



Webinar: Entrepreneurs and the COVID-19 Global Reset in South Asia *Panelist Transcript*

Moderator

- **Tarun Khanna**, Jorge Paulo Lemann Professor, Harvard Business School; Director, The Mittal Institute

Panelists

- **Rajeeb Samdani**, Co-Founder and Trustee, Samdani Art Foundation; Managing Director, Golden Harvest Group
- **Osman Khalid Waheed**, CEO, Ferozsons Laboratories Limited; Founder and Chair, Lahore Biennale Foundation

Enterprises have found themselves caught in the COVID-19 maelstrom across South Asia. This webinar explores the extent to which entrepreneurs have been able to work with both the state and civil society to limit the damage and distress caused by the pandemic, but also to begin exploring new opportunities that a possible “global reset” has opened up to the developing world.

BEGIN TRANSCRIPTION:

Chelsea Ferrell: Hello and welcome to today’s seminar on entrepreneurs and the Covid-19 global reset in South East. I’m Chelsea Ferrell, the Assistant Director of the Lakshmi Mittal and Family South Asia Institute at Harvard University. The mission of the institute is to engage through interdisciplinary research to advance and deepen the understanding of critical issues relevant to South Asia and its relationship with the world. As part of this engagement, the institute is running a series of spring and summer on a number of topics related to COVID-19. We’re so glad you joined us today and please consider joining us next Friday, June 12, when we will be hosting an event at the same time on the labor of fashion, the global Covid-19 crisis and the politics of resistance in Bangladesh. Please also check our website for other upcoming events.

A couple of housekeeping items for today, today’s session will be recorded. During the Question and Answer session, you can submit questions directly to moderators via the Q&A function on Zoom. Due to the large number of attendees at today’s seminar, we unfortunately will not be able to cover all questions. There will be a short survey automatically sent to you at the end of this session. We would ask that you kindly fill this out.

Without further ado, I would like to introduce the moderator of today’s panel Dr. Tarun Khanna. Tarun Khanna is the Jorge Paulo Lemann Professor at Harvard, where he has taught for 25 years focusing on the role of entrepreneurs across developing countries. He is the first Director of Harvard’s Mittal Institute, a university-wide endeavor that brings together scientists and humanists with students and professors from professional schools for scholarship related to the two billion people of South Asia. His latest book Trust and his earlier Billions of Entrepreneurs chronicle great adventures in China, India and beyond, while a co-authored book Winning in Emerging Markets distills lessons for building world class enterprises in emerging markets. He is the founder of and investor in several ventures across emerging markets. Thank you for being with us today Tarun.

Tarun Khanna: Thank you Chelsea for the introduction to the institute and to and the generous comments about, unnecessary comments about myself. It’s my privilege to host this panel with two really eminent entrepreneurs and social activists if I may call them that in their own countries, in Bangladesh and Pakistan, and more importantly people that I have come to call good friends. For which I am very grateful.

My task here is to introduce them and then I will make some framing comments and each of the panelists will spend about ten minutes, providing their own perspective on entrepreneurship as its playing a role or failing to play a role as the case might be in the midst of this pretty devastating health and financial and economic crisis that’s spreading around the world and in the region. So, first let me start with my own perspective on this and then go to each of Rajeeb and Osman.

Rajeeb Samdani is a seasoned entrepreneur in Bangladesh, head of a very diversified group Golden Harvest that has an interest in a range of different enterprises. He is also with his wife Nadia, the founder of the Dhaka art event which happens every couple of years, which has really become quite a destination on the art's calendar globally and I had the privilege of attending a couple of years ago.

Osman Waheed is a graduate of Harvard college, one of our own, and is in Lahore and runs Pakistan's pharmaceutical company Ferozsons Laboratories. Osman and Rajeeb, I'm doing this from memory, so I may get the words wrong, so pardon me for that. But Osman is basically an entrepreneur and lately has decided to our immense delight to sponsor, fund and organize Lahore Biennale, which I have not had the pleasure of visiting but it's really quite nice to see arts springing up in different places. So, we are very fortunate to have them both with us because they are entrepreneurs in the sense of creating viable, financially sustainable enterprises that are doing good in their parts of the world, generally employment and therefore have a ring side view on the crisis. And, Osman in particular also has a health centric view with his pharmaceutical company but equally important to me they are entrepreneurs in the broader sense of the term, which I like to think of it as bog tent view of entrepreneurship which is essentially just creativity and problem solving and goodness knows one thing we need in developing countries in particular with institutional of all sorts we need creativity in spades and that's been my own passion so to speak in my home country in India, but also in developing countries around the world. So, it's really a privilege and a pleasure to be with my two colleagues, friends and panelists.

One thing I would say is that when I took over this role as creating the Mittal Institute about ten years ago, one of the very first things I did was start a course in Harvard's gen-ed curriculum, general education curriculum, which is sort of a core curriculum encloses many iterations, which I struggle to find the right tone and framing for it but it's the part of the curriculum that every Harvard graduate has to engage with in some way and I began teaching a course in creativity in South Asia, primarily as a means to have touch point with the institute with Harvard college, which is the beating heart of the university in some sense. And that quickly mushroomed into a course on entrepreneurship for creativity across the developing world because even though we were teaching a course that was centered on Bangladesh, India, and Pakistan so to speak, which was very unusual in the college ten years ago and even unusual today for that matter.

We quickly found that within a couple of years, the room was full of Brazilians and Ecuadoreans and Senegalese and South Africans and so on, and it really spoke to all of us, saying that these, at a certain level of abstraction, the problems are similar across the developing countries. So that course has become stable, it's become very popular course at Harvard tracks, undergrads and graduate students from all over the university and we do it every year and it's really a privilege. And, a number of people now do it with me, so we have a medical doctor, an architect, a theatre personality and a scientists co-teaching with me. So, you can see that it's incredibly, it's like, I think of it as a jazz improvisation in some sense in real time, in the classroom. It's not easy to pull off that when you are having fun, it's not that bad.

The second thing that happened is that that course got an online version, I'm recounting this primarily to make a point that there is a, even in remote, if you will, education institutions, I mean remote physically from South Asia in this case and remote in the sense being traditionally intellectual citadels, there's an increasing recognition among the ranking faculty but more importantly the faculty among the students that this sort of synthetic scholarship and mixing it up with the problems and immersing yourself in the milieu is the way to go. Not the only way to go for education, but is a way to go, and that course has got an online version, which is one of these so called MOOCs, massive online courses and I'm pleased to say that it's now Harvard's, across our 200-300 MOOCs, it's the second most widely subscribed mood across any field.

