

THE BROOKINGS INSTITUTION

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SAVING LIVES, SAVING ECONOMIES:  
IN CONVERSATION WITH  
DR. NGOZI OKONJO-IWEALE

Doha, Qatar

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**Featured Speaker:**

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## P R O C E E D I N G S

MR. BARAKAT: Good afternoon, and welcome to the Doha Institute. My name is Sultan Barakat, and I'm the director of the newly established Center for Conflict and Humanitarian Studies here at the Doha Institute for Graduate Studies. This is our first public event, and we have the pleasure of organizing it jointly with my former home, the Brookings Doha Center; one of the best think tanks in the world, and certainly, in the region.

The present global landscape is marked by several economic demographic and political challenges whose causes and effects are not confined to national borders anymore. I will therefore, require greater political commitment and international coordination between world leaders.

These challenges include a sluggish world economy, affected by the falling global commodity prices; continuing population boom, and mass urbanization, more frequent and severe conflicts and natural disasters, which has resulted recently in the

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largest displacement crisis ever witnessed since the end of the second World War, with almost 41 million people internally displaced and over 20 million people refugees today.

And unfortunately, our region, and I'm talking here across -- including Sub-Saharan African all the way pushing into Pakistan and Afghanistan, has carried more than its fair share of those challenges. And it is for those reasons that we at the Doha Institute have decided to establish the Center for Humanitarian Conflict and Humanitarian Studies.

The Center aims to become a region leader for teaching and research on issues of conflict, state fragility and humanitarian action in the Arab world. And only last week, we welcomed 24 exceptional master students from 15 Arab countries, plus Ukraine and Pakistan, who are embarking on a two year study with us, and who we hope will become the future leaders of development globally.

Against the backdrop of the crisis we find ourselves in, the threats to global health, security

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and economic stability have become ever more acute. Risks of the spread of infectious diseases, endangered plans for development and it drives develop backwards, as recently witnessed, during the Ebola crisis in West Africa and the current Zika pandemic in Latin America.

Both the Doha Institute and the Brookings Doha Center are very honored to collaborate today to offer a platform for one of the most distinguished practitioners and academics who for decades, has provided indispensable global leadership to provide answers -- well, first, to raise questions which was very important in her career, and to provide answers to some of those global challenges we face today.

This afternoon, we have our distinguished speaker, Dr. Ngozi Okonjo-Iweala, who served twice as finance minister in Nigeria, and was, of course, the first female finance minister, more recently between 2011 and 2015. In 2006, she became Nigeria's first female foreign minister, and has also held several key positions globally, including at the World Bank, where she acted as the managing director.

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She serves on a host of boards for non-governmental organizations, and currently, she is the chair of GAVI. And some of you would know GAVI as the organization that provides vaccines internationally, and it is made of the Vaccine Alliance Board.

She is the author of several books; most recently, "Reforming the Unreformable," which was published by the MIT Press. We're very pleased to have Dr. Ngozi with us today, and we have agreed that she will share her thoughts with us for about 15 minutes, and then, we'll engage in a conversation of a question and answer before taking some questions from the audience.

The plan is to run the whole discussion within an hour, and it is really just a taster to introduce you to the Doha Institute and to our international work. And there is no better person than Dr. Ngozi to launch this interaction with our (Inaudible) society. Please join us. (Applause)  
Thank you.

DR. OKONJO-IWEALA: Well, thank you very  
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much, Dr. Barakat. And thanks to Dr. Yessir, both of you and all the people here for your leadership in this great institution.

It's an honor and a pleasure to be here, first, because I understand that I'm acting as a bridge builder between the Doha Institute (Laughter) and the Brookings Doha, being the first to speak at a lecture that brings the two institutions together here.

I also understand you opened up here the Center for Conflict and Humanitarian Studies just two weeks ago, and you moved into this fabulous facility. And again, this is, perhaps, the opening address of that. So what I know now to be the one to kick off, and I wish you the best of luck in the future.

I want to start off, distinguished ladies and gentlemen, by thanking the government of Qatar. I know this is an academic thing, but I cannot but thank them, because what brought me here, in addition to this lecture, was also to meet with members of the government, her Highness, Sheikh Hamza, the minister

of health, we met earlier today. The Qatar fund -- because they have gone out of their way to try to support GAVI.

They have joined, along with the many Gulf countries, and we are doing it toward the Gulf, had decided to support GAVI, the Global Alliance for Vaccines. And the reason they've done this is because they recognize -- one of the things that Dr. Barakat said, that we are now in a different situation globally, where vaccination and immunization is what I would call a global public good.

This is something we all have to support, because no longer are we isolated. If you don't take care of the health, it's not just about taking care of the health of your children in your country or your citizens, but the neighboring countries matter, because if you do not, what happens there could become a serious problem for you. It could become a serious problem globally, as we saw with the Ebola case and with Zika and MERS and SARS and all of the pandemics that threaten.



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So I owe them special thanks, because they now have joined this global -- support for this broader global landscape. Investing in global issues, in global health is fantastic, because I believe that this is the way to go for the future, because these types of issues will become increasingly critical in the years to come.

As we face shifts in the global landscape in the face of formidable seismic forces, such as human migration, we do what we can to stop it. I don't think we can completely succeed, so we have to contend with it. As we cope with climate change, urbanization and all the other phenomenon, the case for investment in global health will come, not just out of humanitarian need, but increasingly out of global economic necessity. And that is why I want to address you today on the issue of saving lives, saving economies.

I talk about it with conviction, because as a former finance minister, I focus very much on the economy's part. But as I got involved more and more

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in the health field, I recognized that this lies at the heart of savings our economies. People will recognize that when they think of all that we've gone through globally in the various pandemics that I talked about.

