

CGIAR & WFPF PARTNERSHIP AND 50TH ANNIVERSARY CELEBRATION

Barbara Stinson – Moderator

October 20, 2021 | 1:40–2:40 p.m.

Welcome

Barbara Stinson

President - World Food Prize Foundation

Welcome, everyone. We are back in a wonderful setting here in the Hall of Laureates, World Food Prize Hall of Laureates, welcoming our laureates, our very special guests from many locations, and laudable leaders from all over. We have Global Guides with us, and we so appreciate everyone being here to celebrate the 50th Anniversary of innovation and impact by the CGIAR.

Fifty years ago Norman Borlaug received the Nobel Prize for the breakthrough achievement of the Green Revolution. Advances in agricultural innovation that saved over a billion lives and then fundamentally changed the world by improving our food systems. So out of the advances of the Green Revolution, which brought about an incredible collective effort, mainly the CGIAR, which was formed so long ago. For the last 50 years, CGIAR's research has transformed global food systems, advancing agricultural development, improving food security, and elevating smallholder farmers.

CGIAR has produced many great innovations, and some of them, the most impactful innovators just in the last 50 years and impacting so much more than even all of the history of agricultural and human development. So as a powerful reflection of this impact, since its inception 30 years ago, the World Food Prize has been awarding the World Food Prize to so many individuals—51 overall have received the Prize; 25 of those have been CGIAR scientists and research leaders. These are the heroes, the greatest modern heroes in food and agriculture. And they had some affection with the CGIAR in their careers. So the World Food Prize Foundation also recognizes promising young researchers, as you just saw, those who show real promise in their early careers as Borlaug Field Award recipients. And out of the ten Borlaug Field Award recipients we have...—and these are people receiving this award under the age of 40, \$10,000 award—that five of them have also been from CGIAR as researchers.

So it's a tremendous day here to celebrate together. Thank you all for coming, opening this in-person event that will now proceed through the rest of the week. And welcome to all of you who are online. We are so glad to continue the extent and reach of all of what we're able to do, doing it virtually. So we look forward to the rest of today, and I'd like to now introduce Kundhavi Kadiresan. She is the CGIAR's Managing Director for Global Engagement and Innovation, and she's going to deliver opening remarks.

Kundhavi Kadiresan

Managing Director for Global Engagement and Innovation

Thank you, Barbara. It's so great to see many of you we have seen only on here on Zoom calls and TEAM. It's such a different world just to see people.

So on behalf of the entire executive management team of CGIAR, I'd like to express my sincere gratitude to all of you and to Barbara and the team for the many years of collaboration.

Welcome to the celebration of 50 years of CGIAR. Our original mission, *To solve hunger*, is expanding to address wider 21st century challenges. Our mission now is the transformation of the world's food, land and water systems in a climate crisis, the biodiversity crisis as well.

Today we'll celebrate half a century of innovations driven by CGIAR science. Just to highlight the few solutions, such as high-yielding varieties of key staple crops, making a difference to food security and livelihood of millions of people worldwide, biofortification, adding nutritional value of foods that millions eat every day, insurance that offers compensation to smallholders when the rains don't come, and innovative approaches, helping to eradicate crop-destroying disease and pests. This list can go on and on.

Today we will also meet some of the Borlaug Ruan interns who are hosted by CGIAR Research Centers, and we will look forward to the future with an introduction today to the CGIAR portfolio of new initiators. A lot of exciting work has gone in the last few months, and I'm glad my colleague Claudia will speak of it more later. We will also recognize the laureates and awardees past and present, those individuals who have contributed exceptional innovation to advance human development through creative interventions in our food systems, continuing the legacy of Norman Borlaug.

Today we'll especially recognize and applaud this year's awardees. Elliott Dossou-Yovo is the 2021 recipient of the Award of Field Research and Application. What a joy and inspiration to hear that young man when he spoke about his work and the focus in terms of the farmers. Elliott is recognized for innovative water management systems, for resilient rice production. His research has led to greater income for thousands of rice farmers throughout West Africa and increase in regional food and nutrition security and enhanced agroecosystems. And we have Shakuntala Haraksingh Thilsted – very glad to have you and really an honor be a CGIAR scientist, recipient of the 2021 World Food Prize. Shakuntala is the first woman of Asian heritage to be awarded the World Food Prize – very proud; I come from Asia too. Her research identified small, indigenous fish as a powerful school of micronutrients. You know, I come from Southern India, a part of Kerala where fish has been a major source of nutrition, so I grew up with that kind of understanding. And to see that the work that you did and to be recognized globally for that, Shakuntala Haraksingh, this is indeed a real inspiration.

So offering life-changing benefits for children because of your work in the first thousand days, and nutrition-sensitive approaches that you have championed have led to improved diets for millions across Asia, Africa and the Pacific. So when we talk about nowadays food security – it's more the nutrition security. And I'm also glad that many countries, many governments are not talking about just feeding the people, they're talking about nutrition, and that comes a lot because of people like you who have contributed to the thinking. These awards and those that have gone before underscore the global recognition of the important contributions of CGIAR work.

