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Panel Moderator: Sano Shimoda

CONVERSATION:

WORKING CAPITAL: LEVERAGING GLOBAL FINANCIAL TOOLS FOR SMALLHOLDER FARMERS

Panel moderator:

Sano Shimoda

Founder and President, BioScience Securities

Panel members:

Ray Offenheiser President, Oxfam America

Walter Bell Former Chairman, Swiss Re America Holding Corporation

Carolyn Woo President and CEO, Catholic Relief Services

Jack Sinclair Executive Vice President of Food, Walmart U.S.

Introduction by:

Catherine Swoboda

Interim Director of Planning, World Food Prize

We'd like to thank very much Monsanto for this opportunity to highlight the work of the Invest an Acre Initiative to fight hunger in our communities here in the United States.

On Tuesday over 600 Iowans gathered here in the Marriott for Iowa Hunger Summit to hear Howard Buffett deliver stirring remarks about these issues and the impact of this initiative, and we are so grateful for this opportunity to share it with the dialogue as well. So now I'd like to introduce our next panel.

The focus of this conversation is to explore how we can customize our traditional financing commodities markets and other tools to make them work for unconventional borrowers and further integrate smallholders into the global economy in a way that sustains growth and benefits all. You will find that the composition of this conversation panel is particularly fitting, as Swiss Re and Oxfam have a partnership that delivers crop insurance to rural farmers in Ethiopia, while Wal-Mart and Catholic Relief Services have collaborated on a produce-sourcing program with farmers in Latin America.

So, finally, our moderator, Sano Shimoda, brings a Wal Street background and agricultural investment perspective to this panel. So with that, I'll hand it over to Sano, as he will most certainly lead us in a lively and substantive discussion.

CONVERSATION:

WORKING CAPITAL: LEVERAGING GLOBAL FINANCIAL TOOLS FOR SMALLHOLDER FARMERS

Sano Shimoda

Founder and President, BioScience Securities

Good morning. Good morning, everybody. Good morning, Iowa. I'm going to do this a little bit differently. It's in my genetics. Global agriculture, as you well know, faces unprecedented challenges – price volatility, cost increases, developing access to markets, erratic weather (You and I would know that up close and personal.), the challenge to sustainability. These challenges face, whether you're one of my farm friends in Iowa or the many small farmers in the emerging markets. While these challenges are monumental in scope, the opportunities in agriculture have never been greater.

I want to take you back to February 1964 – I'm dating myself. Ed Sullivan on the Ed Sullivan show, had the opportunity to introduce the Beatles – you remember those, them – to the American TV audience. I'm playing Ed Sullivan. Well, Ed Sullivan had the opportunity to present the Beatles. I have a better opportunity. I have sitting on the stage four movers and shakers, four stars of creating new partnerships, using microfinance tools and the growing world marketplace to help farmers feed themselves, to help farmers provide food for international markets.

My background, and here again was alluded to – I'm a former Wall Street analyst in New York, yeah, one of those – turned into an investment banker, yeah, one of those too. But why I've been asked to moderate this panel is very simple. I spent a lot of time in the real world of agriculture. A lot of people in Iowa think I live in Iowa. I live in Los Angeles now, but I'm from New York.

I roam around the cornfields, the rice fields of Arkansas, the cotton fields of Mississippi, because it's very important to understand through the eyes of the people who make it happen. Just as these four people in the audience, it is very important to them to interface with the real people in emerging countries that make it happen.

They've been introduced. The bios, which were extraordinary, are in the packet of information you have. I've divided this up into two pieces. When I call, it is your time. I want to give five minutes – and I'm going to watch the minutes like a hawk. I'm going to play Candy Crowley here again – the last presidential debate. I'm going to give them five minutes to talk about their involvement, what got them involved, and then it's 20 minutes, it is my time. I'm going to ask each of them a lead-off question, and the whole idea is to provoke a conversation between four of these people. And then we'll wind up and hopefully have a few minutes for question and answer.

With that, what I'd like to do is start off with Ray Offenheiser, who is president of Oxfam.

Ray Offenheiser

President, Oxfam America

Well, thanks, Sano, and I appreciate the analogy to the Beatles, and in case anybody's wondering, I'm Ringo.

So basically what I want to do is just sort of frame sort of what the nature of the partnership is between ourselves and Swiss Re very briefly for you within those five minutes, because I know Sano's going to pull the plug on me if I go any longer.

So in all the meetings we've had so far, I think we all realize that we're really dealing with a problem in which one billion people are chronically hungry, according to the most recent U.N./WFP estimates. And that said, conservative estimates that over the next decade a hundred million more people perhaps will face food insecurity, partly due to the effects of climate change.

An Oxfam study has found that weather-related disasters around the world have quadrupled over the last decade. Communities, we realize, must take action, in fact, to reduce the kinds of vulnerabilities that climate change is creating in their communities and particularly manage the kind of heightened risks that they are now confronting.

The question we've been grappling with is – how to help rural families build resilience against climate-related risks? We believe that this is actually a critical element in addressing global poverty and making sure that every person in the world actually has enough to eat.

