

DIGITAL DIALOGUE #1:
PERSPECTIVES ON FOOD SYSTEMS RESILIENCE IN COVID-19
Thursday, April 16, 2020

Barbara Stinson

President - World Food Prize Foundation

Greetings, everyone, and thank you so much for joining us today, especially in these challenging times. I want to welcome everyone to the World Food Prize Foundation's first Digital Dialogue where we hope to bring to you our World Food Prize laureates and other experts in a series of webinars that will advance discussions on resilience in the global food system.

As many of you may know, the mission of the World Food Prize Foundation is elevating innovation and inspiring action to sustainably increase the quality, quantity, and availability of food. And we really hope to support and advance that mission today.

We are pleased to welcome a distinguished group of panelists for our discussions, but we also have, I think, close to 600 individuals joining us from all over the world, including several of our other laureates. We have several hundred members of our academic and research community coming from Wageningen University, right here, Iowa State University, and really from all over the world, various CG Centers, CIP, CIMMYT, IFPRI; also joining us, 90 representatives from the private sector. We're so honored that you're here with us. Coming in from the nonprofit sector, also over a hundred representatives, 25 government agencies from around the world, including the U.S., USAID, USDA, Department of State.

We have many multilateral agencies. We so appreciate your partnership – FAO, IFAD, World Bank joining us. And among the participation are over 80 young professionals coming to us in their early development as agricultural development specialists and global food security specialists. We have folks coming in from every continent, and we're really so thankful for everyone dialing in.

As in the International Borlaug Dialogue, we welcome participants from all sectors and around the world, so thank you for joining us.

My name is Barbara Stinson. I am the new president of the World Food Prize Foundation. It's an honor to be here. I'm also welcoming three important guests. Catherine Bertini is Distinguished Fellow of Global Food Security of the Chicago Council on Global Affairs. She has ten years at the World Food Program as executive director and many U.N. and presidential appointments. And she's our 2003 laureate.

Shenggen Fan comes to us as Chair professor, China Agricultural University, ten years as DG of IFPRI, and awarded the Fudan Management Excellence Award recently. He's also a tremendous participant in many of our Borlaug Dialogues.

David Nabarro is Special Envoy to WHO, Director General for the COVID-19 pandemic. He's also co-director of Global Health Institute at Imperial College. And he serves as the Strategic Director of 4SD. David is one of our 2018 laureates.

So today we're going to conduct an interactive discussion amongst our three experts. We invite you to submit questions. We'll take them at about 40 minutes in the hour, and maybe just a few of them we'll have time for. So please click on that button below, and you can submit a question. And we'll track those throughout, and they'll help inform our future dialogues as well.

So already global experts have been pointing us in the direction of addressing food systems, a systemic approach to addressing global food security. Through the U.N. Food Systems Summit that's planned through 2021 and many other fora. Now we see a dramatic shift to try to improve the resilience of the global food system. We see key vulnerabilities that existed before, now magnified in the world of COVID-19.

Today we want to discuss some of the destructions and choke points in the system that we knew about before but now they're accentuated. We'll look at examples from China, the U.S. and globally. And we'll focus on solutions, solutions that are needed to strengthen these weak points now and in the future.

Panel Moderator

Barbara Stinson President, World Food Prize Foundation

Panel Members

Catherine Bertini Distinguished Fellow, Chicago Council on Global Affairs; 2003 World Food Prize Laureate

Shenggen Fan Professor, China Agricultural University; World Food Prize Foundation Council of Advisors

David Nabarro Special Envoy of WHO Director General on COVID-19; 2018 World Food Prize Laureate

Barbara So with those introductions, let me start with a general question. And, David, perhaps you want to address this first. With so many international responses, really, what are those that best support the resilience needed in the global food system? What are the main system threats that you see in responding to COVID-19, and what are your initial thoughts?

David Well, thanks very much indeed. Great to be here. Welcome. Hello to everybody. Can I just start by stressing that the COVID-19 pandemic is a new thing as far as being known to us, but just over four months; and we're learning about it all the time. One thing is that it's a really dangerous virus, and it's bouncing everywhere. And the only way to handle it is to interrupt transmission and to introduce physical

distancing when the transmission is building up, and that has to be done by reducing our people's opportunities to move. But of course when you do that, and particularly when the interruption of movement involves some kind of curtailment of the economy as is happening now for more than half the world's population, it has immediate impact, particularly on food systems.

First of all, it's leading to great increase in levels of food and nutrition insecurity everywhere, in advanced economies as well as in poorer countries. And this is because people are not able to get the cash they need, and they're not able to get the food they require. Secondly, it's leading to real challenges for food producers, and that is leading to problems in the production of food, particularly by farmers.

