THE WORLD FOOD PRIZE

2019 Borlaug Dialogue International Symposium "Pax Agricultura: Peace Through Agriculture" October 16-18, 2019 - Des Moines, Iowa

U.S. SOY'S COMMITMENT TO GLOBAL FOOD SECURITY

Panel Moderator: *Mr. Kirk Leeds* October 16, 2019 – 2:25-3:15 p.m.

Introduction

Steven Leath

Member, Council of Advisors, World Food Prize Foundation

As this panel is exiting the stage, we'll prepare for our second panel today, which will be a soybean panel, and I'll introduce the panel. And then as the panelists come forward, I'll introduce them. This panel will be focused on trade and development that is designed to strengthen our agricultural value chain with regard to soybeans, especially through the improvement of health, nutrition and food security in our emerging markets. So, is our panel ready? Here they come. We'll bring the panel forward, and I will introduce them.

This is a distinguished panel with varied backgrounds. First, Mr. Samuel Ntim Adu, who is the father and CEO of Yedent Agro Group—it's a group of companies that do agricultural processing, and they're headquartered in Ghana, West Africa. Next panelist is Liz Hare, who is the executive director of the World Initiative for Soy in Human Health, and that's part of the American Soybean Association. Third, we have John Heisdorffer, a soybean producer from Keota, Iowa, and he is the chairman of the American Soybean Association. And next, Polly Ruhland, the CEO of the United Soybean Board, a board that works on behalf of U.S. farmers and investors to advance agricultural sustainability through research, education and promotion programs.

Now, as distinguished as these panelists are, they do need a leader, and they have a great one in Kirk Leeds, who is the CEO of the Iowa Soybean Association. He's done many great things. A couple of them I will mention. One is he helped lead efforts to establish the Soy Transportation Coalition to remove many of the obstacles for the U.S. soybean industry related to transportation. He also assisted in efforts to form the Iowa Biodiesel Board. Kirk, I turn it over to you.

Panel Members

Ms. Liz Hare Executive Director, World Initiative for Soy in Human Health,

American Soybean Association

Mr. John Heisdorffer Chairman, American Soybean Association

Mr. Samuel Kwame Ntim AduCEO, Yedent Agro GroupMs. Polly RuhlandCEO, United Soybean Board

2019WFP-4 Leeds Panel 10-16-19 - 1

Panel Moderator

Mr. Kirk Leeds

CEO, Iowa Soybean Association

Thank you. Thank you very much, Dr. Leath. It's great to see you again. Welcome back to Iowa. It's great to have you here. Thanks, everybody, for joining us this afternoon here at the Borlaug Dialogue. We're very happy to be here with you. We've got a very impressive panel—after me, anyway, you've got a very impressive panel here today, a good cross-section of the U.S. soybean community and some of the leaders. These farmers and the farm organizations that are represented here have been playing a critical role and really working on this topic of *Peace Through Agriculture*, as well as helping improve global food security around the world.

I think it's really appropriate on this World Food Day that we're here at the Borlaug Dialogue talking about these issues. This is again, I said, a distinguished panel, and they're going to bring you some experiences and perspectives on the work that's been going on for many, many years in the soybean industry.

We're going to start today with some opening comments from our panelists about their experiences and perspectives related to the topics of today. Then we'll go into a dialogue and discussion, thus the name Borlaug Dialogue, and then we're going to have a few minutes at the end—we'll open it up for feedback, questions or concerns that any of you may have as we move forward.

As I said, we have a number of senior leaders here, and I'll just quickly reintroduce them as a way to start the conversation. First of all, Polly Ruhland is here with us. Polly is the Chief Execution Officer of the United Soybean Board, the National Check-off Board. She works in St. Louis. She comes to us for the last couple years in this role, plus she brings significant background in the beef industry as well. So, Polly, great to have you in Iowa and glad to have you on this panel.

On the far end is my friend, John Heisdorffer. John is a soybean and corn farmer in Iowa. They also raise hogs, he and his family, in Southeast Iowa. John is currently Chairman of the Board of the American Soybean Association, a former President of the American Soybean Association, and a former President of the Iowa Soybean Association. So, we're going to be able to have one of our farmers share his perspectives on the things that he's experienced in his more than 20 years of leadership in the industry.

