

**THE GLOBAL FOOD SECURITY AND COVID-19
CRISES: U.S. RESPONSE AND POLICY OPTIONS**

HEARING
BEFORE THE
SUBCOMMITTEE OF THE
COMMITTEE ON APPROPRIATIONS
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THE GLOBAL FOOD SECURITY AND COVID-19 CRISES: U.S. RESPONSE AND POLICY OP- TIONS

WEDNESDAY, MAY 11, 2022

U.S. SENATE,
SUBCOMMITTEE OF THE COMMITTEE ON APPROPRIATIONS,
Washington, DC.

The subcommittee met at 2:02 p.m., in room SD-124, Dirksen Senate Office Building, Hon. Christopher Coons, (Chairman), presiding.

Present: Senators Coons, Durbin, Murphy, Van Hollen, Graham, Blunt, Boozman, and Moran.

WORLD FOOD PROGRAMME

OPENING STATEMENT OF SENATOR CHRISTOPHER COONS

Senator COONS. Good afternoon. I would like to call this hearing of the subcommittee on State and Foreign Operations of the Senate Appropriations Committee to order. The purpose of today's hearing is to hear testimony from six exceptionally experienced witnesses concerning two of the most urgent crises confronting our world today.

The ongoing destruction of cities and the daily atrocities committed by Russian forces against defenseless Ukrainian civilians outrages and offends the sensibilities of all of us, but we should also be concerned, even alarmed, about the widening food security crisis that this needless and brutal war by Russia is causing for hundreds of millions far beyond Eastern Europe.

Before the war began in Ukraine, more than 50 countries, including nations like Ethiopia, Sudan, Syria, Yemen, and Afghanistan were facing acute food shortages due to prolonged drought and conflict. And today, their circumstances are markedly worse. As we will hear from our first panel of three witnesses, the collapse of exports of grain and vegetable oil from Ukraine, combined with inflation and higher costs for fertilizer, fuel, and transportation, have caused commodity prices to skyrocket.

Latest UN information says the total number of people hungry has increased to 273 million, more than doubling the number living in hunger in 2019. Millions are at risk of starvation.

Some estimates are even higher. This food security crisis is compounded by a second ongoing global crisis, the COVID-19 pandemic, triggering complex humanitarian emergencies on several continents that threaten economic, social, and political stability.

Now, while the number of Americans hospitalized and dying from COVID has declined significantly after Omicron peaked in January, it is again rising sharply in a number of our States, and this pandemic is far from over with us.

COVID-19, I will remind you, originated halfway around the world, and we are no less vulnerable to this pandemic today from a global perspective than we were a year ago. Roughly two-thirds of Americans are fully vaccinated, but worldwide billions are not, and they are concentrated mostly in countries where the virus continues to spread and in countries with weak or fragile public health systems that struggle to respond to this ongoing challenge.

Global campaigns against HIV, AIDS, Malaria, TB, Polio, and other infectious diseases long led by American funds or initiatives have stalled or lost ground. And there is a very real risk to our nation and the world that new COVID variants will emerge overseas, causing a sudden resurgence of potentially deadly infections.

That might force another lockdown that would threaten to once again shutter businesses, schools, public transportation, and government offices. If we can increase global vaccine coverage, we can dramatically reduce the spread of the virus and the incidence of new variants protecting everyone, including Americans.

As we consider our President's request for emergency supplemental military and humanitarian assistance for Ukraine and other countries impacted by the food crisis in Ukraine, our challenge is determining how the United States can best respond to these interrelated global challenges.

The President's request initially included about \$1.8 billion for food aid, which in my view, fell far short of what is urgently needed. Senator Graham and I have both called for at least \$5 billion, and I am optimistic, given the action in the House last night, that that amount will be in the final supplemental. The President's request for \$5 billion in emergency funding for global COVID response was submitted in March and has not yet been acted on by this Congress.

Now, as the Appropriations subcommittee responsible for providing the relevant funding, we are looking to our six witnesses this afternoon to help us understand what the COVID virus is doing, what we should most be concerned about, how other organizations and other donors are responding, and the recommendations we can make the strongest case to our colleagues in the Senate.

Any successful global response against the COVID pandemic requires United States leadership and resources. I also want to emphasize in closing that we are in a critical global, strategic situation as well, because dozens of countries and millions of people were forced to rely on Chinese and Russian vaccines, which have ultimately proven ineffective against the Omicron variant.

We have an opportunity, 20 years after the PEPFAR program was launched, to once again demonstrate that the United States is a reliable global public health partner, and we should take that chance.

Before introducing the first panel, I will turn to my Ranking Member, and wanted to express my gratitude to my colleague, Senator Graham, who has been a strong partner and advocate for addi-

tional funding to address both these crises, for any opening remarks he care to make.

OPENING STATEMENT OF SENATOR LINDSEY GRAHAM

Senator GRAHAM. Well, thank you, Mr. Chairman. I appreciate it very much. I think the Committee has done a good job working together, and one of our witnesses is a South Carolinian, David Beasley. We are very proud of you at home, former Governor of South Carolina and the leader of the World Food Program.

Thank you, Ms. McKenna, for coming, our second witness here. The bottom line is, if you believe in a strong national security to keep America safe, then you have to be involved in addressing world hunger.

As you will hear from David here pretty soon, the number of people that are in desperate straits will lead to mass migration, will start the cycle all over again—there are so many conflicts on the globe, it is hard to keep up with them, then you have got COVID on top of that.

The amount of money that will be in this supplemental for food and humanitarian assistance is about \$5 billion. That is a lot more than requested, but still not enough. And to the American people, what does it matter? Well, if somebody is starving over there, they are not going to just sit around and starve. They are very vulnerable to terrorist recruitment. I spent a lot of time in Afghanistan doing reserve duty. There are a lot of ideologically driven terrorists, but a lot of people wound up in Afghan prisons because they couldn't feed their family and \$500 bucks sounded pretty good. That is why they plant the IED. The ability of terrorists to recruit and sell their cause goes up exponentially as people are looking for a way to feed their families.

The downside to famine and hunger is so enormous that the amount of money we are spending, I think, is inadequate to the task, but we shouldn't be the only country spending the money. The Gulf Cooperation Council (GCC) nations need to do more, the European Union needs to do more. But to the American taxpayer, it is in your interests and our interest that we deal with this hunger problem not only just from a moral point of view, but from a national security perspective. One last thought and we will get to witnesses.

We have a Global Fund to Fight AIDS, Tuberculosis and Malaria that did a terrific job dealing with AIDS and malaria. I would like the Committee to think about creating a global fund for food security to get a new line of revenue from the private sector. We will put money in, but other countries have to match, have a multi-national approach to food security and get more involvement with the private sector.

Elon Musk, who has gotten a lot of attention lately, is one of the world's richest people. He said, he was asked to give \$1 billion, I think, to the World Food Program or some cause, and he asked, well, tell me how \$1 billion will solve world hunger? It won't. But \$1 billion that can be leveraged to get more money from other people goes a long way to providing the gap in funding that exists today.

Ambassador Cindy McCain, who works with David Beasley on the same line of effort at the United Nations, has lots of plans to teach people to farm and to bring new farming practices to bear so people can feed themselves. The World Food Program is a result of people not having food available in their own backyard.

The goal is to get those people through the crisis and create a backyard that has food. If you don't understand, after 9/11, how important dealing with hunger and poverty and the abuse of women is in this war against terrorism and extremism, you have missed a lot. Thank you.

Senator COONS. Thank you, Senator Graham. Our first panel of three witnesses will focus on food security. We are very fortunate to have three witnesses whose combined experience in this field is unmatched.

First will be the Honorable David Beasley, Executive Director of the World Food Program, an organization that won the Nobel Prize in 2020. Ms. Tjada D'Oyen McKenna is Chief Executive Officer of Mercy Corps, a well-regarded global humanitarian relief organization. And Dr. Akinwumi Adesina is President of the African Development Bank.

President Adesina is in Accra, Ghana and will be testifying remotely. I had the honor of visiting with Dr. Adesina in Accra a number of years ago, and his leadership of the African Development Bank is very widely regarded. We welcome each of you.

I would ask you make opening remarks of up to 6 minutes and your full written testimony will be included in the hearing record. Members will then have 6 minute rounds for questioning. Dr. Beasley—excuse me, Director Beasley, if you would please lead off, followed by Ms. McKenna and Dr. Adesina. Thank you.

**STATEMENT OF HON. DAVID BEASLEY, EXECUTIVE DIRECTOR,
UNITED NATIONS WORLD FOOD PROGRAMME**

Mr. BEASLEY. Senator, thank you very much, and it is an absolute honor to be here. And I know Democrats and Republicans fight on a lot of things, but when it comes to strategic international aid and food security, it is quite a remarkable thing to see everyone come together recognizing the catastrophe that we are facing.

Because, as you said, and Senator Graham, as you said, if you don't have food security, you are not going to have any other security. And we have seen that firsthand. And I have been out in the field, and I have heard this many times over, particularly where ISIS and Al Qaida and extremist groups are, where women will say, Mr. Beasley, my son, my husband did not want to join ISIS or Al Qaida or this extremist group, but we hadn't fed our little girl in two weeks, what were we supposed to do?

And so if you are not going to—if you are not going to respond out of the goodness of your heart, because I tell friends around the world said, so why should I send money down to Chad or Niger or Nicaragua when we got issues at home? I say, well, it is going to cost you a thousand times more if you don't address the root cause and get ahead of it quickly.

And I can give the mathematics expert experientially what we are talking about, because when we are not there—and if you are not going to do it out of the goodness of your heart, you better do

it out of your National Security interest. What we are already seeing, for example, in Central America from just 1 year ago, when you feed 125 million people like we do on any given day, week, or month, we survey a lot of people. We know what they are thinking.

We watch their patterns. Five times the number of people are already talking about migrating from Central America to the United States. And The Washington Post did an article that said, on the children that end up at the border in the shelters, it was something like \$3,750 per child per week. For \$1 to \$2 per week, we can stabilize the environment in Guatemala, Honduras, or Nicaragua, or El Salvador. The math is simple.

Germany just did a study from the Syrian crisis, which is ongoing. They had a million refugees. We can feed a Syrian in Syria for \$0.50. That same Syrian is up in Berlin, \$70 per day. \$125 billion, divide that by 140 and you will get the cost of what we could have done inside Syria. And we surveyed Syrians left and right. And what was the response? They did not want to leave home.

But when they didn't have food security, they would actually move on average 3 to 4 times inside their country before they had no other alternative when they couldn't feed their family and no degree of security, they did what any mother, any father would do in any country around the planet.

When I arrived at this job 5 years ago, there were 80 million people marching towards starvation. There were 650 million that were chronically hungry. That number is now up to 810 and it will go be going higher now. But that 80 million, those 80 million that are acutely food insecure, I thought we could eliminate that.

I was hoping to put the World Food Program out of business, that we would no longer be needed. We have ended hunger and created sustainability and resilience, but we had manmade conflict one after the other, and climate shocks, and that number went from 80 million to 135 million right before COVID.

COVID comes along, that number went from 135 to 276 million people marching towards starvation. This is pre-Ukraine now. And out of that 276 million, you have 48 million of them that are knocking on famine's door in 43 countries. So I can tell you which 43 countries are vulnerable to famine, destabilization, and mass migration by necessity. And we have an answer to that, and that is food.

If we get the resources we need, just like we did over the last 2 years, even with COVID economic crippling effect, we were able to avert famine and destabilization and mass migration because the United States Government responded along with countries like Germany that stepped up and others. But we have many other countries now that need to step up.

And especially with oil prices, the Gulf States need to step up in a way they have never done before. At least, if they would pick up the price tag for humanitarian funds of need in their own neighborhood. So just when you think it can't get any worse, Ethiopia, then Afghanistan, and then of course, Ukraine.

Why is Ukraine troubling? Because it is the breadbasket of the world. They grow enough food to feed 400 million people. That is gone. The ripple effect of that around the world, 26 nations alone depend on 50 percent or more of their grain from that region. The

silos are full. Why are the silos full? Because the ports are blocked. Why are the ports blocked? Because Russian forces.

The farmers need to harvest again in July and August, where are they? They are on the front lines. They need to be putting out pesticides and fertilizers. Even if they do get a harvest, of which we expect maybe half the yield, where is it going to go? If the ports aren't opened, the global ripple effect will be famines around the world.

And this is why it is critical, and so much appreciated, that the United States, the Senate and the House is responding in such a time as this. But we have got to get those ports open. We have got to get the resources we are talking about out into the field quickly into the countries that are going to be very vulnerable in the Sahel and Eastern Africa, in the Middle East and Central America, and I can go on and on.

But if we get the resources that you are now talking about appropriated, it will go a long way in stabilizing nations around the world, which the American taxpayer will save money because you won't have famine and destabilization and mass migration. Thank you, Mr. Chairman.

[The statement follows:]

PREPARED STATEMENT OF DAVID BEASLEY, EXECUTIVE DIRECTOR, UNITED NATIONS
WORLD FOOD PROGRAMME

This brief is being provided on a voluntary basis and should not be understood to be a waiver, express or implied, of the privileges and immunities of the United Nations and its officials under the 1946 Convention on the Privileges and Immunities of the United Nations.

I. INTRODUCTION

Chairman Coons, Ranking Member Graham, members of the Senate State, Foreign Operations, and Related Programs Appropriations Subcommittee, thank you for convening this hearing on the dramatic need for resources to address the growing threat of starvation around the world.

I want to thank this Subcommittee for your support of the United Nations World Food Programme (WFP). The United States is WFP's most generous and longstanding partner. Last year, the United States provided \$3.86 billion in support to WFP, and a considerable amount was provided through programs under this committee's jurisdiction.

And many thanks are in order in this moment. I commend the Biden Administration for the recent release of the Bill Emerson Humanitarian Trust and the chorus of support from lawmakers on Capitol Hill that made that possible. I also thank Congress for including emergency humanitarian assistance for the Ukraine crisis in the fiscal year 2022 omnibus spending package signed into law on March 16. We are hopeful that a considerable portion of those resources can be directed to the worsening hunger emergency occurring within and beyond Ukraine.

I would also like to thank the United States Agency for International Development for its excellent cooperation and longstanding partnership. Despite this generous support, needs are still outpacing resources. Today, I will outline the state of global hunger in the context of the Ukraine crisis, provide you with an update on WFP global needs and resourcing, and a picture of what might transpire should humanitarian responders like WFP not receive the resources required.

II. STATE OF GLOBAL HUNGER

It is no secret that the world is not on track to achieve Zero Hunger. Progress toward this global goal was waning even before the COVID-19 pandemic produced economic turmoil and eroded food security. Currently, in the 81 countries where WFP operates, up to 276 million people are acutely food insecure and in need of urgent food, nutrition, and livelihoods assistance—in other words, marching towards starvation. This is a record high, and more than double the 135 million people living

with acute hunger before the pandemic. Refugees, returnees, asylum-seekers, and internally displaced persons are particularly vulnerable.

Among the 276 million, there are 48.9 million people living across 43 countries in even graver danger. They presently face severe hunger emergencies (IPC/CH Phase 4)—just one step from famine. To put the severity of these numbers into context, people in IPC 4 are in a state of “emergency conditions” where they are acutely hungry and are liquidating their final assets to do whatever they can to get food. They are exceptionally fragile, and many die from the impact of their hunger. Thirty percent of their children are wasting and many are now permanently stunted, undermining their ability to ever achieve their potential. This is not just a critical moment of hunger; it is a generational impact that will have consequences for decades to come.

And finally, there are 730,000 people languishing in IPC 5, a catastrophic condition of hunger which is the highest number on record since the 2011 famine in Somalia. About 400,000 of these souls are in Tigray in Ethiopia, and the others in parts of Yemen, Somalia and South Sudan. While famine has not officially been declared in these places because the technical thresholds have not yet been verified, the people living in them are experiencing the same horrific conditions. The very real risk that famines will be declared in 2022 is an admission of failure at a time when the world has enough resources, food and money to reach them.

While all of this is very bad news, it is about to get much worse.

III. THE UKRAINE CRISIS

We cannot adequately speak to the current global hunger crisis without addressing the conflict in Ukraine and the ripple effects it has produced across the globe.

I have just returned from Odesa, my fifth trip to the region since Russia’s invasion on February 24. In Ukraine, Poland and Moldova, I witnessed the same heart-breaking scenes again and again: women and children who weeks ago led safe, comfortable self-sufficient lives now suddenly struggling to survive in a world of the unknown—and lack of food is one of their major concerns. These are families who have never had to worry about food and did not need the world’s help to feed their families.

That has all changed. Last year, Ukraine grew enough food to feed 400 million people, but now the food they grew is unable to reach its own population because of this war. Ukraine has gone from being a global breadbasket to being on the breadlines. About 35 percent of the remaining population inside Ukraine have resorted to missing meals, reducing portion sizes, restricting adult consumption to feed children or borrowing food. To date, 3.6 million people have received help from WFP and we are preparing to serve 6 million by June, if needed. These people have every right to expect the global community to respond in their time of need.

But even greater concerns lie beyond Ukraine’s borders. The war is already causing “collateral hunger” all over the world. The tens of millions of tons of wheat, barley, maize and vegetable oil produced by Ukrainian farmers, are trapped in ports, silos and warehouses—threatened by the destruction of the infrastructure to get them to market and the blockade of ports in the Odesa area of southern Ukraine.

We urgently need these ports to reopen so that food being produced in the war-torn country can flow freely to the rest of the world before the current global hunger crisis spins out of control. Unless they are reopened, Ukrainian farmers will have nowhere to store the next harvest in July and August. The result will be mountains of grain going to waste while WFP and the world struggle to deal with an already catastrophic global hunger crisis. WFP urges all parties involved to allow this food to get out of Ukraine to where it is desperately needed so we can avert the looming threat of famine.

In recent years Ukraine and Russia became major engines for feeding the world, serving as critical suppliers to global markets for wheat, maize and other food commodities, as well as energy and fertilizer. This conflict has rocked global food and energy markets as exports from Ukraine have been halted by this war. Steep rises are occurring in international prices for basic staples—notably wheat, maize and vegetable oil—creating a food price environment that resembles the 2008 and 2011 crises. Given heavy reliance on world commodity markets by numerous countries, prices are rising even in places that do not source their wheat or maize directly from Ukraine or Russia. So in truth, instead of exporting food to help feed entire countries, the conflict means that Ukraine is now being forced to export hunger.

In the case of a prolonged conflict, we should expect the destruction of the commodities currently trapped in storage, worsening declines in Ukraine’s upcoming grain harvests and severe limits on its capacity to supply global markets. Countries that rely heavily on grain imports from the Black Sea, like Egypt, Lebanon and

Yemen, will be greatly affected. To make matters worse, a lack of fertilizer supplies from Russia and continuously high energy costs will further constrain yields in many countries far from Ukraine, especially across Africa. Some 25 countries depend on Russia for 30 percent or more of their fertilizers.

WFP now anticipates that in the countries where we operate, acute hunger could rise by 47 million people, from a pre-war baseline of 276 million people who were already in the grip of acute hunger. This means that up to 323 million people could be facing crisis levels of acute food insecurity in the coming months.

Let me be crystal clear: Conflict in Ukraine is quickly transforming a series of already terrible hunger crises into a global food crisis that the world cannot afford. A crisis of this scale will destabilize many parts of Africa, the Middle East, Central and South America and Central Asia.

IV. NEEDS AND RESOURCING

This dramatic turn of events leaves WFP in the position of serving the greatest number of people in its 60+ year history. In the face of COVID-19, multiple conflicts and climate-related crises, we aim this year to assist 147 million people. This is after reaching a record-breaking 128 million beneficiaries in 2021.

Unfortunately, we are doing this in a time of dramatically insufficient resources. WFP's assistance this year will cost approximately US\$21.5 billion. To say that our needs outstrip our funds would be a significant understatement—today WFP faces a funding gap of over 50 percent. While WFP has historically faced funding shortfalls, they have not been as great as this in the past or surfaced in such a complicated environment. As other UN agency and government budgets are similarly under strain, many responders are forced to cut assistance at the same time. This makes cuts in WFP's assistance much more painful for recipients than in prior years.

