

**ROUNDTABLE #4**

**RECONSTRUCTING EQUITY AND ACCESS IN FOOD SYSTEMS**

**Moderator: Barbara Stinson**

October 16, 2020 - 11:00-12:30 A.M.

*Panel Members*

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<b>Catherine Bertini</b>	Distinguished Fellow, Chicago Council on Global Affairs; World Food Prize Laureate 2003
<b>Stefan Caspari</b>	Senior Vice President and General Manager, Grain & Protein, AGCO
<b>Marie Haga</b>	Associate Vice-President of the External Relations and Governance Department International Fund for Agricultural Development (IFAD)
<b>Dr. Edward Mabaya</b>	Senior Research Associate, Cornell University
<b>Ruramiso Mashumba</b>	Chief Executive Officer, Mnandi Africa
<b>Xavier Morgan</b>	Territory Manager & Co-Chair, Inspired Giving Campaign, Hormel Foods Corporation
<b>Dr. Raj S. Paroda</b>	Chairman, Trust for Advancement of Agricultural Sciences (TAAS)
<b>Dr. Claudia Sadoff</b>	Managing Director, Research Delivery and Impact, and Executive Management Team Convener, CGIAR System Organization
<b>Janie Simms-Hipp</b>	Chief Executive Officer, Native American Agriculture Fund
<b>Dr. Roy Steiner</b>	Senior Vice President, Food Initiative, The Rockefeller Foundation
<b>Caitlin Welsh</b>	Director of the Global Food Security Program, Center for Strategic and International Studies

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*Panel Moderator*

**Barbara Stinson**

President - World Food Prize Foundation

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Welcome to our final roundtable discussion of the International Borlaug Dialogue of 2020 – “Reconstructing Equity and Access in Food Systems.” This discussion is so important. Disruptions to the food systems have been disproportionate under the impacts of COVID, and they’re disproportionate year round at all times for under-resourced communities. There are systemic barriers to accessing inputs, capital, and all kinds of information and technology needed. These create deep inequities that impact livelihoods, culture and overall food sovereignty – something we hear a lot about now. This roundtable is going to explore these impacts, like the shocks of COVID-19, for the most vulnerable people in our food system. And we’re going to look at some of the systemic changes needed to increase access and build equity.

So first, I want to introduce you to our speakers for today. We have a tremendous array of 12 individuals coming forth for our dialogue. First, Dr. Jim Barnhart. Jim is Deputy Coordinator for Development for Feed the Future. He's the Assistant to the Administrator for the Bureau of Resilience and Food Security at USAID. Welcome, Jim. Catherine Bertini is the Distinguished Fellow, Chicago Council on Global Affairs. She's also a World Food Prize laureate from 2003. Welcome, Catherine. Stefan Caspari is a Senior Vice President and General Manager for Grain & Protein and AGCO Industrial Company. Welcome, Stefan. Marie Haga is joining us. She's the new Associate Vice President of the External Relations and Governance Department at IFAD. And IFAD is the organization where we heard from the president, Gilbert Houngbo, in a keynote. So thank you for joining us, Marie. Dr. Ed Mabaya. Ed is a Senior Research Associate at Cornell University and formerly with the African Development Bank. Ed, welcome. Ruramiso Mashumba. Ruramiso is Chief Executive Officer, Mnandi Africa and farmer organization from Zimbabwe, also part of the Global Farmer Network. Welcome, Ruramiso. Xavier Morgan is a Territory Manager for Hormel Foods Corporation and Co-chair of Inspired Giving Campaign and really here as a member of our young professionals joining this roundtable. Xavier, welcome. Dr. Raj Paroda is Chair of the Trust for Advancement of Agricultural Sciences. Welcome, Raj. Dr. Claudia Sadoff. Claudia is Managing Director for Research Delivery and Impact and the Executive Management Team Convener for the new CG, the One CG System Organization. Welcome, Claudia. Janie Simms-Hipp is here as CEO of the Native American Agriculture Fund. Hi, Janie. Dr. Roy Steiner, Senior Vice President, the Food Initiative, The Rockefeller Foundation. And Caitlin Welsh is Director of the Global Food Security Program at CSIS. Welcome, Caitlin.

## Q&A

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Barbara      So we're going to start with an initial question. We have a round of questions with individual responses and then hopefully a little time for conversation about each question. So talking about resilience in the food system and particularly supporting equity and access, let's talk about the risk transference that goes on in food system shocks. These disproportionately impact our under-resourced communities, including farmers and wage earners, frontline workers and many others. How does this risk transfer, and what can we do? Can we start with you, Marie?

Marie          Absolutely, thank you, and good afternoon, good morning or good evening, wherever you're at. When disruptions to food systems occur, small-producing farmers are generally heavily affected. And particularly among them, women, youth, Indigenous people, and I could also mention persons with disabilities. This is actually relevant for all of us, because two and a half billion people live on 500,000 small farms that have agriculture as their lifeline. And they produce 50%, at least, of the calories that we eat globally.

Many of these producers live in poverty, more than 60%, in fact. If they stop producing food, we are all in trouble. So why are they hit particularly hard? Well, if we look at the situation right now with COVID dominating our lives, and many small-producing farmers are particularly hard hit because of poor health systems and lack of clean water in rural areas, they are also, many of them, relatively old and therefore are more at risk.

Lots of these small-scale farmers are, as I said, poor, and they have limited assets and savings to cope with disruptions to income, disruptions that unavoidably will happen. If it is worth noticing that small-producing farmers' households increasingly have diverse sources of income, including laboring and remittances. And these income streams will be at risk, which means that farmers will have insufficient income to cover basic food and other needs and also less to invest in farming inputs.

Small-scale farmers are also highly dependent on intermediaries for marketing, supplies and also credit. If this network of food system business is disrupted, there is significant flow on effects for small-scale farmers in terms of their input and inability to deliver to the market. So that's my last point on that. On average, small-scale farmers are net purchasers of food, believe it or not. So any impact from food on food prices and also the negative will impact them while increased food prices will not flow back to small-scale producers of any significant degree. That's the way the world is, unfortunately.

So this sounds bleak, but it is possible to do something about this. Economic growth in agriculture is two to three times more effective at reducing poverty and food insecurity than growth generated in other sectors.

Given the right tools, small-producing farmers can help us avoid food shocks. They can help us fight hunger, and they can help us reduce greenhouse emissions. Giving them this opportunity will serve us all. So in order to give them the right tools, we need to listen to them. This is why we at IFAD are very concerned that the process for the Food Systems Summit next year is inclusive. We need to listen to the voices of the small producers and particularly those of women, youth, and Indigenous people. We are all dependent on the small-producing farmers, but they also need our support. And rich countries should step up. It will serve us all. Thank you very much.

