

THE AFRICAN FERTILIZER SUMMIT - 10 YEARS LATER

Panel Moderator: *Charlotte Hebebrand*

October 20, 2017 - 9:35 a.m.

Introduction

Ambassador Kenneth M. Quinn

President - World Food Prize Foundation

I am now going to turn the emcee duties over to Maggie, but I wanted to show you my new tie. I've got it on. Thank you, Jan.

Margaret Catley-Carlson

Council of Advisors - World Food Prize

Before you leave the platform, Ken – does this guy give a good party, or does he give a good party? That was an amazing event last night, just amazing. And I first of all would like to congratulate all of you that are here this morning for just being here. I think that we laughed, we partied, the people who were watching it outside, the people who were there. It was just an amazing event. And how this small staff puts all of that together is really quite amazing. So you're here. Well done. And some of you were even at breakfast at 7 o'clock in the morning, and some of you were awake at breakfast. And that was a great beginning presentation. It's wonderful, when you have a set of biases and prejudices, that somebody then goes and holds up the facts. Huh. That's why we come to this place.

Okay, you have a great morning ahead of you here. The staff has put together some fascinating aggregative sessions that pull things together and may start to either answer some of the questions or make you ask questions of issues that have come up here. And the first one is a revisitation of the... It's the 10th anniversary of the African Fertilizer Summit. So while I talk, let me ask the panel to come up here. I see that the chairs have mysteriously, so now we hope that the panel will mysteriously appear. Very good.

And this is not just a fertilizer summit. This was a hugely important event because African ministers and African heads of state and government did not see themselves as being occupied with... – well, they certainly saw themselves easily occupied with international affairs and intergovernmental affairs – but being occupied with how you planted and what you did with agricultural inputs and how those ag inputs got assembled was not necessarily what African leaders thought they ought to be occupied with, something like the same as sanitation and water. And things have moved very quickly, because we have had African leaders, Olusegun, here who said, yes, this is our business, absolutely.

So what I do in my life for the last 20 years is I sit on boards, which I try and help that organization to become better and more efficient, and I shamelessly exploit the knowledge and wisdom that the people in those organizations have. So I joined IFDC, the International Fertilizer Development, and they were all agog about the Africa Fertilizer Summit and the huge importance of this meeting for the next years, which they saw, yes, important as fertilizer but even more important as a harbinger of greater talk level interest in agriculture, and that was really the extraordinary part of it.

So the panel is going to be skillfully moderated by Charlotte Hebebrand, who is sitting immediately to my left. You can see the cast of characteristics, Richard Mkandawire, Mustafa El Ouafi, Benjamin Pratt, the dancing man from last night – did you see this man dancing? He was doing a wonderful, wonderful job, Olusegun Obasanjo, and, boy, that leader, that singer, when she came out covered in sequins – who did she head for first off? And Josefa Leonel Correa Sacko. So you’ve got a good group, because Charlotte is going to explain to you the significance and the role of each of these, but I know that we’ll enjoy very much listening. And remember what you’re listening isn’t just fertilizer – it’s the governance and how the costs continental governance of agriculture had a tremendous impact from this particular summit and how it’s continued or not continued to today. Charlotte, over to you. Thank you and thank you, panel, and I’ll be back hovering with the timekeeper at an appropriate time.

Panel Members

H.E. Olusegun Obasanjo	Former President of the Federal Republic of Nigeria
H.E. Josefa Leonel Correa Sacko	Commissioner for the Rural Economy and Agriculture, African Union Commission
Charlotte Hebebrand	Director General, International Fertilizer Industry Association
Richard Mkandawire	Director, Alliance for African Partnership/MSU
Mustafa El Ouafi	Managing Director, OCP Group
Benjamin Pratt	Vice President of Corporate Public Affairs, The Mosaic Company

Panel Moderator

Charlotte Hebebrand

Thank you very much, Maggie, and good morning to all of you. To paraphrase some statements from yesterday, we’re all here in the house that Ken Quinn built, and the house is so full because of the respect that we all have for Norman Borlaug. So it’s a great pleasure for me to be back in Des Moines again at the Borlaug Dialogue.

I would like to congratulate the two award winners of this year's Dialogue – of course, Dr. Adesina for his tremendous work in Nigeria and across the continent, but also Dr. Zhenling Cui, who won the Borlaug Field Award for his research on more efficient fertilizer use in China.