Liz Hare is here with us as well. Liz is the Executive Director of the World Initiative for Soy in Human Health. It's an initiative of the American Soybean Association. She'll be talking about that program as we celebrate 20 years of WISHH and its formation.

And our last panelist, the very distinguished Samuel Ntim Adu from Ghana. He has been a partner with the WISHH program for many years. He runs an agricultural company in Ghana and really involved in this issue of the supply chain and bringing food to all parts of the world.

So that's our panelists, and we'll get right started. Polly, we're going to go to you first. Based on your experience in the soybean industry and prior, give us a little idea from your perspective of the role that farmers have played in helping deal with *Peace Through Agriculture* and certainly

feeding a hungry world. Most of your perspective today is USB but your broader experiences you've had in our industry. So what's that role and how important has it been?

Polly Are

I believe that U.S. farmers and U.S. soybean farmers as part of that group understand that feeding the world falls primarily on the farmers' shoulders. And we understand that feeding the world, especially with the growing population, involves a lot more than just producing more food. It's a complicated that issue that involves not only producing more food through the use of technology but also involves things like food distribution and other areas.

But one thing that we probably hadn't thought of maybe when we think about feeding the world, is—How do we efficiently feed the world with a quality food? And when I think about quality food and I think about the basis of a quality diet throughout the world, I think of protein. Because I believe that when we most efficiently feed the world, we feed them with high-nutrient dense food. So U.S. soybean farmers and U.S. farmers in general, be it beef farmers or pork farmers, chicken farmers, egg farmers, soybean farmers, believe that a protein-first approach to feeding the world is very important.

So U.S. Soy, for example, has thought about our role in feeding the world through production of soy, not only for human food, for human health, for human food throughout all types of global markets, but also producing soy for animal feed. So that what happens is that, when societies start with a certain level of protein—soybeans, for example—and start to get more disposable income, we know that they move on the protein chain toward animal feed, animal food and animal protein. So U.S. Soy can play a role in not only human food in that area but also feeding poultry for eggs for those types of protein and feeding pork and beef, for example, for expanding markets in animal proteins globally. So we believe that high-quality food, nutrient-dense food from the perspective of protein is very important to our ideas about feeding the world.

Kirk Leeds

Thank you. Let's go to John Heisdorffer, again a farmer from Southeast Iowa. John, in your more than 20 years of leadership roles both at the state and the national level, I know you've had the opportunity to join Liz—and we'll learn more about WISHH here in a minute—but you've had an opportunity to experience firsthand the importance of protein, as Polly has indicated. But one of the things I wanted to ask you about is... You know, I've had an opportunity, as you know, to work for soybean farmers for more than 30 years, and I've always been impressed about their commitment to feeding a hungry world. And I know sometimes the agriculture industry gets criticized for that, is our mantra, but what I've found in my 30 years is folks like you, John, get up every morning, and that is an absolute commitment and what really gets you to go on days like today, which, this year's been a little tough. By the way, I appreciate you getting off the combine to come in today. But, John, your experiences and your perspectives as a farmer and the role you think farmers have and should play in this *Peace Through Agriculture* and global food security.

John Heisdorffer

Well, thank you, and thanks for having me today. I look at it... This is my 48th harvest. I've put in 48 crops in my lifetime, and soil protein, soybeans has been a part of that every year since I

started. You know, it doesn't make any difference whether that protein is... First of all, as farmers, we have to make a living, and we have to feed our families. But from there, we feed all the families around the world, because all this protein that we have developed through either directly as soy being eaten or through livestock, hogs, beef, poultry and aquaculture, fish, all those things go to feed people.

And we have farmers, which I represent over 350,000 soybean farmers in the U.S. In 1930, and I'm sure some of you know these facts, but in 1930 one farmer fed four other people. In 1970 one farmer fed 76 people. Moving ahead to 2012, with genetics and technology, a farmer fed 155 people. And taking that forward to 2019, I'm sure we're over 160 people that we feed through what we do every day. Like I said, I've put a lot of crops in, and I get up every morning, and I have hogs, and so we feed that livestock.

And I've been to several places with WISHH, with Liz's former boss, I guess, Jim Hershey, and I've been to Guatemala and to Africa. And I've seen some of the schools there that fed a soy protein to their children at school, and maybe it was mixed with something else, I'm not sure, but it was the biggest nourishment for the day. And that gives me great pride that I can produce something here in Iowa that's used around the world. It's just so... You know, as farmers we're always family—it's always family.