In response to the challenge, Oxfam America, with the support of the Rockefeller Foundation, Swiss Re, the United Nations World Food Programme and with support from USAID, have launched what we call R4, or the Rural Resilience Initiative. R4 refers to four risk management strategies. It builds on the initial success of an earlier program that we refer to as HARITA, or if I can break down the acronym for you, the Horn of Africa Risk Transfer for Adaptation. And after that, you'll hear no more acronyms from me – that's it.

HARITA, if I could continue using the acronym, started in 2009 in the drought-prone northern state of Tigray in Ethiopia as a pilot with 200 households participating in one village. By 2011 it had scaled to more than 13,000 households in 43 villages directly affecting approximately 17,000 people. About 1800 farmers who were experiencing drought conditions in seven villages received an insurance payout, the first in the project's history. So how did actually this payout happen? How did this program actually function?

Well, to get it going, Oxfam worked very closely with community members and helped project partners identify farmer vulnerabilities and their capacity to adapt to a series of, if you will, focus groups and discussions at the community level. Farmers from the very beginning were central participants in the design of the HARITA model, which was developed as well with a host of participation of Ethiopian organizations and not-for-profit organizations, the notable of which is a very large NGO in Northern Ethiopia called the Relief Society of Tigray that many of you may have had some experience with. Local government agencies, Columbia University, and Swiss Re were also involved in those early design discussions.

The core of the program, what we were really offering, was a comprehensive risk management framework that includes a microinsurance product integrated and connected to existing social safety net programs, microcredit programs in the region, as well as various risk reduction projects.

So farmers would purchase insurance or an insurance product that would contribute to building long-term food security for them, a weather-indexed insurance product, to be more specific, and with that they were able to reduce their vulnerability to agricultural shocks and improve their livelihood opportunities.

The comprehensive approach benefits farmers, it benefits insurance companies, and it benefits the government's social safety net programs, to which it has a very intimate link. The insurance companies for their part gain access to new customers and new markets, they make a profit, and they, in the work they're doing actually helped us strengthen the social safety net programs. And I should mention parenthetically, in Ethiopia there's a very large social safety net program that's funded by some half dozen donors, and it supports some eight million people in the country, so it's a very large and elaborate program.

So by integrating an array of beneficial services with the long-term benefits for their climates, these programs assist in building a more prosperous and sustainable food system for communities.

So here what you've got is a program in which you've got the insurance companies in some sense benefiting, the social safety net system getting stronger, and communities and farmers actually benefiting and having the security that an insurance policy actually would provide.

The success of HARITA has led to a partnership between Oxfam and the World Food Program to take the model to a multinational scale by launching the R4 initiative, sort of the next generation, if you will, HARITA2, into other contexts.

The core innovation in R4 is that it provides cash-poor farmers the option to work for their insurance premiums by engaging in projects that reduce risk and build climate resilience. So in the cash for work program, they're not just building a road, they're actually building terraced agriculture or water containment systems that actually are assets for the community that are part of the rural resistance design at the core of the program. So not only are they getting insurance, they're also building assets that will enable them to climate shocks in the future.

So in any particular case a member, or a participant in a social safety net program in Ethiopia may be working, for example, 60 days of a year in exchange for cash from that program. Through the link that we have between the program and the social safety net program, the family could work an additional ten days within the social safety net program simply to pay the insurance premium.

When there's a seasonal drought, insurance payouts are triggered automatically when rainfall drops before a predetermined threshold, enabling farmers to buy the seeds and inputs necessary to plant in the following season and protecting them from having to sell off productive assets to survive. And the determination of actual loss is determined by satellite imaging interpretation that's being done with the help of Columbia University and the Earth Institute, I should add.

Next year R4 will expand deeper into Ethiopia and move into Senegal and two other countries over the next five years. We believe that R4 represents a new kind of partnership bringing public and private sectors together in a strategic large-scale initiative to develop better tools to help the most vulnerable people build resilient livelihoods.

In fact, our creative partnership with Swiss Re has taken the form now of a teaching case for business school students. The case is co-authored by leading professors and has now won a prize in the prestigious oikos Global Case Writing Competition earlier this year.

We believe in the end that R4 is an important example of precisely the type of initiative that we hope more companies will invest in as communities across the globe continue to cope with weather risk and the effects of climate change and particularly with market volatility. And we are happy to sort of share our experience with any and all who are interested.

So with that, thank you very much, and I hope I stayed under the five minutes.

Sano Shimoda

The next person we have is Walter Bell, chairman of Swiss Re of America.

Walter Bell

Former Chairman, Swiss Re America Holding Corporation

Good morning, ladies and gentlemen – former chairman as of October 1st. I have a little more time for myself and other kids and my grandkids.

I'd like to thank you for having me here today. And the problem with going second, and especially to Ringo, is that we work so closely together, that our speech is very close together. But I was in the Army, so they tell me, if you tell me and you told me again, then I might remember it. So here you go.

At Swiss Re we know that there are inherent risks that put the survival of the poorest rural families in nearly constant jeopardy, and those risks are magnified by weather variabilities. We also know that partnerships are essential in these countries to build and implement solutions that would effectively alleviate some of the financial hardships that smallholder farmers face.

