CLIMATE AND CONFLICT: HOW GLOBAL LEADERS ARE ADAPTING TO TROUBLING TRENDS Panel Moderator: *Ms. Kimberly Flowers* October 18, 2019 - 11:00-11:55 a.m.

Introduction

Margaret Catley-Carlson Council of Advisors, World Food Prize

That was one of the most unforgettable panels that you will ever listen to, on a completely unforgettable topic, because it's the one that's going to determine what our planet looks like in the next future.

We're going to move right away to the final panel of the morning before lunch, and we're continuing on our theme of climate and conflict and global leadership and how we are adapting to these things. And we've got good people coming on who have been very thoughtful in looking at and analyzing these issues that we have just been taking on this morning.

So I'd like to call our next panel to come up as this other panel is leaving. The next panel is Mr. Nicolas Denis, who is a partner in McKinsey. I think I see people over there making their way up to the floor. So Mr. Nicolas Denis who's a partner in McKinsey and is going to take us through a very important part of the next panel. Tjada McKenna, who is the COO of CARE. Jana, okay, Jana. And Dina Esposito, who is the VP of Technical Learning Leadership in the Mercy Corps, which has a worldwide outlook and very important views on these things. And Mr. Mark Lowcock, who is with the UN-OCHA.

So we've had an amazing session this morning with great minds taking us to the ultimate of the issues that we really must face, and we're very appropriately being followed by a number of people who have gift us with very serious patient work on doing the analysis of how possible this is, what has to move, what we have to look at, and what we have to know about in order to really take some steps in the directions that we all want to take after this morning's session. So I think we're very pleased and very glad to have you here. Not an easy act to follow, but I think you've got the knowledge and the wisdom, and we look forward to your sharing it with us.

Introduction

Mr. Nicolas Denis

Partner, McKinsey & Company President - World Food Prize Foundation

Thank you. So indeed lots of discussion already in previous panels about climate change and its consequence in agriculture. And I'm really thrilled to have such an impressive panel with me to talk about climate and conflict.

So let me start this discussion with a question. What will happen in the world, and for this debate here for agriculture, if when today no longer looks like tomorrow? I know that might sound like a strange question, but bear with me.

So for the entire civilization with the way we've built infrastructure, the way we've built our lives, the way people have started to feed, was actually all relied on a stable climate when basically today looks like tomorrow. But, you know, I can see we like to look at facts, so we look at... Actually, I've got lots of facts for you today, actually 307 years of facts to talk about that.

If you look back into the pleistocene period, right, you see that basically at the time people were nomads, right, people get moving because climate never stabilized. And then suddenly 10,000 years ago something changed – people settled in, people created villages and cities; they started to develop agriculture. They created surplus, surplus in terms of food but also money then after. And all of that was possible because of one thing – it's just because climate stabilized and allowed them to do all those things.

So when we basically then look at where we are today, right, we cannot do a zoon on the recent history, but we've seen that the level of CO₂ has never been as high. We're already a concentration of 415 ppm, and we go up to a higher level. This is higher than we've ever been in the last three million years. So what happened in different parts of the world when today doesn't look like tomorrow? We look at civil economic system and try to understand the socioeconomic impacts, impacts that affect people, impacts that we have not only on yield but also on cities, on infrastructure. And basically you start to see that climates is becoming the multiplier effect when then the probability of events is actually increased, and so it's not necessarily the average that becomes a problem, but the rare events are becoming more frequent.

And that's what we see on the slide. This is looking at the last hundred years and looking at how temperature has increased in different regions. Now, of course, the usual debate talks about the 1 degree Celsius increase of temperature, but reality is some regions of the world had +5 degree Celsius. So that's when you start to see the tyranny of averages and that, you know, the debate becomes quite different if you start to look at it from a more granular level.

So for this debate, the panel will try to answer the question—How will our leaders respond and adapt to the troubling trends? And if we take agricultural lens today, we see that there will be three elements that will be, from my perspective, important. So one, responsibility to act but also two factors of risk that could actually turn into a opportunities if we actually understand them and if we can take action to anticipate them.

So the responsibility of the sector is the one of recognizing that this is actually a source of emissions as well, right. A bit more than a quarter of the emissions come from agriculture, mainly from methane emission and farm land use-change.

Now, of course we take action, but we have to be fair. If we look at ourselves as all kind of stakeholders in this industry, we actually probably do a bit less than what we've seen in a power sector that actually have been through complete transition in the power sector. In fact, if you look at actually the declaration of countries in the wake of the Paris Agreement, less than 40% of countries had a comprehensive agricultural development plan, a sustainable agricultural development plan in their strategy, while a majority of them has a chapter on the power transition.

But fortunately there are solutions to that. I mean this is just a range of, from greenhouse gas, efficient food production, demand shifts, land use change levels. And we have actually a plan; we just need to find a way to implement it.

Now of course we know that the cost is not equal across all these levels, and we need to find a way for the regulators and for the investors to compensate for that difference in cost.