So, we've got half a million people doing it now across 200 countries and it's just spiraling in a viral fashion, and I think that speaks to the importance of the theme that the reason you see so much connection to it is that people embrace the idea of individual agency in problem solving, taking responsibility for problems and I think what you seen in the comments of Rajeeb and Osman shortly is that both these individuals exemplify their attitude. Of course, there are many failures, the problems here are quite intractable, in fact the title of the gen-ed course has creative solutions to intractable problems in some ways and I think the intractability is to embrace as a challenge as opposed to anything else.

Let me say two words on COVID in India because I am kind of keen to hear more from Rajeeb and Osman also. I have multiple lenses through which to view the crisis, primarily as an academic educator of course, and I have been giving these webinars to all the companies whose boards I am on and non-profits, just summarizing how I see COVID. It has been really an education for me to put my arms around everything that's going on in the world. Second lens is as entrepreneurs in India started many companies, watching them go through

exuberance and disaster in the course of the last two, three months. And the third is as member of a different government missions in India that necessarily have to get involved in this. So what we see in India is a standard developing country, struggle right, which is the attempt to balance two very different objective functions that in the long run are co-related. I'm getting a message to say that my mike has to be closer, I will try. Two objective functions that in the long run are co-related, which is health and economic outcome but in the short run cut in different directions, in the sense that to preserve health we have to "flatten the curve," protect the healthcare infrastructure to some extent and so we've imposed lockdowns in all these countries but that comes with the cost of immediate livelihoods, particularly for the vast number of people in all our countries that are quiet disenfranchised, economically and socially disenfranchised. So, how do you balance that?

India is emerging from one of the most severe lockdowns, it's not clear that the curve has been flattened. The numbers of affected people seem low on per capita basis, it's not clear to me whether that's because of testing infrastructure purely or is it because of the some in-built immunity. We don't know, the science is just not very clear on it and I would just report to there's a continuing struggle and unfortunately and sadly the lower sections of society, and I've been reading a lot about the migrant populations that are stranded in different parts of India, have had to bear the brunt of this, and that I'm sure is going to be a trend across all the South Asian countries. I'm eager to hear what colleagues in Bangladesh and Pakistan have been doing about that. I would say that my colleagues in the corporate world in India have, I would say stepped up quite handsomely to do things about this whether in the aggregate it's enough to make a difference, that's highly debatable but at least there's the attitude to do more.

Stimulus spending both fiscal and monetary stimulus is happening in India. The fiscal straight jacket is pretty tight in most developing countries, in India it's no exception, the only sort of ambient good news I suppose across the world is that the world is in an aggregate level awash with liquidity so global interest rates is quite low therefore the cost of taking on what would normally be utterly unsustainable debts are only moderately unsustainable in the long run I would say, just to put a slightly less negative spin on it.

The one very bright light that I see I've been very involved with Gavi, which is a world vaccine alliance. Seth Berkley is a colleague I met at the world economic forum many years ago and had started working on some material from Gavi he did before the crisis, so it was fortuitous, and I decided to a deep dive into it. We have another webinar that's purely about vaccines and science on I think it's next week sometime, that should be on our website also. But through that I've become immersed in the scientific community and I think there's a lot of, if you will, entrepreneurship in the science community in a very, very refreshing way, and I mean that globally. I certainly see that in India, I see it globally. The protectionist barriers, the xenophobia, the nationalism that you see in many countries is absolutely absent in science so far. I'm sure there will be, there's already some noise of chest thumping and saying our vaccines are for ourselves and so on and so forth. I'm sure Osman will comment on this but that said, there are enough number of well-meaning people and institutions working to ensure that whenever there is a vaccine that there will be some measure of equitable distribution, it's going to be imperfect but I think there are people working on it. I don't know as much about the cure side of things, I know there are some antivirals that are showing promise and I have some sense about the tests but not as good as some of our panelists, so I won't comment on that.

So, in summary, I mean lots of distress, lots of actions from the government, lots of action from the entrepreneurial community also, in India. Both in India, in Cambridge, Massachusetts and across the world, a significant revitalization of science. So, with that positive comment about science, let me stop and hand over to Rajeeb Samdani first, who's going to go for about ten minutes and so and then we'll go to Osman. I'll moderate a small conversation and then we will open it up to you and Chelsea and Salman from the institute will run the show from behind the scenes. But thank you so much and welcome to this webinar. Rajeeb, over to you.

Rajeeb Samdani: Yeah, thank you Tarun, thank you for having me. I'll just also, to start with, I'll give a little of background about Bangladesh about what has been happening in the last ten years and where we stand. So, Bangladesh is a young country, and we are a hardworking nation and Bangladesh is the fastest growing country in South Asia, and we have been growing over 6% from year on year for last one decade and our last year growth rate was 8% which is the highest in Asia. So, I think that today when the entire world is fighting this pandemic, where we stand today Bangladesh, we are in a much better position with our infrastructure and everything to fight this battle than probably where we were 12-13 years back. Just to give you an example that in 2009, only 46 % of Bangladesh's population were under the coverage of electricity, today it's more than 93%, even for internet availability or internet access in 2009 only 3.1% of the population had access to internet, today it's more than 65%. Our literacy rate in 2007 from 46 it has grown up to 72.89% and every year half a million graduates are coming out of different universities. So, Bangladesh, we have a young population and

we have an educated workforce. As a nation, we are also a strong nation because Bangladesh, as you know, Bangladesh has been hit by many different natural disasters, cyclones, floods and all these things have also made us strong. And it is the people of Bangladesh along with government, private sector, civil society, creative minds, people of Bangladesh always together, work together hand in hand and we have come out of all these difficult situations.

So, in case of current this pandemic we are in, that is something similar, in case of Bangladesh government, private sector, everyone is working together. As you mentioned about India, our government has also provided several stimulus packages starting from root level to different industries. And other than this government has also reached out 60 million people directly, supported them and also government has launched different e-portals, mainly targeting agriculture, healthcare, food supply chain and education. And along with government, actually the private sector is also working that you know see I'm also a businessman when I'm also going through a challenging time with my businesses but I'm not only thinking how I'm going to survive or my company is going to survive but for me what is very important is that how I will survive and at the same time I'm also going to support my community because this is how the Bangladeshis are. And this country has given us so much, this is our time to give back to our country. So, this is the beauty of our Bangladesh that you know public, private sector, everyone working together. And in Bangladesh, one of the best blessings that we have, we are fortunate to have organizations like BRAC, who are actually working at the frontline. There are many NGOs and organizations like BRAC who are actually working with the private sector and government together during these difficult times. And, just to give an example that last month our ICT division of Bangladesh has also launched a crowdfunding app through that actually any individual can support an organization like BRAC or other foundations who are mainly working at the frontline.

