THE WORLD FOOD PRIZE

2017 Borlaug Dialogue International Symposium
"THE ROAD OUT OF POVERTY"
October 18-20, 2017 - Des Moines, Iowa

NUTRITION SECURITY AND THE UN SUSTAINABLE DEVELOPMENT GOALS: THE ROLE OF AGRICULTURE AND THE U.S. DAIRY INDUSTRY IN FOSTERING GLOBAL ECONOMIC DEVELOPMENT

Panel Moderator: Secretary Tom Vilsack

October 19, 2017 - 4:10 p.m.

Introduction

Steven Leath

President, Auburn University

We're going to talk about nutrition and the U.N. Sustainable Development Goals, specifically the role of agriculture in the U.S. dairy industry in fostering global economic development. We have a very distinguished panel today, and we're especially fortunate to have former U.S. Secretary of Agriculture, Tom Vilsack, moderating this panel. Secretary Vilsack is also the former governor of the great state of Iowa and a new member of the Council of Advisors for the World Food Prize. So I'd like to invite Secretary Vilsack and his panel to the podium here.

Tom Vilsack

Former U.S. Secretary of Agriculture and former Governor of Iowa

Dr. Leath, thank you very, very much, and it's nice to have you back in the state as you provide great leadership to the University of Auburn. Appreciate the role that you played in taking Iowa State to the next level as well, so it's good to see you again.

And thank you all for being here this afternoon. I think this is an incredibly important panel, and we appreciate the fact that you are here at the end of a long day. But I think you're going to here from four extraordinary individuals who have something to say about nutrition; about the challenges that we have around the world in terms of food insecurity and the role that dairy can play in meeting those challenges.

You know, the World Food Program has acknowledged that there is a heavy cost to malnutrition. It is a driver of poverty and inequality around the world. It limits educational and occupational opportunities. It stunts growth. It can cause death among the world's poorest and among the world's youngest. And there's a double burden associated with malnutrition. In addition to not having enough to eat, we often find that it also impacts and affects, ironically, obesity.

The panel today is charged by the World Food Prize Foundation with explaining how dairy and dairy products might be an effective tool in helping to control malnutrition and how it might help and aid in assisting all of us in reaching many of the U.N. Sustainable Development Goals. I suspect that this incredible panel will touch on a number of key points.

You might hear today the role of protein from a dairy perspective, that it has indeed a high-ranking protein that can assist in recovery from malnutrition, while also helping to optimize body composition and to stem obesity.

You might hear from this panel information that will dispel the myth that dairy might be too expensive to be used in this fight, that that high recovery rate can be reached at a cost of as little as a penny per day.

You might hear from these experts how it can assist in the reduction of stunting, something that I think we all ought to be concerned about when one out of four children starts their lives in a stunted circumstance which can result in poorer school performance, lower lifetime incomes, and declining health in later years.

We have today four experts. Mary Hennigan is the Nutrition Advisor at the Catholic Relief Services, and Mary is going to explain in part the important role that NGOs play in promoting good nutrition and preventing stunting and some of the challenges the Catholic Relief Services has faced.

Joining her is Greg Miller, who is the Global Chief Science Officer at the National Dairy Council, and he's the Executive Vice President for Research, Regulatory and Scientific Affairs at Dairy Management, Inc. Greg has done and continues to do research and will tell you about how that research reflects on the effectiveness of dairy and dairy products in providing nutrition and recovery from malnutrition.

Joining us as well is Lauren Landis, who is the Director of Nutrition Division at the World Food Programme. Lauren was a driving force behind the World Food Programme's 2017 Nutrition Strategy in reflecting on the importance of proper nutrition and the obstacles and challenges in providing products that can provide that nutrition.

And finally, Chris Policinski is the CEO of Land O'Lakes. And Chris is here from Minnesota to talk about the role that his company, and for that matter, the corporate world has in addressing these challenges and where there is a disconnect between the corporate world and the efforts of nonprofits and other organizations. Land O'Lakes has been heavily involved in international development and rural development in developing companies, and I think Chris brings an interesting perspective as a CEO.