And so you look at the soy family — whether it's Iowa Soybean or American Soybean Association or United Soybean Export Council or USB with Polly, we all work trying to increase the amount of food that is in the world through soybeans. And you cannot, you can just not understand how I feel if I can look at a bunch of children and think they're getting their one meal for the day because I'm doing what I'm doing back on my farm.

Kirk Leeds

Thank you, John. So, Liz, we mentioned WISHH a couple different times in our introductory comments, World Initiative for Soy in Human Health, again 20th anniversary coming up for the WISHH program. It's hard to believe that states like Iowa and others helped, with ASA, found the World Initiative for Soy in Human Health. Why don't you give us kind of an overview of the WISHH program, what it's focused on and what are the goals and maybe a couple examples that you think are relevant for our discussion today.

Liz Hare

Yeah, absolutely. And first of all, I'd like to say thank you so much to Ambassador Quinn and to everyone else here at the World Food Prize for having us here today. This is a real honor to be here and to be in this room with so many people who have dedicated their lives to agriculture and to the promotion of peace. So, thank you very much for having us here.

As was alluded to earlier, WISHH is a little bit different than traditional agricultural development organizations, and we're a little bit different than traditional international marketing organizations because of the role that we play as a connector between those two different efforts. And a lot of people often see those two different efforts versus competitive versus complementary. But really our role is to connect trade and development in order to create future markets for U.S. soy. And the visionary leaders who founded this organization 20 years ago knew that they could create a market for their beans for the improvement of health, nutrition and global food security abroad.

So in order to tell you a little bit more about how we connect trade and development, I'm going to tell you a story that is a little bit more of the story that John started. Years ago I lived in El Salvador. El Salvador is one of my favorite places in the entire world, and Salvadorans stole a part of my heart that will always be with them. But when I was there I worked in a primary school making soy milk for kids. And the school was supporting the soy milk program because they knew that their students needed additional nutrition, and they were not currently part of the government school meals program. They also knew that if they offered food to the students, the parents would be more likely to send them, keeping them off the streets of downtown San Salvador. That daily glass of soy milk for those kids was a small portion of their daily caloric needs and their daily protein needs — but it was something.

Fast forward 15 years later to a conference that WISHH hosted last summer at Purdue University in collaboration with the U.S. Department of Agriculture's Cochran program. One of WISHH's great strengths is our ability to facilitate strategic partnerships across the globe. And we work with what we often refer to as the three-legged stool. We seek entrepreneurs, innovators, leaders and institutions from the public sector, the private sector, and from nonprofit organizations. And at this particular conference we had a representative from El Salvador's Ministry of Education. We had a representative from the Central American Food Production Company, and we had a representative from one of El Salvador's largest NGOs. At that conference, those people spent a week learning from key researchers and key professors. They worked hands-on in a food technology laboratory, learning how to create food products that could deliver to their population's growing needs. And they networked and liased with leaders from across Central America and Africa.

But most importantly, they built trust. And before those three individuals left that conference, the representative from El Salvador's Ministry of Education, the representative from the nonprofit organization, and the representative from the Central American Food Production Company had committed to creating a pilot program in one of El Salvador's primary schools where they would allow students to taste test foods that were made to deliver specifically to the protein needs of those kids at a price that the government could afford. Many of those foods included U.S. soy. This year, not only have they completed that pilot program but they're in the final stages of getting those recipes included in El Salvador's school meals program. And that really is the power of WISHH—the ability to take an idea, this idea that soy protein really can have a genuine impact on people's lives—and scale it from one school to an institutional school meals program that impacts over one million kids in El Salvador.

U.S. soy trade was able to play a role in that because it was able to enter and fill supply gaps, allowing that Central American Food Production Company to produce foods that were affordable, accessible and available to kids like them, and the government could afford them. And WISHH really believes strongly that these types of strategic partnerships for trade, especially those which ultimately impact youth, are key to the promotion of peace.

