Manu from Ghana. I want to ask a question about the involvement of this partnership that you talk about today. I think there are so many countries who have prospered in so many areas because of the Diaspora, the input of the Diaspora. And I think we come here to learn things. We go to Europe to learn things, and we don't want it to stay with us. We want to go home and help. What is any policy that has been developed by the bank or any other organization to involve the Diaspora in terms of agricultural development; because people are doing good work over all the world in terms of Diaspora, and I wanted to know if there has been a consistent effort to make it a standard thing to do to involve the Diaspora.

Jennifer Thank you. Okay, so let's turn back. That was a large variety of questions. If I can summarize, one is great to see unity among the donors, but what about among leaders. Second one is things like bringing in social scientists. Third was, what is the role of storage and why is it neglected. And the fourth was, what could be the role of Diaspora? Would anyone like to take any of those all of them? Agnes.

Agnes I guess I'll talk about two – the leadership part that was asked and then the storage part. Now, earlier on I was talking to you about how being in government, I did

recognize how we were suffering with lack of technology that were already there. One of the things that we want to work on and started working on is really the issue of steady capacity and driving agricultural development. We do recognize with countries, like I said earlier are struggling with having the right capacities to define some of the challenges they are dealing with to write some of those programs. And African Development Bank, you have PPFs and things like that, that you have countries to support them this program. But we want to institutionalize. We want to ensure that the countries we work with have the capacity to provide the leadership that partners are looking for, whether it is African Development Bank or it is World Bank and other institutions. We want them to own their problems.

So what we are doing now is as an African institution, we are actually working and assuring that we provide the capacity, we provide the reviews they want. We also help build their data analytics department so that they can actually start understanding the planning process that is behind, driving and building a profitable culture. But we also want accountability. We want them to understand that in the real world, there are comfortable systems that we all must work with. So having these discussions, being accountable to the communities that they work for but also being accountable to the people that give them resources is very critical in organizing further resource. So as an institution, we actually mostly are focusing on driving and building country leadership and really helping them have a very good partnership.

We also looking how we can help them build better partnerships with the development community that they work with because sometimes it is a challenge. So that's an area that AGRA has decided to focused on, and that's an area that many of our development partners, the Bill & Melinda Gates Foundation, the Rockefeller Foundation and the USAID have recognized as a critical area. The USAID has been leading in this pursuit, Africa lead, for some time. And they've understood the challenges that countries are facing. So that's why we formed the [inaudible] partnership so that we can help drive leadership at country level. And we as AGRA take that responsibility very seriously, because on one hand we see the suffering end. These are people we look up every day and see – the children that have no food, the children that are hungry, that we have something to do about. And we know that there are technologies in the world that we can get to them. So that idea really helps us ground this.

So I wanted to talk about that leadership part. That's why we really shifted our strategy to focus on how we can help Africa's leadership. The part on post-harvest losses, I appreciate the comment, and, yesterday I had the gentleman who is asking. Africa loses between 30 and 45% of the crop that we produce, so if we just saved that, we probably would do very well without doing much more. So there's a lot that has been done. The gentleman that is asking works with us. He thinks it's being done by the Bill & Melinda Gates Foundation but it's actually work being done with the Rockefeller foundation through the yield wise program. So I wanted to emphasize the Bill & Melinda Gates foundation is supporting that especially and driving technologies all the way from breeding to markets, and the Rockefeller foundation is supporting AGRA through the yield wise, which is a program that is focusing on using post-harvest technologies but also supporting the private sector to come up

with post-harvest technology solutions. We work again on that stream of business. We work with USAID to do seed companies, so we have three partners, and this time we are really partnering on focusing on building steady capacity for agriculture. Thank you.

Jennifer Yes.

Akin Just on the point of political leadership, I think while we talk about political leadership, we kind of that political means the president, it means the vice president or things like that. No. No, we are the political leaders. We are the leaders, actually. You know, leaders are foundation in everything. You know, we have leaders in research, we have farmer leaders, we have community leaders and so on. So we have to begin to look at the concept of leadership apart from that very heretical thing – the collective leadership that we actually need a lot more in Africa. When I look at the issue today that would make the leadership to pay attention to agriculture, you know, you look at Africa today. We have a problem with terrorism in many parts of Africa. But in my view, I feel that part of the problem is what I call this triangle of disaster, because of three factors. Whenever you have them, you always have terrorists. You have a high level of rural unemployment, especially among the youth, extreme rural poverty, and areas you have high levels of climate and environmental degradation. Anywhere you find those areas, whether it's in [inaudible] Basin, whether it's in Northern Kenya, whether it's in Mali, you've got terrorists always operating.