Barbara Thank you. Ed, we're going to go to you next, I believe, for a bit more from an Africa perspective, especially. You're on mute.

Ed Sorry about that. Thank you very much, Barbara. Happy World Food Day to all of you. At the risk of sounding redundant, let me start by explaining why at-risk transference from food system shocks disproportionately impacts under-resourced \_\_\_ communities.

See, it takes many resources to build resilience against any type of shocks. Poor people, by definition, have limited resources, and many of them live from hand to mouth. Thus, when any shock takes place, be it civil unrest, extreme weather, a locust invasion, fall armyworm or even COVID-19 pandemic, under-resourced communities always bear the brunt of the burden, regardless of the origin of the shocks. There's an old African saying that goes, *When two elephants fight, it is the grass that always suffers.*

I was a manager in the African Development Bank when COVID-19 was declared a global pandemic in April of this year. Beyond the immediate efforts to contain the pandemic from a public health standpoint, the second highest priority by almost all African governments was ensuring that vulnerable communities would not

starve. I was part of the team at the African Development Bank that developed the Feed Africa Response, the COVID-19 strategy that sought to build resilience, sustainability, and self-sufficiency in food production and distribution. And to minimize the COVID-19-related disruptions brought to agricultural value chains.

Fortunately, the death toll from COVID-19 pandemic has been relatively low in Africa up to now. Unfortunately, however, far more people, especially poor women, children, farm workers and other vulnerable populations are more likely to die of the hunger pandemic.

Here's a few facts about hunger in Africa. Before COVID-19 hit, one in five people in Sub-Saharan Africa were already hungry. As we speak today, an estimated 67,000 children had the risk of dying from extreme hunger across Sub-Saharan Africa before the end of this year. By 2030, it is predicted that 433 million people will be undernourished in Africa. These numbers are unacceptable, and they should keep us awake every night.

Systemic changes are needed to increase food access and build equity. Thank you.

Barbara Thank you, Ed. Jim, you've been working on these issues. This is USAID's prime mission. Tell us from your perspective.

Jim Thank you very much, Barbara. It's an honor to be joining you, and congratulations on an incredible week. I've been so impressed throughout. I've learned a lot, and I've been inspired. Particularly, the laureate event yesterday was wonderful.

Anyway, sorry. Yes, so USAID, how do we... Marie and Ed laid out a very clear and somewhat bleak picture of what we're facing right now in terms of COVID-19, the disproportionate effect it is having on disadvantaged communities, the gender divide, etc. So what do we do? At USAID we were thinking on this. We're trying to apply ten years of Feed the Future's experience, lessons learned in the field. And it's about acting, legislating and programming.

And so, to help alleviate poverty and gender inequality, particularly, in this critical window of time, I want to highlight a couple of key approaches that the Feed the Future initiative is pursuing.

Point one – We're focusing on the entire food system. And in doing so, we're making sure food systems center on the needs of the poor and marginalized groups. Secondly, we're ensuring that marginalized groups are involved in policy decision-making – and that's critical – being a part of the decisions that are being made at the local, regional and national level.

So on the first point, we want to address both the availability and affordability of good food, and we can open up opportunities for low-income and marginalized groups – strong value chains for vegetables, dairy and other nutritious foods, offer good employment, leading to stable income and economic opportunity. They also support affordable quality diets for the poor. We are seeing some very serious numbers in terms of malnutrition around the world in this COVID pandemic. And because women are critical change agents and make important economic decisions

in areas where we work, we strive to unlock the potential for them for the benefit of the entire food system.

So, quickly, a couple weeks ago we announced a one-million-dollar program post-COVID-19 to address small and medium enterprises in Africa, Sub-Saharan Africa that are trying to focus on supporting SMEs that are really struggling right now. One of those companies, RealFruit in Nigeria – it's founded by Affiong Williams. We've been working with her for some time. As part of her business, we've been trying to expand and help her grow operations during and after COVID with a focus on sourcing smallholder farmers. So as her business is able to stay afloat, Affiong is not just creating options for herself, but she's also creating opportunities for her community in this incredibly difficult time.

And I know I'm running out of time, so let me just jump to the second piece. We need to bring in marginalized communities at the local level into the decision-making. An example I have, a program that we're doing right now in Ghana is making sure local leaders, particularly at the village level, recognize the important factors of women as those smallholder farmers, in SMEs, and adjusting laws accordingly. And we're already seeing some effects on that in terms of making sure that women have an opportunity to not just survive but thrive during this period.

I'll stop there.

Barbara It'll be great to hear more about that as we proceed, Jim – a great example. Others that would like to respond to this question. You may have further thoughts. Janie.

Janie I'll just jump in here very quickly. A young native leader just recently was discussing this entire issue with me, and he commented that what COVID has really brought about for many native communities in the U.S. is a resurgence in traditional food system knowledge at a moment's notice. Quickly, a rebuilding of hope and self-reliance but really an opportunity to rethink, refocus, recover, rebuild, and reclaim our food systems.

And what we are trying to do at the Fund is really focus on access to capital, infrastructure development, and some of those key tools that can really help us move past and through the immediate effects of COVID and really build a better food system globally at this point.

Barbara That's so great to hear, and you're working with the Native American Agriculture Fund, and with so many tribes, to hear that there are those positive steps, those silver linings, if you will, it means so much. And people stepping forward into that, that's wonderful. Catherine, did you have a thought?

Catherine Yes. I just want to congratulate Jim for not only the emphasis on the most vulnerable but the emphasis on women, and in particular, making sure community leaders know that you want to hear from women. Thank you.

Barbara Thank you. Raj?

Raj To absorb food system shocks, we certainly will need access to healthy and nutritious food. And access is to be considered in three dimensions – physical,

economic, and also ecological. I think COVID-19 has brought upfront the importance of access to local food systems, and for that, almost 200 eminent people from all around the world, including you, Barbara, we have written to the U.N. and G20 an open letter asking for the concerted, proactive action on the ground to avoid possible disruption of food supply chains, and alert national governments to put, actually start using a place to provide food and nutritional security to their people.

Barbara Yes, a tremendous call to action early in the COVID period. Shall we move on? Xavier, go ahead.

Xavier Oh, we can move on if we need.

Barbara No, no. Go ahead.