The Ukraine conflict has further added to the funding gap by increasing WFP's operational costs and constraining its response at a time when it is needed the most. While other exporters of staple food commodities should—at least partially—be able to make up for the shortfall in supplies from the Black Sea region, these commodities are higher priced and moving them comes with significantly greater operational costs; shipping costs are now 4 times what they were in 2019. Buying from farther away means higher transport costs and longer delivery times—for WFP and everyone else dependent on purchases in international markets. WFP's operational costs are now \$71 million more per month than they were just 2 years ago, an increase of 44 percent. This is enough to feed 3.8 million people for 1 month.

Because of these increased costs, we have had to cut rations to our beneficiaries. In the past month in Yemen we have had to reduce rations to 8 million individuals who are already in IPC 3 and 4. We are being forced to make the terrible decision to literally take food from hungry children to give it to starving children. Those hungry children are now getting hungrier. This is also true for many of our beneficiaries in Niger, Chad, Burkina Faso, Central African Republic, Mali, Nigeria, the Democratic Republic of the Congo, and sadly the list goes on.

V. IMPLICATIONS FOR GLOBAL STABILITY

We have long known that war produces hunger; that has been true of every major conflict in human history and the world is seeing this dynamic unfold in real time in Ukraine today. But we have also observed that hunger itself can produce conflict and instability, creating a vicious cycle of deepening hunger fueling increasing conflict. This is what we should be afraid of today—the further weaponization of food.

In localized cases, we see how food insecurity produces conflict in a community because of competition over agricultural inputs like land and water. In other cases, a party will deliberately manipulate food supplies as a weapon of war. However, one of the most predictable ways that food insecurity can produce instability is through unexpected, rapid spikes in food prices or a lack of access to food. As prices of grains, oils and other basic commodities suddenly spike in countries around the world it is important that we realize the risks this portends. Recent history serves to warn us.

In 2007–08, a rapid increase in prices for major food staples produced social unrest in at least 40 developing and middle-income countries, and regime change in at least one. A former WFP Executive Director, Josette Sheeran, referred to this period as the “Silent Tsunami.”

We saw food-related instability strike again in 2011 with a second wave of price spikes linked to the Arab Spring in the Middle East, which created social upheaval in Tunisia, Egypt, Libya, and especially Syria. It is not well known that the conflict in Syria was predated by what some experts have referred to as “the worst long-

term drought and most severe set of crop failures since agricultural civilizations began in the Fertile Crescent many millennia ago.” As a result of that drought, the southwestern city of Dara’a, situated in one of the traditionally fertile areas of Syria, saw a large influx of agricultural migrants and was one of the first sites of social unrest in the country. From there, the dominoes continued to fall, and Syria remains in the grip of a crisis that has overflowed its borders. WFP currently serves over 2 million Syrian refugees in Lebanon, Jordan and Turkey, along with another 5.8 million beneficiaries inside Syria.

The links between food insecurity and instability often produce spikes in migration. Food insecurity in Middle Eastern countries during the Arab Spring led to an increase in refugee flows and asylum seeking in Europe. WFP’s own research into the causes of migration, based on data from 88 countries, found that a 1 percent increase in food insecurity fueled a 2 percent increase in migration. More recent surveys across Central America have produced similar results—a 1 percent increase in hunger leads to a 2 percent increase in migration.

The bottom line is that people do not stand idly by when they cannot feed themselves or their families. Already in the past month, we have seen social unrest triggered by food price spikes in Peru, Pakistan, Indonesia, and Sri Lanka. This is likely just the beginning: the conditions for food-related instability today are far greater and the risks of social upheaval are much higher than they were a decade ago.

First, in 2008, the world was more stable than it is today. Several major conflicts have erupted since that time. The civil war in Ethiopia began in 2020, the Yemeni civil war in 2014, the Syrian civil war in 2011; while the conflict in Northeast Nigeria began in 2009 and in Central Sahel in 2017. Furthermore, we are experiencing exceptional, persistent droughts across the Horn of Africa, central Asia and the Dry Corridor, which have already created millions of additional migrants. The combination of conflict and drought has created fragility in multiple regions impacting hundreds of millions of people.

Second, the world has still not fully recovered from the ripple-effects of the COVID-19 pandemic, leaving it ill-equipped to cope with yet another crisis. In low- and middle-income countries especially, incomes are still depressed from COVID-19, labor markets are struggling to recover, and debt is at record levels. Governments around the world are less economically resilient and unable to respond with fiscal and monetary measures to help reduce the impacts of increasing food prices on their populations. With rising interest rates, the costs of credit further limit the options for governments to respond to these difficulties.

Third, city dwellers are facing increasing obstacles to accessing affordable food due to reductions in incomes and closures of informal markets, combined with price surges due to COVID-19 containment measures. While hunger has long been associated with rural areas, COVID-19 has created a growing class of hungry people: city dwellers in low- and middle-income countries. This matters as food price riots occur overwhelmingly amongst urban populations, particularly in relation to food products of cultural significance, and among countries with a strong reliance on agricultural imports. For example, Egypt, the most populous country in the Middle East and Ukraine’s top wheat customer, will struggle to maintain existing subsidies on bread—a staple of the Egyptian diet—in the face of rising global wheat prices.

The combined effects of these factors, exacerbated by the war in Ukraine, have created a perfect storm that threatens to unleash an unprecedented global wave of food insecurity and instability.

VI. CONCLUSION

A swift resolution to the crisis in Ukraine appears unlikely. Therefore, its global repercussions for food security and stability will become progressively more dangerous in the coming weeks and months. As humanitarian needs soar our ability to respond is diminishing due to the lack of funds. While global food supply chains are stressed, there are enough resources available in the world to feed everyone; the issue is one of cost and allocation. Because needs have outpaced funding, WFP is increasingly being confronted with the impossible decision of who to support—and who not to support. We are being forced to decide who will live and who will die because we do not have the resources available to feed them.

Today you have the opportunity to decide whether or not to provide funds to help save the hungry. The costs of humanitarian inaction are tremendous, especially for people in need, who in the worst cases pay with their lives. Failing to mobilize sufficient, strategic, and timely funds for humanitarian assistance will not spare national budgets. Let me warn you clearly: if you do not respond now, we will see destabilization, mass starvation, and migration on an unprecedented scale, and at a far greater cost. A massive influx of refugees to Western countries could soon be-

come a reality. As soon as they arrive, the host governments will start paying the price—literally—for not having acted earlier. Germany’s recent experience of absorbing Syrian refugees in the aftermath of the civil war is a case in point. It costs less than 50 cents to feed someone for a day in Syria versus almost \$70 a day in Germany to provide a refugee with the humanitarian support they require.

I therefore urge the members of this body to take decisive action to prevent a rapidly worsening global food crisis and help WFP and our partners stabilize the food security of the most fragile countries at this time of unprecedented need.

At a minimum, an additional \$5 billion dollars for food assistance from the United States will provide WFP and other aid agencies with the support we need to stem the rising tide of famine. It will also send a very clear message to other donor nations that they must step up to do their part.

I do not look to the United States to solve these problems alone, but I do ask that you show the humanitarian leadership the U.S. is renowned for and which the world urgently needs right now. We are counting on you to lead with your actions as much as your words. As the Washington Post said in an editorial just 10 days ago, “Whether this precarious situation turns into a true global famine depends largely on what the United States, European Union, China and other large and wealthy nations do now [. . .] The United States and other major world powers have the ability to prevent a global famine. This is as urgent and morally necessary as sending tanks to Ukraine.”

Senator COONS. Thank you, Mr. Beasley. Ms. McKenna.

STATEMENT OF TJADA D'OYEN MCKENNA, CHIEF EXECUTIVE OFFICER, MERCY CORPS

Ms. McKenna: Thank you. Good afternoon, and thank you Subcommittee Chair Coons, Ranking Member Graham, and Members of this Committee. I want to express my gratitude for convening this hearing on rising global food insecurity, a problem that was already acute, but that has already deepened dramatically in recent months.

My name is Tjada D’Oyen McKenna. I am the CEO of Mercy Corps. We are an international humanitarian and development and peacebuilding organization. We operate in 40 fragile countries facing conflict and hunger, supporting more than 37 million people. I previously stood up and ran the U.S. Government’s Feed the Future Initiative at USAID in response to the last global food crisis, and I know how critical it is to respond to immediate hunger crises while strengthening food systems and building long term resilience.

A perfect storm is leading to heightened global food insecurity, worse, much worse than the previous food crises over the past decade. Food and fuel price hikes resulting from the war in the Ukraine are the latest shock, undercutting the ability of the poorest and most vulnerable to feed themselves.

The deepening effects of climate change, conflict in other parts of the world, and the economic pummeling of the COVID-19 pandemic combined to push those least able to cope towards the abyss of hunger before the shockwaves caused by Ukraine. I testified last year in front of the House Foreign Affairs Committee that COVID-19 was burdening people’s ability to feed themselves through the loss of income and global supply chain disruptions, and those words continue to ring true.

COVID-19 was not only a health crisis, it is a food and socio-economic crisis as well, one which rolled back decades of hard won poverty reduction and food security gains and continues to do so today. The drought unfolding in the Horn of Africa is a prime example of the devastation wrought by a second hunger driver, cli-

mate change. The region is experiencing its third drought in just a decade.

The current one is the most devastating in a generation, with over 15 million people experiencing extreme hunger, a 70 percent increase in comparison to past severe droughts. In Somalia, a recent famine risk assessment clearly signals the potential for widespread malnutrition and starvation, with 81,000 people already in famine like conditions and over 1.7 million on the brink.

Additional projections indicate the lives of 350,000 children are at risk. The dual challenges of COVID-19 and climate shocks are now being compounded by conflict. While the war in Ukraine is responsible for food, fuel, and fertilizer price hikes, it is not the only conflict undercutting people's ability to feed themselves.

Conflicts in the Sahel, Somalia, Syria, and Yemen have decimated food systems, destroyed livelihoods, and led to widespread hunger. As my colleague, Mr. Beasley said, several of the most fragile countries reliant on Ukrainian imports find themselves in serious trouble. The prices of wheat, corn, and oil—and cooking oil across Africa and the Middle East are rising sharply. I recently traveled to Lebanon just after visiting Poland to visit the Ukrainian border.

I saw that the price of some basic food items were increased already within three weeks of the conflict starting. In Somalia, basic food items have increased by over 100 percent. Lebanon, which—where I was, which imported 81 percent of its wheat from Ukraine, faces the fallout from the grain shortages and higher commodities, it continues to host a very large Syrian refugee population, and is still reeling from the Beirut port blast, with a growing proportion of the population already relying on subsidized wheat.

There is increasing risk that higher fuel and food prices could drive social tensions, instability, and protest. The global price of wheat has never been higher, eclipsing the last highest price, which was just prior to the Arab Spring, which threatened regional stability in the Middle East. While this perfect storm may appear unique, it is a window into the types of multifactor challenges we face if conflict goes unchecked, climate impacts increase, and new health security challenges unfold.

In order to tackle this current crisis, Mercy Corps urges Congress to specifically increase humanitarian and food security funding this year. Organizations on the front lines estimate that an additional \$5 billion will be needed for the U.S. to tackle. I know that you all agree, so I will leave that.

Mercy Corps also recommends that the U.S. Government double down on efforts to mitigate future food insecurity through a series of critical actions. First, we recommend that the U.S. Government urgently make humanitarian aid smarter by prioritizing the use of flexible cash and voucher programs complemented by actions to sustain local markets.

Second, we recommend scaling resilient food systems by doubling investments in Feed the Future countries to shockproof those communities. And lastly, we recommend tackling the root causes of hunger by significantly increasing investments in peacebuilding and conflict prevention in fragile contexts, reinvigorating the coordination of the R3 bureaus at USAID.

And finally, appropriately layering and sequencing both humanitarian and development interventions for better outcomes. We must not only act to address immediate food security situations, but also to insulate communities to help withstand future shocks that will be costly in both human resources and human lives lost unnecessarily.

The U.S. Government exercised leadership in the wake of the last crisis in standing up Feed the Future. We encourage an equally bold, and even bolder because the situation is so much worse than the last one, to address the drivers of the current crisis and build resilience. Otherwise, I fear food aid needs will continue to grow and we will continue to have to hold hearings like this every 10–5, 10, 15 years if we don't act now. Thank you.

[The statement follows:]

PREPARED STATEMENT OF TJADA D'OYEN MCKENNA, CHIEF EXECUTIVE OFFICER,
MERCY CORPS

INTRODUCTION

Good morning, and thank you Subcommittee Chair Coons, Ranking Member Graham, and members of the Senate Appropriations Subcommittee on State and Foreign Operations. I first and foremost want to express my gratitude for convening this hearing on the pressing topic of rising global food insecurity—a problem that has deepened dramatically in recent months.

My name is Tjada D'Oyen McKenna, and I am the Chief Executive Officer of Mercy Corps, an international humanitarian, development, and peacebuilding organization. Our global team of 5,600 humanitarians operates in 40 fragile countries facing conflict and hunger, where our work supports more than 37 million people to improve their lives in the face of adversity and crisis. In my previous work standing up the United States government's Feed the Future initiative at USAID in response to the last global food crisis, I focused intensively on strengthening global food security and know first-hand how critical it is to simultaneously invest in smart responses to immediate hunger crises while strengthening food systems and building long-term resilience.

Food systems in many of the countries in which we work are on the verge of collapse. In places like Ethiopia, Kenya, Lebanon, Nigeria, Somalia, South Sudan, and Yemen, communities are being battered by a perfect storm of conditions: ongoing economic setbacks from COVID-19, climate stresses, conflict and skyrocketing food, fuel, and fertilizer prices resulting from the war in Ukraine. This potent combination of challenges imperils lives around the world and threatens to fuel instability and civil strife. While the conflict in Ukraine is responsible for the recent price hikes, they are only the most recent factors contributing to global food insecurity. Given this combination of threats, solutions must, by definition, include bold short-term relief and medium, and long-term interventions that fortify communities to cope with and withstand future shocks.

COVID ECONOMIC SHOCKS TO FOOD SECURITY

I testified in front of the House Foreign Affairs Committee a little over a year ago and stated, "Due to COVID-19, global food insecurity and hunger are on the rise. In part, this is because [at the time] 114 million people have lost their jobs due to market disruptions and movement restrictions. Another 141 million people have reduced their hours, which has led to an income loss of over \$3.7 trillion. The price of basic staples, such as grains and dairy, has inflated tremendously, triggered by COVID-19's disruption of supply chains." That statement is as relevant today as when I first testified and, unfortunately, the statistics are worse now than then. These impacts will persist for years to come, pushing those who were already vulnerable closer to the edge of acute food insecurity.

From the start of the pandemic to today, COVID-19 continues to drive hunger and poverty and now a global food security crisis is staring us in the face. The World Bank and the International Food Policy Research Institute, with analysis from the Pardee Center, estimates that COVID-19 may cause a persistent increase in extreme poverty, leading to a six to thirteen-year setback relative to a No-COVID scenario. Furthermore, at least two-thirds of households with children have lost in-

come since the start of the COVID-19 pandemic, and income losses have left 1 in 4 adults in households with children going without food for a day or more.

In this sense, COVID-19 has not been just a health crisis, but a food, and socio-economic crisis, one which has rolled back decades of hard-won poverty reduction and food security gains. This impact means vulnerable populations such as women, children, and marginalized groups' ability to respond to shocks and stresses is impaired as we have witnessed first-hand in many places, particularly the Horn of Africa.

CLIMATE SHOCKS AND STRESSES

The effects of climate change are a primary driving force in the current global food crisis. Increasing weather risks and the associated impacts of a dramatically changing climate continue to unfold around the world, disrupting agriculture and pastoral activity, decimating livelihoods, and increasing conflict within and between communities suffering from a diminishing ability to provide for themselves. This is particularly true in the most fragile places in the world, where smallholder farmers are reliant on rainfed agriculture for subsistence farming. Continued crop loss both limits household earnings from agriculture and causes an increase in food prices.

The drought unfolding in the Horn of Africa is a primary example of the devastation wrought by climate change. The region is experiencing its third drought—an event that is supposed to take place every twenty years—in just a decade. The current one is the most devastating in a generation with over 15 million people in Ethiopia, Somalia and Kenya currently experiencing extreme hunger—a 70 percent increase in comparison to the population in need during past severe droughts.

After three consecutive seasons of failed rains, parts of the region are facing their driest conditions and hottest temperatures since satellite record-keeping began 40 years ago. Forecasts suggest that the situation is likely to escalate further, as a fourth consecutive season of below-average rains (March-May 2022) is now widely acknowledged to be occurring. This would be the first occurrence of four consecutive below-average rains in the region since at least 1981, resulting in one of the worst climate-related emergencies on record. A fourth season of failed rains could leave a staggering 45–55 million people facing acute food insecurity by mid-2022.

In Somalia, a recent Famine Risk Assessment Report clearly signals the potential for the drought to lead to widespread malnutrition and starvation, and indicates food security and malnutrition will deteriorate “further and faster” through June. Based on past drought responses in 2011 and 2017, we know that the worst is yet to come and that we should expect heightened humanitarian needs through at least September. The assessment concluded that as of right now 81,000 people are already in famine-like conditions, while over 1.7 million are on the brink. Additional United Nations projections indicate the lives of 350,000 children are at risk of death in coming months.

On top of the urgent threat to human lives, the protracted drought crisis also threatens livelihoods for millions. Severe water shortages are leading to crop failures. Over three million livestock have already died across the region; without access to enough pasture, water, and fodder, the health of remaining livestock is rapidly deteriorating. This is greatly reducing people's ability to sell off animals—a key coping strategy for agro-pastoralists. Mercy Corps is responding to the drought by protecting lives, assets, and livelihoods in the immediate term while laying the groundwork for long-term resilience by working with communities, governments, and the private sector to improve local capacities and systems.

Prices of wheat, corn, cooking oil, and other staples across Africa and the Middle East are on the rise due to the conflict in Ukraine. For example, the price of some basic food items in Somalia has gone up over 100 percent, with three liters of cooking oil going from \$3 USD to as high as \$12 USD. A 50-kilogram bag of flour increased by 34 percent. The impact will contribute to the cycle of compounding and recurring crises that has eroded communities' coping strategies. While regional governments and development actors' investments in local systems and capacities have been crucial in helping lessen these impacts, the scale of the current drought occurrence, in combination with the array of other shocks, is overwhelming communities. Women and girls will bear the heavier brunt of the impacts of the drought, due to prevailing gender inequality. For instance, in times of crises, affected households adopt negative coping strategies such as skipping meals or removing children from school. Cultural norms dictate that women and girls will be the last to eat or not eat at all, and girls will be the first to miss out on their education. The displacement that results from drought can also lead to greater gender-based violence.

The countries in the Horn are far from the only ones experiencing climate-related shocks. South Sudan, a country known more for its past as a conflict hotspot and

political turmoil, has struggled through multiple heavy cycles of rains in the previous 3 years. Last year was the wettest on record, flooding 33 out of the 79 counties across the country and causing the displacement of 835,000 people. An estimated 800,000 livestock without the ability to graze due to the flooding have died and the ability of smallholder farmers to support themselves and their communities has been devastated. Very little water has receded, leaving these communities at risk of complete inundation in the next round of rains traditionally starting this month. Beyond lives lost to the flooding and flood-related hunger, the desperate situation has fueled increased conflict across the country, continuing the cycle of violence and misery borne by the people of South Sudan.

THE UKRAINE EFFECT

The dual challenges of COVID-19 and climate shocks are now being compounded by the conflict in Ukraine and elsewhere. In this globalized economy, those living far beyond Ukraine's borders are feeling ripple effects in their daily lives through inflation and increased food and fuel prices.

The Ukrainian and Russian agricultural sector accounts for roughly 29 percent of the global wheat supply and due to the conflict in Ukraine the price of wheat is at an all-time high. Disruptions caused by the conflict, particularly in Ukraine's agricultural heartlands, are already having a disastrous effect on food prices and availability in the Middle East and the Horn of Africa. If fields continue to lay fallow, crops are not planted or harvested, and it remains near impossible or cost prohibitive to transport critical commodities out of the country, there will be less food on the global market, driving up scarcity and prices.

This is compounded by skyrocketing fuel costs, which have added cost to every link of the supply chain. These challenges will likely remain far beyond this planting and harvesting season—meaning scarcity and increased prices will be a feature of global food commodity markets well into the future. Additionally, fertilizer use will also be heavily impacted as Russia and Ukraine are both top exporters of three key fertilizers and crucial suppliers to many countries whose agricultural sectors are highly dependent on fertilizer imports. Globally, fertilizer supply continues to drop, and prices have increased fourfold since early 2020, driving up the cost of agricultural goods and affecting long-term yields.