Samuel, sitting next to me, is going to tell you a whole lot more about what he does in Ghana. But just really briefly, a bit about WISHH's work in Ghana, because it tells more about what we do on the feed production side of things. We are currently implementing the U.S. Department of Agriculture funded Food for Progress Program called "Amplify Ghana." That project is specific to the improvement of the poultry value chain in Ghana, and our role in that project is the production of improved poultry feed. The entire idea behind that being that if improved feed is produced locally in Ghana, more protein can be produced locally to feed the needs of a growing population. Soybean meal is included in improved protein feed formulations. Current

demand supply of soybeans cannot meet existing demand supply of soybeans cannot existing demand, so that really leaves the opportunity for U.S. soy trade to enter and fill those gaps. And as John so eloquently said earlier, that is why U.S. soybean farmers remain committed to this work—because they've been to these emerging markets, they've seen this growing demand for protein, and they genuinely believe that this work matters. They're proud that the product that they produce can help meet the world's growing protein needs while also building a market for the beans that they grow back home.

Kirk Leeds

Thank you very much, Liz. You can see she brings her passion and her commitment to the work that is funded by farmers and other partners. Samuel, she kind of gave you a short introduction there, but Samuel has been a partner with the WISHH for many years in Ghana. So, Samuel, why don't you tell us about your role and what you've experienced working with U.S. soy.

Samuel Ntim Adu

Sure, thanks. It's an honor to be part of the World Food Prize this year. And also I'm honored to receive a couple of USA soy farmers in Ghana some years back at my factory. I drove my heart for the beautiful work being done by U.S. soy farmers. Our collaboration with WISHH, as Liz earlier indicated, is consciously billed as a public/private partnership that ensure that private sector know the context within which it's working. And through that, we're able to deliver the goals of WISHH, primarily being: How do you help deliver health? How do you help deliver nutrition at affordable prices to the base of the pyramid population? And through that, we need to be able to craft a product that is culturally acceptable and which is always there to help in productive development by sending technical systems, creating products, and also helping navigate strategically the route to the market so that at the end of the day when public funding gets exhausted, how does the tree sustain that.

Now this one. Last year through WISHH three Ghanaians had Cochran Fellowship from the school feeding program and a couple of them. For the first time, the school feeding cuisines, texturized soy product are being introduced to it. And they going around the country it would sadden you to hear that mostly the school meals did not contain any protein, that for the introduction of TSP protein is being introduced, and that help fight protein deficiency and also curb malnutrition.

Again, through this partnership, WISHH always try to provide technical assistance and training programs along the investees and centers of research in the U.S. And by so doing, it will also link trade where partners from Ghana, Senegal, Nigeria, Uganda, and all are able to buy U.S. soy, soy flour, introducing to baking. The first time we introduced soy bread was last year when through which we had quality sample product. And we have taken the caloric system trimmed because..., so now we have soy bread on the market so people can have protein and nutrition. And above I think the work that has been done, as Liz indicated, is trying to envision how markets are created into the future. By 2055, Africa will become one of the most populous nations in the world, and it'll have the most youths combined in the whole world. And if today the youth is introduced to soy-based foods, which are healthy and nutritious, then surely they are willing to grow and love those foods and introduce it into the next generation. So I think we are creating a futuristic market that together we have to work strong towards it. And not only creating a futuristic market but also giving life and hope to the malnourished who have become so stunted because of protein deficiency. But now with this as families are not able to buy meat

and fish, they can access protein-based foods about one-tenth the cost seen for fish. So we would urge the American Soy Association, USDA, the U.S. Board to deepen such relationships and collaborations towards making the world a better place to fight malnutrition.

Kirk Leeds

Thank you very much for that. That's powerful, and it's the real core of what WISHH is about. Before I go to the trade versus development, I'd like to go back to you for a minute, Samuel, if I could. You mentioned bread as one of the products that have been developed through the WISHH funding to get protein into the diet. I'm sure many of us—I know I can speak to this—that really don't quite understand how you go about getting protein into a local food that's accepted by the locals. You talked about the children. What would be another product that you've worked to get soy added to besides bread—you mentioned bread. And I'm sure it's different in different countries, but give us another example of that would look like.

Samuel Ntim Adu

Sure. WISHH has sent the consultant to our factory, and through that we have been able to develop corn soy flour, soy flour mixed together, and sweet potato—orange flesh potato flour—blended together into puffs, which are energy puffs you can just take snack on the move, which are energy puffs that you can just put in a cup, add water to it and cereals. Again, we shall send a technical assistant to help us develop texturized soy products, locally made, so that if there are some imports that are not coming the way it ought to be. So together we've been able to create three products, corn, soy, and bread. The consultant have been able to help teach people how to introduce soy flour into sausage-making to complement the meat extension process, CSB in the puffs. And they are helping us with—how do you promote this, how do you market this, the routes to the market approach. So it's not just only for product development. It's not only just leaving it to be purchased by the public space, but how does the project itself sustain itself beyond everything.

