

2011 THE "BORLAUG DIALOGUE"

October 13, 2011 - 11:30 a.m.

Keynote Speaker: Josette Sheeran

Introduction:

Bian Li:

If everyone can please take their seats, we're going to be starting the keynote of Josette Sheeran immediately, please.

I have the pleasure of introducing Ms. Josette Sheeran, Executive Director of the U.N. World Food Program. Ms. Sheeran mgs the world's largest humanitarian agency, which provides food assistance to more than 105 million people in 75 countries, 3.8 million in Darfur alone, including victims of war and natural disasters, orphans and families affected by HIV Aids and children in poor communities.

In addition to her World Food Prize leadership, Ms. Sheeran is the chair of the U.N. High-Level Committee on Management and under her tenure has helped to update the U.N. security system and has initiated a systemwide efficiency study.

She is also a member of the U.N. Development Group and the U.N. High-Level Taskforce on Global Food Crisis.

An active participant in the World Economic Forum, she served as chair of the World Economic Forum's Global Agenda Council on Food Security. She has been a member of the Council on Foreign Relations for more than a decade and has served on its Washington Advisory Board, as well as the Washington boards of the Urban League and the United Negro College Fund.

She earned her B.A. from the University of Colorado.

Please join me in welcoming Josette Sheeran.

KEYNOTE

ENDING HUNGER AND MALNUTRITION

Josette Sheeran

Executive Director, U.N. World Food Program

Thank you. Well, good afternoon, everyone.

We're gathered, as we know, at a very extremely serious time in world food security - something that's been addressed repeatedly over the past couple of days.

I want to focus on a particular area, which is access to food. It's obviously the area where the World Food Program focuses most, and I'd like to basically discuss three things: From our perspective, where are we today, where do we need to be, and how do we get there - the only three important questions I think there really ever are.

And as I gather here, I just want to say how humbled I am. I feel I have nothing to teach this audience. I have everything to learn. And with so many heroes here, I'm just very grateful to Ken Quinn for pulling us all together to be able to have a cross-sector dialogue on how to address the issues.

I want to start just by going back to 2008. What we saw in 2008, what I called at the time, "the silent tsunami" was a radical discontinuity in access to food. And if you remember at the time between June of 2007 and January 2008 we saw a doubling of food prices. It was the fastest acceleration at that point on record.

And what intrigued me, in retrospect, at the time (not during it because it was a fairly wild ride on the frontlines of hunger) was the fact that we know in the end there were 2,700 kilocalories per person on earth, and yet we saw 140 million people driven into hunger. And it's very important we understand what happened and how to prevent that, unless we're going into a period of even more radical uncertainty in world food security.

Another thing we saw in 2008 was not just individuals driven into extreme hunger very quickly, the first globalized humanitarian disaster - it hit villages throughout the world almost with equal speed - but we saw whole nations unable to access food supply. And so there were moments in 2007 and 2008 where WFP had calls from the nation of Liberia, from Afghanistan, and if you remember the Philippines - nations that were unable to place tenders on global markets. And we actually faced the specter not only of more individuals in hunger but of whole nations unable to obtain supply.

At the time, the World Bank, the IMF and others stepped in. And there came a period where it wasn't an issue even of access to funds for those governments, even though their budgets were completely blown out by the cost, especially import-dependent nations, but again an inability to compete on very tight supplies.

Another thing we saw in 2008 - I remember going to the Rift Valley and the brief moment of euphoria where people were saying, "Well, maybe food was at the wrong price - maybe it's

now at the right price; maybe farmers - this is the huge opportunity for the small farmers of the world - they'll plant more - and we have to get over this disruption. And I remember going to the Rift Valley and meeting with farmers and saying, "So prices are high - this is a huge opportunity." And they were planting one third what they did the year before. And I said, "Why are you planting one third?"

And they said, "Because the price of inputs have doubled, tripled, quadrupled - we can't afford them."

And I said, "Ah, it's a microcredit problem."

And they said, "No, we wouldn't take the loans because how do we know when we harvest that we'll be able to pay them back?"

And I remember then feeling that - many of you are familiar with my red cup - it wouldn't be me without it, but this is the cup we use to reach over 20 million school children - that somehow in 2008 the disruptions that happened in global markets due to macro factors, droughts in Australia, other factors, high oil prices, the risk went all the way down to this cup, and there were very few speed brakes in the global system. And it also went down to the poorest farmers with very few speed brakes in the system for them.