I think what we've got to really do is to see the power of agriculture to transform rural economies from zones of economic misery to zones of economic prosperity. And I think that's what political leaders in particular have to pay a lot of attention to. Personally, I don't think we can solve the problem of insecurity in many parts of Africa just by Apache helicopters – that's now how you're going to solve that problem. You've got to really go in there and make sure we create a lot of opportunities for young people.

Another reason why leaders are paying a lot of agriculture today, and that's because of the youth bulge, the fact that what you were saying about the high level of youth unemployment that you have. You have a lot of young people in the rural areas that can do so much, and they are going to put everybody's feet up in the fire to make sure we can create economic opportunities for them.

And I think that when we also talk about getting agriculture working, we need collective action by farmers. You know, we're sitting right here in Des Moines. I understand you can't be president of the United States if you don't win in Des Moines, Iowa. But how come leaders win in Africa that go to rural areas and campaign and after that you forget about them? Yet, if you're in France, if you do anything against farmers, they will take all their tractors and all the manure of their farm and organize. So what I'm trying to say, I'm not saying let's organize against government. I'm just saying that we need very strong farmer institutions that can actually hold government accountable for what they actually said they are going to do. And I think we should organize farmers to be able to have political voice. And I think when you have political voice, you've got leaders actually listening to you quite a lot.

I want to also say something about the storage point, and I think Agnes was saying that. Two points I just wanted to make is that when Phil Nelson got the World Food Prize, it was for actually doing exactly that, which is to help to reduce a lot of the post-harvest losses. We have a hermetic bags developed by Purdue University. Of course, I'm making a big speech for Purdue because I'm an ag guy from Purdue, of course. But the hermetic bags are great to reduce losses, in particular cowpeas and things like that. IITA has the fantastic technology that is Aflasafe. And the Aflasafe actually reduces aflatoxin actually in maize at about 99.9%. And so again back to the TAAT technology, how do we take those kinds of things to scale. And I know Gates Foundation actually supported another work, you were there, at Gates at that time.

And the last thing I just want to say, you know, on the Diaspora side, is that I think that today in Africa we've got a lot of Diaspora coming in. They have commercial farms. Diaspora remittances are very, very important for households in Africa, and we have to find a way in which we take those remittances and try to make sure we can make sure we can use them not just for, consumption, but to securitize them so that we can use them for investment in energy and infrastructure that Africa needs.

So I agree with you. China has a great program that's called the China Bridging Program where they bring in scientists in world leading institutions back to China for a couple of months. And I think in Africa we're looking forward to being able to do something like that, and this Bridge program, it's not a, what do you call it? It's not a brain drain. It's actually a brain gain or us, so we're talking to that.

Jennifer Thanks, and just there are five people who have been waiting, and I want to make sure they each have a chance. But please very briefly we'll go to each. Because we have five minutes left. Each like 20 seconds each with your comments, and then we'll try to get a few last comments in here, so please.

Q Thank you very much. My name is [inaudible], and I am with IITA. I can sense the excitement in this room from what we have heard from the distinguished panelists, and I just want the panelists to help me here. I'm trying to identify three words which cut across what they have given to us. And the first word that comes to my mind is the word "transformation," that agriculture now has to be transformative, and we need to make sure what we are doing is leading to enhancement of benefits of livelihoods in places.

The second one I hear is the word "alignment," that we have to be aligned to the big goals, the excitement that has been created, and also alignment to countries' strategic agendas, that we can be working through countries to achieve what the big vision wants to do.

And then the third word is the word "integration," that we can't do things just by ourselves and we have to figure out.

And I just want to throw these three words to the panelists and see if they agree or disagree. Thank you.

Jennifer Hard to disagree with those three. Please.

Q I am [inaudible] from South Africa. I work for the [inaudible]. Happy to have a Development Bank president who is so motivated and sees potential in what can happen in Africa. But I think we need to move beyond that. We need to move beyond potential. For many years Africa has had potential, and it has been spoken of, but we keep continuously, perpetually we fail to deliver, and we fail to meet our potential. We continuously take for granted knowledge equivalent that has already been generated, that is already there for use. Technology is not new. Technology in agriculture has been there. In South Africa we have consolidated vertically integrated system of agriculture that are working effectively. But the failure to take those to small-scale farmers, I don't know when we are failing but if Brazil can collectively amongst small-scale producers constitute cooperatives that are able at the end of the day to export to Africa, then there's a problem, either with our statesmen or with what we're doing as developmental agents in Africa. Thank you very much.