We'll have statements from these panelists. I'll ask a question or two, and then we'll open it up for a question or two in the remaining time.

I want to take this opportunity to thank Ambassador Quinn and the staff of the World Food Prize Foundation for the opportunity to have this conversation. Over the course of the last few days here in Des Moines there have been a variety of conversations about nutrition, about the importance of agricultural production and research, about how science is playing a role in increasing productivity, the legacy of Norman Borlaug – people from all over the world

discussing new research, new innovation, new opportunities. But oftentimes what's missed in this conversation is the role that individual food products can play in providing nutrition.

Now, I think there's probably no better example of that than the dairy. There is such incredible diversity within dairy that it can provide a number of products that can meet the nutritional needs of people around the world and can make a difference. So I hope that you will find this to be an interesting conversation and discussion. And again I want to thank the World Food Prize for this opportunity and thank our panelists for the taking the time in coming significant distances to be here today.

So with that, I'm going to sit down. I'm going to turn it over to Mary, and we're just going to go, Mary, Greg, Lauren, Chris, with their statements. Several of them have slides. And then we'll do the Q&A and hope that we get finished relatively on time, because we know there's a small celebration that follows this.

Panel Members

Tom Vilsack President and CEO, U.S. Dairy Council

Mary Hennigan Senior Technical Advisor – Nutrition, Catholic Relief Services

Lauren Landis Director of Nutrition, World Food Programme

Gregory Miller Global Chief Science Officer, National Dairy Council

Chris Policinski President and CEO, Land O'Lakes

Mary Thank you very much for this privilege to be here. This year is the 75th anniversary of Catholic Relief Services, and we were founded by the U.S. Catholic bishops to work internationally in feeding the poor and working for very vulnerable populations.

And over the past 75 years, our role has evolved from food aid and just provisions of services to a nutrition-centric partnership with government, researchers, donors, civil society, and communities. And I want to talk about that partnership today.

This partnership really formed when the SUN Movement galvanized so many nations to work on national nutrition plans. And these national nutrition plans helped us start to coordinate and develop our role in accordance to national plans to address stunting and address malnutrition. Up until that time, we were sort of pretty much free to do what we wanted to do, where we wanted to do, in countries. So the national nutrition plans gave us opportunity to focus and to support the scale-up of these evidenced-based interventions.

And I was very pleased to learn recently that our staff in Kenya was asked by the government of Kenya to help in the revision of the national nutrition plan there, specifically to look at the protocols for children with disabilities and nutrition. So that opens up a whole new way of a population that we hadn't thought of, is children with disabilities who are also stunted. We also work, for example, in Rwanda. And in

Rwanda we work with the government in rolling out their national nutrition plan, and we covered 25% of the country's districts.

So we've been able to really focus our interventions on these, with government in scaling it up. And how do we do that is through donors like USAID and DFID, who have really been out front in encouraging government ownership and country ownership of stunting and nutrition plans.

In Burundi, for example, we teamed up with USAID in 2010 to do a five-year program specifically designed to roll out USAID's strategy for reducing stunting. And we reached 50,000 households, and this Title 2 program had a very large randomized trial on top of it, so that USAID could study the effects of their interventions on stunting. And I'm happy to announce that last month the findings were released. And as part of those findings, it really demonstrated that NGOs like CRS have a role in helping governments and donors look at what they're doing, how do you implement their plans.

And one of the big questions that I raised in the presentation of the findings was — there was no dairy. We looked at plant-based supplements. We looked at all sorts of nutrition education. We might have talked about animal source protein, but we did not look... The studies are limited to plant-based interventions.