Many observations have been made on why. Lack of information - FAO has been very focused on this, especially in the G20. Actually the world had very shockingly little information on where the food was and where the supplies were.

Secondly, I saw the world divided into nations that had resiliency systems and those that didn't. And a certain number of nations had no buffer capacity, no ability to handle the shocks. We know emergency stocks were depleted. We know that nations grabbed onto the few tools they had, which were fairly blunt instruments, such as export bans, hoarding, and this compounded the problem.

And at one point WFP could not move humanitarian food. Our food was trapped behind 30 different export bans. We had severe pipeline breaks throughout the world. And we know also now that 80 percent of the developing world has no food safety net.

What was also new, I think, in 2008 is that the speed of information, which has been causing discontinuities, as we see in the Arab Spring and other, in political systems and old systems that haven't adjusted to the amount and speed of information also hit the world of food.

And I remember going to the commodity market in Ethiopia, and I was very taken with trying to understand how changes in global food market prices could reflect so accurately throughout the world at the village level, even in localized markets. And I went into the grain market there - there was no electricity - all the food was being moved on donkeys. I went up to one grain trader said, "How did you set your prices?" The price of tech amazingly was about exactly doubled over six months and all the other commodities there.

And he looked up said, "It's easy. I go on the Internet every morning. I go to the Chicago Board of Trade. I look at the prices; I discount them ten percent - we're a poor nation after all - and I set my prices." And I thought, wow, you know, this is a new world where the speed of market information can reflect almost instantaneously down even to very localized markets.

This volatility in price and supply -which is particularly difficult for the world's small farmers, particularly difficult for those without resiliency systems - is what I call the new normal. And we in fact have not seen that volatility change, so after 30 years of relative stability, in fact, the indicators going in a pretty steady direction of more supply and lower prices, we now see a very unpredictable pattern.

And most of the world is not placed to handle unpredictability in food pricing and supply - including at the time, WFP was not very well placed; we lost half the food in our system overnight and we're a spot buyer, and we've been working very hard with our board and the G20 and elsewhere to get some of the risk out of the backup plan that the world has through the World Food Program and others to be able to come in as a support system at the time.

So this volatility is inherently destabilizing but not if you have built-in resiliency systems, but most of the world doesn't. I'll just take you to a sad picture from the Horn of Africa. Of course, now we see a whole region, and it's again a perfect storm, not just as an epic drought - this is a child named Sadak from Southern Somalia; I was there at the moment -many thousands of people are not only hit by what is considered the worst drought in 60 years, but also a volatility in prices including some of the prices up 280 percent in a year in Somalia, in Kenya 70 percent in three months. This is compounding the challenge.

And another picture from the Horn that is obviously not only affecting people, but we've lost a generation of livestock. And I think FAO's numbers show that about 80 percent of the livestock in some of the hardest hit areas have been lost.

Now just to continue for a moment on the bad news - because I will get to why I'm an optimist on all of this - I will take you to this chart. A couple years ago the world shifted, our world shifted very much, certainly the world of Tom Arnold and others shifted. When *The Lancet* came out with the research that showed that, if a child does not receive adequate nutrition from the moment of conception to two years old, their brain will not develop - and there is no intervention that can fix it - it is permanent disabling.

This is a scan of two brains of two three-year-olds: one that had adequate nutrition; the other who was neglected and did not, malnourished. And the brain volume is actually 40 percent less. And this chart shows the neurons - this is from a research institute in Chile -if you see on the left, a normal brain with many synapses and then a malnourished brain.

This information that that intervention was critical, that if we had to triage or prioritize, it had to go to the pregnant and lactating women and the children under two, totally changed the way the World Food Program does business and prioritizes, but also the way that many of us are working together under the SUN and other efforts to really address this issue.

But what most intrigued me about this is that I don't think this is only a compassion case - this is an economic imperative for nations. If you look at the 36 nations that have the highest burden of malnutrition and then look at the studies that the World Food Program has done with the Intra-American Development Bank, you'll see that an average of six percent of GDP can be lost from the burden of malnutrition in early childhood, permanently lost every year. If you look at the World Bank's estimates of what it would take to do proper nutrition interventions in those countries, and then look at the total GDP of these nations, the cost benefit analysis for investment in ending malnutrition and undernutrition is compelling.

