CONVERSATION: PARTNERING WITH SMALLHOLDERS ON STRATEGIES FOR FOOD SECURITY October 14, 2010 – 3:30 p.m.

Sean de Cleene - Vice President, Yara International

The last time I stood in front of an audience was, as Ambassador Quinn was saying, at the African Green Revolution Forum in Ghana, which was the first time that Africa had held an event of this scale and nature to look at the whole role of farming and how that can be developed in Africa. This is a different place. Flying over – this was my first time that I'd been to Des Moines – flying over in the plane coming into Des Moines, and you're looking at all this perfect, neatly arranged agriculture, was very different to the flight into Ghana. But it's still, I think the synergies and the harmonies between these two events are very powerful, and I was very honored to have the opportunity to be involved here.

So joining me on stage are leaders from diverse backgrounds: from the corporate sector, from government, from international organizations, and a farm leader in her own right. And it's fitting to have this diversity on the stage as we discuss partnering on strategies for food security, which at this point in time is of critical importance, particularly as we look at volatility in the global food prices. And the people that will be most impacted, if that has a negative impact, will be smallholder farmers often in sort of remote parts of the world. Myself, I lived in Malawi for six years and in Africa for twelve years, so this is something I'm very familiar with.

Gabriela Cruz is from an 800-hectare family crop and livestock farm, the Isabela Cruz and Sisters farm, which has been in the family for over 100 years. Ms. Cruz is president of the Portuguese Association for Soil Conservation and represented Portuguese farmers at the European Union Commission for eight years. She participated in this week's global farmer-to-farmer roundtable and yesterday was announced as the winner of the 2010 Kleckner Award for advancing trade and technology for global farmers.

Jose Fernandez is the U.S. Assistant Secretary of State, whom many of you know, who's been in the role for, I think, nine months now — is that right? — for Economic, Energy and Business Affairs, who oversees State Department's efforts on international trade and investment finance and global energy security, but probably most importantly for this discussion on development and agricultural. And his bureau is very involved in the Feed the Future initiative, which we've heard quite a bit about over the last couple of days and seems to be really gaining momentum. Mr. Fernandez himself has legal experience that includes three decades of practice in Latin America, Europe, and Africa as economies in those regions have evolved. So if we could just warmly welcome Mr. Fernandez.

Until last month Matt Kistler was the senior vice president of Sustainability for Wal-Mart, leading the company's global sustainability strategy and engaging the company's 100,000 suppliers and more than 2 million associates worldwide towards these goals. He's now the vice president of marketing, so has big shoes to step into, but he's a tall guy, so I think he'll do fine as he continues to work on the company's linkages with diverse food producers throughout the entire value chain.

And then Robert Zeigler, whom many of you know, is the director general of IRRI, the International Rice Research Institute, which is part of one of the flagship centers of CGIAR, the Consultative Group for International Agricultural Research, which this year is marking its 50th anniversary for taking cutting-edge agricultural research and improved crop and production technologies through to the farmer at all levels, internationally. A plant specialist in his own right with experience in the Congo and Burundi, he's also worked and led programs with CGIAR – at CIAT in Colombia, prior to leading IRRI, which as many of you know is headquartered in the Philippines.

Partnering [with] smallholders to achieve something significant in terms of food security – now, this is something that we've been engaging in for a long time now, but I think particularly since 2008 there has been a renewed focus on what this means. To engage literally billions of smallholder farmers around the world and bring them comprehensively into the value chain has required us to, in many ways – from where I stand coming from the private-sector side of things, there's probably an unprecedented level of congruence and willingness to try and find solutions to these partnerships that will engage smallholder farmers and take that to scale at a much more significant level. We're seeing new kinds of partnership models, we're seeing alliances being developed, we're seeing much more engagement between government, international organizations, the private sector, farmers, medium, small and large-scale farmers, and civil society.

So just very quickly we're going to do this in the form of a sort of discussion. I'm not going to ask people to give ten-minute speeches, so just very quickly – I mean, from your representative perspectives, if maybe I could just ask you just to, you know, in one or two minutes, just to say — What is it that's changed from the previous decades? And how are we going to continue that change in terms of the way we do farming, the way we partner?

Gabriela Cruz – Farmer, Elvas, Portugal

Hello to everybody. I would like to thank the organization of this Borlaug Dialogue and the Truth About Trade and Technology Association for both inviting me to be here and share my experience, from my experience with farming. I've been managing the farm for 20 years, and I was brought up on a farm, so I could see what my parents were doing. The partnership between various associations, farmers, enterprises, research institutes are very important. And they are so important that I can give you an example of what we did and are doing in my country.

