THE WORLD FOOD PRIZE 2014

Norman E. Borlaug International Symposium THE GREATEST CHALLENGE IN HUMAN HISTORY: Can we sustainably feed the 9 billion people on our planet by the year 2050? October 15-17, 2014 - Des Moines, Iowa

2014 BORLAUG DIALOGUE

October 15, 2014 - 1:00 p.m.

Opening Keynote Address: H. E. Kanayo F. Nwanze

Introduction:

Ambassador Kenneth M. Quinn

President - World Food Prize Foundation

Dr. Kanayo Nwanze, welcome back to the World Food Prize. We were thinking about when you were here before with us in 2004, when Monty Jones received the World Food Prize, and then 2009 when Gebisa Ejeta won the World Food Prize. So we need a lot of laureates from Africa, so I'm hoping that you'll plan several more trips back as well.

Dr. Nwanze is a Nigerian national. He's on his second term as president of the International Fund for Agricultural Development. He is a member of the World Economic Forum's Global Agenda Council on Food Security; he's chaired that group. He's had senior positions at research centers affiliated with the CGIAR, Africa and Asia. He's received numerous honors, including the National Order of Merit of Côte d'Ivoire and of the National Order of Benin and the National Order of Agricultural Merit of France. But he heads the organization that's very close to my heart, because the infrastructure is so critical to the development of all areas in the world for agricultural production.

So it's my great honor to welcome back and introduce to you for our keynote address for the 2014 Centennial Borlaug Dialogue, His Excellency, Kanayo Nwanze, the president of IFAD.

H.E. Kanayo F. Nwanze

President - International Fund for Agricultural Development

Thank you very much, Ambassador. Excellencies, expected colleagues, fellow scientists, ladies and gentlemen. This is a great moment in the annals of the World Food Prize annual event, the celebration of the centenary of Norman Borlaug's birth. For me it is a pleasure and an honor to participate in this year's symposium.

Those of us working in agricultural research and development owe Dr. Borlaug our thanks every day for his work as a scientist and as an advocate. During his Nobel Prize Laureate lecture in 1970, Norman Borlaug said, "It is a sad fact that on this earth at this late date there are still two worlds, the privileged world and the forgotten world." Even 45 years on, that statement remains only too true.

So today I would like to talk to you about the forgotten world and the role it can play and must play in feeding the planet's 9.6 billion people in 2050. If, like Norman Borlaug, our sights are set

on feeding those who most need food, we must look to the invisible and the forgotten world, the rural areas of developing countries — because this is where more than three-quarters of the world's poorest children, women and men live, and most of the world's hungry. They are deprived, they are underprivileged, and they are very hard to reach, because they live in remote areas out of sight of the world's political and media centers.

It is easy to pretend that they don't exist, but they do. And in this ever-shrinking world where desperation, disease and violent ideology know no boundaries, their problems are our problems. Anyone who doubts this need look no further than Ebola, which was largely ignored when it was limited to rural Africa — a neglected disease of the forgotten and invisible world.

Now that it has reached capital cities and traveled as far as Europe and the United States, the visible world is trembling, trembling; and we are beginning to see a collective, global response. If it continues to strangle original trade and interferes with the next planting season, it will lead to a hunger crisis of epic proportions for Western Africa. In Guinea, Liberia and Sierra Leone farmers are leaving their fields to rot as they stay home in fear. In Sierra Leone, up to 40% of farms have been abandoned in the worst-affected areas, setting the stage for a second wave of the crisis.

No part of our world should be forgotten, nor its people. We live in one world, not several, and we share the risks as well as its potential. This is why we need a rapid, collective response. First, to deal swiftly with emergency but also to invest in the long-term resilience of rural areas so that they are better able to weather future shocks and to rebuild once the crisis is over.

The international community needs to come together to act holistically to break this cycle of individual tragedies from becoming a collective disaster. And this will require political leadership, robust policies, sound economies, infrastructure, social safety nets, healthcare, and of course, stronger agricultural systems.

Ladies and gentlemen, feeding the world in 2050 has been described as the greatest challenge in human history, yet it is, I believe, a challenge that we can meet, provided that our efforts are inclusive and responsive to small producers, small-scale farmers in developing worlds, in the developing countries.