And it's why I think this now has to move to finance ministers, and I'm so pleased we have so many presidents and prime ministers here. I'm also pleased to see Ghana and Brazil make that decision to invest to shore up their GDP and the future of their nation and not only out of the compelling humanitarian need to address this challenge of children.

I'm going to take us to the world of information systems management, Silicon Valley, for a moment, to try to draw from another field of expertise and apply it to food security.

If you look at information management systems, you have to invest about five percent of that system upfront to ensure the security of the 90 percent - so the firewalls, the types of investments that you do to secure your computer and data systems. And at the backend you have to have a manual override if everything fails. And at least in a lot of that modeling it's five percent - five percent to buy the 90 percent security.

The question that I have been asking - because frankly WFP's business is booming - and this is not good for the world How do we offset the drivers of the discontinuities in the food system? How do we allow the 90 percent to thrive? This is where market principles go.

And what kinds of investments, both in the front-end and in the backend are required to stabilize the world food system? Everyone here has spent their lives thinking about how to ensure global stability, an end to hunger, and what types of investments we need at that front end to do this.

Well, certainly we know that in computer systems you have an early warning that things might be off. And I think again the work being done, the G20 is going to be very important, the work done by the African Union to set up early warning systems and CADAP and NEPAD -very critical. But we need that pulsing, but then there has to be tools that come into action when that pulsing is felt. And I'm going to give some very successful examples of this.

And then on the backend you have to have a manual override. When all else fails, such as today in Somalia or other places, there has to be the ability for you to fight global action. And I would put out a strong appeal - this is not a time for the world to pull back on that backend of support for the world's most vulnerable at this critical time.

So how do we deal with the vulnerabilities in the access of food? I'm counting on all of you to make sure that the 90 percent is booming and the supplies are there. And how can we ensure the kind of investment; how can we sometimes trade a little inefficiency in the five percent zones to buy the stability of the 90 percent zone?

And I would argue that we need a more dynamic modeling of aid and of partnerships in order to think about this problem in a macro sense. And I see Urogen is here from the World Bank. I went to Urogen with a problem, which frankly was put to me by the leaders of Southern Sudan. We have a new nation. It will be extremely dependent on food aid. And it is also a fact that in order for Southern Sudan to succeed, it needs to be an agricultural economy and it has the potential to be so.

And so the dilemma came – is there a way to think about food aid that becomes a productive investment in helping Southern Sudan reach its very goal to become an agriculturally self-sufficient nation and maybe even one that exports to other places?

And we had a dilemma because WFP now buys 80 percent of the food it distributes from the developing world, but the food in Southern Sudan tends to be about 40 percent more expensive than the neighboring countries. So under any model that is not dynamic, WFP would not buy food there.

Now, the problem is, if we're not engaging those farmers at the front-end, how do you ever break the cycle of dependency that is so important to stabilize all the returnees and everyone returning to a nation that no longer has the infrastructure of support and has some very critical problems, making it not quite ready for large scale private sector investment, given insecurity.

And what I asked Urogen and his team was, "Could you look and see if there's a case to be made that if WFP purchased 20 percent of the food upfront in Southern Sudan, that even though there might be more expensive today, that you could model that in a way that it would reduce dependence, and so in five years and ten years, not only are the savings huge but you're also creating the ability for a sustainable model."

In fact the Howard Buffett Foundation has personally invested to create a warehouse that not only brings in food but also receives food and dries it and cleans it and buys it.

But this requires a new way of thinking. And I just want to thank the aid community out there from nations who are willing to look at these equations in a different way so that maybe the return is not immediate but it comes in the years to follow.

And so the bookends of prevention - early warning, safety nets, the backend of emergency action - need to be stabilized in order for the 90 percent to thrive. And I know – is José Graziano da Silva here? I mean, what Brazil has done with its Zero Hunger Program is one of the best examples of that type of investment and how it stabilizes the whole.

So one would ask – and you've heard many comments – how could we be here? Isn't this a failure of the system? What is changed? Isn't it all the same? Well, let me just give a new perspective on this.

We see an epic level of drought, so you have to ask if this drought is the worst in 60 years. If it's the worst, as some say, in our lifetime, why is it then? If we're not doing business differently, we, the world, we together, the partners, the nations of the Horn of Africa – why is it that in '86

and '87 by this point in the drought we'd already seen a half a million people die and by the end of that drought over a million people die? And you are not seeing the massive loss of life outside of the famine zone, meaning it is not a failure of intervention; it's a lack of intervention in Somalia..