We also use our private funding to convene, and we convene different types of partners. Last year in Nairobi, Kenya, we convened 300 people who represented governments, civil society, private sectors, and small businesses and governments to address the issue of the private sector in nutrition. And what struck me the most was that small businesses—and the president of Land O'Lakes were there—and their commitment to nutrition. And as an NGO, maybe I had stood off a little on the side about private sectors and nutrition, but this really resonated on their work and dedication to reducing stunting and finding solutions.

CRS is in 90 countries, or over 90 countries, depending on the day. We worked a lot with small farmers and local businesses. One of our secrets is that we're a multisector agency, so we don't look at nutrition totally from a nutritious-specific point of view. We can also address issues around consumer demands, helping consumers become informed, households become informed about what decisions they make on nutrition. And one of the ways we've looked at is—how do couples make decisions in the household? Often a woman understands what her child needs. Often she knows what to buy. But maybe her husband who controls maybe the money doesn't have that same understanding. So we spend a lot of time on couples' communications and household decision-making for nutrition.

And this sets up opportunities for the private sector to really work with us in terms of products so that people make informed decisions. In Guatemala, for example, we're trying to make sure people aren't just buying junk food and literally that is like—no more Coca-Cola or no more sodas—but let's look at other types of foods that are healthy.

We also recognize that, while we can lift people out of poverty and we can help feed them for today, the real future is in programs like early childhood development and girls' education that will pay off in the long run. And this has been very important to take a look at integrating early childhood development. Because if you have a child who isn't stunted, you really want that child to have a holistic development program. So we've been doing a lot of ECD with governments, with civil societies and other actors.

And of course our partnership is really at community level, and we work with communities to help them become advocates for their own nutrition. We could spend hours talking about how you do that, but I really want to talk about something that is near and dear to me. I think one of the hopeful signs for more sustainable nutrition in the future is the increasing number of national nutritionists in each country, and this links communities to the national agendas.

And I'm really pleased that so many more NGOs, private sector, governments are finding ways of employing well-trained nutritionists. I think in terms of having these nutritionists on the grounds, we can start to answer some of the questions around dairy. Because up until now, it's always been a plant-based issue, but I think having this local understanding of culture, this local understanding of the factors that influence malnutrition and in a particular country, dairy is going to be an important factor. Dairy will become a question that we can address in the future. So I think now is a good time to start talking about dairy and putting it back into the national nutrition plans and making NGOs like CRS promote some of these products.

Tom Mary, thank you. Greg, speaking of nutrition.

Greg Okay, I'm going to jump right in. Good afternoon. We've got a lot to cover, and I've only got five minutes, so please put on your seat belts. We're going to try to move along here real quickly.

I recently served on a high level panel of experts for the United Nations to develop a report on nutrition and food systems. And as I participated in this group, I learned a lot. And one of the key things is — the link between nutrition and sustainability is really characterized by a growing tension to respond to intersecting challenges. We have a growing population out there. We're going to need to produce more food, 30 to 40% more food.

And not only is our population growing in numbers, they're growing in size. We have an obesity epidemic that's across the globe. But unfortunately those folks that are getting too many calories are often not getting the nutrients that they need. We see deficiency of calcium, iron, potassium, fiber. And so they're undernourished. They're overfed but undernourished. We have food insecurity, but yet we're wasting or losing a third of the food that we're producing. That's just shameful. We need to deal with that issue.

And what this really says to me is that not only are we going to need to produce more food, we're going to need to produce more of the right kinds of foods, nutrient-rich foods like dairy foods. And we're going to have to do it in a way that minimizes our environmental impact and minimizes our use of natural resources.

The U.N. recently approved the 17 Sustainable Development Goals. This is the agenda for 2030 for the U.N. This is their goal to move forward. And they said in order for us to achieve the Sustainable Development Goals, we're going to have to look at it through a particular lens as we approach that. We're going to have to use the triple bottom line approach of sustainability—and that means planet, people and prosperity. Those are going to have to be an equilibrium for it to really be sustainable.

