

2011 THE "BORLAUG DIALOGUE"

October 14, 2011 - 7:30 a.m.

Symposium Breakfast Keynote Speaker: Michael Mack

SYMPOSIUM BREAKFAST KEYNOTE

Introduction by:

Ambassador Kenneth Quinn

President - World Food Prize Foundation

I think everyone is a little slow to start this morning, if they're like me. So what a great night that was at the ceremony. Thank you, thank you. So it was hard to get back to bed in time and to get up this morning.

I'd like to ask the Marriott staff if you could now stop clearing the room. So thank you very much, and thank you for your wonderful service.

This is our traditional Friday morning breakfast. We have special presents and emphasis for our Global Youth Institute, and students are here. Where are the students? They better not have slept in. Only one of my kids made it - he's the one who got up best. The others, I think, probably are still in bed. But students, where are you at over there? Stand up so we can just see you. Yeah, okay, great, thank you. Thanks again for being with us today.

The breakfast this morning is sponsored by Syngenta, and we've got a number of Syngenta connections beyond that our guest speaker is the chairman and CEO of the company. We've had participation involvement from Syngenta back from the very beginning of my time at the World Food Prize. And we had Heinz Imhof, who at that time was the chairman.

Our students and our teachers, who you just saw, they have a traditional field trip, so they're here for part of the morning, and then we take them all - they're going to a Syngenta facility here in Iowa to see all the good things that you're doing.

We have in addition other connections. I want to say very much Mike Mack, to you and everyone who's here, thank you so very, very much for the support that we received, particularly for our hall of laureates and for our regular programs as they go on. And we appreciate working with Jessica Adelman who's our friend and I guess is pregnant again. So she said she couldn't come this time to be with us because she's going to have another baby.

But I've also been to David Morgan's facility in Minneapolis. I've been to Vern Hawkins' facility - David, not that yours isn't very impressive too. But to be with Vern Hawkins, I was invited to come down and deliver an address and a wonderful program in North Carolina.

There's Marco Ferroni at the Syngenta Foundation. It's been our pleasure to have him here on the program as well as to have Sarah Hall. And it was a real treat for me to go there and meet with Robert Burundi.

So we feel we have a lot of great friends at Syngenta, and we really appreciate that relationship.

The role that Syngenta is playing in terms of being at the forefront in what has now become the global challenge as to whether we can have a trading system and an international system that is going to be able to, with all the stresses and strains that are on, whether it's about climate change, whether it's about price volatility, whether it might be about food shortages, is critical. And that's why I wrote to and invited and urged Mike Mack to come and to deliver a major keynote address for our conference.

As the CEO and Executive Director of Syngenta, he's come up through the company. Chief Operating Officer of Seeds, head of crop protection in the NAFTA region, previously served as president of Global Paper Division of Imerys SA, the French mining and pigments company. He's been in the industry and has come to the very top of it. He also held various roles with Meade Corporation, Chairman of the Board of the Swiss American Chamber of Commerce.

Has a degree in economics from Kalamazoo College in Michigan, studied at the University of Strasbourg, has an MBA, Harvard University, at the forefront and one of the real leaders in the international world of food and agribusiness.

Please join me in welcoming Michael Mack.

***SYMPOSIUM BREAKFAST KEYNOTE* Michael Mack**

CEO and Executive Director, Syngenta

That was a test to see if I knew this by heart, and I don't. Well, good morning, ladies and gentlemen, and on behalf of, I hope everyone in this room, I would like to just take a moment again to give recognition for Ambassador Quinn for everything that he did to make this so far such a memorable event. Congratulations on this.

It's really a great pleasure for me to be here and of course an honor to address all of you this morning on the 25th anniversary of the World Food Prize, and of course a thoroughly enjoyable evening last night.

I want to begin by recognizing this year's noble laureates, of course – President John Kufuor and of course President Lula da Silva. The leaders of two very different nations, they have a lot in common, not just about the food but also about the nutrition.

They understand that farmers need not just tools but the support of the community. They appreciate that education and training is not simply useful for output but a path to health and

long-term prosperity as well. They understood that success requires securing financial capital but also that it means having the courage to spend political capital as well and to be advocates for change while managing the tensions needed to turn their vision into a reality.

By doing this, they herald enormous gains in productivity, driving major economic advancement for their country. The world would be a much more encouraging place today if we had many more like them.

Now, this morning I'd like to talk to you about boosting agricultural productivity, but I feel compelled to start by saying that this boost of agricultural productivity isn't a given and that danger does lurk if the collective world don't focus on this as a vital pillar for prosperity and peace. Let's face it - a lot depends on a full stomach, which I hope you now have after breakfast.