Several of the most fragile countries in the world reliant on Ukrainian wheat and other staple crop imports, or dependent on food security assistance provided by the World Food Programme and other actors, find themselves in serious trouble, unable to feed their populations. A prime example is Lebanon, which imported 81.2 percent of its wheat from Ukraine in 2020, and as a result faces significant fallout from grain shortages and the economic impact of higher commodity prices. The country continues to host a large Syrian refugee population and is still reeling from the Beirut Port blast in August 2020, with a growing proportion of the population relying on subsidized wheat as a primary source of sustenance.

I recently traveled to Lebanon and saw firsthand how dramatic the impact global food and fuel price increases are having on Lebanese households. The Ukraine-related shortages and price hikes are increasing pressure on the national government to respond quickly and forcing families to commit dwindling economic resources to skyrocketing food prices. There is increasing risk that higher fuel and food prices could drive social tensions, instability, and protests. Historically, there is a strong correlation between political instability and rising international food prices.

Lebanon is not the only country in the Middle East, contending with this potent mix of conflict and Ukraine-induced food insecurity. Food prices in northwest Syria—an area wracked by nearly a decade of conflict—were already up 86 percent, before the conflict in Ukraine had even started. The Turkish-supported Syrian Interim Government in northwest Syria and the opposition's Syrian Salvation Government have both implemented policies to combat the high level of food insecurity in the region given Turkey imported 69.7 percent of its sunflower oil and 78 percent of its wheat from Ukraine and Russia. In Yemen, which imports more than 90 percent of its wheat from Ukraine and Russia, 16 million people do not know where their next meal will come from.

RECOMMENDATIONS

While the perfect storm of climate change, conflict, and COVID-19 I just outlined may appear to have emerged from a unique confluence of circumstances, we are likely to witness similar combinations of shocks manifest in the future. The global food security crisis is a window into the types of multi-factor global challenges we will likely face repeatedly if conflict goes unchecked, climate impacts increase in severity, and new global health security issues unfold. The international community

and U.S. government must not only meet this moment by providing adequate humanitarian assistance to address acute food insecurity today, but by investing in and reorienting our assistance modalities to prepare vulnerable communities to weather these future shocks. As this committee and the broader U.S. government considers how to respond, Mercy Corps urges the following:

Rise to the Challenge through Adequate fiscal year 22 Funding

Based on new and worsening humanitarian emergencies and increased food, fuel, and shipping costs, the global humanitarian and food security assistance funding shortfall in 2022 has increased by 50 percent. We welcome the Administration's recent release of the Bill Emerson Humanitarian Trust to the Horn of Africa and Yemen, but these food commodities will take months to arrive, let alone get to people's plates. The Administration's recent second Ukraine supplemental request included some international food security assistance, but from our estimation there is only \$1.85 billion dedicated to addressing the urgent humanitarian needs. Put simply, this is entirely insufficient to meet the current challenges.

Consequently, we are asking Congress to provide \$5 billion in supplemental funding for international food security programs. The now 323 million people likely facing crisis levels of hunger around the world cannot afford further delay, nor can U.S. partner humanitarian organizations continue making impossible choices every day as to who lives and who dies because of a lack of funding.

Make Humanitarian Response "Smarter"

Humanitarian and food security assistance are vitally important tools in mitigating the impacts of crises and saving lives. First and foremost, it must be immediately available and provided in sufficient quantity to actually meet needs around the world. It must also be provided in ways that promote maximum speed and effectiveness. Finally—and of critical importance—it must promote readiness for future shocks and strengthen local systems that people rely on to meet during emergencies and times of acute stress.

We encourage the U.S. government to:

1. *Ensure robust base funding for humanitarian accounts.*—While supplemental funding for unexpected emergencies may be required, nothing will ever replace the adequate baseline budget necessary to respond to needs that are clear at the outset of a fiscal year. We know enough about current needs and historical spending patterns to set an adequate spending level for the humanitarian accounts and to provide a State and Foreign Operations topline number that will accommodate them. This is essential to make sure U.S. humanitarian offices can plan and make better choices throughout the fiscal year.
2. *Prioritize cash and voucher interventions.*—Cash and voucher interventions support household's ability to purchase food and farmers' ability to access seeds and fertilizer. These interventions directly support local market interventions as part of emergency response and recovery. Evidence suggests that in most cases, cash is a more efficient and effective mechanism to reach needy people. It has the added benefit of sustaining markets and offering people dignity of choice. Where markets are thin, it should be complemented by direct support for local businesses and other actors to sustain the marketplace.
3. *Universally integrate the use of flexible financing mechanisms into all existing and new procurement mechanisms across USAID.*—Streamlining the activation of crisis modifiers will enable bureaus to better pivot quickly to emergency response while protecting development gains. This flexible funding mechanism allows USAID to rapidly pass-through new rounds of funding to current, existing partners whenever a crisis hits, without the need to go through time intensive new rounds of requests for applications. This allows crisis response to leverage existing partnerships and interventions to ensure response is faster and more effective. Additional flexibility through procurement reform will also be required to fully implement smarter humanitarian assistance.
4. *Implement peacebuilding and good governance alongside emergency response.*—While emergency assistance is focused on saving lives, there are ways that it can be provided to promote peace, improve good governance, and strengthen systems that help vulnerable people cope. Mercy Corps' Advancing Peace in Complex Crisis framework provides guidance on how this can be achieved across a range of conflict types and security conditions.

Invest in Resilient Food Systems

The U.S. recognized the need to strengthen food systems when it stood up the Feed the Future Initiative after the 2007/2008 food price crisis. Feed the Future is a "whole of government" initiative with proven results in reducing poverty, pre-

venting hunger, and reducing stunting. Congressional investments in food systems were successful in increasing the resilience of households vulnerable to the impacts of COVID-19 and food systems proved more resilient during the pandemic than originally expected. Feed the Future has also proven that investments in fragile areas can increase household resilience to food security and reduce the need for humanitarian assistance. For example, in Northeastern Nigeria Mercy Corps is strengthening local market systems, partnering with input suppliers, buyers, and other local actors to improve the resilience of food systems and strengthen livelihoods of households. 80 percent of participants in Mercy Corps' poultry market interventions have reported improved ability to address conflict related shocks, while agriculture businesses and farmers supported with financial assistance in Northeastern Nigeria were able to generate revenues up to four times larger than the program budget that supported them. Given these proven results, we would recommend the following:

1. *Invest in Feed the Future Countries.*—Despite the increase in frequency of disruptions, food systems investments at the country level have remained the same for more than a decade. The U.S. government must commit adequate resourcing to this global anti-hunger agenda to ensure it is truly able to “shock proof” global food systems as we head into a future that will inevitably include more events like those we are currently experiencing. These must focus on building the resilience of global and local food systems to more frequent climate and conflict disruptions. Feed the Future can help mitigate additional needs by expanding the program into fragile areas to strengthen food systems for the future.
2. *Reauthorize the Global Food Security Act (GFSA).*—The GFSA authorized Feed the Future and sets forth Congressional expectations on a bold global food security agenda. It must be reauthorized this year and this process should be used as an opportunity to incorporate lessons learned and reinvigorate Congressional support for global food security in light of the crisis we are currently witnessing. We would encourage Congress to double the authorized amount for Feed the Future through the GFSA.

Commit to Proactively Addressing Conflict and Climate Change in a Strengthened Resilience Agenda

The U.S. and other bilateral and multilateral donors continue to be stuck in a paradigm of foreign assistance that is reactive. In recent years, with the passage of the Global Food Security Act, the Global Fragility Act, and other important pieces of legislation, the U.S. has begun to pivot toward a more forward leaning and proactive agenda to head off crises. We must strengthen this posture by squarely focusing foreign assistance investments on tackling the root causes of conflict, violence, and fragility, prevent the escalation of crises where we can, and mitigate the impacts of inevitable shocks. In short, we must redouble our efforts on building resilience to help communities prevent or reduce effects of crises.

Conflict, climate change, and COVID-19 are major, intertwined challenges across the globe. There is increasing evidence that climate change compounds existing sources of economic, political, and social risks that drive violence. Climatic shocks like drought are already increasing the risk of intercommunal conflict in the Horn. Ongoing conflicts in Ethiopia, Northern Kenya, the Sahel, South Sudan, Somalia, Syria, Ukraine, and Yemen are exacerbating disparities among vulnerable communities, destroying livelihoods, and limiting humanitarian access. Of the more than 161 million people around the world that live in countries with crisis levels of food insecurity, more than 100 million live in places where conflict is the main driver of that food insecurity.

A strengthened resilience agenda should prioritize development investments and peacebuilding initiatives alongside humanitarian assistance, which we know all too well cannot solve the underlying causes of these crises. These different types of interventions should be thoughtfully integrated and connected for impact. The three USAID bureaus—for Resilience and Food Security, Humanitarian Assistance, and Conflict Prevention and Stabilization—were brought together expressly to ensure a better response to these mutually reinforcing challenges. We must do more to layer and sequence humanitarian and development investments in fragile contexts and be more intentional, and bolder in our efforts to do so.

Our research on this topic in the Horn of Africa demonstrates resilience programming that better integrates early warning systems, more shock-responsive social protection programs, and stronger market systems are arguably mitigating some of the worst effects of the current shocks—at a fraction of the cost of emergency assistance. Recent analysis drawn from drought data in the Horn between 2000 and 2015 indicates that investments in resilience and safety nets “reduces the net cost of humanitarian response by an estimated \$1.6 billion [USD] over a 15-year period over

the cost of a late response.” When considering the costs of meeting immediate needs and the benefits to incomes and livestock, investments in resilience building are estimated to save \$4.3 billion over a 15-year period, which averages to \$287 million USD per year.

Put simply, we cannot afford to take any other approach. The intricate connectivity between climate change, conflict, economic shocks, and food insecurity demands a more integrated, better coordinated, and sequenced approach to our foreign assistance investments. No amount of humanitarian assistance will suffice if this gordian knot is not untangled.

Mercy Corps recommends that efforts be made to:

1. *Increase investments in development and peacebuilding interventions in contexts affected by recurrent or protracted humanitarian crises.*—Investments in addressing root causes of these challenges is insufficient. Furthermore, we believe embedding a conflict-sensitive approach throughout all food security programming, supporting peaceful migration and resource sharing makes our humanitarian assistance smarter.
2. *Ensure USAID works collaboratively across bureaus.*—The Administration must expand and enhance its focus on working collaboratively across all relevant parts of our foreign assistance apparatus with relevant mandates to create an integrated package of assistance that is mutually reinforcing. It is particularly important that USAID’s efforts break silos and add up to a greater sum than their individual parts. This includes ensuring all humanitarian action is conflict sensitive, and that social and market systems are reinforced rather than undermined in areas where humanitarian aid is prolonged. We recommend reinvigorating the “R3” concept with a fully empowered Deputy Administrator role to oversee USAID’s Bureaus for Humanitarian Assistance, Resilience and Food Security, and Conflict Prevention and Stabilization.
3. *Build Resilient Food Systems in Fragile Areas.*—The evidence is clear that resilience investments can mitigate humanitarian needs in fragile contexts. Through the reauthorization of the GFSA and the elevation of the USAID Resilience Leadership Council, we can ensure resources are being targeted in areas of greatest need and opportunity. Ultimately, food system resilience must include efforts to prevent and reduce the impacts of future health, climate, and conflict shocks, among others, that can impact functioning food systems. Resilience requires the ability to adapt to the rapidly changing contexts within which food systems operate, including increasing urbanization, income changes, complex supply chains, and natural resource and equity constraints. Adaptive food system monitoring systems are also needed as part of the resilience-building pathway.
4. *Layer and Sequence Humanitarian, Development, and Peacebuilding Approaches from the start.*—In every context, program interventions must be layered and sequenced with the full range of foreign assistance resources, tailored to individual contexts, communities, and countries. This means that when responding to a weather emergency or a new conflict that humanitarian and development funding tools are aligned, mutually reinforcing and appropriately timed, and sequenced to give individuals and communities the best opportunity to survive, cope and thrive.

CLOSING CALL TO ACTION

Taken together, the impact of COVID–19, enduring and escalating climate shocks, unchecked conflict and now the war in Ukraine are the perfect storm impacting vulnerable communities’ ability to feed and support themselves. The consequences could be catastrophic—in terms of lives lost and further global instability—if adequate efforts are not made to provide immediate assistance at the scale required.

We must also recognize that these interconnected challenges are not in fact anomalous, but a glimpse into a future where multi-factor shocks will combine to create significant threats to lives around the world. Knowing this means we must proceed boldly and strategically, making dedicated efforts to ensure our humanitarian assistance not only prevents lives from being lost, but fortifies communities and food systems to withstand inevitable shocks. It also means better combining our foreign assistance tools and approaches to promote resilience by planning and executing assistance that layers and sequences different interventions. We have a critical window of opportunity to better prepare for a complex and potentially dangerous future in which global food security will be imperiled by an array of interrelated shocks, let’s seize it.

Thank you.

Senator COONS. Thank you. Dr. Adesina.

STATEMENT OF AKINWUMI ADESINA, PRESIDENT, AFRICAN DEVELOPMENT BANK

Mr. ADESINA. Thank you very much, Chairman, Senator Chris Coons. It was great to have you visit us in Abidjan. It is nice to see you again. Ranking Member, Senator Lindsey Graham, it was also great to see you in Abidjan when you visited.

Distinguished Members of the U.S. Senate Appropriations subcommittee office on State and Foreign Operations, and I hope I will have the opportunity to welcome several of you also to the headquarters of the African Development Bank that is based in Abidjan. I very much appreciate the opportunity to testify about the U.S. response and policy options for a global food security crisis.

I have dedicated my professional life to realizing Africa's potential through development. I have served Africa's most populous nation as Nigeria's agriculture minister, and I am President of the African Development Bank Group, Africa's premier and most trusted development finance institution.

And I am also the 2017 World Food Prize winner. So I like things about food. With an active portfolio of \$60.35 billion in more than 140,000 locations, the African Development Bank is Africa's only triple A rated financial institution. Our strategic high five priorities are to light up and power Africa, feed Africa, industrialize Africa, integrate Africa, as well as improve the quality of life of the people of Africa.

Today, I would like to focus on feeding Africa and what the African Development Bank is doing to address the global food crisis. Africa has an estimated 33 million smallholder farmers. They are key to food production and the livelihoods of millions of more Africans whose walk and lives are linked to the agriculture sector.

The truth is, with America's financing and those of other 80 shareholder members of the bank, the African Development Banks group actions to boost harvests from Africa's farms are achieving impressive results.

For example, through our technologies for African agricultural transformation, which are called T-A-A-T or TAAT, our support reached 11 million farmers in 28 countries in a little over 2 years. The program is delivering climate smart seeds, fertilizers, and technical support, allowing farmers to harvest high yields of wheat, corn, rice, and other staples.

African food production, as a result of those efforts, has increased by more than 12 million metric tons. The economic shocks from the Russian war in Ukraine are causing all of us to pay more to put food on the table.

The magnitude of food price interests and trade disruptions caused by the Russia and Ukraine conflict have hit Africa harder than other developing regions of the world, threatening to topple the continent's food systems already stressed by the COVID-19 pandemic. Africa must prepare for the inevitable global food crisis. Ukraine exports 40 percent of its wheat and corn to Africa.

According to the United Nations, 15 African countries import more than half of their wheat and as much of their fertilizers and oil from Ukraine and Russia. As the Russian, Ukraine conflict

rages, Africa is also dealing with a 30 million metric ton loss of wheat and corn that won't be coming from Russia nor from Ukraine. The cost of bread is now beyond the reach of many Africans.

The Russian, Ukraine conflict is a huge factor in fertilizer prices, hiking upwards of 300 percent. Our analysis is that America faces a fertilizer shortage of 2 million metric tons this year. We estimate it will cost about \$2 billion at current market prices to source new fertilizer to cover the gap. If we don't mitigate this shortage rapidly, food production will decline by at least 20 percent, and we estimate in many places by more than 50 percent as well.

This horrific perfect storm will see Africa lose more than \$11 billion in the value of food production according to our analysis. Without urgent and immediate global action, we may witness social and political unrest, as we have seen only too often in the past, as we heard from Senator Graham and also Senator Coons.

The truth is that the African Development Bank, with your support, is prepared to meet this challenge and others head on. Let me share what we are doing to help avert a looming food crisis. We have developed an Africa emergency food production plan. A \$1.5 billion plan will be used to support African countries to produce food rapidly. Produce 38 million metric tons of food, in fact.

The total value of the additional food production is \$12 billion U.S. dollars. The Africa Emergency Food Production Plan will deliver climate resilient agricultural technologies to 20 million farmers, a majority of those will be women farmers. The \$1.5 billion plan intends to source \$1.3 billion of own resources.

With U.S. Government support to reduce the \$200 million financing gap, we can ensure the Africa Emergency Food Production Plan's success. Distinguished members of the subcommittee, we are spearheading efforts for African solutions to Africa's immediate, medium, and long term challenges.

The strong support of the U.S. for the Africa Emergency Food production Plan will allow Africa to avert the looming food crisis and use the opportunity to drive structural changes in agriculture to unleash the full potential of Africa to become a breadbasket to the world. Thank you very much for the invitation.

[The statement follows:]

PREPARED STATEMENT OF DR. AKINWUMI A. ADESINA, PRESIDENT, AFRICAN
DEVELOPMENT BANK

Chairman Senator Chris Coons, Ranking Member, Senator Lindsey Graham, and distinguished Members of the U.S Senate Appropriations Subcommittee on State and Foreign Operations, I appreciate the opportunity to testify about the U.S. response and policy options for global food security crises.

I have dedicated my professional life to realizing Africa's potential through development. I have served Africa's most populous nation as Nigeria's Agriculture Minister, and I am the President of the African Development Bank Group—Africa's premier and most trusted development finance institution.

With an active portfolio of \$60.35 billion in more than 140,000 locations, the African Development Bank is Africa's only AAA-rated financial institution.

Our strategic High 5 priorities are to light up and power Africa, feed Africa, industrialize Africa, integrate Africa, as well as improve the quality of life for the people of Africa.

Today, I would like to focus on feeding Africa and what the African Development Bank is doing to address the global food crisis.

Africa has an estimated 33 million smallholder farms. They are key to food production and the livelihoods of millions of more Africans whose work and lives are linked to the agricultural sector.

Truth is, with America's financing, the African Development Bank Group's actions to boost harvests from Africa's farms are achieving impressive results. For example, through our Technologies for African Agricultural Transformation (TAAT) program, our support reached 11 million farmers in 28 countries in little over 2 years. The program is delivering climate-smart seeds, fertilizers and technical support allowing farmers to harvest higher yields of wheat, corn, rice and other staples. African food production has increased by more than 12 million metric tons.

The economic shocks from the Russian war in Ukraine are causing all of us to pay more to put food on the table.

The magnitude of food price increases and trade disruptions caused by the Russian-Ukraine conflict have hit Africa harder than other developing regions of the world, threatening to topple the continent's food systems already stressed by the COVID-19 pandemic.

Africa must prepare for the inevitable global food crisis.

Ukraine exports 40 percent of its wheat and corn to Africa. According to the United Nations, 15 African counties import more than half of their wheat, and much of their fertilizers and oil from Ukraine and Russia. As the Russia-Ukraine conflict rages, Africa is also dealing with a 30-million metric ton loss of wheat and corn that won't be coming from Russia.

The cost of bread is now beyond the reach of many Africans.

The Russia-Ukraine conflict is a huge factor in fertilizer prices hiking upwards of 300 percent. Our analysis is that Africa faces a fertilizer shortage of 2 million metric tons this year. We estimate it will cost about \$2 billion dollars—at current market prices—to source new fertilizer to cover the gap.

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The strong support of the U.S. for our Africa Emergency Food Production Plan will allow Africa to avert a looming food crisis and use the opportunity to drive structural changes in agriculture, to unleash the full potential of Africa to become a breadbasket to the world.

Thank you very much.

Senator COONS. Thank you, Dr. Adesina. Thank you, Ms. McKenna and Mr. Beasley. My colleague had a quick comment he wanted to make before.

Senator GRAHAM. Yes, Mr. Chairman, we had a huge bipartisan vote last night in the House. I am hoping we can pass the supplemental appropriations bill this week and that there will be \$5 billion in the package to help the problems identified by our witnesses. Governor Beasley's advocacy has been huge.