2021 has been a momentous year. The global response to the ongoing pandemic reminds us of what can be achieved with collaboration but also of the scale of the ambition necessary to tackle complex global challenges. We have seen the U.N.S.S., the food systems highlight the importance of the investment in science and innovation. The communique that came out of that, highlights the importance of research and innovation. And we at CGIAR are extremely honored that this focus on research and innovation on food systems is getting in every big event and global community as a whole. It came out in the G7, it came out in the G20, so as a community, global community, the importance of research and innovation is getting a big place. The coming COP26 will be a pivotal moment for climate change – the food systems formally on the agenda. And the transformation of CGIAR that has continued a phase this year is nearly complete.

We look forward to working together with all of you to connect the dots between food systems, climate, policy and finance, for meaningful and lasting impact that's based in science and fueled by innovation. I look forward to some interesting and fruitful discussions. Thank you.

Barbara Stinson

And we all are so excited about this restructuring and the amazing results that are coming from the CGIAR as a result.

So we are now pleased, so pleased to continue this discussion. We have wonderful CGIAR colleagues in the room here with us and so many dialing in virtually. We asked the Honorable Victor Manuel Villalobos to join us. He was not able to quite be here yet today, but he did create this message.

Victor Manuel Villalobos

Secretary of Agriculture, Mexico

Greetings of this special celebration of the 50th anniversary of the CGIAR, the largest group of international agriculture centers in the world. As the Secretary of Agriculture of Mexico and as such having the honor to be ___ of the Honorary Chair of the CIMMYT Board of Trustees but also as a representative of the Ministers and Secretaries of Agriculture of the host and key countries of the CGIAR, it is an honor to be with you today.

For six decades Mexico is and will be the home of the CGIAR outstanding center, CIMMYT. An official bilateral relationship goes back to 1966 when CIMMYT was officially established as a result of the president's of Mexico visit to the Philippines at IRRI. This relationship is also based on one of the most successful and longstanding US/Mexico bilateral collaboration programs. These positive outcomes of these outstanding partnerships should never be underestimated. The CGIAR system grew up on that ___ world vision that changes billions of lives. Conscious of one CGIAR process, through my career I have learned that to drive change and transform our agrifood systems to more healthy and affordable diets, for these with plenary boundaries, we have to remember that we serve. And to serve, we must listen and show respect – listen to the farmers, listen to the stakeholders, and build change through consensus.

Another ___ to an organization is essential to address the globe's formidable challenges. CGIAR centers beneficiaries require entrepreneurs, innovation, and clear responses to today's crisis. The world's ___ robust and enduring agricultural research centers with a local food emphasis that place a primary role globally in the CGIAR by developing healthy, affordable diets as part of sustainable and resilient agrifood systems. Only by CGIAR systems, its founders, its centers, and its host governments working in close

partnerships with human respect, strengthening each other and taking into account the needs of our people and global citizens, we can achieve zero hunger Sustainable Development Goal.

We look forward to attracting through CIMMYT all the other innovation that CGIAR centers have to offer to Mexico and to offer countries in Central America. One of the most successful results of these bilateral relationships is the integrated approach to sustainable rural development and reliable and consistent strategy that, as partners, CIMMYT and Mexico have been the deciding, testing, implementing, assessing, and further improving over the past ten years. ____ crops for Mexico, which is an example not only how the national systems have to collaborate but also a model of the public, private and social sectors on how to engage in a common goal with successful, real, on-the-ground input.

The president of Mexico has asked me to lead the council of host countries, ministers and secretaries of agriculture of the One CGIAR, and I have been discussing with them and assessing the CGIAR properties. For us, it is clear that the One CGIAR has to deliver more efficiency, more impact, and more success while maintaining and increasing its research and output quality where needed. I believe that in their hands lies the possibility of changing the course of the history by improving the livelihood of hundreds of millions of farmers. Thank you very much, and best wishes to all on this special occasion.

Barbara Stinson

We're so grateful for Secretary Villalobos in delivering those remarks. We also have another guest who was unable to be here but wanted to commemorate this moment. The Global Affairs Canada Assistant Deputy Minister of Global Issues and Development, Peter MacDougall, sent along a message as well.

Peter MacDougall

Assistant Deputy Minister of Global Issues and Development and Global Affairs - Canada

Dear Colleagues:

My name is Peter MacDougall, Assistant Deputy Minister of Global Issues and Development and Global Affairs, Canada. I am honored to speak to you today on behalf of Canada's Minister of International Development. Canada congratulates the 2021 World Food Prize winner, Dr. Thilsted, and the 2021 winner of the Borlaug Field Award, Dr. Dossou-Yovo. Dr. Thilsted has pioneered research on nutrition-sensitive approaches to aquatic food systems. The application of that research has led to tangible improvements in nutrition and health of people in countries across Asia, Africa and the Pacific. Dr. Dossou-Yovo's work has been widely recognized for helping to improve water management, ____ rice production in the face of climate change. Canada thanks both of you for your achievements. The wellbeing of countless numbers of families and communities has improved, thanks to your pioneering and pragmatic research. It is no surprise to us that both of these 2021 prize winners are a part of the CGIAR family.

For 50 years, the CG system delivered critical research and innovation to address hunger. And now, in celebrating its 50th anniversary, CGIAR is undertaking ambitious reforms in adopting a systems approach to achieve its new mission to deliver science and innovation that advances the transformation of food, land and water systems in a climate crisis. As CGIAR celebrates this anniversary, we must all recognize that putting climate and the empowerment of women is at the heart of our research and innovation agenda. These are prerequisites for transformation that will result in food systems that are more sustainable, equitable and efficient.

