

Food Entrepreneurs in Africa: Scaling Resilient Agriculture Businesses was given on October 15, 2020 by Ndidi Nwuneli, co-founder of Sahel Consulting and co-founder of AACE Foods. It is part of the Mossavar-Rahmani Center for Business & Government's weekly webinar series.

William Clark:

... Ndidi Nwuneli has been, as Scott said, a senior fellow here at the center where my colleagues, Max and I had the pleasure of being her host and working with her on some of the material that she will present today and a whole range of other things.

William Clark:

For those who don't know about her, she's generally an expert on African agriculture and nutrition, philanthropy, social innovation, and the like. Wearing her official hats, she is a Managing Partner of Sahel Consulting, Agriculture, and Nutrition which works across West Africa on shaping agricultural policy. She's Co-Founder of AACE Foods, which I just found utterly fascinating when she described it to us as she was here. Sources foods from over 10,000 farmers around Africa, produces a range of packaged spices, seasonings, and so on, making African cuisine a centerpiece of the world economy just as other cuisines have been.

William Clark:

She's a Founder of Nourishing Africa, a digital and knowledge platform for food and agriculture entrepreneurs and of LEAP Africa, which is empowering and expanding leaders in the field.

William Clark:

Well, in one of her earlier ventures with us she authored, Social Innovation in Africa, a practical guide for scaling impact, which was published by Routledge. She has got a new book just about to come out early next year entitled, Food Entrepreneurs in Africa: Scaling Resilient Agricultural Businesses. We're looking forward to seeing it, but we get a special look ahead at it. With great pleasure, I introduced to you, Ndidi Nwuneli. Thanks for being here.

Ndidi Nwuneli:

Thank you so much, Professor Clark, and thanks for being a fantastic advisor during my time at the Harvard Kennedy School. A special thanks to Scott Leland and the entire team at the Mossavar-Rahmani Center for Business and Government. I've come twice to the center. That's how much I love the center. I really appreciate the guidance and support that the entire team has provided. I have a presentation I'm going to run through and we can then take questions at the end.

Ndidi Nwuneli:

My whole motto is to start off with a case for food self-sufficiency in Africa, to share some key insights from my research, and some suggested ways forward. You can see the picture I've started this presentation with, when I first came to the United States for college at 16, this was the picture that was the face of Africa, hungry children. This picture followed me around dinner parties, train stations, TV infomercials, and it really upset me because this was not the image I had of Africa.

Ndidi Nwuneli:

I committed to changing this narrative because Africa is naturally endowed for agricultural excellence. Not only do we have rich soils and natural rainfall and sunlight, but 50% to 70% of our population works in the agriculture sector. 80% of the food that's consumed on the continent is produced by small holder farmers and processed by SMEs.

Ndidi Nwuneli:

We're the number one producer of cocoa, of coffee, of so many other value chains, cashews, when you aggregate all the different countries, Fonio, which is the equivalent of quinoa, highly, highly nutritious and so many other value chains.

Ndidi Nwuneli:

I started a number of companies, Professor Clark mentioned, Sahel Consulting, which works across Africa, transforming the agriculture and nutrition landscape, AACE Foods, which is an agroprocessing company, which produces a range of spices and complimentary food, addressing moderate malnutrition and most recently, Nourishing Africa, which I'll talk about.

Ndidi Nwuneli:

But through my experiences, as an entrepreneur, trying to scale these businesses and working with many of the entrepreneurs through LEAP Africa, I identified that many entrepreneurs were struggling to scale due to lack of funding, poor links to markets, weak brands, insufficient or ineffective business models, limited access to data, and unfavorable policies. I shared these challenges and many other entrepreneurs share these challenges.

Ndidi Nwuneli:

I decided to embark on a research project building on the great experience that I had had in 2014, 2015, writing the book on Scaling Social Innovation. I decided to write another book, but this time focused on agripreneurs and their role in transforming the agriculture and food landscape in Africa. When my book has eight chapters, and I'll walk you through the key insights from each of the chapters today.

Ndidi Nwuneli:

The first chapter is really focused on what the current context is in the African agriculture landscape. We all know that we're going to have 2.5 billion people by 2050, according to the United Nations on the continent. One thing is for sure, all of these 2.5 billion people have to eat.

Ndidi Nwuneli:

Now, their critical reality though, climate change is a reality on the African continent. Just this year in Nigeria, we've experienced tremendous floods and at the same time, serious drought. At least four states in my country have experienced unprecedented and floods, which have covered all the farmlands and devastated businesses.

Ndidi Nwuneli:

Climate change is real, and it's setting us back and setting back so many gains that have been made in agriculture. We continue to experience high post harvest losses in some value chains, as high as 40% to 60% for fruits and vegetables and in grains about 20%. Unlimited processing, unlimited value addition.

High rates of malnutrition among the continent. One out of every three children is stunted still today in the 21st Century.

Ndidi Nwuneli:

We continue to struggle with infrastructure, talents, and financing gaps, poor regulatory environments, flip-flopping of policies, and sometimes mixed messages by our government where we have import substitution one day and export-led growth another day.