At one point we were allowed to grow sugar beets in Portugal. We didn't know the crop; we had no idea [how] to grow it, and we were in the hands of the company who bought our produce from our farms. And what we did, with the Association of Sugar Beet Producers, was, we did an experimental association between the industry and the farmers – in order that we could select the best varieties, and the best adapted varieties, of sugar beets for the country. And it was so successful that in two years we doubled our production in two years.

Sean De Cleene

Doubled in two years?

Gabriela Cruz

Doubled. Sometimes I feel some fear to say that it was two years, because many people might not know — Why is that? The thing is, the industry was pushing us some varieties they were wanting. They were not the best-performing, so we could bring the experience of Spanish and Italian farmers. And the adaptation of varieties to our country was much weaker, because we had other countries' experience with those varieties, because they had the same climate and soil conditions. So in two years we started at a very low level. We were doing 35 tons per hectare, and in two years we reached what the Spanish and Italians were doing, which is 70 tons. That's why we could be so quick, [because] we had a partnership like this one.

Sean De Cleene

It's very exciting. I'm going to come back to this, but I'm just going to do a quick thing, because I think these kinds of examples are very impressive. And what's exciting there is also the interaction. This wasn't just done in Portugal as an association with the research institutes and the industry, but you were also looking at this from a cross-country perspective as well in sharing that knowledge. But let me ask Matt. Walmart, I'm sure you would say, they've changed a lot in the last decade. In terms of – what are some of the ways in which you've seen that change significantly?

Matt Kistler - Senior Vice President, Walmart

Well, first of all, we appreciate the opportunity to be here today. We had our own, kind of, sustainable agriculture meeting today as well.

But in the broadest sense we've been on a journey now in sustainability for over five years, and certainly the opportunities that we have, as a corporation, to make a true difference to better serve the more than 200 million people who come through our doors every week, is amazing and something that we think is a true responsibility that we have as a corporation.

We have three basic sustainability goals that we have, as a company, now integrated globally into every area of the company. And those three broad goals are to be supplied 100% by renewable energy; to create zero waste; and to sell products that sustain people and the environment. And today we made nine new goals as a corporation that our CEO announced globally. We had about a thousand people in our conference room in Bentonville, Arkansas. We were also webcast into our 15 countries where we have operations, and certainly a lot of external media also witnessed our event this morning. But we made several...

Sean de Cleene

So the World Food Prize are in good company when they webcast the World Food Prize out – but, anyway, keep going.

Matt Kistler

Absolutely. But we made several commitments today, and I'm very pleased to say that we made nine new commitments around sustainable agriculture. And one of those is to source \$1 billion worth of merchandise, agricultural merchandise, from 1 million small- and medium-size farmers globally. But we also backed it up with providing training to more than 1 million farmers from which we buy now in many countries, including the United States – directly from.

And so those of two of the goals that were made today that I think not only show our commitment but, as a corporation, I hope, people are starting to realize that sustainability – for Wal-Mart, sustainability as a business strategy is a good one. And certainly the value that we're seeing not only is financial but obviously, too, has tremendous environmental and social benefits as well.

Sean de Cleene

Robert, I'm just follow on and say, I mean, listening to this you're seeing two different sides of the private sector: the small farm – yeah, well, it's not a small farm that you're on, Gabriela, but I mean, yeah, you're not on the Iowa sort of scale of farming – and then from a Wal-Mart perspective. But from a research institute, I mean this has been something you've probably been wanting to see for a long time, having this.

Robert Zeigler - Director General, International Rice Research Institute

Oh, absolutely. I think when we look at your question, "What has changed?" — I think the first thing that comes to my mind is, "What has not changed?" And that is that we still have the vast majority of the world's rice being supplied by very small farmers. We have 200 million rice farms in Asia alone.

Now, in terms of what has been changing, I think this is extremely exciting from a research-institute perspective. And that is we're seeing farmers having access to tools of communication unlike they've ever had before. We've heard a number of speakers over the last couple of days repeatedly bring up the prevalence of cell-phone technology. And I think that means of communication is something that will completely revolutionize smallholder production at a global level. We look at – we've heard a lot about seed production and how new seeds can revolutionize production systems around the world. Jeff Raikes mentioned some of our flood-tolerant rice that's going out.

But I think we have an opportunity now to see the whole way that rice farming and, by extension, other smallholder agriculture is being managed to be changed. We see today technology that we're rolling out that would allow farmers to get real-time information about what is the best fertilizer to apply on their fields, at what time, in what formulations. It's only a small step to then see how, with that information, they can have access to credit and, again, credit coming through a cell phone. That access to credit will crack one of the most difficult nuts in development that we've had in developing countries over the past decades.

Going beyond that, the crop modeling, geographical-information systems that are coming together, that can be used in a real-time way, allow us to begin to imagine a crop-insurance program that would allow farmers to participate in the credit markets in a way that would give them a level of power and decision-making they haven't enjoyed before – and, of course, participating in markets in a way that they have not traditionally been able to participate, that is empowering them with the price information that Mr. Page talked about.