Canada has been a proud partner of CGIAR since the very beginning in 1971. We look forward to continuing our deep and fruitful partnership as we work together to implement this mission to attain several SDGs and to Pioneer research to transform the way we feed ourselves. We know that science and innovation are absolutely critical to achieving the future of food that we want and to addressing hunger and poverty. We know this, because we have all seen the difference that research and innovation can make. In Canada, research and innovation has seen Canadian farmers double the value of their production over the past two decades, while stabilizing greenhouse gas emissions. We have also seen research from our prize winners today and from countless others in the CGIAR system transform practices and approaches on the ground and make real and lasting improvements to lives and livelihoods.

Canada is very pleased to see that this focus on climate and women is being taken at CGIAR as well as the growing recognition that the traditional knowledge of indigenous peoples can be just as important in fighting climate change as scientific knowledge. We hope to see many future CGIAR-affiliated researchers become World Food Prize and Borlaug Field Award winners in the years to come. But more importantly, we hope to continue to see CGIAR's research help pave the way to a sustainable food future. Thank you very much.

Barbara Stinson

We so appreciate those comments. It's great to hear from Canada. We now have a live guest with us who is able to join us. I'd like to welcome Rodger Voorhies. He is the president of Global Growth and Opportunity at the Bill & Melinda Gates Foundation. He is joining us remotely but live, so we're looking forward to hearing a few words. Roger.

Rodger Voorhies

President, Global Growth and Opportunity, Bill & Melinda Gates Foundation

... programs, and the reason's really simple. The CGIAR, the only institution in the world that consistently delivers high-quality impact to smallholder farmer producers. The achievements recognized in this year's World Food Prize and the award for Field Research are just the latest examples of the many contributions from the CGIAR. Dr. Thilsted, the winner of the World Food Prize, had the support she needed to explore the many benefits of raising small, local fish species. And with the CGIAR's strong network of partnerships, her breakthroughs are now providing higher incomes, better nutrition for local communities across Asia and Africa. And as we heard earlier, it's exciting to see Dr. Dossou-Yovo, who was encouraged to develop a low-cost approach to growing rice in regions of Africa where drought conditions are common. He also developed innovative ways to ensure his water management strategies were adopted by local rice farmers. This is CGIAR's unique value—the marriage of innovation with impact for sustainable, resilient, small-scale food production. The world needs this one-two punch now more than ever.

Climate change is already causing significant harm to smallholder farmers and livestock keepers. The effect on hunger and poverty will only get worse. For example, new research from the Foundation and the CGIAR show that by the end of the decade, 200 million people in Africa will be living in areas where global warming will cross the 2-degree C threshold. That's the point where we can expect significant harm to crops and livestock. Unless we act now to help farmers adapt, by 2050 that number could soar to as high as one billion. CGIAR researchers are already providing farmers in Africa and many other regions with the innovations they need to

overcome a wide range of climate threats. But climate change is moving rapidly. We are going to need more innovation in order to go beyond just keeping in pace or even falling backwards.

We will be working with the U.N. Climate Conference to rally local support for the CGIAR through new Agriculture Innovation Mission for Climate, or the AIM for C. AIM for C is responding to the fact that the world is significantly underinvested in agriculture adaptation. It's time to turbocharge efforts to address the specific challenges. New funding is needed for everything from basic research to what we are calling "innovation spreads." These are target investments to celebrate the work. CGIAR is arriving at its 50th anniversary. It's developed amazing capabilities, and that's why we're working with them at AIM for C. And the world is fortunate to have an institution like the CGIAR, and I'm so happy to celebrate its 50th birthday and capitalizing on its neat contributions as part of the World Food Prize this week. Thanks, thanks, Barbara.

Barbara Stinson

Thank you, Rodger. Thank you for joining us. Turbocharging investments in food systems – that sounds tremendous coming from this man.

Next we'd like to turn to a local representative. We have someone here with us in Des Moines. Jim Barnhart is the assistant administrator for the Bureau of Resilience and Food Security at the U.S. Agency for International Development. Please, come to the stage, and you are welcome.

Jim Barnhart

Assistant Administrator, Bureau of Resilience & Food Security, USAID

Wow! People. It is, it is. It's amazing. You're missing out here, Rodger. Happy Birthday, CGIAR. Happy 50th. 2021 just happens to be, for those of you that don't know, the 60th birthday of USAID. So celebrating decade birthdays together. And I know when President Kennedy launched USAID in October, I believe it was, of 2021, it was precisely these kinds of relationships creating with CGIAR organizations that he had in mind when he was envisioning the role of the U.S. Government in supporting these kinds of initiatives.

I only have one complaint. The U.S. Government is really good acronyms. In fact, I take special pride in someone throwing an acronym at me and trying to figure out what it means as quickly as possible. My complaint is that CGIAR is almost impossible to pronounce, and it's about 20 times in my speech; so I'm already going to apologize ahead of time for any blurring of the I and the A in the acronym. We could have done better, I think, in 1971.

But from the beginning and throughout our history at USAID we have sought to push innovation and science to develop and advance best practices in agricultural development. USAID partnered early in launching the Green Revolution. And in fact, I just learned this from Mike Michener, our Deputy Assistant Administrator just a couple weeks ago, that in fact in 1968 it was the USAID administrator, William Gaud, who coined the phrase "The Green Revolution."