So, I'll talk a little bit about global health, and a little bit about the costs and the benefits of investing in global health, the value of vaccines. I want to talk to you a little bit about the GAVI model, because you may not be familiar with it. The story is so far, I use this as a means of weaving together, you know, what it means and what benefits we get from savings lives and saving economies.

The term global health is often thought of as being synonymous with doing the right thing. It conjures notions of protecting the vulnerable, improving the lives of those most in need, and addressing growth in equities. While all of these remain true, recent years have taught us that global health also means much more. Outbreaks of mass -- I

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think it's called (Inaudible), Ebola and Zika have demonstrated, sometimes with brutal ferocity, that infectious diseases can be as destructive and disruptive as armed conflict.

Despite all that modern medicine has to offer, viral outbreaks remain a continuous threat to global health security and to economic stability across the world, because in addition to the cost in human lives, there can be huge (Inaudible) effects to infrastructure and trade and broader impacts in the form of demand shocks to trade and service industries.

It is not just the diseases we need to worry about. The fear and uncertainty that comes with a viral outbreak can be as contagious as the virus itself. And like disease, it is by no means confined to where an outbreak just takes place. This means we are all vulnerable, no matter how well protected we might think we are. Gulf states tend to have exemplary track records in protecting their people from infectious disease, often with childhood immunization rates close to a hundred percent, like

that of the developed countries.

But even that is not enough. As I said earlier, if your neighbor is at risk, then one way or the other, so too, are you. As Dr. Martin Luther King, Junior once put it, whatever affects one directly, affects all indirectly. In short, if we ensure global health security and avoid global economic instability, then we need to protect everyone, no matter where they live. I really want this lesson to sink in. We need to protect everyone, no matter where they live.

Consider the evidence. With Ebola, the economic impact on Guinea, Liberia and Sierra Leone, the three worst hit countries, was estimated at \$2.8 billion. For Zika, the figure is even higher. An optimistic estimate for the localized impact of the virus in Latin America and the Caribbean puts the cost at \$3.5 billion for 2016, alone. And when you take these measures as percentages of the income or GDP of -- let's say, the Guinea, Sierra Leone and Liberia, we see that this is very significant.

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In my country, let me speak personally on the Ebola. We were very lucky, because Nigeria is a country of almost 118 million people. And what happened? Ebola was not endemic. It didn't start there. It started with one case of an official traveling from Liberia to Nigeria for a conference for the economic community of West African states. And he arrived at the airport and became sick.

He used his telephone to call his ambassador. That telephone was lent to him by somebody, and the person who lent him the phone got the disease. He was taken to a clinic, and a very clever female doctor, who is a heroine in Nigeria today, thought something beyond malaria, because he said he had malaria -- thought something beyond malaria was wrong, and she kept him there against his wishes, and put him on a drip, ran a test.

Luckily, in Nigeria we have the labs. This was one of the problems in Guinea, Sierra Leone and Liberia. They didn't have the labs for the tests, so it took longer. We had the labs, and within a couple

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of days, the result came out. But by then, three or four more people had been infected. But because we had a stronger health system than the other countries, we were able to use that system established with the help of GAVI, which is why I'm an enthusiast of GAVI today.

GAVI, the Bill and Melinda Gates Foundation - - we had a system for polio. We used that system to track those who were infected and the contacts they had. And that way, we were able to limit the cases to 19 of which 8 deaths and that shut the pandemic down. Imagine if a country of 118 million, with so many travelers had not done this, the world could have been a worse place. So I'm speaking to you from experience of having this happen and having had it very scary, but successfully dealt with in my own country.

So, we are looking at this and counting the costs. When we look at Ebola and so on, and Zika, we are talking about local impacts. For these viral outbreaks, it's too early to know what the broader economic effects will be. However, if we look a

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little bit further back, we can get a sense. Between 2002 and 2003, an outbreak of SARS, or Severe Acute Respiratory Syndrome spread from China to 37 countries, infecting more than 8,000 people and killing 774 of them. The cost? For 2003 alone, it cost the U.S. \$54 billion in global GDP loss.

Then, there is the Middle East Respiratory Syndrome. Since 2012, of the 1,800 or so mass cases of which 640 resulted in death, the vast majority were in Saudi Arabia and the Arabian Peninsula. While the risk of infection is relatively for MERS, as was the economic impact of this outbreak, the possibility of a more infectious strain mutating represents a real threat to the region.

Not least, the U.S.' \$12 billion a year generated in tourism as a result of the (Inaudible). And I must here also commend the government of Saudi Arabia, because they have strongly supported GAVI. They are also one of the states that have come in, and in fact, in two days' time we'll be signing an agreement with them for support to GAVI to help deal

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with these threats.

Typically, the natural reaction to these kinds of threats is to focus efforts on protecting one's self from the disease itself. However, even this is fraught with challenges. Viruses already have little regard for borders, but now, the scale and speed of human migration could potentially make outbreaks even more difficult to contain.

With nearly a billion people migrating internally or internationally each year, whether they be economic migrants on holy pilgrimage to their haj or fleeing conflict in Yemen or Syria. The world is decidedly much smaller than it used to be. Today, it is possible to travel from Nairobi to London and New York, all in less time than it can take for someone to develop symptoms of their viral infection.

Border security and immigration control will only get us so far. If we want to keep the bugs at bay, instead, we need to look at how we can prevent outbreaks in the first place. And that means investing in global health, ensuring that that child



living in poverty in a remote, raw village on urban slum has the same access to vaccines, to nutritional supplements, to sanitation, as children in Saudi Arabia or Qatar. That's the challenge we face.

This is, of course, the right thing to do; the humanitarian thing to do. After all, health is a fundamental human right. But in addition to this, what may sometimes be forgotten or overlooked is that investing in global health, investing in that child is also the smart thing to do, because the threat posed by disease is not just to human life; it's a threat to society, stability and ultimately, to economic growth.