Xavier I just wanted to thank you for the opportunity to tune in on this question when we were talking about risk transference and who it impacts. I would say one thing that is very important to mention and acknowledge is, you know, food deserts, you know, for me being from the city of Chicago, I think it's important to acknowledge that food deserts exist, not only in inner cities but in rural communities. And food insecurity is a major issue around the world. Data shows that 23.5 million people are currently living in a food desert. Access to fresh and nutrient-rich food is a fundamental need for life, and everybody should have access and an advantage to that. Me, coming from the Chicago Public School System, the free and reduced lunch programs play a large role in ensuring socioeconomically disadvantaged youth have the access to that meal. And a lot of people don't realize that sometimes that meal at school might be the only full meal that that student has access to when they go home. So systemic and structural racism, such as redlining and stereotypes, also contribute to the persistence of food deserts. And that it's very important to bring that up as well.

Barbara And, Xavier, if you don't mind, just say for those listening in that may not know – tell us what a food desert is.

Xavier Yeah, so a food desert—depending on which scholar, what you're reading—basically a food desert is an area, a geographical area, where there is not access, direct access to fresh, plentiful and nutrient-clean food. So, food deserts exist not only in inner cities – and that's a big misconception that a lot of people think only in cities – but they exist in rural areas as well. And in food desert geographical areas, those people usually are eating foods that are not healthy and that may come from a fast food institution or even corner stores or corner grocery stores, which don't always serve the fresh produce and that clean food, nutrient, clean foods that people need.

Barbara It's just such a compelling terminology. You can be in the middle of an urban area and in a food desert.

Xavier Right.

Barbara Okay, let's move on. Did anybody else have something? Move on to our next question. So, we want to talk a little bit about the political will and commitment

that it takes in our institutions, decision-making policies, etc., to really move forward towards a more equitable and accessible food system. So we're going to hear from several of you here and hopefully with some examples of really what are examples where it's working? Catherine, can you get us started?

Catherine Sure. Thank you. You know, I think first what everyone's done wherever possible is to extend and enhance the actions that are already being undertaken, and that's of course, critically important whether it's in the U.S. or elsewhere. Second, we could do a better job – and when I say “we,” I'm talking about the people with the political will and people managing – helping to pivot on the basics of the needs.

There are a couple that were just mentioned already. For instance, Xavier talked about how important the school lunch program is, and it's true not only here but all around the world, as the Global Child Nutrition Foundation knows, because they do this kind of work. But when the children are out of school, then what. So, in the U.S. I think many districts have figured out how to get food to students, but in a lot of other countries people haven't figured that out yet. So, that's one way I think the donors and other governments can help provide alternatives as countries pivot to try to figure out how to still feed children even if schools are closed.

Then, there's the issue that people talked before about perishables and farmers. When perishables rot in the field, how quickly can donors and others move in order to do something about that, in order to buy from smallholder farmers their perishable goods or their milk, for instance, from dairy farmers and be able to then move that into the system, which then means that there may be some organizations that need to be created, community-based food banks, for instance. And there's a big movement for food banks around the world. In some of the countries in the north, we're used to this, but there are a lot of food banks in Latin America, some growing needs and organizations in Africa and Asia where those perishables can be quickly moved so that distribution could work. That's an important issue as well and I think an important action that could be undertaken.

And then as was mentioned, I think, by Xavier, we have the issue of is the food quality food? Is it the right kind of food that people should be eating. So that's when we need to look at organizations like GAIN, which the laureate, Lawrence Haddad, heads, and say – how can we take the kind of information that GAIN has and get it to inner cities and get it to rural areas so even people growing food know actually what are the kinds of food that they should eat. But some of these kinds of things need more resources, and they need resources from donor governments and others to be helpful.

And then two more points. One is on community support. Jim talked about this from a USAID perspective. Listening to the leaders in the community is absolutely critical, again domestic or international, wherever we are. I know in my own little rural county called Cortland County, there's a group called SevenValliesHealth.org, and they've got an amazing food system set up just for the county, and we need more of those kinds of system that can be set by the county, by the village, by the state or by the country.

Then, finally, funding. What can we do about funding? Every country's got to deal with their own needs about COVID, but what can we do about helping others?

Again, the Global Food Banking Network increased its funding from 6.5 million last year to over 20 million just in the first six months of this year, and that was mostly because of private sector contributions. So, I think we shouldn't limit our discussion only to talking about what the governments can do, but actually a private sector could be extremely involved.

And then if you permit me, as you mentioned, Barbara, I was laureate in 2003, and my prize money went to a trust fund for girls' education. And on World Food Day every year and on International Women's Day every year, we announce organizations that are going to receive grants from this group. So, I'm really happy that the WPUA announced today that a group in India called Her Future Coalition, which helps girls who are at risk or who have been trafficked or abused in gender-based violence, it helps them with housing and education. And also a program in Bangladesh called "Speak Up for the Poor," and in this case, they work in 30 villages to try to convince parents to keep their girls and school and don't marry them off so early. So, I'm really pleased that the World Food Prize is able to help some of the most vulnerable in a different way. Thank you.

Barbara Thank you for that. I'm so glad to hear about those announcements in both of those countries. And advancing young women to have education in Bangladesh, this is our Borlaug Field Award winner, which she benefited from at 31 years old – allowed not to get married.

Catherine Yes.

Barbara So thank you for all of that. Caitlin Welsh, you're coming in from Washington, DC, but connected around the world with CSIS. Give us some of our perspective on the short-term and the long-term needs.

Caitlin Thank you, Barbara, and Happy World Food Day. I'll speak from my perspective at CSIS but also my time in U.S. government. I'd like to take the prompt a few different ways.

First of all, I'd like to talk about political will and commitment at the national and local levels. I do think we're living through a food security crisis today, and I think that today's crisis is the next major reference point for the global food security community after the '07-'08 crisis. And following that crisis, global political will was historic, and it resulted in tangible improvements in people's lives. I thought that political will at the time was contagious with global commitments by G8 and G20, building on and encouraging further commitments from low- and middle-income countries; and also we saw that at the time investments, they can beget further investments. So, at the time, financing by global donors encouraged investments from developing countries, NGOs called for accountability; they committed their own funding. Everybody stepped up. So, at that time, in the last crisis, political will and commitments and the follow-on investments resulted in better food security outcomes for the most vulnerable.

But, when it comes to the question about how do these changes in political will and commitment make institutions' decisions and policies applicable, I'd like to talk about how these changes in political will can make outcomes more equitable. And I want to talk about what this can mean for the crisis we're living through.



So, it's my hope that in response to the crisis we're living through today, that we'll see a resurgence of political will and commitment and investments in response to today's crisis. But when this happens, it will take an honest look at today's challenges and design programs and policies that reflect these challenges. And as we've heard so far, today's crisis is not the same as the crisis in '07-08. Causes are different of food insecurity, demographics have shifted, economies have evolved, and COVID-19 is affecting people working across food systems. I was really encouraged by what I heard Jim Barnhart say about Feed the Future working across food systems. And in developing countries, it's not just smallholder farmers who are affected, it's truck drivers, it's shop owners, it's the millions of people who rely on markets who are affected.