And over that same period that Dr. Borlaug was pioneering new research and technology in agriculture, USAID had established new models of long-term, collaborative agriculture research in institution building with dozens of American universities. And in the process, we built and supported hundreds of local leaders in agriculture development who then became change

agents in their own communities. Even then, we understood that local capacity and local partnerships were mission-critical.

In 1971 USAID joined with other foreign assistance partners to form the CGIAR in a partnership to utilize the best science and solve problems facing hundreds of millions of smallholder farmers around the globe. And as a founding member and recognizing the absolutely fundamental critical role it plays, USAID has been one of the largest financial partners, providing an estimated \$100 million a year in funding throughout that period. These investments have paid off. CGIAR research is estimated to have lifted food production in developing countries by 7 to 8%. And in some most vulnerable areas, by much larger amounts.

In a recent Supporters of Agricultural Research study, found that CGIAR investments of roughly \$60 billion in present value terms has generated a benefit-to-cost ratio of 10 to 1 over the past five decades – and these benefits compound over time. Take a moment – 10 to 1 – right? And as someone who is responsible for expending U.S. Government/taxpayer resources, being able to pull out a 10 to 1 return on investment is astounding. And I think it's testament to the excellent work that the CGIAR has done over the years.

So we're proud of the success, and we're especially honored to add that USAID missions have been critical partners around the world in supporting the impactful work pioneered by this year's laureate, Dr. Thilsted. Dr. Thilsted's work underscores that these successes are ultimately human outcomes. I believe those same goals are reflected in Administrator Power – our new USAID administrator. Her ambitious aim to contribute to a 20% reduction in extreme poverty and child stunting in the areas where Feed the Future, the U.S. Whole-of-Government's efforts to advance nutrition and food security around the world.

So our work is about the future and building a stronger, more resilient world for the generations that follow. And typically when one turns 50, we take stock of the past and look to the future. Now, our work together to create One CGIAR reflects a mature recognition of the changes needed to meet our current 21st-century set of challenges and imperatives. I'm confident that, as we look towards 2030 and the Sustainable Development Goals, the CGIAR will play a critical role in achieving the progress we need.

Under the leadership of Administrator Power, three key messages are rising and driving a lot of the work that we do and that very much intersect with the work of our Feed the Future innovation labs, the CGIAR, and our research partners in general. First is *Equity and inclusion*. You mentioned that earlier in your comments, Barbara. If we are to build a truly resilient set of food systems, we need all partners at the table, including women, young people, marginalized populations, and indigenous people. And we not only need them at the table, we need them to be leading and guiding us in how we try to work in the areas in which they live. Too often we've had the perspective of the foreign expert who has the ideas, the solutions to their particular problems. We really need to set that aside. We need to move on, and we need to allow leadership roles to our local partners.

We also welcome the increased emphasis of partnerships that the CG has on building National Agriculture Research Systems, the NARES, that are critical to building and ensuring the sustainability of resilient and inclusive food systems. Strengthening partnerships between the CGIAR and national research organizations and other public and private partners in the

countries where we work together will accelerate poverty alleviation and boost nutritional outcomes in a sustainable manner.

Second key aspect that we are pushing as fast and as hard as we can is an improved and affordable diet. USAID will collaborate with the CGIAR and other partners to increase the affordability and availability of key nutrient-dense foods, such as fruits, vegetables and animal-source foods, including aquatic-based foods that are economic wins for smallholder farmers.

And lastly, the CGIAR and USAID, together we need to lead the way in meeting the challenge of climate change, especially where science matters in understanding the tradeoff, generating solutions and to tackle both agriculture and food security while conserving our natural resources and biodiversity. And as we think about food systems, it's critical that we all be willing to be a little bit uncomfortable, that we step outside of our silos; and if we're doing work on agriculture, we need to think of the nutrition aspects, we have to think about water, we have to think about climate—that's part of the systems approach, and I think it does put us all in the position of needing to take some risks in the way we think about how we work.

So from the earliest days of 1971, we have highly valued our partnership with the CGIAR, and we look forward to working together for another 50 years in funding groundbreaking research that will change billions of lives, delivering on the promise of better policy, effective seed systems, greater capacity among country partners, and vibrant private sector partnerships.

So again, happy birthday, and thank you.

Barbara Stinson

Thank you so much, Jim. So this celebration is a joint effort. This is the opportunity to share more about this partnership and recognition that's gone on for so many years. So we're not just going to boast 30 different laureate award winners and 5 BFAs that received their awards that have come through the CGIAR system. We want to show you some of these. So in the next set of video recordings you will see a quick tour through at least half, part of these winners, and then we'll hear from more folks and see the second half in a moment.

— VIDEO CLIPS —

Feeding the world has been a key challenge of the past 50 years as the world's population has continued to grow rapidly. CGIAR and partners have made a significant contribution, helping to ensure food and nutrition security for hundreds of millions of people. The work of CGIAR over decades has made a real difference from field to plate, transforming food systems the world over.