Now, the second element was the one on looking at the future. Now if we look at climate models, they help us to forecast what will happen in the future. Well, let's look at what it could mean for agriculture if we basically see that some of the assumptions we considered as a given might become very brittle when we look at it from the vector of climate change.

So an example of that is — if we look at how the projected changes in crop suitability per region could evolve in the next few years. It's actually very important to overlay that with an important assumption that we all do today — where are the breadbaskets of the planet? Most of them are located into part of Europe, Australia, U.S., part of Brazil. And actually if you start to look at what could be the future, you see that some of those breadbaskets will actually be subject to change. We'll see the right means... You see actually a negative change in suitability, so less suitability of crop, and the green means more suitability. And you actually see that some of the regions, within some regions you will have winners from regions that will become more prone to agriculture and some that will actually be losers. It means that we will need to anticipate those changes as we think about the breadbasket and how the food will flow in a different part of the globe.

But you might argue that it is still far away in time and that we have time to adapt – and this is actually not granular enough. But let me take some more granular and close to us example. If you look at India, for instance, this is already one of the warmest and most humid weather that we actually have in India. But as we will see, some of the changes that were on the previous slides, you start actually to wonder if you will cross some of the physiological thresholds for people working outside. How long will people be able to work outside, how many hours? What will it mean for the jobs, for the livelihoods? What it will it mean actually for the institution that will have to support them? So all of that are kind of questions that are not questions we'll have to ask ourselves 50 years from now but actually that we have to ask ourselves now.

Another example is one of the research we are doing across different countries on the close impact of climate change, and this is one of the cases we've done for Ethiopia. We basically see that Ethiopia, which is seen as a success story in terms of ag development in Africa and yet would still be very vulnerable to the early effect of climate change. This is just kind of trying to take a 2020 to 2040 perspective, what could be the impact on suitability and volatility of yields for coffee being one of the key cash crops for smallholder farmers in Ethiopia.

Well, you basically see it is actually a mixed perspective. You see some regions becoming more favored by the climate change but some actually being in danger. So it's important to recognize that volatility and see how the country could adapt to still make it a successful crop for the smallholder farmers in Ethiopia.

Now, just to sum up all that, what needs to be done to solve this problem is not just incremental change. There is actually a paradigm shift in the way we think about agriculture and ag development in many regions of the globe and, by the way, equally in developing and in developed countries as you've seen from those maps.

What needs to be done can be summarized, for me, in two or three things. So on the technology side, we need lots of technology, and that was already stressed by many of the panelists before me. Unfortunately, the range of technology keeps expanding, and we can trust that innovation will continue to deliver, and in tradition of what Norman Borlaug has created, we celebrate every year some innovations here. So I'm quite faithful on this one. We actually have quite a lot. But we need to continue to support it in a very strong way.

We need also to think about the right regulation to help direct the market forces — right? So far the market doesn't necessarily see all this risk ahead of them. They just look at current. Maybe they look at the past, but they don't look at the future. So it's important actually to point to that and to think about regulation, also in terms of solving some of the equity issues related to those new challenges.

And lastly, we need also to have capital but not just a sheer amount of capital but smart capital, capital that is actually aware of those risks and actually can invest in more climate-resilient projects rather than projects that kind of keep promoting the risky behaviors that we've seen in the past.

Now, I'd like to close also with some good news—right? In a sense there are kind of three reasons to give me hope in the future. So one, we actually have good forecasts, so we know what could happen. Actually, sometimes it looks gloomy, but actually we know what are the risks ahead. So again what needs to be done in terms of technology deployment, in terms of rules to be change? We see also a clear path forwards. And also finally the human factor with you—right? And we have other decision-makers in agricultural sectors to pick up these challenges. I mean, these are daunting challenges, but I really trust in good faith that this sector has a lot of good leadership that we can deploy against it.

Thank you.

Amb. Ertharin Cousin	Distinguished Fellow, Chicago Council on Global Affairs
Ms. Dina Esposito	Vice President of Technical Leadership, Mercy Corps
Mr. Mark Lowcock	Under-Secretary-General for Humanitarian Affairs and
	Emergency Relief Coordinator, UN-OCHA
Ms. Tjada McKenna	COO, CARE

Panel Moderator

Ms. Kimberly Flowers Director, Humanitarian Agenda & Global Food Security Project, CSIS

Thank you so much, Nicholas, and thank you to McKinsey, who has partnered with CSIS to pull together this panel. And thank you to you all for staying until the end. I promise you are going to be rewarded by sticking it out, because this is going to be a great conversation with some good friends of mine.

What we're going to talk about it climate change in conflict and how that relates, of course, to food security and, of course, to smallholder farmers. But we're going to be looking at it from a slightly different lens. And by that I mean looking at this also from the humanitarian

perspective. I've been coming to this event for a decade, and I love it very much and love that it's focused on agricultural development and research. But I think we need to do a better job of thinking about this not just through the development lens but also through the humanitarian lens; because, as you all know, especially with climate change, with conflict, those that are suffering the most from this unfortunately have the least. And we have decades of experience with my friends here on the panel who can talk to us about that.