In addition, in the Horn of Africa today there are 4.5 million people just in WFP's knowledge and experience who would have been the first to go down in this drought who are now on productive safety nets in Ethiopia and Karamoja who were not displaced, did not lose their livestock, did not lose their homes, did not have to wander to try to find food. And those productive safety nets were able to scale up because they have built the food self-sufficiency through water catchment systems. The Merit Project alone restoring over a million hectares of land to be able to be food productive.

And so if you add to the estimates of 13 million people now in need of emergency aid an additional 4.5 million who aren't on there, we've had an almost 30 to 40 percent reduction in what would have been displaced lives, which would have been a much more dramatic burden Dadaab without the incredible help that the Kenyan government and others are providing to those displaced in the region.

So if you look at the Horn of Africa, [the reason] why we think you're not seeing the loss of life where in every other drought of this level or even lesser level you would have seen, is the investment in agriculture. Ethiopia had 12 percent bigger harvest than I think almost on record last year. The emergency reserves that you see in Ethiopia and Kenyan that have been drawn down over and over again, because there is an actual shortage of supply in the region, are due to the productive safety nets and more effective and efficient humanitarian action, which I'll talk a little bit more about later.

I just want to go through, and this is just an example, the Productive Assets Program in Karamoja taking a chronically dependent on food aid population. It costs a little bit more per person, but much sooner than we expected, it prevented those people who have been moved to the Productive Assets Program from being thrown into the emergency.

We see these kinds of ideas, and again I'm just taking examples from our world, but I think they're very powerful in turning around a situation. This is a picture from Northern Cameroon. The boom and bust cycles of hunger there are chronic. Well, three years ago, because the world's doing business differently -we're all on active efforts to reduce the caseload that's on the back of five percent, move it to the productive five percent, and ideally build up that middle 90 percent - we went to those villages with the government and said, "We have a proposition. We'll give you the food aid one more time. We'll build a warehouse that will be the first warehouse ever seen in the village, and you can then use the food as a food bank, but the village has to return it - those who draw down the food have to return it." So this is a food banking example.

And what intrigued me here - 410 villages took on this program with European Union support in this case - is we had a problem because there was a lack of trust of handing over the asset of food. And we couldn't break that. And we went to the women and asked them what to do. It's amazing - you just have to go to women anywhere in the world, and they'll tell you exactly

what to do. Right? They know. They have the solution. And half the time, they're like, we've been waiting forever for anyone to ask.

And what they said was, "Put three keyholes in the door and have three different women elected in the village to hold the keys, and the door can't be opened without the three all being present." And when we took this picture, they all dressed up. It was a very exciting moment, because it is a sacred trust they feel they're holding for the village as the very famed and powerful keyholders. This broke this need to adapt the solutions up.

So we know that food banking and breaking the boom and bust cycles of hunger are critical, but it's not going to look the same, as Howard Buffet was saying, in every place.

Just on school feeding, I want to say this has gone from a great program to something that we now understand. And the World Food Program and the World Bank put out a study recently called, "Rethinking School Feeding" that really looked at 40 years of evidence and experience, best practices by nations and aid agencies, and fundamentally recommended that this is really an entry-level safety net of great value.

And if you fill those cups with local food, as Brazil is doing, from smallholder farmers, you're actually building a true safety net that provides resiliency at a base level. But of course there are so many more benefits.

And I think Catherine Bertini started something at WFP called the "Take-home Ration." If you want to get girls to go to school, even in countries where they've never gone, it costs 50 cents a week. And what you have to do - you don't have to get in any ideological argument - is at the end of the month for perfect attendance, give an extra ration of food for them to take home.

We know the price of it - it's about two dollars a month - and pretty much 50 percent of the kids in school will be girls. And if you continue that take-home ration from 12 years old to 16, many of their families will delay marriage just so they can continue to be a productive producer for the family. And so your ability to build a platform with the school feeding that not only brings food security but has additional benefits is quite powerful.

The next thing I want to mention is just the revolution and understanding of how to use base crops. This is a product called wawa mum. WFP developed it in India and Pakistan. We produce this in Pakistan. It's saving lives. It has a 98 percent effectiveness rate in our studies in coming in and preventing severe malnutrition. It's made with chickpeas, dried millet, power-packed with smart vitamins that protect the kid's brain and body. You don't need to add water; you don't need to refrigerate this. It's similar to other products like Plumpy Nut now.