The World Food Prize Foundation has recognized the contributions of CGIAR scientists and their innovations to promote food security, nutrition and human and environmental health. CGIAR approaches 2030 and the Sustainable Development Goals with a focus on delivering science and innovation to transform the world's food systems in a climate crisis, improving nutrition, health and food security for all. Over 50 years, the work of CGIAR and partners has supported livelihoods and jobs throughout the world's food systems and lifted hundreds of millions of people out of poverty. Every dollar invested in CGIAR research has produced an estimated \$10 in benefits, making a real difference to the lives of some of the world's poorest producers and consumers. The World Food Prize Foundation has recognized the

contributions of numerous CGIAR scientists and their innovations to reduce poverty and promote livelihoods and jobs. CGIAR approaches 2030 and the Sustainable Development Goals with a focus on delivering science and innovation to transform the world's food systems in a climate crisis while promoting poverty reduction and better livelihoods and jobs for all.

Barbara Stinson

Thank you. And now it is my pleasure and my honor to welcome Shakuntala Haraksingh Thilsted. She's the Global Lead for Nutrition and Public Health at WorldFish, the CGIAR Center, and our 2021 World Food Prize Laureate.

Shakuntala Haraksingh Thilsted

2021 World Food Prize Laureate; Global Lead for Nutrition and Public Health, WorldFish

Thank you so much, Barbara, for welcoming me. Thank you so much for the audience speak at the CGIAR 50th anniversary. I'm part of that celebration as well. Important milestones such as these for ag organizations, as well as individuals, or for the chance to celebrate accomplishments, to draw lessons from the past, and to reflect upon key actions for the future. The purpose of CGIAR as the world's largest global network, working to solve humanity's greatest challenges throughout agriculture, science and innovation is as relevant now as it was 50 years ago.

The new CGIAR mission to accelerate the sustainable transformation of food, land and water systems towards nutritious diets that sustain the health of people and our planet is as promising as it is exciting. It opens up new opportunities for a broader and more inclusive research agenda that takes into account so many possibilities for growth and reinvention.

During the course of my career and as a world fish scientist in the CGIAR, my work at the intersection of nutrition, food and aquatic food systems has enabled me to examine the multiple benefits of diverse aquatic foods for sustainable development. It has pressed me to advocate for greater support and funding for research and innovation in aquatic food systems. It has compelled me to talk about the need to shift away from the limiting discourse of feeding a growing global population to towards that of nourishing billions of people, nations and our planet.

For decades the global agricultural research agenda as well as policies and agriculture, food and nutrition security, and even food aid has primarily focused on solutions related to staple crops and livestock. Historically, aquatic foods research has accounted for only 3 to 4% of the annual CGIAR budget but, however, has returned big gains across the Sustainable Development Goals. The world is finally waking up to the unmatched potential of aquatic foods, which is the fastest-growing food sector globally. Aquatic foods, which include plants, animals and microorganisms, are the closest thing we have to nature-based solution to the complex challenges of transforming our current system to one that is healthier, more sustainable and more equitable.

Research shows that with inclusive and sustainable management, we can increase the current supply of food from the ocean alone by six-fold. And this would contribute more than two thirds of the protein required to meet the nutritional needs of the growing global population.

The ___ small fish species, such as sardines and mollusk and anchovies, as well as the ___ and seaweeds are micronutrient powerhouses. They have ___ in production, have significantly lower impacts in environment compared to many food production systems on land. Moreover, consumption of diverse aquatic foods can help avert over 166 million micronutrient deficiencies worldwide. It can also improve the nutrition and health of women and children and at the same time prevent diet-related diseases in many low and middle-income countries.

This year the World Food Prize Foundation, among other financial actors, has embraced the green body of scientific evidence on aquatic foods once again. The scientific group of the U.N. Food Systems Summit 2021 named aquatic foods as one of the seven priorities to end hunger and malnutrition worldwide and protect our planet. Together with FAO and WorldFish, the U.N. Nutrition released the first-ever report on the role of aquatic foods in sustainable health diets, to inform and steer policy and investment and innovative solutions for improving nutrition in public health.

The High-Level Panel for a Sustainable Ocean Economy has issued a series of new policy papers on critical ocean and other aquatic systems solutions that benefit nature, people and the economy. And the recent blue foods assessment in partnership with Stanford University and Stockholm Resilience Center and the Efora delivers more compelling evidence of the growing role that aquatic foods must play in the shift towards healthy, equitable and sustainable food systems.

Looking ahead at the future for the next 50 years of the CGIAR, a sustainable food systems transformation will not be possible without due attention and investment given to aquatic food systems, alongside crops and livestock. To capture the full potential, including that of captive fisheries in aquaculture, we must prioritize higher up in the agenda in the new CGIAR in its structure and very importantly the donor commitments. The famous Danish philosopher, Soren Kierkegaard, I spent quite a lot of my time reading that once said, "If I were to wish for anything, I should not wish for wealth or power but for the passionate sense of potential – for the eye of which, ever young and ardent, sees the possibilities." My hope is that the new One CGIAR will go and reinvent itself by firmly embracing the policies that come from food from the water. Thank you so much, and happy birthday to us all.

Barbara Stinson

Thank you, thank you so much, Shakuntala. Many of you saw Elliott Dossou-Yovo, our 2021 Borlaug Field Award winner, give his remarks, but he also added just a couple of more minutes:

Elliott Dossou-Yovo

Good morning, good afternoon, good evening, everyone. My name is Elliott Dossou-Yovo. I've come ...specialist for agriculture, and I work for Africa rice. In based in Cote d'Ivoire in the Ivory Coast. First of all, I'd like to thank the World Food Prize Foundation and the CGIAR for providing me this platform to briefly present my work.