I'm going to do some quick introductions, and then we'll get right into the conversation. First, I want to let you know if you see on the schedule, that unfortunately the Honorable President Houngbo from IFAD was unable to join us.

He sends his regrets. My name is Kimberly Flowers. I live in Washington, DC where I direct a program on food security as well as humanitarian assistance at the Center for Strategic and International Studies, or CSIS, which is a think tank. In my former life I also worked for USAID and for USAID partners.

Next to me is Ambassador Ertharin Cousin, who currently is affiliated with Stanford University and the Chicago Council, but in her former life she was also a U.S. ambassador to the U.N. agencies in Rome as well as the Executive Director of the World Food Program. Next to her is Dina Esposito who also worked for the U.S. Government, leading our Food for Peace programs. Also, she is currently the vice president for Mercy Corps, which is one of the leading humanitarian agencies in terms of responding to these crises. And next to her we have Mark Lowcock who leads an agency some of you may not be familiar with, but it's the U.N. agency, OCHA, which responds and coordinates devolving humanitarian crises in the world. But in his previous life he also held multiple senior positions at DFID, which is the UK development agency responding to development. And last but far not least is Tjada McKenna. Many of you may remember and know her from her days with Feed the Future where she helped found and then lead that organization. She is now back in our space as the new COO of CARE, which is also a leading NGO and humanitarian organization in this space.

So to be polite, since we have one man on our almost-all female powerhouse panel, I will start with the gentleman. Mark, talk to us first about the trends that you've been seeing in terms of climate change and conflict. And how does that relate to some of the crises that are most prevalent in what you have to prioritize in your work?

Mark Lowcock

Kimberly, thank you. So as you say, my job is to have an overview of all the world's humanitarian crises and try to coordinate responses to them. You know, the world in its wisdom created all these wonderful agencies – WFP that Ertharin used to run and the wonderful NGOs and the Red Cross family. And one of the things about the crises we're dealing with is that no one agency can solve the problem. So when you think about a famine, actually what kills people in famines isn't just the starvations. It's mostly the measles or a respiratory infection – those things that a healthy person fights off and a starving one can't. And that's why there needs to be a coordinator.

So what we're trying to do in my office is identify the needs. On the 5th of December we will publish our Global Humanitarian Overview for next year, which is I mean the world's most authoritative, sophisticated assessment of future needs. We're trying then to coordinate response plans. This year we are trying to raise \$25 billion to reach 150 million people, save

their lives through these crises. We're trying then to raise the money to support all these guys in doing their work. And then we're trying to support implementation, especially in conflicts where the biggest problem is the way the men, and it is the men, with the guns and the bombs get in the way of the lifesaving agencies trying to protect people.

On climate change I'm basically seeing two things. Firstly, more really big bad storms. A month ago I was in the Bahamas. This week we've seen the typhoon in Japan. Two years ago we would have been talking about Irma and Maria. Paradoxically, in a way I'm also seeing more droughts, so more wet problems but also more dry problems. Six weeks ago I was in Somalia, a very drought-prone country, exacerbated by conflict. And in the past, droughts have led to famines in Somalia, as in '92, the first time I was there – a quarter of a million people lost their lives and then again in 2011 a quarter of a million lost their lives. But we're getting better at staving that off. 2017 – the worst drought the country had seen for a long time, we staved off famine.

But what we need to do, as well as staving off the immediate problem, is help countries diversify and evolve to reduce the risk they face. I had a very instructive experience in Malawi about six months ago where there in the middle of a really bad drought I went down to Salima, the shore of Lake Malawi and spent a few hours just listening to the stories of people from that part of the world. And what they said to me, especially the older people, is that they could see the climate has changed. People in that part of the world are entirely reliant on subsistence maize farming and there to make a living farming maize from rainfed agriculture, what you need is 90 days decent rain per season. The number of years where that's happening is declining. So what they are talking about is how to build different livelihoods, so that the humanitarian system both needs to do a fantastic job in saving lives, but it also needs to help contribute to the solutions.

Kimberly Flowers

Thank you, Mark. Tjada, I want to turn to you next. Why don't you give folks a quick overview of CARE is and then what, as CARE thinks through its programming, how does this influence what you do in terms of climate change, conflict? And who do you see impacted the most?

Tjada McKenna

Thank you, Kimberly, and thank you to everyone. For those of you who are not familiar with CARE, our goal is simple – we want to save lives, defeat poverty, and achieve social justice. And our primary lens of that is for women and girls. So on the save lives aspect, we are very active in humanitarian assistance work. And on the defeat poverty and achieve justice, we also are a big player in the development space as well. So we do both, and increasing they are emerging together to be the same thing.