But what is so exciting to me about this is that it's climate proof. Often you see places where you can't get access to water and populations struck with chronic levels of malnutrition. There's nothing a parent can buy that will actually turn that situation - there's nothing. You go to those shops where many rich people can go now; they get power bars - 40 different kinds and different levels of carbohydrates and proteins, etc. Let's get it out there on the frontlines where people are malnourished and hungry.

So when we first produced this, I had a meeting with Prime Minister Melis. He said, "Forget WFP - I want this for Ethiopia." People need to have something they know that if they buy it their kids can be restored to health in a drought or in any situation. And in a very unique partnership with Pepsi and USAID, we will be rolling out the biggest production in Africa of a product like this over the next year with chickpeas indigenously produced.

This type of revolution is taking the best technologies and understanding how to take crops that have no micronutrients and power them. I know something CGIAR and others have worked very well on, and we have partnered with FAO and others on really bringing that revolution of knowledge to be able to do small-scale production.

Just the next thing I just want to mention is the power of technology to change the dynamic in that front five percent and also the back five percent. This is the new face of food aid in, I think, over 25 countries in our world, and I know that Oxfam and others are doing very interesting similar-type things.

But in the West Bank there's food. There are people who have no ability to access that food. And so today, like this woman, she gets this card. It can get swiped at a small shop. She can get nine food items - they all have to be locally produced, and they all have to be nutritious, like hummus, yogurt, milk and bread. This has increased the dairy industry in one year by 30 percent in the areas where it's used.

And so we see in some places where there isn't an absolute deficit of food the power of interventions like this and the power of governments to incorporate, as Mexico has done to revolutionize the face of hunger. Mexico in fact wrote the book on the ability to do this, along with Brazil and others, to really transform at large scale the face of hunger and malnutrition.

I just want to talk about the last three pieces. I talked about the school feeding, the wawa mum. This is a picture from our Purchasing for Progress Program with the Bill and Melinda Gates Foundation and the Howard Buffett Foundation and now with many countries. And the proposition was: Could you have aid agencies work with farmers who will not be able to participate in markets to help figure out how to unlock the keys of their ability to participate - and can you use the advance market commitment, if you will, of WFP's need to buy food to begin to work with some of those farmers who may be chronically dependent on food aid in countries? And can you tie in the engine of local purchase to these cards or look at making sure these types of things happen at low-scale production?

And we're finding that this has powerful potential, especially with small processing warehouses. In Gulu, Uganda, for example, where thousands chronically dependent on food aid, we put the first warehouse and processing center ever seen in the area; and we now are buying from thousands of farmers to feed people- very powerful if farmers believe that if they produce, there is someone who can overcome the market gaps and buy it. We've worked with Namanga [Ngongi] to make sure that we're lined up with some of AGRA's programs on this.

So that potential for partnerships where maybe the private sector isn't going to go into Gulu. I remember opening the first bag of food there - it had two dead mice in it and an old shoe, and I

thought, you know, it's not quite market-ready – and then going into the warehouse and looking at the sorting.

What amazed me in Gulu is in that case it didn't require new seeds and new technology. The food that would immediately begin rotting because of too much moisture and have an aflatoxin problem, with basic and drying and sorting and cleaning equipment, turned into Grade A East African maize. And after our third month there, Tanzanian traders came and offered \$10 more per metric ton than we were willing to offer, because we do it all at the market price, and our country director said, "You know, this is a disaster. What do we do? We're counting on these."

I said, "Sell it." And then now these farmers are market-ready. And by the way, the farmers pay for the warehouse services. Purchasing for Progress is a market model but a very patient market model.

Okay, so what has really struck me since 2008 is we got a very big message. We have to do things differently. The vulnerability is too big. The discontinuities were too big. And so I'm also always often thinking – my family's from Princeton, New Jersey – of my friend Albert here of about how we look at the problem in a different way. And some of the ideas here I think are changing, certainly the way our world works, in a powerful way in collaboration with nations.

But one of the paradigm shifts I think has been talked about here. I call it radical collaboration. No nation, no individual, no private sector company, no U.N. agency, no NGO, no leader how powerful, can change the face of hunger on earth. It requires radical collaboration and working across different tribes, by the way. [\[Note to Megan: Continued on page 11 and last page\]](#)

I remember the first meeting at the World Bank, and mark history there because it was the first time nutritionists came together with agriculturists, together with finance ministers after *The Lancet* series. And it was literally like tribes with different language. They didn't trust each other. They didn't really like each other very much. They didn't use the same language, the same terminology. And we had to figure out how to work together. And I think this is the world that we're in now. And thank you to the World Food Prize for being ahead of the curve on that one.