Jennifer Thank you, and I think that that's really the goal of TAAT. So please.

Q [inaudible] president and CEO of Humana [inaudible] Global and Chair of the Community for Zero Hunger. Akin, last year at a meeting you had a brilliant statement that stayed with me. It was, "Africa's development will come within Africa, not from outside Africa." And my question is for both you and Agnes, as both of you are really leading that charge and driving the agenda on what is possible. Who from within Africa – again both for Akin and Agnes – who from within Africa is not at the table who needs to be at the table? And what issues are being overlooked by the donor community that need to be prioritized?

Jennifer Thank you. Please, quickly.

Q [Inaudible] her from seed systems for cassava in Nigeria. Hats off to the communing power of the World Food Prize. It is the most powerful panel that I've experienced in my life so far. So involving youth, solving the demographic problems of Africa. as Dr. Adesina said, the times have changed. In my mind, initially we said, give them fish, but then you said that time has gone – teach them fishing. But I think that time also has gone, and now we need to set up a fishing industry. Because if you teach fishing, we can teach them only so far as what we know. But if you set up the fishing industry, let somebody do the eggs, let somebody do the processing, let somebody come up with new nets and all that. So as an ex-prime minister of India used to say, "I want to see the animal spirits in the industry." So how can we lead the powerful people that we are talking about with the big guns here, how can we set up, unleash the power of youth coming out; that would be more powerful than empowering few people. And empowering few people is good to getting the process happening, but unleashing the whole power will be more powerful I think.

Jennifer The ultimately not giving the fish but teaching to fish all along the value chain. And the last question, please?

Q Hannah Johnson, farmer from Iowa, and I want to offer the voice of farmers collectively to help turn this wheel. It inspires me. I see the need, and I'm president of Mazion, the International Alliance of Corn Growers from Argentina and Brazil and the U.S. And we are pledged to have agriculture without borders so that farmers

small and large have access to technology, and there are good government policies to allow that to happen, and especially now with Uganda adopting the new biosafety protocol law, we would like to be able to offer our services to help carry on that mission. So thank you for your panel.

Jennifer Excellent, thank you. Okay, so in the last very, very brief minutes that we have, if I could just go along and just ask each of you to say a few words, ideally responding a little bit to what you heard and also any final thoughts that you have for the room and how we can work very effectively together. Please, Nick.

Nick Thanks, Jennifer. Brief response and thoughts. Just first in relation to the three proposals, I think transformational law and integration, can't argue with that. I just wanted to pick up on the transformation piece and emphasize the inclusive nature of that transformation. We know, and we are seeing, agriculture economies transforming. There are different pods for that transformation. To be inclusive requires deliberate actions. We've talked already on the panel and in the sessions prior around the importance of women and girls, importance of reaching those harder to reach, further from markets, further from infrastructure. So just to really emphasize that inclusivity on this projector to agricultural and economic transformation as we were the rise of medium farms and the like.

The other, I think very briefly, aspect that hasn't come up but is relevant to a number of the questions in the Africa-led national capacities of agricultural research and extension systems to enable technologies to be made locally relevant and to continue to drive progress, drawing on the best... [microphone malfunction] but recognizing that Asia's transformation journey is a very different one to Africa's, given the agro ecologies and the local contexts, so that patient investment in national capacities and extension, not in ways of the past but in exciting new ways, incorporating digital to get new knowledge and products to families.

Jennifer Thanks, and Haleh.

Haleh Yes. Some of the questions made me think that really we may be looking at agriculture as a narrow sector, and it is not. It is really a thing. It is not something that you can just look at one narrow way. You need to look at markets, you need to look at how to bring in new, how to make it inclusive. And the question on the social scientist sort of connections with this, because you really need to look at things, bring different strands into it to succeed. Otherwise, by looking purely at the sort of fertilizer, entrants, you know, the very narrow agricultural issues, we're not going to be able to make it. We have to look at it more broadly, and we have to bring in those other sectors to support it.

Jennifer Yes.

