THE WORLD FOOD PRIZE

2016 Borlaug Dialogue International Symposium
"LET FOOD BE THY MEDICINE"
October 12-14, 2016 - Des Moines, Iowa

WEATHERING THE STORMS: PROGRESS AND CHALLENGES FOR AGRICULTURE AND FOOD

SECURITY IN ASIA AND LATIN AMERICA

Panel Moderator: Benjamin J. Pratt

October 13, 2016 - 11:00 a.m.

Introduction

Ambassador Kenneth M. Quinn

President - World Food Prize Foundation

Margaret Zeigler – where's Margaret? Come up here. Margaret, a great friend, head of the Global Harvest Initiative. They're here releasing their report every year at the World Food Prize, just indispensable part. It's all yours.

Margaret Zeigler

Executive Director, Global Harvest Initiative

Thank you, Ken, and good morning, everyone, and a happy 30th anniversary to the World Food Prize and Borlaug Dialogue. We have a panel now that's going to focus on some fascinating issues. We've got a great lineup here, and I'm just going to briefly mention who each of them is, and we're going to hopefully have some time for questions and interaction with you all at the end.

Since the start of the Borlaug Dialogue, the business and practice of agriculture have changed dramatically. And thanks to the pioneering work of Dr. Norman Borlaug and the World Food Prize laureates and farmer leaders, global agriculture is now becoming much more productive and is rising to meet global demand while becoming more sustainable.

Dr. Norman Borlaug made a connection between his research in Mexico at CIMMYT, the International Maize and Wheat Improvement Center, and India and Pakistan. And we also want to recognize the 50th anniversary this year of CIMMYT. This connection between Latin America and Asia is what we're going to talk a little bit more about today as well as global issues. How can we continue to strengthen linkages between Asia and Latin America today for food security and productivity?

The Global Agricultural Imperative to feed the world more sustainably is complicated. Volatile agricultural business cycles are challenging growers in North America and Europe. Rising conflict across many regions of the world is creating an unprecedented demand for humanitarian assistance. Changing climate causes disruption and water shortages for four billion people annually across the globe. And health is becoming more vulnerable due to vector-borne diseases between humans and animals, all the while global demand for food and agriculture continues to grow.

Today our panelists are going to explore these issues faced by producers and consumers across Latin America and Asia as well as the wider global economic trends. The panel is moderated by Ben Pratt, Vice President of Corporate Public Affairs at The Mosaic Company, the world's largest producer of phosphate and potash fertilizer.

Seated next to Ben is Vanessa Stiffler-Claus, Director of International Affairs for John Deere. Vanessa directs the Company's political engagement and advocacy in all regions outside the United States. She leads John Deere's Global Public Affairs Council and manages the Company's international trade and regulatory policy.

We are also honored today to have on our panel Josette Sheeran, the seventh President and CEO of the Asia Society. Josette is the former Vice Chair of the World Economic Forum, which hosts the annual Davos and Davos in China gathering of world leaders. Many of us have known Josette's leadership through her prior role as Executive Director of the United Nations World Food Programme, where she managed the world's largest humanitarian workforce. Among Josette's many honors is one very dear to her heart—Norman Borlaug called her his "goddaughter."

We also look forward to hearing from our friends in Latin America. José Cardenas is currently the Senior Director of Elanco's operations for Latin America at Elanco Animal Health, a division of Eli Lilly and Company. He began his career at Elcano in 1990 and has had many roles across the Latin America region. His knowledge of consumer and agricultural issues in the region is very deep.

And finally, we are pleased to have with us from Argentina, Santiago del Solar Dorrego. He's a sixth-generation family farmer. He plants soybeans, barley, wheat, sunflower, maize, and raises dairy cattle. His family operation began in the 1830s. Today it's evolved to a high-technology precision operation with a range of crops for local use and export. Santiago has served in many agricultural leadership roles in Argentina. He received the La Nacion-Banco Galicia prize for the best farmer in 2015. He speaks in global symposiums, including the UNFAO, about the needs of farmers, and his commitment to sustainable and profitable agriculture, both in Argentina and for farmers around the world, is the mission of his life.