Now, if we don't have these full stomachs, if people can't count on having enough food on the table, if the price of food suddenly becomes beyond their reach, history, indeed our very recent history, suggests that the results will lead to unrest.

Now, we're all familiar with the events of the Arab Spring, which continue to unfold right now. There were many grievances fueling the protests, including of course longstanding political oppression. But we shouldn't forget that these disruptions were also in part catalyzed by rising food prices.

In Nigeria, violence began shortly after prices for food spiked in early January. And as crowds broke into flour warehouses and set governments buildings afire, there were reported cries of, "Bring us sugar."

In Tunisia, President Ben Ali's promise to lower the staple price of food wasn't enough from keeping him from being thrown out of power. And in Egypt, of course, bread riots were part of what sparked the riots in that country.

Now, many of you in this room must agree that the situation today bears many similarities to the situation that we experienced in 2008, a mere three years ago, where the food "food crisis" was a daily headline around the world.

I recently saw- I'll put it up here on the screen - you can see that. That photo, by the way, is one you saw many times over the past months, but this is the chart that I was referring to. And I saw some interesting correlations made by a place called the New England Complex Institute. These slides now draw from their work, and they start here with a grab of the FAO's food price index from 2004 until the present. At the end of 2007 and '08, as you can see, prices reached what were then record highs.

Now, these red lines that are going up represent countries which experienced riots, which were reported by the media at least in part as having to do with the rise in food prices. Fourteen countries had riots with a combined death toll of 89. But when you consider the combined population of these 14 nations, 1.4 billion people, if you include India, and a quarter of a billion people, if you exclude India, you get a perspective for the number of people who are experiencing at various levels human hardship.

Many thought the circumstances of 2008 were a one-off event, that food prices would again return to normal levels, and yet here we are again. Although there was a bit of a decline, prices have been on a steep ascent, up 32 percent in the second half of 2010 to an even higher level than we experienced three years ago.

Now, this cluster of red lines that you see going up represent food prices of 2010 and the riots therein, at the beginning of this year. Now, they were largely centered in North Africa and the Arab nations. And although the Arab Spring grabbed the majority of the media headlines, you can see that rioting was not confined to those regions alone. This time the death toll mounted well into the thousands in countries that are home to 400 million people.

Once the violence began, of course, it was fueled in no small part because of a pent-up desire for political change. Many factors were at play, but a shared thread across all of these countries had indeed been a steep price in the rise of food here.

Now, these blue arrows that I just put in and added represent the beginning of this social unrest mapped against the food price. And while correlation – and this is important, ladies and gentlemen – correlation does not necessarily prove causation. But common sense and human history suggest that we can expect more social unrest if we don't find a way to address this volatility.

Now, if you factor out these spikes altogether – and that's what's right here in these blue ovals – and you factor those price altogether and then you put a trend line, I think it gives you a sense for where we're headed.

And this leads to the question – will living on the edge become the new norm? I hope not, and I certainly don't believe we should accept this as inevitable. Each of the countries that are on this slide is different, of course. But they share common challenges. We heard about some of these last night.

Many are poor; their populations spend a large percentage of household income on food, their access to major grains are very exposed to import trade risks, and finally agricultural productivity underpinned largely by smallholder farmers is a fraction of what it could be. In short, these countries are vulnerable.

Now, while the role of trade is vitally important to food security, these countries typify the urgency of boosting farm productivity where we can.

Take Algeria where some of the first food riots broke out. That nation has seven and a half million hectares of arable land, but yields are just over two tons per hectare. Compare that to France where average yields are more than three times, or about seven tons per hectare.

At first you might think this an unfair comparison. How can Algeria be compared to France? But the fact is that for some crops – grapes, onions, potatoes, olives and oranges, for instance – Algeria is productively on par and in some cases already surpass the French average.

Algeria's biggest hurdles aren't climate and soil, and it's not about agronomic know-how. They have more to do with regulatory and trade restrictions by the central government, which keeps valuable technology out of the hands of growers.

Meanwhile, some 53 percent of an average Algerian household consumption is spent on food. When Nomura Bank assembled its food vulnerability index, Algeria ranked number 3. That, by the way, was in September of 2010, just a few months before rioting broke out there.

Morocco and Egypt also ranked in the top ten and have themselves both seen another round of rioting.

Mozambique is another case in point. This country has considerable agricultural potential and farmers who are eager to learn through some of the demonstration plots that we heard about yesterday. According to the FAO, 46 percent of the land is suitable for cultivation, but only 14 percent is currently used. And the part that is cultivated is underproductive, yielding less than one ton per hectare.