So I'm really delighted that fertilizer has been such a topic at this year's Dialogue. You may know that Norman Borlaug referred to seeds as "the engine" that drove the Green Revolution, but he referred to fertilizers as "the fuel" that drove the Green Revolution.

So it's really my honor and a great privilege to be here today to moderate this very distinguished panel during which we will be taking stock of a very important event that took place in 2006 in Abuja under the leadership of President Obasanjo, and which was the 2006 Fertilizer Summit.

And a lot of organizations were involved in this really very important event. What I find so interesting about the date of 2006 is that preceded the world food price crisis the following year. So it was really the earliest clarion call saying we need to pay more attention to agricultural productivity, to access to inputs in Africa. So I think the timing of it was just extraordinary.

Many organizations were involved. Many heads of state were involved. Maggie mentioned the IAPC. The IAPC played a very important role in the lead-up to the summit under the leadership of [inaudible]. My organization, the International Fertilizer Association, was also actively involved under my predecessor at that time, [inaudible], and many, many groups throughout Africa and friends of Africa, very much involved with the Summit.

And we actually have two people on this panel that were there in 2006, and I'm first going to turn to our most distinguished panelist, President Obasanjo, and thank you so much for joining us. You really were a key driver behind that event, and of course Akin Adesina, this year's laureate, also at the time at the Rockefeller Foundation played a very crucial role in creating this very important event. Would you mind telling us about what you think was so significant about the Abuja summit, which again gathered heads of state from across the continent and led to a number of very significant resolutions.

Obasanjo Thank you very much. Let me begin like all of you have said, congratulating the awardees of last night, and that was a splendid night. I enjoyed every minute of it, especially the surprise of bringing the drummers and singers from Nigeria and I couldn't resist dancing.

Now, let me give you a bit of background to that very momentous Fertilizer Summit. Before that, I had to work with Sasakawa, President Carter and Norman Borlaug on work was done Sasakawa, go back 2000. It was the initiative of Sasakawa, who after watching the devastation of drought and the effect in East Africa, particularly Ethiopia in 1986, called on Norman Borlaug. Said, look, "What can we do?" And Norman Borlaug told him that, "Look, I'm getting old, and don't get involved in this type of thing." And Sasakawa said, "Well, if you are old, then I'm older, and then even older and [inaudible], then you cannot say you are too old." Well, the two of them agreed, and then they wanted the world leader who would join them. And they persuaded President Carter to join them. And President Carter thought that there should be an African leader who would join them. President Carter persuaded me. By then I have ceased to be Nigeria head of state, but I haven't become Nigerian, elected president.

So that was what led us, and we went around Africa. So I have seen, not to leave my country, but all over Africa the effect of what that I can call the death of the earth, as a result of loss of nutrients in the soil.

So when, at the instance of Norman Borlaug and the Rockefeller Foundation, the idea of fertilizer summit was then brought to me. It found a fertile soil, so to say, and I decided and accepted to head it. And as you have rightly said, we had leaders from Africa, leaders from institutional organizations, agri organizations from all over the world.

But what was very important outcome was before we went in, and I said to Akin Adesina and Rockefeller and those who are behind the scene that – Look, I don't want to have to go in here and come up with a hundred objectives and targets and things to achieve. I said – Look, we know what's going on in my part of the world. The rural and native people that would say whatever I want to do, we should be able to count it with your finger. So I said to them, we shouldn't have more than five objectives so that they are crisp, they are objectives that we can focus on.

And the five that we came up with were a good agro-dealers network for fertilizer, announcing access for agri-dealers, smart subsidies for small scale farmers, which is support domestic for class of production, and of course the fifth one was establishment of Africa fertilizer [inaudible] facility, which was at the African Development Bank.

And let me start by the last point what I mentioned, the establishment of Africa fertilizer [inaudible] facility. At that meeting when one of the decisions. I immediately got up and said, "Nigeria, I will contribute \$10 million to all that." And of course with the African Development Bank you cannot move it forward unless you have \$10 million as the seed fund, the initial effort. So that will come back and I will say over the last, what, three years, we have made progress on those five objectives.