Panel Members

The Honorable Josette Sheeran President and CEO, Asia Society

José Cardenas Senior Director, Elcano Operations, Latin America

Santiago del Solar Farmer, Argentina

Vanessa Stiffler-Claus Director, International Affairs, John Deere

Benjamin Joseph Pratt

Vice President, Corporate Public Affairs, The Mosaic Company

I know time is of the essence, and I want to promise that we will get to questions from the audience, so we'll get right to it. And, Josette, I'll start with you. I have I think a pretty big question. From your perspective today as president of the Asia Society, how would you sort of scope the dimensions of hunger and food insecurity in the region? And then could you also address sort of the trends we might be seeing in the Asian region?

Sheeran

Well, thanks. And, first, Dr. Swaminathan, it's wonderful to see you here, and Gordon Conway and the Borlaug family. It's great to be with these heroes of fighting for world food security. The Asian Society was founded by the Rockefeller family, so food for the Rockefeller institutions has been a central element, and I think the miracle of the economic growth in Asia, what we've seen in some of the regions of Asia is that this has actually lifted rural poverty. That's often not linked when we see an industrial revolution and a services revolution, and yet in Northeast Asia, we've seen that, so there used to be 500 million people mired in absolute poverty in the rural areas two decades ago, and today there is about 117 million.

So we've seen a connection between economic growth and a reduction of rural poverty there; and a decade later it started to happen in Southeast Asia, and now those numbers are just as impressive. In South Asia, an area that Dr. Swaminathan knows well, we haven't quite seen that link. And so, despite the fact that South Asia was declared the fastest-growing region in the world just last week and we've seen incredible economic growth, somehow that link in lifting people out of poverty in the rural areas hasn't been quite as direct. I was always struck at the World Programme that China a few decades ago was WFP's biggest program, and today they're a donor and fighting the battle against hunger.

I think there's a lot to learn, and I was struck when I was with the World Food Program—I was in Rwanda with Agnes Kalibata, who was then the ag minister of Rwanda and now the head of AGRA. And one of the women farmers took a picture. She said, "Do you ever travel to China?" I said, "Yes," and she took a picture that she carried in the folds of her dress, always with her, and it was all crumpled, and it was a picture of farmers in Yunnan Province in China that were having high yields in step-farming. And she was shaking, and she said, "Could you send a message to these farmers?" And she said, "I dream of learning from them," and she looked at her farm, which had very spotty yields. And it struck me then that Asia has so much to share, because it's small farms, small plots, many of the same challenges that we see in other areas of the world.

So the other thing I'd say is we've also seen a pretty dramatic reduction in malnutrition, as we did over the past century or so in the United States and in Europe, happening in much of Asia. But the numbers in Asia are so big, so the vast majority of kids who are stunted or malnourished are in Asia—so we can't presume all is well, because these numbers are so big, and the benefit in India alone, if we were able to tackle stunting, could rock all the SDGs on their axis—like that alone. If

India put the brilliant minds of India behind that in a way that got support from the regulators and the policymakers, we could see a transformation in these numbers for the world and I think really accelerate these goals greatly. So my great hope is that we keep that in mind.

Just the last thing I'd like to say is the dynamism of the region. We're seeing this happen in many areas where the young generation, even though they're leaving farms, they're participating in the farm economies in new ways. So they're setting kiosks and selling cell phones. They're the ones teaching the older farmers, even though many of the young people are going to cities. And I just want to give one example.