Ndidi Nwuneli:

Gender inequity, with huge gaps when it comes to women in agriculture and huge gaps translating into serious barriers to women taking their rightful place across the value chain with financing gaps, with limited access to land, et cetera.

Ndidi Nwuneli:

Then some serious regional and trade dynamics where Africa is still viewed as a net export of commodities, as opposed to an exporter of finished products in the food landscape. Serious trade imbalances, where Africa is still remains a net importer of food.

Ndidi Nwuneli:

However, there are lots of promising trends. Digitization for Africa with close to 400 digital innovations that are actively being used across the continent to leapfrog technological innovations around seeds and soil health and innovations that directly address the climate challenges.

Ndidi Nwuneli:

Youth engagement with an unprecedented number of youth entering the sector with lots of great ideas and great businesses, a growing middle class that is appreciating African food and proudly nutritious food sourced locally, a growing interest in healthy diets. This is very important for the continent.

Ndidi Nwuneli:

Finally, a focus on equity and the Black Lives Matter Movement, and all the different initiatives have inspired many, many African entrepreneurs to push for a level playing field, not just for trade, but for financing for agriculture entrepreneurs.

Ndidi Nwuneli:

The second chapter really focuses on what it takes to scale and to build a compelling business model. For this, I interviewed close to 80 entrepreneurs, top leaders and financiers in the agriculture landscape. For all of them, these six critical components were so pivotal to their scaling.

Ndidi Nwuneli:

The first is that their business model had to be demand driven with measurable value addition. So it's important for a lot of us, who are in the agriculture sector, to sift between what our interests are, what donors are subsidizing, and what the market is really willing to pay for, and what the market values.

Ndidi Nwuneli:

Every business model today, and COVID-19 has pushed us into the need for technology and data and innovation in ways like never before. Every business recognizes that they have to leverage technology. Every entrepreneur who's going to scale in agricultural sector has to shape the ecosystem, has to get involved in policy and create an enabling environment for their business to survive. That business model has to be cost efficient dynamic with class systems and structures and boundaries and controls. The business model has to have simple and compelling branding.

Ndidi Nwuneli:

Finally, it has to infuse resilience into its DNA because COVID-19 is just one shock and there are going to be so many other shocks to the agility and the ability to mitigate shocks and risks are critical.

Ndidi Nwuneli:

Two of the businesses that I really was inspired by are Cowtribe in Ghana, which leverages technology to get vaccines and all the support systems and structures to livestock farmers. Ensuring that their cows and other lifestyle can live productive lives and ensuring that the barriers between rural communities are really eliminated using technology.

Ndidi Nwuneli:

Twiga is another very interesting model. Now, the founders of Twiga started with the idea that they were going to be exporting bananas to the Middle East. That was their business model. But as they researched and delved into this, they realized that there were not enough standards and enough providers of high quality bananas for the Middle East. So instead of exporting, they started saying, "Let's create a supply chain in our own country."

Ndidi Nwuneli:

Now Twiga, basically sources from small holder farmers or medium sized farmers and ensure that all the urban small retail outlets in Kenya have access to fresh fruit. You order on your phone and within 14 hours, farm fresh fruits is delivered to your stalls. It's just created such an efficient market. Twiga has been able to raise over \$60 million just because of how quickly they've been able to scale.

Ndidi Nwuneli:

Maneli Pets is also very exciting innovation, which shows you that you're going to have to refine your business model as you progress. This Harvard graduate also started with the desire to export very high quality meats from South Africa to the rest of the world and quickly realize that the standards that were expected from a safety perspective were difficult to meet.

Ndidi Nwuneli:

So guess what he did, he pivoted quickly to start exporting pet food. Now, he exports to 12 countries, high end, high quality pet food and has realized that people are willing to pay three times what they'll pay for themselves for their pets. It's even more profitable to sell pet food than it is to sell regular meat.

Ndidi Nwuneli:

Now, the third chapter is really focused on talent. Once you've gotten your business model right, have to have the right team around you. You have to build your capacity as a leader, constitute a strong

board of directors, and show that you have a strong talent base, outsource where you can, structure for innovation and excellence as part of your culture.

Ndidi Nwuneli:

There are many, many examples showcased in the book of innovative approaches to leveraging talent, to building a pipeline of talent. Nucafe in Uganda actually has over 300 employees, but really only 53 are full time. They have 65 interns and a lot of field-based staff.

Ndidi Nwuneli:

The same with Good Nature Agro. I actually met one of the founders of Good Nature Agro when I was at the Kennedy School who came to hear my talk last year. They leverage a whole network of private extension agents, have been able to scale by almost building a little university or a little school to build the skills of their private extension agents.

Ndidi Nwuneli:

The fourth chapter is focused on leveraging technology and innovation. This, for me, is really what is going to ensure that we achieve the Green Revolution that we've been pushing for on the African continent. There are so many great tools available to entrepreneurs now around financial inclusion, advisory support, market linkages, weather information, supply chain linkages, and market intelligence.