Charlotte Excellent. Well, thank you so much for your tremendous leadership at the time, and of course you've continued that leadership after you left the presidency and chaired the AU Commission as well. So thank you very much for taking us back to 2006. Let's turn to Her Excellency, the new African Union Commissioner for Agriculture and the Rural Economy, Her Excellency Josefa Sacko. We're delighted that you can be with us today. Could you perhaps place again the Fertilizer Summit of 2006 in the wider context of the CAADP policy and more generally the efforts of the African Union to promote agricultural transformation on the continent?

Josefa Thank you, Director Charlotte. Good morning, everyone and esteemed participants. I would like to join the Baba. We call him Baba, to also congratulate my brother, my schoolmate, Dr. Adesina, for the award you got in the World Food Prize yesterday.

Coming to your question, I would first of all like to present the actual situation, and the need of nutrition in the world. As we are all aware, this population is 7.3 billion, and in 2023 we are going to be 8 billion, and 2050 we are going to be 9.7 billion. So the demand for food is going to increase. And after this 2.4 billion increase, 50% will come from Africa. So there is a need that we need to boost productivity. We need to transform our agriculture to feed the world population globally and also at the continental level.

That's why in 2003 the African Union Commission, through our heads of state and government, they created, they founded our flagship program, which is CAADP. CAADP was created in Maputo in 2003 to transform agriculture. Transformation of agriculture is the key pillar, is a key pillar for our Africa we want, we want to see, and for the next decade. The transformation is captured in our Agenda 2063. This is the agenda. We made it ourselves, we Africans, and we have a vision where we are going to double our population in 2063. This is also our economic development blueprint for the continent.

So this CAADP project was created. And ten years after, one of the main objectives was to finance agriculture through our domestic resources, through the public expenditure. And the second one was to boost productivity. By ten years after, that is 2003 to 2014, there was not much progress comes from the 55 African Union member states, so our other states, we met again in Malabo, and they committed themselves to still support the values of CAADP and went farther with more commitment.

They brought up seven commitments. And the issue we are debating this morning, it's about fertilizer, but it goes on productivity. As you know, we have a lot of problem in terms of yield on our continent comparing to the other parts of the globe. That's why we took the Abuja Declaration, and we aligned it into the Malabo Declaration. So we are asked to report on the progress.

In terms of fertilizer application, we have risen on the continent, some progress. I think my colleagues will go further to explain. But there was some progress, but we are very far to attain the Abuja Declaration, which is 50 kg per hectare. Today, Africa we are on the average of 16 kg per hectare in Sub-Saharan Africa except South Africa. This is the progress we are making, but if we go at this level, we will not reach the target of Abuja, which is 2025 to reach 50 kg per hectare.

That is why in terms of the African Union, we have a tool today, which is the CAADP Malabo Declaration Business Plan to implement the decision taken by head of state. So we are implementing this phase of this, and we are going to report. Of course, the question is – are we reporting? Are we monitoring as the continental organization? We are going to present the first reports on the progress, which the fertilizer is also inside, in January summit, during this January summit, 2018. We have already got the report, and we have got the report plus these scorecards and this scorecard will allow us to know which country is progressing better. So we are really working on that, and we know that through the biannual report, we can also monitor about the decision that was taken by our head of state in 2006. Thank you.

Charlotte Great, thank you so much, Commissioner. If you allow me... The Commissioner mentioned she was classmates with Akin Adesina. She didn't mention that President Obasanjo brought her to Nigeria. He was the one to offer her a scholarship and brought her from Angola to study in Nigeria, so it's a small world.

We have another very distinguished... Everybody's distinguished on this panel, but our next speaker was actually also at the 2006 Summit, and that is Richard, Dr. Richard Mkandawire. He is serving as the Director for the Alliance for the African Partnership and is also the chairman of the Malawi Planning Commission. He, of

course, has had a very distinguished career. Prior to his present position, he was the vice president of AFAP, and he has also of course had a long history with NEPAD and actually was one of the architects of the CAADP. So it's really great to have you with us, Richard.

Could you maybe go into a bit more detail and tell us from your perspective – how have some of these goals been met and perhaps how have they not been met since 2006?

Richard Well, thank you very much, Charlotte. Perhaps an entry point is to recognize that Africa is on the move, and I think we have a crop of new leaders that have begun to realize that Africa, to put it in the words of Norman Borlaug, “cannot work on an empty stomach.” And I think President Obasanjo, you were certainly torn in 2006 when you organized not just the Fertilizer Summit but also other summits linked to agricultural transformation in Africa.