So this young scientist in Canada decided he wanted to address anemia in Asia, which is huge, and it is a huge contributor to malnutrition and child deaths. And he invented a little iron puck, like a hockey puck (he was Canadian) that you could put in a rice pod, and it would leak in enough iron. It cost five dollars to make for five years of iron. And all the scientific testing showed that it did that. And he found out in Asia this did not appeal to people very much in Cambodia where he was testing it, so he designed it into this little lucky iron fish, which today is extremely popular. So this... Where the other had 5% market acceptance, this has like 90% market acceptance, and, you know, he's been like the innovator of the year.

But these simple solutions are coming from a younger generation. You see it in the Philippines, you see it in Indonesia, you see it in China. It's so exciting, and I just think we have to remember that, even though maybe they don't want the same livelihood their parents had, these young people are going to contribute in a new way. And I think they bring dynamic thinking to the frontlines of this issue.

Pratt Great, Josette. Thanks. It's exciting to hear about all that progress. Santiago, let's move to South America for a minute. I know that several countries in your region, including Brazil, Argentina, Chile and Peru have been effective at reducing hunger at the same time. So I'd like you to talk about some of the progress that's been made in the region. At the same time there are still some 32 million people hungry in Latin America, and in fact it appears that some of the progress that has been made in Brazil in recent years is starting to recede a bit. So can you talk about the progress you've made and then also some of the challenges that the region still faces in food security?

del Solar Thank you very much. I'm really proud of being here, being at the World Food Prize Borlaug Dialogue. I remember when I was a young kid, my father took me to the wheat fields, and there in the field he explained to me who was Norman Borlaug. He explained that the wheat that we planted there had rust-resistance, and we could use more fertilizer, thanks to his research.

> And I'm really glad to be here, and I see Jeanie Borlaug here in the first line here, and Julie is here, following Norman Borlaug's legacy. And I can tell that Norman Borlaug inspired many farmers all over the world. I can tell that.

Well, we go to South America. We really have good news from South America. You will see the broad picture. South America, in the last 20 years we have made great

progress. In the '90s we doubled the grain production, Argentina, Paraguay, Brazil, Uruguay together – double grain production. Then in the year 2000 we doubled again, so we had good news for many people, lots of opportunities.

At the same time you can see the broad picture because we have different situations, different countries and different regions. We have reduced hunger and extreme poverty. Brazil, for example, is remarkable. They reduced from 14% of people suffering hunger during the '90s, and now they have less than 5% of people suffering hunger. They have many support programs that help people, but at the same time their economy grew in the last 20 years. Of course, with all the ups and downs that we have in Latin America usually, that happens that way.

Peru is remarkable, as just was said. The president of the World Bank explained the support programs that they have for people, linked with other programs like healthcare and education, so they can go to the roots of poverty and help them. And they had 30% of people suffering hunger in the '90s in Peru. Now they have less than 8% — that's great progress.

Argentina, my country, is a completely different situation. We produce food for more than 400 million people, and we are only 42 million people, so nobody should be suffering hunger in my country, but we have the problem. And we have to say this—when we speak about data and reliable data, my country released data in the last years that was not real and that didn't help us much to improve the problems that we have. We said that we have 4.7% of people suffering hunger in the last years and only 1.7% of people suffering extreme poverty. Sorry... 4.7% people in poverty and 1.7% people suffering extreme poverty. But now we release the data. I would disclose the data. It's also good news to know the truth. The truth is that we have one third of Argentinians living in poverty and 6% of Argentinians living in extreme poverty.

So something that we have to tackle in South America is transparency. We can have the best support program, but if we don't have transparency and we have corruption, we can't get out—it's impossible to get out. We know that corruptions also starve people, so we have to increase that and get out of corruption. We see the transparency international chart. Argentina is 107 in that chart so that's not good news. Uruguay is our neighbor, and Chile is our neighbor; they are 22, 25%, 22 in the ranking. They are much better than us.

So to get out of poverty, we need many things, many things. We don't have a silver bullet. It's not only support programs. There are many things to do. And I want to quote an American in this one. This is Henry Louis Mencken. He said that, *For every complex problem, there's always an answer that is simple, clear and wrong.* So it's my favorite. So if we want to get out and finish with extreme poverty, we have to do many things. And one of the important things to do is transparency in our countries.