Ndidi Nwuneli:

Then when we think about every single component of the business, lots of advances in drought resistant seeds, biofortified seeds, lots of interesting approaches through mechanization and the use of data, post harvest aggregation, cold storage technology, energy saving devices, bio fuel, et cetera, and processing tools.

Ndidi Nwuneli:

We're seeing this on the African continent, the use of sensors, the use of mobile applications. What is fueling this? It's really the availability of mobile subscribers. In 2018, there were 426 million mobile subscribers, and this is projected to reach 625 million by 2025. So the cellphone has revolutionized how farmers interface with markets and how processes interface with farmers. This will really help us leap frog in a lot of ways.

Ndidi Nwuneli:

This chapter really focuses on what entrepreneurs need to know and how they need to embrace it. The entrepreneurs who are driving the technologies, how they can scale their approaches as well as ensure more feed paying subscribers and customers for their digital innovations.

Ndidi Nwuneli:

The fifth chapter focuses on branding. For me, this was the biggest learning is that there's so many great entrepreneurs on the African continent, but they are struggling to attract financing and support because they don't know how to tell their story and amplify their voice.

Ndidi Nwuneli:

We often say there are few donor darlings or few investor darlings who get all the support and all the attention. But the truth is that these companies who do have been very strategic about how they tell their stories, starting from their name, the company name they pick, all the way to their logo, their tagline, their brand promise, their marketing strategy, their presence online, their digital marketing strategy, how they packaged their products, how they build supply chains and distribution networks. I've just been so inspired by many, many of them.

Ndidi Nwuneli:

One of them is called Hello Tractor. I'm sure many of you have heard of Hello Tractor. They're punching way above their weight. When I talked to the founder of Hello Tractor, he said, the first thing he did was actually take a communications class and figure out how to leverage and amplify his voice. Then he said, every morning, he listens to the podcast from the CEOs of all the companies in his industry. So the CEO of John Deere, the CEO of Caterpillar, and the CEO of all the companies that he works with and he's positioned himself to serve as a service provider.

Ndidi Nwuneli:

He basically has switched from saying, "I'm the Uber of tractor," to, "I'm providing the software to enable tractor providers and equipment providers reach the farmers." It's so amazing because he's been covered in Fast Company, Forbes, Washington Post, and New York Times. He hasn't paid for any of these incidences because his partner are the ones who have the relationships. It's just such an exciting story about how he's been able to scale, even beyond Africa now to South Asia.

Ndidi Nwuneli:

Java Foods is a very interesting example that's also leveraged media and branding and storytelling to build her brand, starting with a noodle company, she's now making nutritious food as well, Super Cereals, et cetera, for the World Food Program and has really created a very strong brand for her products, eeZee Noodles, eeZee, a broad range of products under the brand of eeZee and then Super Cereal.

Ndidi Nwuneli:

The sixth chapter focuses on financing. A lot of young people and young entrepreneurs always struggle with accessing financing. But what I learned from my first book, and which was reinforced by this book, is that there's more money chasing projects and more money chasing entrepreneurs. There are so many different permutations of what is available from grants, to prizes, to private equity, venture capital, challenge funds, accelerators, incubators.

Ndidi Nwuneli:

But that many of our entrepreneurs are not investment ready. They don't have strong financial systems and controls, they haven't been able to build a strong board of directors to demonstrate governance and transparency, and they don't have clear profitable exit potentials for the investors.

Ndidi Nwuneli:

We've seen, by looking at so many stories, that there are many pathways to build your investment readiness and many new opportunities for supports that are available to you, from blueMoon in Ethiopia, that I visited and we were just amazed at the great work they're doing, to the Co-Creation Hub

right here in Nigeria. In between, there's so many other opportunity for entrepreneurs who are excited and interested in the agriculture and food landscape.

Ndidi Nwuneli:

The seventh chapters is really focused on shaping your ecosystem. If COVID-19 has shown us anything, is that you can't be a bystander, you have to get in there and shape the policy in the environment in which you sit in. Every day is a new adventure, new challenge, new risks. Your role as an entrepreneur is to really build the bridges that will enable you to shape the political landscape that affects you, not just in terms of the policies that affect your specific value chain, but the financing available to you, the human capital available to you.

Ndidi Nwuneli:

It requires that you map your ecosystem, you identify the enablers, the beneficiary, the opponents, the competitors, and the effected bystanders. Then you actually get involved in influencing the regulatory environment, the competitive environment, the geography and infrastructure through joining professional networks and actually being part of associations and shaping the norms in your environment.

Ndidi Nwuneli:

A very interesting example that I visited in Rwanda as part of my research is called Africa Improved Foods. It was actually started through a consortium of investors, DSM, FMO, CDC, and IFC. These are large institutions, but they decided to partner with African entities and the Rwandan government to create this amazing company that produces Super Cereal. Seven cents an hour and have been able to expand their distribution network across East Africa, really through this PPP, this private public partnership, demonstrating that you can actually form very complex relationships and shape policy and shape the ecosystem. There are many examples of this that are emerging across the continent, which demonstrate what is possible in the ecosystem.