There are a lot of initiatives from private sector, people are building isolation centers, hospitals. One of these foundations, tech foundation, is VK foundation has launched an app called When, mainly focusing on women, supporting women around Bangladesh during these these difficult times. Even yesterday Bangladesh has launched the corona tracer in partnership with ICT division, our health ministry, and one of the leading private company called Shohoz, they have collaborated together, and they have launched it. So, there are many thousands of examples like this, private sector and public, they are working together and from my company, we are also working on a project like this, so, I'll give you example of that.

So, Golden Harvest, as you mentioned, that we are quite diversified company, we operate in different sectors but considering the current situation and where we are entering a new world, an unknown world, so we are actually focusing on few specific areas of our businesses that are our process food business, our commodity business, our supply-chain and logistics business and our information and technology business. So, I'll give you an example of our IT company where actually we are doing a collaboration with government, so if I explain you then you'll understand. So, we have a business process outsourcing and software development company, where we employ about 1500 people and we work with very specialized hand-written document, old archival data, we digitize them, we have our clients all over the world. So, when actually, and before the lockdown, we currently have 1500 people, we were supposed to recruit 3,000 people and of course the lockdown happened and we had to shut down our operation.

When actually we shut down our operation, most of our colleagues, our employees actually they went outside Dhaka and they are now all over in different parts of Bangladesh but thanks to our infrastructure, thanks that we have electricity and we have internet available all over Bangladesh, so within only 10 days' time we were able to come back to our production. So now, almost 1500 people sitting in different corners of Bangladesh running our company on a virtual platform. But business is running as usual, we are doing our export, we are receiving our export as usual. So, what I said that you know just before the lockdown, we are in the process of recruiting 3,000 people so that became challenging in the kind of work that we do that requires specialized training in a room. But considering this current situation where maintaining physical distance is a challenge, it is impossible to train this sort of workforce.

We have now invested in a software, mainly using artificial intelligence and machine learning and through this actually we will be able to train our people from all over Bangladesh. So, for this specific project we have partnered with CRI, which is the country's leading thinktank. They have come forward to support us in this project and we also have education ministry and ICT ministry, they are also working with us in this project. And, in this pilot project we are going to not only train 3,000 people, we are going to train 20,000 people and out of that 20,000, 5,000 will be recruited by our company and 15,000 people will be able to work freelance for companies outside. Bangladesh private sector and government sector is also going through digitization and our government has also announced that they are going to introduce block chain technology by 2030. So,

there will be a lot of requirement for this digitization work. So, this is one thing we are working together at because Bangladesh is going to also face some challenges. As you know that Bangladesh is the leading garments exporter, our garment export earning is about 36 billion annually and Bangladesh garments is based on the fast fashion. So, the fast fashion industry is quite badly affected all over the world, so Bangladesh is going to have a bad impact to an extent because of this. Though our Bangladeshi entrepreneurs are creative, already exporting PPE, they are exporting gloves, they are masks.

So, I think that we will have a little bit of deficit in this case, what you also mentioned Tarun about the remittance, so actually our second earning is about \$15 billion that comes from our Bangladeshi brothers and sisters who are living abroad. Thousands and thousands of these people are jobless, they are coming back to Bangladesh, there are going to be another deficit. So that is why working on this project, we think we have the proper IT infrastructure, we have educated workforce, and I think BPO is one of the sectors that we want to focus on moving forward. And that sector can also help us to contribute toward deficit that currently is going to happen. So, that is something you know we have been working with government, with CRI, and as I said that you know this is just an example we are doing. There are several other examples like these, private sector is working with the government and working together. Thank you.

Tarun Khanna: Thank you, Rajeeb. Osman, you want to pick up, maybe?

Osman Waheed: Sure, thank you Tarun. And I'd like to start by first of all expressing my condolences for the losses of lives that are taking place in the pandemic. It's been shockingly very sad numbers, happening globally of course but yeah my condolences to all the families who have experienced a loss. And, also, with the recent tragedy that took place with Mr. Floyd and Mr. Arbery. So, the world is going through a difficult time, and it's similar in Pakistan also. With the pandemic, initially, and I think still even today the mortality rates are relatively low but the number of cases in Pakistan are now in a steep upward vertical.

So, even though we began with a fairly severe, in a South Asian context, we are very chaotic people and we're very passionate. We handle this pandemic in a way we handle our sports, well like we play cricket. There's also a convergence in leadership between sports and politics these days, so that shows a little bit. In the beginning we had a fairly effective lockdown, I think very quickly, just before Eid although this idea was smart, lockdown is something that some provincial governments tried, some of it was very effective at it, in Punjab. Harvard was part of this effort, the Kennedy school faculty was helping design a data management system, a response system that would in real time collect data and help the governments decide which areas to lockdown and which to not.

Unfortunately, the political side of things always has a tendency to go through knee-jerk reaction and in the end we were not able to reach the optimal goal of having an easing of the lockdown that would have been systematic, there to sort of a revival of the economy. So, as it stands today, we have about 90,000 confirmed cases in Pakistan, they ramped up very rapidly and mortality although it is still as a percentage lower, it's doubled in the last week. It tested 1,000 about a week, ten days ago, now it's very close to 2,000. So, we have a real challenge before us and while we don't have the long tradition of institutionalized NGO work that Bangladesh very admirably has, we have seen a lot of positives also. So, there are departments in the government that have really stepped up, as I said some of the departments actually did a phenomenal job in protecting their people. And, in the private sector a lot of companies, the large-scale textile sector, for example, very quickly switched over to producing PPEs, they collaborated with the private sector pharmaceuticals, so together we donated PPE equipment in the tens of thousands to public sector hospitals across the country to protect frontline healthcare workers.

Now, as a result, we were not in the PPE export business, but it's becoming a significant opportunity for Pakistan that we have just begun to exploit. And similarly, for the pharma industry, it began with hand sanitizers and more sophisticated products like antivirals. So, in our case, we signed up with Gilead Sciences in the US to produce this antiviral called Remdesivir, which is so far the only antiviral that's been approved in various countries for treatment. It's not a silver bullet, it's not a cure but it does seem to help in reducing the severity of the disease and reduces hospital stays by about 30 to 40 percent in the most advanced cases and in moderate cases about 60 percent, it reduces the hospital stay by about 60 percent. So, hopefully with the way progress is taking place, the breathtaking speed at which the healthcare industry is responding to this challenge, soon you'll see combinations of this therapeutics that come together and are more effective in fighting the virus. And, of course, you know about the, you're intimately connected with Gavi, so you know the race to vaccine development, over 90 candidates across the globe and couple of them at least are now in human testing phase. So, hopefully, there is positivity ahead.