So what have we seen? As Mark was saying, things are just becoming more severe, and they're happening more frequently. So as an example, in the el Niño crisis in Southern Africa in 2015-16 there were roughly 38 million people left food insecure then. The el Niño we saw this year in 2019 has 45 million people in a state of food insecurity, and those people have also been impacted by seasons of inadequate harvest caused by climate change.

So the issues are compounding the other thing we're seeing is the disproportionate effect of climate change and conflict and all of this on women and girls. So women, on average in disasters or humanitarian conflicts, are four times more likely to die. And the big cyclone years

ago, 70% of the victims were women. We are seeing an increasing rate in some communities where there are high levels of gender inequality, and with people on the move we see an increasing rate of child marriages — so things that you don't even think about in an emergency situation. So child marriage to kind of reinforce some social bonds that have been broken for economic reasons, for survival reasons.

So it has been really important for us to really break down the walls and the traditional ways that development actors work, compared to humanitarian actors. So for example, monitoring and evaluation is something that people did more in development situations than humanitarian situations, especially because these things are becoming more protracted, and they're coming on top of each other. We are doubling down to do more.

One of the first things we do at any emergency is something that we call a rapid gender assessment, and we are sharing that information broadly with aid organizations to inform the response and also the government. So for instance, in the work that we're seeing on the Colombia-Venezuela border, we're seeing huge increases in sex trafficking, huge increases in violence against women. And making sure that those things are programmed into responses and that people are getting the resources that they need to support their families.

And we're also seeing that we increasingly have to train our staffs in everything. There's not this divide. Obviously, resilience has been a cornerstone of all of our work for a long time. We've doubled down on savings. We've pioneered something call the Village Savings and Loan Association. We've reached about six million women with savings in the past 25 years. Our goal now is to get to 50 million women, because as families increasingly are taking on many of these shocks, they need savings; they need to think of contingency planning. We need people who are able to do climate change assessments at the beginning of projects to think through those things.

So it really is increasingly blurring what was probably an artificial divide in our work between humanitarian and development, but it's also really causing us to double down and really help other actors to understand the impacts on women and girls and to make sure that their programming takes that into account when we're doing things that people generally think of as just a gender-neutral savings lives activity. It's not.

Kimberly Flowers

Since you bring up resilience, of course I have to turn to Dina, because resilience and resilience programming is at the heart a lot of what Mercy Corps has been doing for years. So, Dina, talk to us about what is Mercy Corps, what is resilience, and how does that connect to climate change and conflict.

Dina Esposito

So Mercy Corps is an international non-governmental organization. We're about 5,000 strong. We're in 40 countries around the world, and we are focused not only on humanitarian assistance and development with a focus on market systems like Tjada's organization, but we also are engaged in peace-building, a lot of people-to-people, bring people together to improve trust among communities who increasingly are in conflict over natural resources. And one of the things we're seeing in our communities is that there is underlying tension that has always existed around water and land, whether you talk about pastoral communities who are on the border between, in the Uganda-Kenya border, or the middle belt of Northern Nigeria. But now those resource conflicts are just more and more acute.

So it's increasingly important to combine natural resource management types of programming with peace-building programs so that you can get resource sharing agreements. We have early warning systems to alert people if livestock is passing through their farms, for example.

One of the other things that I have seen, and I just came back from the Democratic Republic of Congo. I was in South Kivu, which is on the border with Rwanda—highly conflicted area; dozens of armed groups have been there for decades. And it is also suffering from the impacts of climate change.

I met a young woman who was in our farmer field school where we're teaching resilient agriculture and sustainable natural resource management. And I asked her, "What are you noticing?" And she said, "You know, I don't understand the weather anymore. I just don't get it." Right? "I plant my seeds. It doesn't rain. I lose my seeds. I plant my seeds. It rains too much. I have to figure out—can I afford to do it, or I just miss the harvest? Or I'll plant my seeds, I'll get a harvest, and a massive hailstorm of all things comes across and completely wipes out my crop. So she says it increases hunger for her family and her community, and you see that globally.

We have more people in need of emergency food assistance today than ever. I was the director of the Global Humanitarian Emergency Food Program at USAID. When I started in 2010, there were somewhere between 40 and 60 million people in need of emergency food assistance, acutely hungry, so much so that food assistance was required. Today that number is over a hundred million. So when you speak to an individual in South Kivu, it's a hundred million times that you're hearing that story. And what happens in a conflict area is that increased desperation makes picking up a gun look increasingly lucrative. How are you going to support your family?

And so I come back to that point about — What are the peace-building dimensions that need to be alongside of the relief and development interventions? And that's where our resilience frameworks which we've been developing and iterating since really 2010 are asking those questions. And we're saying, okay, even within Mercy Corps we have stovepipes. The relief, the development and the emergency practitioners need to sit down together, think about what the problem set is in South Kivu and how... — not that they have to become experts in each other's sectors — but they do need to ask, how, if we work together, can we ensure that that great technology and improved seed actually yields a crop and that the humanitarians are helping that family before the crop comes and the peace builders are ensuring that peace is in that community.

So that's just a little bit of a taste of it.