Ndidi Nwuneli:

My final chapter, which I added during COVID is about building business resilience. Because during COVID, about 50% of the companies that we interface with were struggling and many were wondering if they would actually survive this pandemic. When I did some research, the research indicated that 43% of businesses never reopened after a disaster and 25% of the companies that do fail within a year.

Ndidi Nwuneli:

The challenge for all of us in this ecosystem, that's so vital to Africans development, Africa's future, is to embed resilience into the DNA of our company. It starts with the leader really. Deloitte actually defined a resilient leader as someone who is genuinely, sincerely empathetic, walking compassionately in the shoes of employees, customers, and their broader ecosystem. I feel like so many entrepreneurs need to build this resilience model. Watch this space, there might be a new book just on resilience.

Ndidi Nwuneli:

But it's really required a whole muscle around building resilience, around scenario planning to stabilize the business, to plan for the future, to be agile enough to respond to challenges as they emerge, and to figure out how to shape the ecosystem.

Ndidi Nwuneli:

There's also a big component around financial resilience, about building savings buffers. It's not enough to just have three months of savings in your business. You have to have a full year of savings if you do have challenges, investing insurance, managing costs, hedging your risks, especially with their currency devaluations. In Nigeria, in the last six months, we have experienced a major currency devaluation. Investing in scenario planning, as I've talked about, and then opportunities for support.

Ndidi Nwuneli:

What are some ways forward as I start to close? First is a sense of urgency. I started off with saying that Africa is naturally endowed as a cultural excellence, and that the private sector can and should be driving the growth required on the continent. A recent SOFI report that was just published by the Food and Agricultural Organizations said that 57% of Africans and South Asians cannot afford a healthy diet, 57%. Which has huge ramifications for health indicators.

Ndidi Nwuneli:

Food is medicine. If anything that COVID-19 has shown us that we need a healthy population to withstand health shocks. When you think about what healthy diets is, they are fruits and vegetables, whole grains, diversified protein supply, and reduced consumption of salt and sugar, and highly processed food. The challenge is that our food is still too expensive for the average African entrepreneur, especially healthy food.

Ndidi Nwuneli:

COVID-19 has brought new challenges to our landscape. Many, many people are struggling to even pay for unhealthy food, not to talk about healthy food. So there is a challenge for us, all the entrepreneurs, to really think through how we can ensure the availability and affordability of nutritious food all year round for our people and how we can reduce the cost of food so that more people can afford nutritious food. This requires innovation.

Ndidi Nwuneli:

The last business I've just started during COVID-19 is called, [NourishingAfrica.com](https://www.nourishingafrica.com). I hope all of you will visit this website. I know that Bill Clark told me when I was starting this book, he said, "Ndidi is not just the book. You need to think about how to get this information out there to change ways people live and ways people work." So we did that. We created a website, [NourishingAfrica.com](https://www.nourishingafrica.com), which has now become a full fledged business.

Ndidi Nwuneli:

Our mission is to drive the profitable and sustainable growth of African agriculture and food landscapes by attracting, empowering, equipping, and connecting over a million entrepreneurs who are dynamic innovative and who really drive the future that we desire for this continent.

Ndidi Nwuneli:

Our vision is a flourishing, sustainable, and just food ecosystem, which leverages agtech and digital innovation, driven by African's vibrant and entrepreneurs to ensure that the continent nourishes itself and becomes a net exporter of food by 2050.

Ndidi Nwuneli:

We've created this one-stop shop. It's a combination of LinkedIn, DevX, and Facebook for ag and food entrepreneurs. It has a members' portal, a jobs' portal, events portal, knowledge portal, a funding portal. Please, I encourage all of you to visit this. There's lots of funding. So search by country, search by value chain, search by types of funding. It has an events' portal, a knowledge portal, a food culture, and jobs portal, and it lots of benefits for the members.

Ndidi Nwuneli:

We have over 500 agribusinesses already on the portal, 32 countries represented, knowledge sharing sessions, webinars, podcasts, ask an expert, first Thursday, and we're just about to launch a fund to help entrepreneurs rebuild post COVID.

Ndidi Nwuneli:

As I round up, and as I think about the future of our food ecosystem, and as we celebrate World Food Day tomorrow, it's really important that we shift our mindset from thinking about food as just agricultural production, to look at the entire ecosystem from farm to fork, to look at food environments, individual behaviors, and consumer behavior, and the impact of climate change. Because food is at the heart of the SDGs. In fact, every SDG could be addressed if we unlock the food and agriculture potential in our countries, in our continent, and in the world.

Ndidi Nwuneli:

As I end, and this is the conclusion of my book, I start to think about the future that we want and the future we must build as African entrepreneurs for our continent. I was inspired by one of the visions set forth by an entrepreneur who was just selected as one of the finalists for Rockefeller Foundation's World, Food Systems Change Prize.