My research focused on improving rice productivity and production by providing Africans with rice-based nutrition options. Specifically, I investigated ___ technologies. It turned into a ___ in the context of climate change. Converted this ___ into important rice-based food systems while preserving biodiversity and ecosystem services. I also work on water-saving technologies to produce more food with less water and less greenhouse gas emission. And our irrigation system design to promote vegetable, legume and fish and to rice-based system. I use crop as special modeling, and I identify climate hotspots.

____ for climate-smart technologies in order to direct the technology and information services to the most ____ farmers. My research contributes to the action we are resilient agrifood systems. And I'm going to stay involved in the development of food initiatives. The first is market driven resilience, agri-food system. In the humans of Central and Western Africa ____ platform. Thank you very much for your attention.

Barbara Stinson

Isn't he so inspiring? So it's wonderful to hear from the African Continent. Now we're going to go back to our video and highlight the rest of our both laureates and Field Award winners.

– VIDEO –

The limited opportunities for women, youth and other marginalized groups prevent food systems from reaching their full potential, holding back entire societies.

Over the past 50 years, breakthrough CGIAR innovations have supported more inclusive food systems around the world by bringing marginalized voices to the fore and breaking down barriers to equality now and for future generations. The World Food Prize Foundation has recognized the contributions of CGIAR scientists and their innovations to support gender equity, youth and social inclusion. CGIAR approaches 2030 and Sustainable Development Goals with a focus on delivering science and innovation to transform the world's food systems in a climate crisis, while recognizing the important role of gender equality, youth and social inclusion. For 50 years CGIAR innovations and agriculture have reduced hunger and poverty for hundreds of millions of people, but new approaches are needed in the face of 21st-century challenges. In recent decades, CGIAR has made strides to transform food, land and water systems in the face of a global climate crisis. Climate-smart crops and agricultural practices developed through CGIAR research have helped to lower the emissions of food production while equipping farmers to use less water and become more resilient to climate shocks. The World Food Prize Foundation has recognized the outstanding contributions of CGIAR scientists and their innovations to support climate adaptation and mitigation to the important work of reinventing food systems in a climate crisis. CGIAR approaches 2030 with a focus on delivering science and innovation to transform the world's food systems in a climate crisis ensuring a sustainable and secure future for all.

Agriculture depends on a healthy environment, yet unsustainable farming practices have become a major contributor to biodiversity loss, environmental degradation, and greenhouse gases emissions. Over the past 50 years, CGIAR has advanced global understanding of the place of food production within broader ecosystems, recognizing that safeguarding biodiversity and the environment also sustains our future food supply. Through its gene banks, CGIAR works to conserve and increase the diversity of plant species that feed the world, holding more than 700,000 accessions in trust for the global community. Innovations in crop breeding and farm practices are further helping to transform food, land and water systems in a climate crisis. The World Food Prize Foundation has recognized the contributions of CGIAR scientists and their innovations to support environmental health and biodiversity and a better future for all.

CGIAR approaches 2030 and the Sustainable Development Goals with a focus on staying within planetary boundaries as it develops new research and innovations to promote environmental health and biodiversity by transforming food, land and water systems in a climate crisis.

Barbara Stinson

There you have it! I hope you enjoyed that tour through the 30 scientists. If you were counting, they were all there. Several are with us here this week, so we're so fortunate. Now I want to turn to another gem of the partnership between the World Food Prize Foundation and CGIAR, which is our Global Youth Partnerships and innovation that we do through internships. And the Borlaug-Ruan internship in particular will be featured. I want to introduce Keegan Kautzky. He is the World Food Prize Foundation Senior Director for Global Youth Programs and Partnerships.

Keegan Kautzky

World Food Prize Foundation Senior Director for Global Youth Programs and Partnerships.

In 1998, 23 years ago the World Food Prize Foundation and CGIAR partnered to create the Borlaug-Ruan International Internship Program to advance our shared mission to train the next generation of young leaders in the global effort to end hunger. Now, this partnership was the vision of Norman Borlaug, who saw that so much more effort was needed to empower and inspire promising students to pursue high-impact research careers in food, agriculture and nutrition and sustainable development. And over the past 23 years, 10 CGIAR centers have hosted 124 Borlaug-Ruan International interns at their headquarters and in over 15 countries. Now, this is in Mexico, in the Philippines, in Bangladesh, Ethiopia, Indonesia, Kenya, Peru, Malaysia, Taiwan, Egypt, Thailand, Nigeria, Uganda, India and Turkey. All over the world, high school students, college students, getting to work with incredible scientists on the issues that matter most.

Now, CIMMYT was the first CGIAR center to host Borlaug-Ruan interns in 1998. IRRI and ILRI joined the next year, and over the next decade CIPP, C4, ICRAF, WorldFish and ICRISAT all adopted the program. We were excited this year to have IITA and IMMI join and host their very first Borlaug Ruan interns and are looking for IFPRI, AfricaRice, acarda, and the Alliance of Biodiversity, and CIAT to begin hosting Borlaug interns as we now expand this strategic partnership and our shared programming to empower the next generation of food systems heroes and future World Food Prize laureates.