As Ray said, about five years ago Swiss Re held a conference in Rüschiikon, Switzerland, on weather index insurance in emerging markets, and we invited organizations active in Africa. One of them was Oxfam America. And straight on, our companies decided to collaborate on an agricultural risk transfer solution. This meeting of the two drastically different organizations, world apart in size, scope and history, was the birth of the Horn of Africa Risk Transfer adaptation project.

As Ray said, the project was implemented in Ethiopia in Tigray, and this year, this multiyear program uses drought insurance to empower farmers to develop long-term resilience to growing challenges of food insecurity and climate change. The payoff that Ray was talking about probably kept kids in school and not taking them out to help the family, which is going to be one of the long-term effects of eliminating poverty in those areas.

The project has scaled up, as Ray said, and we are very pleased with the progress. You've got to understand we are working with a community that does not understand risk transfer products, and so there's a lot of scale that we have to go through to get to this point.

As Ray said, the current program and the commitment to extend it to Senegal, called the R4 Rural Resilient Initiative, are built on the highly successful program that we had in Ethiopia. It's based on managing four risks: community risk reduction, productive risk-taking, risk transfer, and risk reserves.

The project absolutely monetizes the labor of farmers, enabling them to purchase insurance and then gain access to these other risk management services. Over time, as the poorest farmers become more prosperous, they can begin paying in cash, helping to ensure the commercial viability and the long-term success of this project.

Swiss Re and Oxfam America, along with our other partners, USAID and the World Food Programme, have committed to provide this risk transfer program to the more than 18,000 in Senegal by 2016. And, as Ray was saying, the long-term plan is to expand it to five additional countries.

But I want to spend a little time on what makes this project so successful. First of all, it's always the people. And then it's having the right partners, organizations that are willing to cooperate and align their complementary skills for a joint and clearly defined goal. They will share the belief that derisking smallholder farmers will help increase food security and will have long-term, positive effects on society.

Swiss Re is, up to now, the only reinsurance company with a dedicated team focused on building commercial risk transfer solutions for governments, NGOs and microfinance institutions. We bring a great deal of technical know-how, experience, execution capabilities and financial support to the table, while our partner Oxfam provides the local presence, project management skills and the network to farmers and the governments in those areas.

Believe me, it's a huge challenge to build up sustainable microproduct insurance solutions for a market that lacks the familiarity with financial services, and it requires all the excellent knowledge of the needs of smallholder farmers and a lot of the education and local capacity building that only Oxfam can provide the insight to these challenges.

Sustainability is another important aspect to our work. To make solutions sustainable, they need to be commercially viable for us. In the case of the R4 project, this means solutions can be scaled up to result in meaningful impact for the farmers and achieve commercial viability. Since 2008 working with Oxfam and others on this project, we are convinced we have refined our approach in such a way that we can get scale and create a sustainable commercial market for weather- index based insurance.

We truly value our relationship with Oxfam. It's a phenomenal organization that Ray leads here in America, and it brings a high level of credibility, reliability and clear perspective on the overall mission of reducing risk and improving lives.

We at Swiss Re pursue leadership in public/private partnerships in order to shape the commercial environment, open new markets, generate business growth, spark innovation and support our brand. At the same time, we aim to do good by doing well.

We believe that as we grow and increase our collaborations with public entities and NGOs in the future, we can contribute to making society more resilient by focusing on the openness, strength and clarity in the mission of our partners. Swiss Re and Oxfam's mutual and transparent understanding has given both parties the confidence needed to launch and over time enhance our partnerships to help realize our shared vision.

Thank you, and I look forward to further discussion.

Sano Shimoda

Next we have Carolyn Woo, who is...

Carolyn Woo

I think I'm going to defer to Jack first, because he's going to give you a picture of what success looks like in a collaboration so that I could go backstage about what it takes...

Sano Shimoda

Okay, then we're going to defer to Jack Sinclair, who is the executive vice president, head of the Grocery Division of a company you all know, Walmart.

Jack Sinclair

Executive Vice President of Food, Walmart U.S.

I very much appreciate the opportunity to be here. It's a privilege to be amongst you all in terms of the topic that you're tackling is something that affects us all both personally and as a business. I'm here representing over a million associates that we have, over 200 million customers weekly, whom we sell food to. And it's something that they expect of us, to take a very serious approach to poverty and hunger in the communities in which we serve.

And the opportunities that we have to make a difference can only be achieved if we do it in partnership with many of the people in the room, NGOs, government agencies, suppliers, other people in that supply chain – the interdependency of the supply chain has become so indivisible from each other that we can only achieve progress if we are going to work together. And I'm very much here to listen to the opportunities of all of us working together.

We're increasingly going more direct to farmers and working direct to farmers, is something that is enabling us to understand what the challenges of the agricultural communities are better than we ever have before. We've been opening up across the Americas where've got people directly working with the farming communities. And that's also applying in Africa with our investment in South Africa and other Sub-Saharan African countries. And we're also opening up direct sourcing programs in a whole host of, India and China, where we've got some very specific objectives.

We've got the objective to sell one billion dollars in food from one million smallholder farmers. And we define smallholder farmers as those operating in less than two hectares. We want to train one million farmers, half of whom will be women. The opportunity for women's empowerment from agriculture is something our eyes are being opened to around the world.