Also, what's happened amongst all this chaos is the nature of health delivery in some ways might actually improve. So, I'll just give you a couple of examples, one is in medical education and traditionally how the medical community used to learn was to travel around the world, spend or waste a lot of resources attending these conferences to keep themselves updated with the latest medical advancement. What's happened with the lockdown is that this transfer of knowledge has shifted online and it's far more efficient as a result than what the physical manifestation previously was, it was a lot like wastage of time. You don't have this issue of visa access, so now it's much more democratic. Any physician that's interested in a subject can log on, so just to give you an example, we ran a series of the CME symposiums with the start of the Covid-19 crisis that connected frontline physicians, cardiologists for example who were doing angioplasty procedures in Brooklyn, New York. They had a live talk with all the interventional cardiologists in Pakistan, and compared to a normal healthcare conference where you would have an attendance of 50 to 60 or maybe 150 people in a room that would be considered good, yet we had well over a thousand people online, very engaged, far more interesting Q&A sessions than you would have in actual conferences.

So, you see this, and the application can extend beyond of course medicine, so something that we, the Mittal Institute for example have been talking about for some years is bringing these minds together from across South Asia, there is so much learning within the region that we can have from each other, we can learn so much from Bangladesh and so much from India and vice versa. The public health officials in these countries have so much knowledge and information to share that it has not been possible because of the political boundaries but in the virtual space anything's possible. So, I think that's been one really wonderful outcome of the way medical education has changed.

We are also now trying very quickly to help physicians transition into digital consultations, and this didn't really take off before COVID but now with COVID, a lot of companies are working to make the experience very, the consultation very experiential. Help patients transfer money through either mobile wallets or even cash on delivery mechanisms where somewhere on a motorbike comes and takes the money and deposits into the doctor's account and the patient is able to have his medical consultation despite all the challenges around lockdowns. And of course, if you have been to a South Asian clinic, you know how chaotic that experience is to end up waiting, a 9PM appointment sometimes comes through only at 1AM and you're sitting throughout waiting all this time. Now, you can sit at home, watch TV, while your doctor takes his time to get around to your appointment. So, there are positives that have come out and I think as we go forth, we'll see the health sector in particular but other sectors also evolve in a way that will reduce inefficiencies and create new opportunities as well.

Tarun Khanna: Thank you Osman, and thank you Rajeeb again. So, we've got a lively set of questions coming in from our audience. But before we do that let me exercise moderator prerogative per second and pose a couple of questions. There were two things that struck me as being present either explicitly or implicitly in all three sets of comments. The ones that I made to frame things and then each of you did. One was about the nature of interaction with the government, of private entrepreneurs with the government, not so much the individual. I think the individual collaborations we see in every country; I think that's there to stay because I have fundamental belief that most human beings are decent and want to do good things and will look out for small opportunities to do them. So those we see everywhere.

I'm more interested in the fabric of collaboration. Is there any comment that either of you would like to make about, I mean let me give you an example of what I mean by fabric of collaboration. Is it the case that you know the private sector finds a role in articulating and influencing policy in an explicit or the implicit way with the government? Is that feedback mechanism across societal strata so to speak getting better in any sense and has COVID changed the dynamics than before, so that's my one question. Let me start with that and see if either of you want to comment on that nature of that private, public, civil society collaboration. Rajeeb, you already commented that with BRAC and fabulous NGOs that Bangladesh has, that your starting point is different perhaps from Pakistan's, and India maybe somewhere in between I'm guessing, I don't know that for a fact. But Rajeeb, go ahead.

Rajeeb Samdani: Yeah, so one thing I can just add over here. The way actually our Bangladesh government is, they always welcome any, because private sectors are mainly coming up with ideas, it's not like you know government is giving an idea to the private sector and asking them to implement this. So, what is happening is they are welcoming private sector to come up with an idea and that is where actually we are being facilitated, they are supporting these sorts of projects.

So, in our case also, as I said that we are also working with a think tank and we have these government agencies because if we as a private company want to do something in this mass skill that will be extremely challenging for us. But they are the ones supporting these projects, opening the door for us, so this is how from Bangladesh's perspective, this is how our government has always been working, not only during this COVID situation, even the event, you know our Dhaka Summit, that is also a partnership we do, partnership with Bangladesh government. So, this is something quite common here. It is not something new that we have started because of this COVID situation, it's not like that. So at least that is how we have been working here.

Tarun Khanna: So that DNA of collaboration is well-established in Bangladesh perhaps as a result of the past crisis that Bangladesh has had to endure.

Rajeeb Samdani: Absolutely, absolutely.

Tarun Khanna: Osman, any comment on that?

Osman Waheed: Yeah, I think it's in the early stages in Pakistan for sure. But, what we've seen in this crisis is that the government has been much more proactive in reaching out, not just to private sector but to academia as well. So, there's been a lot of very fast policy, research projects that have tried to inform government and I mentioned that there have been some problems with policy becoming practice but still that effort has begun. And in some areas, it has worked very well, and going forward I think it's created these pathways of communication that should hopefully strengthen over time.

Tarun Khanna: I know, in my own case working within the Indian government infrastructure, which is you can imagine, it's quite complex being a large country and a noisy democracy. But I've often found that sometimes you can get traction with the central government and when you can't get that, federalism, as we say in India, federalism zindabaad. I mean we can use the federal structure to find partners, some state is more progressive in some dimension than the others and so again wearing my creative entrepreneur hat, you just look for the right constellation, trigger that experiment and hope that it catches on. And, you're absolutely right, like any other creative venture, most things don't really take off but you can try in a few places. I will say that Mittal Institute in a very small way has triggered a number of these initiatives across in India, and our track record is not bad. Something or the other clicks, some foundation picks it up, some civil society entity, some bureaucrat in a responsible position in a state and so on. So, I would report that the experimentation on private-public partnership itself and all on a public-private partner ring is well advanced. That to me is a really good sign in many ways.

It's a meta level of experimentation and it's an area where I think it would be fruitful going to Osman's other point and coming to my second question, this idea of barriers between the South Asian countries for reasons of historical tensions that have prevented, in particular, well-intentioned people from both India and Pakistan who want to get together to collaborate on things from getting together physically we would have to get together in Dubai or Singapore or Guangzhou or something or Colombo but now we can get together virtually much more frequently, which we could do earlier also but I think people are just more predisposed to it now. It doesn't seem unusual, so I hope we can capitalize on that in some way.

Osman your point about the rethinking education of course is something we are experiencing all over the world, right? All universities are forced to grapple with this pivot in some ways. So whether it's professional education, recertification etc. of the persuasion that you were offering or it's Harvard College here in our own immediate backyard, it really is a new moment and exciting new moment in some ways. Sobering also, but exciting also. Do either of you want to comment on anything I just said?