And there's no question also that, since 2006 we have seen I think a movement from the international community. New businesses in the fertilizer sector are coming in, and I think the international business community is seeing Africa as the destination for future markets in fertilizer. So we've seen increased competition among various global fertilizer companies coming into Africa, and this I think is good business for not just those companies but also for the smallholder farmers in Africa. I would like to encourage more companies to come to Africa. So indeed I think that has been this movement.

But also I think increasingly our governments are beginning to realize that they cannot run fertilizer programs. There's much greater opening up of spaces now for the private sector to come in, and I think we have seen also the growth of small to medium enterprises coming in, not at the same pace as we have seen the seed sector growing terms of small businesses; but there are nevertheless small fertilizer companies growing. We have seen increased growth of these agro-dealer networks. And this is where perhaps there is a gap where there is a need for increasingly supporting those small enterprises in fertilizer value chains to grow better.

And indeed the fertilizer financing mechanism, which was actually again supported very strongly by President Obasanjo, is now operational, as we might have learned. But obviously, more resources are required to go into that part of money that was actually initially contributed by the president of Nigeria and also the African Fertilizer and Agribusiness Partnership as well as AGRA [inaudible] needed to put in there, some resources there in that part of money to support small to medium enterprises. And we very much hope that ADB will actually commit additional resources, because clearly financing is a major challenge for the growth of these SMEs. Our interest rates in Africa are so exorbitant that people cannot make business by borrowing from commercial banks. So we need to find ways of innovatively supporting these SMEs to grow. And this financing mechanism, I think, will go a long way towards that support.

But I think it's also noteworthy that, with pressure from civil society organizations, which are critical to stimulating greater accountability and push for supporting the growth of our smallholder farmers, there is actually increasing pressure in the

establishment of national policies on fertilizer, including fertilizer laws in some countries. So in a number of countries there are fertilizer policy frameworks that have been actually put in place, regulatory frameworks. And I think this is important so that a private sector actor coming into the country, he's aware what is the regulatory framework like in a country? So they should not have any guesses tomorrow they might be manipulated, or indeed they will be, you know, rent seeking, seeking for bribes and so forth, but they understand fully what the law says about establishing a fertilizer company in a given country. Even at the regional level, the regional, economy community level, COMESA, which is the common market for East and Southern Africa, there's actually a regional fertilizer regulating policy framework that has establish. The same is true for ECOWAS.

So, currently I think there's this awareness that something needs to be done to really stimulate increased investments in fertilizer value chains in Africa. I would very much hope that the global community will actually look at Africa as the destination for future investments of fertilizer. Thank you.

Charlotte Excellent. Thank you so much, Richard. We have two very distinguished panelists here from the private sector. They're actually both [inaudible] members, so I'm going to first turn to Ben Pratt, who is the vice president for corporate affairs at The Mosaic Company, which is one of the largest producers of both potash and phosphate fertilizers.

Ben, maybe we can shift away from Africa for just a few minutes, and could you explain how you perceive how other regions have been able to enhance the access of farmers to fertilizers. In particular, let's talk about India, perhaps also Brazil. Could you give us a sense of what was necessary to ramp up fertilizer use in those countries?

Ben Thank you, Charlotte. I just would like to acknowledge that it's a great honor to share the stage with you, Mr. President, and all these very distinguished panelists.

So I think one of the mistakes we make when we talk b Africa, at least in the circles I'm in, which are mostly in the United States, is – we think of Africa as one thing. Africa is 54 countries. India and Brazil are countries. Africa is a continent. And that 54 countries multiples the complexity of this issue.

But to answer the question, I think what's required to increase access to fertilizers is a whole system. It starts on the ground with farmer education, which in turn creates for fertilizers. We won't have a market for fertilizers if there is not demand for fertilizers. And on the more macro scale, it requires good infrastructure. These are all things that are fairly clear, but it requires good, reliable, consistent infrastructure – roads, good port access. We move fertilizer in very large bulk, and it has to be moved in bulk to be economically efficient; and so it has to arrive at those countries in bulk.