And I think you heard earlier from Ken Powell from General Mills exactly what can happen to communities if women are empowered through agriculture. And we're also committed to raising incomes of farmers by 10 to 15%. These are aspirational goals that we think, in conjunction working with a whole host of other people, we can make a huge difference on going forward, and we're excited to be part of that.

The reason we, as a business selling food – and we sell, over half of our business is now food – is traceability, surety of supply, quality of product, and continuity of supply, is something that we will not be able to serve our customers with the food that they need unless we get hold of those issues and take direct responsibility for it. But it leads you into a whole raft of issues that I've been listening to this morning in terms of – how do we tackle some of the challenges?

So the issues that we get into as we get closer to farmers are training and development – How can we support the training and development? How can we provide a guaranteed route to market and a guaranteed price, prompt payment, guaranteed route to market so that the farmers can invest with confidence that something's not going to pull the rug. How can we ensure that we take the whole raft of crops? We have the advantage of scale, and we are in a position to say – irrespective of the weather, we'll take the whole crop that comes from that harvest. And building long-term, trusting relationships is the key to our supply base. We need farmers who are very profitable. We need seed companies who are profitable. We need the whole supply chain to be profitable. And we need to give our customers a better price at the end of it all.

So this challenge of low price, while creating an efficient supply chain, takes you into the areas of – How do we invest appropriately in processing technology to support? How do we invest appropriately to help packaging solutions, to help solutions to reduce the challenges of waste that we have in the fresh produce industry in particular?

So these are the kinds of things we are working on. I was very struck this morning, listening to the gentleman from Netafim – the challenge of investing in capital to get irrigation, to get less agricultural inputs so that we can be more productive. Our opportunity there is – How do we give some guarantee when that capital is being invested? And I think the opportunities in terms of insurance programs – If you know you've got a source to market, a route to market and got price, there's an opportunity, I think, to get less risk in some of those investments. And that's something that we're working very closely on.

We've got many different partnerships around the world. Probably the best and the shining light in that is the partnership we've got with the CRS organization in Central America where we've been... I think I'm going to let Carolyn talk in more detail about how that works. But we are very, very proud of the fact that over three, four, five years we've now got relationships with farmers who are bringing product to market.

And there are some great stories you could tell of how people have been able to send their children to school, to invest in their communities, and actually raise themselves out of poverty.

Agriculture can pull people out of poverty, and if we can put the right processes in place, I'm sure we can make a huge difference.

And so all sorts of different partnerships. We've got ... partnerships in India. We're working closely and listening hard to people at the Gates Foundation who get such great knowledge of some of the complexities that exist in this. Just a quick example of that - cashews in West Africa - they're grown in West Africa. They're sent to India to be processed, and then they're sent back to the United States to be sold. Surely there's a better, more efficient way of doing that, that can actually enhance the profitability of everybody in the chain and actually get perhaps a better quality of product and more supply, more surety of supply back here in the United States.

So we haven't got a blueprint. We've got some great examples working. And I'm conscious of the time, so I'll let Carolyn talk through the specifics of the Central American program.

Sano Shimoda

Thank you very much, Jack. And Carolyn, who is president and CEO of Catholic Relief Services. Carolyn.

Carolyn Woo

President and CEO, Catholic Relief Services

Thank you, Sano. So the project that Jack described is a project in Nicaragua where we involved 7,000 farmers, and these are very small farmers, and eventually they sold to a subsidiary of Walmart, HortiFruti, and also in their supermarket.

So I just want you to imagine the really small farmers that Jack talked about - less than two hectares - and how do you get these farmers eventually to have this formal market relationship so that they're selling to Walmart? I just want you to imagine that particular challenge.

Before I go into that, I think that there is really three questions I'd like to focus on. The first one is - Why? Why are we talking about formal market mechanisms in a session about finance?

The second question is - What does it take to achieve that?

The third is - So what? Particularly for the farmers who are in this program - So what?

Let's get to the first question. Why are focusing on formal market mechanisms when we're talking about capital? So I just want to say, first of all, there is insufficient capital for small farmers, and I'm glad to see this type of emphasis, particularly going into the next ten years.

But honestly, even if this capital is available, the farmers whom we are working with would not have access to the capital. Think about these farmers. They have less than two hectares. They are subsistence farmers. They barely grow enough to feed their own family. They would not be credit worthy. So drawing on my business background, even if there is capital, they are not the ones who will benefit. And we are talking about 70% of farmers in the world.

So the reason we talk about formal market mechanisms is that – unless we use this approach, even when there is capital, it would not reach to the 70% of very small farmers in the world. So that's why.

Then the second question is – What does it take? What does it take in a journey of transforming a subsistence farmer into one of those who would be selling to Walmart?

First of all, this is a journey that takes two to eight years, depending on how small the farmer is. From subsistence to market-limited to market-ready and finally to market-engaged, we are talking about seven years. What does it take behind the scene? And this is a project that first started in 2003. We had some success, we formalized it in 2007. We then again, we knew the grant and one of the sources of funding is USAID, so just to give you some sense of the learning.

What it takes behind the scene first of all is organizing farmers. They cannot just operate as individual units. Eventually they have to become clusters, and these clusters have to become cooperatives. And that is the scale when we begin to have some major changes. So think about the organizing challenge. All right? And here in this project we talk about 8,000 farmers.