So I think that, if we look at how things are changing for smallholders around the world, I think it's on the tip of a revolution that we're just beginning to appreciate.

Sean de Cleene

Jose Fernandez, I mean, we're hearing words like "tip of the iceberg" or "tip of the revolution" or, you know, we're hearing Wal-Mart saying five years ago they really embarked on a journey. And then now they're talking about fairly large figures, you know, sourcing from 1 million smallholder farmers, \$1 billion worth of supplied goods. The U.S. is also, in its own way, taking a very strong leadership stake from a government perspective, and that's been very powerful to watch over the last 12 to 18 months. But what do you see as the challenges and the successes that need to be emulated going forward in this whole framework of partnership for smallholder farmers to achieve the scale levels we're talking about?

Jose Fernandez - U.S. Assistant Secretary of State for Economic, Energy, and Business Affairs

Thank you, and thanks for having me here. Food security is the reason I left the corporate law, and I'm very glad to be here. And we're very proud of the steps that we're taking to try and deal with the food-security issue. By no means is it a silver bullet.

But I think to answer your question, I think there may be four or five differences in what's been done before with what we're doing now. And I would first of all focus on the scale. The numbers that countries are pledging to fight food insecurity are unprecedented, and the fact that we're very proud of the fact that the U.S. has pledged \$3.5 billion over the next three years, and that the rest of the world has pledged \$18 billion plus. So that's – the scale is one important aspect of Feed the Future and our strategy.

The whole innovation [in] how we're using technology, how we're trying to leverage partnerships, the fact that it's comprehensive. We're not simply focusing on putting seeds on the ground, but we're looking at things such as infrastructure, working on markets, including using cell-phone technology, looking at gender issues — the fact that in Africa 70-plus% of the workers on the land are women, but they in many places cannot own the land. So how do you deal with the title issue in these countries? Technology, including ag biotech, all of these are – it's a comprehensive way of addressing the problem.

And it's also, another part of the strategy, I would say also, is we're really making sure that the countries are invested in the strategy. They have to be country-owned. They have to own it. And that means that some of the steps that we're taking may take a little bit more time to actually be implemented. Because one of the things we want to make sure of is that they're owned by the government, that they are partners in this enterprise.

And lastly, I think, at least for the U.S. side, another difference, I suppose, is the fact that we're not trying to do everything for everyone. We're focusing on, at this point, 20 countries, countries where we believe we can make the most difference, countries that have taken steps already to take advantage of the help that we can provide — countries like Rwanda and others in Africa, in Asia and, as well, in Latin America.

Sean de Cleene

Coming back to a point that was made earlier, and I'm going to ask both Robert and Gabriela this. One of the things that struck me in listening to your story – just on that sugar-beet one, for example – is that there was a very strong link between the research component of this and the industry driving this. So you've got a link between the private sector and the industry, in that sense, the research, and then the farmer, and the farmers that you represented. I mean, for both of you, is this – this is a critical link as I see it, this link between research and the market, making sure that that link is developed. Is that something that you're seeing growing, or that you see [as] needing to have more emphasis in developing these kinds of partnerships?

Gabriela Cruz

Well, those kinds of partnerships are very important, especially in my country, because research is getting less and less things done. We're facing an enormous crisis, and the government is giving very little money to public research. So what we are trying to do is, mainly, between the industries and other farmers, our suppliers. And we applied to some of the programs which are funded by the European Union, and those fund, fundamentally, experimentation [and] the research [that] some other countries have done. So we don't have much research in our country.

What we are trying to do is profit from the research from other countries that have the same conditions as us, like Spain, Italy, and United States. And some – like no-till, for example – we tend to use the example and the practices of the United States and South America. But unfortunately now we cannot rely on Portuguese research. What we can do is tell the market, or the industries, "We want to do what you want us to do." But we need the support of some institutes abroad, some farmers abroad, and the companies who supply the inputs for us.

Sean de Cleene

You're seeing much more virtual partnerships in that sense. This isn't a traditional partnership done in Portugal, developed with Portuguese associations. You're looking much more at a virtual, international-type partnership – but with a very local, specific, tangible result. Robert, from your side what are you seeing?

Robert Zeigler

Well, I think we've just heard an extremely important point being made, and that is the decline of publicsector research. We have heard a mantra over the last 20 years or so that the private sector can do everything. Well, the private sector can do an awful lot, but one of the things that it's not particularly good at is a lot of the innovative research that is pre-competitive, that actually goes out to creating a platform upon which new technologies, new products are built. And I think we have to keep in mind that without a vibrant publicsector research dimension to our whole overall food-security strategy, over the long run we're going to run into trouble.