Ndidi Nwuneli:

He says, "By 2050, people will eat food because they like it. They'll have choice. They'll be able to afford it, that food. While cultural, diet, economics, and environment will be important, science, technology, and innovation will be pivotal in driving food production systems." He lays out very robust vision, which matches the vision we have for Nourishing Africa.

Ndidi Nwuneli:

I'd really requires that we start changing our mindsets, first about the opportunities in the food and agriculture landscape and about African food. That if you are an entrepreneur, you review your business model, you start leveraging and using tools like Nourishing Africa to scale, you advocate against dumping and food fraud, you start to shape your ecosystem, and then you start telling positive stories.

Ndidi Nwuneli:

I'll end with a quote, which I really love, which inspires me. It's a Tibetan quote that says, "If I tell you my dream, you might forget it. If I act on my dream, perhaps you'll remember it. But if I involve you, it becomes your dream too." My hope through this book, through this research, and through my work is that my dream that Africa will nourish itself and nourish the world becomes your dream too. That we work collaboratively to achieve that in our lifetime.

Ndidi Nwuneli:

Because this is the face that I want you to think about when you think of Africa, healthy children, who eats nutritious food, who live full and meaningful lives, and who achieved their highest potential. We can do this together, working together as entrepreneurs, as activists, as change agents, as thought leaders to ensure that this narrative becomes our reality. Thank you so much.

William Clark:

So Ndidi, thank you so much. Anyone in your audience today and your audiences around the world who can resist becoming part of your dream, is a less receptive person than I, that was just immensely compelling.

William Clark:

I know we've got a big audience here and I'll open it up for questions from them in a second. I'm going to cheat though in his chair start with one or two myself. One of the big trends that you've touched on at the beginning, but then wasn't central to your argument that I'd like you to expand a little bit on, is the rapid urbanization that is going on in many, though not all parts, of Africa. How do you see these trends, really quite radically rapid trends towards urbanization, both creating new opportunities for the food and agriculture sector, but also presenting new challenges to it.

Ndidi Nwuneli:

Thank you so much for that question, Bill. I think you have a sixth sense. I always knew you did, because I just contributed an op-ed to CSIF, which was just published today. They have a series called, Resets the Table, and the op-ed I was asked to write was really focused on the urban communities and what's going on.

Ndidi Nwuneli:

I started off by basically saying that the viability of cities is being questioned with COVID-19. The food pressures and the fragility of the food ecosystem in cities has been unprecedented. I live in Lagos, and we have experienced food prices hikes by up to 50%. Of course, there's no data reported on cities, but I can tell you that my food bill has doubled in the last six months. That has been a similar trend across the world.

Ndidi Nwuneli:

In fact, food banks have seen demand. The Pew Research shows 17% of US adults have visited food banks in the last six months, 17% of US adults. It's not just unique to Africa. This presents unique challenges and opportunities.

Ndidi Nwuneli:

In terms of opportunities, I would really say that the first thing we have to do is to actually create a cross sector task forces or task teams in every city, because food is not just for those in agriculture. We need leaders in health, education, technology, manufacturing, trade, transportation, water, climate, gender, financing, to really think about what to do around food.

Ndidi Nwuneli:

We need data in our cities to look at where food comes from, how it's eaten, where the gaps are, where the demands are. I looked at examples like what Austin has done, Austin, Texas and Nairobi is doing. Nairobi actually came up with a comprehensive Urban Agriculture Promotion and Regulation Act to help guide actors in this space.

Ndidi Nwuneli:

Second is private sector. We need private sector organizations to work collaboratively, to leverage technology, to reduce costs, to share infrastructure, to share storage facilities, because hidden hunger is a serious issue in an urban center. We also need community gardens, urban gardens, groups of garden.

Ndidi Nwuneli:

It's interesting with this work I'm doing, the visioning exercise for Nigeria, that one of the teams said, "We need some mandate that anybody who's building a high rise, devotes the rooftop to rooftop garden." And I said, "Can you really mandate that?" But these discussions are bubbling up because we realized that with cities, they're too dependent on other communities for our food and a simple lockdown and the city's locked up.

Ndidi Nwuneli:

It's urgent, it's timely. I put in the link to my article and I encourage all of you to please check it out because for me, this is something that is pivotal to a future. Especially with urbanizations, 60% to 70% of Africa is now urbanized. Only about 30% to 40% of our rural areas are still rural in the true sense of the word.

William Clark:

Thank you very much. I have lots of other questions, but I see many from the audience do as well. So let me, at least, temporarily turn it back over to Scott to be the one who's guilty of picking which ones get their opportunity.

Scott Leland:

Great. Thank you very much, Bill and Ndidi, especially for a great presentation, very inspiring, a lot of really good information. I'm just going to start going through some of the questions that are coming in. From Jeffrey Mason, we have regarding the regulatory challenges African agricultural firms face, are you able to speak to the experiences of firms with agroprocessing or export zones and facilitating their business activities and growth?