But I want to also recognize Senator Blunt. He is the conference Chairman on the Republican side. He has made this a top issue for the conference for the last three or four weeks. He laid the groundwork better than anyone, quite frankly, about why we need to think about paying now or paying later. Governor Beasley was at

the conference yesterday. So Roy, I just want to let people know that we would not be here on our side without you, and I appreciate your leadership.

Senator BLUNT. Thank you, Senator.

Senator COONS. As a seasoned senior appropriator and a widely respected colleague, I look forward to your engagement both on this Ukraine supplemental and on figuring out a path forward on COVID internationally, domestically. And I also want to thank you for your friendship and leadership, Senator Blunt. We have only got 6 minutes, so I will try and touch on a few main issues.

Across all three of your testimony, it seems clear this is one of the worst food crises in the world in decades, certainly in the lifetime of any of us. I would be interested in how you think we can best maximize the effectiveness of our response. You have made references to resiliency, to investing in smallholder farmers, to bringing to market climate resilient seeds, to unblocking access to the capabilities of Ukraine.

I would be interested in each of the three of you would simply talk to, given that we may well have a \$5 billion additional contribution from the United States, if and when we pass this Ukraine supplemental, how do we make it as flexible, responsive, and effective as possible? Please. First, Mr. Beasley.

Mr. BEASLEY. Senator, thank you. And a limited time. But first thing is get the money out the door as fast as we can because we do have a crisis. We are already cutting millions upon millions of beneficiaries down to 50 percent. Like in Yemen, 8 million have been cut down to 50 percent. In the Sahel region, Mali, Burkina Faso, Chad. And those are areas that you will have destabilization and mass migration. It will be absolute catastrophic consequences. And so we need to move fast.

We need to make certain that USAID is encouraged to move the resources out as quickly as possible, and we have got means and mechanisms to do that. I think what we are facing right now is a short term crisis and phenomenon that we do need to talk about the long term of resilience and sustainability because we have solutions on that too. But right now the house is burning down, we have got to make certain that we put the fire out before the entire world is on fire, and that is where we are.

So, and just by the way, just our operational cost increase of \$71 million more per month because of food price increases, fuel price increases, as well as shipping costs. And what we are facing right now in the next 8 to 12 months is a food pricing problem, which creates access issues for those who can't afford it, which is critical.

But next year, because of the fertilizer and the droughts, we could have a food availability problem next year. And so we have got a lot of work to do, and we have got to move fast. And I think that is critical to stabilize the countries that we are concerned are at risk.

Senator COONS. Thank you. Ms. McKenna, resiliency. Future, long term, what should we be doing? We have to address a crisis, but what else should we—

Ms. McKenna: Yes. Exactly. It would be a grave mistake if USAID were to err and put, you know, 95 or most of the money in the current food—although obviously we need the current com-

modities. Based on research that we have done in the Horn of Africa, we have seen that investments in resilience building are estimated to save \$4.3 billion over a 15 year period. So that averages to about \$287 million per year. And what does that look like?

That looks like the real long term layering of longer term assistance and mechanisms while doing the humanitarian assistance. So humanitarian assistance that helps to build and support local markets like cash and flexible vouchers, support to entrepreneurs to do import substitution or other things needed to kind of keep people in place.

Programs that support youth to help prevent them from being recruited into conflict. Things that promote governments and their own fiscal stability to provide safety nets so that doesn't further impair social cohesion. So we would love to see more of this long term, comprehensive focus on building systems, more coordination between those three bureaus around conflict, more support to conflict prevention actors and social cohesion, and the fighting of misinformation.

We have got to—food, climate, conflict, they all go together. It is a circle. So we are really making sure that USAID is thinking about this comprehensively is critical, and with a lens particularly on conflict affected countries, is critical.

Senator COONS. Thank you, Ms. McKenna. Dr. Adesina.

Mr. ADESINA. Thank you very much, Senator. Firstly I think, as Senator Graham was saying in his introductory remarks, if people can produce food in their backyard, they really have absolutely no resilience at all. So the first thing to do is to make sure that people can actually produce the food that they are actually going to grow for their families without having to check out a boat and beg for food.

So I think the first thing for building resilience is support people, smallholder farmers to produce the food, and decouple from such effects that happen so often. The second is you have got to also focus a lot on making sure that we can leverage resources. Fantastic to really hear what the Ranking Member has said about \$5 billion, but that can be leveraged a lot and I think international multilateral financial institutions like ourselves can use some of those monies and actually leverage them significantly.

So leveraging matters, as you actually said, Senator Coons, in your introductory remarks. I think that whatever we do to ensure effectiveness and efficiencies, the private sector is critical. Governments are going to have to play a role, yes, in terms of support. But we have got to make sure that whatever support is provided does not undermine the private sector, but rather promotes and enhances and facilitates the private sector in input markets, in financial markets, and in logistics and getting food out to markets.

I think we also have to make sure that targeting is done in such a way that those who actually need based support for seeds and fertilizers get it. Most of those are actually women smallholder farmers. And so targeting that, I would say is very important, and digital technologies can play a role in that. And finally, at the end of the day, as you all said in the beginning, both the Ranking Members, the issue of fragility is important.

Many of these countries, and my other colleagues have already said it, in the Sahel, in the Horn of Africa, where we are having what I call a disaster triangle, that has to do with very high structural poverty, high levels of unemployment, and environmental degradation makes these areas so highly vulnerable. So I think that we should target quite a lot of support to make sure we can stabilize these particular areas.

Senator COONS. Thank you to all three of you. I agree that we need to move swiftly. We need to be flexible in how we deliver this aid, how it partners between the private sector, multilateral development banks, nonprofit partners, and the largest agencies and entities like the World Food Program and USAID. I look forward to hearing more of your testimony. Senator Graham.

Senator GRAHAM. Thank you. Governor Beasley, the demand for your product is going through the roof, is that correct?

Mr. BEASLEY. Yes, sir. In fact, we are 50 percent of the resources we need. We now, because of all the crises that we are talking about, from conflict, to climate, to COVID, and now Ukraine, we are about \$10 billion short of what we need.

Senator GRAHAM. Okay, so the \$5 billion—we are appropriators so, you know, I am not much of a farmer, but I want to help people help themselves. That is the whole point of this hearing. The \$5 billion helps, but it is not enough by itself.

Mr. BEASLEY. That is correct.

Senator GRAHAM. Okay. What I want to know is what did the GCC nations give to causes like this?

Mr. BEASLEY. This year has not been much compared to what the United States—

Senator GRAHAM. So every time you go to the gas pump—these folks are getting rich, they are allies in problem areas, too. I want the subcommittee not only to fill in the gap that Governor Beasley has with American taxpayer dollars but I want us as a group, Mr. Chairman, to call our allies and say you need to help too. In terms of Europe, how do they do?

Mr. BEASLEY. Germany has really stepped up compared to where they were about 7 or 8 years ago. They were \$300, \$350 million. Now they are at \$1.4 billion. I have spoken to the Bundestag on a number of occasions.

Senator GRAHAM. What about the European Union? It represents all of Europe.

Mr. BEASLEY. The European Union, in my opinion, has stepped up, but it can do more.

Senator GRAHAM. Do you know what they give to us?

Mr. BEASLEY. To us about \$500 or \$600 million.

Senator GRAHAM. Now they are the same amount of people as United States, so we are going to visit these other groups and we will make an argument to the American taxpayer, we need to spend this money and spend it now for the reasons you said, but I promise the American taxpayer, we are going to rattle some cages.

So to the President of the African Development Bank Group, you have been very impressive in your presentation. How has COVID hurt the economy in Africa?

Mr. ADESINA. Well, thank you very much, distinguished Senator. COVID situation has really hurt Africa quite a lot, of course. Economic growth rates actually declined by roughly 1.5 percent as a result of that, the lockdowns, and you couldn't get trade going, and all of that. And we had roughly about 26 million people that fell further—into poverty as a result of the COVID-19 pandemic.

And roughly 30 million people actually lost their jobs. So the impact is beyond just the amount of disease, of people that actually died from it. Roughly—so that's the impact. But in the recovery of Africa from that, it has been rather muted compared to other parts of the world, we project that our economies will probably go back about 5.1 percent. But the real issue is how do we ensure that we don't have a divergence in the growth rates of the developed countries and the developing countries such as Africa?

The big issue there is access to vaccines. And as you know, right now we have only 16 percent of Africa's population is actually vaccinated, I mean fully vaccinated. And if you look compared to developed economies, countries in the world, Australia, it is about 83 percent. If you look at the United States, well—I mean, you have so high here. If you look at Europe, well over almost 70 percent.

So the issue is—access to vaccine. A lot of work is being done, distinguished Senator, in terms of local manufacturing of vaccines in Africa. That ought to be promoted. But I do think that we have got to make sure that we prepare not only for this particular COVID situation, but we build what I call Africa health care defense system, which will have to be predicated in three factors, three areas.

One is build Africa's pharmaceutical industry, which is very critical. We import over 80, 90 percent of pharmaceutical products in Africa, which is not acceptable. The second thing is to make sure we build local vaccine manufacturing capacity. And third one, the most critical, is the issue of health infrastructure, primary healthcare, secondary healthcare, and tertiary healthcare, especially also diagnostic infrastructure.

I know that when you came, Senator Graham, to Abidjan and we had a conversation over dinner, the whole issue was around infrastructure. And this is one area of infrastructure that we think is critical, infrastructure for life.

Senator GRAHAM. One of the things I learned on the trip from the Gates Foundation, there was a single mother, I think, with four daughters, and where the power lines go, everything changes. As you build the road and build the power system, you can get products to market better.

Drought resistant seeds were used by this young woman and her yields were ten times what they were before because she was using technology. They moved the cow out of the house into its own place and it improve the health care environment. They were able to get some disposable income and didn't have to walk five or six miles a day to get water.

So, infrastructure really is important to economic development, particularly on the food side. Ms. McKenna, the Global Fund has been, I think, a good success of where money has been matched. Do you see a need for something like that in the food security space?

Ms. MCKENNA. Absolutely. Absolutely. Multilateral action is key. And what is concerning is that we have seen some countries kind of take away aid from places like—from places like Yemen or Syria in order to support responses in the Ukraine. And the answer is more, including private sector and other motivations. It is not less or moving it around.

Mr. BEASLEY. Senator, can I add real quick? I pulled out the 2 numbers on like Saudi Arabia and UAE. Three years ago, we received from both those countries \$658 million, primarily in Yemen. This year we received \$6 million from Saudi Arabia and \$0 from UAE.

Senator GRAHAM. Wow. Thank you. That may change next week.

Mr. BEASLEY. Thank you, sir.

Senator COONS. Look forward to the persuasive effort. Senator Durbin.

Senator DURBIN. Thanks, Mr. Chairman. And thank you to the witnesses and all of you here today for this critically important hearing. I am going to ask you some questions that may be a little bit different. When we talk about food and feeding people, most of us think in terms of raw foods, foodstuffs, and I would like to be more specific. In areas of famine, I have seen, and this goes back a few years, I don't know if this is still the case, the use of food supplements like Plumpy Nut, is that still out there?

Ms. McKenna: Therapeutic.

Senator DURBIN. It's a winner, isn't it?

Mr. BEASLEY. Super coffee nut——

[Technical problems.]

Senator DURBIN. And also rehydration therapies. When we talk about food aid through your agencies and such, does it include these things?

Mr. BEASLEY. Yes, sir. In fact, there has been a deliberate effort and a substantial improvement in not just calories, but the right calories and nutritional added value products. And that is one of the things that we are really working together more strategically than we were years ago.

Senator DURBIN. When we hear about the increasing cost of local food producers, I think of how we might help them directly, but I also think indirectly. Are there microcredit programs that are part of your effort so that local farmers can borrow some money to get through the tough times?

Mr. BEASLEY. We think this is a very critical part of the success going forward. Not nearly, nearly enough. One of the things that Congress has done in the last few years is given us more flexibility with funding. So we now do \$2 billion in cash based transfers, which puts liquidity into the local economies, which stimulates the local smallholder farmers.

And we are also now buying internally like for Africa to stimulate farming operations in that regard as well, as well as we are bringing obviously tremendous amount of quantity of commodities from the United States into the countries that are in great need. But these resilience programs are the long term success.

The charity is never going to be the final solution, as you well know. It has got to be—we have got to create an incentive such as you have water harvesting and all the things that you create the

resilience. Because in many of these countries we are struggling with right now because of this shock from Ukraine, if we could go in with the right programs to scale them up, then they won't have these shocks like we are experiencing.

And that would be—that will save a lot of money, Senator.

Ms. McKenna: May I add, Senator. In addition to microcredit, which can be difficult sometimes for agricultural producers to make the frequent payments it requires, we are also have looked at things like microinsurance to kind of help protect against crop failures, the things like risk—different micro savings products to help them plan better. So comprehensive financial tools are part of the services that we offer.

Senator DURBIN. We know that COVID—

Mr. ADESINA. Sorry. Distinguished Senator, may I come in?

Senator DURBIN. Sure. Go ahead.

Mr. ADESINA. Thank you. I just wanted to make two quick points about what you said about the importance of malnutrition. We should make sure that in the interventions that we do, it is not just calories that matter, it is actually nutritious food that is also very important.

So, because at the end of the day, if you have children that are stunted and they are not getting the right kind of nutrients, it affects actually the capacity of the brain to function well. So, you know what I call gray matter infrastructure, we have got to really build that into this. And one of the things that we will be supporting through this emergency food production plan is the whole area of bio fortified foods.

So what I highlighted, maize, sorghum that is actually fortified with iron, or beans and things like that that are also fortified, is very important. Nutrition and supplementation is important. Now, one thing I just wanted to say is how important these interventions are. We have a program that we are doing in the Soqota area, which is in Ethiopia, which is in the Tigray area.

In fact, as part of war in that area, the number of percentage of kids that were actually stunted was as high as 50, 60 percent. We brought it down to about 38 percent in a very short period of time. So these focused production things that are targeted with high nutrient foods does make a difference very quickly. And on the point of the microcredit that you said, I think at the end of the day it comes back to what Senator Coons was saying.

We have got to make sure that \$5 billion that we are talking about here is used to also leverage financial institutions. Banks don't lend to agriculture in most cases because of high perceived risk, but when I was Minister of Agriculture, I got the banks in Nigeria to actually lend to agriculture, put together a \$350 million risk guarantee facility for them if they lost their money.

And we ran it. We leveraged over \$3.5 billion from the banks into agriculture. And non-performing loans, less than 1 percent. So which means that the passive risk is excessively high. And so we at the bank, as part of our intervention, are looking into how we are going to use risk mitigating factors and risk guarantees to leverage the capital of the balance sheet of those banks, going to seek companies, fertilizer companies, logistics, and all of those factors in the agricultural value chain. This is very, very important.

Senator DURBIN. Thank you, sir. I want to ask one last question, if I can, and it relates to COVID-19. We all know the death toll in the United States has reached a million, maybe 6 million worldwide. The U.S. has developed very effective vaccines, but we have struggled to supply them to the rest of the world.

Now we have a greater challenge in poor countries than just providing vaccine. We have weak health infrastructures in those countries, vaccine hesitancy, and other competing basic health demands. A member of my staff went to West Africa, and I asked he specifically to look at COVID-19 vaccine supplies. He reported a surplus of vaccines, but not enough demand. There is a hesitancy involved in it.

There is a lack of infrastructure to deliver it, and that has to be part of our conversation. So it isn't just the value of the vaccine, its taking with it the means of delivery. Can anyone on the panel comment on that aspect?

Mr. BEASLEY. Senator, when most of the airline industry shut down during the height of COVID, the World Food Program stepped up and began delivering COVID supplies, from PPE, testing equipment, ventilators, the whole nine yards in 183 countries. So someone said that we were actually the world's largest operating airline at one time.

That is something that you aren't really proud of, but when the airline industry shut down, we had to do what we needed to do. When it came to vaccines, we were and are prepared to step up and deliver and take advantage of our logistics supply chain, because we were really very good at it.

But we have really not been asked to do that much in the supply chain of vaccines. We have been—we have had a very little role in that.

Ms. McKenna: I would like to echo that. NGO partners like Mercy Corps and our peers, we are your last mile partners. We are in these deep communities that are difficult to reach with deep, long standing relationships. And we reached out several times kind of trying to get people to work with us to support that last mile delivery and it just was not something that was taken up in a huge way.

Mr. ADESINA. For Africa, from a—distinguished Senator, the issue with the vaccine hesitancy that you mentioned, yes, there is some truth to that, but I will not say that there are surplus of vaccines in Africa. In fact, what happens is that there is not enough supply. We have—even well what was supposed to be delivered to Africa wasn't really delivered. It came late. Some of them were actually expired vaccines, so they couldn't really be—doses couldn't be applied.

You have a situation in which as developed countries actually have, double doses, triple doses or booster shots, Africa was just basically still struggling to have basic shots. So I do think that it is not necessarily correct to think that there is a surplus of vaccines in Africa. There is not a surplus of vaccines in Africa.

There are structural issues that we must deal with in terms of making sure that we have the capacity to produce those vaccines in Africa, and also issues that have to do with intellectual property rights that can make sure those vaccines and antigens and things

like that, that are needed are actually available through R&D systems in local pharmaceutical and vaccine manufacturing industry.

So in Africa right now, a lot has been done in terms of Johnson & Johnson in South Africa and many other places to set up vaccines manufacturing. And when they are setting up those vaccine manufacturing is because there is demand, but they are trying to deal with the problem of structural bottlenecks that have made it difficult for Africa to actually access the vaccines in the quantity, at the cost, and at the timing that is needed.

Senator GRAHAM. Thank you. We have votes, and I am going to go vote and we will do the best we can.

Senator BLUNT. All right. That means I am in charge until you get back?

Senator GRAHAM. Means you are in charge—maybe—

[Laughter.]

Senator BLUNT. I have got lots of time then. Well, thanks to all three of you for being here. Ten years or so ago, when I started talking about the demographic impact on food, which is highly predictable, and the double in the world food need in a relatively short period of time—and I was talking to somebody who runs one of our big agricultural companies, and I said, how do we—can we do this?

And his answer is, yes, we can do it, but we can't do it without Africa. That that incredible population growth in Africa, that what all three of you are saying, the importance of Africa producing more of its own food and us helping figure out how to do that is critical. I do think at this moment, this immediate \$5 billion, frankly, is going to go pretty fast, and go fast to meet the crisis need.

I as—Governor, you said you bought a lot of—Governor Beasley you buy a lot of food from Ukraine. What happens as the Russians move across Southern Ukraine, they have almost destroyed Mariupol, if not—and probably the port at Mariupol, I don't know. But they are now focusing on Odessa.

What happens, one, to the rest of the world if those ports are not operational for some period of time? And then two, what do you think happens to Ukraine and the food they maybe would be able to still continue to grow if those ports aren't available to them or to anybody else, perhaps?

Mr. BEASLEY. I guess you could actually say goodbye to Ukraine if you don't get those ports open because the economy collapses. 40 more percent of their GDP is based upon agricultural products that are exported through those ports, so it is critical. And then you talk about the impact that it will have on global food security, famines around the world, the pricing that we already see is spiking.

And so over the next 8 to 12 months, you will be—you will see continued pricing spikes. And here is what is very frightening. When you look at the Arab Spring in 2011, 2012, the economic indicators is now are worse than they were in Arab Spring, because we see food pricing and what it leads to, from migration to riots to protests to destabilization. Just in the past few weeks, you have seen Sri Lanka, Indonesia, Pakistan, Peru.

In the last few months you saw Chad, of course, and Burkina Faso, and Mali. And so it will only get worse in these places if food prices continue to spike, and they will, because you don't have the

availability of \$400 million—400 million—Ukraine feeds 400 million people with the food. So if that is out of the equation, where is that going to come from? You can't make that up that fast.

So it creates tremendous market volatility, and then you compound that with the fertilizer problem, and like Ethiopia and Sudan, 85 percent of their fertilizer comes from Russia and Belarus. And they are already in very, very fragile state. That is just two, and I can go from country—

Senator BLUNT. But without those ports, could Ukraine even if it could grow the food, how would they—how would they get the food—how would you get the food out of Ukraine?

Mr. BEASLEY. You can't. You can't get enough food out. To try to truck it out—for example, when an average day at the ports is 3,000, give or take, train carloads per day, and the average train carload is 3 to 4 trucks. So do the math.