It also is inefficient for us as a big company to sell, to try to reach farmers individually one by one as customers. It's much more efficient for us to have a new of retailers and especially in regions where farmers are smaller, smaller landholders. And so having a network of retailers is very important.

These are all things that, if you look at India, those things have been achieved in many sections of India, but India still has many challenges. It is impossible for us to reach Indian farmers one by one, given that most of them are very small landholders. Brazil is a very different story, and the challenges in Brazil that existed until the last 30 years, say, came primarily from infrastructure challenges and some political instability. We have to be able to rely on long-term ability to serve the market.

You know, we talk a lot about sustainability, and we'll talk about that more. Sustainability is really the ability to sustain your business or whatever your enterprise is. And that means we can't have a market that opens briefly and is profitable and then closes due to some sort of instability. It is, I will say, very critical that we figure this out and that we come together to increase access to fertilizers.

To put a different spin on your stunning statistic about fertilizer use, the Global Harvest Initiatives, 2017 GAP Report, was launched here on Wednesday. It includes a statistic that shows African farmers will meet just 8% of the growth in their demand for food, but through increased productivity of existing land – 8% through increased productivity. That needs to change. We need the existing land that's being farmed to be far more productive in addition to bringing good farming lands into production.

So access is very complicated, and it requires a long-term commitment. It's not easy for us to turn the ship and go to a market briefly. It requires long-term commitments.

Charlotte Okay, thank you very much, Ben. The next question is for Mustafa Ouafi, who is the managing director of the OCP Group, a very important North African producer of fertilizers. Mustafa, the 2006 Summit really shone a spotlight on the fact that over centuries, really, African farmers have been harvesting from their soils but not replenishing the nutrients sufficiently.

Could you give us a sense of the... Again, keeping in mind that Africa is in fact 54 countries, but in a very general sense, could you give us a sense of the problem, the extent of the problem of nutrient depletion on the continent?

And maybe the second question related to that is: We know, of course – and maybe this did not get enough attention in 2006 – we know that, besides the very important problem of nutrient depletion, there are other soil health issues that really require urgent attention on the continent. So could you maybe give us a sense of all of the range of issues that need to be addressed if in fact we're going to increase from those really still rather low statistics which Ben and the Commissioner have given us?

Mustafa Thank you, Charlotte, for your interaction. For those who are not familiar with OCP, OCP is an African company operating in the largest phosphate mine worldwide. We are 23,000 employees with 17 nationalities in 15 countries, serving our customers globally. We are truly an African company, and we do believe in the enormous potential of the African agriculture to face the challenge of nourishing the growing global population.

I would also like to take this opportunity to thank the Borlaug Dialogue for again bringing all of us together here. And also I would like to take the opportunity to congratulate Dr. Adesina. He has done so much for so long for the African transformation.

Coming back to the question at hand, yes, there is a big issue of soil degradation in Africa. Soil degradation is expanding at a very alarming rate, and this is along with one of the lowest yields of agriculture and livestock worldwide. This is a scientific-based fact. There is plenty of reports, but the more recent one of the FAO states that at least 40% of the African soils are in severe to moderate stage of degradation. The degradation of soil refers to diminishing of its quality by loss of organic matter, loss of fertility, nutrients, degradation of structural condition, and adverse development of acidity or alkalinity.

And the main factor behind the soil degradation is the nutrient depletion. See, the poor status of nutrients of African soil combined with the low of use of fertilizer is causing this degradation. You see, Africa is using around 12, some say 16, between 12 or 16 kg per hectare. This is less than 10% of the world average. So in a recent FAO survey which had been published in 2015 at the occasion of the Year of the Soil, all the countries in Africa are facing the problem of imbalanced nutrients.

What does it mean is that the amount of nutrient for nitrogen, phosphorus, phosphate applied is far below the amount of nutrient which is taken out of the soil when we harvest all by origin. So this situation is continuing to degrade. It needs a real soil health agenda. And we at OCP believe and are very active toward this goal. And the main priority we see – we should start by proper characterization of the soil, a proper characterization through soil mapping, digital soil mapping and build in better ways of soil fertility.

We have started in Morocco where we have covered the whole arable land by digital soil maps that are publicly available. We went on that experience to share with other countries, and there has been a great job done in Ethiopia with a lot of partners along. It just was a big success. We have a lot of initiatives going on in other countries – Cote d'Ivoire, Nigeria, Mali, Burkina Faso, and others – toward developing soil mapping.