The second thing that we need to do is to go from basically growing rainfed crops that they are familiar with to having a market approach – growing crops that the market wants at a level of quality that meets the standards that Walmart would need, to have the type of certification of the product and the type of guarantee for quality. So we have to change the product.

In order to change a product and the quality of the product, you have to change the production system. And the production system does not just have to be able, but it has to be consistent; because we don't want to sell one month or three months and then not have the supply for the other month. So we have to also guarantee a consistent supply for that. And in the process we have to work all of the different issues, whether soil or irrigation, in a way which is sustainable. All right? We use, whether it's water conservation or soil conservation, it has to be sustainable. So that's the second big challenge.

The third challenge then is – How do you prepare the farmers and educate them and develop them so that they not only change their production processes, but they also have skills in planning, business planning, market negotiations, being able to access information to inform what they do. So the third very big part is really developing the capacity of these farmers.

The fourth challenge is – before we have access to formal capital, we still need capital, and where does that come from? So working with things such as individual savings circles so that they could still have some assets – that becomes very important, is to attend to capital which these farmers may have access to without paying very high cost.

The fifth thing then is – While we're preparing the farmers with this, we also have to be out talking to companies like Walmart or the other companies that we're working with across the world. That becomes our proposition too, is – How do we bring these other partners, the corporate partners to the table?

The sixth thing we've got to do then is – We've got to include the ministries, the government ministries which are relevant. Because again in the end, for the work to be sustainable, for the changes which are made to be permanent, we need to include the local government.

So those are just a thumbnail sketch of – What does it take behind the scene to get farmers ready for this formal market engagement?

Let me just talk a little bit about my third question, and that is – So what? So what? Jack gave you a sense of what Walmart can gain from this type of engagement. But for our farmers, what are some of the benefits?

To give you a sense, we have noticed that in certain situations – and this is not uncommon – that the production quantity can actually improve by threefold, by the type of methods which are used, using better seeds, irrigation and so on – so a threefold increase.

We have seen revenues increase twofold. We have seen income increase by 80%. Jack mentioned a goal of 10 to 15%, but in this project actually the average income change was 80%.

What we have also seen is job creation, because a lot of these also involve post-harvest processing, whether it's canning or pulping or washing, whatever it is. Those involved a lot of community jobs. So we have actually seen job creation.

We have seen sort of sustainable conservation methods really generating results. So, for example, in this project the amount of water that was used was reduced by 25%, where we were getting a lot more crops than before. So much less water usage for much more product.

Another thing we see – and this is really important – is when the municipal government gets involved, what we see is that there are roads, there are bridges. They are willing to invest in storage facility, they provide gifts in kind, whether it's the personnel for training, whether it's land for other purpose. We also see that they develop communities. They build community halls, for example. And in the end they end they actually incorporate this as part of the municipal economic development plan.

So I just want to end here and say the availability of capital is very important, but access to capital requires us actually to do a lot of work behind the scene to help farmers with less than two hectares eventually to participate in the market. And then there is a set of benefits that can come to that.

Panel Discussion

Shimoda Thank you. That was the easy part. That was your turn. Now it's my turn. What I'd like to do is pose a question to each of the individuals, and we don't want a wrestling match. We don't want Romney versus Obama, but we'd like to get you involved in a conversation of the topic.

So, Ray, I'd like to go to you first. What are the characteristics you look for in trying to develop relationships with farmers at a local level in emerging and developing countries?

Offenheiser Well, obviously, with a not-for-profit organization like CRS with a mission that's focused on trying to reach the poorest of the poor, obviously we're going to some of the most difficult areas and we're trying to work with populations that are the most vulnerable. So just in characterizing the population that is benefiting from this

particular insurance program in Tigray, the northern province of Ethiopia, these are poor, illiterate communities living in a semi-arid zone where the productive potential is not optimal. But this characterizes much of the population living today in rural Ethiopia.

What we're looking for, I think, in terms of the capacity to work with these communities, is there – just to go Carol's point – is there some degree of organization already in place? Are there perhaps some local partners, NGOs that are indigenous to that context that have some history working with those organizations that actually can speak to them in the vernacular and enable and enliven sort of the organizational capacity of that community to embrace a complex project like this, enable us to sort of bring in other partners in the future?

Oxfam's approach to this kind of work is in some sense one in which we are not presuming that we're going to be the operational NGO on the ground; we're presuming our role is in some sense to be a social venture investor in building indigenous, not-for-profit capacity in the countries where we work.

So we're looking for density, we're looking to build a density of indigenous, not-for-profit organizations that can work with these local communities and build the kind of organizational potential that I think Carolyn was describing. And that's a tough investment that requires a long-term commitment. I think Carolyn, you said seven, eight years, I think. Yeah, and that's typical of the kind of work that needs to be done on these complex kinds of programs.

Shimoda Maybe, Carolyn, given what your organization does and what you said, how would you add to that, or how would you look at it differently in terms of what are the characteristics? You say, okay there's lots of needs globally – How do you basically focus and say, we see the dynamics there to try to make it happen?