Agnes I just wanted to mention the parts that is missing for me when you said transformation, alignment and integration, is partnerships. So assuming that that was implied as well. Because one thing we have learned is there's so many of us there that are trying to do the right thing when we really need to align our efforts. We need to align our efforts, we need to integrate our efforts. We need to make sure that we are adding up, so I think that's a very critical part of where we are going. If

we are going to get the transformation for the African Continent, especially where I'm from, we really need to align our efforts and be workers, partners in this perspective.

The question that was addressed to me on who is missing at the table here. Who I would like to be around is actually, for example, a minister of agriculture. It would have been nice to have a minister of agriculture at this table discussing with us what we are talking about. Because many times... I can't tell you how many times I sat on the other side, and I thought that these guys miss the point – they don't get it – because I had my ideas of what I wanted done. And I'm sure Akin had that impression sometimes.

So it's very important that the plans that we talk about and the people we are looking to support and the governments we are talking about, their views also get heard. And I'm sure many of us presented that in a way because we care about what happens there. I'm happy there are a number of farmer voices in the audience, and those two voices are very critical. Those are the people we serve, the governments that are trying to do everything they can for their people and the people that actually depend, whose livelihoods depend on what we do. Thank you.

A I'll just pick up where Agnes left off in terms of people that could be included in this conversation. The first group in my view ought to be people who represent patient private capital. Akin has made the case loudly that agriculture needs to be seen as a commercial business and a commercial investment opportunity, but there have been very few successful agricultural transformations that exclude real private investment. And in a world where we see billionaires investing in long-term enterprises to make space travel or hyper-loop travel more possible, it seems like we should be able to tap into the pools of capital to be patient and focused in bringing the technology transformation to African agriculture.

The community of leaders I'd love to have in this discussion are mobile phone operators and those that really do capture the consumer behavior data of these rural households. I think we live in a world where data itself is going to be extraordinarily valuable, and even the poorest rural family generates information about when they use power, how they move around, when they connect with others and for what purpose. And in the spirit of those 30-year-old studies the World Bank used to do on understanding the lives of the communities you try to serve, the modern interpretation of that is probably big data and machine learning applied to aggregated information about the lives of the billion or two billion people that still live in some form of extreme poverty.

A Yes, I wanted to thank the representative of the farmers' association that just spoke over there. I think what you find us really talking about here is the time you used that, looking at agriculture without borders. And in fact, when we're really talking about TAAT is really that – technology without borders in Africa. I think that's very important. So we can have technologies without borders. We can have innovations without borders, but we also need partnership with our borders. And I think that ability to learn from different parts of the world what works and what didn't work, so how do we adapt is very important. That is why I very delighted with the conversation we had with Embrapa and with the Argentinians and so on about their

successes in actually, there cerrados of Brazil and how those cerrados, in fact our savannahs are better than their cerrados of Brazil, and how they were able to unlock their potential – and we are sitting on ours. And to your point, Dr. Borlaug said all the time – if you like potential, you haven't seen it yet on the menu; nobody eat is. So we've got to really make sure that we unlock this.

My mother taught me something which I never forgot, that if you're trying to sweep, you have a broom, and you have different strands of it. And if you use those little strands of it to sweep, you will not succeed. But if you took all the strands together, you know, wrap them all together and you try to sweep, it works, like a vacuum cleaner. At least when I was growing up, that was the home vacuum cleaner.

And so what you have here is the power of partnership. I think partnerships is the way to go. You know, I have absolutely no interest in planting any plans. Nobody eats them. But we want to work together to make sure that we can transform the lives of people together and really lift millions of people out of poverty.

I'm going to end on the point that Rajiv made on the issue of private sector, because Rajiv is absolutely correct. And that's why for us at the African Development Bank we are also launching this next year what is called the Africa Investment Forum, to try to [inaudible] exactly the global pension fund, the southern wealth funds, the institutional investors and similar ones in Africa to invest in agriculture, to invest in rural energy and enable energy and logistic change and things like that, and warehousing and things that we need. And just to let you know that we think that we must have strong public/private partnerships for the technologies for African transformation to actually work there.

I want to thank Raj. I want to thank Agnes for your leadership, thank the World Bank, and thank you, Nick, and also Bill and Melinda Gates for their very strong support. Of course, I have a very capable vice-president that you will make it all happen. So thank you very much.

Jennifer What else is there to say? I think it's all been said. Now we will go forth and prosper. Carpe diem. And as we said, we will come back next year, and we will tell you what we have achieved, and we are planning to achieve things quickly. So thank you very much, and thank you to the panel, and we wish you a great rest of our day.