The country currently imports its wheat, which is a staple of the urban population. Even in rural areas, which are traditionally agrarian societies, family farms are net importers of food, and this is despite the fact that 81 percent of the nation's population today work in agriculture.

Many of these countries could increase yields multiple times compared to current levels. We know this. We have the tools and we have the know-how today, but somehow it is not getting done. And this of course begs the question – Are we, the global community, are we having the right discussions? After years of debate, are we moving the needle?

If we were, I wonder if we would spend as much time as we do debating, for example, how safe is safe, regulating new technologies, ladies and gentlemen, sometimes to the right of the decimal place. Life and death issues are begging our attention, and if we were serious, I think we would be focusing often on different discussions. And I think this is particularly so when it comes to sustainability boosting agricultural productivity.

As the world appetite grows larger, it just can't be argued that stagnant agricultural productivity is an acceptable option. And the halls here at the World Food Prize have spoken to this plainly over these past 25 years. And we know that one of the most critical areas for action must be to help smallholders make a better living.

Now, there's probably not a single person in the room here this morning who hasn't heard the word "smallholder" multiple times over the past three days. And that's because the fate of the smallholder could effectively determine the world's long-term food security.

At 450 million small farms, typical supporting five members per household, meaning that one third of this world's population directly depends on these small farms for part of their livelihood. We know that success will hinge on whether they can become sustainable enterprises.

And the key word is here “enterprise” – the sustainability of the farm as a firm, because when these firms can earn enough to sustain not only their farms but also enough to invest in the education of their children, will they be able to contribute to the general uplift of their nations.

As we’ve been discussing at this conference, such efforts require the cooperation of many, including governments, NGOs and academia. But business can bring something to the table too. We have knowledge in critical areas like finance, risk and supply chain management, and the adaptation of technologies to local markets.

My company has been working on a broad range of stakeholders to apply some of this business expertise in as direct and as targeted way as possible to smallholder farming. We probably don’t even have a fraction of the answers; but, through a number of projects around the world, we’ve been learning a lot along the way.

I thought it would be worth sharing a few examples here today, because a big part of boosting yields without sacrificing natural resources and without an overreliance on mechanization – two important things, of course, we heard about yesterday. And here’s an example of a market-centered approach.

New coffee is an initiative in Brazil, and it’s designed to give small farmers access to international markets. And the idea is to boost value to all parts of the supply chain, starting with coffee farmers themselves all the way through to the consumer. New coffee combines a number of elements we’ve already been discussing.

First, integration of technology in learning. We help the farmers grow higher-quality coffee beans and most of this through agronomic advice on products but also such things as geo-mapping of each of the plots of their farm so that farmers can then pinpoint what works and then put that over the rest of her farm.

Second, information and education. Workshops provide farmers with information on what roasters desire in the coffee that they buy.

Third, financial instruments that provide capital and help farmers manage risk. In our case, the farmer can pay Syngenta in a kind of barter arrangement where the farmer records a premium based on the quality of the coffee she delivers.

Finally, access to markets. New coffee takes on the risk of selling the coffee to foreign roasters on behalf of the farmer but at the same time capture data for the field, about the inputs they used, the postharvest procedures they deployed, and can report directly about the history of the product and the farmer. And this helps connect consumers with the coffee that they’re actually drinking, alongside a guarantee that it has been grown sustainably.

Projects that we have in Peru and Cameroon also illustrate how small farmers can be more effectively integrated into the supply chain. In Cameroon we’re focusing on postharvest practices and safety in order to boost cocoa production 40 percent and to produce better-quality beans. The goal is to generate higher prices and better contracts from the cocoa traders and the

food value chain. And this project includes training in financial management, the setting up of banks accounts with some 25,000 growers, targeted to be trained now by mid-2013.

I recently visited a project in Central Peru where the Syngenta Corporation is partnering with McDonald's Corporation, which currently supplies its restaurants in Cusco with vegetables flown in from the coast and Lima. Now, the aim of the project is to provide local Indian farmers with the training they need in order to meet McDonald's rigorous quality protocols. And the progress there is simply fantastic.

I've been talking a lot about productivity, and it's not the only thing, though. What impressed me most about this project in Peru is that it has a holistic approach that incorporates also community health and environmental conservatism.

Now, the simple examples I just described hopefully are intended to emphasize what can be done farming in the developing and emerging world and that it can be a sustainable business. We've seen that demonstrated, of course, in the home nations of two noble laureates this year, Ghana and Brazil.