Woo Actually, the way... First of all, you want to have a crop which is in high demand. That's important. The second one is, in the end you have to work with the local communities. Are they excited? Is this something that they want? Because this cannot be something that we impose. So not only the local community, our local partners, but also the local government. Because eventually they have to take ownership for some of this work.

But the third thing really is our corporate partners. And I just want to say a little plug, and that is – We need more corporations to join with the NGOs in such a way so that, for example, large companies can convene, you know, multiple corporations and NGOs, first of all, that we could learn together from some of these projects – that corporations may be willing to engage in some of the pilot projects for themselves.

And then the fourth thing is to be willing to integrate into their core value chain. So we also need that on the other side.

Shimoda Maybe to go to the second question – Walter, obviously, given your expertise and your company's expertise in the marketplace – Clearly risk has gone up globally in agriculture, whether that be corn country or developing country in Africa or Latin

America. What kind of tools do you see that either Swiss Re has developed or possibly could be developed to help the farmer, especially in developing areas?

Bell Well, Sano, we've done studies that show that if in fact we don't do something to help people on the climate exposure, weather variabilities, that 100 to 200 million more people could fall further into poverty over the next few years because of climate.

Swiss Re has been in the climate space now since the mid-eighties, because it's a very dear and near piece to our heart in terms of what we do. The exposures throughout the world have just grown dramatically, exponentially over the last, since 1980s. The amount of money that was spent on disasters, weather-related disasters, in 1980s was probably less than ten times what it's spent on in the last five or six years, with Katrina being one of the huge ones.

But it's not just here in the U.S. but in developing countries that you get the ability that it just keeps people in terms of a level of poverty generationally, because they never are able to get out of it.

What we think is that, with our products, whether it be weather-related index insurance or parametric insurance where we draw a box around an area and say if certain things happen in that box, then we pay off. It's not an indemnity product as what we're used to here in the U.S. It is - you draw the arrow, and if there's too much rain, too little rain, then we start to pay off. And so it makes it very easy in the countries that we're working in because of the distribution systems that we cannot put in just as Swiss Re, but we certainly need all of the partners that come to play to do that.

Shimoda I suspect there's a real opportunity in Iowa, because I think my corn and soybean farmer friends could use some weather risk insurance on top of their regular insurance.

Bell [inaudible]

Shimoda Okay. We'll send them your way. Ray, how about in terms of your experience, in terms of broadly - Of all the agricultural activities you have, how many people were involved in products that Walter was just talking about?

Offenheiser You mean developing new products?

Shimoda Yeah.

Offenheiser Well, in the first phase, I mean, it was a complex enterprise, because basically we were playing sort of a convening role in this sort of bridging function I think that Carolyn was mentioning where we had identified a problem, and what we realized was to solving that problem what was going to be critical was, what institutions were available to address it?

And we basically started from the community level and sort of worked backwards. And we had the advantage in that particular region of Ethiopia of there being a very large NGO that had a very large microenterprise program that had been there some time and that was actually providing agricultural credit to a whole range of communities across that northern tier of Ethiopia. They had never done insurance before, so the conversation was really about – So how would we do insurance if we did it here, and could you take on this new product?

The other question was – What was the mechanism to reach the farmers? And fortunately in that area there were farmer co-ops that were scattered all across that geography, which is very, sort of it's a very densely populated area over sort of a large land mass. But having some of that institutional presence made a big difference.

And then finally the other sort of local actor was the fact that there was in Ethiopia a well-organized national social safety net program run by the government and then orchestrated through local government. So there was actually buy-in, and it was run bureaucratically rather well.

So that helped us sort of with the national level work, but then the question was – So how do we create an insurance product that actually could be market-based in the future? In other words, we're not in the business of, we're not running an insurance company. Walter is. And so the fortunate thing was, we began this conversation with Swiss Re about – well, would this be something that you would be interested in?

And from their point of view, the interest – and Walter hasn't said this, but I know he can elaborate on it – Africa is seen as a potential future market for the insurance industry. The issue is – Can the insurance industry find a way to build, pooled diverse risk in Africa at scale? How are we going to do that? How are we going to provide insurance products for millions of African farmers all over the continent?

Let's imagine, 10, 20 years from now, that could be happening. But how is it going to happen? We're going to have to build the institutional architecture from the ground up to make that happen, country by country – 51 countries we're going to be needing to do this kind of work to reach the poorest farmers and ensure that there's weather-index insurance.

So the good thing, I mean, the wonderful thing is, Swiss Re has been a leader in this climate change space, they understood the discussions that are going on in the development community about adaptation and resilience. We were able then to work with them to find an indigenous Ethiopian insurance company that could be a partner in all of this. And then the final question was – Were we going to have to hire adjustors to go out and visit all the farms where the losses were being incurred?

And fortunately, we developed a relationship with the Earth Institute and its satellite imaging operation, which actually has technology today that can actually measure evapotranspiration at really sort of a micro-regional or micro-ecological level that allows us to actually do all the risk assessment and even develop the

actuaries using satellite data. So in other words, we're taking out sort of the role of the adjuster or the underwriter on the ground doing the sort of farm-by-farm visits, which then creates an economy of scale that we can multiply rather rapidly.