Thank you, Santiago. I know, while you're busy trying to ensure food security for your region, I know that you've also made significant progress there in terms of sustainable farming. Can you talk a bit about some of the practices that you and your neighbors have started to pick up to encourage sustainability?

Pratt

del Solar

Of course. During the last century, during the '90s, we had two very disruptive improvements – no-till, and biotech. Those two improvements make all this gain of yields that we had in the last years in many countries of South America, like Uruguay, Argentina, Paraguay and Brazil.

But now we are looking to the 21st century improvements, 20th century improvements like biotech – we don't discuss it anymore. We don't discuss biotech yes, biotech no. You're like discussing computers yes and computers no. We just go with biotech, and we try to have the best biotech that we can, you know? The same with no-till. But now we have an amount of data that we didn't have before, and that data is very good to make decisions. But we have to organize that data.

I've been working since 2006 with precision agriculture, and we're developing that technology, and it's helping us a lot to use less inputs in the places that we need less and more where we need more. So that's the balance between economics and at the same time environment. So it's a sustainable way to do things better.

At the same time we've made a lot of improvements, but as we mentioned Brazil first, about the disposable of containers. Pesticide containers is something that is a problem, but Brazil had a solution six or seven years from now that is working very good. Argentina just passed a law just a few weeks ago for the disposal of containers. So we're working together with the new government, and we have a fresh start with this government trying to improve and trying to do things much better.

Pratt

Thank you, Santiago. José, on to you. Latin America has seen considerable growth in animal protein exports to other parts of the world in recent years. What impact do you think that's having, first on production for the people of Latin America, and secondly on the overall food production system?

Cardenas Right, so first it's a pleasure to be here, being from Latin America, and this is dear to my heart in terms of a passion. But coming back to your question, I think the benefits of exports have significantly impacted not only efficiency of production but also the quality and safety of the food that's being produced.

> To give you an example, if you look at Mexico (I'm Mexican by birth), in Mexico the slaughterhouses, we have two systems. We have the local, which is called municipal type local slaughtering that serves a lot of smaller communities. And then you've got what we call TIF, which is more focused on more inspection, and most of the plants that are really focused to export. So as exports have grown in Mexico, the expectations and the production standards have significantly increased. And as a result of that, people are demanding better practices from food production, and that's having a tremendous benefit in the Mexican economy as we go forward.

Pratt

If you look a little farther south, there's been a lot of political instability and some changes in governments that have been pretty profound and particularly in Brazil. What do you see as the main challenges that animal agriculture in particular faces in becoming stronger in the context of some government volatility?

Cardenas Yeah, I think if you look at..., if we even step back a little further, I mean, if you look at Latin America, if you look at the potential and the opportunities that we have, I think it's something that as Latin American people we don't step back and recognize enough in terms of the resources that we have available to produce protein, to be that basket of food production for the globe. I mean, in our area, we have a third of the water, a third of the land, and a very competitive workforce to produce a significant amount of food to feed the world. Right?

> So if you look at our realities, and it's been discussed here in this forum, you know, we expect protein to increase significantly as a result of the increase in population, also as a result of the people moving more into the middle class. Now, with that, I think the biggest challenge that we face in Latin America is – how do we produce sustainably, and how do we make sure that we are taking care of the limited resources that we have?

Another of the realities that we have is that it takes about 1.6 "earths" to eat or to consume what we eat today. If you look at the additional demand in protein, I mean we don't have a sustainable model to get to that point, so I think to me the big challenge is – how do we produce more efficiently? How do we make sure that we're managing the disease of animals? Cause right now about 20% of the animals globally we lost to disease. So addressing those two pieces with technology practices, best practices, I think is going to be a key to address that.