They also added a couple other dimensions — partnerships, because they realize that the civil society, governments and private sector are all going to have to work together and come to the table if we are really going to achieve these Sustainable Development Goals.

And the other dimension they added is peace. Certainly without peace, it's going to be very difficult to achieve the Sustainable Development Goals. And so the further we move along in achieving those Sustainable Development Goals, hopefully it will bring more peace to the planet, and hopefully that will allow us to get there.

But at the heart of attaining these Sustainable Development Goals is nutrition. And that's clearly evidenced by the U.N. passing the Decade of Nutrition. The U.N. has focused their efforts solely on nutrition. They understand without food and nutrition security across the globe, we will not be able to achieve our Sustainable Development Goals.

We think dairy can contribute to that, and we certainly think, as we look at it through the various lenses and the various dimensions, dairy can play a very significant and important role.

Dairy provides good nutrition to people. Every day six billion people across the globe get up and consume dairy as a part of their healthy diet. Dairy provides affordable, accessible, culturally diverse, nutrient-rich foods that people can consume. And dairy provides nutrition 365 days of the year. There isn't a season for dairy. Every day dairy is being produced across the globe to feed our growing planet.

In the dimension of planet, the dairy sector has committed to reducing its environmental footprint, and this is evidenced by the Dairy Sustainability Framework. You can go online and look for this. This is dairy reporting on its commitment to continuous improvement in terms of its environmental footprint. We are reporting on 11 different dimensions in terms of soil health, water, biodiversity, animal care, working conditions and other dimensions as well.

Another way dairy can enable a sustainable food system is with dairy cows. Most people don't realize dairy cows are great recyclers. They take things that we can't consume and turn it into nutrient-rich food. 80 to 90% of what we feed dairy cattle is non-human consumable. There are food production byproducts such as almond shells, spent brewers' grain, citrus peels—all of that is waste that could go into landfills, but we're feeding it cattle. They're recycling it and turning it into nutrient-rich dairy foods with high-quality protein that we can consume and be nourished by.

Animal care, of course, is important, and dairy farmers have committed across the globe to good animal care and to good care of their lands. In the U.S. they've been

doing that. We produce a gallon of milk now with 90% less land, 65% less greenhouse gases and 63% less water use than we did seventy years ago.

Dairy contributes to prosperity. It's very important to rural economies, these dairy farms. Across the globe there are 600 million people who live on dairy farms, and that's their livelihood, and it contributes to rural economies —400 million people, their livelihood is tied to the dairy sector; they're either selling inputs into the dairy farm or they're purchasing the milk, processing the milk, transporting the milk, or selling the dairy products that are made from milk. That means every day one billion people on this planet, their livelihood is tied to the dairy sector. And that's very important for those economies.

Dairy has shown its commitment to partnerships. We partner with the full dairy sector to report on our continuous improvement in the dairy sustainability framework. We signed the Dairy Declaration of Rotterdam; that was in October of 2016. It was an agreement signed by the International Dairy Federation and FAO to show our joint commitment to partner to help achieve the Sustainable Development Goals. So globally the dairy industry has shown its commitment to work hard against these Sustainable Development Goals.

So when we look at the dairy sector contributing to all these critical areas, we are really here to work to create a sustainable food system that creates a healthier food environment that will create healthier people and a healthier planet.

Tom Thanks Greg. Lauren.

Lauren One of the benefits of going third is I think all the topics will just be a continuation. The World Food Programme works in about 80 different countries; in about 54 of them we do nutrition-specific programming. That covers about 12.8 million people worldwide, and about half of those are in emergency environments.

When you think of the World Food Programme, if you know the World Food Programme, you're probably thinking of emergency food aid, large scale in large emergencies. We've been doing that for about 50 years. But one of the things that we realize is that it's not just about getting that food to the most remote areas but it's also about nourishing people. And so therefore you've really got to make sure that you're getting more than just the calories. They have really got to get the nutrients that the particular age group or vulnerability, pregnant and lactating women or under two's need to live healthy lives.