That would be at least 10,000 trucks per day. And it is not a one day trip. It is several days. So you could talk about 4 to 5 days' worth of trucking operations, 50,000 trucks. What we have, and sitting down with the Ukrainian government, a best case scenario is you could truck and train out about 1 million metric tons a month.

Now, the problem with that, and that is not much compared to how much they produce, it is a drop in the bucket. But the problem with that is pricing spikes with that, because the cost of transportation will move it up to \$120 more per ton, which prices it out of the market.

Senator BLUNT. Right, right. Let me ask one more question here. You said, and I think Ms. McKenna has also said, we need to move fast. What can we do to speed up our efforts through you, through USAID? Are there elements—are there tools we can better use to get this done quicker? And I want to go next to Ms. McKenna and ask her if the NGOs have the capacity to do more, if we will work in a better way. But, David, you want to answer that?

Senator BLUNT. Yes, I do. I think there are several things. I think first and foremost, I think encouragement to USAID from the Senate in the House to move these funds quickly. I think they are in a lot of pressure.

You have got lawyers and all the bureaucracy, and I think as much encouragement as we can do down to USAID, that would be very important. Number two, in the past, we have mechanisms that we can put in place—that we have in place ready to move quickly. Funds, I mean, cash based transfers, we can move just like that.

IRA accounts and major tranches for regional areas of the world. We can move these funds very quickly, so we have the capacity to handle such. And then we can move funds with our partners as quickly as possible. But I think it is going to take a lot of encouragement down the street.

Senator BLUNT. Ms. McKenna.

Ms. McKenna: Yes. Thank you for that question. We would encourage USAID to really work with NGOs to move that quickly, obviously, but also really leveraging NGOs and leveraging existing relationships they have to do things like creating cash consortiums that can be used in multiple markets around the world like Yemen or Syria to kind of support local markets while also supporting food

production and other things. So we saw them able to do that a bit with COVID, being able to top up existing awards to support that, and we would encourage them to look at that again.

Senator BLUNT. Well, thank you. And I have a whole lot of other questions if the Chairman hadn't returned, but he is back and—

Senator COONS. Please feel free to ask—

Senator BLUNT. No, go right ahead, Chairman.

Senator COONS. We have no other members currently. And I know two are on their way back.

Senator BLUNT. Well, from the African Bank point of view, what are we—again, the key points to, one, get food out quickly, and two, to encourage more production.

Mr. ADESINA. Thank you very much, Senator. And so back to your point, you were saying earlier on, it was an excellent point, on the importance of R&D science models. And I just want to make two examples of that.

One is, in Africa today, we have actually supported what is called the water efficient maize for Africa, which is a very, very drought tolerant maize variety. Interestingly, I was at that time an associate director of the Rockefeller Foundation, and I was based in Zimbabwe, where we actually supported the global setup for wheat and maize cement based in Mexico to develop those varieties.

And those varieties worked. When we had drought in East and Southern Africa in 2018, 2019, the African Development Bank, through this program that I mentioned to you, called Technologies for African Agricultural Transformation, we actually got those water efficient maize varieties out to 5.2 million households, and that is why we were able to avoid a food crisis that there.

The second one is about wheat. As we all know, wheat is a temperate crop, but with technology right now, we actually have heat tolerant wheat varieties. And the African Development Bank was able to provide, and Beasley was talking about the case of Sudan and also Ethiopia. We provided for Ethiopia—I mean Sudan, 65,000 metric tons of certified seed of these heat tolerant varieties and that is about the equivalent of if one takes an Airbus A380 in terms of passenger cargo and we have a 90 metric tons or 98.2 or so metric tons.

So you are talking about almost 665 A380 Airbus of seed provided for them. And that allowed them to reduce that import of wheat, most of you, of course, you know, coming from Russia and all of those places, by 50 percent.

We did the same also in Ethiopia, where today they were closing in 2018 to 5,000 hectares of heat tolerant varieties. They have gone to 400,000 hectares of that today. So technology actually does matter. And in terms of, you know, the issue of getting things out, I think just to add to what Tjada was saying and also to David, is I think that we should get into what is working on the ground.

To come back to what Senator Graham was saying, produce food in your backyard. You know, and we have part which actually brings together the global R&D centers, the national centers, the regional centers, the private R&D centers, to actually get technologies to move agricultural value chains all across Africa.

So put the money where it is working on the ground. The plan that we have put forward here, distinguished Senators, is not one

we developed in our offices. It is one that is actually developed from the countries, over 44 countries where we have been impacting them in terms of access to climate resilient technologies.

So one of the things we can do with this money, given also that the Administration, U.S. Administration is big on climate, as much as we are big on climate, is to make sure that the money is used for food, but also wins on climate. So we can win on food, but we also have to win on climate, and R&D is the best way. And we have—the best way of getting these technologies out, I would say, is the mobile phones.

We can register, we have to register farmers biometrically, give them access to technologies, and give them via their mobile phones, and send them money by mobile phones, that way we make sure there is inclusiveness, in particular that women have to be carried along.

I continue to say that because you have to make sure that women participate and benefit from this because they are the majority. I have done this when I was Minister of Agriculture in Nigeria. We got all the farmers registered on mobile phones. We put them on a digital databases.

I was sending money by vouchers on their on their on their mobile phones. And I remember walking into one perimeter one day. The farmer told me, the woman from out there said, well, thank you, Minister. Now we get seeds and fertilizers in our villages, and the men cannot cheat us anymore. We have got to bring transparency and accountability and inclusiveness to the way in which these phones are deployed for impact.

Senator BLUNT. Thank you. Thank you, Chairman.

Senator COONS. Thank you, Senator Blunt. And thank you to my colleagues who have come to join this compelling hearing. I believe we will move next to Senator Murphy, then to Senator Moran, then to Senator Van Hollen, then to Senator Boozman. I am basing that on the order of when they were here before. We have another panel following this on COVID, which will be equally compelling. Senator Murphy.

Senator MURPHY. Thank you very much, Mr. Chairman. Thank you all for being here and for your fantastic work. I just wanted to have you all take a few minutes to delve a little bit deeper into the crisis in Afghanistan. This started as one of the world's poorest countries, and it has descended into what is really now the world's worst humanitarian crisis.

And I would like you all to give us a little bit of advice as to how we best unlock the significant amount of money that the United States currently has in its possession and at its disposal to try to address this crisis. In February, President Biden authorized \$3.5 billion, that is about half of Afghanistan's frozen assets to be used, "for the benefit of the Afghan people."

But 3 months later, we have not yet figured out what that international financing mechanism is. It still hasn't been set up. And so what advice would you give the Administration? What advice would you suggest we give the Administration as to how to push that \$3.5 billion? Because it cannot be that we can't both save lives while also not unjustly enrich the Taliban.

There is a mechanism by which to get this money as directly connected to the Afghan people as possible. So, I am certainly—I will start with you, Mr. Beasley, but I would love comments from all three of our panelists.

Mr. BEASLEY. Yes, Senator Murphy. I mean, this is one of the things we have been talking about from the beginning, because of the lack of funds that we have globally and then in Afghanistan hit. We were already—right before Afghanistan, we were talking about the crises that we are facing around the world. And Afghanistan hit, a nation of over 40 million people, 23 million people are in IPC 3, 4, 5.

I mean, that is just unheard of 8, give or take, 7 million are knocking on famine's door. So we were like, look, we don't have enough money. So what we did with the World Bank because the World Bank couldn't give it to the Taliban, and so we actually sat down with the Taliban, said, look, no one is going to give you money. Let it go directly to us without your fingerprints being on it.

And they, I would say, consented, but didn't matter. But it worked out with—money came directly to us. Same thing on these frozen assets. I don't think there is any question whether it is us or UNICEF and others, that we can work with teachers, health care providers, and of course, is working with beneficiaries throughout the country is not difficult to do. We are reaching about 40 million people right now.

But because of the lack of funding, we are having to cut back, cut back, cut back and at least try to reach those knocking on famine's door. But we have got to unleash those funds, whatever it takes, because otherwise you either got appropriated more dollars, and if you don't, you will have famine, you will have destabilization, which means you have more migration coming out of Afghanistan and you are going to have an extraordinary amount of recruitment by extremist groups for terrorist training activities.

Senator MURPHY. Ms. McKenna.

Ms. McKenna: Afghanistan is actually our largest—our longest continuous country presence. We have been operating in Afghanistan since the 1980s through multiple Administrations. The Government needs to figure out a mechanism to program that money to partners like us who are in those communities.

That economy has collapsed. We have seen news accounts of families selling off young children, young girls for dowry money because there is just no money coming in. Opium production is through the roof. We need to be able to start—we need to that to help starved—save people from starvation.

Senator MURPHY. But money coming directly to your programmings does not enrich the Taliban, in any way, shape or form?

Ms. McKenna: No, and we have been working with Treasury to create different rules and such that we can program those funds.

Senator MURPHY. Dr. Adesina.

Mr. ADESINA. I will have to take a pass because my mandate doesn't cover Afghanistan.

[Laughter.]

Senator MURPHY. All right. Thank you all. This is long overdue. In a world in which we are starved for resources, here lies for the time being, \$3.5 billion that is ready to go. And you have pointed out that the programmings you are running on the ground right now directly benefits the Afghan people without unjustly profiting the Taliban.

You are not alone in that club. There are plenty of mechanisms that will allow us to do both, save lives and make sure that this money doesn't end up in the hands of the wrong people. And so my hope is that this Committee can work with the Administration to expedite a mechanism to get that money released. Thank you, Mr. Chairman.

Senator COONS. Thank you, Senator Murphy. Senator Moran.

Senator MORAN. Chairman Coons, thank you. Thank you to our witnesses who care so much about this topic. I guess Ambassador Beasley, Secretary—or Governor Beasley, Yemen. You talked about Afghanistan. A lot of unsavory individuals who control most of the populous parts of Yemen. How has the cooperation been with the Houthis, and what worries you with those countries going forward?

Mr. BEASLEY. Senator, I have had some very frank conversations with the Houthis. I was just there a month and a half ago meeting with the Houthi leadership. And I know you probably recall back when I was pretty tough on the coalition about the blockade in Hodaydah and really was—in fact, 60 Minutes did a story then that helped break up the issue of the blockade in Hodaydah because we couldn't get food supplies in.

And that is a country that relies on 90 percent—85, 90 percent of all its food comes from the outside. And so when I was pretty hard on the coalition and that broke apart in terms of allowing the blockade to be set aside and food came in. The Houthis were just so excited and patted me on the back, thank you, thank you, you are our friend.

And I said, look, I am not doing this because I am on your side. I am doing this because it is the right thing to do. And I said, and if you cross that line, too—I probably should say what I said to them here. But anyway, the bottom line, I said, I am going to kick your rear end. You know that kind of thing. And they kind of laughed about it.

Well, a couple of years later, we had some serious issues with regards to many of our provisions in place to move food out there and neutral impartiality to reach the beneficiaries with independence. We had significant issues. So I went and sat down with them and said, let me be very clear.

We don't have enough money right now to feed everybody in the world. And our donors want to make sure that every dollar go—is maximized to reach the most people possible. And so when what you are doing in diverting our aid and creating all these unnecessary obstacles, there is no way that we can get the funding we need to help the people in Yemen. And we want to be able to do it in a neutral, impartial, independent way.

I actually made the decision to cut off all food supplies for about a million people for about a month. It was a hard decision, but with diversion taking place—otherwise I would be participating in di-

verting food from innocent children over here to help—you know, and this is what we are facing today.

We are having to take the lack of money, food from hungry children to give to starving children. That is horrible. So it was quite remarkable. Houthis didn't think there was anyone in the United Nations, I think, that would actually do that. We made that hard decision, and they were at the table within a few weeks, and we resolved it.

And things have moved incredibly better since then. That doesn't mean it is all perfect. Anytime you are dealing these types of places is tough. But the cooperation has been—has remarkably improved inside Yemen. But there is still a lot of issues there.

Senator MORAN. Is there attention being paid to this, and this is—perhaps it is to you again, Governor, the attention being paid to the countries that are enacting protectionist policies to keep the food they grow within their country? And is there something that you, the United States of America, the United Nations, needs to be doing to encourage—it drives up the cost and makes it more difficult for us to meet the needs of hungry people elsewhere.

Mr. BEASLEY. We faced this in COVID in a remarkable way. A lot of ministers of different governments of economies and trade were doing lockdown, shutdowns, border controls, limitations on imports, exports, and it was creating havoc.

So I was on the phone, particularly those first 6 months, and my teams were on the phone saying, let me explain to you what is going to happen, you shut down this port right now or you put this limitation at this stage, and here is what is going to happen in the next three, 6 months. And so we were able to really avert a lot of the complications from those types of restrictions.

Now we are seeing that bubbling again. And I think not just us, but everywhere we see it, we try to make a phone call. Explain, please don't do this, here is what is going to happen. Talking to the secretary general and others in the United Nations, as well as talking to our friends like in the United States to say, please call this particular government leader to minimize these types of issues. And so that is one of the—

Senator MORAN. Actions are being taken.

Mr. BEASLEY. Actions are being taken. But you have got to be on top of it literally every day.

Senator MORAN. Let me quickly, in the last minute or so, raise the topic of ready to use therapeutic food, RUTF. Two countries, I think South Sudan and Ethiopia, have already requested RUTF through the Bill Emerson Humanitarian Trust. Do you support including funding for RUTF via the Bill Emerson Trust, the emergency supplemental package, or annual appropriations to ensure that this lifesaving product gets into the hands of those who need it most?

Mr. BEASLEY. Yes, sir. The Emerson Trust is a godsend right now with the crises that we are facing. If you don't use it now, I don't know when you would use it. And so we are 100 percent supportive.

Senator MORAN. Thank you. Mrs. McKenna, anything to add or—?

Ms. McKenna: No, nothing to add.

Senator MORAN. Thank you, Chairman.

Senator COONS. Thank you, Senator Moran. Senator Van Hollen.

Senator VAN HOLLEN. Thank you, Mr. Chairman. Thank you to all of our witnesses. Mr. Beasley, it is good to see you today. We were together yesterday morning talking about some of these issues. And thank you for all your passion and the experience you bring to these critical matters. Yesterday, I was able to bring you the preliminary good news that we were on the verge of passing the \$40 billion assistance package, including \$5 billion for food security assistance.

And I do want to thank the Chairman of our subcommittee for all his work on making that happen. I am confident that—I am increasingly confident we will have bipartisan support here. I want to get to how the \$5 billion will help the emergency food situation around the world. But before that, I have a question about Odessa and the Russian ports.

And I know it was covered a little bit already, but if you could dig down more deeply on what will happen to food insecurity around the world if we don't unblock those ports—there is some people saying, well, we can use the land routes and obviously we want to do our best.

But Mr. Beasley, tell us what will happen if that? I think it is over 30 million tons of wheat is stuck in those Ukrainian ports. What does that mean for world hunger?

Mr. BEASLEY. Ukraine normally ships about 60 million metric tons through those ports on an annualized basis. That is about 3,000 train carloads per day. You can't truck enough out. You can't do it. You might can truck out about a million metric tons a month on a good day at best. And even then, you are talking about \$120 more per metric ton. So it puts it out of the market in terms of pricing.

And so the ports have got to open. Ukraine grows enough food to feed 400 million people. It is not just availability of food price—food, it is also food pricing. That is going to do more harm to the poorest of the poor around the world who barely can afford it now. As I was saying earlier, we have gone from 80 million people marching to starvation to 276 right before Ukraine.

And now that number is going to go up an additional 50 million. So, number one, the Ukraine economy, 40—over 40 percent is export, over 40 percent is agricultural exports. So it will have catastrophic consequences if another shot is not fired in the war and the ports are just blocked. I don't know how—I mean, I am not the economist here. I am just a humanitarian. But I don't know how you don't have economic collapse.

Then you have the impact—inside Ukraine—then you have the agricultural impact on food supplies, particularly in Eastern Africa, Western Africa, the Sahel, countries that depend on this grain from this region. For example, Egypt, 80, 85 percent dependency, Lebanon 80 percent.

Twenty-six countries depend upon Ukraine, over 50—Ukraine, Russia over 50 percent. And we buy over 50 percent from Ukraine itself. We assist about 125 million people on any given day, week, or month. So it is already having a \$71 million increase of oper-

ational cost per month on our operations, which means we will feed 4 million people less as we—right now—

Senator VAN HOLLEN. Yes. No, I appreciate you going into that. So what I wanted to paint a clear picture of what the consequences here. I think the world, at least outside of Russia, knows that Putin is killing people indiscriminately in Ukraine. But countries around the world need to recognize that what he is doing in Ukraine and the blocking the ports are going to result in starvation and food insecurity for tens of millions of people around the world. Do you know of any ongoing efforts to address this issue? And I don't mean those of us who are calling for something to happen. I mean any material progress in this.

Mr. BEASLEY. Senator. I know, as you know, I have made requests straight to President Putin that the world's famines are in your hands right now and you need to open up these ports. I do believe there are efforts being made as we sit to try to create an opportunity to open up the ports.

And it cannot—it can't just be an open of the ports for humanitarian purposes, because the commercial side is just as equally on a humanitarian basis. And we cannot use—food can't be weaponized. It just cannot. And right now, if those ports stay closed, food would be weaponized.

Senator VAN HOLLEN. Let me in my remaining time here, first associate myself with the comments of Senator Murphy with respect to Afghanistan and the situation there. I think, as he indicated, we can find a way to help people without in any way strengthening or reinforcing the Taliban government. Thank you for the efforts you made in Yemen. That remains a really terrible situation, but your efforts improved it.

And in my final seconds here, maybe if I could just get a sense of the \$5 billion. Maybe, Ms. McKenna, you could tell me, what will that mean for your efforts around the world, if we are able to get the \$5 billion for food assistance?

Mr. BEASLEY. The \$5 billion, a chunk of it obviously will go to emergency food relief, and we expect that through our colleagues at the World Food Program. But what is really important is that we have a chunk of it that really goes towards long term resilience and building long term systems so that these economies can support themselves and that they can further withstand the shocks that are to come with climate change, drought, and conflicts.

That is things like supporting farmers long term, like using cash and vouchers and things to support local markets, incorporating youth into activities, and really working with conflict actors. May I add one other point kind of based on your prior question? Russia is using hunger as a weapon of war, and Congress is on record kind of condemning the use of hunger as a weapon of war through the recently introduced House Resolution 922. And we hope that the Senate will take up a companion version of that as well.

Senator VAN HOLLEN. Thank you. We will look into that.

Mr. ADESINA. Can I comment—Senator Hollen?

Senator VAN HOLLEN. Oh, yes, I was going to ahead, but let me—

Ms. McKenna: Yes, Akin—

Mr. ADESINA. Yes. Right here. On the video, yes. Well, just on that point, distinguished Senator, on the, what will this mean? In the case of Africa, I think we need to refocus on what the problems are. You know, for Africa right now, it is not just giving food away, it is actually producing food because we are dealing with a very massive food price inflation at the market level to bring that down. It has to be something that is structural, that is scalable, and that is sustainable.

And that is why we have the African Emergency Food Production plan to actually produce that food. And that is going to, with the \$5 billion, you know, we have put in \$1.3 billion of our own money on the line. We have put in our money where our mouths are, you know, and we need \$200 million to be able to come up to \$1.5 billion that we want to be able to help Africa to avoid a looming food crisis.

What this will do, the \$1.5 billion, if we are able to get \$200 million from the U.S. Government to complement \$1.3 billion that we are putting down ourselves, it will allow us to get climate resilient agriculture technologies to 20 million farmers in Africa. It will allow them to produce 38 million metric tons of food. And a big part of that will be 11 million metric tons of that will be wheat. I just mentioned my experience in Sudan and also in Ethiopia.

We will have 18 million metric tons of corn and we are looking at 6 million metric tons of soybean—rice and 2.5 million metric tons of soybeans. So it will make a lot of impact, but we need to also use this crisis to deal with the structural issues to unlock agriculture potentially in Africa.

And from the African Development Bank, we have a program that we are also going to see as a relay basically from this emergency production program, that we are calling 1 for 200 mission, 1 for 200, which is to allow support of African countries to produce an additional 100 million metric tons of food that will feed 200 million people.

If we are able to feed 200 million people, that means that we can actually cut hunger in Africa by 80 percent. I have been in agriculture all my life. I have never been this confident that we can actually reach zero hunger, but it will have to be done via a structural approach, not just only giving food away.