And these are weak points in the system, and they are having to be dealt with simultaneously in numerous countries, and it's a massive challenge for local authorities, national governments, civil society, farmers' organizations, and indeed for the world.

But unfortunately, the level of inter-governmental as well as within national coordination on dealing with these issues is still not up to the level that's required. The speed with which this challenge has emerged has taken everybody unawares, and there has been some tendency for governments to try to work separately and independently. This needs a global, coordinated response like none other. And within the international system, that's what we're encouraging everybody to do. You have to coordinate because the problems are so acute, and if we don't do so, the levels of distress and undermining of the resilience of food systems are going to be huge.

That's my quick comments. Thank you.

Barbara Thank you so much. Shenggen.

Shenggen Yeah, so, well, thank you very much. Thank you for joining this event. I think that this is very important for everybody to work together, so let me thank you for doing this.

During my career for the now 35 years, I have never seen this great threat to our food security and nutrition security of everybody in the world. So yesterday I just saw the IMF economic outlook, so we might see minus three economic growth for 2020. So when economy is slowing down by 1%, 1 in 14 million people will suffer from hunger and malnutrition. So we expect probably 80 million to 100 million people will suffer from malnutrition and hunger, in addition to 820 million who are already suffering hunger and malnutrition. Some report from the United Nations, a university called UN-WIDER, they even think the poor and hunger people will double in 2020.

So that's why I said I have never seen this in my career. But we must work together. The first, we need to make sure that everybody in the world has access to food, whether through their own production, through markets, through social protection techniques - protecting the rural migrants, disabled people, women and children who really need help.

Then production side, David already mentioned. We must make sure that the whole..., so the spring planting season in many parts of the world has to be prepared; otherwise, the whole year 2020, the food nutrition security will be compromised. Obviously, the whole value chain will have to work, have to follow the flow to make sure that the trade market all work efficiently and effectively. Over.

Barbara Thank you, Shenggen. Catherine?

Catherine Thank you, Barbara, and thank you for including me and for arranging this wonderful virtual event from the World Food Prize. And welcome to the Prize.

I think when we look at a huge tragedy like this, we always have to look at the silver linings, or in other words, take advantage of some things having to do with this that we can improve on our lives in one place or another.

So one issue that I think is important, or a concept, I guess, that I think is important is for those of us who have earlier had this challenge of dealing with a pandemic in our own countries, to share experiences and ideas with countries that are about to be hit harder by the virus. We certainly learn from China, we learn from Italy, we learn from Spain, and now perhaps people will be learning from the United States. What are kind of some of the things, I think, to think about while we're in a country that is preparing right now for the next stages.

So I think about the vulnerable people that Shenggen and David had talked about, for instance school feeding. We won't be able to have congregate school feeding. The children won't be going to school. So what is happening in this country is that schools are offering foods still. In some cases children are going to get the food at the school. In other cases they're going to some other site in order to get them. Some countries, I think, are thinking about vouchers for children if there are still markets, to be able to get their school feedings. If a school has school feeding, I think there are examples that they can learn from for how to try to keep food to the children, not only during the schooldays but possibly expanding that to be for the weekend as well.

When we think about food distributions, we've seen in the U.S. long lines of cars of people waiting to get to food banks to receive food assistance for 8, sometimes 10 times as many people as usually go. This is certainly going to happen throughout the developing world and elsewhere if it hasn't already. So thinking about creative ways to deliver food, for instance, or to set up different times when different people, based on their last name or some sort of numerical system or something, they'd come get it, is another thing, I think to think about.

The supply chains that were mentioned before, we have to all learn how to be more nimble. For instance, grocery stores are getting more crowded or markets potentially are getting more crowded, which is very problematic, but at the same time restaurants are closed. So the suppliers to the restaurants all have no customers, whereas the suppliers to the grocery stores are working on overtime. How can we work with industry, for instance, early on in the process, to try to shift,

pivot, to be able to prepare food or process food to send to markets rather than to send them to restaurants?

If what we just saw, the kinds of things I think that we need to be thinking about—we have a crisis here of milk, too much milk, that has not yet been able to be figured out how to deal with this. Well, let's use that example in other countries and find other solutions for quickly pivoting with farmers to be able to, for instance, make cheese or yogurt or something else with the milk before it has to be dumped because there's not enough refrigeration and transport to move it elsewhere.

The final point is I hope we're able to do all of this with more transparency. I met with a group of scholars in Islamabad last week, and they were hoping that this opportunity, when donor countries, for instance, gave assistance to other countries, would be an opportunity to be very transparent about what was going where, for whom, and what the expectations were, because the whole community is involved in this, not just a national or a provincial government. And the whole community can hold the process accountable. Thank you.

Barbara Right. Thank you, all three, for those responses. So we hear about a grave situation that we all face. We understand that it's going to get worse, especially if unimpeded, and we also know there are many lessons because the world has faced situations like this but not this.