Kirk Leeds

So let's talk a little bit more about what WISHH introduced or Liz introduced as part of WISHH, which is this kind of pre-trade, pre-development. And one of the things that I've heard from over the years is sometimes some criticism of perhaps this appears to be kind of self-serving the U.S. agricultural industry to go into these countries and to help develop food products as a way to introduce soy and other products to them. So, Polly, I'm just curious in your work that you've involved with, I know, beyond the soybean role—this pre-development work, whatever you want to call it—how important that is and how you would answer anyone that might be critical of U.S. agriculture coming in and doing these programs. Liz, I'll ask you the same question in a minute, but, Polly, what's your thoughts on the U.S. role in all this?

Polly Ruhland

You know, I'm a big believer in doing well by doing good. I don't believe that profitability and mission have to be the opposite thing, like some people do. And so I believe that, when U.S. farmers take an interest in pre-development and infrastructure development and product development in countries that may not necessarily be our biggest market today but in the future may be a bigger market, and we do it for humanitarian reason, like WISHH does, then we can do well by doing good. And I believe that U.S. farmers are very mission-driven as far as the

world goes. John indicated that he gets up every day thinking about feeding the world. And I believe most of our farmers do that. And so when farmers go to work every day, they are driven by a mission. They're driven by the mission of quality food, and they're driven by the mission of economic, environmental and social sustainability. And I will not leave economic sustainability out of the mission that farmers have for themselves and for the world. So I believe that, when people insist on juxtaposing profit with humanitarian aid and/or doing good for the world, that's a false juxtaposition, and that is not something that is good for solving world problems. We can do well by doing good, and farmers wake up every day thinking about that.

Kirk Leeds

Liz, I know this comes up with you as you're working with partners and go into some of these markets. You know, what is the U.S. soil industry up to? So again, very similar to Polly, how do you answer the question and perhaps experiences that you've had with that conversation?

Liz Hare

Yeah, I think a little bit of it—you know, we are only in developing markets and emerging economics, and most of those there is a significantly large growth in populations and therefore a significant increase in demand for protein in those populations. And a lot of those countries are in a situation where they already cannot produce the levels of protein that their population needs. So we are working together with those partnerships that I mentioned to try to figure out a way, together with people. You know, we really focus on this idea of "with" and not "for." We're trying to figure out a way with people and partnerships in-country to drive these types of projects and develop things that are actually going to meet growing needs. So there are some countries that are interested, as Samuel mentioned, in soy foods. There are some countries that are really interested in aquaculture and increased fish production. There are others that are very interested in increased poultry production, and so we're really trying to work together with partnerships, a lot of government partnerships, to figure out how do we actually meet the growing needs and the growing demands of a population and deliver to what people actually want.

Kirk Leeds

Well, John, I'm going to go to you a minute, because having traveled with you but knowing you've traveled extensively. And as typical when American farmers are traveling the world and there's questions about, when we have a farmer with us, which is always a highlight for the groups that we meet with, often there gets a conversation about the size of your farm, the productivity of your farm in comparison to wherever you might be. I know that's happened to you, and you have these conversations, but how do you again deal with these questions that come up about—"Well, that's good for you, John, in Iowa or the United States, but we have different problems here in our world, and your model and your products may not be a good fit for us." How do you engage in that conversation with other farmers around the world and respond to those kinds of concerns and opportunities for conversation?

John Heisdorffer

It is an opportunity, and, you know, we have... Here in Iowa I guess we're very fortunate that we have some of the most productive soils in the world. And not always is a bigger farm or a smaller farm... They're really, it's just a different level. It takes more to operate a bigger farm

than it does a smaller one. And so we're all farmers. We're not... It doesn't make any difference if you're farming halfway around the world or not, we're still doing the same things. We're trying to have our families and make a living. And so there's really no difference there. It just seems like there is, to me. I always said people are no different anyplace in the world that I have met—only the governments are different.