So, I think that in response to today's crisis in some cases it's going to mean doubling down on existing investment, and in other cases it's going to require completely new energy, new and creative responses. Also, picking up on what Catherine said, I really like just the idea of doubling down in some cases and also pivoting in other cases. Happy to build on this in a few minutes.

Barbara Thank you, thank you for that. Roy Steiner, Rockefeller Foundation, tell us about the impact of institutions like yours on effecting equity and access – so much work you're doing.

Roy Well, yeah, I wanted to follow up on Caitlin and Catherine.

Barbara Great.

Roy Your point that... You know, COVID, as many people have said, is the great revealer of inequity that's always, always been there. But it's at an extent that we just cannot ignore it anymore. And we shouldn't be thinking about going back to normal. Normal was inequitable. Normal was not fair. Normal was not a world that any of us really want.

And so I think too often, as we're thinking about how to create a more equitable system, there is a tendency to think incrementally versus the more dramatic shifts that we need. And there's a little bit of moving some deck chairs on that Titanic. We need to shift the entire tanker, right? The ship has to go in a different direction, because we're gonna crash, and our food system is going to destroy our environment. Our food system is going to destroy our culture. Our food system is going to destroy our health. It is, in fact, bankrupting our healthcare system. And that has been revealed, I think. You know, 76% of all the deaths from COVID were the result of an underlying diet-related condition. Alright, so the way we're eating exacerbates the impact of a COVID-type response.

I think from the philanthropic point of view, it is our role, hopefully, to kind of speak to the power, bring people together; because it's going to take all of us to be able to shift, to turn that ship in the right direction. This is a very hard thing to do because we have to fundamentally change everything from subsidies to fund on-the-ground behaviors.

And there are two things that we're currently thinking a lot about. The whole concept of true cost accounting, and what is our food really costing us, and what

are the implications of the choices we're making. When you think about it, COVID started as a result of a meal choice. That's probably the most expensive meal humanity, a human being, has ever eaten, if you take in the true cost accounting. But I mean I think that way of thinking requires you to understand the system and the true expenses and externalities and all of that. And we're at a point where we just can't ignore that anymore. We are truly interdependent.

The other thing I want to just leave you with is, I think the whole issue of equity and specifically racial equity, is another issue we can't walk back from. The fact that COVID has had such a disproportionate effect on people of color requires us, I think, to operate in very different ways. And what I'm suggesting here is, you know, a lot of traditional types of grant-making, etc., we just can't continue doing it that way. We have to create and enable empowered communities who can make decisions for themselves and who can do the kind of research and transformation that's required.

So I know my time's up, so I'll hand it back to you, Barbara.

Barbara Thank you. Great, great insights and contributions. Others who want to respond to this question especially. There's a few hands. Okay, and then Marie.

Ed Yes, let me just add here that, beyond the question of political commitment, there is still the issue of what is the best allocation of resources. Where do we get the best bang for our money? And as we're making these decisions, we have to really try forgetting the actionable intelligence that is often lacking in this field of agricultural development. I must confess that I have been getting a case of data envy when I see all those graphics about COVID that you updated every day. We see them on TV. When it comes to agriculture, I just ask a simple question like – how much maize is there in the DRC? The best statistics you might get are from two or three years ago. So there is a call here to research institutions, academia, places like where I am with Cornell Global Development. But we need much more actionable intelligence that can inform governments and policymakers and the philanthropics for them to get the best bang they can get out of the allocation of their different resources. So we need more research, more real-time data to inform those key decisions. Thank you.

Barbara And we all hear so much about the data and the information, the access that's needed, the disproportionate impacts of not having access to that information for the example you gave specifically. And I know there's a lot of initiatives going on with this regard, so I want to give a chance for those. But, Marie, you had a point.

Marie And let me build on what Roy Steiner just said. I think it is just so important that we accept, realize that we have a completely broken food system. There's just so much that needs to be done. We need to produce more nutritious food, it has to be done within planetary boundaries, which means that we need to use less land, less water, less pesticides, less fertilizer. You know, this is just extremely, extremely challenging. And I think we need to wake up to this reality, and I think we need to wake up to the reality that the food system can be an equalizer globally, and it can be an unequalizer. And I fully agree that this is not only a question about the rural and city life, it's also within rural communities and within cities. But that fundamental realization that we have a broken food system, that we absolutely

need to do something about it, is essential. And let's hope that the Food Systems Summit next year and the buildup to that will raise awareness about this. Thank you.

Barbara Yes, this is going to happen. There's no doubt. We are moving in that direction. Somebody else had one more comment. Jim? Oh, Catherine. I'm sorry. Catherine and then Jim, and then we'll move on.

Catherine Roy is absolutely right. We have to get through this crisis now as best we can, but we have to use it then to create a different system and a different process. And whether that's through the Summit next year or through wonderful ideas from organizations like Rockefeller Foundation or others, or through administrations when they change in this country or others, it's going to be really important to use the negativity of COVID to make it into a positive for what the future should be. Thank you.

Barbara Jim, quick last words.

Jim Very fast. Three really quick points, Barbara. I'm going to pick up on what Catherine and Caitlin said about political will. In my experience, the easiest part of getting the political will in a country moving is at the national level. What it comes down to is implementing good policy at the village and community level. And so it really does involve all of us being a part of the partnership with our partner countries at that local level; because that is really where the rubber hits the road. Point one.

Point two. On the funding issue and the issue that Catherine raised and Ed then, the funding allocations issue. We at the U.S. Government have right now finalized the program where we're doing our best to start syncing up our humanitarian response with our development response, so that right now the Bureau of that I head, the Resilience Bureau, is working hand in glove with our Food for Peace folks in these areas to try to start addressing immediately the systems breakdown. In other words, it's not an issue of – well, let's get the food packets out now, and then we'll come in later and we'll do the development. The development has to start right now. And we've found that for every dollar we put in on the development front on the agriculture front, we're saving \$3 in future humanitarian spending. So that, in and of itself, is a strong argument.

Final point. Food Systems Summit—I think if all of us could agree that we could rally around ending poverty, malnutrition and hunger as the big themes of the Food Systems Summit, it will help galvanize the international community for results that help the poorest and the neediest people in the world. I'll stop there.

Barbara Thank you so much. Okay, we're going to shift to another question which relates to biodiversity and the role that it plays in improving health, equity and access to food, especially for our most vulnerable groups. And we'll start with you Janie and Raj and then open it up to others, even those who have not yet spoken – we want to get you all in the conversation. So, Janie, get us started.