The good news is that we already have a solution -- vaccines. Not only are they extremely cost effective health intervention, but one that has already played a hugely positive role in global health security with the eradication of smallpox in 1980. In the 20<sup>th</sup> century alone, smallpox killed between 300 to 500 million people, leaving many of the survivors blind or disfigured.

The annual savings brought about by its

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eradication is believed to be in excess U.S. \$1 billion in terms of the direct cost of vaccination and quarantine. But the full impact on global economies is simply incalculable. And here is why. In addition to preventing illness and death, immunization can have an extremely positive impact on a nation's economy. A vaccinated infant is less likely to require medical treatment and care, both of which come at a cost. And by avoiding illness, they have a greater chance of growing into a healthy child who is able to attend school, and ultimately, become a more productive member of society.

Meanwhile, instead of caring for a sick child, their parents are in a better position to go out to work, increasing their earning capacity which feeds back into the local and national economy. So, by preventing disease, vaccination can, in a very real sense -- can and does in a very real sense contribute to the economy.

Let me also here emphasize that interception of education and health in the well-being of our

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children and the strength of our economies is paramount. And that is why working multi-sectorally, as we are trying to do with the sustainable development goals can have a really greater impact than working on one alone. This is well recognized here in Qatar by Sheikh Hamza in her education work.

As Her Highness said in a recent speech, "We cannot overcome our healthcare challenges unless we begin to invest in solutions that link health and education, as they're intrinsically connected. And innovation and education leads us to innovation and health. It is our wish to promote the cost of both access to basic primary education and universal health coverage." We couldn't agree more, as we see increasingly in the work we're doing that the intersection of these two sectors and the ability to work with the two together will yield much greater impact.

Now, regarding vaccines, a recent study published in the journal, Health Affairs, has gone some way to quantify the returns. Looking at 94 low

and middle income countries, the research has found that for every dollar invested in childhood immunization, we can expect to save \$16 in healthcare costs, lost wages and productivity due to illness. If you take into account the full value people place on living longer, healthier lives, then the return on investment increases even further to \$44.

But then, if immunization has such an important role to play and is such a good investment, why not simply immunize every child on the planet? I'll come to that. But I want to emphasize the returns that I just spoke about. There are very few investments quantified that can yield you the kinds of returns we talk about. One dollar yielding \$16 in avoided costs, and \$44 if you add broader benefits.

So, why not simply immunize every child? Here, let me talk about the GAVI model. One reason is that until a few years ago, this would have been unimaginable. Towards the end of the 20<sup>th</sup> century, despite great progress, immunization rates were stagnated. In developing countries, preventable,

infectious diseases were still killing many children because they were not receiving even the most basic vaccines.

At the same time, new life saving vaccines were becoming available for some of the biggest killers of children, but they were not reaching poor countries, because they were simply too expensive. This led to global health champions coming together to create what is today, GAVI, the Vaccine Alliance, a unique and innovative global health organization designed with the specific task of improving access to vaccines for the world's poorest children, and an organization of which I'm very proud to say, I'm the board chair.

As Nelson Mandela, the founding board chair and one of the original inspirations of GAVI put it, "Life or death for a young child too often depends on whether he or she is born in a country where vaccines are available or not." GAVI and its partners seek to end this through a unique, public-private sector partnership that brings together developing countries,

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UNICEF, the World Health Organization, the World Bank, Bill and Melinda Gates Foundation, along with donor countries such as the UK, the U.S., Germany, the Gulf countries, of which Qatar is one, and I could go on and on.

It also brings on board vaccine manufacturers, the private sector, civil society all around one table within a sustainable governance model. It is a model that has proved incredibly successful, with 40 percent of the world's children now receiving vaccines with GAVI support. Global coverage of routine immunization has increased more than 80 percent, and as a result, childhood mortality has fallen. Indeed, GAVI is just 15 years old and has helped vaccinate more than half a billion children -- 580 million children, plus preventing 78 million deaths in the process.

All this has been achieved partly by giving poor countries access to the same vaccines that are available in wealthy nations, but at an affordable price. To fully immunize a child in the U.S. would

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cost roughly \$950 in vaccines, alone. Yet through GAVI, the same vaccines are made available to low income countries for just \$35. And that's because we use our alliance and our power to bargain and negotiate and offer volume, and we are able to bring it down.

At the same time, we have seen the speed at which new vaccines reach poor countries, increase, such as those that prevent pneumonia and diarrhea, the two biggest killers of under fives, and even vaccines that prevent cancer. But it's still not enough. Currently, one in five children in GAVI supported countries are still not getting access to the most basic vaccines, and despite progress in reducing child mortality, we still see 1.5 million children die every year from vaccine preventable diseases.

Because of this, GAVI is now accelerating efforts to increase coverage and improve equity with the ambitious goal of reaching an additional 300 million children by 2020, therefore, preventing another five to six million more deaths in the

process.

GAVI's success is critical, but not just from a humanitarian point of view. Ensuring that all children are protected, no matter where they live, is both the right thing to do, but also, what is necessary. If we want to have global health security, then we must reach every last child, which will be no small undertaking. Reaching that fifth child, the one in five that is still missing out will be difficult enough, particularly given that they represent the hardest children to reach.

But in addition to this, there are further pressures that are shifting the global health landscape, and in doing so, challenging our efforts and threatening global health and economic security in the process. We are increasingly discovering that many of the hardest to reach children exist not just in remote, rural communities, but in the heart of cities, living off the grid in marginalized urban communities.