Kimberly Flowers

Ertharin, you know, when Dina brings up the competition of the resources, I think back to the great Chicago Council Report on Water Scarcity that I know you worked on, so maybe touch on that, but also just your thoughts on – as you've seen these changes happen over the last decade, the impact is happening now. What should especially young people be thinking about as they're learning more about this topic?

Ertharin Cousin

Well, as we sit here, and I'm sitting here nodding as everyone is speaking, going, oh, yeah, I know that, yeah, ooh, that's terrible. North Kivu, oh my goodness. When we think about all of the issues we've discussed here for the last three days—research, development, providing access to new tools, new ag tech, new food tech—the challenge is that those tools aren't being developed for low-income populations. They're not reaching vulnerable populations. And as a result, you have stresses in those communities. Each of my colleagues here has used the word *resilience*. Resilience is simply the ability to withstand shocks in crisis.

There's nothing complicated about it. How do you withstand the shock in crisis? You have seeds that are drought-tolerant or drought-resistant. You have seeds that can withstand long periods of salination when the storms come and the rice seeds are under salt water for too long.

You have the policies in place that support the sharing of our fresh water. Let's remember that we look down on our planet and see all this blue water. The reality of it is, 1% of all of our water is fresh water; 70% of that water is used for agriculture. We have growing urban populations that result in more conflicts now between urban populations and rural populations for the use of what is now becoming a scarce resource in too many places around the world.

And these aren't things we <u>think</u> may happen. We saw almost a zero day in Cape Town just a little over a year ago. We've seen challenges in Rio, Mexico. And I was just talking to a professor from Colorado State last night, and he was telling me about the challenges in Colorado.

And so the challenge of a resource that we have 1% of on our entire planet that is our freshwater comes from rain, precipitation and melting ice packs from our mountains and from our snow. We're seeing Mt. Kilimanjaro and the other ice packs that feed the rivers across climate-marginal places and we see those ice packs shrinking; we see precipitation becoming more erratic — that means less fresh water.

So we recognize that the science must lead us but that what we at the Chicago Council published in our report was that the science must come online for the benefit of not just the affluent and the middle class but for low-income people as well. We must ensure that we have policies in place that support not just those who can afford the access to seeds and tools that will ensure their ability to withstand shocks and crisis but for the entire global population to ensure that we can build that resilience that is necessary. And we must recognize that climate is, as the Department of Defense has now recognized, a force, a conflict multiplier and that the issues that my colleagues have talked about that are directly related to the lack of access to peacemaking, the lack of access to resources, the lack of access for women, will ensure that that multiplier does in fact affect conflict.

Kimberly Flowers

So two weeks ago I had the privilege of being a participant in a CARE learning tour to Bangladesh where I got to travel with members of Congress and others including Tjada. And as you talk about, Ertharin, the most vulnerable... And you know Bangladesh is one of the countries that is feeling the impacts most of climate change, and as we met with refugees in the Rohingya refugee camps some, and others, we were there to look at nutrition. But there's still a lot of linkages there. So, Tjada, how can we think about our trip, and how does that relate to some of what we're talking about here?

Tjada McKenna

Yeah, thinking about this topic and the trip that we just saw in Bangladesh, you saw it everywhere, and we had the opportunity to spend some time in the Rohingya refugee camps there. And right now the need... I think the emergency funding system is so stretched, you know, feeding all these people from Yemen to South Sudan. And so when we were repairing... CARE runs one of the camps, and we were preparing for the monsoon season, we could only raise 7% of the funding that we needed to weatherproof the facilities. And there were about 1700 families whose makeshift shelters in these refugee camps were destroyed in the monsoon season. And there's just constant reinforcement of those facilities for rain. And then when you talk to them about... They all want to go back to Burma and Myanmar, but they also, when they told us stories of there, they also talked about... They didn't call it climate change, but they were struggling there on their farms and with their food in other places.

And then the other, Bangladesh. Bangladesh has just been a remarkable story of economic development, but of course there's still a lot of poor people left behind. And the other piece that we saw that was so acute for us is just some of the gender norms that we saw. One of our colleagues, one of the members of Congress when he first got there, he says, "Where are the women?" So in some societies where women are encouraged to stay inside, where they're discouraged things like climbing trees or running around outside, like what happens to these women when emergencies happen or when there are shocks to the system—so this need to reinforce that and to help people get other means of economic opportunity. We met with some garment workers in factories who told us that, because they were now earning an income, they had a better voice in their families and could help prevent child marriage or help save themselves from getting married off.

So it is one big ecosystem, right? I think Pam Anderson, who I saw before, decades ago, introduced us to the concept of systems change and drove it so hard when she ran SIP. And you do have to think of it all as very interconnected and kind of strengthening people's opportunities and reserves to withstand all of this. And sometimes that's even just physical. Some of our programming—we have a program in Uganda where we teach adolescent girls how to box, and it's a more comprehensive program, to talk about their rights, and it's an entrée to sexual reproductive health and education. But just building strength on so many different dimensions, including physical strength is so important.