In addition to that, in Latin America particularly, recognizing the level of opportunity, but also I think it's vital to be able to capture and be able to be a leader in protein production. How does private and government come together? Because we know that when it happens, I mean, we've seen the example of Peru. I mean, Peru has been used as an example a couple of times. We exploit the opportunities and we work better together. I mean, we saw it in Brazil. We can step back, and if you look at the last year, you know, there's been a lot of volatility in Brazil; but if you look at the last ten years, Brazil went through a pretty significant time of improvement. And that was a result of the government working very closely with private to take advantage of the opportunities that they had.

Pratt

Thank you. That's a good segue to another of our private sector representatives. And, Vanessa, let's focus on trade briefly, and I'll ask a question going back in time a little bit. I'd like to get your perspective on some of the contributing factors to the food price spikes that Asia experienced in particular in the 2007 to '09 timeframe.

Stiffler-Claus Yeah, thanks, Ben. I think overall, just take a step back first. The theme we're talking about is weathering the storm, and everything we've heard here on the panel thus far about the opportunities and challenges in both Asia and Latin America are microcosms, very big microcosms of the world challenges and opportunities. We have rapidly growing and urbanizing populations, particularly in Asia and agricultural productivity that needs to keep up. And Latin America is a great example of a powerhouse that can help feed the world.

> When we look back several years ago, though, we had these price spikes, as you noted, in 2007, 2008, particularly in Asia, particularly with rice, that caused a lot of countries to react very quickly and do things that were trade distorting. They put in

export bans, which caused other neighboring countries to worry and logically hoard supplies, which further increased the price. And so that, to me, is a great case study for what we need to take away going forward as we look into the world and think about how we take these linkages between Latin America and Asia but also globally to make sure that we don't enter into kneejerk reactions that end up exacerbating the situation.

Pratt Along those lines, in the current business climate, which is very different and very difficult for the business agriculture, what can the private sector in particular do to maintain a focus on ag investments, innovation, investments in developing regions in particular, even when resources are as scarce as they are today?

Stiffler-Claus I think the private sector can do a very good job of working with governments to help explain the efficiencies that come about from trade and globalization. When we talk about food security, no country on its own can be solely, fully secure in everything they need. And so to find ways to import from areas where the most efficient production of that crop happens to the places where its demanded, is very relevant – but not just for food security but also for sustainability reasons. If we can be more efficient in a given region in certain crop production, that enables us to reduce inputs, to reduce water use, to be more effective in our handling of the environment. And as we think about climate change and the risks that come from that and the shifting population patterns, I think the role of the private sector is there to help explain where the opportunities are to bring that leveling effect to help smooth out the volatility.

Pratt Fair warning. After I ask Josette one question, we'll take a couple questions from the audience, so if you have questions, please try to find your way toward the microphone. Josette, we're seeing much lower prices for food now and agricultural commodities than we saw during that price spike. How would you say Asian countries are being impacted by lower prices for ag commodities?

Sheeran I think all farmers in the world are being impacted by the volatility in pricing and really a breaking loose of food pricing in the world, where it was relatively steady after the 1970s food crisis and it was consistently going down and there was some predictability. So we're seeing the same thing in Asia that we see in Africa and elsewhere, where farmers really don't know what to count on. They don't know how much they can spend on inputs, because they don't know what they're going to get on outputs. And so that risk environment for farmers is greatly increased. I think this makes the business of farming really..., again, puts another burden on its difficulty for people to break out of poverty and for farming to be a solution to poverty. And without that, how is Asia going to raise 50% more food by 2050? How is the world going to do that?

> So reducing [inaudible - mic cutting out] to price volatility is key to the entire value chain (I think I'm going in and out with my mic here.) – key to the entire value chain of creating a stable, successful food security environment in the world. In general in the world, it's the only system. We have far less shock absorbers for food than we do for our computer systems or any other system in the world, and yet we all depend on it to live. And I think 2008 should have taught us when we looked really at the

brink of disaster in the world where whole nations couldn't get food, including Afghanistan, the Philippines, in Asia couldn't place orders for food.