So one of the things that you'll see as the World Food Programme has written it's new strategic plan based on these Sustainable Development Goals, we selected two of them, 2, getting to zero hunger, and 17, partnership, is the ones that we will put most of our effort to, though most you in the room know that nutrition is linked to almost all of the SDGs.

The red circle is the only thing you need to look at on this slide in the sense that nutrition is now one of the strategic objectives or strategic results of the World Food Programme, so giving it a much higher profile to say that it's not just about getting the food there but getting the right food there.

As we develop this new strategic plan or new management plan for the World Food Programme, we've also written a new nutrition policy that goes hand in hand with it and again really saying, as Mary has already said, you need to focus on national plans and implement what governments want to do, not just what the World Food Programme might think is appropriate and really focusing on all forms of malnutrition, which goes all the way from wasting and stunting to micronutrient deficiencies as well as overweight and obesity which is such a growing problem globally.

And then again focusing on diet and really making sure that we're thinking about all the food systems that are related to getting the most appropriate local diet and not bringing in that diet from imported sources and clearly also, as this chart tries to show, also working in partnership.

This slide I don't want to spend a lot of time on except to have you look quickly at the three yellow boxes. Because really what we're trying to say here is it's not only about access and availability to safe and nutritious foods that we want to focus on in the World Food Programme as part of our nutrition policy, but we also want to look at creating and expanding the demand and consumption of local nutritious food. That's new for the World Food Programme and something that I think resonates with a lot of things that I've heard today.

So we are focused on diets, national plans, all forms of malnutrition, partnership and particularly looking at nutrition-sensitive programs. For those of you who know the World Food Programme, we do, for example, a lot of school feeding globally worldwide. And this is an important social safety net where you can reach children with things like milk, that it can have a really important impact on their lives.

So how can we do what the World Food Programme has done for years, for decades and put a nutrition lens on it? How can we make sure that, when we're procuring from smallholders and using the power of our procurement, that we think through a nutrition lens? When we're building infrastructure assets, can we think about it through a nutrition lens? Even when we're handing out cash for people to buy the foods that they need in local markets, what can we also do to make sure they think about it from a nutrition perspective?

So I just wanted to say one other thing, which is — How do we use milk? And really we have been thinking about milk for a number of years, but we realize that milk is really just an important, nutritious component of the diets of the children and other beneficiaries that we're trying to reach.

And we really look at it in two ways. One, straight up, straight up—as milk, yogurt, cheese, etc., as a commodity that goes into a ration that we provide. But we also look at it very closely as an ingredient for products such as specialized nutrition foods, whether it's for treatment of acute malnutrition, either moderate or severe, and also for supporting growth and development, so say in complementary baby foods that are fed to children after exclusive breastfeeding. We're really for younger children much more interested in using it was an ingredient, because we're very much concerned about encouraging full and complete breastfeeding from zero to six months. So I'll stop there, and hopefully we'll still have some time for questions.

Chris

Great, thank you. One of the challenges of going last is to try not to be redundant to all the good comments you just heard about the role of dairy and nutritious diets. So let me focus on the role of the private sector in improving nutrition in developing economies — why is that I mean, and what can private sector companies do?

So first let me take a half a step back and just 30 seconds to describe Land O'Lakes and tell you why our opinion even counts in this matter; because, after all, most of you think of us as the butter company. And indeed that is true. We were formed in the early '20s by a bunch of dairy farmers in the upper Midwest to aggregate the supply and market their dairy products. What most people don't know is, very, very shortly after that, they formed an animal feed division and a crop inputs division—seed, crop nutrients, crop protection products—to bargain for them and do things for them that are faster and cheaper than they could do on their own.

So if you turn the clock forward nearly a hundred years, those are our three business units. We've grown quite a bit. We're a Fortune 500 company, Fortune 200 company with about \$15 billion in sales. And a cool part of it is, we're still farmer owned. The neatest part of our company, though, is those farmers who owned us as an outgrowth of their rural values about 40 years ago said, "You know, we know a lot about getting food from farm to market. There are a lot of places in the world that seems to be a struggle. Let's form a nonprofit organization and go do that work."