In fact, it is know that we produce enough food, enough food to feed every child, every woman and every man on this planet. So why are there over 800 million hungry children, women and men on our planet? Why is it that over six million children under age five die every year and 45% of child deaths are due to malnutrition? Why?

The world's 500 million farms produce around four-fifths of food supplies in developing countries; yet today, too many of those who work to feed the world, at least the developing world, are going hungry themselves. This is a terrible and tragic paradox. But it does not have to be this way. For IFAD, the answer is simple: Invest in rural people; invest in smallholder producers.

Experience repeatedly shows, in places as varied as Burkina Faso, China, Ghana, India and Thailand, that smallholders can contribute to food security and lead agricultural growth. In China, China's small farms produce 20% of the world's food, and yet they own 10% of its land.

So why are smallholders so frequently forgotten? Not investing in agriculture in the developing world is a false economy. Agriculture not only improves food security, it creates employment and wealth. Agriculture in its broadest sense, including crops, livestock, fisheries, agroforestry, is the main source of employment and livelihoods for the women and men who live in our planet's rural areas. We all know that GDP growth due to agriculture is at least three times as effective in reducing poverty than growth in other sectors; and in Sub-Saharan Africa, it is estimated at 11 times more effective.

Some 2 to 2.5 billion people depend on small farms for their lives and livelihoods; that is one third of our human race. Let's give them the means and the tools, and they will lift themselves out of poverty. They themselves have to lift themselves out of poverty, improve their own food security and nutritional status. They can also help feed our rapidly growing cities. The answer to our greatest challenge lies within our reach if we have the will to reach far enough.

Continue to forget about rural people, and they will follow the familiar path away from their farms and villages to the cities, to urban areas in search of work, contributing to waves of migration, swelling urban cities that become prey to hunger, economic and social instability.

Our challenge as we work to sustainability feed a growing population is to ensure that everyone committed to eliminating hunger is also committed to working towards the transformation of rural areas and that the forgotten world is no longer forgotten.

Colleagues, ladies and gentlemen, through my work as a scientist for over 30 years and now as head of an institution dedicated to invest in the rural women and men, I have seen time and time again how agriculture and rural development can transform lives and feed communities.

So today let me share with you three lessons I have learned on how to create the conditions for sustainable food security and which we will need to apply if we are actually serious about sustainability feeding more than 9 billion people in our planet in the next 35 years.

My first lesson is that we can only eliminate hunger if we take advantage of everything that science has to offer. And when I say "science," I also mean the softer sciences—the social sciences, human behavior and the dynamics of policies, as well, of course, as biology, chemistry and physics.

Development needs to respond to the needs of the communities we serve, rather than to the scientist's needs to see her or his discovery in the field. Yes, it is exciting to develop a technology in the lab, and even more exciting to see the implementation in the field. But why give a poor farmer in Africa a new seed variety that increases yield when that farmer lacks access to safe storage but does not even have access to markets to sell her surplus? Of what use is that technology?

I have also learned that no amount of high technology or advances in research and development will have the desired impact on people's lives unless the social aspects of the community are adequately addressed. Don't get me wrong. I'm not a social scientist; I'm a biologist by training. But experiences in the field have told me that biological sciences will go no way unless we factor into it the social behavior of societies that we work with.

This September... Let me give you an example, a very simple one. Earlier in September I visited three projects that IFAD supports in Ethiopia, just about 200 kilometers south of Addis Ababa.

The first two projects have successfully responded to the local social conditions. Both projects were participatory and inclusive. The farmers, women and men, had formed strong organizations that were growing and financing their business through rural savings and credit organizations, otherwise called SACCOs. And they were irrigating their crops; yields and incomes were higher; nutrition had improved.

But at the third project, social issues had not been addressed. There were no farmers' organizations, and the men dominated the discourse, and women were excluded. These farmers have not even been able to box their produce properly. They had not seen real increase or improvements in yields, neither in income or in nutrition. It was obvious that there was very little by way of community cohesion or social cooperation.

But don't get me wrong, please. There's a role for high-end cutting-edge technologies to start with. On a recent trip to India, actually this past August, I had an opportunity to visit, ICRISAT, International Crop Research for Semi-Arid Tropics—ICRISAT's genome center for excellence. I saw work in sequencing the pigeon pea genome. Now, this has the potential to revolutionize the development of plants so that they are higher yielding and faster maturing but also disease resistant and tolerant to drought and other stresses. It is exciting work, and it holds tremendous potential.