So how do we globally respond? How do we pivot? How do we quickly learn those lessons and make some of those changes? That's one of the things that I think everyone is grappling with and I hear from you all today.

Catherine, I'd like to turn to you with a question, and maybe you can reflect a little bit for us. In your career you've championed reforms to improve government responsiveness and efficacy to food and nutrition assistance around the world, trying to guarantee those critical services are accessible and appropriate to the needs of especially women, infants and children. So what do you see now that we could do? What are the opportunities for that immediate action to pivot, if you will, and really head off what could be even more catastrophic?

Catherine Thanks, Barbara. Well, first of all, I think we have to remember the first thousand days that form a child's life is the most important time for getting adequate nutrition. So if the rest of us are going to be short of some kind of food or any food for a while, we will suffer—but not like they will, not like a one-year-old will, because if she doesn't have that food, then she can never make up the difference. She'll be stunted for life both intellectually and physically.

A high priority has to be on that population. We understand from the World Food Program that there's already a shortage of the special supplemental feeding for this population. So one thing very high on the list should be to identify who are manufacturers of this kind of food and also for every government and NGO and agency that has access to be able to distribute to children to be able to get that kind of food. But this is, of course, in addition to regular feeding. But then the systems obviously have to be developed to be able to give that food to mothers in a safe manner.

So absolutely, number one, I believe, so that we don't compound this problem in the future even more, is to highlight that population of pregnant women through children age two at the very minimum. When we think about women and their issues, we can see in the countries that have so far been hard hit by the virus that, when schools are closed, everybody's home, and most work is closed and everybody's home. So this is going to put an extra burden on women, who if they have the opportunity to do some extra work or to be able to work from home in some manner, they have also the childcare issues that are virtually right on top of them, to be able to deal with, too. I think we've seen it in the U.S., and certainly we'll see it throughout the driving world that many times women are on the frontlines of what are considered essential services, working in not just women but certainly a majority of women, working in the healthcare industry, working in the adult care industry, working in childcare, working in supermarkets or markets. So, but they have also the extra burden of staying safe, and they need to be sure to have that support to help stay safe.

Barbara Right, thank you so much. Shenggen, David, do you want to respond to this as well, some of the things that you see from your perspective, could be quick action, areas to pay attention.

Shenggen I'll start with my experience in China. My view on this is this virus will affect everybody. It's everybody's job, everybody's responsibility to work together. So as a researcher, when I came back to China from IFPRI, so I set up an online discussion group of researchers from different parts of the country, because we need to really monitor to track market prices, the supply chains and so on. And we knew that the situation that was pretty bad in mid-January and early February so the livestock industry was affected in it, because they couldn't get their feed, they couldn't sell their produce, and they couldn't get the workers. So immediately we prepared some policy briefs for the government to take actions. So let me start from the central government. The central government began to look at this issue very seriously, starting from mid-January, the Minister of Agriculture, transportation, housing and so on. They issue some very urgent notice to make sure that the food supply has to be guaranteed. The feed has to be transported to all these livestock farms, the so-called "green channel." Everything can wait, but medicine and food cannot wait. Medicine—I have to include medicine, right? So I think that really helps quite a bit.

Now, the provincial government—provincial government is responsible for the whole province's food supply, food basket. And down to the community—community leaders, community volunteers are responsible for getting food from somewhere to the community, so you keep some social distance, and meantime you have adequate nutritious health food to your doorstep through the community movement.

Then finally, the private sector. As you know, the private sector plays a huge role this time through the Internet platforms and to bring foods to individual households and keep the social distance. So my view is it's everybody's responsibility. We all have to work together.

Barbara Thank you so much. David, any thoughts?

David Thank you very much indeed. Well, first of all, in this kind of discussion it's really important to say when you really support what others have said. So I'd like to say everything that Shenggen and Catherine have said, I think, is highly relevant. And I just really would like, therefore, to just cap it a bit with my own feeling.

Starting at the top, all societies everywhere in the world are going to have to live with the threat from this virus for the foreseeable future. In a discussion today among health leaders, I heard people talking in terms of 24 to 36 months; and these were words from leaders of the health sector in the United States. So let's get our priorities right, what we've got to do inside this.

We must prioritize the people who are what I call "food-poor," the people who are in the informal sector, people who are on daily wages, and of course women and children and disabled people and anybody else who is normally at risk but at this time are particularly at risk.