We also recently launched an initiative that I call all interested parties to join, is that we have a new university in Morocco, which has been lost by OCP. It's named University Mohammed VI Polytechnic. This is a company in university that we are turning into a full-fledged university, land grant university.

Well, we have launched a center that is called Africa Center for Fertility as a fertility platform and the aim of the center is to develop a network with academia, a government of urgency to harmonize the methods of collection of information and use all sophisticated methods, like satellite imaging and others, and to build a database for soil. Also is in Morocco, which would be public knowledge, publicly available to all the players.

Why it's important to get this characterization? Because if we get the right characterization of the soil, we can develop the right formulas of fertilizer that can

address the soil health problem. And we have a great success in the [inaudible] recently last four, five years after developing the soil fertility lab, we developed the right fertilizer that have shown an increase of yield of 30%. And here it's not only about basic nutrients, nitrogen, phosphorus and potash, but also we have to pay attention, as you have mentioned, to minor nutrients like sulfur and other illegal elements.

So I think the proper characterization of the soil is a prerequisite for developing for the right strategies for taking care of soil health.

Charlotte Thank you very much for placing nutrient depletion into the broader context of soil health. And let me turn back to you, Commissioner Josefa Sacko, if I may. Mustafa just referred to an FAO Report from last year. And in that same report where they reported on soil health difficulties on the continent, they also suggested a high-level ministerial conference on fertilizers but fertilizers in the context of an integrated soil fertility management approach as a follow up to the Abuja Conference. And they suggest that it would be important to review progress for each country and sub-region and perhaps to agree on some new targets and milestones for boosting African soils. From your perspective as the new agricultural commissioner at the African Union, do you think that this kind of an event or this kind of a renewed focus on African soils and African plant nutrition is a good suggestion?

Josefa I think so because we had a meeting, the African, the AUC member had a meeting [inaudible] of the 28 [inaudible] original conference and decided to come up with a summit and follow up the implementation of their Abuja commitments. So this type of summit has been on this caution between the AUC and the FAO and UNICA, so we are walking towards to organize the summit and follow up, because we want to really follow up the implementation country by country. We don't monitor the implementation of this Abuja Declaration. So to me it is really an important issue that we need to address, but we need to address it in a holistic approach so that all the factors have been taken into account so we are encouraging and fully committed to walk with the FAO for the organization and other partners, of course, for the organization of the summit.

Charlotte Great. Thank you very much, Commissioner. I think that will be a great initiative. maybe let me ask you, Richard, just as a quick follow up to that point. Of course, we don't just want a summit for the sake of having a summit. How can we perhaps prepare the way for such a follow-on summit in a way that creates also some synergies among the very many important institutions that are looking at soil health in Sub-Saharan Africa?

Richard I think first we need to recognize that there are models of good practice out there, whether it is actually in Africa or elsewhere. So the first thing is to ensure that we get those documented. We also review progress that has been actually achieved and look at where are the gaps? For example, we are aware that for some of the countries, such as Rwanda, Zambia, among others, there's a move towards targeting subsidies in a smart way – one, using electronic voucher systems as opposed to using paper vouchers. It's much more efficient. Are we sharing those models across the continent? We should also draw from the South, other countries in the South – India, China. What lessons can we learn from those countries? And

who is actually doing that? Again, I know there are representatives of knowledge institutions, IFPRI and others, some of the CG centers. Can we begin to work together to make sure that we document lessons that are out there, which can be tailored to suit the African environment?

Again, statistics, ensuring that we have the proper statistics on fertilizer – that is critical, including, by the way, the need for ensuring that within Africa we have all think tanks which begin to guide us in terms of some of these practices, advising governments in terms of what is appropriate and what is not appropriate, including of course ensuring that where there's rent seeking, that rent seeking is exposed through data collection and appropriate statistics. So really knowledge is important. I know Madam Commissioner here is committed to looking at an African think tank. Yes, would like to draw on global knowledge, but I think it is important that Africa takes the leadership in terms of articulating the challenges and the opportunities that are out there within the continent but also drawing on a global knowledge.