Osman Waheed: Yeah actually about this, there is an exciting moment in education. At the moment all universities, including LUMS university in Lahore, all of us are going through a crisis that we are trying to adapt to a situation and trying to find a technology-based solution that gives a good enough experience for the students to be satisfied and for the parents to — But once we go beyond this inward-looking crisis management phase, we should really be extremely willing to experiment with what opportunities this offers us. Sitting in Lahore if I can be connected to you in Cambridge, let's see how universities can do that, and start a series of really interesting conversations that can take on a life of their own and actually make this platform so much more exciting than initially you would think coming into it could.

Tarun Khanna: I'll give you one small example, which is, you know I've been teaching both at Harvard College for last decade and last quarter century at Harvard Business School and that at HBS our discussion is all in a

very regimented manner. It's a case study discussion in a classroom of between 50 and 120 people, amphitheater, Socratic style, fairly limited experimentation in some sense, right. Experimentation about content, yes, but not about format and this year, I proposed before COVID, to give me a little bit credit, before COVID I proposed that this is antiquarian method, we should be opening it up to the whole, technology is already there and I after much struggle, I got an approval to teach a class which was two thirds to Harvard students, MBA students but one third opened to the rest of the world. In other words, in a live studio, where two thirds of the students would be ... of treating equally with outside students would also be on screen, on live screen in a theatre that we have created, but 20-30 people 40 people would be from the developing countries of the world and they would be on the screen also. And I said okay if you HBS guys are so good, why don't you mix it up with the best of the world and see if you can stack up. And, I've run that experiment before in Harvard college also and even the college kids are handily outperformed on assignments by kids from Kazakhstan and Belarus and Burundi and what have you.

So, I think it's a very sobering, important lesson for all of us that you know you are where you are as a result of course of some work but also by the grace of god and by a lot of largess that has been delivered to all of us by society in our western families and not to forget that talent is everywhere and it deserves a chance in some ways. There are a lot of questions on the, I'm struggling to see how to, Rajeeb we have a lot of questions for you about particulars, about Bangladesh, to some extent about Golden Harvest and so on and so forth. So, let me pose one or two of them to you, there are tons of questions about what will happen to growth rate, I'm not sure that anybody has any unique insight into growth rates in the next several quarters and so on but if you wish to

Rajeeb Samdani: Sorry, Tarun I couldn't hear you. Can you repeat it?

Tarun Khanna: I'm just going to pose a question to you. There are a set of questions about BPOs and what do you think is the future of the BPO industry in Bangladesh. And one person says, why is Bangladesh behind in the BPO industry? Do you want to take that briefly and I'll pose a few more.

Rajeeb Samdani: No, no, absolutely. So, actually, I won't, the reason actually probably in case of BPO industry, we are a little bit behind because our IT industry infrastructure was only built in the last ten years. As I said previously that in 2009, only 3.1 percent of the population had access to internet, today it's over 65 percent. So, we didn't have the infrastructure before, if you talk about the IT infrastructure it was just, because India I think, this industry started in the 80s whereas we just started in the last ten years. But Bangladesh, I think we will be able to catch, we will be able to develop very fast but the main challenge as I said that you know we actually never had this infrastructure before. Now we have infrastructure, we have the educated people, this is I think way forward in one area Bangladesh is going to do amazingly well.

Tarun Khanna: Osman, do you have a comment on this BPO industry in Pakistan?

Osman Waheed: Well, the BPO industry in Pakistan is doing very well, the current circumstances are IT infrastructure has been fairly decent. I think it was about maybe the last 15 years or so that it enjoys a complete tax holiday, so it's invited a lot of investment. It's nowhere near the scale that India's outsourcing industry is at, and we've suffered a little bit getting international contracts because of the perception problem that Pakistan has throughout, much less so now thankfully. So, it is experiencing a kind of renaissance.

Tarun Khanna: Another question that comes up is the specific version in which the audience is posing questions about cold chain and Rajeeb again, directed to you explicitly but more generally. The explicit question is Golden Harvest had spoken about investing in cold chain in the past and you just mentioned you are a food processing industry and so on. So, could you comment on that? And then Osman, the generalized version of that question that I think is are there significant public or private infrastructure limitations that you see private enterprise stepping up to do something within Pakistan as well. So, Rajeeb first maybe?

Rajeeb Samdani: Yeah, so basically this is something that we have announced last year, and we have a joint venture agreement with IFC. And IFC and us, actually together, we are building country's first-ever cold chain network, so that is under process, hopefully Inshallah this project will go live sometime next year and once actually this project goes live, this will be the country's first-ever temperature controlled logistic system so it will be a revolution for a country like us because in case of our horticulture sector, we also waste a lot of products, in few cases our post-harvest loss goes up to as high as 47 percent and IFC has introduced cold chain in India, in China, in many other countries, they are also investing in Pakistan. So, that is the similar way we have been doing, right now we are at the construction phase, hopefully Inshallah next year because we

were supposed to go live end of this year but due to this pandemic, things got a bit delayed. So, hopefully Inshallah next year this project will go live.

Tarun Khanna: Osman, any thought on that?

Osman Waheed: In a more generalized way, I think what this Covid-19 pandemic has showed us that this view we had of the world, we live in a global village, everything is interconnected, you order one thing one day in part of the world and you get it the next, all of that has been challenged. And it's exposed these weaknesses in parts of the world, in our case it has been our insecurity in terms of access to vaccine production for example or I don't know medicine API production. There has been so many disruptions that it's really brought home the point that despite everybody wanting to live in one global village, we have to be prepared for situations like this one where it's not going to be the case. Even in Covid-19, when a vaccine is developed a year down the road, one of the challenges that Bill and Melinda Gates Foundation and organizations like SEBI have identified is that there is a real shortage of well-finished capacity for vaccines around the world. So, what you might see is this inequity, a new form of inequity where some countries will have immediate access to vaccination and others will have zero access to vaccination and one of the things that we have been trying to do in Pakistan and the government has been very supportive is to kickstart these industries and invest very heavily in them.

So, we're for example ramping up our production facility in a way that it can very quickly move to vaccine production in 12 months of 14 months down the road. And, you can have then a series of geographically distributed producers around the world the planet and this is something the WHO also has stated as a goal, as part of this equitable access to therapeutics and vaccines that I think is important. It's not just the basic information infrastructure but also these industries, these key industries that are missing, and that in the case of disruption will willy deny access to very basic human requirements unless these inequities are addressed.

Tarun Khanna: But this is, you said this is a new form of inequity that will emerge with some countries having access to vaccines but this is the oldest form of inequity. I mean with the yellow fever 20-30 years ago, yellow fever vaccine was available around the world and most of us in the developing world had no access to it, there were a lot of deaths occurring. So, I think this is quite old problem, exacerbation of pre-existing disparities in times of crisis.