Janie Well, there's so much happening right now that it's hard to stay on what I thought was going to be my primary message, but I'm going to give it a shot.

Barbara Go ahead.

Janie You know, biodiversity is a very tricky issue, as we all know. And a couple of points I want to make about biodiversity as it relates to Indigenous communities, specifically. You know, biodiversity is scientifically shown to be best managed by the people who are there. We all know that, but we somehow keep returning to the idea that we are better, we know better than the people who live in those places, how to manage for biodiversity. If we manage for biodiversity well, then we can actually ensure not only the health of the planet but also the health of the people who live within those communities. You know, among the deepest pockets of food insecurity in the U.S. are Indigenous communities. And that comes from a lack of control over the biodiversity of our place where we live, but also, a lack of access to capital as well as infrastructure.

But I did want to not stay in that space, because you can probably tell by my comments, I search for and I move forward towards the light. And at the Fund, we've only been around for about two years, but in the last year... Our first year of grant-making happened during COVID, so you can just well imagine the pressure we were under. But our work... We've been able to fund over 180 projects with 270 different Indigenous communities in the U.S. within the last year, and we're already seeing immense impacts from that work. And it's all based on what that community believes is best for them, what the community's deep biodiversity and traditional knowledge about their place, the relationship that has to their own health and to their own food access. And so we are just really... We're not telling them what we're looking for. They're telling us what is important for them in place. And I think that is so terribly important when we think about biodiversity, but also when we think about it in relation to human health and our future. And it's all inextricably intertwined, but it must be led by the people there. It is so difficult to think about moving the people in order to correct for biodiversity challenges. That is improper and unacceptable at so many levels.

I'll leave it at that. I'm looking forward to more conversations.

Barbara Thank you, thank you so much. And you can see the design of this group is people speaking from institutions, organizations at all levels. Raj Paroda, I think you're going to talk to us about a different level on biodiversity preservation.

Raj The importance of biodiversity for global food and nutrition security needs no emphasis. In fact, we have been using biodiversity in the past, and therefore, diversifying our food basket globally. Considering the fact that genetic resources are a common heritage of humankind, and they were exchanged freely. But after the convention on biological diversity, we have given a call for food rights, for taking care of genetic resources by individual nations. And since then, exchange of genetic resources seem to have been affected adversely than what it used to be in the past.

Now we also know that the available biodiversity has not very effectively been researched yet. Out of the 300,000 species of flowering plants, only 25% have been scientifically examined yet, which means it will take us maybe 500 years more to study what is available. And what we need to diversify our food basket – and food baskets around local foods – and for that we need the alternative ways of not only

conserving but conserving through use. And that use has to be by either evaluating the materials or including the capacity of the people or providing institutional backup. In that respect, we have two ways. One is the *in situ* collection, and the other one is *ex situ*. About *in situ*, already the mention has been made that you need to empower local communities, the resource-poor farmers, and those who are gene savors, to see that they continue taking care of them, but at the same time, improve their livelihood – and how that can be done, by linking them, by adding value and linking them through market is one issue.

The second is the *ex situ* collection, which seemed to have been followed very aggressively globally. And therefore, we have almost now 1300 gene banks presently in the world. It's currently about 7.4 million accessions, of which in the CG gene banks, which are 11, we are storing about 8,000-10,000 accessions. So, the national systems' gene banks are important. They need to be supported, but most of the gene banks, including the most important one, which is Vavilov in St. Petersburg, is the starting of funds. Many of these gene banks would require support and human resources, which is not available. In South Asia, we notice that even there is not one or two people in the countries to take care of genetic resources. So we need infrastructure, you need support, and you need to use now these genetic resources, not only store them but use them more effectively through use of new science, for which new options are now available. Whether it is gene editing, whether it is genetic engineering, whether it is marker-assisted selection. I don't want to go into the details of those, but I would like to say that the possibilities are great, and the first international agrobiodiversity convention that we organized in 2016 in New Delhi, which was inaugurated by the prime minister, we recalled on day one that we need to use more wild relatives for improving our genetic resources and go for gene mining, and that gene mining is only possible if you try to have capable institutions and human resources in place for our future food security and for posterity.

Barbara Thank you, thank you, Raj. Amazing broad perspective there, you bring, with all of that information. I want to open it up for just a minute or two to any others who might want to respond. Marie and Caitlin.

Marie Quickly. Agrobiodiversity is very little understood, unfortunately. But it does offer tremendous opportunities. But, you know, as we speak, we are losing diversity. For many crops we have lost up to 90% of the diversity that existed only a few years ago. And now for each variety we lose, we lose options for the future. So, we know we need to safeguard all the 3,000 varieties of coconuts or the four and a half thousand varieties of potatoes, or the 125,000 varieties of wheat. Because all of them have different traits, and we need that for the future when we want to breed, and we can do that with natural breeding, and breed new crops and adjusted crops that can take higher temperature or higher salinity in the soil or that can have higher nutritional value, for example. Now it offers tremendous opportunities that we need to build on, but we've got to be sensible enough to safeguard what we have left. Indigenous people are tremendously important in that context for *in situ* conservation. And we also need, as Raj Paroda said, to make sure that we have it in gene banks. It's not the question of either/or. This has to go hand in hand, and it's just amazing what you can do with this material if used correctly. Thank you.

Barbara Thank you. Quick thought from you, Claudia.

Claudia Thanks. I was also going to come in on this important issue of wild cousins and the idea that the genetic resources are ones that we haven't necessarily needed in the past. With climate change, we're seeing new extremes, we're seeing new pests. We're seeing new extremes and new pests in different places and needing to take some of those genetic strains from wild cousins to adapt our food systems.

I think the other area that's really exciting in terms of those sort of... the marriage between agriculture and biodiversity, is the opportunities that we see for nature-based solutions in agricultural production and the ways in which we can leverage co-benefits of nature-based solutions through, for example, watershed and wetlands management to regulate water, land regeneration, mixed farming systems, emphasis on agroforestry, main growth conservation for disaster risk management – these more landscape-level approaches, more integrated-level approaches that we can leverage the ecosystem's strength that provides strength to our agricultural systems and thereby achieve both the food security and greater biological diversity, and also, create a greater sink for greenhouse gases and agriculture. We are such a source of greenhouse gases now, but with creativity, we can become a much greater sink and at the same time conserve our ecosystems and biodiversity much better than we're doing now. Thank you.