Senator VAN HOLLEN. Thank you. Thank you for emphasizing that. Thank you, Mr. Chairman.

Senator COONS. And thank you, Senator Van Hollen. Senator Boozman, for the last questioner of this round. We do still have three great witnesses for a second panel and about half an hour left.

Senator BOOZMAN. Thank you. And I will be brief, because I know we need to move on. We appreciate all of you being here and we appreciate the great work that you do. Governor Beasley, congratulations on your Nobel Prize, you and your agency.

That is remarkable. And we are very, very proud of you. U.S. is a very generous country, and it has really stepped up in the past. It is stepping up now. Tell us about that. Tell us about what that means. And then also, how does that help you when you are dealing with other countries to pony up the way that they should?

Mr. BEASLEY. When I arrived, the United States was appropriating about \$1.8 to \$1.9 billion. And if you—we had many of us in this room had a conversation out of concern that this new Republican Administration would, Trump would zero out the budget and we would have significant funding problems. And all of us came together.

It was quite remarkable to see everybody come together—and actually on both ends of Pennsylvania Avenue on this particular issue. And so our funding went from \$1.8 billion to \$3.84 billion. And like I was saying earlier, my goal was put the World Food Program out of business and funding would go down, but because of crisis after crisis, war after war, climate shock, and now Ukraine, Afghanistan, Ethiopia, the needs are going up substantially. So the United States has led the way and I have been able to use that.

When I go to Germany, the colleagues in the Bundestag or in the UK Parliament or the Nordic countries, the EU, and say, look, the United States is stepping up because usually the first line of impact is in Europe. And now, Central America's first line of impact is the United States.

But because of what the United States has done and Germany and a few other major donors, we, particularly during COVID, because not many people realize the economic ripple effect that COVID had on the poorest—on the poor countries around the world. Had it not been for the United States, the taxpayers of this country, we would have had mass famine, we would have had destabilization of many nations, and we would have had mass migration.

We were able to avert that in the last couple of years because of the generosity of the American taxpayer, along with Germany and other donors. So here we are again, unfortunately, because of COVID recycled—and now in Ukraine, we have got a crisis within a crisis, that perfect storm.

And so this appropriation right now, as I am sure—I get some of my friends of South Carolina, why should I send money down there, you know, and I am like, well, if you don't it is going to cost you a thousand times more.

I don't say that hypothetically, theoretically. I have experiential data that proves very clearly when we have strategic international aid and food security, it saves taxpayers anywhere from \$100 to \$1,000 more, a thousand times more. So thank you, sir.

Senator BOOZMAN. So, no, and again, we have got all of this going on the—I am very active in agriculture right now. The increase in fertilizer costs, the input costs are just through the roof. Part of that being, you know, fertilizer from Belarus and Russia and, you know, areas. And other countries seeing this are actually holding their fertilizer. So you have got the input cost problem.

You have got the high cost of diesel. So as you mentioned earlier, we are going to have, you know, tremendous commodity increases, so these countries aren't going to be able to buy as much. And then the other problem is, you know, Senator Van Hollen mentioned the importance of opening the ports and all that.

You know, even if that is done, high commodity prices, high—because of the high inputs. And then—what I would like for you to talk about is the potential. Even if we do, ports, do all we can, are

we looking at shortages? How do we plan—what do you need for us to do? And it is not—you know, with shortages it is not money.

You know, what do we do to coordinate, to make it such that we are proactive and see this coming and people like you help us plan as we go into the future?

Mr. BEASLEY. Senator, before Ukraine, I was already declaring to the world we were facing the worst humanitarian crisis for the year 2022 that we have ever seen since World War II. And just when you think it couldn't get any worse, then Ukraine, the breadbasket of the world, a nation that feeds 400 million people.

And so you are seeing fuel costs, shipping costs just escalate beyond the roof. Food price, you know, commodity was already doubling and tripling in many, many of the poorest of the poor countries. And so it was already a problem. Then Ukraine comes into the scene. So what is critical is to get those ports operational for a variety of reasons. It will not eliminate the problems.

It will at least diminish some of the excesses of the problems we are going to face, because right now, when you look at the droughts taking place around the world, even in the United States, and then you get the Horn of Africa and other places in Central Asia, for example, you are talking about a dynamic impact on food production. Compound that with the fertilizer problem.

Countries are not able to get the fertilizers, or the cost is so high they can't afford it, so smallholder farmers can't afford it. Now, we are already hearing farmers say they can't afford the fertilizers. They will be cutting back on production. And this is not the time we need that. So when—I have talked with the, about four weeks ago, the minister—foreign affairs minister for France who called me and when I went through this scenario, what we were looking at, he literally was just shocked.

And we brought, got together the G-7 agriculture ministers, Tom Vilsack and all of us had a very practical conversation. And I said, let me tell you what we are facing. The question to me, to you is how quickly can you react in the major producing countries to offset not just Ukraine, but the crises that we are facing around the world, from the lands that have been set aside to fertilizers.

And which has been interesting because like the Green Party in Europe and in Germany have been very open and pragmatic at this stage, which is, it is good to see everybody coming together to understand that we truly have a global crisis coming before us.

And so the next 8 to 12 months, we will have a food pricing problem. And I think in the spring—well, I will say the spring and the fall of next year, we could have a food availability problem.

Senator BOOZMAN. Very good. Thank you. Thank you, to all of the witness. Appreciate it.

Mr. ADESINA. Senator Boozman, can I make a point on the fertilizer question?

Senator BOOZMAN. Yes.

Mr. ADESINA. Thank you. Just on that fertilizer question, as I said in my remarks at the start that Africa faces 2 million metric tons of shortage. And if we don't actually very quickly to close that, it means that even productivity on existing arable land will decline by anything between 20 percent to 50 percent. Just to let you know, concrete actions are actually being taken on that.

I called for a meeting of all the global CEOs of fertilizer companies that meeting is actually tomorrow, you know, to really look into how is it that we make sure that Africa is not shortchanged this time around, and we know what happened with regard to the COVID-19 issue with vaccines. We want to make sure that Africa's priorities are not at the end, that all the rich countries of the world take all the fertilizer, and then, of course, then we have a problem.

So ammonia phosphate are the main issues so we are trying to see how we can actually deal with some of this issue. Now, the point on the price, I think of fertilizer. I am right here in Ghana. I am not based in Ghana, but just came here to see the President as we are preparing for the annual meetings of the African Development Bank that is holding here in Accra. But I was surprised at the price of fertilizers here, you know.

You know the price of fertilizer has gone up about GH¢ 65 Ghanaian cedis of about 25 Kg bag, you know, to roughly on the open market, part of the market almost GH¢ 220. You can imagine what this will do. So it is a big issue. If we don't solve the fertilizer problem, we cannot solve the food problem. And one of the things I want to suggest to the distinguished Members of the Senate Committee is that the issue of trade finance is going to play a very, very important role.

And secondly, guaranteed facilities are going to be very important to make sure that financial institutions can actually lend to the fertilizer importers and wholesalers and the retailers to actually get it out to the end. And in particular also, maybe I will link it back to the original point, at least by one of the Senators on efficiency of the use of the \$5 billion, you have got to make sure also that we deal with delivery risks, because if we look at the price of fertilizers as high as it is, that is not that we are going to have to subsidize.

But if we have to subsidize, we have to then make sure that the subsidies are done in a way that are market friendly, in a way that is well-targeted, in a way that actually uses digital technologies to redefine the standard. And in fact, I actually don't so much even like the word subsidy. I like to call it the growth enhancement support.

Which is we give people what they need to boost their production and very quickly transition that to a more market based system. So these, I think, are very important if we are going to actually have to deal with this. But this fertilizer question is very important, and we actually have a global meeting on that tomorrow.

Senator BOOZMAN. Right. Thank you very much. Thank you, Mr. Chairman.

Senator COONS. Thank you, Senator Boozman. Thank you, Dr. Adesina. I remember well our visit in Abidjan, and I appreciate your insightful testimony today. Ms. McKenna, thank you, and thank you for everything Mercy Corps does around the world. And I thank David Beasley in the World Food Program. We are now going to quickly transition to the second panel. We are awaiting notification of when the next vote will be. A number of the Members of the Committee are holding, waiting for that next vote, but I think we should proceed with this second panel.

I want to thank the witnesses for a second panel today that will focus on the COVID-19 pandemic, and in particular, its global impacts and what investments the United States should be making to address the current status and future risks associated with this and other potential pandemics.

We have three of remarkable witnesses, physicians with extensive experience in responding to infectious disease outbreaks, Dr. Tom Frieden, former Director of the U.S. Centers for Disease Control and Prevention, and currently serves as President of Resolve to Save Lives. Dr. Atul Gawande is the Assistant Administrator for Global Health at the U.S. Agency for International Development and testifying or speaking with us remotely today is Dr. Michael Ryan, Executive Director of the World Health Organization's Health Emergencies Program, who will be joining us remotely from Geneva.

This second panel is a briefing of the subcommittee for some technical reasons relating to the World Health Organization, but it is important that I recognize that. Dr. Frieden, if you would please start us off, and if there is a vote that interrupts us, I will inform you. But thank you for your testimony.

If you can keep it concise, that will allow us to have more of a discussion. But I appreciate your testimony and your patience with the first panel and the enthusiasm of our members.

STATEMENT OF TOM FRIEDEN, PRESIDENT AND CEO, RESOLVE TO SAVE LIVES

Dr. FRIEDEN. Thank you very much, Chairman Coons, and Ranking Member, and distinguished Members of the Committee for the opportunity to testify today. Here is the bottom line. The U.S. and the world were underprepared for COVID, haven't responded well, and we are well on our way to making the deadly mistake of repeating the cycle of panic and neglect. This would leave us avoidably vulnerable not only to future COVID variants, but also to future health threats.

I urge Congress to approve the proposed COVID supplemental request at least the \$5 billion for global COVID control, with funding to both USAID and CDC. Most of the one million deaths that the U.S. has suffered and most of the nearly 20 million deaths that the world have suffered did not have to happen. Pandemics do not stop because of wars. In fact, wars tend to accelerate pandemics.

That is certainly what happened 100 years ago. With safe and effective vaccines, as well as stunningly effective treatment, we can have the upper hand on COVID in this country. However, this is only true as long as a worse variant doesn't emerge. We have to face three dichotomies, and in each of these there is a pull toward one side that would imbalance our response.

The first dichotomy is the temptation to spend money on stuff, vaccines, equipment, medications, while neglecting the need for staff. To increase vaccination uptake, you need health care workers, you need to focus on vaccinating health care workers, as well as the elderly and immunosuppressed people who are not only most likely to die, but perhaps most likely to have the emergence of variants if they are infected. We have to support staff on the ground who can do this.

And I will say that in Sierra Leone, my organization, Resolved to Save Lives, worked with one of the organizations implementing the tremendous success story of PEPFAR, a bipartisan program. We approached more than 7,000 health care workers because health care workers getting vaccinated is a critical first step to change the narrative on vaccinations in many countries. 2 percent, 2 percent declined vaccination. 90 percent were double vaccinated. 8 percent got a single dose.

The second dichotomy is the need to focus on both response and prevention. It is tempting to focus on putting the fire out, but we have to make our world more resistant to future outbreaks. This is why it is essential to have at least the \$5 billion previously requested for the global health appropriations supplemental.

I also strongly support the fiscal year 2023 budget proposal of \$88.2 billion over 5 years to allow sustained, targeted interventions, and investments in public health and preparedness domestically and around the world, including to support both CDC and USAID for global protection.

The third dichotomy is protecting the U.S. versus recognizing that it is in our self-interest to support programs to fight COVID and other threats around the world. The plain truth is that it saves more lives and costs less money to fight outbreaks at their source than fighting them on our shores. When it comes to access to vaccines and treatment, the right thing to do ethically is also the right thing to do epidemiologically.

But that is going to require more money from the U.S. and from other countries. The CDC plays a critical role around the world in vaccine planning and implementation, vaccine safety monitoring, supporting ministries of health. CDC has over 1,000 doctors and other public health specialists who know how to plan vaccine campaigns, support countries, assess and improve vaccine administration.

Both USAID and CDC have indicated that they will no longer be able to continue this work unless Congress approves additional funding. This funding was cut, unfortunately, from the recent bipartisan supplemental deal framework. I urge you to find a way through to provide support for global COVID control.

Representative Tom Cole of Oklahoma said at the start of this epidemic, it is just a no brainer to spend millions—to spend billions on preparedness to save trillions of dollars in costs. He also predicted years before COVID hit that Americans are much more likely to be killed by a pandemic than by a terrorist. He was right then, and he is right today. COVID has claimed more than a million American lives.

That is more than any in all wars over the past 150 years. And yet we spend only about 300 times to 500 times less on our health defense than we do on our military defense. We have to address COVID now, be ready for the next variant, and protect against future threats. Fiscal responsibility certainly includes cutting direct costs when appropriate, but fiscal responsibility also requires making sound investments to save money and save lives.

We can't afford not to spend the \$5 billion and ideally more to protect the world and protect ourselves through increasing global vaccination. We have to be better prepared for the next threat, and

that is why the fiscal year 2023 proposal is so very important. This really is the make or break year.

This is the world's teachable moment to prevent the next pandemic. You and Congress have the power to provide the essential investments to make this possible. Thank you.

[The statement follows:]

PREPARED STATEMENT OF DR. TOM FRIEDEN, PRESIDENT AND CHIEF EXECUTIVE OFFICER, RESOLVE TO SAVE LIVES

Good morning. I thank Chairman Coons, Ranking Member Graham, and distinguished members of the Committee for the opportunity to testify today. I'm Dr. Tom Frieden. I was CDC Director from 2009 to 2017 and New York City Health Commissioner from 2002 until my appointment to lead the CDC. I received my MD and MPH degrees from Columbia University, with advanced training in internal medicine, infectious disease, public health, and epidemiology. I am currently President and CEO of Resolve to Save Lives, a global public health organization that partners with countries to prevent 100 million deaths from heart disease and stroke and to make the world safer from epidemics, and am Senior Fellow for Global Health at the Council on Foreign Relations.

I will give you the bottom-line up front: The U.S. and the world were underprepared for COVID, haven't responded well, and we are well on our way to the deadly mistake of repeating the cycle of panic and neglect, leaving us unnecessarily vulnerable to future COVID variants and to future health threats. The result: Most of the 1 million U.S. deaths and most of the approximately 20 million global deaths from COVID could have been avoided. No war in American history has cost the lives of one million of our people, as COVID has, and yet we spend more than 300 times as much on our military defense as we do on our health defense. Unless we spend more now, COVID and future health threats will cost us more later—in both lives and money.

With very safe and highly effective vaccines developed in large part through the efforts of the prior administration and provided in large part through the vaccination campaigns of this administration, as well as stunningly effective treatments such as Paxlovid, we can have the upper hand over COVID in this country—as long as a worse variant doesn't emerge. COVID isn't over—it will almost certainly be with us, with ongoing spread and flare-ups in different times and places, for years. In much of the world, lacking widespread vaccination coverage and access to effective treatment, COVID continues to be a deadly threat. And COVID will not be the last health threat our world will face. Because a pathogen can travel from one part of the globe to anywhere else within 24 to 36 hours, uncontrolled disease spread anywhere is a threat to people everywhere.

More than half of deaths in the U.S. and globally were preventable—first by better and faster public health action, then by immunization. But even though we've begun to strengthen the global capacity to find, stop, and prevent disease outbreaks, the world remains unprepared for and unprotected from epidemics. The United States must continue to address COVID now, be ready for new variants, and prepare for future health threats. To do this requires addressing three dichotomies and avoiding a gravitational pull that risks having an unhealthy balance in how we address each of the three.

First, *the temptation to spend money on stuff while neglecting the need for staff*. This is crucial to help vaccinate the world, which we must do to reduce the risk of emergence of more dangerous variants. Today 2.7 billion people have yet to receive their first shot of COVID vaccine,¹ with 91 percent of the unvaccinated living in low- and middle-income countries.

Donating vaccines is essential but insufficient. It's not enough to airdrop vials of vaccine into countries without supporting the overall vaccination programs needed to get vaccines into arms. Many vaccines were delivered too close to their expiration date and some countries received large shipments of vaccines only to discover that they lacked the appropriate syringes to administer them.

It will be particularly important to increase vaccination uptake among healthcare workers in order to maintain essential health services, as among the elderly and those who are immunocompromised, who are not only at the highest risk of hospitalization and death from COVID but are also the most likely to be incubate new

¹Wang, et al. Estimating excess mortality due to the COVID-19 pandemic: a systematic analysis of COVID-19-related mortality, 2020–21, *The Lancet* 399, no. 10334 p. 1513–36 (2022).

variants. To do this, we must support national staff on the ground who manage supply chains, organize vaccinations, and get shots in arms.

Early international cooperation can contain a disease outbreak before it becomes widespread, as happened with SARS back in 2003. Ongoing cooperation can reduce illness and death worldwide, as countries around the world are doing, with crucial support from the United States, in the continuing fight against AIDS, TB, and malaria. PEPFAR, a bipartisan success story that has saved millions of lives, has strengthened health systems in more than 50 countries. In Sierra Leone, my organization, Resolve to Save Lives, worked with a PEPFAR implementer to reach more than 7,000 healthcare workers and offer vaccination. Only 2%—2%!—declined vaccination, with 90 percent getting both doses and 8 percent a single dose. The U.S. has strong programs to build the capacity of staff in countries around the world, and doing so is crucial for our collective health protection.

The second dichotomy: *The need to focus on both response and preparedness.* Our impulse to fund immediate COVID response risks overlooking our need to also invest in protection from future pandemics. Responding to the blaze is not enough; we need to make our world more resistant to future pandemics. This will not be our last pandemic threat.

We must prepare for the next health threat while we provide the resources to fight this one. We need at LEAST the \$5 billion previously requested for global health appropriation supplemental. Protecting the U.S. against pandemics here without finding and fighting them abroad is like having a military that only works in the US. That is why I also strongly support the expanded proposal for \$88.2 billion over 5 years that will enable sustained, targeted investments in public health and pandemic preparedness both domestically and around the globe, including the support for CDC and the \$6.5 billion which would address the need for better global protection.

Although the price tag sounds high, the annualized cost for the Administration's preparedness plan is \$18 billion—less than one fortieth the U.S military budget.

We need transformative investments to protect our health security as well as our economy. If major pandemics similar to COVID, which has cost more than \$15 trillion, occur every 30 years, the annualized economic impact on the U.S. would be more than \$500 billion per year. In this estimation, the proposed \$88.2 billion over 5 years would generate a return on investment of approximately 30-to-1.

These investments also need to address equitable access to vaccines and other products to confront outbreaks at they emerge. Vaccine nationalism is both ethically unjustifiable and, unfortunately, politically inevitable. Solutions need to address ensuring quality, quantity, timeliness, sustainability, and equity of distribution of vaccines, medications, diagnostics, protective equipment, and other essential supplies around the world.

The third dichotomy: *Focusing on the United States vs. recognizing that it is in our self-interest to support programs to fight COVID and other epidemics around the world.* The plain truth is that we live in an interconnected world. A disease outbreak anywhere is a threat everywhere. It saves more lives—and costs less money—to fight outbreaks at their source than on our shores. Improving detection and protection in low- and middle-income countries could save millions of lives and trillions of dollars. We can't protect Americans effectively without supporting global progress.

Neglecting preparedness is tantamount to playing with matches and gasoline. Letting COVID burn unchecked through other countries makes Americans less safe, similar to a fire burning in building in which only some rooms have sprinkler systems. We can either fund global vaccination and control efforts now, or increase the risk of paying far more later when new, more dangerous variants reach our shores. Failing to make vaccination programs, testing, and life-saving treatments available wherever people are at risk of dying is not just a moral failing, it is epidemiologically dangerous, and will worsen the impact of the pandemic. When it comes to access to vaccines and treatment, the right thing to do ethically is also the right thing to do epidemiologically—but it will require more funds from the U.S. and other countries.

I'm especially pleased that the Administration's initiative for Global Vaccine Access (the Global VAX initiative) has worked to build on the successes and lessons learned from the President's Emergency Plan for AIDS Relief, better known as PEPFAR, rather than duplicate them. As you know, this is an all-of-government effort led by both USAID and CDC. I'll let my friend and colleague Dr. Gawande tell you more about USAID's activities in this area.