With population levels set to rise to nearly

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10 billion by 2050, where more than two-thirds of the world population will live in urban settings, we can expect more and more of these marginalized communities to end up in cities hiding in plain sight. In terms of global health security, such communities represent a significant blind spot in the prevention of urban epidemics. Our ability to reach these communities will only get harder as urban density increases, and it will.

Along with population growth, additional pressures will drive more and more people towards the cities. Decertification is expected to displace 60 million people between 2014 and 2020, with as many as 200 million more people becoming permanently displaced environmental migrants. Land degradation, rising sea levels, famine or conflict mean more and more people will be competing for less land with one consequence; cities are likely to swell.

This could have dire consequences for global health security. The combination of more people living in less space and placing more strain on a

readily metered sanitation represents a fertile breeding ground for infectious disease and the insects that spread them. At the same time, the shared scale of cities has the potential to overstretch vaccine supplies, limiting our ability to prevent or respond to outbreaks. We have already seen this recently, with the largest yellow fever outbreak in decades in cities in Angola and DRC recently.

Let me then conclude by saying ultimately, what we need is a complete reassessment of the way in which immunization is viewed. Yes, it's about saving lives and preventing needless suffering. But yes, it is also about saving economies. When I talk of investing in vaccinations, I mean this in every sense of the word -- an investment in the lives of children, an investment in helping families, communities and nations pull themselves out of poverty, an investment in making the world safer, and an investment in global economic stability and growth.

GAVI has been working hard towards this end, but in the face of global economic downturn and

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tightening in budgets, the need for additional investment in childhood immunization has never been more critical. Immunization is already recognized by global leaders as an important part of the sustainable development growth. But it also needs to be viewed differently as a global health security priority.

Without equity, there can be no global health security. Or if I may quote from the Koran, Chapter 5, Verse 32: "And whoever saves one life, it is as if he had saved entire mankind." Let me say amen to that. Thank you very much. (Applause)

MR. BARAKAT: Thank you.

(Discussion off the record)

MR. BARAKAT: Thank you very much. Well, thank you so much for this wonderful exploration of what is a very complex issue, and I think what really struck me is the direct link you made between vaccination and the economic impact of it. And the figures you've given -- it shows clearly that for a fraction of that, we could avoid getting into that situation where billions and billions of dollars are

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lost in global economies.

DR. OKONJO-IWEALA: Absolutely.

MR. BARAKAT: In terms of the way we look at it from our region, I mean, clearly, we're very pleased to see that the Gulf countries are playing a small part in supporting GAVI, but we are increasingly living the situation where states' roles are shrinking.

DR. OKONJO-IWEALA: Mm-hmm.

MR. BARAKAT: We have countries in the Arab world where states' fragility has become the rule, and there are areas that are inaccessible. And of course, vaccination then becomes much more difficult to implement, and immunization campaigns and so on.

I don't know if you have any particular view on that, whether GAVI is working on a strategy to address conflict affected countries, particularly in terms of access to those communities that are trapped within the conflict.

DR. OKONJO-IWEALA: That's a very important question, and a very critical one. Actually, GAVI has

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a fragility policy, which we are reviewing as we speak, and hopefully, will come back to the board at our December meeting. What we are trying to do is look at this to see how we can be more flexible in handling situations of fragility.

Already, we have a case in point in Yemen where we are working with our partners, UNICEF and WHO are part of this alliance. And on the ground, it became very difficult with the conflict to try and reach people to immunize, and yet, every party in the conflict, we are very fortunate, recognizes that this is absolutely critical. So, from a situation, we are almost up to half of the facilities where we could not use.

Recently, we've been able to restore, you know, the use of the facilities where the vaccines are stored, or move them to safer areas where they do not spoil, and I'm happy to say that I think we're at 75 percent -- covering 75 percent --

MR. BARAKAT: Yemen?

DR. OKONJO-IWEALA: -- of the -- yes -- of

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the areas of the children we need to cover. We are not yet -- in 25 percent, we are not able. But we have restored much of the services, and we're also doing it using mobile vaccination clinics and following people where they go. So, that's the adaptation we need to look at. What do we need to put in place?

Also, issues of -- you know, we work using a cutoff, because not every country is GAVI eligible. If you have income of about \$1,580 per capita and above, you may not be GAVI eligible. You are deemed able to take care of most of your needs, and so on. So we have cutoff points, but we are reviewing that, as well, because -- two reasons. Some of the countries that are well off are in conflict. Syria is a case point. Libya is another case in point.

And what do we do in those particular countries? Their per capita income may fall, or even if they are well off, they are not able to organize. So, these are some of the issues we are looking at. Some of the richer countries who are working also fall

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in and out, you know, like when they're impacted by a commodity downturn, they experience the fall. What do you do? How do you support them over the interim? So for all of these reasons, we are reviewing what we can do to help.

MR. BARAKAT: Mm-hmm. In a previous life, I used to spend a lot of time in Somalia, and I was stuck that the main obstacle for good campaigns of vaccination is the absence of fridges --

DR. OKONJO-IWEALA: Mm-hmm.

MR. BARAKAT: -- at the village level. You can go around, village after village after village and they don't have the fridge. They can't keep the vaccine. And therefore, they rely on vaccination that is quite random, whenever the campaign happened to be around. They cannot do it systematically for children. And all it takes is a solar powered panel.

DR. OKONJO-IWEALA: Mm-hmm.

MR. BARAKAT: And that small investment is still not there. And ironically, I was talking the other day to a colleagues from Yemen. He was saying

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in Yemen -- now, they're innovating. They're coming up with solar panels, as the people in Gaza, because of their isolation. Now, those small initiatives that have been taken on the ground to try and make sure that vaccines are available continuously, what role do you think the global community should do to help?