Kimberly Flowers

You know, thinking about the Rohingya refugees, of course, and see things about all the displaced persons interest the world and talking about interconnectedness... I'll start with Mark, and anybody can respond, of course. But thinking about the connections that I'm sure you see, Mark, between forced migration, displaced persons, conflicts, climate change, how all of those are connected and perhaps how that's changed in terms of political will, in terms of your programming — what is it you're thinking about when you have to confront those issues.

Mark Lowcock

I think one of the starting points is for us all to recognize and understand that conflicts have causes, and what we're seeing as a result of climate change is that we're seeing more powerful drivers that are creating displacement and conflict and so on. On Tuesday I'm going again to West Africa to the Lake Chad Basin, the Sahelian region. If you look at that region, what you see

is very rapid growth in populations — it's doubled so far this century. It's going to double again in the next 25 years, and then it's going to double after that. You see people whose historical lifestyles have been nomadic, have been on the move so their pastoralists. And you see that the environmental resources are increasingly stressed so that the traditional lifestyles are not working for people, and so you see increasing competition over resources, witnessed in places like the Lake Chad Region. The water in Lake Chad has declined by 90%. The population is much bigger, more people fighting over fewer resources and that creates a space for insurgents and terrorists and so on.

So the only long-term solution to deal with that problem is to find different livelihoods for people. Unfortunately, what we see at the moment mostly is a response to the symptoms. So we see a response in the form of military efforts to deal with insurgents, which I'm in favor of, you know, if that needs to be part of the response. But we also see a response in terms of humanitarian action, which I'm obviously in favor of, including for displaced people. But what we're not seeing enough of is a response dealing with the underlying drivers of the situation.

Now, there are some ways the humanitarian system can act better to create more space for the solution and kind of agenda. One of the things we need to do is anticipate much better the next problem. It's much cheaper, more humane to deal with a problem earlier than to wait until it's on our TV screens and we're confronted with huge numbers of starving children who can be only saved, as they must be saved, by expensive therapeutic feeding programs. And I am seeing more examples of earlier action. You guys who were in Bangladesh recently and in July just before you were there, when we could see a big storm coming, the World Food Program provided to 25,000 people - \$53 per person, three days before the storm, to get out of the way and to solve their own problem. And that kind of anticipatory action is what we need to see on a much bigger scale in order to avoid things simply overwhelmed by the strain of dealing with growing caseloads.

Kimberly Flowers

Dina, before you add some comments, I have to put a plug, because you bring up the Lake Chad thing. I see Chase Sova in the audience. Chase and I, as well as Christian Man, coauthored a piece that we published this week on food security and climate change and talking about U.S. leadership in a fragile world. So I'd encourage you to Google that – you'll find it easily. But we have pictures from Lake Chad from 25 years ago to today showing the drastic the drastic difference of the water that is no longer there and then of course talk about how that creates more instability. Dina, what do you have to add on this?

Dina Esposito

Well, Mark was talking about this level of displacement we're seeing more and more. We have historic numbers of refugees, more people displaced today than anytime on record. And one of the reasons we're thinking differently about relief responses is because these are what we call "protracted crises." It turns out that people who are displaced today by war and other factors are displaced for as many as two decades and that some of them are stuck in refugee camps with very few opportunities; others are living in host communities. But relief actors tend to rush in and ask, "What is it you need to survive tomorrow?"

But if we know we have two decades, we might begin to address the immediate need but step back – and this is where the resilience assessment approach comes in – and not say, What do

you need to survive tomorrow, but what are the risks you're going to face in the community or place that you're living? Is it climate shock? Is it a price shock? Is it a health shock? What systems do you need to address that — the systems that are social, ecological or economic — to meet your potential vulnerabilities? And then how do we strengthen the system sand the capacities of people to cope, adapt and thrive for themselves, so that we can get out of the way and allow them to continue to advance their aspirations?

And the aspirations, when you do a resilience assessment, you don't just find out what people need, you find out what people dream about having, and it is remarkable. And you can go to Maiduguri where people are displaced from the conflict from around Boko Haram, you can go to South Kivu, you can go to a refugee camp, Syrian refugee camp, and the story is really the same — "Thank you for the food, but what I really want are education, training, access to finance, so that I can get on with my life." And until we kind of begin to address those aspirations, we have a problem.

So that the resilience approach is really around thinking about how we give people agency to help themselves. Our research around resilience in Syria tells us that people cope with the conflict mostly through friends and family and through access to markets. And a benefit of the world today compared to the '90s is that there are a lot more markets out there that can be reinforced and support. They are not, the majority of them, getting relief support for government support.

So these are things that resilience actors are saying – How do we reinforce communications with family and friends, who are the first providers? And how do we reinforce markets, so that people don't have to rely on relief?

So we have two decades we probably could work on it if we get the right kind of resources.

Kimberly Flowers

And it's part of why you see a lot more cash basis systems – right? – and use of technology so that we're building up those markets. Ertharin.