CDC plays a critical role not only in this effort to help vaccinate the world but also in strengthening health system readiness, vaccine planning and implementation, vaccine safety monitoring, implementing evidence-based interventions to reduce vaccine hesitancy, and supporting ministries of health with which CDC has

many close relationships. CDC must maintain and expand CDC country offices around the world to strengthen the capacity of those countries to detect novel diseases and outbreaks, as well as ensure strong ties with international organizations so they can get the financial, technical, and logistical support they need. CDC has more than 1,000 doctors and other health professionals who are experts in planning, implementing, assessing, and improving vaccination programs, including hundreds who work in CDC's Global Immunization Division. Both USAID and CDC have indicated that they will no longer be able to continue this work unless Congress approves additional funding—at a bare minimum the \$5 billion in the Administration's original request to Congress for global vaccination. This funding was cut from the recent bipartisan COVID supplemental deal framework; I urge you in the strongest possible terms to ensure that the full \$5 billion is restored to any future supplemental appropriations bill.

Someone I consider a friend, Representative Tom Cole of Oklahoma, the Vice Ranking Republican of the House Appropriations Committee, said at the start of this pandemic: "I think it's just a no-brainer to spend billions [on preparedness] to save trillions." He also predicted—years before the COVID pandemic hit—that Americans are much more likely to be killed by a pandemic than by a terrorist. He was right then and he is right today. COVID has claimed more than a million American lives, more than all deaths in war over the past 150 years in this country.

We need to address COVID now, be ready for next variant, and protect against future threats. Fighting the fire of COVID today requires that we that we help vaccinate the world and invest in global health security—because you can be certain that there will be more fires. Funding for pandemic preparedness to ensure our nation's health defense is just as critical as the 300 to 500 times more that we spend on our military defense.

Fiscal responsibility certainly includes cutting direct costs where appropriate. But fiscal responsibility also requires making sound investments to save money and lives. We can't afford NOT to spend at least \$5 billion—and ideally more—to help facilitate global vaccination. We must be better prepared for the next pandemic by passing the proposed pandemic preparedness plan into law. This is THE make-or-break year to prevent the next pandemic. You in Congress have the power to make the essential investments to make this possible.

Thank you.

Senator COONS. Thank you, Dr. Frieden. Dr. Gawande.

STATEMENT OF ATUL GAWANDE, ASSISTANT ADMINISTRATOR FOR GLOBAL HEALTH, USAID

Dr. GAWANDE. Thank you, Chairman Coons. Here we go. Chairman Coons, Ranking Member Graham, and Members of the Subcommittee, thank you for the invitation to speak today. I lead Global Health at USAID and I get to co-chair our COVID-19 task force. My written testimony I put into the record, so I am just going to try to hit a few of the high points for you. The direct and indirect impacts of this pandemic have been horrendous.

The result is the first reduction in global life expectancy in a century. It is development in reverse. If it weren't for the bipartisan support that you and Congress and American taxpayers have provided, these numbers would be far worse. The Government, the U.S. Government is providing more than \$19 billion in assistance towards the fight against COVID-19. Of this, USAID has deployed almost \$10 billion.

And through the President's global COVID-19 summit last year and the second one, which will take place tomorrow, we have also rallied the world to join this fight. And in the course of this, we have accomplished a lot. We have donated more than half a billion COVID-19 doses to 115 countries in just 9 months.

That is a historic accomplishment. We launched the Global Vax effort to ensure that we are able to get shots into arms with \$1.7 billion in committed funding. And USAID is also leading the non-vaccine work where we become the global leader in providing oxy-

gen systems as well as testing and treatment supplies. But here we are. We are now at a precipice.

As of the first of May, we have approved and, or notified 99.9 percent of the total COVID-19 supplemental funds that we have received. And we have obligated 95 percent of those funds. When it comes to the American Rescue Plan Act funds, we have obligated 90 percent of that. We expect to obligate virtually all remaining supplemental funds by July. Our work at that point will begin grinding to a halt. And it is clear that the fight against COVID is not done. I just want to say, the worst may not be behind us. I want us to understand that.

The potential outcome scenarios that we face are extremely wide. I am a cancer surgeon, and I tell my patients that we will hope for the best, but hope is not a plan. Of more than 10 million vaccine doses administered worldwide, only 1 percent has been administered in low income countries. We have barely more than 16 percent of people across Africa fully vaccinated.

Lower income countries face even bigger gaps in access to the arsenal that we now have been able to count on, that is they barely have access to rapid diagnostic tests, to oxygen capacity, and now the new generation of oral antiviral pills that have proven to be so effective. And that is why the Administration requested \$5 billion to support the immediate needs of the global COVID-19 response.

That includes \$2.55 billion to enable an expansion of Global Vax to get more shots into arms in under-vaccinated countries. I pointed out—I will point out, it requested no money, not a dime for new vaccines, because we are in a situation of vaccine abundance. We had \$1.7 billion in request, however, to enable us to shrink the gaps in global access to testing, oxygen capacity, and antiviral treatments.

And then finally, we have requested \$750 million to enable humanitarian assistance. As you heard from the prior panel, COVID-19 has complicated humanitarian assistance in a number of domains, made disasters worse, in particular, increasing food insecurity. We are now facing the cost, potentially, of inaction.

If the—if no further funds are appropriated, we will have to end our leadership in increasing vaccinations. We will have to give up on fighting dangerous variants, even though each surge of variants has disrupted our supply chains, disrupted the trade we rely on, and driven inflationary pressures that are hurting every American.

These recurrent cycles of damage. Have endangered and continue to endanger the health and lives of all Americans, as well as people around the world. So I want to emphasize here, stopping global COVID-19 funding would be a geopolitical mistake. It would be an ethical mistake. It would be a health security mistake, and it would be an economic mistake of historic proportions.

Throughout the pandemic, you in Congress have done what has had to be done in passed supplemental funding that has saved the lives of millions abroad and protected hundreds of millions here at home. And once again, we are asking you to please come together to continue America's leadership to end the acute phase of this pandemic.

I am grateful for this opportunity to be here today. I welcome many questions.

[The statement follows:]

PREPARED STATEMENT OF DR. ATUL GAWANDE, ASSISTANT ADMINISTRATOR FOR
GLOBAL HEALTH, U.S. AGENCY FOR INTERNATIONAL DEVELOPMENT

Chairman Coons, Ranking Member Graham, and Members of the Subcommittee, thank you for the invitation to speak with you today about United States leadership in controlling the COVID-19 pandemic, the key role played by the U.S. Agency for International Development (USAID), and the funding necessary to continue this fight to control the pandemic.

My name is Atul Gawande, and I serve as the Assistant Administrator for USAID's Bureau for Global Health and as Co-Chair of the USAID COVID-19 Task Force.

I am grateful to the Subcommittee for calling today's hearing and for continuing to prioritize the global response to COVID-19. Since the start of this pandemic, we have lost almost one million American lives, with the death toll globally now exceeding six million. The effects on worldwide health, development, and the global economy are like nothing we have seen in our lifetimes.

Data recently published in *The Lancet* estimates that total deaths during this pandemic increased by approximately 18 million worldwide¹—most not directly from COVID-19 but from the indirect effects of its disruptions of healthcare and economies. The result is the first reduction in global life expectancy in more than a century. It is development in reverse. It has pushed back the impact of our decades of bipartisan U.S. global health investments.

Thanks to bipartisan support from Congress and American taxpayers, the U.S. government has mounted a historic response to this global crisis. Since the beginning of this pandemic, the U.S. Government is providing more than \$19 billion, of which USAID has provided \$9.9 billion in supplemental funding towards the fight against COVID-19. The U.S. government led the world by donating, in partnership with COVAX and bilaterally, more than half a billion COVID-19 doses to 115 countries in just 9 months, as part of President Biden's commitment to donate and deliver more than a billion COVID-19 vaccines.

In December, the U.S. government announced the Initiative for Global Vaccine Access—or Global VAX—a whole-of-government effort, led by USAID in partnership with the CDC and other interagency partners, to turn vaccines in vials into vaccinations in arms around the world through more than \$1.7 billion in funding committed to date. Global VAX encompasses all of the U.S. government's work with more than 100 countries to accelerate COVID-19 vaccine uptake, and involves a surge of technical and financial resources to 11 countries in sub-Saharan Africa where we see the greatest opportunity to increase coverage rapidly. USAID is also making progress to save lives now through programs that provide oxygen, testing, and treatments in order to slow transmission and decrease COVID-19 morbidity and mortality.

But we are now at a precipice. As of May 1, USAID has approved, and when required notified Congress, of 99.9 percent of the total COVID-19 supplemental funds received since the beginning of the pandemic, and we have obligated 95 percent of these funds. We expect to obligate virtually all remaining supplemental funds by July of this year. Under the American Rescue Plan Act—or ARPA—we have so far obligated 90 percent of the funds.

As much as it may feel like we are returning to normal in the United States, the fight against COVID-19 is not over. This is especially acute for those in low and lower-middle income countries (LIC/LMICs), but as long as COVID-19 continues to persist anywhere, inevitably more variants of concern will emerge, putting us all at risk everywhere. Of the more than 10 billion vaccine doses administered worldwide, only 1 percent has been administered in low income countries. The result is that although almost 60 percent of the world is fully vaccinated—including 50 percent of people in low-middle income countries—barely more than 16 percent of people across Africa are. At the same time, low income countries have begun to delay vaccine deliveries, not because they are not desperately needed, but because the flow of supply is now outstripping their capacity to get shots in arms fast enough. This is why Global VAX's efforts are so vitally important, and broader U.S. efforts such as the Global Action Plan and the COVID-19 Summit to lead efforts to galvanize commitments and coordinate these efforts, alongside our partners in governments, international and multilateral organizations, and beyond. Lower income countries simultaneously face even bigger gaps in access to rapid diagnostic tests, oxygen, and the new generation of oral antiviral pills that we in the United States have been

²PATH, Oxygen Is Essential: A Policy and Advocacy Primer, PDF p. 7 (2017).

able to count on to help us so markedly reduce the morbidity and mortality of COVID-19. These gaps create a situation poised to produce further COVID-19 variants that pose risks to not only to other countries, but also to U.S. lives, our economy, and our national security.

In March, the Administration requested \$22.5 billion in additional COVID-19 response funding, including \$5 billion to support the immediate needs of the global COVID-19 response. This global funding would enable a significant expansion of our Global VAX surge efforts to another 20 to 25 countries and other global COVID-19 vaccination priorities, including the rollout of boosters and pediatric doses. With more than 30 countries qualifying as severely undervaccinated, it remains critical to expand the initiative beyond the 11 surge countries we currently support. This request will also enable us to shrink the severe gaps in global access to testing, oxygen capacity, and antiviral treatments—enabling lifesaving services for more than 100 million people—as well as enhanced monitoring of potential or emerging variants.

Failure to continue our supplemental global funding would abdicate U.S. leadership even as the People’s Republic of China continues its transactional approach to pandemic response and global health; it would weaken health systems that are crucial to fighting this and future pandemics; and it would amount to a surrender to the inevitability of dangerous new variants. Failing to provide supplemental global funding would also jeopardize our long-term baseline pandemic preparedness, global health, and health security investments. In sum: it would be a geopolitical, ethical, health security, and economic mistake of historic proportions.

The President has repeatedly outlined the stark realities of not passing a COVID-19 supplemental. Variants of concern continue to emerge. Each surge has disrupted the supply chains and the trade we rely on and driven inflationary pressures. U.S. leadership is critical to keeping political momentum and commitment to clear action. Barring additional funding, however, essential work cannot launch and many of our existing programs will begin to grind to a halt in the coming months.

By not helping lower income countries get shots into arms, and not fostering adequate testing, treatment and oxygen delivery capabilities, their populations will be left unprotected and we’ll continue to see more preventable deaths and societal disruptions. New, potentially more dangerous variants may also be more likely to emerge from a long-term infection in immuno-compromised individuals who lack access to vaccination or treatment. That outcome would be disastrous both globally and here at home, with the potential to claim more lives and deliver a serious blow to the economic recovery that all countries and economies seek. We will need additional resources in order to improve our ability to track variants. We were lucky that Omicron was not more lethal. The next time, the variant, or the new pathogen, may be more lethal and may spread even faster; we need to be able to identify the new organism rapidly and respond quickly.

U.S. leadership has led to significant achievements since the beginning of this pandemic. But now is not the time to be complacent or we risk the normalcy and security we are just beginning to experience.

DETAILS ON USAID’S GLOBAL HEALTH RESPONSE TO COVID-19

USAID is supporting more than 120 countries to contain, combat, and recover from this pandemic with more than \$9.9 billion in funding. Our activities align with the goals outlined during President Biden’s Global COVID-19 Summit last year and those that will be discussed at the Second Global COVID-19 Summit tomorrow—vaccinating the world, saving lives now, and building back better to prevent future pandemics—and are driven by USAID’s COVID-19 Implementation Plan which outlines USAID’s role in the whole-of-government U.S. COVID-19 Global Response and Recovery Framework (“Framework”). The global community came together around last year’s Summit, making new commitments centered around these global response goals. We continue our work to rally the world to deliver on these goals during the second Global COVID-19 Summit, taking place tomorrow.

Vaccinating The World

Safe and effective vaccines are one of our best tools to end this acute phase of the pandemic. President Biden committed to donating 1.2 billion COVID-19 vaccines—more vaccines donated than by all other countries combined—to the world for free and with no political strings attached. Completing the job collectively with other nations and donors is the Administration’s and USAID’s top COVID-19 priority. As of May 10, the United States, in partnership with COVAX and bilaterally, has donated close to 540 million vaccines, the result of highly successful coordination with our interagency partners, and the White House.

But vaccines on tarmacs are not vaccines in arms, which is why the U.S. government launched Global VAX. This initiative supports countries to scale up their vaccination campaigns and help with last mile efforts, including vaccinating the highest risk populations; planning and logistics; the purchase of ancillary supplies; cold chain infrastructure; and community engagement and public outreach, especially to strengthen vaccine confidence and counter mis/disinformation about vaccines. In the 11 Global VAX surge countries—Angola, Côte d’Ivoire, Eswatini, Ghana, Lesotho, Nigeria, Senegal, South Africa, Tanzania, Uganda, and Zambia—the U.S. Government is surging technical, financial, and diplomatic support in close partnership with the interagency. And we are seeing results:

1. In Angola, the U.S. government supported vaccination efforts through ultra cold chain strengthening, logistics support to vaccination sites, social media campaigns, and vaccination donations, which contributed to 18.5 million doses administered as of May 2, 2022. To date, around 11.7 million people received their first dose, 5.9 million people received their second dose, and another 440,185 received a booster dose. The U.S. Government is the largest donor of COVID–19 vaccines in Angola, providing more than 8.6 million doses of Pfizer and Johnson & Johnson vaccines, in partnership with COVAX. Of the eligible population, 64 percent have received at least one dose.
2. In Nigeria, U.S. Government vaccine donations and logistics support, in addition to other implementation support, improved the availability of vaccines at the state level and helped sustain vaccination rates of around 200,000–250,000 doses administered per day by April—up from 30,000 to 55,000 doses daily prior to acceleration.
3. In South Africa, Global VAX acceleration plans have built on existing health platforms to deliver integrated services. USAID’s partner BroadReach integrated HIV testing services via PEPFAR into a vaccination campaign in February to April 2022 in the coastal region of KwaZulu-Natal. During this campaign, 57 percent of individuals reached were first-time COVID–19 vaccine recipients, and 69 percent of individuals were high-priority populations. BroadReach also conducted 3,000 HIV screenings, identifying nearly three times more positive cases than usual community testing programs.

Saving Lives Now by Strengthening Health Systems And Countering Emergency Impacts

Success in stopping the catastrophic damage of COVID–19, however, has required more than a vaccination strategy. Omicron makes clear that we must sustain and expand support for activities that minimize spread and prevent the emergence of new viral strains, decrease severe illness and death, and limit the burden on health systems, including health workers who are on the frontline of this battle. We must save lives now while we continue our efforts to vaccinate the world.

At the first Global COVID–19 Summit in September 2021, President Biden emphasized the importance of reducing morbidity, mortality, and disease transmission. With the constant threat of emerging variants and many lower income countries still facing low vaccine coverage rates, increasing global access to COVID–19 testing, therapeutics, and countermeasures is critical to saving lives among those who experience a breakthrough infection or who are yet to be vaccinated. Two of our efforts with greatest impact have been increasing oxygen capacity and providing resources for emergency response.

Oxygen.—USAID has become a world leader in supporting increased access to life-saving oxygen in health facilities that lack it. An estimated 50 percent of facilities with inpatient services in LMICs lack reliable access to oxygen—even before COVID–19.² Thanks to more than \$100 million in COVID–19 assistance funding, USAID has built systems to provide oxygen to facilities in more than 50 countries—including India, Haiti, and Ghana, to name just a few—and is in the process of building oxygen systems for facilities in 13 countries across Africa, Asia, and Latin America and the Caribbean.

When expanding access to oxygen, USAID acted quickly to strengthen oxygen ecosystems and is currently a leader in bulk liquid oxygen investments for LMICs, the standard for oxygen delivery in high-income countries. To promote sustainability, we are exploring market-shaping opportunities so that oxygen markets can work more efficiently in LMICs, and lower prices and increase distribution. Our leadership is also informing other partners’ investments, including those of The Global Fund to Fight AIDS, Tuberculosis and Malaria. All of these investments have the potential for long-term impact on countries’ health systems—strengthening their capacity to

² FIND, SARS–COV–2 TEST TRACKER (2022).

respond to not only this pandemic, but also other critical health needs, such as child and adult pneumonia, safe birth, safe surgery, and new infectious disease outbreaks.

Emergency response.—Since the beginning of 2021, USAID has supported rapid responses across the world as COVID-19 hotspots developed. To date, we have provided \$429 million to support urgent healthcare needs and critical commodities (including PPE, diagnostic tests and treatments) in South Asia, Latin America and the Caribbean, and sub-Saharan Africa.

COVID-19 has also continued to exacerbate humanitarian crises around the world by increasing food insecurity, reducing access to lifesaving services, and fueling a shadow pandemic of gender-based violence against women and girls. In response, USAID has provided more than \$2.658 billion in COVID-19 supplemental funding focused on preventing famine and mitigating food insecurity, supporting protection and gender-based violence programs, and strengthening critical public health initiatives to reduce transmission of COVID-19 in humanitarian settings. For instance, in Ukraine, we are supporting the World Health Organization (WHO) to expand delivery of COVID-19 vaccines to internally displaced people, and to expand hospital oxygen supply to improve health system readiness to manage COVID-19 cases.

USAID has also been investing in the capacity of the humanitarian assistance community to respond to outbreaks. The READY initiative (currently in its fourth year) has been focused on building and retaining capacity among non-governmental organizations (NGOs) and other stakeholders in priority regions and countries to more quickly and effectively respond to major outbreaks. Risk Communication and Community Engagement continues to be a priority as well, with USAID partnering with the International Federation of Red Cross and Red Crescent Societies (IFRC) in building community trust, social cohesion, and public solidarity to pave the way for uptake of emerging lifesaving COVID-19 biomedical measures.

A NEW AREA OF FOCUS TO SAVE LIVES NOW: TEST-AND-TREAT

Recently authorized oral antivirals have been shown to significantly reduce the risk of hospitalization or death by almost 90 percent among people who are at high-risk for severe disease. These treatments are becoming a mainstay of treatment in the United States and limiting the COVID-19 hospitalization rates and risk of death, especially among the unvaccinated and the medically vulnerable. But lower income countries have little to no access to the new therapies and have limited access to rapid diagnostic tests. In collaboration with other agencies and global stakeholders, USAID is working to increase the supply, availability, and use of low-cost, generic versions of these oral COVID-19 antiviral drugs for lower income countries.

With additional resources, USAID can work to build a “test-and-treat” approach and the capacity to deliver it to those who need it the most. This work would build on successful test-and-treat approaches for HIV and malaria and will require educating communities about the importance of prompt testing (including use of self-testing) and availability of treatment. It will also require the expansion of health systems’ capacity to quickly identify new infections and initiate appropriate treatment in high-risk patients. USAID can support these strategies to ensure that test-and-treat programs are integrated into existing health infrastructure and community systems. In addition to reducing morbidity and mortality, these activities would also help stem transmission and reduce the likelihood of health systems being overwhelmed by patients suffering from severe disease by promoting early diagnosis and intervention.