Kirk Leeds

I think I'll leave that government comment alone for right now, make no comments from the microphone today. But, Polly, I want to go back to you again for a moment, and it's been talked about a couple of times. Samuel talked about soybean protein as part of meat products, and he called them extenders. There's been a lot of debate around the world about alternative protein sources. And of course you bring a unique perspective for your many years working on the cattle side and now working for soy. And I know you've given a lot of thought to this whole conversation about protein and the need for diversity in the protein sources. From a soybean perspective now, how does the United Soybean Board go about talking about protein for really a protein-deficient world?

Polly Ruhland

Well, I think it's really important that we think about protein different domestically than we do about protein internationally. And the reason for that is, domestically, many American citizens have the choice to choose any kind of protein they want, whatever they prefer, they can afford; and whatever they prefer, they buy. And so some of us may get into the challenge of pitting one protein against another domestically. And I believe, and I know at the United Soybean Board we're for consumer choice domestically. That means offer consumers domestically whatever they want, let them choose it. The market will speak. Internationally, Liz always talks about how a lot of places in the world don't have a choice about what protein they use. They have to use the protein that they can afford that in many cases the government can help them with and that's readily available, to Samuel's point, too.

So I think sometimes when I hear U.S. citizens talking about world markets and protein in particular, we do tend to make our views known to other populations without understanding not only their cultural needs but their economic limitations. So we need to think as Americans how we can help the world choose all kinds of protein, whether they are able to afford and/or want more expensive proteins like beef and pork, or whether they are able to and want less expensive proteins like soy. And, for example, we want those people to get what they want. Right, Liz? We want them to want the food that they eat. That's the best thing they have. No matter what kind of protein you're eating, we want it to be good, and we want it to taste good, and we want those kids to want it for their life, right, to want good nutrition and good health for their life.

So I think what we have to be careful of is extending and amplifying our opinions about what we know here to the rest of the world's protein needs, especially when we start pitting proteins against each other in reference to international markets.

Kirk Leeds

Samuel, do you have a comment on that as well, or do you have any comments about this protein, where it comes from and how it's handled in obviously a different situation than the American consumer.

Samuel Ntim Adu

So I want to comment using some practicalities. For instance, there are three to four million school children being fed through government institutional feeding on a daily basis in Ghana. The amount earmark for a student is one Ghanaian cedi, which is 20 cents, barely less than 20 cents. And it's that 20 cents that has to be used to buy the carbohydrate, the protein, the vegetables, pay taxes out of it, and everything. How can one craftily and nutritiously produce food for 20 cents? So it makes plant protein the most affordable and accessible if one can introduce plant protein into a local, cultural cuisine that's tasteful and nutritious. So if America, U.S. farmers and policies are geared towards doing such good to humanity, which America has always done, then its invention in aerospace engineering, being it going head-on during the second World War. And many, many, many, many good things that America has done to the world. If America is doing good to emerging markets, developing markets, by introducing alternative, affordable protein - I think doing good is in the DNA of the American people, and it ought to be encouraged.

Kirk Leeds

Thank you for that. So, Liz, you mentioned before that it's not only in the protein consumption directly by humans, but in some markets you're actually helping them develop the beginnings of a livestock or poultry industry. Give us an example of a project that perhaps you've gone and done aquaculture, livestock or poultry, and kind of helped a country begin that side of the business.

Liz Hare

Yeah, so we had a project in Pakistan a few years ago that was focused on... The whole idea of the project was to reduce the protein gap in Pakistan. So the difference between the amount of protein produced locally and the amount of protein the population needed to consume in order to be healthy. Our role within that project, again, similar to the poultry project in Ghana, was the production of fish feed—floating soy-based fish feed for tilapia. When that project began, there was no commercial tilapia produced in Pakistan, and there was no soy-based feed produced in Pakistan.

So we partnered with a feed production company that was producing horse feed at the time and saw an increase in demand for protein in Pakistan and strongly believed that aquaculture was a way to meet that growing need. So we worked with that company to bring an extruder into their facility and produce soy-based floating fish feed, which allows fish to grow bigger and faster and helps farmers save money because the feed floats, which means they can see how much feed they're actually feeding to their fish and help make adjustments; because feed is the largest component of the cost of production. So it was able to bring down their production costs.