Today we see again farmers really struggling to make farming a business, which is the fleeing that we're seeing from the farms to the cities. Leaving the elderly in farming is a trend that we have to be very careful to counter. So, while it's good for consumers to have lower prices—we know this—I think it really disrupts the value chain.

I just want to say I think one answer we have to look at is much more systems leadership. And everything we're talking about today, it really requires insurance, experts, governments, policy experts coming together to create an environment that really builds one of food security. Even policies on seeds—three of the biggest biotech countries in the world are in Asia, but the policies, the frameworks for investment and all of that are very difficult. So I think Lisa Dryer's work at the World Economic Forum and the New Vision for Agriculture in Grow Asia, Grow Africa, really is an example of the power we can get when we look at these things not isolated, like the cost of food and the prices that are coming in markets.

Pratt Thank you. Do we have questions from the audience? I can't really see the microphones. I apologize. Well, in lieu of an immediate question, I'd like to ask one more focus question of all the panelists, perhaps, and that is — How do you think the role of women can be strengthened in food security in your regions? And maybe, Santiago, I'll start with you if you have thoughts on women in South American agriculture.

del Solar I think we're changing a lot in South America, and the culture is now, the new culture is helping us to have much more women working in the fields. I've been in the agriculture university three or four weeks ago, and I saw that half of the people that were there are women, girls, and half boys, as it should be. When I was a young boy, it didn't happen that way. Now I think we are changing a lot, and that is good news for us, and it's good news for food security. They are very helpful, because we can complement together boys and girls, as it should be. So that's changing for better in South America.

Pratt Josette, let me get your thoughts briefly on that, and then we'll take a question from the floor.

If hunger is the world's most solvable problem, which I believe it is, it doesn't take rocket science that we don't know, or it's not searching for a cure. We know how to grow enough food and healthy food to feed the world. And even during the food crisis, there was enough kilocalories per person to have a very healthy world. So the challenges we're looking at are solvable.

If hunger is the world's most solvable problem, then women are the secret key to unlock the problem. Women are the majority of farmers in the world. They can't own land in many, many countries, they can't get bank loans, they can't get the support, they can't get the inputs, and they need our help. And so I think if we see a change in policies toward women farmers, we can see a revolution. And this is very true in Asia where traditional land ownership and if the husband dies, the land does

Sheeran

not go to the wife — they lose their family security. And so looking at the array of policies that really affect the ability of women farmers to make it, is key. And I don't think Asia has unlocked that problem yet.

Pratt Thank you. Let's take the question from this side. Please identify yourself and ask your question.

Q Hi. I'm Rich Gotmeyer. My question is that farmers, whether they're smallholders or large farmers, have as a key problem the ability to make the right decision at the right time. So how in particular in Latin America and in Asia can we help the farmer and can we scale a decision support structure?

Pratt Thank you. Santiago, why don't you start?

del Solar In Argentina I belong to a farmers' organization called CREA. CREA, we gather together farmers and we exchange experiences and we share information. And sharing information is the way to understand how we can do things better. We say that the secret that we have is that we don't have secrets between farmers. When you have a trust and you trust other farmers and you let them go to your farm and you show all your data and you have a professional advisor hired by all the farmers... For example, next week 10 or 12 farmers would come to my farm. I would show them everything that I have—transparency—all the data, all the information. And that day I will have the privilege to have 12 farmers being as my board of directors, helping me and my family to make better decisions.

We are working that way since 1957, and it works. It works. It will work Argentina, by doing in in Uruguay, in Bolivia, Paraguay, Georgia, and now we are going to Armenia. So I think the way of improving and understanding the better way of doing things is listening to other farmers and have a system. It's not only chatting with farmers, it's just having an organized way to exchange information and trust between farmers. It works. Believe me, it works.