Barbara Absolutely, and it's a theme throughout the week – "both and," it has to be all of it. So we're going to shift now to our next question. It's really our final question for a quick round before we have a final comment from each of you. We have a wonderful media partner that works with us, Farming First. And before this gathering, they were able to poll our audience to ask our speakers, "What kinds of things do you want to hear from this panel?" And this is the topic that came up resoundingly for this group. What are the barriers to knowledge and resource acquisition that we know exist, and how do they in different locations and cultures and circumstances, really impact the equity and accessibility of the overall system?

So talking a little bit about knowledge and resource acquisition, Ruramiso, we haven't heard from you yet. Looking forward to your comments.

Ruramiso Thank you, Barbara, and happy World Food Day. This is a very interesting topic when we look at inequality in the food system. I think COVID, we can use a wake-up call to the future crisis of climate change...

Barbara Ruramiso. I'm sorry. It's a little hard to hear you. If maybe, you can come a little closer to your microphone.

Ruramiso Okay.

Barbara That's perfect.

Ruramiso Okay, let me just begin. So I was saying that COVID has really highlighted just the inequalities in the food system. I live in rural Zimbabwe on a farm, and some of the things that we have always emphasized is the importance for technology. I think before, yes, we always used to talk about technology, but I think in terms of the importance, always there was just a comment that maybe other aspects are more critical. But what COVID has really highlighted is that when we look at even inequalities in terms of access to internet connectivity in rural communities... I

remember when we had our initial lockdown and I was trying to have my meetings on Zoom and my webinars, and just discovering how poor the internet connectivity is. And getting... I remember getting a quotation for 100,000 U.S. dollars just to put up fiber on our farm. And you can appreciate that these are the most poor communities.

So there's a lot of inequalities in terms of just access to tools that would help people living in rural communities. Because when we don't have access to things like good connectivity, that means information is also delayed. For a long time, a lot of farmers actually thought that COVID wasn't real, and even wearing of masks for a long time for adaptation because of just this lack of access to essential tools in agriculture. I think this is something that we really need to look at in terms of – what are the inequalities in these rural communities of the food producers? How can we actually assist them so that we can actually start moving towards a better future? Because you might have a climate-related pandemic that might happen. How are we ensuring that smallholder farmers, women, are aware of climate change? And, you know, sometimes in my community, when it doesn't rain, you find that people go out and they think that somebody killed a snake or something is happening. So then it shows that there is so much like lack of information that really needs to be out there, and the food system is disrupted because we are not equally getting enough information. There's a lot of information being discussed at all these international platforms, but what about the people on the ground – do they have this access, the same access? And how can we ensure that they do?

Barbara And, Ruramiso, just say a little bit more about... Give one example, because you're there on the ground. You're creating and mobilizing these technologies, providing this access in your community in Zimbabwe. Just a word? Something that's working.

Ruramiso Yeah. I'm sorry. Can you say that again?

Barbara Something that's really working?

Ruramiso Okay, well, something that's really working is now the mushrooming of organizations that are now coming in and giving information through radio. Because previously all our trainings in rural communities used to be done physically, and you had to physically go to a field day to learn about new innovations. But now what we found is that a lot of the stakeholders are now using radio, and the uptick of radio is actually very high. Because you'll find that people might not have Wi-Fi in their homes or a smartphone to access information, but a lot of people will go to the local markets to buy produce, and there are radios there, and they usually are on. Then, they can listen to information on the radio. So radio has really been a very good innovation that people have maybe had forgotten about. But the impact has really been high. So using these radio, local radio stations to just really impact communities has really shown to be very positive during this pandemic.

Barbara Amazing. A technology that's been here for decades longer. Stefan, turning to you, AGCO is a major industrial equipment technology provider from a whole different scale. Talk to us about some of the access to technology and tools.

Stefan

Thank you very much, Barbara. Well, what we see is there are significant differences between developing areas of the world and areas with more advanced agricultural infrastructure. But all are facing their own unique challenges when it comes to education and knowledge and resources.

So let's take the example of Sub-Saharan Africa just as we just talked about it. And there are still humans providing 65% of the power that is needed for land preparation as an example. So without question, we believe that educational opportunities and mechanization need to be prioritized to support these communities and unlock the potential we have there for small-scale farmers.

So what we did on the educational side, we established a network of future farms around the world, and one of these future farms is located in Zambia. So on that farm, we are empowering a new generation of farmers with knowledge, and they need to succeed. So the farm provides classrooms and online trainings for new and aspiring farmers, helping them to learn about the latest solutions in their culture, the latest solution technology, and how they understand successful farming technologies and the agronomy around it. Now ultimately our goal is to help them maximize their land and to support the community, and finally have a financially rewarding future coming out of farming.

Beyond the education, we are also looking at the mechanization, which is part of our business, obviously. So what we have done, we have developed a concept that we call "Farm in a box." So that's basically a ready-made package of essential and affordable farm equipment, and the box is the container around it. So that equipment includes a tractor and small-scale implements, together with parts and workshop tools. As well, it comes with training and some additional expertise to help these farmers become much more productive on their land.

So one perspective of the tool itself, it is packed with the equipment inside, and you can modify that shipping container to become and repurpose it to an office and to a workshop and also to the garage where to store your equipment then during the night. So it gives small-scale farmers access to the machinery and the knowledge and also helps them transform their operation into a profitable business.

But as I said, we don't see these barriers only in the developing world. We also see that in areas like North America and Europe. And so, if we here take the example of livestock growers that are challenged to increase their productivity, and we talked about that earlier and how the food system is broken and what needs to be adjusted, there's a lot of need for them to address the growing demand on protein, for example. And, but there is not enough skilled labor, plus they have to evolve their practices to address sustainability and animal welfare, which are important topics, as we talked about earlier as well in biodiversity.

So we believe these challenges can be only addressed with new innovation and with technology, so we are on the path of developing new ways of livestock management and livestock environment, using more sensors that can not only measure the conditions of the livestock in the facility but also the condition of each animal itself. So, this would allow producers to make sure the animal is more



comfortable and it improves the welfare, but it also creates the optimal conditions for healthy growth. And with improving productivity and the entire business.

So there are different areas we need to address, depending on the different areas of the world. But a lot of excitement in addressing those questions.

Barbara Thank you, Stefan. So interesting to hear about so many different levels, who knew “Farm in a box,” a big box.

Stefan A big box, yes.

Barbara Xavier. Talk to us from Hormel, also from your work as a young professional.

Xavier Yeah, for sure, and thank you so much, Barbara, for the question. Before I start, I just want to acknowledge that the views that I'm sharing today come from a privileged Western perspective, as you know there's different circumstances around the world and different people around the world don't have access to what we may have over here in the United States.