But what this experience did to me was that it confirmed that modern science for agriculture is not only about biotechnology, and that biotechnology is not only about transgenics and GMOs. But sometimes the technology that farmers need isn't a new seed. It could just be a smartphone or a tablet. At IFAD we have recently joined forces with Intel Corp. to bring new tools to small farmers in Cambodia. The software will allow farmers to analyze soil and other conditions onfarm, so that they can use appropriate seeds, fertilizers and pesticides. The software will even help locate the nearest suppliers. And for one particular farmer, it resulted in a most unlikely result—50% reduction in fertilizer cost. Why? Because actually the test revealed that she had been actually overdosing her rice fields.

Ladies and gentlemen, as we strive for innovation, we must also remember that there is nothing wrong with thinking small. About thinking small, take fertilizer microdosing. I'm sure most of you know about this. This simple technology uses a bottle cap to measure out small, affordable amounts of fertilizer. It means that even illiterate farmers can simply administer the right amount of fertilizer to grow more food.

Scientific advances, large and small, are all important. But we must always remember that no amount of high technology or advances will have the desired impact on people's lives unless the social aspects of the community are also addressed. And when technologies or innovations are effective at the local level, we must see that they are scaled up for weather impacts—and that is where we invite the private sector to be engaged in this effort.

Now to my second lesson: My second lesson is that we need public and private access alike to each play their allotted role along with farmers themselves if we want to feed the world. And, of course, my starting point is government.

Countries need strong and consistent policies for inclusive growth in order to maximize the potential of food production to reduce hunger. In much of the developing world, there is a gross disparity between government investments in rural and urban areas. In fact, at IFAD we say, "The inequality between the rich and the poor is basically the inequality between the urban and the rural areas."

It is time for governments to consider policies that offer incentives for investment in rural areas and in agriculture, policies that encourage inclusive business models, policies that facilitate the about of poor farmers to access finance and technology and to have the rights to water and to land, and of course policies that reduce the risks of private sector partners when they invest in agriculture.

Let me digress a little. It is known that agriculture in Sub-Saharan Africa is largely subsistence, but Africa also has some 60% of all available uncultivated agricultural land. Six or more of the fastest-growing economies in the world are in Africa, and GDP growth in some African countries dwarfs global averages.

So why is it then that Africa's agriculture is mostly subsistence? Why is it performing at so far below its potential? The answer for this is that for decades, many decades, African governments have neglected to invest in rural areas and in agriculture. Now, this is despite the fact that the experience shows that agriculture works.

According to IFPRI, agricultural led strategies contribute directly to reducing hunger and undernutrition. The experiences in China and Vietnam show that in agriculture-based economies where smallholders predominate, growth strategies focused on smallholders may do the most to reduce poverty and hunger. Between 1990 and 2013, China reduced undernutrition from 23% to 11%. Child stunting was reduced from 32% to just above 9% in the same period.

Yet, we seem to ignore these impressive gains when it comes to Africa. Consider that more than one third of Sub-Saharan Africa's rural population lives five hours from the nearest market town of 5,000 people—just what my good friend, the ambassador, mentioned a while ago—roads, rural roads—why? Because of the lack of roads.

Also consider that an estimated 20 to 40% of crops are destined to be lost to pests, diseases, spoilage, because of lack of infrastructure. And consider that irrigation alone could increase output by up to 50% in Africa, that Sub-Saharan African farmers use less than one-tenth the amount of fertilizer used in East Asia and the pacific – it's a shame. Instead, African countries import \$35 billion worth of food annually – money that can be invested in Africa to produce more food, create jobs and build rural infrastructure and provide social services.

Last month I told an African head of state, "Sir, you are creating jobs elsewhere, not for your people, but for foreigners, by importing food."

This money could be used to provide incentives for rural people in the public and private sectors to forge strong, multiple-win partnerships. Private sector partnerships need to be part of the equation. The private sector, after all, is an important engine of growth in many economies; and poverty alleviation, as we now know, needs market solutions.