Number two, we must focus on smallholder farmers who have very limited margins, are often in debt and not able to go for long periods with their own marketing disrupted or unable to get their goods to market. And then within that, a big, big, big thing that I've learned is the importance of acting locally. I was hearing today from the president of the World Farmers Organization. You see, we've got farmers all over Southern Africa with food in their fields that they can't sell because the market has collapsed. But we're setting up apps and other techniques to enable them to communicate with people in the urban settlements where there are poor people who are short of cash, short of food, short of nutrition, and basically saying – Don't plow your rotting vegetables or fruits or throwing away your milk or whatever else, throwing away your fish, but actually make sure that if you've got food, that the people in your urban communities, if they can get there to pick it up, let them come and pick it up. Short-circuit the loops, and remember it's the urban poor who are much, much worse off than the rural poor. And hearing today from South Africa, there are many communities that are getting really angry. They're saying, "We're having to go to all this sacrifice to do with this virus, but we're hungry and we can't eat." And that could be short-circuited, and that means finding new routes.

And then lastly, just to build on what colleagues have said: No. 1 - We must do everything based on evidence and science. It's just not clever to do things based on lack of science, just on some kind of whimsy. Secondly, we've got to find solutions that are imaginative and innovative, and there the private sector and NGOs are hugely important, working within governments. Business has so much to offer, especially small and medium enterprises. Thirdly, it's about solidarity – finding ways to work together, not creating lots of separate initiatives or new initiatives with our flags on them, say, "Look, we came and did this." No. It's too serious for that. And anyway, everybody's so busy that they can't possibly work with lots of different initiatives. We've got to find ways to work together. Whatever anybody up there tells you to do, solidarity is the only way to deal with this crisis, the only way – the biggest crisis ever – and we cannot work with people pulling in different directions. And lastly, speed. People are hurting now, and they will hurt more and more in the next weeks. This is not something we put in process and we implement

in three months' time. By that time, everything will be different if we don't help people to get through the crisis now. Thank you.

Barbara Well, thanks, all three of you, for such articulation of urgent action needed and in really crucial areas. So the need for the cooperation is key, and I heard in all three of you, private sector. So let's return to that before we conclude today, more on—What really could private sector be mobilized to do most readily? Some great examples from you, Catherine.

Shenggen, I want to turn to you now with a focused question. So you had the unbelievable fortune—I don't know how to depict it exactly. But you landed back in China after many, many years in the U.S., in early January, I believe. What a condition to arrive in. And it sounds like you've been working so hard. China has been dealing with the COVID-19 crisis for four months now. Many of us, many other countries have been dealing with it for weeks or months. What is it that you see, in addition to some of the things you already articulated, that we could do in the food system to address key challenges, responses that the rest of the world should really take up and learn from what China has been able to accomplish?

Shenggen Well, thank you, Barbara. I think let's start from the global level. I think the global trade must work, and export bans should not be allowed, should be prohibited. Perhaps in several countries we try to ban the rice export, wheat export—this is very bad. We must all work together—global level, United Nations, the World Bank, IMF, major countries, G-20—make sure that nobody is going to ban the exports. So that's number one.

Number two, strategic reserve. This has not been mentioned for some time. Every country needs to have two months of strategic reserve. In the case of emergencies like this, whether it's earthquakes, flood, drought; if you've got the two months then you will have enough leeway room to move around. You can plant new crops and fix your imports and international aid will come. So without that two months, many people will suffer, will go hungry.

So that's just at a global level. And from the China side, I do think the evidence is very critical, as David has said. I really appreciate that. As a researcher, we have about probably 20 researchers together, we come up with our own analysis. We prepare all these notes for the government. Whether they use it or not, but definitely they are appreciated all this evidence and the data.

Then from the Chinese experience, I can see there's the... Now it seems to me the food prices are sort of a..., predicted food prices is gone. The food supply in 2019 production was very high. You know, we had a record grain production, and the fruits, vegetables suffered a little bit, but I do know fruit and vegetables can come... I think the vegetables can come up very quickly. And your livestock has been resumed. So if you can, let's say, sustain for one or two months, make sure that they do everything right, then you will begin to move forward.

Now, how can we really build a long-term that's a resilient food system is in everybody's mind. I do think we need to rethink very hard what kind of resilient food system we will have in the future to make sure that food system is resilient

against shocks like this. So including the kind of shock, including some of these trade talks we mentioned. You know, many food exports actually go through two or three major trade transport “hot spots,” is the word. If one of these hot spots fail to work, then our global food supply, we have a problem. So how can we make sure that is not going to happen?

Barbara Thank you. Catherine, David, would you also like to reflect on either experience that you know from China or lessons we could draw from other parts of the world?

Catherine Sure. Well, I have another thought, and that is that when we think about... Shenggen mentioned reserves, strategic reserves. It brought my thinking to, of course, food assistance. And it used to be that food assistance was almost exclusively the distribution of food. It started with surplus food, and then it was food that was purchased often in local communities. And now there's been a great shift to vouchers and electronic benefit transfer cards and so forth. And that's really good to help support the local economy, but of course it only works if there is food availability.