Charlotte Great, thank you. Thank you very much, Richard. Ben, let me turn to you next. You actually, The Mosaic Company had a very interesting side event here at the Borlaug Dialogue the other day on sustainable fertilizer use. So the question for you, Ben, is – As African farmers hopefully will continue to increase fertilizer use... And let me just say that actually right now Sub-Saharan Africa is the fastest-growing region in terms of fertilizer demand. That sounds, of course, very impressive, but we need to keep in mind that it's starting from a very low base, but nonetheless it is important to recognize that. But as the use of fertilizers increases in Africa, from your perspective, Ben, what do we need to pay attention to so that we can perhaps ensure that fertilizers are being used in an efficient and sustainable manner?

Ben Well, thanks, Charlotte. You know, you take a step back, and I think if I asked everyone here to define sustainability, I would get a different answer from all of you. At Mosaic, we think about sustainability in the broadest possible sense. It's everything that contributes to our ability to sustain the business. And at the very heart of sustainability is profitability – right? And I know that most people think about sustainability as environmental sustainability. They go hand in hand. And I think one of the great benefits that African farmers have available to them now is all the learned..., the errors of the past – right? – and the great technology that's available to apply to fields.

As Mustafa mentioned, the technology exists in that field to make sure that fertilizer is used appropriately. In the U.S., we have a big problem with fertilizer lost to the environment and the subsequent impacts on the environment that we talked about at our side event earlier this week. It's avoidable, and it's in no one's best interest to lose fertilizer – right? If you go back to profitability, farmers don't want to buy fertilizer and lose it to the environment. And so we think that there's a great opportunity as more land comes into production and farmers get more educated about how to use all of their inputs in Africa, that they learn how to be as efficient as possible, using the right products at the right time, in the right place, and keeping them on the farm to maximize their productivity and their efficiency.

So the technology exists, the knowledge exists. It needs to be transferred, and it needs to be transferred wisely.

Charlotte Thank you, thank you so much. Mustafa, back to you. Would you describe how you... I mean, private sector, of course, is a very big term and includes the big producers, it includes all the players in the value chain. But how do you see the needs and also the evolution of the private sector as we try to again make a renewed push for increased sustainable fertilizer use in Africa?

Mustafa Okay. I think I will address this by explaining what's going on in Africa where we see there is tremendous interest, a lot of players now, in fertilizer and network development for agro-dealer and distributor. And this is because in private sector we are focusing on, first, we focus on the small farmer, smallholder farmer, because these are the farmers that in Africa are producing almost 80% of the food being produced in Sub-Saharan Africa.

In a broad term, I think first thing is by private sector dedicating capacity, investing and dedicating capacity to African farmers. A huge problem we used to face in the past in Africa is the timely availability of fertilizer. These have prevented the development of the distribution system. Yet, at OCP a few years ago, we announced that we built a bright new platform that we call African fertilizer complex, fully dedicated to the African market. This dedication of the capacity has helped to bring the downstream private sector distribution system once they get assured that they get the right supply and also they have someone who share the risk with them in all the value chain.

Second important point... And before I go to it. Development of capacity production should be also very close to where the consumption is. That's why we are busy launching a development production platform in different area in Africa, while bringing complex fertilizer, whatever we can have, competitive access to inputs, so that the fertilizer produced there could be affordable to the farmer; and yet this is the project we have in Nigeria in partnership with the private sector, the project of new complex fertilizer we have in Ethiopia in partnership with the local government. So development of capacity in close capacity to the farmer is important but completing this also by developing lending capacity all around in Africa, whatever we can produce locally, at least we can customize locally close to the farmer.

Second point is then – When you assure the quantity, you have to assure the quality. And here comes the R&D. We are busy working on the product development so that we can tailor make the product to the farmer for two reasons. First, for giving him a product that is just what he needs, so cutting costs, some of this could be affordable. While doing so, we are developing a sustainable product, and this is the way we are looking into sustainability, and we are aligning this. It should be economic and profit for the farmer while protecting the environment.

We have a big program of research to which a lot of institutions are contributing IFDC, AFAP, but also other university that's working with our own university. And I have here to express special thanks to the University of Wageningen. They are

devoting an overwhelming interest to our common research agenda on nutrient management.