Ertharin Cousin

As I sit here and I listen to us, and I'm sure you all hear this – what <u>we</u> do. The responsibility is with the family themselves first, with their governments, with their markets. We come into play when all that fails, when the government systems don't work, when the market systems don't work, when the family, the access to livelihood support for their own individual care doesn't work.

And Dina talked about getting out ahead when we know it's a protracted crisis, to avoid the conflict. We need to get out ahead of even that, to ensure that the market systems do work, that the government systems do work, that people have the opportunity to support their own livelihoods. And that's what all of this is about — ensuring that we have, as I was saying, the research, the development, and the financial investments. Research without financial investments will not reach those who need the assistance the most.

Kimberly Flowers

I want to shift gears a little bit, especially those that are leading organizations. How have you changed in terms of your strategic planning, your makeup of your staff, maybe even your budget? From a management perspective, what are you doing differently now because climate change is happening now. So this isn't about how are we going to reach certain goals or deal with things for the future. But right now are there any changes you're making within your organization, within your own strategic planning to shift how you're addressing climate change at the moment. Anybody? Mark, go ahead.

Mark Lowcock

So for us and our support for all the humanitarian agencies – the U.N. agencies, the NGOs and the Red Cross – we're basically trying to do three things. The first thing we're trying to do is improve the timeliness and quality innovatibility to data so that we know the next problem we're going to be dealing with in time to have an efficient, effective response, not to be very reactive.

The second thing we are trying to do is put in place in advance finance so that when the problem arrives, it's available instantly. One of the characteristics of humanitarian action around the world is that a problem emerges and we all see it on our TV screens, and people like me pick up the phone to leaders in rich countries and say, "Have you seen what's going on, on the TV?" And can you help us do something about it? And they think about it, and then they generate some money and eventually gets to the agencies, and then there is a response. That is a long process. What we need is the pre-agreed finance – and insurance can help with this and contingency finance can help with it.

The third thing we're trying to do is make sure that, once you've got the data and you've got the money, you also have a plan with agencies and organizations behind it who can execute it quickly. And that requires more agility and repetitive response than we've had sometimes in the past. There's a really good example of how to do this well in Mozambique in March when that huge cyclone hit Beira. Within a month of the cyclone hitting, a million people had not just been promised but had received food, had had their kids vaccinated, had shelter provided, and had some start to help them recover. And the faster you act, because you've got a plan and you've thought about it in advance, the cheaper the response, and the quicker you get on to the recovery.

Kimberly Flowers

Excellent. Other thoughts, Tjada?

Tjada McKenna

Yeah, we have a couple of approaches. The first is really just the doubling down on the tools and the training, so we've ruled out a rapid gender assessment tool. We have a climate resilience tool. And those are things we're beginning to do at the beginning of all of our projects, and some of them are more specific to emergencies. There's also the cross training of staff, another prong of work that we have, and this gets to the resilience and just the local, the importance of communities and other actors. Localization is a big buzz word around our organization, so increasingly we work at lot with smaller, local nonprofits and like bring them into these tools and training and work alongside them – because they know it's best for their communities. You know, the aid, architecture and organizations that used to be the country directors were generally white men from Europe and America. 60% of our country directors are from the countries and regions that we serve. We have a goal to get to 80% of that, and so we're rapidly moving towards that.

But we believe all of that is... You know, the people that are best suited to help themselves to work through emergencies are just exactly what you guys were talking about – families, communities, policymakers. And having people from those areas who can talk to local governments and their national governments and who can advocate for the systems that they need is going to win the day at the end of it.

Kimberly Flowers

Dina.

Dina Esposito

Well, some of the things that we've been working on are building out what we call "resilience hubs" in Africa and in the Middle East and soon Latin America, where we put staff who actually get it, this idea of interdisciplinary approaches, to train the country teams who are, to be honest, quite stovepipe still. Despite the fact that we have all these kinds of approaches in one organization, there is just sort of a cultural distinction between development actors, relief actors, and peace actors. So they facilitate joint problem-solving; they facilitate assessments. So that's one of the areas.

Increasingly we are looking for people not only with bigger skillsets in data and business but also who are just comfortable with interdisciplinary approaches. And that's actually not as easy as you think it might be.

We've also stepped out for the first time this year with a climate advocacy agenda to go alongside the work we do in the field. We were at the U.N. Climate Summit with a call to action that some of this climate adaptation money that is promised, which has been in adequate, that actually some of it go to fragile and conflict-affected settings. It would be great if we get that money, but it doesn't tend to flow to the areas where we have the climate and conflict nexus. And we've committed ourselves to reaching two million farmers in fragile and conflict-affected settings with climate adaptation. So trying to hold ourselves to account and call on others to do more.