Ndidi Nwuneli:

Yeah, so right now, actually is a very interesting time because we have this Africa Free Trade Continental Agreements that's about to take off in January 2021. That's going to promote more regional trade within the continent. Historically, there's been very limited formal trade between African countries. We, as AACE Foods, actually export. We export to South Africa, we export to Europe, and small amounts to the United States.

Ndidi Nwuneli:

The biggest barriers we face are really around ports delays. In the Nigerian context, our ports are extremely inefficient and sometimes a product can be there for 30 to 45 days before they leave the

country. The red tape is about 14 steps that you have to go through before you get your product out. You can imagine how long that chain becomes if your product is stocked for 40 days. Then it has to be on the sea for a month. Then it gets to the other country and they have to be tested. With food, you have a shelf life. So that logistical barrier has to be addressed in ways that I can't imagine.

Ndidi Nwuneli:

Now for those who are in the West, for me, the biggest help you can provide to us, is helping us with the regulatory issues on the other side. When we get to your port, what happens? I think helping African processes meet standards, helping African processes navigate the red tape on the other side, if it's FDA approval, USDA approval, or whatever it is.

Ndidi Nwuneli:

Then also building those market linkages between countries is really important. Helping African entrepreneurs get into the Walmart's of the world, the Amazons of the world, and meet the standards required.

Ndidi Nwuneli:

From a regulatory perspective, I think we have to create a level playing field. What we often feel on the African continent, and someone said it very accurately yesterday. She says, "I sell to the United States and people either expect my products to be cheaper and substandard or buy me because they think they're helping charity," and she said, "We need to change that narrative," because African food, African product, can meet the standards, can compete.

Ndidi Nwuneli:

I know Scott you've gotten some of our spices. We have the best ginger in the world. In fact, Nigerian ginger is the best in the world, hands down. So companies from India come buy our ginger, take it to India, package it nicely. Then you think you're getting spices from India. You're not realizing that they are sourcing in Africa.

Ndidi Nwuneli:

I think for me, it's really around changing our narrative about the quality of African food, traceability, because we do have that traceability. People ask me, "Is your food organic?" I'm like, "Well, only 4% of our farmers use fertilizer. So it is as organic as it comes." But we really have to change that narrative and ensure that we create a level playing field to make it easy on both sides of the divide for African food to get to the West and for food from the... we already have lots of imports from the United States. So we need to change that balance and balance that power a little more going forward.

Scott Leland:

Thank you. I can certainly vouch for the quality of the ginger and spices. Next up, we have a question from Alvares Goetz. She says, "Alvares from Paris. I represent Unitlife, a UN initiative fighting chronic malnutrition of children, especially in Africa. How can we," meaning Unitlife, "Engage with local private sector actors in Africa to fight nutrient deficiencies in the daily food intake?"

Ndidi Nwuneli:

So the great thing is that right now there's so many new initiatives bubbling up that are very open to partnerships. I would encourage you to please check out NourishingAfrica.com. You will find a lot of entrepreneurs who share your passion and vision for addressing malnutrition.

Ndidi Nwuneli:

I'm also part of the Africa Philanthropy Forum. I think they are a great partner to work with you because they have quite a few African philanthropists that are committed to this. Then growing number of nonprofit organizations committed to fighting malnutrition.

Ndidi Nwuneli:

I also think the private sector is a very worthy partner. I spoke at the World Food Prize yesterday about the role of private sector in fighting malnutrition. I think we have to hold private companies accountable, I think they have to invest in innovation, to reduce the cost of food. They have huge marketing budgets, so they can actually influence what people eat. We need to channel that energy towards influencing people to eat nutritious food. We have to hold them to standards around mandatory fortification and additional exceeding that ensuring healthy food is produced and it's affordable.

Ndidi Nwuneli:

I think there's so much to do and many, many initiatives. So please reach out to me. I'm happy to engage with you directly on this.

Scott Leland:

Thank you. Next up from Tim O'Brian, "What do you think about national, regional, local governments can do better to catalyze the emergence and growth of companies like those who've highlighted. What's the role of government sector?"

Ndidi Nwuneli:

Government has a pivotal role to play. Food is really local. What we're even trying to encourage is, shorter value chains and more locally sourced food. One of the key requirements that government has to play is first, infrastructure. We need feeder roads to reduce the cost of transportation, we need lots of investment in storage, large storage that can be through PPP. We need ICT infrastructure in all of our rural communities. We need energy solutions and there are lots of PPP examples for that. Then we need streamlined and supportive policies.

Ndidi Nwuneli:

One of the policies I'm pushing for is the local sourcing policy. Brazil did this. They actually required that 30% of every company's inputs have to be sourced locally, school feeding programs, institutional purchases, and I'm pushing for 50% local sourcing on the African continent. If that policy works, you'll see multinationals, especially in investing in backward integration, investing in local sourcing, and that will have a tremendous impact on the entire value chain.