Other than food deserts that I brought up earlier today. You know, there are two other main issues facing our food and natural resources systems that I would like to touch on, and they all have an underlying theme – access to people, places, resources and knowledge. You know, agriculture is a predominantly white and male-led industry. This unintentionally, and many times intentionally, creates an unwelcoming space for people of color, different gender identities, different religious affiliations. You know, we need an industry that reflects not only how our country looks but how the people around the world that we are feeding looks. And this is why access to knowledge through career and technical education is very important, in my opinion.

We as a community need to ensure that under-represented communities have access to career and technical education programs such as agricultural education. While CTE courses are considered electives at most schools, it is important to understand that they are essential to combating hunger and disparities – racial disparities, opportunity gaps, and the growing demand of specialized labor definitely showcase this need. Research has also suggested that participation in CTE programs improves academic and professional results for people. Research also shows that students of color disproportionately face disparities in gaining access to these programs, the CTE programs; and, therefore, that's why the CTE programming aids in narrowing the racial opportunity gap. These educational opportunities are fundamental for youth development from elementary school, well into post-secondary education and into their career.

And the last point that I would like to bring up is the prevalence of representation belonging in the ag industry. One of the main reasons I am here where I am today is because of my high school mentor, Mr. William J. Collins. I went to an agricultural high school on the south side of Chicago, the Chicago High School for Agricultural Sciences. And William J. Collins, my mentor, he's a black male in agriculture. He was active in FFA, like me, and he had a career in both agricultural education and corporate America. Meeting him during my first year of high school, I was able to see myself in him, which led me to follow in his footsteps. So,

being able to see someone who shares the same intersectional identities as you is very important, especially in agriculture. Sixty-five percent of ag instructors are white males, and we need to ensure that people of all genders, races, religion, etc., have access to equal career advancement and have a feeling of belonging.

Ag organizations such as the National FFA need to understand and engage in civil rights movements such as the Black Lives Matter Movement and actively promote equal rights and inclusiveness for all. An organization that I'm a part of that actively does that is the national society of MANRRS, Minorities in Agriculture and Natural Resources and Related Sciences. It is very important that we hold all of our agricultural and food organizations accountable when it comes to implementing diversity, inclusion and equity initiatives to educate members and create a diverse and welcoming environment for all.

You know, one thing that we can't do is just slap a picture on the front of a magazine or a newsletter and act as if it accurately reflects the organization. We can't do that. We must do better when it comes to diversity, equity and inclusion initiatives. As a black man in agriculture, I'm dedicated to definitely making our industry a better place for all people, and I hope everybody joins me in doing that.

Barbara Well, thank you so much for that, and that is exactly why you're here, to continue that mission of yours and really to create that open and inclusive space. We are all... We know that the youth in agriculture is the future of everything we're talking about trying to do in food systems. All of this advancement, some of it will happen now, but a lot of it is going to happen in your generation and with your generation's help. So, thank you for all of that.

Xavier Thank you, Barbara.

Barbara Claudia, I want to come to you now. You have a new position within the CG. It's so exciting. Talk to us a little bit about the work that you're doing.

Claudia Great, well, thank you. The CG is really, in a moment, it's our 50<sup>th</sup> anniversary. We're going through a reform process to really come together as a One CG. And our focus and our mission really is to deliver better. And I think the topic, this question topic, is an important one in that regard, which is – How do we overcome these barriers to knowledge and research acquisition?

And so if I can really address that question – From the perspective of research for development, there are so many barriers to knowledge and equity within the food systems. And in one sense, it arises from the fact that there simply isn't enough knowledge or knowledge that isn't appropriately targeted or contextualized. And in fact, this week several really important studies came out.

There was the Series 2030 Report that was just released that called for an additional or for a sum of \$14 billion of investment in agricultural research and innovation, something that I think we all need to take quite seriously. The SoAR Foundation Report came out that looked at the returns on investment in agricultural research and development and confirmed that for the CG, for example, there is a ten to one return on investment. And I'm sure that it's the same in the organizations that are represented across this panel today. The need for and returns to agricultural

research and innovation are enormous. And if that agricultural information and knowledge isn't there, then obviously that's a first barrier to access.

But really the issue of differential access is what is so pressing in the conversation that we're having today, because we know that these barriers are disproportionate for smallholder poor farmers, for different ethnic groups, for different genders. We heard, for example, from Ruramiso about the technological access to technology, and there are really exciting solutions here. At the CG we are working, for example, on the Digital Earth Africa platform, which would make much more open-access data available. We're working in Last Mile Communications with technologies that can push information, advisories, warnings to individual farmers. We're working with FinTech groups to be able to demonstrate fast and reliable payments for crop insurance and thereby increase uptake of these sorts of farmer safety nets.

We also know that access is constrained by access to capital, to financial education, to weak supply chains, particularly in poor farming areas, and to weak extension services. And to respond to this, so many people that we have heard on the panel today are working across food systems and across supply chain routes and rural finance.

But so much of this really does come down also just to education and capacity. And it was interesting again in the Series report that just came out that empowering the excluded was entered as their number one priority for agricultural investment.

And that really brings me to my final point, which are these examples that we've been hearing across the panel. The fact that the differential exclusion of gender groups, of ethnic or religious or language groups, are very real, and they're very well-documented. Yesterday was the International Day of Rural Women. And we know that two-thirds of the world's 600 million poor livestock keepers are rural women who handle the day-to-day tasks of managing the animals and processing and marketing and selling animal produce. But they virtually always receive substantially less income than men.

And we see this when we look for it, and we see the solutions when we look for it. So, for example, the CG was working with water user associations in Tajikistan and found that excellent training is taking place. But when training transfers from males to males, the knowledge transfers but not from men to women. We can target our training better. We find all these sorts of examples in so many places.

And I'm conscious of the time, but let me say that the final thing that we really need to be aware of is that the institutions themselves need to transform. It's not just a question of putting better representation into deeply biased institutions. If the institutions are biased, if land and water rights are not available to certain groups, if there isn't access and voice of all groups within institutions, then we haven't achieved our goal. So institutional transformation is essential. Thanks very much.