Philip Pardey at the University of Minnesota has done some outstanding work that's shown that a dramatic reduction in investment in public-sector research will show up as a drying-up pipeline after only about 15 years. So you can have a short-term cut in public spending and research and not see the consequences of that for a decade or more, which is a very dangerous scenario when you put that sort of thing in the hands of politicians.

Now, having said that, there is a very important role for the private sector — and this is someone who's spent his entire life in the public sector. I'm seeing, more and more, that there is going to be a much more positive contribution by the private sector in its relationship with the public sector. I think there is a much more mature relationship that allows us now to enter into the kinds of partnerships that would have been unthinkable 10 or 15 years ago.

Sean de Cleene

Jose Fernandez, I mean, I'm going to come back to this word "pre-competitive," because I come from the private sector — we compete on all levels.

Jose Fernandez

I also come from the private sector; I've only been in office for nine months, so I feel your pain.

Sean de Cleene

So this notion of "pre-competitive," where you're seeing companies come together in a more collective alliance around research in the way that Robert is describing this – I mean, there's also a challenge there, I would imagine, for the U.S. government about how it supports the private sector. Traditionally, for a lot of the international donors and agencies around the world, there's been a difficulty of having this broader alliance that involves the private sector. But with this, is it possible to have these kinds of pre-competitive, dynamic partnerships that then, later, lead to more market competition issues later on?

Jose Fernandez

I think it's critical. I think you have to have them. In fact, one of the things that we're trying to do, one of the reasons why I'm here, is, I'm trying to find ways to create alliances with the private sector. Because at the end of the day this cannot be a charitable enterprise; it's got to be a confluence of development and dollars, development and profit. That's the only way that I believe we can make something that will be lasting.

And so what we're trying to do is to find ways to work with the private sector, to find ways to interest companies to go into some of these markets, to go into Africa, to go to some of these countries. And what I'm seeing so far is actually quite encouraging. I had expected to get a lot of responses that I've gotten in other industries that would say, "Well, we're really not interested in going into this part of Africa because there's not much of a market there."

Well, the fact of the matter is that, at least what I'm hearing from many companies, is that, yes, they would welcome a partnership, a collaboration with the U.S., with universities, with civil society, to try and open some of these markets — and that, in fact, many of them are already looking at ways to do so. So I'm encouraged, and I frankly believe it's the only way that this thing is going to work. This is not going to be led – it can be facilitated and maybe galvanized by government, but it cannot be done by government.

Sean de Cleene

So I mean, Matt, you can imagine the next question is coming to you on this, as representing a large, international, private-sector company. You're hearing this story, but do you see a role that government can have, as Jose was saying, in terms of galvanizing, in terms of facilitating this? Or is it something that you should be just doing anyway? I mean, this is something that you should do as Wal-Mart and you don't need help, you go and do it anyway? Or is there a broader alliance, as was being suggested, that can be formed?

Matt Kistler

Yeah. Quickly the answer is yes and yes. But we are working, quite frankly, in ways we never worked before. We're working with governments not only in the United States but around the world – but also, too ,working with our key suppliers and also even our competition in areas around (I'll broadly use the word) sustainability, but also now, too, in agriculture as well.

And so we have a network of NGOs, of governments, of suppliers, of other retailers, academics in many areas, thought leaders in many area; fourteen of these networks. One of them is around agriculture, though. They're very large, some of them 800 people involved. But we are working now on, what are the best sciences? What are the things [where] we can work together to develop standards, to develop best practices? And we're doing that specifically in the large-impact area, of which, obviously, agriculture is one of those.

And I'm happy to say that after today's events that we had, and this event that we're all in today, that I think we'll be accelerating our efforts around sustainability in agriculture. And certainly the efforts that we're doing are open-source. Anything that we learn in this area we are sharing with everyone, including our competition, and working with a number of universities and stakeholders now to get that information out and do more research around it.

Sean de Cleene

And very interesting. And I think, I mean, I'm going to deviate a fraction from pure food security to ask a question which is critical, obviously, to food security, around issues to do with sustainability, to do with the environment, to do with climate change.

I mean, I heard you mention zero-tillage and conservation farming earlier. The kinds of developments that this requires, to broaden that out to include issues of climate change, mitigation issues, into farming, and to look at conservation farming – does it also require a new kind of partnership? Do we need to be reaching out beyond just the traditional agriculture sector, in this sense, to the environment sector and to other sectors? Gabriela, I'm going to ask you.