Ndidi Nwuneli:

Then the last piece is talent. I'm pushing for government to change curriculum around agriculture. Agriculture in all our schools it's still taught as a science, not as a business. I'm pushing for an entire

revamp of the agriculture curriculum to ensure that it's relevant, it's timely. How has this program called us a health scholars program? We go to universities and help professors think through how they teach agriculture to get young people excited about the course. We give scholarships and internships, and we've seen such a dramatic impact on the lives of those who have benefited. We need this at a larger scale and we need to partner with governments to ramp this up across the continent.

Scott Leland:

Thank you. A question from... and I'm probably mispronouncing the name with apologies, Tabiso Melechi says, "Thanks for a great talk. Since it's hard to find formal markets specifically in African continent, what other alternatives can you do to promote small scale farmers? What motivations can you give young people who've stayed in Africa?"

Ndidi Nwuneli:

As I mentioned, I keep on referring to Nourishing Africa. I think Bill, you have to take some credit for this photo. What excites me about nourishing Africa is the number of young people on the portal who have business ideas, who are linking farmers to markets. There are examples from Gambia, from Nigeria, who basically what they have is portals where they are putting farmers into clusters and they're linking them to uptakers, they're linking them to processes, and they're tremendous opportunities to scale and to help these young people scale their businesses.

Ndidi Nwuneli:

What I would say, and this is very interesting, one day I was flying back from Italy and on the plane, I met one of my staff from AACE foods and he was coming back from France. He told me how he got all these messages, text messages from friends saying, "Why are you coming back? This is your first time abroad, just run away." He told them, he said, "Why would I run away? I have a good job. I have health insurance. I can provide for my family. Why should I come to the West and suffer?"

Ndidi Nwuneli:

The truth is what we're doing with the companies we're creating that are growing concerns about profitable is that we're providing a good opportunity for Africans to stay. None of my staff, not one, has left to move to Canada or the United States because they were looking for a better life, because we have created that better life. That's the beauty of building strong, vibrant businesses is that you change the course of events and your young people are excited, they're energized, they're challenged. They believe in the future of the country and the continent. It's not easy, but we're changing that narrative.

Ndidi Nwuneli:

What I would encourage you to do is to support more agribusinesses, encourage them, mentor them, promote what they do, source from them, buy from them and that way you're going to create a whole new generation of people who stay and build a continent because they believe in the future of the continent.

Scott Leland:

We have an anonymous question. Somebody writes in and says that, "I am working on a project that focuses on developing data-driven, soil-less, urban farms to combat climate change and build self-sufficiency in Nigerian cities, focusing on Lagos first. Given the fact that urban farming techniques, such as hydroponics and aeroponics are highly dependent on consistent electricity and water. Could you

please speak more to the viability and prospects of these systems in city spaces like Lagos where the prerequisite infrastructure isn't available and/or reliable?"

Ndidi Nwuneli:

The interesting thing about these types of models is that, you can actually benefit from grant funding to start. I'll give you an example. So Sahel is working in the yam value chain and the cassava value chain. What we're doing is actually helping commercialize improved seeds from IITA and other research institutions like Umudike Seed and NRCRI.

Ndidi Nwuneli:

In fact, there are four companies that are getting funding to try out aeroponics to grow these seeds. That allows you to get some support as you're starting off to scale. I would encourage you to check out the program is called YIIFSWA. YIIFSWA II is on yams, but there's an equivalent we're using solar less farming for cassava seeds and look at seeds as a way to start.

Ndidi Nwuneli:

Because the amazing thing about seeds is that it's high value, it multiplies really quickly, and there's a market, especially for yam and cassava in Nigeria at the moment. Now, if you can get some of these grants or technical support to start, it reduces the barrier to entry, and that helps tremendously for someone who's starting off.

Ndidi Nwuneli:

Then in terms of infrastructure, the great thing is that a neighboring states, Ogun State has an amazing young lady, Angela Adelaja, who started with Ogun State. She's a special advisor to the governor. She also started urban farming in Abuja and she's doing the same thing in Ogun State. So you can find some states in Nigeria and other parts of Africa that have created an enabling environment for entrepreneurs.

Ndidi Nwuneli:

Almost like a staple crop processing zone that has access to water, access to electricity, to reduce your startup costs and reduce the risks that you face. I encourage you to take advantage of these opportunities. Please, get at Nourishing Africa, and then you can reach out to us and get some more support and links. Thank you.

Scott Leland:

Thank you. A question, I think on food security from Joyce Alawi, "According to Stratford's agriculture worldview, cattle, cotton, corn, anything humans need to survive and thrive is inherently geopolitical. Global food production, and therefore global food security, will depend on government's ability to do more with less," that was all a quote. "Knowing that policy reform is key to creating an enabling environment for agribusiness growth. What have been the challenges in Nigeria, the most populated African country, in getting them to realize the food security issue in a food insecure environment?"

Ndidi Nwuneli:

That's a very important question and a very serious one. We could actually have an entire talk on just that issue. What I'm learning and I mentioned to Professor Clark and Scott Dillon, that I was appointed by the government to head up the visioning exercise for Nigeria around agriculture, food security, and

rural development, is that prioritizing is very, very challenging. Allocating resources in a resource strapped environment is very challenging and that many people have different interests. So you're almost navigating.