When we finished that project, the value of commercial tilapia sold in Pakistan was \$4.5 million. There was one feed mill producing fish feed. Today there are eight feed mills in Pakistan producing soy-based floating fish feed. And as some of you may know, Pakistan is a significant

market for U.S. soy. Aquaculture is still one of the smallest components of that, but it is a component of that trade, and it is a part of the trade that is delivering to the needs, as Samuel mentioned, of a population that cannot afford other sources of protein.

Kirk Leeds

Excellent. We're going to go to questions here in a couple minutes, so please be ready for that. But, Liz, I'm going to go back to you for a minute. As you indicated in your opening comments, we've got a very distinguished audience here, people who have dedicated their lives to global food security and peace through agriculture. I'm going to give you a little opportunity here. So from a WISHH perspective, what would you like from some of our... Again you don't know all the individuals, but there's an interesting group here that can be really great partners. What would you like to share about WISHH and its needs moving forward, with the distinguished group of folks we have in this room?

Liz Hare

I think what I would say is, going back to the strategic partnerships, because I really do believe that that is one of our greatest strengths and one of the greatest resources that U.S. soy can bring to the table is this ability to connect people across the globe, because we do believe in so many different types of protein sources. We do believe in different ways to get food to people. And so we play a connecting role that I think a lot of other organizations don't play. And one of the biggest deals of that connecting role is this ability to connect development and trade, because the people in those two conversations often do not speak to one another and definitely do not talk to one another about how they can collaborate. So I think coming together with ideas of how can we collaborate with one another to increase the potential for trade but to also increase global food security. And, you know, we don't have our own ideas. We do have some of our own ideas, but we're not shut down to the rest of everyone's ideas, and we really are interested in hearing from people about—how can we make this work? How can we help increase food security around the world while continuing to create markets for U.S. soybean farmers?

Kirk Leeds

We're ready for some questions, so if anybody has them, I guess you need to go the microphone so we can hear you. There's microphones on both ends, so if you want to find that microphone, we'll be glad to take your questions.

Q&A

Thank you. My name is Mark. I'm from Rwanda. I go to the University of Nebraska-Lincoln. I'm glad to hear of those projects, because it's something that we've been talking about, like solving hunger, like making people's stomach full—but full of what? So are we talking about like just not getting food but getting the real food which is gonna help them grow. And so my question was about like asking what we show on all of these programs, like the criteria that they base on choosing countries to work with. Like I would specifically talk about Rwanda. We... And if like the program is not yet there, like I'm really sure like it's a great country to work with. And so can we start the process if it's not yet there, or how can we get it progress? Like I'm being specific because I can't speak for every country, but I'm pretty sure about mine.

- Kirk The criteria, so how do you go about finding partners and selecting where to go?
- Liz Yes, so as I said before, we're only in developing markets and emerging economies. There is another soybean export organization that works in larger markets. So that is our one primary kind of restriction is that's really where we work. That's really where we do our best work. We are not currently in Rwanda, so I look forward to having that conversation afterwards about how we can potentially get into Rwanda. But that is really, it's growing populations, emerging economies and people looking for additional sources of protein, and how do we help U.S. soybean farmers play a role in delivering that protein to them. So let's definitely talk afterwards. I also want to see if you've been a convert to the Nebraska football team, so we can talk about that afterward.
- Kirk Just some advice. I wouldn't lead with the University of Nebraska when you're here in Iowa—just some advice for credibility, but I'll stop with that. Any other questions, another question from the audience? Yes, go ahead.
- Q My name is Joshua. I'm originally from Indonesia. Currently, I'm a masters student I'm from Iowa State University.
- Kirk Yes, thank you very much for that, yeah.
- So I know that Asia is one of the big receivers of a lot of trade with soybean in the U.S., and we are grateful. We eat a lot of U.S. soybean. But one of the stories that I've heard sometimes is that we receive so much trade from the U.S. soybean, but in a way that is not very... Some farmers probably are not happy with that in Indonesia, because they don't grow soybean as well as in the U.S., and therefore they can't sell their soybeans as cheap as what the imported soybean would be for them. And I know you talked a lot about trade and development and how to create this partnership together. But just what would you say to people who have a belief that a lot of imports of soybean, say, to our country, sometimes it creates such a barrier for them to further their development because they can't compete as well?
- Kirk That's a difficult question. Anybody else got a question you want to ask? No that's a great question, and it does come up lots of times. Polly or John, I'll turn it over to you guys if you want to take a stab at that. So, Polly, you're first, I guess.
- Polly So we see food security, which really what you're talking about is the food security issue—right?—domestically produce food versus imported food. And we see food security as a government responsibility both in the U.S. and all countries. So when we go in to soy U.S. soy in countries, we rely on the governments of those countries to understand food security in a way that allows their people to have the nutrition they need and also to support farmers within that country. Right? So never do we go into a country with the idea that we're going to put that country's farmers out of business. Because we understand that food security is a balance of domestically produced food and imported food. So the markets that we wish to develop, we always go in with respect for local farmers. However, we also don't believe it is the U.S.'s job to develop and/or execute food security strategies for the governments around the world. So we always respect whatever the food security responsibility and strategies are of those governments. We're farmers ourselves, so putting farmers out of business globally is