So there were something like eight to a dozen different actors that had to be convened on this to make this machinery work.

Shimoda Let me switch over to Jack. Jack mentioned one very important word, and that's sustainability. "Sustainability" - everyone talks about it. But to Jack, here again from a Walmart's perspective, maybe, Jack, you can talk about the importance of sustainability, how you define it, and what kind of competitive advantage it gives you.

Sinclair Yeah, well, I think in 2005 we made a fairly public commitment to have supplied a hundred percent by renewable energy to get down to zero waste, generate zero waste, and to sell products that sustain people and the environment. We got some great... The Clinton Global Initiative a week or so ago, President Clinton recognized some of the progress we've made on solar and wind energy, and I think we're probably leaders in that now - made real progress, because there's been a commitment within our team. The associates that work for Walmart have been energized by this challenge of sustainability.

When it comes to food and how do we make sure we're selling products that sustain people and the environment, we've got a very simple kind of way of thinking about it. We want to sell safe, affordable and sustainable products. Sometimes it gets... Affordable is important to our customer base - we serve the underserved, and we want to make sure that we give great prices to people so that people can afford to save money and live better. It's who we are. So affordability is very important. Safe is obviously a fundamental responsibility that we have when we sell food.

But when it comes to sustainability in food, there's quite a lot of debate around what is sustainable. Are GMO crops sustainable or not sustainable? You could talk about that for a long time. And it's quite a challenging sort of environment when it comes to sustainability. The way we think about it is - How can we produce more with less? How can we encourage the processes, the investments, the capital, to produce more with less? - which, in agriculture terms is: How do we use less water, how do we use less agricultural inputs and start producing more and more and more with that?

And I think there has been some progress made on that. And we need support of NGOs, government agencies, agricultural institutes, universities. We've got a great program working in the Mississippi River Delta with Tuskegee University. Some of the most deprived places in America are in that Mississippi River Delta, which has got fertile land that can produce great food. And with encouragement, with support, we're beginning to see communities able to produce products for us and drive that volume up.

We've said that from a produce point of view, we need to support 10% of our sourcing. At least 10% of our sales have to come from local. And we define that local

in terms of the kilometers, the miles that it has to travel. And that initiative has encouraged a lot of development in terms of fertile areas that have been left behind. California is such a fertile part of the United States and cheap gas allowed us to transport product across the country - I think that's changing a little bit.

And we've introduced something called a produce sustainability scorecard, which will allow us to compare lettuce that's grown in California and shipped to Maine with a greenhouse-produced lettuce produced in Maine. And we've got that right around the world now in terms of how can we compare product by product, all the scorecard, and we want this to become kind of a common thing that people will use. It's not, we don't see this as a competitive advantage, but we see that understanding truly the environmental impact of everything that we do and finding a way of measuring is important part of our thought process in sourcing our food.

Shimoda Carolyn, Ray, in terms of the important points of sustainability, how important is that in terms of what you do on the ground?

Woo Absolutely it's integral to every program that we have. So in this case of getting farmers ready for formal engagement, one of our priorities is that, you know, how we conserve the soil, how we conserve the water. And I think what is important is that when you look down the road, everybody predicts high demand for food, and yet there's only about 12% of land which can be cultivated.

What it means is that the land which is currently in use, we need to have two objectives. One is that it needs to be more productive, but the second thing is that we've got to take care of that land for the future. So absolutely.

Offenheiser For Oxfam, I mean, we are in the midst of a global food security campaign called GROW, and sort of the short and brief, if you will, mission statement of that is - Feeding everyone, everywhere in a resource-constrained world. In other words, the resource-constrained world really for us represents the challenge of trying to feed nine billion by 2050 in a world in which scarcity is becoming a reality in many of the parts of the world where we are working.

And I think Her Highness mentioned some water scarcity - I mean, that's an issue that is very much in mind. We see it - as humanitarian organizations, Carolyn and I see that in the Sahelian drought experience, the drought in the Horn of Africa. On the frontline of humanitarian work, these droughts are occurring in shorter cycles.

So sustainability and resilience are really becoming something that are ever more important to the work that our organizations are doing. And I think one of the things I think has been a big challenge - A lot of us are participating in meetings like this over the last, say, four or five years in which climate change has become much more central to the discussion about agriculture. We've started talking about the need to sort of accelerate work on adaptation, make resilience and resilience-based programming much more a central part of our humanitarian as well as our development work.

However, when you actually get on the ground and say – Well, what does that mean in terms of real programming that produces sustainable outcomes, I think our whole community is still trying to come up with the ideas that make it practical and make it real and are going to ensure that we are stewarding the world’s resources properly.

So I think that’s one of the big challenges, and I think some of these kinds of programs, be they finance programs or better supply chain management with sustainability principles of the sort that Walmart are implementing, enable us to kind of come up with a logic that makes sustainability real and something that we can actually execute on the ground.

Shimoda Walter, the quantification of sustainability, does that play at all in risk insurance product?

Bell Absolutely. I mean, Swiss Re is a very philanthropic company, as Walmart and many other corporations, and we do a lot in that space in terms of charities. But when we talk about our core business, it has to be sustainable, it has to be commercially viable. I mean, we are not only working in Africa, but we have programs going with rice farmers in Vietnam.