DR. OKONJO-IWEALA: GAVI, the alliance is actually playing a very important role in supporting some of these efforts that you see, and trying to use, you know, adaptable technology. And I'll tell you one thing. We've just launched a big initiative on a cold chain platform. We've just opened up -- because we realized this problem -- well, we've realized it, but in addition to that, even countries -- their existing cold chain equipment is falling apart, is obsolete or needs to be renewed.

And what we're saying is, let us use appropriate technology or available technology. Let's innovate where we can. And it very much using solar - - little fridges that are solar powered, little packs, cold packs that are solar powered. And I've seen this

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in action. I was in a clinic in Ethiopia where they had one of these.

So we are promoting that. This new platform, we are in fact, mobilizing even additional resources to support it. We think we need \$300 million to reach all our countries. GAVI is putting in maybe -- we put in an initial 50, and maybe another one, and we are trying to get our donors to support. So yes, you are absolutely right.

And I will tell you the other thing that's exciting about GAVI. We really try to innovate. In Rwanda, for example, with the government in the lead, we've worked with the private sector, a company called Zipline and DHL to use drones to deliver vaccines and blood to high -- you know, it's a very really -- a mountainous country, and driving roads up there is very expensive.

So now, we are using these drones to deliver the vaccines, deliver blood and other supplies up there. So where we can innovate with most recent technology, with the adaptable technology, we are

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doing that.

MR. BARAKAT: Right. Thank you so much. And if I may just ask a couple of extra, additional questions, and then we'll go back to the audience. In terms of global governments --

DR. OKONJO-IWEALA: Mm-hmm.

MR. BARAKAT: -- of the whole issue of vaccines, you mentioned pharmaceutical being on your board and so on. But are they governed in any way, or is it like herding cats (Laughter)? You have to go around trying to bring them all in one direction. If you recall, when we had the flu, the bird flu, those who can afford it bought a lot of that vaccine and brought it into their countries.

DR. OKONJO-IWEALA: Mm-hmm.

MR. BARAKAT: They didn't necessarily use it all. And those who couldn't afford it, they were left behind. And then later on, some donations helped them acquire some vaccines, but maybe it arrived after the disease had passed on.

DR. OKONJO-IWEALA: Mm-hmm.

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MR. BARAKAT: Is there a body that governs that relationship?

DR. OKONJO-IWEALA: Mm-hmm. Well, I was smiling at the notion of herding cats, because I'm chair of the board. And anybody who is on board's chairs know sometimes it is very difficult and can be like herding cats (Laughter).

MR. BARAKAT: I'm sure.

DR. OKONJO-IWEALA: But I'm fortunate that the GAVI board, even though it has this public-private partnership, works very well. It's very good governance, I have to say that. But to answer your question, the WHO, you know, governs this relationship, you know, in deciding what vaccines should be further developed; where -- how should they be stocked? Which one is ready, not ready?

And WHO is part of the alliance, so we very much rely on their judgment when it comes to human vaccines. For example, just recently, they did a protocol to look at which new vaccines should companies be working on. As you know, it doesn't --

most of these are very costly to develop. So it's not really cost effective for them, so you have to find means.

I'm happy to say that in the protocol, MERS, the Middle East Respiratory Syndrome, has been identified as one of those for which the WHO will launch the work. But where GAVI comes in is to say look, we know it's costly to develop these things. Developing countries cannot afford it. But if we can guarantee you volume, since we work worldwide, we will purchase such volume that in the end, you'll be able to make some money back.

You know, this encourages companies to go into this area, do the research that is needed that they otherwise would not do. And we also encourage companies to stockpile. I'm very proud that one of the things GAVI did recently is that in January of this year, is with to pay -- negotiated with Merck -- just a reasonable cost -- amount to cover their costs and so to stockpile 300,000 doses of Ebola vaccine. Three hundred thousand.

You remember -- a few will remember what happened when there was the Ebola crisis. You remember there were these few doses left, experimental, and then there was this (Inaudible) deciding who would get it and who would not get it?

MR. BARAKAT: Yes.

DR. OKONJO-IWEALA: It was for me, one of the most painful sights to watch the world going through this. And I'm very proud that GAVI, we decided this must not happen again. The WHO has approved this vaccine. The EU authorities were waiting -- the U.S. is going -- they take a long -- but we decided, if it has been approved by this, let us get a stockpile.

Let's pay for it, so that if it ever comes out again, we will not have to sit as a global community watching people dying needlessly. Isn't that something to be proud of? I'm proud of it. And that's the kind of work that GAVI does and can do (Applause).

MR. BARAKAT: Thank you.

And the last question for my side is on the

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private sector. I know they play a very important role in this, and we established that they're kind of governed by WHO, but that issue does not hold them accountable.

DR. OKONJO-IWEALA: Mm-hmm.

MR. BARAKAT: Do you see any difference between the private sector that is rising in countries like India, Brazil, maybe Jordan is one of the largest in the region in terms of pharmaceutical production? Is the attitude different from those that are established in Europe and North America, or is it the same attitude for running after the profit?

DR. OKONJO-IWEALA: Well no, I would not say what I've encountered, and I've sat with the CEOs of these organizations, both from -- we actually have on the board -- this is very interesting, the representative of the pharmaceuticals for developing countries. And then we have the representative for developed, because the developed country manufacturer has the big ones, like Novartis, GlaxoSmithKline, you know, and so on -- and Merck.

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The developing countries, India, China and all that, they feel that it's so hard to compete with these people. They need their own chair on the board. Now we've done that. So there's actually competition. And that ability to negotiate down a dose of vaccine to \$35 is because manufacturers from the developing countries are producing -- those who have been at lower prices.

So, we're able to get them to compete with each other. But I don't -- they have not exhibited that it's the bottom line only. I have to be very fair to them. You know, I think there's a recognition that it's more than the bottom line in some of these things. Yes, profit counts, and we recognize they have to make something. You know? So we have to allow for a little bit of cost plus.