Diagnostic testing remains a critical part of the public health response, not just for diagnosis of new infections and linkage to care, but also to help identify emerging variants. The President’s Global COVID-19 Summit laid out ambitious goals of reducing the cost of diagnostic test kits to \$1 per test and achieving global equity for testing. But rapid diagnostic tests are largely not accessible in many LMICs. Only five rapid diagnostic test kits have WHO Emergency Use Listing. When Omicron spread more rapidly than had been anticipated during the Omicron surge, manufacturers could not keep up with surging demand, and many countries did not receive the testing supplies they ordered until after the Omicron wave had passed. Available laboratory testing can be slow, and extremely costly, with a diagnostic test costing as much as \$99 in some countries. As a result, testing rates in lower-middle income countries remain low, and low income countries account for less than 0.5 percent of the tests performed, despite having almost 8 percent of the world’s population.³ The WHO has now committed to accelerating test approvals, but low income

³ Wang, et al. Estimating excess mortality due to the COVID-19 pandemic: a systematic analysis of COVID-19-related mortality, 2020–21, *The Lancet* 399, no. 10334 p. 1513–36 (2022).

countries have limited capacity to drive demand. For them to effectively roll out new test and treat strategies, investment in purchases of low-cost, rapid diagnostic testing is essential.

Much of the world also lacks excess laboratory capacity and is unable to respond to a dramatic rise in testing need; therefore, we have invested in laboratory strengthening activities that will pay benefits beyond the current COVID-19 crisis. To support national laboratory networks, we have funded sample transport networks to ensure timely and safe delivery of samples within 24 hours so results can quickly be returned to individuals. Future surges are likely to encounter the same challenges without additional financial support.

THE COST OF INACTION: AN URGENT NEED FOR COVID-19 RESOURCES

We have made huge strides since this pandemic first began, and we are witnessing the end of the acute stage of this pandemic here in the United States. But we simply cannot ignore that in many parts of the world—where countries face low vaccination rates and lack of access to tests and treatments—this pandemic is far from over. And as long as that is the reality, we face a world in which new and more dangerous COVID-19 variants will be able to continue developing and endanger the recovery we have made so far.

Without additional COVID-19 resources, we will be unable to mount the response needed to end this acute stage of the global pandemic. That is why the White House has requested \$5 billion to support the global COVID-19 response, which includes:

- \$2.55 billion to resource our efforts to vaccinate the world through Global VAX programs that are strengthening countries' vaccine deployment and readiness capacities, including \$1.8 billion for USAID and the State Department and \$750 million for CDC. These additional resources would enable us to support an additional 20–25 countries to get shots into arms; support multilateral partners providing critical assistance; and prepare for pediatric doses;
- \$1.7 billion to finance our efforts to save lives now, covering activities that are critical to ensuring adequate global supply and technical assistance to support COVID-19 testing, treatments, access to oxygen, personal protective equipment (PPE), and support for health workers to reduce morbidity and mortality and mitigate transmission. This would provide lifesaving testing, treatment, and care for more than 100 million people; and
- \$750 million for lifesaving humanitarian assistance as global humanitarian needs have skyrocketed, with COVID-19 adding an additional layer of suffering upon the world's most vulnerable. This humanitarian funding will help us to continue to scale up to meet new and growing needs, while sustaining our ongoing complex emergency responses in places such as Ethiopia and Afghanistan.

Without additional funding, we will be forced to scale back the expansion of Global VAX into 20–25 countries and our existing programs will begin grinding to a halt this fall. Many countries that finally have received the vaccines needed to protect their populations will risk seeing them spoil on the tarmac because they can't be distributed in country and/or administered to the population. And at the same time, we will not be able to expand the critically needed testing and treatment programs that we would have otherwise been able to support and continue our leadership in expanding access to oxygen. All the while, COVID-19 will continue mutating and growing, endangering populations abroad and the health and prosperity of all Americans.

Throughout this pandemic, Congress has come together to pass supplemental funding that has saved the lives of millions abroad and protected millions more here at home. Once again, we are urging you to come together in support of continued U.S. leadership to control and end the acute phase of this pandemic.

Thank you for the opportunity to represent USAID. I welcome your questions.

Senator COONS. Thank you. Dr. Gawande. Dr. Ryan.

STATEMENT OF MICHAEL RYAN, EXECUTIVE DIRECTOR, WHO HEALTH EMERGENCIES PROGRAMME

Dr. RYAN. Good afternoon, Chairman Coons, Ranking Member Graham, distinguished Members of the Subcommittee. Thank you so much for the opportunity to speak with you today, as we—this will be an informal technical briefing.

I am the Executive Director of the Health Emergencies Program here at WHO, and for over 25 years, I have worked on the front

line in epidemics, conflicts, and natural disasters all over the world.

I have just returned from Ukraine—I have just returned from Ukraine, where I saw firsthand the work of frontline health workers and witnessed the power of resilience in the face of horror.

This is the same resilience, compassion and dedication that we have and continue to witness in our frontline workers around the world against COVID-19, in their determination to protect communities, save lives, and deliver to the last mile.

COVID-19 has infected billions and killed millions. However, every single person on the planet has been impacted by this virus, with health weakened, loved ones lost, future stolen, and livelihoods destroyed. This virus has ripped through our communities like a tornado.

And like that tornado remains highly unpredictable in its course and its intensity. While global reported cases are declining, the virus continues to evolve and evade, leaving our inter-linked communities highly vulnerable everywhere, especially in areas with low vaccination, high rates of people with underlying conditions, and limited access to health systems.

Continued major disruptions of vital programs for HIV, AIDS, malaria, tuberculosis, maternal health and immunization, and others threaten decades of progress. Intense circulation of this virus has resulted in many variants of concern, each more transmissible than the last. All these variants have emerged outside the United States, and all have reached the United States.

Yes, testing, sequencing, and surveillance activities in many countries are falling, blinding us to the potential—to potentially dangerous new variants. However, in a world of intractable problems, COVID-19 has solutions. This is thanks to the scientists who developed lifesaving interventions and the public health of frontline workers who have delivered them. This is in great part due to the leadership of the United States and other countries supporting a global effort led by WHO and its partners.

But massive disparities in access to vaccines, antivirals, oxygen and other lifesaving tools and interventions threatens to undermine all we have achieved in the fight against COVID. While almost 12 billion doses of COVID vaccines were administered around the world, nearly 1 billion people in lower income countries have not received a single dose of vaccine against COVID. That number includes more than two-thirds of health care workers and older persons in those countries.

We can end this emergency phase of the pandemic, but we will not do so unless we deliver these lifesaving interventions to everyone, everywhere. This will not happen with vaccines alone. It also requires surveillance, testing and sequencing, protective gear and therapeutics, and most of all, effective community engagement and empowerment. It requires that all of these are delivered to the last mile and administered by well trained and equipped workers.

The funding you are considering today is critical to help us to get these lifesaving tools to the people that need them most everywhere. WHO's strategic preparedness readiness and response plan details how to achieve this, but it remains underfunded by \$1 billion.

WHO also coordinates the access to COVID tools, our ACT-accelerator, and is shipping millions of vaccines, test kits, and therapeutics to lower income countries? The ACT's COVAX pillar has delivered 1.42 billion vaccine doses so far, 80 percent of the supply for low income countries so far.

However, the ACT is facing a nearly \$15 billion funding gap. This includes—this money is needed to purchase over 700 million tests, treatments for 120 million patients, protective equipment for 1.7 million health workers, and 600 million doses of vaccine.

In summary, Senators, as long as this virus is circulating widely anywhere in the world, we are all at risk. We have to act now to save lives and enable the global economy to get back on track. We need to track this virus. We need to vaccinate the world. We need to diagnose and treat patients quickly and early, and we need to communicate with and engage our communities deeply.

We need scale up investments in the solutions that are so badly needed to end this pandemic. The world has long looked to the U.S. for global health leadership. It was nearly 20 years ago that you introduced the PEPFAR Program, a bipartisan effort which saved the lives of 20 million people from AIDS.

Today, the leadership of the United States is more vital than ever. The funding you are considering today will be a major contribution towards ending the acute phase of this pandemic and making the world prepared for the next global threat. Thank you, sirs.

[The statement follows:]

PREPARED STATEMENT OF DR. MICHAEL RYAN, EXECUTIVE DIRECTOR, WHO HEALTH EMERGENCIES PROGRAMME

Good afternoon, Chairman Coons, Ranking Member Graham, Distinguished Members of the Subcommittee.

Thank you for the opportunity to speak with you today. As agreed, this will be an informal briefing.¹

I am the Executive Director of the Health Emergencies Programme of the World Health Organization. Over 25 years, I have worked on the frontline in epidemics, conflicts and natural disasters all over the world.

I have just returned from Ukraine, where I saw first-hand the work of frontline health workers and witnessed the power of resilience in the face of horror.

This is the same resilience, compassion and dedication that we have and continue to witness in our frontline workers around the world against COVID-19 in their determination to protect communities, save lives and deliver to the last mile.

COVID-19 has infected billions and killed millions. However, every single person on the planet has been impacted by this virus . . . with health weakened, loved ones lost, futures stolen and livelihoods destroyed.

This virus has ripped through our communities like a tornado and like that tornado remains highly unpredictable in its course and intensity.

While global reported cases are declining, the virus continues to evolve and evade leaving our interlinked communities highly vulnerable everywhere especially in areas with low vaccination, high rates of people with underlying conditions and limited access to health systems.

Continued major disruptions in vital programmes for HIV/AIDS, malaria, Tuberculosis, maternal health and immunization and others threaten decades of progress.

Intense circulation of this virus has resulted in many variants of concern each more transmissible than the last. All these variants have emerged outside the United States and all have reached the United States.

Yet, testing, sequencing, and surveillance activities in many countries are falling, blinding us to potentially dangerous new variants.

However, in a world of intractable problems, COVID has solutions.

²PATH, Oxygen Is Essential: A Policy and Advocacy Primer, PDF p. 7 (2017).

This is thanks to the scientists who have developed the life-saving interventions and the public health and frontline workers who deliver them. This is in great part due to the leadership of the United States and other countries supporting a global effort led by WHO and its partners.

But massive disparities in access to vaccines, antivirals, oxygen and other life-saving tools and interventions threatens to undermine all we have achieved in the fight against COVID.

While almost 12 billion doses of COVID vaccines have been administered around the world, nearly one billion people in lower income countries have not been vaccinated against COVID. That number includes more than two-thirds of healthcare workers and older people in those countries.

We can end the emergency phase of this pandemic but will not do so unless we deliver these lifesaving interventions to everyone everywhere.

This will not happen with vaccines alone. It also requires surveillance, testing and sequencing, protective gear, and therapeutics, and most of all effective community engagement and empowerment. It requires that these are delivered to the last mile and administered by well trained and equipped workers.

The funding you are considering today is critical to help us to getting these life-saving tools to the people that need them the most everywhere.

WHO's Strategic Preparedness, Readiness and Response Plan details how to achieve this but remains underfunded by over \$1 billion.

WHO also coordinates the Access to COVID Tools (or ACT) Accelerator and is shipping millions of vaccines, test kits, and therapeutics, to lower income countries. The ACT's COVAX pillar has delivered 1.42 billion vaccine doses so far. However, the ACT A is facing a nearly US\$ 15 billion funding gap. This money is needed to purchase nearly 700 million tests, treatment for 120 million patients, protective equipment for 1.7 million health workers, and 600 million doses of vaccine.

In summary:

As long as the virus is circulating widely anywhere in the world, we are all at risk. We have to act now, to save lives and enable the global economy to get back on track.

We need to track this virus, we need to vaccinate the world, we need to diagnose and treat patients quickly and we need to communicate with and engage our communities deeply.

We need scaled up investment in the solutions that are so badly needed to end this pandemic.

The world has long looked to the United States for global health leadership. It was nearly 20 years ago that the U.S. introduced the PEPFAR program, a bipartisan effort, which saved the lives of 20 million people from AIDS.

Today the leadership of the United States is more vital than ever. The funding you are considering today will be a major contribution towards ending the acute phase of the pandemic and making the world better prepared for the next global threat.

Thank you.

Senator COONS. Thank you, doctor. Thank you, all three of you, for your testimony. If you might, you used particularly pointed, unsettling, difficult, and memorable phrases about our being avoidably vulnerable, about the balance between staff and staff, about this being a tornado whose course and intensity we cannot predict.

Let me just first ask of all three of you, if I might, it is a compound question, but what is the risk of the development of a variant that is more deadly as well as more transmissible than what we have seen so far? I am struggling with my colleagues. One of them said to me memorably, my colleague—my constituents are done with this pandemic. And I said, sir, with all due respect, this pandemic is not done with your constituents. One of our real challenges is one of imagination.

Most Americans and many Senators don't appreciate that as long as there are billions who are unvaccinated and whose public health systems in the countries they inhabit are fragile, and where testing and monitoring is dropping rapidly, the risk of a new variant emerging that is more deadly and that can get around the vaccine

protection we have already deployed, I think is significant. But I would be interested in hearing from all three of you whether there is any real risk of this, first.

Second, the timing of money matters. We failed to deliver \$5 billion when requested months ago. We failed to get it on to the Ukraine supplemental likely to pass tomorrow. I don't see what the timing is or the path forward on getting the international COVID relief funded through this Committee and through this Congress. I will try. I raise it every day. I press it with leadership, with my caucus and the other caucus. What difference does it make if we deliver this \$5 billion this month, next month, or not until the fall? What would the consequences be domestically and globally?

And last, what do you think is the right balance between staff and stuff, between making sure that we are investing in public health system personnel and resources, as opposed to delivering more therapeutics, delivering more testing, delivering more vaccines? What is the right balance? If each of the three of you in turn would answer those questions, I would really appreciate it. Dr. Frieden.

Dr. FRIEDEN. Thank you very much. The Nobel laureate, Joshua Lederberg, used to say that microbes outnumber us millions, billions, or trillions to one. Our only hope is to outsmart them. The risk of a variant that is deadlier than the Delta variant and just as or more infectious than Omicron is absolutely present, but it is not inevitable, and it is not something that we can't do something about.

Unlike perhaps a tornado, we are able to reduce the risk by tamping down spread, particularly in areas of vulnerability and where there are people with immunosuppression, which is one theory of how some of the more dangerous variants have emerged. No one can tell you with certainty that it may or may not occur or when it may occur. It could have already occurred. It might not happen for a month, a year, or 5 years.

There is no inevitability about various variants becoming less vicious. There is an inevitability that variants that are able to spread better do spread more. And those that have begun spreading in one area may spread more in that area. But the virus is only rewarded, if you will, if it spreads faster, whether that is a devastating variant that causes a high fatality rate or as Omicron, may be somewhat less deadly, particularly for people with immunity from either prior vaccination or prior infection.

What we are seeing with the new Omicron variants is increasingly the virus is learning about our immune systems and learning to get around our immunity, either from prior infection or from vaccination.

And that is why it is so important that we get these first generation vaccines out as quickly as possible and continue to develop second generation vaccines, and make sure that if and when we do have better, broader, longer lasting vaccines that may be able to address vaccine escape variants, they are available to the world promptly after they become available, so we don't have a repeat of what happened this time around. In terms of the timing, better late than never.

The sooner, the better. But every month that goes by, we have a greater chance of unchecked spread, leading to a more dangerous variant. And in terms of the balance of stuff versus staff, I think that may maybe one way to think about that is to think about the minimum necessary for staff and to protect or ringfence those fundamental systems. You need systems to detect problems when they first occur.

So you need a laboratory network, you need a surveillance and monitoring system. You also need rapid response capacity so that the public health staff can go out and investigate outbreaks when they occur.

There are great new tools, I really am very excited about them, genomics, artificial intelligence, machine learning, but none of them are shortcuts to building a system where someone who feel sick goes to their local health provider, the local health provider contacts the public health department, there is a prompt and effective investigation, and a prompt and effective response.

In fact, that is what we have promoted with our approach for rapid diagnosis and rapid response.

Senator COONS. I apologize. My staff is telling me that we are down to very few Senators who have not voted, and the floor is waiting for me. If I could ask each of the two remaining witnesses about 3 minutes in answering my question.

Are there any staff or are we aware of any Senator who is seeking to come back? In the absence of that, I am going to ask for the two remaining witnesses to speak, and then I am going to close the hearing and return to cast my vote on this. If you would, please, doctor, go on. And thank you to all three of you for really compelling written testimony and in-person testimony.

I will berate my colleagues for their attendance on the floor rather than here.

Dr. GAWANDE. I will say quickly. The risk of development of a more deadly disease—WHO laid out the best case scenario. The best case scenario and the worst case scenario. The best case scenario is that we continue to have what we have had thus far, which is a contagious, relatively milder form of the variant, variants that remain amenable to vaccine effectiveness.

However, evasion of vaccine effectiveness or being more deadly is absolutely a potential outcome. And so we have to be prepared for the worst case scenario, much as we don't want to think about it. It is just the reality of what we should be preparing to do. Time really matters. We already see now, the production lines for testing is not unlike before Delta last time. That basically we are at some of the lowest levels of rapid test production that we have seen.

We have low levels of production on PPE and masks because the demand for these things have disappeared, and that is going to cost us. So if we wait, we are not seeding those supply lines, we are not keeping them, we are not keeping the workers in place, and so it will be weeks to months to get them back online.

Then add in the antivirals. If we don't have advanced market commitments to get production of the new oral antivirals that so protect us—that is our safeguard so that if a virus develops, a variant develops that evades the vaccines, then we have the oral antivirals to work with.

But if production is not happening for the world, we will find our own countries behind. Finally on staff and stuff, what I would say is that we have been very good about buying stuff. It is easier to move out quickly, it is easier to buy.

But when it comes to making these services happen, whether it is oxygen, whether it is antivirals or vaccines, making it possible for in the United States and abroad, having more commitment to the staff so that we are getting the mobile units out to do the vaccinations or do the treatment or enable the systems to get into place.

That is what makes these lasting systems. And those systems are helping us not only for the next variant, it is for the next possible outbreak, it is for addressing childhood pneumonia, making safer births. It makes for a better system of care.

Senator COONS. Thank you, Dr. Gawande, Dr. Ryan and Dr. Frieden. I am going to want to follow up with you about the therapeutic procurement in particular, something Senator Murray has been relentlessly pressing our caucus about. Dr. Ryan, you are going to get the last word today.

Dr. RYAN. Well, thank you, Senator. In terms of will more transmissible variants emerge. They are emerging as we speak. They are emerging on almost a monthly basis. This is a nonrandom effect. This is pressure on the virus through transmission and survival. Whether more virulent or more dangerous, more lethal variants emerge is very much—it is a random effect.

It can happen instantly, or it may never happen. It is very hard to quantify that risk. But if we leave millions of people getting infected who are not getting well quickly, people with immunosuppression, underlying conditions, with longstanding infections that we don't either prevent or treat early, those people produce quantum more virus because the virus stays in the individual human body for longer and can produce more and more variants, and those variants become much, much more dangerous.

In terms of timing, I have said it before, perfection is the enemy of the good when you are dealing with epidemics. Speed beats perfection. Speed is what we need. We need to act now. We need to reduce the number of people on this planet who are being infected. We need to reduce the number of people who have longstanding severe clinical infections, who can produce variants that can go on to infect others and potentially evade our vaccines.

And in terms of staff versus stuff, we have a big focus on commodities but to protect communities and to save lives, it is as it has always been, we need frontline health workers, frontline community workers, frontline NGOs, frontline people in the system who can deliver the solutions that we develop upstream. Just having stuff without the staff makes no difference in the world, Senator. Thank you.

Senator COONS. Thank you, Dr. Ryan. Thank you, Dr. Gawande. Thank you, Dr. Frieden. I am grateful for your testimony today, for your long service to protecting the world and the American people and advancing public health.

ADDITIONAL COMMITTEE QUESTIONS

We will keep this record open for a week until 5:00 p.m. on Wednesday, May 18.

[The following questions were not asked at the hearing, but were submitted to the Agency for response subsequent to the hearing:]

No questions were submitted for the hearing.

SUBCOMMITTEE RECESS

Senator COONS. And I look forward to working tirelessly with each of you and with my colleagues to ensure that we do in fact advance this desperately needed appropriation to ensure that the world is safer from this pandemic, and I look forward to working with you on preparations for the next. Thank you, and with that, this hearing is concluded.

[Whereupon, at 4:06 p.m., Wednesday, May 11, the subcommittee was recessed, to reconvene subject to the call of the Chair.]