Gabriela Cruz

Well, definitely. It definitely requires [this] because telling you the situation at the European Union — the European Union is now putting a lot of restrictions on farmers in terms of adopting practices which are more environmentally friendly, and they are very strict on food safety. At one point when the European Union started with that, we were a bit worried, because we didn't have the tools for that. So some farmers, we had to decide, did we want to stay in business or not? Yes, we did, so we had to solve the problem. Many of us went

into conservation-agriculture practices, to IPM, integrated pest management, and simultaneously the European Union gave us a fund, a subsidy, to go faster into these kinds of practices. The only thing is that at the same time they are giving us the funding, but they are forbidding us to do some things. They are retiring from the market many pesticides, so now we're finding ourselves in a situation where we are asked to produce, but we don't have the tools, or we have too many restraints or constraints.

That's why I particularly, and some farmers, we tend to [say] that the European Union, if it wants to go towards a more sustainable agriculture, if they want us to increase no-till surface, if they want us to integrate pest management – it's not enough to give us a fund or a subsidy, because many of the times it doesn't compensate for the loss you might have because you are implementing these practices.

So one of the things, one of the ways we find we should be able to do, and the European Union should permit us to do, were the biotech crops. You may know that we can only grow Bt corn in Europe. There's an enormous opposition to the biotech crops by very much misinformed people. Society trusts journalists more than scientists. And we get into a sort of narrow strait where, if we don't have enough tools, we cannot be efficiently producing and be sustainable at the same time.

Sean de Cleene

So, I mean, Robert, it's often – how do you respond to this? In the sense, I think – for African farmers or farmers in Asia, this is even going to be more pressing as the impacts of climate change really take effect. And this tradeoff between food security and climate change – is there a tradeoff? Do we need that...?

Robert Zeigler

Well, that's a very pertinent question. Before Al Gore's movie came out, *An Inconvenient Truth*, I used to talk about a convenient convergence of this nexus of food security and climate change. And that is basically that addressing — and I think one of our speakers this morning alluded to this — that when you address the challenges that smallholders, particularly rice farmers, are facing — drought, floods, seawater intrusion, etc., that are becoming more of a concern because of climate change – you also address the needs that are directly affecting, or challenges that are directly affecting, farmers today. So I think it's not an either/or kind of thing.

Likewise, when you look at the challenges of greenhouse-gas emissions and mitigating the impact of agriculture on greenhouse-gas emissions — managed properly they should be very attractive to farmers economically. So I think that by applying ourselves, and then looking at the challenges both from the perspectives both of the farmers' needs today, the needs of the environment tomorrow, and the challenges that will be facing farmers in the future, we have an opportunity to develop multiple-win solutions and multiple-win scenarios.

I'm extremely sympathetic with the European farmer who is, instead of being allowed to take the best of technology and aggressively meet the demands of society – that same society is placing constraints on the farmers. And I hope that that doesn't happen in developing countries.

Jose Fernandez

Let me just add a couple things on some of these points. First of all, we cannot allow our food-security effort to be seen as a Trojan horse for ag biotech. I think that's important. At the same time, I do think we've got to bring ag biotech to the forefront of the discussion. Not as a silver bullet, but as a way of addressing climate issues, of addressing hunger, and addressing some of the needs of some of the countries that have the most need.

One of the things that we're trying to do in the State Department is to partner with companies, partner with government, and partner with regulators – and actually we've had some success in a couple of the countries –

of trying to work with the regulators to create alliances, to have them come to the U.S., to engage in capacity building with a lot of our land-grant universities, to try and build some of the alliances, and basically to try and get the regulators comfortable with the technology.

Part of what's going on here, as I go around the world, is a desire to look at the issue – but a real insecurity and an unwillingness to take that step, as a regulator, that creates a risk. So the need to build alliances with regulators, and then also, from a government point of view, to try and work with industry to anticipate some of these problems. Some of these problems in biotech we know are coming, but oftentimes the people in our bureau who are supposed to deal with this issue just learn about it after the fact; and at that point it's too late. And so one of the things that we've got to get better at is anticipating roadblocks as well as building alliances.

Sean de Cleene

I think as we see more volatility here, you're going to see that need for more understanding risk and the complex nature of risk, and the kinds of solutions and technologies, you know, the balance that you have in terms of either transferring that risk, mitigating that risk, reducing that risk, and how that's done.

Matt, from the private sector's side, this whole issue of trying to enhance food security, balance that with the growing perceived needs of climate change, the impact mitigation that's going to be required but also the adaptation and how that's done — how do you deal with that from a company perspective?

Matt Kistler

That's a large question. Couple different things.

Sean de Cleene

Yeah, you don't come to the World Food Prize and get small questions, there's no doubt about it.

Matt Kistler

That's a large one. But we look at it, I guess, from a very holistic sense – as the world's largest retailer we want to grow our business, we want to serve more people, we want to sell more products to them. And so food security, a surety of supply, selling quality products at a very economical price, is core to our business' sustainability. We are working in ways that we never worked before, developing – from, literally, the farm up – products, increasing agriculture in the United States, but also working abroad in sourcing as a means of development, so that we can have those products on our store shelves and provide those [to] customers who do shop in our stores.