Osman Waheed: Yeah, it's a new manifestation of a very old problem, you're right.

Tarun Khanna: Yeah, new manifestation. Absolutely, absolutely. But is it, since you are in this pharma world, can you report whether you're pessimistic or optimistic or on some sliding scale as to whether, you know, we are in a fractured world, really in so many different senses and it's so difficult to have conversations across preexisting polls of what polarizes segments, yet you have SEBI and GAVI and the MGF and what have you, trying to run these international collaborations and you have President Trump saying 'American First,' and the Chinese saying 'Chinese First,' to some variation on it. How, from your vantage point in the middle of the pharma industry, how optimistic are you about getting, if not equitable then something approximating equitable access?

Osman Waheed: It's, in a sense the pandemic has really brought, simultaneously brought out the best and the worst in us and it's a battle now between the best and the worst in us that's playing out globally. So, I moved from being cautiously pessimistic to cautiously optimistic. But it is actually organizations like SEBI and BMGF that give me this hope that regardless of what global politics looks like, or even regional politics in our case, which is sometimes far more of a challenge than the broader planet. That till these rays of hope that I see, the collaborations that they place in the Covid-19 landscape for example this licensing that's now addressing 127 developing countries with manufacturers in India and Pakistan working together. That's a great example of despite politics some parts of our society coming together and looking to solve these intractable problems.

Tarun Khanna: Very, very interesting. I mean one of the opening comments I made, to me the, probably biggest silver lining of this, the two big silver linings of this crisis have been, you know triggering of a much overdue revolution in education and the realization that despite the political challenges the collaboration of scientific communities have been well and that you really see come through in both these situation. I want to, there are two very different directions of questions to go in and I'll just put them both in the table and arbitrarily pick one. One has to do with government support for businesses in your respective countries and to what extent is it realistic to count on it? I think I know the answer but how do we think about, not just your individual enterprises but just in general at the level of the private sector being supported by enterprises and the second

very different direction is to talk about your respective engagement with the arts, as entrepreneurs in the arts so to speak. Let's go with the government side first, which seems closer to the closer to the past conversation. Osman why don't you start? What role do you see realistically, is the government in Pakistan in any position both in terms of financial capacity but then also in terms of mental capacity so to speak. Organizational capacity to do resourceful things one might hope for?

Osman Waheed: So, you know we have a couple of challenges that have come together to almost make the perfect storm. In the sense the pandemic was a challenge or a crisis on top of another crisis. So, we had a brand-new government in office that had no experience in governance. So, that in itself carries this challenge of having to go through a learning curve, learn what government is about and then begin delivering. So, they were just in the middle of that when this thing struck. On top of that, we were going through a financial crisis as well, I mean the we were leading up to the pandemic, we had already lost about 50 percent of the rupee value in about 18 months leading up to the pandemic. So, all these things handicapped the government and its ability to respond without external assistance. So, unfortunately, it's not a great position to support industries looking to its own solutions, but there are islands within government that have responded well. Central Bank for example has come out with really creative packages to make sure that companies have help in not laying off workforce, companies that are still looking to expand in this pandemic and finding out opportunities of growth, have the resources to do so. But it's really small, great efforts but the headwinds are really challenging.

Tarun Khanna: Rajeeb?

Rajeeb Samdani: So, I think in case of Bangladesh government, government has already provided a few stimulus packages for different industries and all. So, from our side it's not that we are like private, if I talk about my company, it's not like I'm just waiting for government's money to come and then I'm going to survive. So, I think like we, ourselves, we are trying to figure it out that how we come out of this difficult time. Of course, like even for my company also, I work with about 17-18 financial institutions where we are talking to do our restructure of power business, but it was also really nice of government that they are going to cover 30 percent of our current borrowing. Government is going to pay 50 percent of the interest for a year, so government is doing all these things but as I said from private sector, we are talking to our financial institutions and both of us, because these financial institutions, they also need to survive, but we also need time.

But one thing in Bangladesh we have done that you know our country was almost for two and a half months, the entire country was shut, but we have paid our employees, we have paid our workers even Eid bonuses. So, that actually commitment more or less Bangladeshi key entrepreneurs more or less kept, and now we are trying to work it out, a solution with the financial institutions. It's not that we are just waiting that government will give us because of course expectation we should also have some limitations. What probably in US is possible, not possible in Bangladesh today. Maybe 50 years down the line that is going to happen, but not today.

Tarun Khanna: So, there's a tone of realism there. There's a question that is directed to me, but I'll pose it to the group also, which has to do with the technology sector in India and more generally. And the question is that a lot of very high-valued startups that are being funded in different pockets of India, and many of them are in trouble now. So there's exposed head scratching about the evaluations that they were paid and so on. So, the question really is what does that suggest about the nature of the way industrious capitals are located and on the other hand preexisting enterprises that have been in existence for a long time are much more naturally are able to weather the storm in the short run. So, it's an observation more than a question I'm just saying you know maybe we are funding things incorrectly in India.

I am not so sure that I would draw that conclusion personally from that one observation but I would say that there is a very fundamental weakness with the India, even though science in India is very highly developed in some pockets, some limited pockets, the big weakness that I see in my own country is that the ability to take scientific insight to action, to implement science is very localized, it's in a very few sectors. So, when you think about medtech, medical technical devices for instance, when you think about risk capital for biotechnology, or when you think about agtech agricultural technology, these are areas where conventional venture capital and even private equity risk capital is not going to go on its own. It really needs some degree of underwriting because of generalization institutional weakness ensuring that the payback periods are on, the money allocated to this be much longer in developing countries. The state and society have not been able in India so far to build that infrastructure adequately. It's a project in which I've been very involved for the last five or seven years, chaired the committee for the prime minister that wrote the report that eventually got enshrined as our

innovation policy in the country. But you know these are slow-moving things, particularly for large complex countries and my view's that it's a 10-15-year journey that we are already on.

So, from my perspective I'll say the weakness in India that is becoming apparent in any form of crisis that the allocation of money from science to practice is very localized, and also of course localized geographically, which would not surprise you. That's true in every single country in the world but localized sectorally, that's what I was trying to say. I don't know if Osman or Rajeeb have any observations on this side because I'm a big believer that ultimately, unless science is front and center, you're effectively competing in this world with your hands tied behind your back. And so, we have to bring science to the forefront and I take every opportunity I can to shout from the rooftop that this is something that's needed in every country and it's inappropriate to equate poverty with no interest in science, or no application of science or even equate poverty inadvertently as we do, including in Harvard, with inability to generate science, none of those equations are correct in my view conceptually. But let me stop my sermon and see if my panel has anything to say about this. Rajeeb, you were nodding, you have something to say?