In India as a re-insurer we insure the local insurance companies on the ground. And in India we’ve got a program going where we’re working with agricultural companies where they sell seeds that the farmer goes in and that’s the way he gets the weather-related index product. That’s a \$400 million annual premium these days. It’s a very attractive, sustainable program that’s going forward, and it’s again, you know, “We do good to do well.” And that’s what we’re doing with that kind of a program.

Shimoda Thank you. Let me get to the last question for Carolyn. I’m a big believer – when I serve companies, I try to put myself in the customer’s shoes. So, Carolyn, if you put yourself in the farmers’ shoes that you work with, how would they look at what you’re trying to do for them?

Woo Absolutely, they are. The journey and transformation is from subsistence where you’re highly vulnerable, you’re barely able to feed your children, not to mention educate. And sometimes you have to make the tradeoff, whether you eat or whether you pay tuition, whether you eat or whether somebody else eats.

So we’re transforming them to a situation where, first of all, what they do, that there are more returns and more just results for labor. We all labor, and we, none of us wants to labor in vain.

The second thing is – I think in the last speech – and that is, when you cannot take care of your family, you don’t have dignity. And so we are transforming farmers so that they get a fair return for their labor, that their lives have some degree of resilience, that they’re not just always laboring at the edge of survival. And along with it a lot of education that comes with it.

They also see themselves at the table with other sectors, whether it is the government or a corporate person. And I think that this connects them to sort of the market opportunities. So for them it makes a big difference.

I gave you some of the statistics on incomes and revenues, water conservation, and so those gains are very real.

Shimoda Yeah, just quickly – Obviously, as a major buyer of products, especially from developing areas, how do they look at what Walmart is doing for them?

Sinclair Well, we would want to be, and it's an important thing for us, to be seen as a fair and responsible partner in terms of encouraging people to do a job that serves our customers.

And I totally agree with the points that have been made. Sustainability involves profitability and in making sure that people can rise above subsistence and into an area where they can get returns that allow them to feed their families and go beyond that basic subsistence. That's important to us in the African space. But by and large across the board we need sustainable and profitable partners, and we want to be seen as a very fair and responsible partner in that context.

Shimoda Fine, thank you. We're pushing up against the clock, and it's getting close to lunch time. I have a bonus question. They don't know what this question is. Everyone has one minute, one minute. Great companies, great leaders are driven by passion, passion for what they do, passion for their objective. In one minute could each of you define in your organization of what your organization stands for?

Offenheiser Right. Well, briefly, creating lasting solutions to hunger, poverty and social injustice. And for us that means really looking at the kinds of issues that we're discussing today, not simply through a sort of technological lens but actually trying to evaluate – are people hungry simply because we're not producing enough grain, or are they hungry because they don't have access to the market or they don't have access to capital or they don't have access to water. And it enables us to sort of see their problems in a more holistic way and understand that maybe we need to be bringing a variety of different kinds of tools and potential partnerships and opportunities to those communities. And we also think sometimes this involves not just sort of work on the ground but also organizing people to push for a sign policy change in the halls of power.

Shimoda Thank you. Walter?

Bell Swiss Re is, when we talk about passion, and I put that with culture, and we have a passion and culture at the company of being highly intellectual, very expert in terms of what we do – the risk transfer of different products, being very innovative. We've created so many innovative products from bonds in terms of financing and different approaches for governments and NGOs and microfinance. We've worked with people in Haiti, people from Vietnam, all over the world, at different levels of the economic scale – and we will continue to do that.

But when we start looking at how do you mitigate and adapt to the climate that has been going on in the world over the last 50 years or so, then that's our passion, that we get really, and look forward to being a reputational company that has the expert to provide to NGOs, governments and other public/private partnerships.

Shimoda Fine, thank you. Carolyn.

Woo Well, Catholic Relief Services, I want to say a line from the Old Testament, and it says, "We shall see the bounty of the Lord in the land of the living." And I think that we work towards, so that this bounty is for everyone, not just for some people, and that bounty is for now and here, not some afterlife. And that's what we work towards.

Shimoda Fine, thank you. And Jack?

Sinclair Well, for Walmart, our passion is to serve the underserved, and it starts with some fundamental Judeo-Christian principles that are very much a heart of Arkansas. And that opportunity to serve the underserved is something that... We have a passion for growth, but that passion for growth is about - How can we serve the underserved better, put all our efforts into making lives better for the people that we serve.

And when you hear, I was in a focus group yesterday in Atlanta, a lady basically earning \$25,000 a year, looking after a family of four. It's when you hear the passion that she has for Walmart on the back of that. What we want to do is to take that to Mumbai and Moscow and all the way around the world where families are just trying to look after their families, people are trying to look after their families. And we can make a big difference in doing that, and that's really what our *raison d'être* and our motivation is.

Shimoda Fine, thank you. I think we've run out the clock here. I'm sure many of you would have questions and answers. I'm sure the four of them will be around for lunch and through the afternoon, so I would kind of corner them. Obviously, it's lunch time and Catherine is going to throw me out. So with that, I'd like to thank the four all-stars. Okay, Ed Sullivan had the Beatles. I have these professionals. Thank you.