- Barbara Thank you, thank you so much. Just a couple of minutes for responses to this access to the information technology. Anybody else want to bring in a different perspective. Marie, I think you might have had something. Nope. Ed.
- Ed Yeah, I would like to underscore two key points. One of them is the participation of the youth. In Africa, you know 75% of the population, three-quarters is under the age of 35. This is why I'm excited to see my sister, Ruramiso, as being part of this panel. If we do not include that group of young people into agriculture, then the future is very gloom, dark and gloom.
- The second is really a new tool that we now have in agriculture that we did not have before in the form of a cell phone. I'm excited about the prospects that this presents – you know, digitalization of agriculture. Right now there is more, almost 400 unique different apps in the digital agriculture space that have been used across all of African Continent. We saw that when COVID-19 hit, you could not send extension officers anymore. You could not send governments to give or make payment to rural areas. Immediately the potential for digital agriculture became very, very real in that part. I'm hoping that because of this pandemic, we can ride on that tidal wave of innovation and utilize whatever resources can be digitized and put on a platform that makes it accessible, It could be FinTech. It could be information extension. It could be marketplaces. All this not only has the advantage of making more resources accessible to more people but also inviting more young people to participate in agriculture and move away from the traditional garden hoe for something that's much more innovative and exciting and likely to invite the young people to participate. Thank you.
- Barbara Yes, it engages them if they know.
- Ed Indeed.
- Barbara Catherine, you had something, and we want to move to our lightning round to give all of you a last word. So, Catherine.
- Catherine Xavier is a great example of why we need more agriculture education in cities, and I hope we can expand that concept in the future. Thank you.
- Barbara Thank you, absolutely. Okay, we are going to move to... Jim, did you have something? Did I miss you?
- Jim I was just going to table-thump of both what Catherine just said and Ed on this issue of the youth. I mean we don't talk about them as much, but around the world we see polls. The youth feel disenfranchised, not a part of decision-making. And like women and other marginalized groups, they're a very untapped resource. It's like oil under the ground, you know, a century ago. Just simply tapping into that resource will transform both the sector, the ag sector but also our economies. So it's just so self-evident that we should be doing that. And on the technology and outreach piece, I think all of us have been forced by this pandemic to pivot as needed. And so I loved what Ruramiso said about the radio. We're doing that in Mozambique and in Ghana, trying to get information out to people that don't have access to the digital information, so passing that out. But in places where we do, like Nepal, we've used the pandemic as a moment to shift Nepal's seed database

from a paper process to a digital online platform where people are getting real-time information on prices and are able to make decisions about the next crop planting season.

So it's a matter of all of us keeping our eyes wide open to where the opportunities are. Thanks, Barbara.

Roy And just to quickly add on to the youth bits, you know, we launched this Food System Vision Prize, and it was incredible how many youth were involved in that, because it's really... If you can't imagine a different future, you can't create it. And we need those creative minds out there to really make that happen. Sorry, Barbara. Back to you.

Barbara Well, I had to put a plug in for that, because if you go to the Rockefeller website, you can see the ten that won, but you can see all of them that were submitted, and it's from all over the world. And they're really fantastically creative ideas for the future. Janie, did you have one last thought before we go to our lightning round?

Janie I'm going to stay on youth.

Barbara Okay.

Janie But I'm going to throw in a wrench – that our agricultural finance access to capital systems need work. I'll just put it that way. But in particular with regard to youth, because they literally... We have to... It's not enough to just focus on their younger years. We have to bridge them to be the farmers and ranchers. And we've got to have the finance mechanisms that allow them to do that, not treating them as if they're 60 years old.

Barbara Good point. Okay, well, thank you all so much. This is a great group of minds and ideas and so diverse. We want to hear from each of you, just ten words or less, if you don't mind. Just what do you want to leave our audience with in terms of – what's the one thing that's most needed, top of your list for increasing and achieving greater equity and access in food systems? I'm just going to let you volunteer. Who wants to go first? Ten words or less.

Xavier I'll start.

Barbara You start, Xavier. Lead us on.

Xavier There we go. I'll say what's needed to achieve greater equity in food systems – simply to create access for underrepresented individuals so that they go on to achieve their maximum potential. And I'll leave it at that.

Barbara Great, thank you. Catherine and then Caitlin?

Catherine Move the emphasis on women and girls from rhetoric to action.

Barbara There we go. Ten words or less – rhetoric to action for women and girls. Caitlin.

Caitlin Thank you. It's about looking not just outward but looking inward in making sure that the ways that our organizations operate aren't perpetuating inequalities but addressing them and rectifying them.

Barbara Thank you. Great advice. Let's see. Jim and then Marie.

Jim Ten words or less: Intentional action, intentional inclusion in decision-making and policymaking; because inclusivity and resilience go hand in hand – you can't have one without the other.

Barbara Yes, and intentional. We're taking detailed notes, by the way. Marie.

Marie So my ten words would be – Learn from women, youth, and Indigenous peoples to build back better.

Barbara Thank you. That's tremendous. Raj, did I see your hand?

Raj There is a definite need to act fast collectively and proactively to build desired political will to address the concerns of smallholder farmers. And in the process, we must build a strong partnership between public and private sectors and enroll youth in agriculture.

Barbara Thank you. Ed and then Claudia.

Ed Yes, for Africa this is simple for me. We simply need to ensure that smallholder farmers can produce more. How do we do that? We give them improved seed, fertilizer, mechanization, irrigation, access to credit, and allow them to do what they know how to do already. Thank you.

Barbara Thank you. Janie, I think you were up next and then Claudia.

Janie Listen, understand, strive for understanding so that we can ensure that local food systems and traditional knowledge is not lost.

Barbara Thank you. Claudia.

Claudia All right, so the CG has just launched a new... It's called a GENDER platform, but the GENDER is an acronym, so these are my words – Generating Evidence and New Directions for Equitable Results. The construct here is that we really need to prioritize explicitly inclusion and access as a priority in agricultural research. Thanks.

Barbara Thanks. Inspiring. Let's see. Who do we have left? Stefan. Maybe Roy gets the last word.

Stefan Sure. Let me just add on also what Ed said, I think, really and can all supporting food security and sustainable agriculture, and there's a lot about mechanization and digitalization to really improve yield and reduce waste.

Barbara Yes, we've heard so much about reducing waste. Roy.

- Roy We need a dramatic systems approach that really affords everyone a healthy diet that's truly equitable and actually shifts the direction of our system, the ship that we're on, rather than just rearranging deck chairs. That's mine.
- Barbara Thank you. So many squares. Ruramiso, I missed you. I'm sorry.
- Ruramiso It's okay. So we desperately need access to ag technologies to increase our yields now.
- Barbara Yes, thank you. Well, what gems from all of you, really. Wonderful conversation, and thank you so much. There's, I'm sure, so much going on in the Whova platform, questions coming in. We are going to record and document all that. It will live on Whova for many more days, so you can return and watch the recording and read all of that. You're probably getting actual questions, and you'll even have a chance to answer some of that.

So thanks to everyone for joining us for the final roundtable of the 2020 International Borlaug Dialogue. Look for our Daily Digest email that comes out from our Farming First partners later on today, and join us for the closing session. In just ten minutes we start with final comments for us and a resounding call to action by Sara Eckhouse. Thank you all for joining, and we'll see you in a moment.