We've also seen it dramatically demonstrated in the nation of Vietnam where only three decades ago this country was dependent on rice imports and had barely enough foreign exchange to feed its population. Vietnam faced the constant threat of famine. Today the world's second-largest rice exporter with the most productive rice farms in the entire region. They're also one of Southeast Asia's fastest-growing economies, in large part due to agricultural export.

In the late 1980s Vietnam started doing a number of things to spur growth. On the macro level they opened their economy to the world and dismantled the domestic controls on economic activity. In short, they made themselves an attractive place for foreign investment. Then they focused on smallholder farmers with improvement in infrastructure, healthcare and an education. They created extension services to introduce better farming practices.

Syngenta has been deeply engaged now in Vietnam for 20 years, setting up farmer training network programs and focusing our packaging specifically for the needs of smallholder farmers, including those who farm on less than one hector of land.

We're also learning how to put ourselves in the shoes of the smallholder farmer who can generate new ideas on how to improve productivity.

Rice may be the most crucial crop in the world today. It provides 60 percent of the calories for more than 2 billion people every day. Yet, productivity continues to lag there. For all of Asia, rice productivity increased over the past decade a mere 1.5 percent per annum. And when you consider the need for acceleration alongside the extraordinary intensity, water intensity of this crop, the challenge is rather obvious.

This is a slide here of technologies called TEGRA, which can be adapted to each and every unique rice ecosystem. The seedlings are grown in nearby nurseries, and we then transport them with special trays after about two weeks, using small planters which substitute for back-breaking labor, which today is even becoming increasingly scarce.

Now, the resulting plants that we have are healthier, they yield higher, and the labor of course much lower. Together with a crop care protocol, TEGRA increases yields, rice yields, by an average of 30 percent. This is just one element of our broader effort to double rice production per drop of water in Asia by the year 2050.

Now, all of this is part of the learning process that we explore more efficiency ways of helping smallholder farmers to achieve their full potential. In the process, we can hopefully create a greater buffer for those unexpected but equally inevitable surprises.

So what's standing in our way? Ultimately, I believe it will come down to leadership, the kind of leadership, ladies and gentlemen, exemplified by this year's award winners. They didn't settle for the status quo. They didn't simply accept the conditions that they inherited. They had the courage to make the tough calls. They had the courage to take the political risks and to give food security for their people the kind of steady focus and attention that this challenge requires.

As I said in the beginning, our world urgently needs more leaders like them.

John F. Kennedy once said, "A rising tide lifts all boats." And I believe that with renewed effort, sharing our collective knowledge along the way, as we've been doing now here at the World Food Prize for the last 25 years, that we can do better. And in doing so, together we can raise the tide of agricultural productivity and global prosperity.

Thank you very much.

Ambassador Kenneth Quinn

Well, Mike Mack, thank you very, very much. As Mike was coming to sit down, I tried to get the speech again from him, and this reads... The reason I wanted it this time is that we want to publish it in its entirety in our symposium highlights and give great attention to it. So he's promised to give it to me electronically. I couldn't... pulling and trying to get it out of his hand, doing my best - should have kept it before when I had it.

But I have to say, I was just fascinated by your presentation. And I'm not sure what it is about the Friday morning symposium breakfast, but some of the very, very best and most insightful and encouraging presentations come at this event.

It's on Syngenta - it's already there. Beat me, yeah, as usual - it's the private sector. Wow, that's impressive.

But the point I wanted to make was that whether it was Mike Huckabee speaking about obesity as a health and a food issue, whether it was Rajiv Shaw who was here talking about building corridors in Tanzania and the Feed the Future Initiative, there have been great and amazing and interesting speeches given, which have those key issues.

And now I'm going to add to that Mike Mack's presentation about living on the edge, because it was so filled with interesting things – particularly, though, about Vietnam. Because I, in 1968, my first assignment as a brand-new American diplomat wasn't to the embassy in London or Paris or Vienna or Switzerland. It was to the Mekong Delta, and I was kind of a foot soldier in the Green Revolution and saw the possibilities.

But I've just been back in Vietnam – John Ruan and I were there – and to see what's amazing, but that TEGRA... Because I used to watch people transplanting the IRE rice and that kind of mechanization is stunning.

So, Mike, thank you so very, very much. Join with me again in thanking Mike Mack for this wonderful presentation.

So my next assignment is – Everybody report to the ballroom at about five to nine, and we'll get started, and President Lula da Silva will be there to give his laureate address, and the rest of the morning program will be underway.

Thank you all for joining us.