The other thing I think that's changing for us when you start thinking about climate is that you think about scale differently. And here as they shop up, like okay, we're going to build a borehole. Right away, we need a borehole. And we just don't... You can't think about that anymore. You've got to think about upstream and downstream and watersheds. And then you've got to think — oh, my gosh, who are all the partners that are required to deal with that? It's government engagement, it's private sector engagement, and it's really about collective action, which again is a word that is thrown around a lot but very difficult, I think, to achieve.

Kimberly Flowers

And speaking of collective action – and I'm going throw this to you, Ertharin – of course, I'm going to bring up U.S. leadership and global leadership and governance and policies, because that's what I focus on and what I think is so important.

It's interesting as we are starting in the presidential debate season, in the presidential campaign, the last one, climate change didn't come up at all. But now it's become a central focus – right? So my question to you, Ertharin, is – Thinking about policymakers, what should they be thinking about in terms of this? And is there anyone – because it's certainly not the U.S. right now, unfortunately – who is really leading the way?

Ertharin Cousin

Very seriously, though, the U.S. continues to lead, and we don't talk about it the way we always did, but the increase in the budget for food security that occurred in the face of four famines, the U.S. increased their investment and food assistance to the agencies that provided the support.

I think the advocacy work that is necessary must go on, regardless of who sits in the White House. We have three branches of government, and we still have one of the great benefits of having three branches of government is that we've always had bipartisan support, particularly for food security, on the Hill. And that has benefited us when attitudes in the administration may ebb and flow. And it works vice versa, because politics shifts.

So we're moving beyond the politics to the need for advocacy and ensuring that we are continuing. All of us across it, I think everyone will agree – the working to educate Hill staff on a regular basis about the challenges of climate change and the impacts on potential security and conflict is something that every organization is engaged in and recognizes the value of performing.

But what we're also seeing now is the... At the Chicago Council last year we worked with AGRA to support a conference on water and smallholder farmer irrigation and then supporting information for the African Union to help them develop a continent-wide policy around smallholder farmer irrigation.

And so it's not just about what's happening with our congress, but how are we working, using our tools to support the governments and the policymaking in those places where we serve, to ensure that we can develop the regulatory frames that we've heard about for the last couple days that would provide the space for the markets that are necessary to support the development of market solutions that help build that resilience in population.

So, yes, it is about our policymakers, but it's also about changing policies and working with policymakers in the countries where we also operate to ensure that we have the appropriate governance structures to support the activities that are necessary.

Kimberly Flowers

Mark, I'd love to hear your thoughts on this in terms of the importance of governance and political will. When, though, you adhere to your humanitarian principles of being neutral and independence, it ultimately comes back to political will. And how do you look at that?

Mark Lowcock

You know, the world's humanitarian system is an entirely voluntary system. No individual or family or government has to contribute to the work of these wonderful agencies. And we need

to keep explaining to everybody why it's in everyone's interest to save lives and build for the future.

And one of the things that happens when the humanitarian leaders like us get together is we're sort of outfaced by the problems, so that we leave everyone feeling sort of depressed and miserable. So there's two things I just want to say to everybody.

The first is – the world has a very effective humanitarian system. Every year, the appeals I coordinate reach more than a hundred million people and certainly save millions of lives. And when I was first doing this work, two million people a year were losing their lives in these disasters, and now it's an order of magnitude less than that.

The second thing, though, is that the proportion of the world's population who are still vulnerable to these problems is much lower than it used to be. When I was born, most people on the planet were hungry all the time and vulnerable to these disasters. And now because a hundred countries have progressed, the proportion of people left in that vulnerable position is not more than 50% — it's fewer than 10%. And there's no reason why we can't help the remaining 8% along the same journey.

Kimberly Flowers

Now in the remaining time that we have, I'm going to go all the way down for each of you to give final thoughts, your final soundbite, what we can get on Twitter – I hope you're all tweeting out there. But the question that I'll pose to you is – Just when you think about climate change and conflict as a leader in humanitarian and development programs, what is it that's top of your mind and that you're thinking of every day? Tjada.

Tjada McKenna

Women and girls.

Kimberly Flowers

Yup.

Tjada McKenna

So, they're the most vulnerable. Can't assume that everything trickles down to everybody, and we've just got to do better.

Kimberly Flowers

Mark.

Mark Lowcock

The problems growing, we better get ahead of it.

Kimberly Flowers

Yeah. Amen. It's getting worse, not better – right? – and we have to figure out how to respond today. Ertharin.

Ertharin Cousin

There's so much I want to say. You want to say Americans are the most generous people on earth, which is why we have bipartisan support for humanitarian assistance in our congress, because our congress, our policymakers represent this country, and this country is generous. And this country is generous when they know that people are vulnerable.

But what we need to do is ensure that people don't need to look to us because they are vulnerable. I never worked a line where we were providing assistance where a woman with a child was in that line because they wanted to be. They were in that line because they had no other choice. We are at a point where we can give people choice by providing the financing and the support that is necessary for people to embrace innovation, technology that will support food systems that provide the resilience that we're all talking about, from farm to fork. And that's what gets me up every morning when you ask what I think about.

Kimberly Flowers

Thank you.