Pratt Thank you, Santiago. Vanessa, maybe I'll come to you and ask you how the private sector can contribute to that problem.

Stiffler-Claus I was also going to note for this question—particularly in the Asia, Pacific and Latin America context, I think that APEC is doing great work on bringing the private sector and the public sector together. In fora that are targeted addressing knowledge-building and capacity-building and how we, we transfer information across the agriculture supply chain. We've been very active in that organization for the last several years, and I'm pleased to see that the progress is sometimes slow when you bring many stakeholders tile drainage, but the intent is there to really bring some knowledge sharing and technology transfer that can benefit farmers of all size and across the production system.

Pratt Over to this microphone.

Q Hi. My name is Ellen Levinson, and my question is — We're focused a lot here on food is medicine and nutrition, so how does trade and international trade and cross-border trade and standards for trade and food safety, how does that contribute to

nutritional impacts down the line, looking at agriculture value chains, food products, affordability, all the different aspects that you see? How do you see that affecting that in your countries or in regions?

Pratt Thank you. José, maybe we could start on your perspective from an animal protein point of view.

Cardenas You know, I think I mentioned that briefly is — If you look at, you know, as countries labor on the role of market, the production standards, especially if you look at countries like Japan, Korea, Europe, they just go a lot higher; I mean theirs is a lot higher. So I think that is helping us to do right standards, have more consistency but also at the same time have more efficiency as we look at how to scale up production to be able to serve the different segments that we're trying to access in Latin America.

Pratt Vanessa, trade is close to your heart. Do you have anything to add to this?

Stiffler-Claus No, not to embroider upon animal health.

Sheeran Can I add just a thought on that? One of the biggest breakthroughs I think we could have is a very controversial idea, which is some mutual recognition of standards. If you look at the SPS standards, the poor farmer in Africa or Latin America or whatever has to meet the standards of the U.S., it has to meet the standards of Europe, has to meet the standards of China, has to meet the standards of Japan — they can be completely different standards leading to the same goal. How can farmers deal with the complex environment? So it hits trade going that way. In addition, the fortification standards are completely different country to country. Some, you know, put iodine in salt, some put it in sugar, and then you can't do cross-border trade. And so cleaning up this to say we all have the same goals, and at least mutual recognition if not some harmonization, which is very difficult, maybe the most difficult thing, but at least mutual recognition to help get food trade moving in the world in a more coherent, consistent way, I think, would be very helpful.

Cardenas Yes, and I think to add to that, and it links to the previous question—I think we made food production more complex by not having more consistent standards for the different markets. And I think investing, like Santiago was saying... And, you know, in Latin America, very similar to in the U.S., we have the extension service where you have government, you have private, and you've got industry coming together. And the question is—are we investing enough, and are we making it simple enough so that we're more efficient. Because I do believe that hunger is a solvable problem, but we've got to make it less complex than what we're making it.

Pratt Take one more question from the floor, please.

Q Hi. My name is Eliza Olevas. I'm a student at Arizona State University. So I know a lot of people have talked about transparency with techniques, sharing information between different techniques in farming and different technologies and things like that. We've also talked a bit about scaling and how to get that information to a large number of people, and I know that another discipline's one method for approaching

that is using social networks to analyze key players, figure out who knows a lot of people in order to expedite that type of effusion of information. So I'm curious as to whether that has been attempted or utilized at all in these areas, whether to try to map out informally networks of personal farms and things like that in order to expedite that information.

Pratt Santiago, maybe you could talk briefly about information sharing among your colleagues in Argentina.

del Solar When we started CREA groups, at first in the 1960s, all the research that we had, we published in a magazine. We don't own all the research that we do—it's for everyone. And after that we started with these technologies using, I'd say, technologies for computers and Internet now. And that's the way to get for more people. We're working on that very hard, but still we have to improve a lot to get to small farmers, small-scale farmers, to get other technology to them. We know that we have to work a lot in that subject.