So we've been very involved in global development, like a lot of the brilliant organizations here and in this room for nearly four decades, nearly a hundred companies, hundreds and hundreds of projects. So we are opinionated. We do have a perch that sees the food industry end to end—that perch is informed by being farmer owned, and we are indeed a private sector organization. But we have this oddity for private sector companies, which is a four decades old global development organization. So you know what? What do we see from this perch, and what is the role of both global development organizations and the private sector?

Well, first when we look at our development, business — Land O'Lakes International Development — a very creative name, there isn't a project we have that doesn't have nutrition built into it. Right now we have 16 projects in Africa, and every one of them has a nutrition component somehow, some way. It might be very directly. In Ethiopia we're partnering with Save the Children to focus on vulnerable populations, women and children in the first thousand days and working to ensure that they have a balanced, nutritious diet — a very direct nutrition component.

Without going into the detail in the other projects we have, which are funded largely by USAID or USDA, some private foundation funding, broadly speaking, what we're trying to do in all of those projects as it relates to nutrition is build much more resilient food systems that are high yielding. That's foundational to nutrition—having a predictable, diverse set of crops, not unpredictable and not narrow, a predictable, diverse set of crops. So that's what's happening on our development side of the business. And it really is very directly tethered to some of the learning, I think, in the development of community around—it's not just calories, it's the right calories.

We also see from that perch that we can grow things in lots of different environments, in lots of different conditions, sometimes surprisingly challenging. Our issue—and

we're making progress—our issue is accelerating that progress and scaling what we know we can do. That's where the private sector comes in. And right now, I'll be honest, from our perch, humbly, there is a disconnect. I think a lot of development organizations have looked at the private sector as kind of hands off—who are these folks? These folks, in my view, can be your best friends to accelerate and scale the brilliant work that you've done for decades.

Right now, if you go talk to my private sector colleagues, they'd say—"We get it. Africa is going to be everybody's growth market at some point in time—Jeez, we can't quite figure out how to make a business proposition work." Capitalism doesn't allocate resources well against highly uncertain or long-term projects. And we're in a long-term trend to improve nutrition—right?

How about if we talked to each other little bit more? And how about if private sector folks work with development folks and said, "You know, you're actually not just doing development, you're building a safe, affordable raw materials supply for us to develop a marketplace." Might that attract investment? Might that attract folks to say—I can actually build processing facility and maybe even give you some money to accelerate the development work you've done, and create a micro-economy. Hmm. Because I do see, as a private sector a payoff, meaning a marketplace has developed. It's what's happening now on a slower pace.

So I think the comment I would make around the private sector's role in improving nutrition is that we actually have to start to talk to one another. The great development organizations that have been in place doing brilliant work for years need to embrace the private sector and say—"Come on in. The water's just fine. And we will help you build that raw materials supply to serve those emerging markets. "

And by the way, when you think about it, there's an economic sustainability comment here, too. Think about who goes to work in those factories. You pay them? They're your consumer base. It is what's happening now, but we can just accelerate it.

Tom Chris, that's a great opportunity for me to segue with both Mary and Lauren. So Chris has put the challenge out to organizations like the World Food Programme, Catholic Relief Services. What advice would you give Chris in terms of how to make that connection, how to get dairy more on sort of the radar screen of these organizations? What advice, what counsel would you give us today? What's the first thing we ought to be doing as an industry to make that connection more effectively? Mary, Lauren.

Mary I think for me I would answer that question by helping us become more aware of what you're doing and understanding more of the science. Because there's been such a negative view on dairy. And I guess I felt this this week when I told some colleagues from other organizations that I was going to be here talking about dairy, and they went, "What?!"