So I think one of the challenges for some communities is going to be—how do we build more capacity of available food when it needs to be given to the vulnerable that David mentioned so eloquently. And where does it come from? So some of it could come from bulk food, whether local or far, but I think we need to look at more innovative farmer-to-consumer ways to get that food. I think that NGOs and governments and aid agencies need to think more about very, very retail local distribution, and as mentioned, letting people go to farms to kind of glean the food from the fields that the farmers otherwise couldn't sell. But I think there's also another step that can be looked at. Of course, there's many steps that can be looked at, but one would be a very local level of picking up farmers' food and distributing them through a functioning organization. Thank you.

Barbara Great, thank you. David.

David Yes, certainly. And so again building on my colleagues... (Gosh, it's great working with you all.) Number one, I think that sometimes we talk a lot about food, but we don't remember what's the primary purpose of food? The primary purpose is to nourish people, and it's the nutrition challenge that I think will grow more and more in the coming weeks. Because there's probably quite a lot of grain in many areas, but when it comes to fruits and vegetables and dairy and meat and other such things, there are real challenges right now, especially for poor people. And so let's remember that we need perhaps to be focusing on nutrition and nutrition security within the context of food.

Secondly, I do, I'm so pleased that the term “food systems” has come into prominence recently, because it helps us to think about all the different pieces that have to come together for people to get the food they need and for farmers to have the markets they're required to function. So keep a good systems view, and as Catherine just said, make sure that it's local. As Shenggen just said, we need to think a little bit about the strategic reserves and also all that kind of stuff.

Thirdly, I love this focus from both of my colleagues on resilience. The resilience of food systems in the face of threats is something that we now have to look at. And what this COVID thing is doing is it's actually exposing a whole series of frailties and possible weaknesses in food systems. And listening, for example, to our colleagues from the African Union this morning, an event that I was involved in, Ephraim Mulaki was saying, "Remember, the food system is within the context of a whole series of other systems that are working to do with peace and security, to do with health, to do with education, to do with transport." And that's why I put the Sustainable Development Goal symbol behind me, to remind myself and to demonstrate to you that we're looking at food systems totally within the interconnected realities of all the other systems within which people are having to live. And those who are vulnerable at this particular time are the people who are also vulnerable from other interconnected causes. Thank you very much indeed. Thank you.

Catherine Barbara, may I add something else?

Barbara Please.

Catherine David, you have prompted me to say this as well. I want to use my county as an example. I live in Cortland County, which is a rural county in Upstate New York of 49,000 people. And one of the things that I'm seeing is that we're much more using and certainly this is a tool that most people in the world have, although connectivity is sometimes an issue, is the Internet and how we can share information to everyone about what's going on. So what I've been impressed with in Cortland County, for instance, is that there's a website, 211CortlandCounty, I think is the name of it, and anybody can look on there and find out exactly where there's food distribution all around the county, where the food, where the schools' children can go to pick up food assistance, where people can..., who they should call if they have a health issue, and it's been extremely impressive, and I should say also again at a local level, that the local... – I'll call the NGOs in our international parlance – but local community groups get together on a regular basis to say, you know – What are the issues? Are there any issues at this food pantry? What are the issues of people going that want to get tested? All different kinds of things that the community leadership is working on in a very impressive manner. And I think that kind of leadership can happen in any, every community around the world.

And as Shenggen said, this is everybody's responsibility. And as David said, it's very much community-based. So how well this is ultimately working – obviously we still have many people who are very hungry, but there's some real effort toward making this a community participatory leadership exercise to try to reach everyone.

Barbara I'm so glad you brought up the local responses and concerns, the 2-1-1 response system. You hear about it in many locales. Maybe that's something that becomes pervasive in this time, honestly, and can be, as you said originally a positive that comes out and that can be perhaps a more durable solution.

So before we turn to our last question, one for you, David, I just want to highlight people. All of you are so well recognizing critical pinch points in the resilience of the food system, the weak points, the vulnerabilities. So before we close today, I just

want to be sure that, with this collective wisdom that you all have, that people are hearing what are those critical weak points that we're seeing most magnified right now, and what are the opportunities to address those. But that's a general underlying question.

We will take another question to you, David, and then turn to our audience questions that have been, I think, coming through the live feed system. So, David, you have so much experience responding to pandemic influenza, malaria, Ebola, leadership in many crisis situations. And you've spoken so well already in many fora about the crucial cooperation, intergovernmental cooperation, international cooperation, national, local cooperation that's needed to address this issue and of course spoke about it today. And we see these call for actions for increased investments to address this issue and global countries stepping forward to reinvest and raise their investments, etc. Just wanted to give you the chance to talk a little bit more about what's really needed in this area of cooperation and reinvestment.