Rajeeb Samdani: No, I'm just saying that you're absolutely right. And, I just want to give you an example from Bangladesh's perspective that our ICT division in Bangladesh, they're so super active that in last two months so many products they have launched to support e-commerce products. Because I'm not a too techy person so I won't be able to explain that properly, but I think at least whatever they were supposed to do in the last three years, they have done it in the last two months. So, of course, talking about all these investments in startups, of course no one actually predicted this pandemic, so some of them really took off and some of them are suffering. So, I think it's a matter of time. It's a matter of time.

Tarun Khanna: Osman?

Osman Waheed: Yeah, I think the argument you are making for science and education, in this situation finally you may have an audience here also because what it has forced the government to do is look at how unsustainable we have been as a country. And look at areas like science and technology for example, the need for real industries and those. So some of the innovations that came immediately from young students, young entrepreneurs was for example in the area of ventilators, so suddenly, with a shortage of pace, with a shortage of ventilators, there have been 17 startups in ventilator space that have created these really amazing ventilators in the space of one and a half, two months. And it's forced the government that traditionally has ignored always these things happening right under its nose is now looking at them very seriously. And at least, you know we've never had a history of enabling governments in our region but at least it's not looking to not discourage those and hopefully going forward will also begin to invest and look at these areas, education, health. It has exposed so many weaknesses in our system in such a stark way that I hope that learning that takes place as a result does not get undone right after.

Tarun Khanna: You know I was a part of a very interesting, more as a because of Mittal Institute supported it not as a participant, on what was the title, it was just yesterday, South-South collaboration in pharmaceuticals, and vaccines and so on. And it was a webinar between the David Rockefeller Center, the Latin American Studies at Harvard, and the Mittal Institute and a bunch of scientists from Latin America and India primarily but some other countries as well, and a lot of Cuban scientists. So, Osman will know that Cuba has a very famously has an amazing primary health system, I was quite interested to see a whole collection of, so this is another one with the political barriers are not in the way right, you can do anything on the web. So Cuban scientists were front and center, mixing it up with Harvard Medical School people and putting forth all kinds of intriguing possibilities, including Osman, a very interesting nasal vaccine that they claim has shown an amazing efficiency in NRCT, in Wuhan and other places.

I have no way to verify these statements but they're credible scientists that you know my Harvard Medical Colleagues knew about him, collaborated with, and my friend in Bangalore Kiran Mazumdar who is India's bog biotech entrepreneur, she was in the room also. And she said I've been collaborating with Cuba since 2002, so you know rest of the world is waking up in some way. So, it's just a data point to say that going back to entrepreneurship and science and the connections and the dissolving of political boundaries in this moment because of predisposition to accept this kind of engagement whereas we're really insistent on physical meetings in many ways that were untenable. Any other comments on this line and then I'll move to the arts side for a second. Any other comments Rajeeb, Osman?

Osman Waheed: I just want to say that this is such an exciting opportunity, I mean Cuba, as you mentioned, has a longer life expectancy than Japan.

Tarun Khanna: Yes, I mean the Cuban guy was saying, what was he saying, he said that just in COVID, we have sent entirely funded by the Cuban government, which is not exactly cash rich, a reminder that it's under severe stress, has sent 28 teams of doctors to countries all over South America and Africa. Whatever, it's great. It's really nice. So, let me switch to the arts because I'm actually very keen also to hear what you have to say about it. So most basic question is, not quite phrased in that way but I'll phrase it more starkly, rhetorically, is your commitment to the arts continued even if COVID continues and what struggles, either the Dhaka effort or the Lahore effort face, assuming worse case that this crisis stays with us and how are you thinking about it as ultimately entrepreneurs behind two important destinations in the arts scene in South Asia and in the world, in Dhaka's case and soon for Lahore's case. Rajeed you want to go first?

Rajeed Samdani: Yeah, sure. So, for us actually, mainly Nadia, she runs the foundation and we are staying positive and even day before yesterday we launched a new program called Art Around the Table. So, one thing, since we are all sort of sitting at homes, our artists are sitting at home, so every Thursday we have a Zoom call with a group of our artists and that is how we have been staying connected. And separately we have launched this program called Art Around the Table, so what we have done, we have invited a group of artists, curators, museum directors, scholars around the world. They are running different educational programs for our emerging artists and basically what we are doing, instead of giving them any fees, that fees we are donating to an NGO called Jaago Foundation in Bangladesh.

So Jaago Foundation mainly runs schools in the slum areas, also in Rohingya camps and during this difficult time Jaago Foundation is supporting all the kids and their families around Bangladesh. So, the way we have designed this program, that you know this, from our friends from all around the world, through them our artists are learning so many things and their contribution is going to this foundation in Bangladesh, so that is how we have designed this program. We are grateful to our friends who have all come forward and of course the Dhaka Summit, we hope that the vaccine will be invented, and again we're going to have half a million people in 2022, I'll also go and visit Lahore Biennale. So that is the plan and we are staying positive. So, I hope that you guys invent the vaccine very soon.

Tarun Khanna: Osman that's directed to you.

Osman Waheed: Yeah, so you know it is one industry that is catered to respond to something like this, it's the arts. Because art is what we imagine it to be and this pandemic reminds me of the very first project that the Lahore Biennale Foundation did when we started of, which was a collaboration with the Venice Biennale, it was a project called My East is Your West, and it brought two artists, one from India, one from Pakistan, Rashid Rana and Shilpa Gupta together in a palazzo in Venice where each had half the room. And Rashid's part of the show was this series of visual experiences and one of which was this room that you enter in Venice, and when you enter there's a, on your left there's a fireplace for the painting of the Madonna and when you turn to the right, there is this giant mirror. And, he built an exact replica of the room in the middle of the Liberty market in Lahore and just planted this green space in the middle of a parking lot and when you enter that container in Lahore, you had a painting of the Madonna to your left, fireplace underneath it and to your right was again this mirror, which is actually a high speed data connected screen where suddenly you would have a completed an unexpected interaction with an audience in Venice. So, you know, you'd have these series of interactions between people that was purely virtual but was so amazingly profound.

So, I'll just give you an example, on the Venice side we were there for the opening and there were a lot of these really attractive Italian people on the Italian side looking at Lahore and you see this little boy with a rag on his shoulder, he was cleaning cars outside, walks in, looks at these girls and starts singing this song in Punjabi. He sang so beautifully that even though they didn't understand a word of what he was saying, when he was done, they were all in tears. The whole room was in tears, and that's really the power of art. It crosses too many boundaries, it allows you to have so many impossible conversations that if anything is suited to respond to this kind of pandemic, art's probably front and center.