And it's like, okay, there's a whole science out there that could really help us out, and I think there's opportunities to really start to educate. Early in my talk I mentioned Coca-Cola. I happen to think they're one of the best companies around in terms of their delivery mechanisms to the furthest areas of the world. How do we learn from that? It's not to say Coke is bad or push them aside, but how do we work with them to

make sure that some of these products that are hard to reach are able to be reached. What's the supply chain?

So I think there is dialog, but it's helping us come to realize the impact and the science and the technology of it. And I think for too long NGOs have been sort of like looking at things from—we're going to serve the poor. But I think we have to also figure out that by serving the poor means that we also have to find the best mechanisms for them to be lifted out of poverty, and that includes the private sector.

Lauren Just to add to that, I think what I would say is that you need to go to the countries. And I think I've seen more of that, and we know that. But one of the things that has come out of the SUN Movement for nutrition is the SUN business network. And I really see that revving up not so much at the global level these days, but really in individual countries where they can bring together small and medium size enterprises with the goal to work on nutrition. And that's maybe the platform to kind of get that science known, to make sure that those health benefits of dairy are clearly understood and then see if there's a business proposition that can be done that is for that consumer group. So that would be one suggestion.

Tom Greg, I know that you probably are chomping at the bit to provide us in a short period of time all we need to know about the nutritional value of dairy. So let me give you an opportunity to educate all of us about the science that has emerged recently about dairy in terms of nutritional value. And what other research do you think we ought to be focused on in order to make the case more effectively?

Greg Well, clearly, the science on dairy is really strong and really solid in terms of — Dairy is a nutrient-rich food. People who tend to consume more dairy tend to have nutritionally better diets. Dairy consumption has been associated with reduced risk of cardiovascular disease, Type 2 diabetes, lower blood pressure, lower weight and lower body fat. And again I work for the dairy industry, so don't take my word. Go read the Dietary Guidelines for Americans. In the Dietary Guidelines, they're the ones who looked at all the available science and put that on the table and said in the Dietary Guidelines for Americans, we need three servings of dairy each day as a part of a healthy diet and showed that relationship. So that's pretty solid from that point of view.

If I were king of the world in terms of researching and what we need to do now, I think we've got a lot of good, basic science. I would look now for more applied science. How do we do more to show how dairy can be delivered into programs, the value that dairy brings in terms of nutritional quality of the diet, health benefits, reduced risks of non-communicable diseases?

As we wrote this report for the U.N., one of the things that the U.N. asked for was more experiential knowledge in terms of what really works out there in the field. Can we do more demonstration products that show that, when you bring dairy in, you enhance the livelihood of people. You give them a cow, and all of a sudden they've got nutrition 365 days of the year. They can get a more diverse diet, because now they have an income, because they can sell some of that now. So I think I would look for more applied kinds of projects to really demonstrate how dairy delivers.

Tom Has there been research on the impact on growth of young children?

Yes, in fact there have been trials that have been done in using dairy protein relative to plant proteins in terms of its ability to accelerate growth after mild acute malnutrition. And there's really good data saying that high-quality dairy protein really can accelerate recovery. And it makes sense to me because if you look at the protein quality, you've got to eat 30 to 40% more plant protein to get the same nutritional quality that you get from animal-source protein. So there's a big difference in terms of protein quality.

Tom And that goes to the cost issue.

Chris I want to come back to the broad comment of science and having the development community really look at the science around nutrition, the role of dairy in a nutritious diet, fact-based, science-based, and the role of science and technology in building more resilient crops. Because again that's part of bringing the private sector into this game. When they see an abundant, more abundant, predictable raw material supply, they can have a business proposition, and they can accelerate the work that you all have done and are doing so brilliantly. It doesn't change what you're doing. It just changes the rate of progress against the objective of improving nutrition for more and more people. It brings the power of the marketplace.