The program places high school and college-age students in two- to three-month internships in Asia, Africa, the Americas, Europe and the Middle East. But the last two years, in response to the COVID pandemic, we adapted and innovated those programs so that we could offer those same transformative experiences virtually, remotely, so that the students could complete them safely and socially distanced from their homes and schools. So for the last two years, from their bedroom desks and dining room tables, these high school and college students were able to conduct first-research and groundbreaking work with world-renown scientists and policymakers at the leading research and development organizations in the world. Even in the most challenging circumstances, we work together to deliver the research and the results needed to advance our food systems.

Now one of the bright, young women who participated in the program this summer wanted to share her unique experience.

Hi. My name is Hannah Fernstein. I'm a freshman at the Ohio State University in the United States. I spent my summer at the World Food Prize Foundation as a Borlaug Ruan intern at the International Maize and Wheat Improvement Center, also known as CIMMYT, in Mexico. Working with Dr. Salinas Adojo Jo on research to reduce postharvest loss among smallholder farmers in rural Mexico. Postharvest loss and food spoilage are a critical food security challenge in every country in the world and in rural Mexico can result in up to 40% of the food that is grown being lost before it even reaches the market or the consumer. Although I was unable to travel to Mexico this year due to the pandemic, my virtual internship was incredibly valuable. My mentor took the time to translate what he was doing in the field in Mexico into practical experiments that I could do safely and socially distanced, from my dorm room.

One of my practical exercises was to observe the spoilage of different grades with a high-moisture content. I tested different methods to dry the grain, using the sun and even salt from my university's cafeteria to evaluate moisture content and to demonstrate different practices that a smallholder farmer would use if

they didn't have access to an industrial dryer or a simple moisture meter. In the virtual environment, I was able to get firsthand experience working with scientists, extension workers and farmers in the field. This experience really changed my perspective, not just how to analyze and understand the problems they face but how we can effectively create and deliver solutions. I learned that you can have the best technology in the world; if you do not involve farmers in the process, you will not create a sustainable or effective solution. This experience inspired me to better understand my own food system and to rethink my role in them.

Keegan Kautzky

Now we have a very special guest with us. We have Jan Low, our 2016 World Food Prize laureate, who I'd like to invite up to share her experience; because Jan hosted Sanjana Moleti last summer in a virtual research internship experience focused on orange-fleshed sweet potato and ways that it could be integrated into East African street food markets. So I'd like Jan, if you want to share your perspective and experience.

Jan Low

2016 World Food Prize Laureate

Great to be here today with everybody. I know one of the major reasons I had success in my own career was my opportunities to undertake field research in Africa during my bachelor's, my master's and my dissertation research, as well as being a Peace Corps volunteer in fisheries in Zaire – great opportunities. And I think that gave me a commitment to say – how do we get these opportunities to others, to get the technical and language skills they need to be able to progress in their career choices in global development? And I think many other CGIAR scientists are equally committed to that.

And when looking for these opportunities, the Borlaug name comes up quite a bit. First, I'd like to mention also the Borlaug Fellowships. Many of our international potato center sign junior African scientists and our national counterparts have been able to do short-term research in American universities, and they've gained so much from that experience. And then on the other side, Borlaug comes again – the Borlaug-Ruan International Internships. And usually at the International Potato Center, historically they've always gone to Lima, Peru, our headquarters, because we have diverse labs there, and of course it's lovely to do research in the Andes.

But then the pandemic hit, and we were searching for – what is a doable topic in this time of the pandemic? And we have learned... I got to work with the lovely Sanjata Moleti, a sophomore at the University of Minnesota, who's very interested in global health and nutrition. And truly it took a team, because this research was based in Kampala, Ganda, looking at a Rolex, a very interesting Japiti flatbread where you roll up an egg inside. And we want to replace 30% of the wheat flour with the orange-flesh sweet potato puree to improve markets for local farmers and make a healthier snack field.

So a feasibility study. Now, how do you do a feasibility study from Minnesota? Well, Sanjata had to get up at 6 and 6:30 many mornings during her summer because we had to do all the survey design with colleagues in Uganda and the enumerators that are identified for students and learn about the cultural practices surrounding the Rolex production. And often these meetings would last two to three to four hours to do that survey design. She had to learn to learn open data kit, and I thank my colleagues, Fred Grant, and Luko Wanjohi for contributing to this team effort to make this happen. And then we learned the usual problems that happen

with field research, but this time it was because of COVID. The first, after training for a week and a half, the enumerators were truly... After the first day out in the field, they quit because their parents were fearing they would be infected with COVID. So we had to go through the identification and training process of all the enumerators again, and then one of the enumerators in that process, father got COVID and had to go into quarantine. So we kept on going, and the World Food Prize was most understanding that the report would be a little late because the data collection took a month and a half longer than expected. But she ended up with an excellent study, exposure to doing data analysis. And I think it shows that we can adapt, we can learn to make sure we continue to strengthen the capacity of our up and coming young people. And I think we are committed in the One CGIAR to help expand this collaboration with the Borlaug-Ruan International Internships. Thank you.

Keegan Kautzky

Thank you, Jan, and special thanks to all of the CGIAR professionals who make these programs and experiences possible. We are honored to have so many of our close partners here with us today and also virtually tuning in and participating around the world. So from the World Food Prize Foundation we thank the hundreds of scientists and CGIAR staff who volunteer their time to mentor and train these young researchers. And we thank all of the support staff – the interpreters, the drivers, the administrative and the field staff that make it possible. But most importantly we thank the farmers and their families who welcome these young researchers into their fields and into their homes to share their incredible knowledge and experience. Thank you.