But they recognize that if you allow these pandemics to take place, if you do not protect, they too, are at risk. The world is at risk. So there is very much a sense of responsibility when you see them on the board. And I want to commend them for that.

From what I've seen, it hasn't been just this profit motive only.

MR. BARAKAT: Great. Well, thank you so much. That's very reassuring. With this very positive response, I'll open the floor for questions. Please. You need to speak into the microphone because of the translation.

MR. STYRING: Yes, thank you very much. My name is (Inaudible) Styring. I work for the Hague Institute for Global Justice. In a previous life, I have introduced also, the access to medicine to the WISH conference here, two years ago. And my question is -- well first, my compliment to you is that you managed to lower these access to medicine prices to \$35. It's a tremendous achievement.

The Access to Medicine Index is also supporting all these initiatives. And my question to you is, do you have a relationship with them, I guess? Are they on the board, or have you heard of them? They are from Holland, and they established this index by which the pharmaceuticals are hoped to lower their



access to medicines.

DR. OKONJO-IWEALA: What's their name again?

MR. STYRING: Access to Medicine Index.

DR. OKONJO-IWEALA: Access to Medicine.

Fisall, do you know about them? Because we -- I don't know about them personally, and I've not encountered them. But let me tell you, we have on the board -- I presume they're a non-profit.

MR. STYRING: Absolutely.

DR. OKONJO-IWEALA: Yes. So, I will have to check, because represented on the board of GAVI's civil society -- and there are more than 120 members of that civil society group. So they got together and elected someone to represent them. So it could well be that they are one of the 120. I just don't know. I will check.

MR. STYRING: Just to add, they are also supported by the Bill Gates Foundation.

DR. OKONJO-IWEALA: Foundation. Then they may very well be, because you know, Bill Gates is the -- the Gates Foundation, sorry, is the second largest

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donor to GAVI with about \$1.5 billion.

MR. BARAKAT: Thank you.

MR. STYRING: Thank you.

MR. BARAKAT: Please.

SPEAKER: Thank you for your value of your comments and presentation. My question to you is, you mentioned that there is a cutoff or a point for countries eligible for GAVI. However, we know that there are many countries which suffer from inequality. So you see a big portion of the population below the poverty line, or in healthcare coverage. So how do you deal with that?

DR. OKONJO-IWEALA: Well, this is a very tough question for us, because you're absolutely right. You can have within a country what I call two or three economies. You can have a per capita income and economy with a per capita income of \$5,000, and within the same country, you find even 5 or 600. You know, even within many of the countries on my continent, et cetera, you find that. India is a case in point.

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So it becomes very difficult, because you look at provinces like Behaff, for instance, and so on. Now you know that the per capita income does not compare. What we have tried to do is very tough. We are operating in some of these countries, precisely because of some of these arguments that we have been able to make to convince the board that some of the -- the middle income countries actually contain some of the largest number of poor people in the world, in share numbers.

So it is very difficult to just say on that basis, let's not operate. So we can operate in some of these states in provinces, but it's a tough sell, because the demand is so high. We are still in India, despite of everything. We're in some other countries. But what we are doing is we make them pay a higher co-financing amount. You know?

So we make countries join in the financing, so nobody gets everything free, and GAVI is one of the institutions trying to work itself out of a job by saying to certain countries, even if we are with you,

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when you get to a certain point, you have to take over your immunization. And between now and 2020, we are expecting 20 countries out of the 73 to fully phase out, and we will support them by making they have access to local vaccines, but no longer be co-financing. So we are doing some of that with these countries; edging them out gradually.

MR. BARAKAT: Great. Thank you so much. I promised you that we will keep this to an hour, and I also know Dr. Ngozi has a flight to catch, so we'll take two last questions. My colleague, Dr. Hassan.

DR. HASSAN: Just an extension to what Dr. Yusuf mentioned here for the per capita income as the measure. With all of the defects in an average, as economists, and I know that you know about this, probably taking one of the more qualitative and physical kind of indicators like infant and child mortality might be a better, in this case, proxy for the countries.

I have also a question about your great efforts in terms of the eradication of diseases for

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children. Everybody used in previous lives, so I will use in a previous life, I was interested also in infant and child mortality. And it seemed like in Africa, specifically, the waterborne disease seemed to be the most important factor in causing infant and child mortality.

So in addition to the vaccination, root causes should be also dealt with in some fashion. So, I wonder if your organization has anything to do with the sanitation -- bringing water -- clean water to the poor people in this case? Thank you.

DR. OKONJO-IWEALA: I think those are just two excellent questions or comments. The first one I couldn't agree with more. We all know the defects of per capita income. It's just that when you are working, you look for some kind of indicator that is simple enough; you know, accepted by the global community. But we do look at other factors.

Just as we are not so doctoring there, when it comes to a country with very poor states, we do look at some of these indicators and factor them into

account, because again, you have middle income countries who may have high looking per capita income. And then you look, and you find certain indicators that just don't work. You know? Some human development indicators that are not good at all.

And I think that even in my country, you have a case like that, you know, where certain human development indicators, maternal, mortality certainly did improvement (sic). And you cannot say let's just abandon these countries. So we take some of that into account. It's not as sharp as I made it sound.

On the second issue, you're really speaking to something which we spent -- and they did today (Inaudible) naturally talking to Her Highness, Sheikh Hamza, who is very interested in these multi-sectoral approaches. And this was precisely her point; that in doing her work on education, she finds that health is important, sanitation is important. And she was asking how do we get into this multi-sectoral.