not what our mission is. And so I would tell you that, as farmers and as farmers that want our government to make sure that our people are fed nutritiously and inexpensively, we respect other governments' ability to do that and to define their own food security in a way that makes them happy. So, yes, we're looking for profit. Yes, we're looking for economic viability of the U.S. farmers, but it is not in our best interest to put a lot of domestic farmers out of business and unbalance a food security strategy of any government, if that's fair.

Kirk Someone else on the panel. Go ahead, John.

John Yeah, and I think I'm going to kind of challenge you a little bit here, but it looks to me like most other governments will buy from their citizens first. And along with that, transportation in a home country is going to be next to nothing compared to getting a shipload of soybeans or soy meal from the U.S. So I don't know that there's that... I guess I don't see that challenge, but maybe I'm not at the right stage here to look at that.

Kirk Samuel or Liz, do you have a thought?

Samuel So we are caught in the same way. An acre of soy plantation in Ghana delivers about half a ton in productivity. And during harvest you have some quantity of soy. After three, four months, it's consumed and the prices begin to spur up. And when prices begin to escalate, what is the effect to the consumer? So that's where I think policy and consumer needs and all have to be taken into consideration. The last time we brought soy into Ghana... in monetization... was selling a thousand metric tons. We sat down with our ministry to ensure which time of the season that local farmer's soy is out of season and how can we bring it so as not to disrupt local production. And these are discussions that, when policymakers have really a mind to ensure it, that consumers have good offering. This can be taken into consideration. So there are a whole lot of policy thinking to go around to satisfy both the farmer, satisfy the consumer, and even how the soy innovation comes in to help develop improved hybrid seeds, harvesting, farming technologies and all that.

Kirk One last question over here. Go ahead, sir.

Q Yes, this is a question for Kirk or John. The article in the morning paper talking renewable fuels—would you care to comment about the government taking away from their promise?

Kirk John, would you like to handle that one? Let me just say, again, for those of you who are not aware, there's a domestic dispute going on about small refinery exemptions and biofuels. And we issued a statement yesterday—"we" being the Iowa Soybean Association—expressing disappointment that the details that were released yesterday were not in alignment with what we had been told two weeks ago would be used to recapture some of those markets for biofuels. We're disappointed. We'll continue to work really hard, trying to make sure in the rulemaking process that there is an improvement in some of that language. You know, basically the other day we were told to trust the EPA in the United States. Again this is a domestic issue, but the EPA, as you know, the trust level of farmers toward the EPA right now is not... Let's just

say the bank's not overflowing with deposits. So we've got a lot of work to do. I don't know. John, do you have something to add to that?

- John Well, I think, you know, we've been encouraged to produce and make renewable energy, and then giving waivers to these small refineries who, really, most of them aren't very small, it's kind of like a slap in the face, I guess, for both ethanol and biodiesel producers. We're using up products, with biodiesel anyway, that are thrown away every day. You know, we use cooking oil and tallow and things like that, that are not used for other things. So I think we're doing a real help to have these renewables. And but yet, you know, they're taking them away, so...
- Kirk I see we have someone at the microphone, but I need to cut it off, so we'll come see you afterwards. How's that? I can see it—I'm getting a signal here I'm already over time. But thank you on behalf of the panel. Thank you, panelists, for participating. We do have a slide of contact information. There's our information if you want to follow up with any of the panelists. Again, thank you very much, and again, Dr. Leath, it's great to see you.