The third point for the private sector is developing the extension services of scale. Because once we have the product in the right quantity, we have it in the right product, we need the technology and the way we apply the product. And this comes with developing extension services, which could be done without building the capacity, and that's why private sector has also, in cooperation with government agency, NGOs, be involved in development of capability. I'm glad here to announce that in UMVP University we are announcing the new program, fertilizer management master. It's a unique master dedicated to Africa but will on international expertise develop it with IFDC and IPNI, and it's offered to African partners.

Charlotte Thank you, Mustafa. So I do want to give us an opportunity for questions, so let me just end with two questions from me, if I may. President, Obasanjo, as a former president, I think you can speak very freely. What do you think we need from African leaders today, from policymakers, to ensure that the good path that we're on with regard to agricultural transformation continues and that we can make further progress in terms of feeding the continent through increased agricultural production in Africa itself?

Obasanjo Let me start from the point that we have made. But I think the use of fertilizer or improved seed, awareness [inaudible], I think we have made some progress. What I believe is necessary is to actually review what progress we have made. The new Commissioner for Agriculture at the African Union says some reports are ready. I believe that review is very, very critical. On fertilizer, when we have something we may call Abuja 10 Clause or whatever we will call it. What have we had, what has worked and what has not worked. And as Richard said, they're good at best, but it seems that we can find out and copy. And the idea is not to name and shame. The idea is to extol what is good and to spread, and probably for once too also pat ourselves on the back and say, well, in some areas we have done well, and we'll continue to do well.

But what government should do, particularly, is coordination. We should have policy that coordinates. You see, unlike other businesses, in agriculture you have so much to bring in. And even take the fertilizer we are talking about. You have the producer, you have the supplier, you have the agro-dealer. Then you have the farmer. how do we coordinate all this and make sure that, one, the material or the fertilizer gets to the user in the right quantity, in the right quality, with the analyses of the soil and what the soil needs. And that cannot be done alone by just one of these units. Government must have a policy, and that policy must be consistent. It must be sustainable. And then they must have a policy where farmers can reach or have access to all that he needs. If the farmer cannot have access, then there's no use in putting in fertilizer where farmer cannot have access to it. It must be accessible, and it must be accessible when it's required. And like other things for agriculture, if you do not have input when you must have it, you might have lost a [inaudible] a year. So it is policy, must be, and it must be managed, handled at the highest political level – that is very, very important.

Charlotte That's an extremely important guidance for policymakers. If I could just highlight two things that really struck me about what you said, I think you make the point that we cannot monitor what we don't measure. So to the extent that we are going to make another high-level summit to focus on soil health, let's really make it something that we can prepare well for, so we understand, as Richard said, what the gaps are, but that we can also set into place a mechanism, perhaps even at the national level to make sure that we are making progress and to see where we need to shore up different efforts.

The other thing that I think is so true about what you said is – we all need to work to improve access to farmers, men and women farmers. And it's not just the access to fertilizers, because fertilizers are really a very knowledge-intensive product. So it's access to fertilizers, but also it's access to the knowledge on how to efficiently apply fertilizers. I think those are two very important points.

Can I give the floor to the Commissioner, because she will take this project forward, so any closing thoughts from you, perhaps, Commissioner.

Josefa Thank you very much. I know that our time is over, but I want like to reiterate the position of President Obasanjo and the Commission we [inaudible] all the recommendations we made, but I would like to also put another point that is important. It is the financing mechanism that we need to develop with a different partner. So African Union Commission is fully committed to sit with the partners to develop a reliable financing mechanism to allow farmers to have access to fertilizer.

Second, we will continue to advocate on the domestication of Malabo Declaration in our [inaudible] so that we can get funding for fertilizer in our national programs.

Thank you.

Charlotte Thank you very much. Sorry, no questions.

Margaret Catley-Carlson

You did a wonderful job in motivating an extraordinarily knowledgeable and committed panel, and I think you couldn't have started us off better. And I think you've given us a very good uptake on what's happened in the last ten years. And the potential gets even bigger. As Norman Borlaug says, "You can't eat potential." But the potential is really getting very concrete in terms of identifying the holes that are still to be filled – financing, organization – but you've got master's degrees in fertilizers coming up, you've got new facilities coming up in financing, you've got much more cohesion, and you've got new scorecards and which the governments have agreed to be monitored – that's a big step from ten years ago now – and you've got a new generation of African leadership emerging to stand on the shoulders of the giants of the last generation. So, Charlotte, thank you for motivating a great panel, and please...