And I told her this is absolutely right. In fact, when I was a finance minister, and the minister

of health sometimes would say the budget is not -- you're not giving us a number yet, I would say, but we've just increased the budget for water and sanitation, because if we can get clean water, you know, it will take the diarrhea, and then we wouldn't have it.

So you're very right, and it's always a question of balance. But how does GAVI deal with this? GAVI decided along with the partners, all the partners, that strengthening of health systems is a very important part of delivery of the vaccination. So we don't just stop at vaccines. We are now working in the health system strengthening area with all -- the whole partnership.

What do we mean by this? Then we are looking at the delivery, the equipment on cold chain, the water along the way, even the personnel. They are (Inaudible) and we have enough to even deliver what we need. And I think that's -- it this kind of more multi-sectoral approach. It's very hard. When you talk of strengthening health systems, it sounds very

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nice and glib and easy. Not at all. You know? It is hard work. And that's what we are trying to do.

But I tell you why I think it's critical, because that's what saved us in my country from the Ebola pandemic, because we had established a system with personnel people tracing data that could deliver. So you are absolutely right. That's what we are -- in the partnership with Qatar, we are going to be working on this multi-sectoral approach.

MR. BARAKAT: I promised you one last question, but I have to adjust that, with your permission, to one last round (Laughter) of a few questions. So what we'll do is we'll take a round of a few questions. There are three or four. Please.

SPEAKER: Okay, thank you so much. My name is Oparta Jajalilly. I'm a reporter with Qatar (Inaudible) newspaper. I just want Madame to clear one point. Making vaccines available is one point. Clearing the misconception about what (Inaudible) people from taking vaccines or vaccinations is another thing.

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Is GAVI doing anything in promoting our awareness? In southern countries like Afghanistan, Pakistan and Nigeria, there is consensual data, no, we are not allowed vaccinations for this or for that. Is GAVI doing anything in promoting that awareness?

MR. BARAKAT: Okay, thank you very much. So there's a point about awareness. Please, there's a gentleman with the red tie.

MR. ABDUL-GHANI: Thank you so much for your presentation. My name is Fadel Abdul Ghani. I'm the chairman of the Syrian Network for Human Rights. I'm really (Inaudible) about -- if you have any estimation of what GAVI is doing in Syria. Syria is an extraordinary situation, especially in the besieged area. We have 2.2 million under the besieged area, mainly by the Assad regime, which is targeting the United Nations convoy on the 19<sup>th</sup> of September -- this previous September.

So, how you are dealing -- and this is part, actually, from Dr. Sultan's first question. How are you dealing with this extraordinary conflict in --

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(Simultaneous discussion)

MR. BARAKAT: Thank you so much.

DR. OKONJO-IWEALA: Okay.

MR. BARAKAT: Please, can you bring the microphone. Okay, take that question on the as well, please. That one. Thank you.

SPEAKER: Hello, everyone. Thank you very much first, for this fruitful and beneficial discussion. Actually, I am Zachary Bahoush from the Study (Inaudible) Institute in political science and international relations. I am, as well, the youth advisor to NFPA. Actually, we traveled to a lot of countries, especially in Sudan and through Ethiopia working on (Inaudible) vaccines and the medical field.

My question is, how can we work on an agreement between UNFPA, the United Nations Population Fund and with GAVI for better cooperation? Thank you very much.

MR. BARAKAT: Thank you. We'll take the question here with the blue tie, and then I'll come back to you.

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MR. AMI: Thank you. My name is Emanuel Ami. I'm from the embassy of Liberia in Doha. Firstly, Dr. Okonjo-Iweala, may I extend my thanks to you for the wonderful presentation? I would like to inquire as to the program of GAVI as it relates to health workers. For example, in Liberia, Syria and Guinea, most of our health workers died because there was no orientation about Ebola, and they had never been in our region.

So do you have a program to work with the health curriculum so that the -- as health workers are being trained or have an idea what to work with upon graduation?

MR. BARAKAT: Great. Thank you. I'm afraid we've got to stop. I know it's a very interesting subject.

DR. OKONJO-IWEALA: Well, let's take the gentleman that had his hand up for so long. Yes?

MR. BARAKAT: Dr. Zakaria.

DR. OKONJO-IWEALA: Yes.

DR. ZAKARIA: Hello. Thank you, Sultan.

Your Excellency, you mention there are vaccinations --

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vaccinations are not going to eliminate breaks in Africa. Maybe we have Ebola, we have AIDS, we have malaria. In Egypt only, (Inaudible) 20 percent of the population is infected with viruses. I think this needs a very big allocation. Charity will not be sufficient.

In Egypt, education. Health research, only 4.7 from the budget. Why is defense and the Army taking 50 percent? My opinion is that in order to eliminate all diseases, we have to fight this (Inaudible) corruption in our continent, and then we will be in no need to treat any more diseases. Thank you.

MR. BARAKAT: Great. Thank you so much.

DR. OKONJO-IWEALA: Okay.

MR. BARAKAT: So we have five points.

DR. OKONJO-IWEALA: Yeah.

MR. BARAKAT: One on public awareness and maybe cultural practices and refusal of vaccination.

DR. OKONJO-IWEALA: Mm-hmm.

MR. BARAKAT: Syria. The relationship

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between UNFPA and GAVI, the idea of developing a health curriculum, and switching away from charitable action to something more developmental -- investment.

DR. OKONJO-IWEALA: Yes. Well, I'm going to not do it alone. I have my colleague, (Inaudible) who is in charge of the Middle East. So I'm going to ask him to take two of the questions and add his voice. Why don't you talk about what we are doing? Because he is from Pakistan; that's why I want him to answer. I'm from Nigeria.

So, I could also answer from that point. But please answer about the awareness programs. It's a very important point that the gentleman raise. And also, at the same time, what we are doing with the program of health workers. That's His Excellency from the embassy of Liberia. He raised the issue, what does GAVI do with training of health workers and raising the awareness about how to deal with some of these diseases, because of the number of health workers that died during Ebola. If I got you correctly ...