The next is I just want to talk about expert passion. I had an amazing conversation with Jeanie Borlaug, and Bill and Julie are here, I think. And this was about the last days of Norman Borlaug's life. Where are the Borlaugs here? There they are.

Someone who became my inspiration, my hero. And we were talking, I said, "How was it in those last few days?"

And Jeanie said, "Well..." You know, she was with Daddy in the hospital when he got the word, you know, "Go home. The time has come." And she recalled getting in the car with him and saying, "What can I do for you, Daddy? Who can I call?" (She gave me permission to tell this story. I asked her if I could please share it.)

And Norman Borlaug said, "You know, I have a problem." And she said, "Yes, I know." He said, "Now Africa," he said, "I'm not done yet." He said, "I haven't solved the problem with Africa together." He said, "I can't leave."

And they went home, and when they got home, she said, "You know, are there people you want us to call? And he named the people who could help transform the face of hunger in Africa. And all his calls those next few days were really saying, "Will you ensure this moves forward?" And then in fact, in his last moment of life he called everyone over and said, "Make sure this device that checks nitrogen in the soil -make sure it goes to every farmer." "*Take it to the farmer,*" I think were his last words.

And so that sort of passion again is so represented in this room, but I would say in a radical collaboration we have to now bring that to fore; because I think we're in perhaps the most dangerous time for food stability that certainly is in my memory.

The most powerful thing in the end that I've seen is when a leader says, "Not on my watch. Children will not die from hunger under my watch." This can be very poor nations, but when they say it, it allows the radical collaboration and the passion to come together to transform the situation. And let us just remember that President Lula, his first speech said, "When I leave office, I want to make sure everyone has three meals a day." I remember meeting with President Kufuor and he said, "Every school child is going to have a cup of food if it's the last thing I do."

And it transforms the situation. The world can unite behind that. But we need more leaders to say, "Not under my watch. This is my priority, and we're going to transform the situation."

I just want to go back to this again. I'm just going to talk about that five percent and just to leave on a moment of hope and right at the heart of WFP's work - Is there a place in that backend 5 percent where there's places beyond hope where nothing can be done? And I want to take you back. This is the same child Sadak - I was there. It's in Southern Somalia, a place where there was no access, and we suddenly had a window of access. And I went in with the foreign minister of Australia, Kevin Rudd. There were tens of thousands of people gathered that had walked weeks.

Most of the women had stories to tell of leaving children along the road to die, trying to get out to get help. And this child, his foot was swelling and he was entering level four malnutrition - not much hope. Well, because of that window of opening, we were able to start airlifting in these types of products - water not required - you can drop these out of helicopters and they can change a kid's life. And my team two weeks ago checked in on Sadak, and this is the same child. That's the same child four weeks later, still living in Southern Somalia, still in dire situation. But the power of interventions can transform lives.

So this is an appeal to put aside cynicism, for us to pull together to really shore up the global system, to understand that in the end there will need to be a last line of defense. There will need to be a manual override, and now is not the time for the world to lose its vigilance on this end. But this end also needs all of the technology and collaboration to transform it.

My goal is to see Africa having the tools to do this, to transfer this knowledge. Ken Quinn last night, in inaugurating the Hall of Laureates, said, "Could this be a place we come together to celebrate vanquishing hunger?"

And I would like to just put forward the proposition. WFP was created 50 years ago this year. President Kennedy, I think it was, or Norman Borlaug, one of the greats on this topic said, "You can't build peace on an empty stomach." Prioritize this. Let us put the challenge on the world to say - We're not going to reduce malnutrition, but we're going to end the scourge of a quarter billion children on earth having stunted brains and bodies simply because they can't get access to what is now readily available and we have the knowledge, adequate access to nutritious food. This costs 17 cents. A small child, six months to two years, needs one pack. It can transform their lives.

So I just want to leave on a very hopeful note. I believe we can end malnutrition in our lifetime. I believe we can end hunger in our lifetime. I believe we can end it because ultimately it's not about charity; it's about creating jobs and opportunity all the way up the value chain.

And when we see nations like Brazil tackle it, it builds a stronger, more prosperous nation - not a more dependent nation, not a nation that needs permanent help but one that can create an engine of growth and opportunity through tackling hunger and malnutrition.

Thank you.