Farmers do play their role by investing in their own businesses. What they need are opportunities, just like their counterparts in the private sector, to grow their business. Those farmers, by the way, are our most important partners. As a group, they also invest the biggest on-farm inputs in agriculture in the developing world.

Experience has shown that development is not something that we do for people. Development is something that people do for themselves. And please let us remember—rural people, whether poor or not, are not waiting for handouts; they're not waiting for aid. What they are waiting for is a supportive environment so that they themselves can invest in their businesses with the prospect of making profit.

So as we look towards feeding 9.6 billion people in 35 years from now, we must not overlook the important role of women in both farming and household nutrition. Remember that it was improvements in women's status and education that led to more than half of the reduction in malnutrition between 1970 and 1995. Women are increasingly the farmers of the developing world, but they have significantly less access than men to services, markets and assets. And rural women often lack authority in their homes, organizations and communities.

To quickly add one anecdote — In rural communities you are what you eat, and what you grow is what you eat. Nutrition begins on the farm with domestic gardens managed by women and their children. Now, I was wondering whether there's something we can learn from Michelle Obama's, "Let's Move" campaign on child nutrition and kitchen gardens. According to IFPRI, reaching 80% of the world's 160 million undernourished children with key nutrition interventions over the next 15 years may require as much as \$10 billion every year.

Now, in my opinion, it will be much, much, far cheaper to make sure that all children have access to balanced, diversified nutritious food right from the start. Of equal importance, of course, is investing in rural youth. Our youth of today are justifiably alienated from farming. Of course — they see the handheld hoe as a symbol of lifelong impoverishment. Why would they want to become a farmer like their parents and uncles and aunts?

But we can change the perception of farming, because it is already happening in developed countries. But it will only happen in the rural areas of the developing world, particularly in Africa, when we offer more of the comforts and services that are found in urban areas—clean water, electricity, Internet connection. I can assure you that, without our young people, who is going to feed the world beyond 2030? Our parents, our uncles, our aunts, who are the farmers of today, will no longer be there.

The mass migration of young people from rural areas to overcrowded cities in search of illusionary economic opportunities has never been more worrying today than ever today. Today's generation of young people is the largest in Africa, is the largest in history. In Africa alone, 200 million Sub-Saharan Africa population ages 15 to 24%, 200 million young people in Africa. But what is even more, every year 10 million more are added, and 35% of them are unemployed. You can imagine what would happen if this trend continues. Governments urgently need to harness the potential and create attractive opportunities for them, particularly in rural areas, before it becomes too late.

My third and final lesson is that we as institutions, as individuals, cannot act alone. Partnership is an essential element. What we at IFAD call the four P's—public, private, producer, partnerships. The traditional three P's—public-private partnerships—always has acknowledged the producers, the small producers. Now, the four P's partnership brings together the interests of all parties in ways that are mutually beneficial, equitable and transparent. And they work—because we have tried them, and we know it works.

In partnership, governments can create favorable policy environments and provide the infrastructure to allow rural businesses to thrive. In partnership, we can build relationships between organized, small-scale producers and private companies, negotiating and supporting inclusive and sustainable collaboration. After all, farming is a business, no matter the scale or the size, and farmers all over the world want the same things for their families, for their children and for their communities.

By creating inclusive partnerships with each partner fulfilling their own role, smallholders can be better positioned to benefit from existing markets and new markets alike. The private sector gains on the supply side, and farmers benefit from links to secure markets and access to technology, services, innovation and knowledge.

Our role is to make it happen, to facilitate, to support, to enhance. I repeat: *Poor rural people are not waiting for handouts – they are looking for economic opportunities.*

Ladies and gentlemen, as I draw close to the end of my statement for this keynote, let us be reminded — no amount of foreign aid, no amount of development assistance, no amount of science will create the future we want if we approach our work in isolation. The international community must commit to working together. The business community must realize that it is an integrated part of the solution. And leaders must also do their part so that no person and no region is forgotten or marginalized.

The food on our tables started in a field on a farm. We cannot ask rural people to feed us while they themselves go hungry. We cannot feed over nine billion people without making sure that rural farmers have what they need—resources, knowledge and opportunity, access to markets.

I believe that we can overcome the greatest challenge of our time, as long as we face it together. And we can turn these challenges into great opportunities for our future, our children's future, and our grandchildren. Thank you very much.