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SPEAKER: So, thank you very much. A couple of points on Syria. As he heard -- still has the high income. We don't have the latest economic indicators, so we were approached by the Arab League in 2013 for support. So directly, we could not, because we had to follow some of our professional procedures. But we brought together UNICEF, WHO and the Bill and Melinda Gates Foundation to come up with a program, and they are supporting immunization in camps, and wherever they could in the inside Syria as well. So that program is ongoing.

And as Dr. Ngozi mentioned earlier, we are working on revising our fragility policy, relaxing it a little bit, and hopefully, Syria might become -- in December, we will know -- on the 8<sup>th</sup> of December, we will decidedly know if Syria becomes eligible for GAVI support. So, we are fully in touch and working on that.

In terms of advocacy, GAVI is -- in November of last year, we became a member of the steering health committee of OIC, Organization of Islamic

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Cooperation, and the whole idea was how we engaged with some of these institutions in the region on dissemination of these issues, like a vaccine is harmful, or a vaccine causes this or that effect, which is, I believe scientifically wrong.

So, Islamic Oil Bank and OIC have done a series of conferences and events in the region for Afghanistan, Pakistan, Nigeria, and Sudan, and we work very, very closely with them. In fact, on Thursday, we met OIC and IDB in (Inaudible) and we have retreated to how we expand that partnership and go and do more work to tell people how vaccines work and how they should take it more seriously.

In terms of I think health training workers, I am not sorry to say (Laughter) -- an authority on how we did on Ebola, but under health system strengthening program. So this is one of the biggest components, how we train health workers in the countries we support. That's part of our health system strengthening initiative.

DR. OKONJO-IWEALA: So, let me take the other

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questions then. I think on the issue of UNFPA and GAVI, UNFPA is not part of the alliance, but it's part of the United Nations. And therefore, we tried to coordinate with them, but I think we need to do more, because they are not a systematic part of the alliance. So it's a good point. We will take that back and see what we can do to improve that.

With regard the issue of a charity, you know, I couldn't agree more, in the sense that I also strongly believe -- and this is not a GAVI thing. I'm speaking as someone from a developing country. I believe that the immunization of our children is such a top priority that it should feature very firmly in our budgets. That way, we are not talking about charity. That is my belief. And this is something we are trying to promote.

So, GAVI doesn't just work on let us wait for donations. We also do two or three different things. One is to insist that a country must contribute something, because one day, they have to take over. GAVI is not going to be there forever, and as I said,

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we already have 20 countries scheduled to phase out. And I support it strongly.

One of the reasons I came on board as chair is because I believe in this; that it should be one of the first things that we pay for in our own budget. It should not just depend on donations. So, some countries are very poor now. They're in conflict. We have to help them, but along the way. So that takes us away from charity. That's what makes this sustainable.

The second thing, though, is that GAZI does not work solely on charity. We also use some mechanisms to raise money on the capital markets. I don't know if you know that GAZI raises money on the capital markets and tries to bring in an element of financing. I'm quick to confess that this is on the back of the support of the donors, but it's a different way. It's not just waiting for them to hand out the money.

What we do is we say okay, we have people who back us, but we can't wait. Sometimes they give us a

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hundred billion. This year, 20 million, the next year -- we want to save lives now. We want countries to become sustainable sooner. So we want to front load money and work now. How can we do it?

So using this backing, we go on the capital markets. We have something called IFFIN, the International Finance Facility for Immunization. We go on the capital market and we raise money. We are targeting 6.5 billion, and we raised about -- more than five billion now to work, to pay for health systems, for vaccines, for strengthening countries now so that they can take over sooner. And what happens is, in 20 years' time when the bond is retired, because it's a long-term, a country that wants to support GAZI can retire the bond at that time. But we use the money now.

So that is a very different way of thinking. So GAZI is very sharp with innovative mechanisms, and this is one way of also trying to get us off the charity and donation route all the time.

MR. BARAKAT: Well, thank you so much. I'm

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sure --

DR. OKONJO-IWEALA: Oh, sorry, I forgot to mention -- sorry, sorry. I wanted to mention the Sukuk. Part of this raising -- we have the Sukuk bonds that we raised 700 million recently in the region. About 50 percent of it was (Inaudible) in this region in a Qatari bank. What's the name of the bank?

SPEAKER: Barwa.

DR. OKONJO-IWEALA: Barwa Bank participated as a lead organizer, and it was very popular. One point six times (Inaudible) in the region, and we will raise more. In Japan, individual people buy these bonds. They are called vaccine bonds and they are very popular. So anyone who wants to do good and do well, please invest in vaccine bonds.

MR. BARAKAT: Well, thank you so much (Applause) and thank you for investing your time. Thank you for investing your time with us. And please, as you battle these issues, do feel free to come back to us for research partnership on some of

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those important issues.

At the Doha Institute, we have, I think, without exaggerating, some of the minds on development economics, public administration, state fragility conflict. We will be very, very happy to work with GAVI on some of those issues. Thank you all for participating today with us. There will be a light reception outside, so please feel free to join us, and we will have more chance to say hello to each other.

This applies to everyone except for our students (Laughter), who I can see Dr. Rame is anxiously standing there in the corner. He's late for his lecture. So, those who are doing our course, you have to skip the reception and straight onto the class. Everyone else is welcome to join us.

DR. OKONJO-IWEALA: I wish I could join your class (Laughter). If I was not going to --

MR. BARAKAT: Thank you.

(Simultaneous discussion)

DR. OKONJO-IWEALA: I miss the young people.

MR. BARAKAT: Thank you very much. Thank

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you.

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