So it is a very broad and very big issue, but we oftentimes get stuck on unintended consequences, of what some of the things we do ultimately cause. And I'd say the one real benefit that we have found as a company over the last several years is that we're starting to see what I'll call unintended benefits of what we are doing in other areas.

And we mentioned, or you mentioned, greenhouse gases. We made – well, not a simple change but set a goal to only source or only use sustainably sourced palm oil in our private-brand products, products that Wal-Mart designs and works with manufacturers to create for us. That one, small move is going to remove about 5 million metric tons of greenhouse gases, permanently, from the environment.

And so looking at the major impact issues, the major issues, and doing what I'll call relatively small things that have big impacts, is what our focus is on. We can all work on the small things, and they will create momentum, they will create change. But I think the key is to really focus on a couple of the really big issues; work together collaboratively, which I think as a company we are doing; and then start making progress

against some of the big things that we are trying, as a global group of people here, to make a difference around. And I think that's the key.

Sean de Cleene

Can I ask, though, I mean, while you've got the microphone, let's take palm oil — it's a fairly challenging area, and I was with the Minister of Environment from Malaysia recently, and he was talking about the establishment of the Roundtable on Sustainable Palm Oils, if that's the name that they use. And what he was saying was – before that, there weren't really the institutional resources at a country level to deal with these kinds of complex partnerships that are being required, which deal with smallholder farming issues, bring in climate change-related issues, and all of that. And so for them they've actually had to go through a whole learning curve to create the kind of institutional frameworks, in this case the Roundtable on Sustainable Palm Oil, which is a merger between WWF and Oxfam and the companies and all of that – a very different kind of framework.

So do you think there's a need for a new kind of, type of, brokerage/facilitation institution that will allow smallholder farmers to engage in these big discussion topics that are going to impact on them significantly? And I'll ask you and then I'll pass this over maybe to...

Matt Kistler

There very well may be in the future. I think today some of the groups you mentioned – certainly WWF, their CEO, Carter Roberts, was actually in our meeting today, and has helped us tremendously in giving us the information and educating us on what we can and cannot do. So certainly I think over time – hopefully our signal, our statement, our commitment today around the sourcing of palm oil, for our private brands, that is sustainability sourced, will create a larger demand, but also too, then, hopefully, the equal supply and move more markets towards being harvested in that manner.

But I think, over time, you're going to get beyond the capabilities of what's in place today, and so what the future holds, I'm not sure. But I think certainly by getting the right direction started; it's something that we started today and I hope others do. And certainly I think the momentum is starting to build.

Sean de Cleene

Jose, what, from your side, do you see? I've seen this very much in terms of developing things like the agricultural growth corridor in Tanzania and in Mozambique, but the role or the nonexistence or the existence of these kinds of new facilitative/brokering partnership platforms at a country level have been critical. But they don't exist terribly much, as such, today, and so we're having to rethink this a bit. Do you share that, or how do you see that?

Jose Fernandez

I share that. In fact, one of the things I think we need to do is to leverage some of these institutions and try and work with them, either on a regional basis or on a product basis. For example, in East Africa, why can't we work, rather than asking our companies to work with specific countries individually, why can't we work with the East African Community on a much more regional, much more general, approach that's going to make it worth it for our companies, and companies around the world, that may not particularly want to go into one country, to work with them regionally?

And if you take that approach, you can do that on the climate-change side, you can do that on the regulatory side, you can do it in Central America – there are a number of places. But I do think we've got to ramp it up, because if we do it individually, maybe our grandchildren will see it, and it'll take too long.

Sean de Cleene

Gabriela, do you think these – from what you were doing when you were trying to put this partnership together, say, on sugar beets with Italian and Spanish farmers coming in with their technologies, is the institutional framework there to support you to do this?

Gabriela Cruz

Well, on the sugar beet experience, we didn't have any support, so the industry and the farmers paid for that, and we paid the Spanish institute to give us all the know-how and the varieties. But in other sectors, like in the cereal sector, and in no-till, we have been able to apply to some programs of the European Union and be supported for some of the institutes who had done that research. Yes.

Sean de Cleene

Okay, I'm going to... Robert, you can come in if you want. Otherwise, I thought we've got about 10 or 12 minutes left. I'm sure there's a couple of questions out there. I've got a couple more. I'd like to find out more about cell-phone technology and financing and some of this alternative, expanding the partnership model even further. But I will hold my thoughts and I will see if anyone – if you'll come to the microphone, which people already are, that's great. Give your name, where you're from and keep your questions very concise, or I will cut you off because we've only got the 10 minutes, very short.

Question

Hello. Angela Mwaniki. I work at General Mills. Originally I'm Kenyan. I love that Wal-Mart is now in Africa, because I know that you know how to market to people of all socioeconomic status. So what is your vision for Africa? Because our farmers need a market.