Barbara Stinson

So we're running a little bit over, but we're going to continue, because, not only do we have an opportunity today to reflect on all that's been done over the last 50 years, at least part of it, we have a chance also to look forward, look ahead to understand the important work still in front of us. CGIAR's managing director, Claudia Sadoff, coming from working in research delivery and impact, is here to share with us some of the ambitious plans that CGIAR has in store for us for the next 50 years.

Claudia Sadoff

Thank you so much, Barbara, for the introduction, but thank you for the event. It really tremendous to be here, distinguished guests, World Food Prize laureates, CGIAR family and friends, and really partners, all. It's such an exciting opportunity to celebrate what has been done. It's such a proud look-back at history at what CGIAR scientists have accomplished and such an exciting opportunity to look forward to what more we can do together.

So let me take this brief opportunity to present a short introduction to CGIAR's research portfolio. On Friday my colleagues, our new global directors, science directors at CGIAR, doctors, Johan Swinnen, Martin Kropff and Barbara Wells will provide a much more detailed overview of the work that we have planned.

But there really are a series of complex global challenges that are setting the stage for CGIAR's next act as we move forward. Progress toward zero hunger has stalled. The advancements of gender equity have met recent setbacks. Many youth face challenges finding employment,

particularly in low-income countries. Food production is at risk from climate change, while also being a contributor to emissions, to biodiversity loss and to water scarcity.

CGIAR's mission is defined in our new 2030 Research and Innovations Strategic as therefore to deliver science and innovation but advance the transformation of food, land and water systems in a climate crisis. CGIAR's new Research and Innovation portfolio focuses on the specific research that will deliver on these high-level aims defined within the strategy. It builds on the 50 years' track record that we are celebrating here today, but it also breaks new ground in areas that address today's systematic challenges. The portfolio leverages capacity across the entire One CGIAR but strongly builds on our work with the extraordinary network of partners. The 32 initiatives, each three years in length, will be launched through the 2022 to 2024 period and is organized around action areas, which correspond to our new science groups. All of them will seek to achieve results across five impact areas that align with the SDG, and this is our contribution to the Sustainable Development Goals, and it'll be financed through pooled funding.

So we've developed a portfolio that will be demand-led, that will respond to local and regional needs. But it's aimed to address the key global issues while still remaining systems oriented, driving benefits across these multiple impact areas and leveraging synergies while at the same time managing inevitable tradeoffs. Again, it builds on the capabilities that we have developed over 50 years but in a more unified management structure, more efficient and more impactful.

And, finally, it's designed around solid theories of change that we can easily align for the purpose of measurement and evaluation of learning. Each initiative will be placed under a primary action area which corresponds to a science group and acting as a management unit to bring together the scientists from across the system to move the needles in these impact area spaces. All will seek to achieve results across the five impact areas that are identified in the strategy, and these are more ambitious and complete impact areas than we have focused on before.

These action areas begin with systems transformation where we're looking at food systems driving sustainable land, water use, livelihoods and healthy diets. Resilient agrifood systems is the second action area where research will focus farming and food supply for resilient, sustainable diets for livelihoods and the environment. And, finally, in genetic innovation, which is really the traditional heartland of CGIAR effort, including gene banks, crop breeding and seed systems.

The science groups will contribute critical science, knowledge and tools toward achieving collective global targets for food, land and water systems across the five SDG-related impact areas. These impact areas are: First, nutrition, health and food security; second, poverty reduction livelihoods and jobs; third, gender equality, youth and social inclusion; fourth, climate adaptation and mitigation; and fifth, environmental health and biodiversity.

This event is the celebration of 50 years of innovation driven by science and by partnerships. So we're also celebrating and offering our immense gratitude to all of our partners, these partnerships that have truly been a driving force behind the advances that have been made to fight hunger – and it's these partnerships that give us all the power to achieve our goals.

Today we face a more complex set of challenges than we could have ever imagined in 1971 when the CGIAR was born. This complexity has given us the impetus for change in and reform,

to drive a transformation of CGIAR that will in turn help us to drive a transformation of the way that we produce and consume food. We've heard that a doubling of research and innovation is required to sustainably end hunger, eradicate poverty and fight climate change by 2030. With the level of ambition that we've been hearing on a global scale and this week at the World Food Prize celebration, I have every confidence that together we will achieve this goal. Thank you so much for celebrating with us.

Barbara Stinson

Thank you, Claudia. Well, thank you all so much. Thank you for sharing your research priorities. It's truly amazing to have a look into the portfolio ahead. We'll see more about that especially coming on Friday.

It's clear that the CGIAR will remain a powerful generator of innovation for the next 50 years as well. So, even with so much accomplished, so much to celebrate, we know that millions and millions of people remain hungry and malnourished. We have so much more work to do in the next nine years of the Decade of Action. So we remain committed. We remain partners and seeing the future forward.

I want to welcome all of you to join us at 9 o'clock in the morning. We return. We're closed for the day, and tomorrow we start with a roundtable on Gender Equity and Equitable Livelihoods. Be ready to jump on Whova, share your thoughts on #FoodPrize21, and thank you for a wonderful day.