I will say that I have just stepped down from the chairmanship of the Biennale, nothing to do with COVID, it's just a way to institutionalize hopefully this effort and I will of course continue to support it and Biennales will take place whether virtually or physically. I'm sure the next Dhaka Arts Summit will, every edition, I went to not this last edition, but the one before, it was just unbelievably amazing. And it's become such a center of the arts for the entire region, not just Bangladesh that these are ways to bring us together that have existed before and I think much more needed going forward.

Tarun Khanna: That's so heartening to hear both of you, both the in the small, specific way Art Around the Table is a fabulous, simple innovation that anybody can institutionalize immediately once you hear it. And the evocative example of the little boy singing Bulleh Shah in a Lahore parking lot to a Venetian audience is spectacular in fact. Let me push both of you for a second on the arts because it's become a little bit closer to my heart as a result of my being part of the institute and having the privilege of engaging with so many of you. We are engaged, the Mittal Institute particularly my colleague Meena in trying to trigger what I would call creativity in the arts establishment in India. And by arts establishment, I mean very in an encompassing sense, you know, artists by definition are creators and entrepreneurs in a sense. Each artist is his or her own entrepreneur so I would obviously see them in the high ground demonstrating creativity, but I'm talking about the rest of the infrastructure, the museums and with the exception of the two of you and like minded colleagues who are involved in Biennales and so on.

There's a lot of rigidity and even among private collectors, you know India has seen a resurgence of wealth in the last twenty years, so there's any number of individuals who have private collections. And in a sense, they all know each other, so when you go to any of these events, you would know all of them and I know most of them but it just seems to me that it's becoming more like a private sale and I wonder if you want to disabuse me of the dismal prospect and I would be thrilled if you did. Or agree with me and think about what could as civic-minded people, civic minded self-started creative people, what could we do to make sure that the answer for everybody beyond what you, the considerable things that both of you are already doing. Let me just pose that as an open ended, I'm particularly distressed about the museums actually and what I see is incredible rigidity and Ostrich like heads in the sand so to speak, in many instances not all. Anybody?

Rajeeb Samdani: Yeah, in case of India actually I think our dear friend Kiran Nader, she is also building a massive museum. And there are other collectors who are slowly, gradually, because for us South Asians, it took us some time to sort of because of the way actually the western world operates versus it's a bit different. So, I think in the last two-three years, I'm seeing a lot of people who are interested, they are forming foundations, they want to support art, they want to start their own institutions, so I think it is changing. It's a matter of time, it's changing, and you know I also coach here at the South Asian community for Tate museum so Tate here was the first museum to look at South Asia so seriously. All this sort of correspondence and communication and connection also started quite recently. And even if you look at our Biennales, Kochi Biennale also started in 2012, Lahore started four years back in 2016, right Osman?

Osman Waheed: 2018 was the first Biennale but yes, the foundation started in 2016.

Rajeeb Samdani: So, Dhaka started also in 2012. So, all these things are actually happening in the last 10 years. So, I think, slowly gradually, it is changing. And of course, the Mittal Institute, your art council people like you are also changing this, bringing people together. So, I think you know it is changing is what I believe. Osman, what do you think?

Osman Waheed: Yeah, you know, I think we long had this problem in our part of the world that art has been seen as a luxury. And, so the only access we had to art in Pakistan at least was are there in private homes, so you saw beautiful works of art or some galleries or one odd museum that nobody bothered to visit. And that's why I think attempts like Dhaka and Kochi in India and Lahore have been important because they are not just democratized art, they've used it as something beyond an exercise in aesthetics. It's almost a vehicle for social impact. I was amazed to see the number of school children that came to the Dhaka Arts Summit in folds. And similarly in Lahore, when we were trying to hold the first edition, the government was initially very negative. They said nobody will bother and come, look at the Biennale, why are you asking us even for support but he and a quarter of million visitors in a fortnight. So, it's challenged that notion of art as something exclusive, and you're right, I think museums are at risk of being left behind.

We've tried to work with the museums in Lahore for example to try and help revitalize them because they were places that were in neglect anyway. But in places like the US, where you have the abundance of museums, I think you do need to, there needs to be a lot more innovation in museums, I think.

Tarun Khanna: I think we are at a really interesting moment, both of you know that I'm a trustee of the Museum of Fine Arts in Boston and you know the museums have been devastated by COVID. And in a positive way, because museums here are not all supported by the state at all, they are all private institutions supported by local philanthropists primarily, so there's a lot of soul searching on about what the museum future will look like. And again, it's an inflection point, you know technology is going to play a much bigger role than it has in the

past or force both on the supply side so to speak because it's possible to do things that you couldn't do before and the demand side with the nature of the financial constraints that are imposed on it. So, I think of it as sort of a creativity under constraint in some ways. Let me, this seems like a good moment on the high note of arts to think about closing down the panel. We usually try to run these for no more than 90 minutes, but we found that the optimal time is 60 to 70 minutes when people start to get tired of staring at a screen, the Zoom event. So it seems like a good moment but I'm just going to give each of you the last word. Osman, why don't you go first and then Rajeeb can close things up. Any last thoughts, reflections, anything of that sort?

Osman Waheed: Just thank you for this opportunity. It's nice for us to get together and have this discussion. And I just think that this is a real opportunity to have many such discussions in many areas and as academic institutions, and as individuals that are engaged or really fond of ideas, communicating ideas, this is in a sense an opportunity that should not be let go of.

Tarun Khanna: Thank you, Osman. Rajeeb?

Rajeeb Samdani: Thank you, Tarun. Thank you for having us and thank you for thinking about Bangladesh and as I said that you know we are staying and hopefully all these things are going to end soon, or we are going to adapt soon but we will come out of it whichever way. Inshallah, thank you, thank you so much for having me, and great meeting you Osman too.

Tarun Khanna: Wonderful to have you both as Chelsea, my colleague, started us off, you know the function of the Mittal Institute is to bring together people for exchange of ideas, stimulate research and creativity and teaching in all manner of issues related to South Asia either by dissemination or by learning in two ways and I'll just remind people that we have two relevant webinars to the immediate interaction. One I think is on, it's early next week I should know, I think it's on Monday on vaccines particularly in the South Asia context and one is on the fashion industry in Bangladesh and what it's going through towards the second half of next week. I think next Friday, so thank you again and thank you to the audience, there are a whole host of questions here, usually our team collates them and does something with them, so expect to see something on the website at some point. And, it's been my privilege to have my two friends Osman and Rajeeb with me, thank you again. Have a lovely rest of the evenings where you are and the rest of the day if you are in the Americas. Take care.