David Thanks very much indeed. You referred to some of the work that I've done before. One of the really big outbreaks that I was involved in working together with the Secretary General of the United Nations was the Ebola outbreak in West Africa in 2014 and 2015. And I remember about traveling within the countries of Liberia, Sierra Leone, and Guinea, and then Nigeria, and then Mali and other countries that were affected and talking with the presidents of the region.

And there was a time right sort of around the middle of 2014 when the president of Liberia looked at me, and she said, "David, I'm really fed up. I feel as though our country and our people have been forgotten, the kind of suffering here, and it's a really terrible situation. But, you know, who's going to support us? Are we really going to be so affected by this that all the gains that we've had since the terrible wars we had are now going to be lost?"

And I said, "Whoa. I'm here representing the U.N." And she said, "Yup, yup, but, you know, who's really going to come in and support us." And I remember I met her again a few days later, and she had a completely different look on her face, and she said, "I've just had a call from the President of the United States, and he said to me, 'I'm going to support you. I'm going to give you what help you need. You just tell me what it is, and I'll be there to back you up.'" And he said, "I'll rally the rest of the world to come as well. I'll go to the Security Council, I'll go to the General Assembly, I'll ring up anybody you want. But we will get the world to come and back you up. We will make sure that your people are able to fight back this Ebola scourge."

The transformation in the mood of the people in Liberia and then that had a contagious effect to the other countries. It's a contagion of hope in the face of a terrible despair. I don't know whether any of you remember – we would go to treatment centers, and there were people coming and falling down and collapsing and dying at the door, because there was no space for them to come in. And there was a whole collapse of the whole economy of that part of Africa at the time. But it was that message of hope, of global leadership, that here was the leader of the United States telling the world and telling the people of Africa, "We're behind you. We're with you. We're going to support you."

The result was like this: Communities got going and organized themselves. They said if the president of the U.S. cares about us, we'll change the way we do funerals. We're going to change the way we work with each other. We'll accept the sacrifices. Because up there they're looking after us, very religious country – in a way, the president of the U.S. was equated with God.

And I want to stress to everybody – this is what really matters now. This is a world that is confused, distressed, that doesn't know what's going to be coming in the weeks and months to come. And what they need is hope and some sense that this is not all just going to be becoming a terrible, total mess but that there are world leaders who care about the poor people who are suffering and who actually are going to reach out to them and touch them through their presidents, through the prime ministers, through their churches, through their mosques – with Ramadan just coming, that's very important – and through whatever different contacts they have. Because that's what's most needed now.

And we must move away from the idea that somehow those who are trying to lead, like the Director General of the World Health Organization or the Secretary General of the U.N., are somehow not relevant. These people, along with the presidents of the main countries of the world are now the most important people to be sending a message of hope and support to the billions of people who at the moment are suffering. That's what international cooperation is. It's hope that then lets us all work harder and get a sense of solidarity and trust one another and work together so that the spirit that's there in communities at the moment that we found in Ebola, that we're seeing all over the world now in dealing with this particular challenge, is reflected also in the spirit of solidarity by world leaders.

Thank you. What a joy it is to be with you, Barbara, and with Catherine and with Shenggen and with all the people listening. This is a time when the human family has a chance to show what it's made of. All, every single one of us matters on this, leaders as well as the poor, poor people who are struggling to get the food they need every day. But we all need to have hope. Thank you.

Barbara Thank you so much, David, for your impassioned message. It's tremendous. So, Shenggen, Catherine?

Shenggen Yeah, I just wanted to add, while I very much agree with David, I think it's time to work together, not to pull the whole into different parts. Now, I just wanted to add another dimension in Africa. Right now East Africa is fighting African Locusts, a desert locust. Twenty million people are already suffering from hunger and malnutrition, and COVID-19 is coming to that part of the world to basically add another layer of even more complex, more challenging situation to Africa. So we need to prioritize our investment, our effort to look at what's going on in Africa International aid, international cooperation must prioritize our efforts to look at what's going on there; otherwise, millions and millions of people will suffer, will go hungry, will die, and probably will go undernourished in the nutrition part, yes, absolutely, even people who don't die but if they're undernourished, particularly children, then it's a life sentence – their whole life will be affected.

Barbara Thank you. Catherine.

Catherine Well, thanks, Shenggen. That was very helpful. But, David, it's almost impossible to follow what you said. I would then less articulately add that it seems now that, when we look at what other countries are going to be going through this or starting to go through this, I think there's two basic things that the rest of us need to help provide. One is whatever we can do about healthcare. And I just read that WFP, for instance, is setting up field hospitals in certain places. I don't know under what circumstances or where they're setting up their usual kind of airline, transport systems to places that are going to be used for logistics hubs for moving supplies. So that's going to be very important, I think, to the WHO effort and to the individual country efforts.