Cardenas I want to say something more about our trade problem? Sure, yes. I think trade is a key issue for South America. We have, for example, different ideas in South America. We have the medical school, for example, medical schools in Argentina, Brazil, Uruguay and Paraguay. We trade between us, and we produce, for example, in Argentina soybean, and Brazil there is the soybean, Paraguay soybean, Uruguay soybean. We produce beef and Brazil produces beef, and Uruguay beef, and Paraguay beef. So there's not complementary economies. So sometimes you feel like you are dancing with your sister, no? So we need to have a broad mind. And Chile, Peru—they have lots of trade agreements, free trade agreements. They open their mind, and they're giving more opportunities for people—more opportunities for people because of trade, taking our people from poverty because they have more opportunities. So I think that's a way to get out from South America to improve and have more opportunities for our people.

Pratt Thank you. Thank you for the questions. We'll conclude with the lighting round. I'll ask each of you to give a very brief answer to this question: If you were the leader of a nation in your region or in one of these regions, what one thing would you prioritize to achieve, either prioritize or change to achieve more inclusive and sustainable growth?

Stiffler-Claus All right. I was just thinking also on that information sharing question, just a very, very brief anecdote. I was India several weeks ago talking to a farmer in very rural Rajasthan, and I asked him how do you share information, and how do you know what to do? And he said, "The desire to learn is universal. My tools have been different over time." And so I would take that anecdote and use it to say the desire to improve is universal, the desire for knowledge is universal, and for agriculture as well. The tools are we need to be talking about sharing, and that's where trade really can come in. So I would urge an open trade stance in my country if I were the leader.

Sheeran If I was the leader of a nation that was very dependent on agriculture or where most of the population was dependent on agriculture for a livelihood, I would first of all make sure I wasn't building more palaces and more glory and really put the farmer at the center with a complete and absolute commitment to ending stunting and

malnutrition. When child brains are 40% less size than they could be because of stunting—and 25% of the kids in the world are stunted—this is completely criminal, because we know how to end it. And so, frankly, it's unacceptable that leaders are not prioritizing this and not rallying the world to help them. The world is there, the knowledge is there, the action is there. It does not cost much, in fact, it costs much more for an economy to not deal with stunting and malnutrition. So I would really put that at the center, because I think building a healthy society with a strong future requires putting malnutrition and ending hunger right at the center. And I think a farmer-centric approach to all of this can get it done. We've seen it happen. So this isn't a mystery. And I think political leadership is the biggest deficit we have today in the world in ending hunger and malnutrition.

Pratt Thank you. José Cardenas.

Cardenas Yeah, I think, you know, Santiago alluded to this. You know, agriculture is the key component of the GDP in most of the countries in Latin America. Brazil, it is about 11%, I think Argentina is very close to that. I think to me it's this collaboration that Santiago talked about, you've got to bring together in country, you know, government, you've got to bring industry, and you've got to bring producer on, how do we become more efficient, in a very simplistic way.

I think the other piece, the opportunity is so significant in Latin America that, you know, Santiago mentioned Mercosur. If you look at the resources that we have, if we come together and become more efficient instead of fighting amongst other, and developing standards where we can have more leverage, I think we can be more productive as we go forward.

Pratt Santiago, you get the last word.

del Solar Well, two things. I think that we have to work to reduce the gap between farmers. The gap is 50 to 70% difference; the yields that we get from the best farmers to other farmers, and we have to work a lot on that. I think the system that we have will help and also computers and the Internet will help us a lot.

And the other aspect that we have to work a lot is, again, about transparency. Why we have corruption in South America? We just can't blame others because of us. But we need help, need help. We know the corruption in Argentina. We know that tango takes two, no? And corruption, also it takes two. So we need the help of the other countries to help us to get rid of corruption, that corruption makes starved people.

Pratt Okay, thank you. Thank you to all of our panelists. Let's have a round of applause.