Sean de Cleene

So, Wal-Mart, your vision for Africa?

Matt Kistler

Well, I think you're commenting on our recent initial movement to acquire a retailer named Massmart in Africa. That's not been finalized yet, so I would obviously be a little premature in saying a plan that we have ready to roll out in that country. But suffice to say, having as a company spent a great deal of time in your country, or in Africa, it is a market that we are very interested in, that we see tremendous opportunity for growth – but also, too, from supplying products that we also selling our stores globally. So hopefully if everything goes well, time will tell, we will be a new corporation in Africa shortly.

Sean de Cleene

In the back?

Question

I'm Patrick Binns from Seattle, Washington. My question is particularly to Matt Kistler. An important element of sustainability is the social-equity component in which the smallholder farmer, in this case, has

some greater participation in the value-added of their product. Sometimes this is seen as fair-trade product, but generally the idea is that the producer of the agricultural product gets somewhat greater return for their effort. When you have large market-power forces in the purchasing side, it's very difficult to come to an equation where there is greater equity at the producer level. What is Wal-Mart's thinking about how to incorporate more of a fair-trade, a more social-equity participation for the smallholder farmer in agricultural products that you sell?

Matt Kistler

I think there are two parts to that question, so I'll try to address both, and hopefully that takes care of it.

Number one is — we are the world's largest purchaser of fair-trade product. Whether it be bananas, coffee, roses, we are a very large purchaser of all of those goods. Personally I have been to Brazil; I have seen the efforts that fair trade has done with the coffee growers in Brazil and elsewhere, and we continue to do that. And we are also marketing that product to our customer. Hopefully, if any of you do shop at Wal-Mart, you'll see those products on the shelf and you can help move us all in that direction. Because certainly I'm a big supporter of it, work very closely with TransFair, and Paul Rice and others, and it's certainly a market that we see growing, not only domestically but also globally.

With regard to farmers globally, we are working in all the markets that we're in to increase our direct relationships with farmers and by doing so actually increasing their income in developing countries by 10-15% because we are working directly with them, versus going through cooperatives or other middle people in the supply chain. And so, not only does it make our business more sustainable, but also, too, from the customer's standpoint, we are delivering much fresher, much higher-quality product to them and doing it in a more environmental and, obviously, socially sustainable manner.

So two big initiatives that we are very supportive of, [where we] see tremendous opportunity, and are developing as fast as we possibly can.

Question

My question is for the director general of the International Rice Research Institute. I am Ravichandran, a farmer from India, from Tamil Nadu. The successful story of IR8 is still vivid in my memory; ADT-27, developed by IARI with the support of IRRI that made tremendous impact on our economic performance. Even now, IR20 and IR50 are still popular. In his lunch presentation, the CEO of the Bill and Melinda Gates Foundation, Mr. Jeff Raikes, pointed out about the flood-tolerant variety. In fact, he displayed a slide also. It is very amazing. My place is a flood-prone area. What is the research work on GM rice in IRRI? We have a variety of problems like biotic and abiotic stress. We need saline-tolerant variety, flood-tolerant variety, and drought-tolerant variety, and other biotech, pest disease and weed problem, also things we need. Is that research work going on in IRRI?

Robert Zeigler

Yes – in a word, yes. We have quite a bit of activity in precisely the areas you outlined. The vast majority of that work uses tools of biotechnology, particularly marker-assisted selection; very little of it, if any, is involving in the use of transgenic, or GMOs. We are moving these materials with our partners across Asia, and particularly in South Asia and India, through various state governments, universities, and we are seeing them actually move into farmers' fields. In Tamil Nadu, looking at the partnership with Tamil Nadu Agricultural University, we expect to have these materials moving out and benefiting yourself and your colleagues in the rice fields over the next several years.

Question

[What about the] golden rice project?

Robert Zeigler

Golden rice is in its final stages. As we speak, it is being field tested. We have transferred the pro-vitamin A beta-carotene capacity to the background of varieties that farmers know and like – for example, IR64, that I'm sure you're familiar with, that's grown by many farmers in India; and equally popular varieties in Bangladesh, Vietnam, and Philippines.

Sean de Cleene

So in the back, just one more question. I'm just moving through. You can grab him as he steps off the stage to take that a bit further.

Question

It's Paul Castle from the Syngenta Foundation. I'm afraid it's another Wal-Mart's question. "Fair trade" always suggests to me that everything else on the shelf is "unfair trade," and it'd be nice in the markets where you have enormous power to influence consumer thinking, if we got away from that idea that there's fair trade and [then] something else. I'd be interested to hear your views on getting together with your competitors and helping consumers getting away from the idea that everything's got to be cheaper and cheaper. Because that, I suspect, is not good news for the small- and medium-sized farms that you now want to buy more from; congratulations on that. I'd like your thoughts on getting consumers away from the low, low price idea, and getting more of that, building on that previous question, back to whatever you mean by small and medium farmers — I'm not sure what you mean by that.