So of course the health efforts are going to be critical, but so are the food and nutrition efforts and all the things that we've been talking about already on this call. And those are absolutely critical. We should say that there are places to donate. If anybody's home feeling – oh, what can I do beyond what I'm doing in my own community? – you should take a look at the different organizations that are very involved in this work. The U.N. Foundation has recently set up, along with a Swiss philanthropy group a fund to support the World Health Organization. And then of course there are organizations in many countries that support the U.N. and support NGOs and other U.N. agencies. So while we're sitting home doing other work, if we're limited on things but we have a few financial resources, there's a lot of people that could use funding, depending on your specific interests.

Barbara Yes, thank you for that reminder – so important. We're going to turn now to one or two questions from our audience. I know there's many. Meghna Ravishankar is our program director for the International Borlaug Dialogue. Meghna, what are we hearing from folks?

Meghna Yeah, thanks, Barbara. So I think based on all of our speakers' amazing comments and inspirational messages, a question which has come up, which I think will be a hopeful way to cap this conversation is – What is your vision, aspirationally, for the new normal in our food system once COVID-19 has been brought under control? What is the opportunity for a more sustainable path when we look down the line?

Barbara Thank you. Who would like to start?

Catherine I will, because I don't want to follow David, so I'll go before him. I think that one thing that we're seeing is more connection between farmers and consumers and less steps in between. Now, some steps are critically important, of course, but I think if we have more understanding from consumers about what farmers can produce, how and when, and more understanding of farmers about what their markets could be, that that might be one of the good new normals that comes out of it. Thank you.

Barbara Thank you. New normal. Shenggen, David?

Shenggen Yeah, well, David always has the last word or the most important word. Now, from my point of view, the trade will continue to work. We cannot use this virus as a way to stop trade or for trade protection. Obviously, we have to look at trade patterns. How can we make sure that trade will be more inclusive, more resilient, together with a strategic reserve?

Now, we also wanted to find Bannon's boundary with our nature, between food and nature. Because, if we don't deal with our nature carefully, another disease will jump to the human being, either through wet markets or through the whole supply chain. But how can we make sure that we do have proper regulations? We also implement these regulations. So this has to be looked at more carefully in one more time, design certain protocol. As you know, in the last several years we have some sort of arguments that, oh, there are not alternative produce in terms of wild insects, wildlife, and so on. We naturally think about it. You know, I think we do need to make sure that some African needs access to the bushmeat, to wild foods, and we must have proper regulation protocol and to check, monitor the safety of these foods.

Catherine Barbara, can I underline what Shenggen said. Sorry, Shenggen. Twice you mentioned trade, and I think that's hugely important, and a lot of countries are being kind of kneejerk and protective, and, oh, we don't want food to come or go, and that's exactly the wrong to do. It's the wrong thing for their own farmers, their own consumers and for the health of their own economies, let alone the rest of the world. So, thank you, Shenggen

Catherine David.

David Barbara, thank you, and, thank you, again, Catherine and Shenggen. So I'm glad that Catherine mentioned shortening the supply chains. I'm so glad that Shenggen really focused on both trade and also on zoonotic disease. This is something, you know, Shenggen, that I was working on ages ago when I was responsible for the U.N.'s response to bird flu. And I couldn't understand why societies keep creating these environments that seem to make it easy for pathogens to move from animals to humans. And I'm super, super pleased that you yourself just said those words—very, very important at this time.

And so just in a way this is a summary remark, because I know this might be my last moment on this program. So I wanted to start by saying this COVID pandemic is revealing so many fragilities in the way we live—fragilities in the fact that our communities are not really as well organized as they might be to deal with a threat; fragilities because of our inadequate public health services that need to be strengthened so fast, fast, fast to enable for us to live with the COVID threat for the time being; and then fragilities, of course, in relation to our food systems and so on.

And so I think that for me just let's just all try to remember that the primary focus of the food system is to enable people to be well-nourished, starting, as Catherine said, with the child before she or he is born and then through those first critical thousand days and then on towards adulthood. We now know so, so well that the future capacity of a person depends on the nutrition in early life. And if the food systems are not geared towards good nutrition, we are not serving society. All of us who are involved in food have got to get that right at the center of our thinking. And of course it's poorer people, we always know, who find it hardest to get access to nutritious food. That's just the reality. It's the reality in the United States, and it's the reality everywhere in the world.

Secondly, I think we've learned so, so hard that food systems depend on farmers, whether they are farming the land or farming the sea or farming fresh water. They are the heart of food systems. They're the soul of food systems. And there are half a billion smallholder farmers in this world who all right really the center of food production for most, most people. And they have very precarious lives and very delicate and difficult lifestyles.