But I can't emphasize enough from the perch we're have and we're opinionated—I know that doesn't make us right—getting to a science-based platform around what the products are that contribute to a nutritious diet, not fact, not opinion, not nostalgia, but science-based view of how to build more resilient food systems, crops, that feed more nutritious crops on their own or the dairy industry itself. That's the basis around which you'll see more business propositions take root.

Greg If I could just add, one of the things that frightens me most is the scientist. That so many people are bringing emotion to the table in terms of how they interpret the science. They're bringing what they feel and what they think, rather than being unemotional and fact-based, and that really frightens me at times. Because if we want to make good policy, we've got make it from good science.

Q&A

Tom We've got about five minutes left. There's a roving mic. If there are questions, now is the time for folks to ask them. Good, we've got a question over here.

Q Jim Hershey with the American Soybean Association's WISH program. Good to see you again, Secretary Vilsack, and wonderful panel. As Raj Shah pointed out, protein comes in many forms, of course. Dairy is a great one, soy and other products as well. It's a specific crucial nutrient that's often overlooked in diets. So how can we help nutrition programs and their designers, consumers and their private sector suppliers understand the power of protein, specifically to prevent stunting?

Tom Who wants to take that?

Mary It goes to, I think, education and also - excuse me I lost my mic- sort of some working with the donor community and I think USAID and others, what is the right formulation of some of the food assistance programs that we have. And then it's also working with universities and the training of nutritionists and others. And really getting back to the issue of protein and dairy source protein, I think we have to also be very cognizant that we cannot give up the fight for breastfeeding, and we must keep that fight alive.

And I think sometimes part of this argument around dairy has been pushed to the side for the issue around breastfeeding. And we must have this dual message that says breastfeeding is the best for babies, and then we will enter into dairy in other areas of the child's life. But there's no question that I think we've had a debate going on, is we don't want to give up that breastfeeding battle. And I think we have to really hold our steps on that one and then make sure that there's also room for dairy as part of the diet going forward.

Lauren I just couldn't stress that more, just really designing programs so that you enhance the breastfeeding but taking advantage of the protein of milk. And one of the ways that you're going to get that adopted around the world—and it's a slow and painful, difficult way, I can admit—is that the quality of that milk protein has to be accepted and adopted in WHO standards. Because when you go into countries and you say, "Let's go this way," they say, "What do the WHO guidelines say?" And often in order to really get that done, you need solid science, good evidence and well-documented. And so that's where we have to go.

Tom Greg, does that sound science, solid science exist today?

Greg Yes, it does. There is more probably to be done—spoken like a true scientist, but, yes, there is good, solid science. We do need some more.

Tom So, Chris, does the private sector have a role in advocating in these organizations or advocating governments to inject this conversation into these organizations, and how could the private sector be more effective in that effort?

Chris Yeah, I think we have to talk to each other, because there's roles for all of us. There's roles for governments, government communications, there's roles for traditional development organizations, and there's roles for the private sector. And broadly speaking, I really, and the theme of my comments is bringing the power of the marketplace to accelerate development around providing better nutrition, in our case, dairy. That is the role of private sector. They need help from traditional development organizations in developing the foundational capabilities to provide a raw material supply. That depends on governments having a rule of law that's honored.

So we all have roles, and I think we have to talk about this together and get out of our silos. Because the private sector right now does look at Africa, and I will tell you most everybody I know says one of these days that's going to be our greatest growth market. My responses is—get in the game now and it'll be there faster. When I talk to NGOs, they talk about the pace of change in whatever the objective is, in this case, dairy nutrition, dairy as it plays a role in nutrition. We get it, but if we could only go

faster. I think we have to talk to each other and coordinate our activities, and indeed we'll be able to accelerate our progress.

Well, the timer has shut the timer off, which indicates that we've run out of time. And I think what I learned from this panel discussion is the need for the World Food Prize Foundation to have this panel back again next year for round 2. Because this is a topic I think that lends itself to much more discussion and opportunity for the folks to be engaged in conversation. So please join me in thanking the panel for this great conversation.