Matt Kistler

Yeah, it's a definition that varies greatly by market, and certainly what we have here as a small- and mediumsized farmer in the United States is different than it is in most countries.

But to answer your question, we serve a variety of customers, and our core customer in the United States — and I'll speak of that; I'll also speak globally — but in the United States is the customer who earns about \$50,000 a year. And in today's economic situation, it is amazing to me the purchasing behavior we see: paycheck cycles, and purchasing food at midnight, because that is when the cash hits their bank accounts. And so, while it would be in some ways great to have fair-trade product universal and not have to market that product, we need a variety of products on our shelves that allow everybody to eat and provide for their families.

We provide that large portfolio of products – whether it be fair-trade, whether it be organic, whether it be Rainforest Alliance – that are available to the core customer for them to make the decision. I'm happy to say that we see a pickup of these more socially responsible products all the time, but to move all of our offering to them, quite frankly, would be financially not the right thing to do. But also, too, it would not provide for our core customer who today is struggling in the United States. We are working to make all of our products have the same benefits as some of the products that we all speak of favorably, to move in that direction. Today the overarching economic system just won't allow us to do that yet. But if it can, we certainly are wanting to move in that more socially, more environmentally responsible way, and we'll market them accordingly.

Sean de Cleene

Okay. Very quickly, last question, because I'm being waved up here. At the front.

Question

My name is Elissa, and I'm with Oxfam Action Corps. And I think that this has been a useful discussion of the collaboration between institutions, but smallholders are the ones experiencing problems firsthand. And it would seem that their voices have to travel so far to reach you, or people like you. And I'm curious to know what specifically you're doing to bridge this gap and to ensure that voices are heard, given the power they deserve, and also included in working towards solutions.

Sean de Cleene

Was that to Matt, or was that just general to the panel Yeah, to the panel. Can I just say, because we've got two minutes, if we can maybe – because I think it's a very important question, this one, as to how are we reaching out to smallholders. If I could just ask you to quickly – making sure that smallholder farmers are much more included into this conversation and how they're linked in, if I could just ask people to sort of link that into just a quick, final statement as well. If everyone just sort of gives a 20, 30-second sort of wrap-up, that would be nice.

Gabriela Cruz

Well, in Europe and in my country, the national associations normally involve large, medium, and smallholders. So when we have a new technology, when we have decided that we are going to reach one market, we will inform and we will do the work for the large, for the medium, and for the smallholders. Of course, there are always some smallholders who want to have a special association for them, but the majority of the national associations reach the three types of farmers. And the smallholders have the same opportunities in terms of technical assistance, information, communication as any other farmer in the country. It's the reality I know the most.

Matt Kistler

Ours is a broad-based approach, whether it be through our associates, of which over 2 million people work for our company; whether it be from our suppliers, of which we buy from over 100,000 suppliers globally; our NGOs that aid us tremendously and we work with directly, and they have offices, actually, in Bentonville; and also, too, obviously, the customers who shop in our stores. We purchase, and we serve our customer, and so what our customer is looking for is what we put on our shelves. And so those 200 million people who are in our stores every week, that's also a tremendous listening post that we have, that we have information coming into us on an ongoing basis that we monitor and make changes on, based on their behavior.

Robert Zeigler

We have an extensive network of relationships that we've built up over the last 50 years with civil society, NGOs, national research systems, and government agencies that allow us to receive a lot of direct feedback from farmers, exactly what they need, what they want, and, equally importantly, how technology is working for them and how it's not working. And I think that relationship has allowed us to guide the development of next-generation technologies.

Jose Fernandez

Our Feed the Future strategy – actually if you read the document on our website, focuses on smallholders in terms of making sure that they have access to technology, making sure that they have access to financing. The other piece that I think we're going to try and do more work on, that I think in some ways is low-hanging fruit here, is post-harvest technologies. Because the large companies may not need that kind of advice, but in the developing world you get 50% of your produce [that] doesn't make it to the market. And the smallholder needs help in that, and so we're going to try and focus as well on post-harvest best practices and technology.

Sean de Cleene

I'd just like to thank our panel. I think what we tried to do today was to have a conversation up here, and I think we did achieve that. There was quite a lot of sort of movement up and down and across the different conversation topics. So I thank you very much. I hope you've enjoyed being part of this conversation with us. I know it's the end of a second, very action-packed day. I hope you all enjoy, those of you who are going to, the awards tonight, thoroughly enjoy those. And I'd just like to thank the panel for a very involved conversation. Thank you.