And so the resilience of smallholder farming is critical. When I came to Iowa, I remember when I got the Prize, one of the most interesting discussions was with people who are working with farmers in your state, and we were hearing that even there in the act beating heart of U.S. agriculture, there are farmers in real difficulty, farmers in distress, farmers who are finding it so hard to pay back their loans, farmers who are not well. They're finding real mental challenges with coping with the distress, and some of us know that this leads to terrible consequences for them and for their families. Let's put the farmers, particularly the small farmers more at the center of what we're trying to do and not take them for granted. They are struggling, and they're struggling big time at the moment.

Thirdly, I just want to underline what Shenggen said. There's no point in having food systems if they are not really valuing nature. If they're undermining nature for whatever reason, that's not good for the future.

And then fourthly, we know that agriculture and food systems in various different ways contribute to more than one quarter, probably one third of the emissions of greenhouse gases that are leading to an acceleration of climate change at a most terrifying rate. I know that energy emissions are also important, but don't forget the food and agriculture contribution to climate change. We should take notice of what's happening right now, and as those systems are transformed, find ways to reduce the extent to which they are contributing to this massive acceleration of global warming that's going to be much, much worse for the world than COVID. Thank you.

Barbara Thank you so much for those comments, David. And I have to say with our plan to try to address the resilience of global food systems, I think you've set our agenda for our International Borlaug Dialogue to some degree, if we're able to proceed in person, whether we are or not. And to highlight your point about the farmers, I mean from all of you, this is so crucial. And one of the things I first learned when I began my position here at the World Food Prize was some of Norman Borlaug's last words, which were, *Take it to the farmer*. So we take that to heart, absolutely, and live with that really here every day. Thank you for your story about Iowa.

Sustainability will be at the heart of discussions of a resilient food system – there's no doubt. And looking at the impacts of agriculture on climate change is crucial. We'll also want to focus on the contributions that agriculture can make to mitigating climate change. So these are all crucial factors in the resilient food system.

So one last question, if we have just a short one, Meghna, and then we'll close on time.

Meghna Sure. The next question I think I can bring up... We've had so many good ones come in, so I'm sure we could talk for hours. But I think the next question that people are wondering about is – What are the medium and long-term implications on the food system of a pandemic like COVID-19?

Barbara Yeah, so maybe looking out at the longer term. We talk about a lot of immediate actions. Anybody have a quick response?

Catherine A lot of it, of course, we don't know what the longer-term implications are. And what we're going to see, I think, in the medium term, a lot of pivoting to providing the food that people can actually sell and distribute, given where we are. So there's going to be a first pivot for a while. But then as countries, I think, gradually open up, there will be shifts in some cases back to what it was like before but hopefully in other cases to more policies and more production that's related to the kinds of foods we've gotten used to that we never had before.

Shenggen Yeah, from my point of view, I do think we need to sit down as a researcher, really analyzing – what should a food system bring or like to have in terms of nutrition, in terms of inclusiveness, women, children, farmers, pork producers. Then in terms of accomodating resilience, in terms of security, you know, to make sure that people have access to food all the time, all the year or anywhere. So that needs to reset some of the thinking we had before. So while I don't have an answer right now, as a researcher, you know, that's a good research question. In fact, the research community are already beginning to think through... The CGIAR and IFPRI, they're ahead. Yes, we have been pushing the food system for the last five to ten years, and David was a leader over there. Catherine, obviously, is a champion on nutrition agenda. But now we need to sit down again, just particularly this pandemic of COVID-19 – what does that mean for the future food system?

So maybe, you know, in the next four or five years... Sorry. The next four or five months, we will have an answer to really tell you – Hey, that's a food system we would really like to have.

David I would just add, Barbara, because I have to run, and I know you do. Actually, the most important thing is to make sure that women are at the center of the redesign. I think they might make a better job of it, quite honestly. They're right at the center of everything now on COVID, and they should be the center of everything on the future food systems. Thank you for your leadership.

Barbara Thank you. Well, I can't thank all of you enough. I know the audience must be so appreciative and inspired. This is the first in a series of Digital Dialogues that we hope to conduct. We're going to use the discussions here today to build the next in the series. We imagine that around mid-May we'll conduct another gathering of experts and laureates to talk about the food system, to talk about the components of it – what are the compelling components of good governance? How do you analyze and provide the scientific and technical underpinnings needed to address the global food system more effectively in the future and design one – the vision that you all started to talk about.

So let me just say that we are so hopeful that this entire world moves into a full recovery and we're able to mobilize (Thank you, David.), we're able to mobilize going forward and be in person more. We're planning for an in-person meeting in October, and we will of course abide by all of the restrictions and recommendations. So if we need to go virtual, we're ready to do it. So I just want to thank you all for participating today. And as always, be thankful for your own food security, and continue your work together to increase food security for the rest of the world. Thank you.