Ndidi Nwuneli:

We did the diagnostic, which was the easy parts. You've just raised an issue, right? How do you prioritize food insecurity. Now, we're at the stage where we're doing the strategy and even determining which crops to prioritize versus others is a challenge. You prioritize food self-sufficiency or import substitution or export-led groups.

Ndidi Nwuneli:

We've had huge debate because we need foreign exchange. So export led growth is important. No, but our people need to eat and we shouldn't be so dependent on imports. How do we prioritize? Can we do everything at the same time? Absolutely not. Now I know why we often fail because we tried to do everything and appeal to everyone and appease everyone. So we ended up doing nothing.

Ndidi Nwuneli:

In my role, I've been very, very adamant about the importance of making some very, very tough decisions about how we prioritize as a country and how we streamline our agenda. To respond to your question, these are very, very tough issues. The government realizes, through COVID-19, that food is medicine and food is critical and that as a nation we need to prioritize agriculture. What the government is struggling with is, how to prioritize agricultural while still appeasing different interests.

Ndidi Nwuneli:

What my role is, and your role is, and private sector role is, to ensure that there's data driven policy making. I'm in the middle of this very dirty and messy process. It gives me a greater appreciation for how difficult it is for nations to plan in resource strapped environment and how difficult it is for us, as private sector, civil society to influence the agenda.

Ndidi Nwuneli:

But I think it needs more people like you to get into those dialogue and to ensure that the data, the information shapes how we make decisions and how we plan and how we hold countries accountable so that when the vision is set and the plan is set, they actually execute. It's a long winded way of saying, it's not easy, but we're pushing and Nigeria is waking up to this reality and I'm well-placed now to help as difficult as it is.

Scott Leland:

A question from a Hakim Omutayo, "Great programs like school feeding initiatives, World Bank, GEMS Initiative, et cetera, have had funds 100% stolen by corrupt officials information from the public domain. How can your organization partner with people that are trustworthy to see great initiatives like yours excel with natural, great talents and partners?"

Ndidi Nwuneli:

Corruption is a huge challenge and it's one that we recognize has limited a lot of great work. One of the things I'm pushing for in this new visioning in Nigeria, is that the government stays in its role of providing

infrastructure and setting policies, what steps out of program execution? There's no reason why government should be involved in procurements, buying tractors, providing school feeding. There's no reason. Set the policy and let private sector work. Have transparent ways of contracting and engaging.

Ndidi Nwuneli:

We really have struggled with that because we haven't embraced technology and transparency and innovation. We've had people in positions of authority who have just been outright corrupt. I share your outrage. What I believe is that first we need people who will get in there and do the right thing and then we need civil society to hold them accountable, and then we need alternative sources of funding and alternative partnership models. That's what we're pushing.

Ndidi Nwuneli:

I currently have a big dairy project in five States in Nigeria, which is private sector led. It has a very transparent model and we have government in the steering committees, but no funding being channeled through government and it's working. If you're providing alternative approaches and showing what is possible and empowering the scaling of the good things that are working, I think we can start changing that narrative and shifting the power dynamics in our countries.

Scott Leland:

Thank you. A question of the port of Nigeria from Vipul Gupta, "It's true that there are huge possibilities of food exports from Africa. There are huge challenges as regards to logistics and especially port issues in Nigeria. Do you foresee the resolution of the port issues soon?"

Ndidi Nwuneli:

Well, we've taken on the Nigerian Port Authority through our visioning exercise and I know that they have a strong woman in place who's leading change. I know it's not going as fast as we want, but I'm optimistic that in the next few months, we're going to see some more technology innovations to enhance transparency in the port. I think, if we actually make it an open source process, then you can see who the bottleneck is and where the barriers are. I think that will change the way things are done.

Ndidi Nwuneli:

I've put in the policy that we wanted three-day-process, not a 40-day-process and that where there are bottlenecks, there's clear punishment for those who are blocking the movement of our goods.

Scott Leland:

I'm going to ask one more question before turning it back over to Bill Clark, to wrap things up, perhaps with a final question. This last question from our audiences is from Hakim Omutayo, again, a second follow up says that, "We have a software supermats.com and hardware embedded systems initiatives to address pure organic farming in Nigeria and working as the largest aggregate of organic farmers in Oyo, Osun, and Edo State. Our problems are mainly on sales. How can we help bridge the gap to reduce the frustration of farming organically without an adequate market?"

Ndidi Nwuneli:

I think you can create markets. That's why I talked about the importance of branding, the importance of packaging, the importance of messaging. The fact that I'm coming on this session to hear about you

means that you need to do a better job of amplifying your voice. I know it's not easy, but they are a growing number of people who do value organic food, especially those who are really health focus. I mentioned that one big trend we're seeing is a demand for healthy diets.

Ndidi Nwuneli:

I encourage you to reach out, please upload your company's profile to NourishingAfrican.com so we can find you and reach out because they are now a growing number of people calling us saying they want to source organic produce. If you have it you're well placed to meet the demands.

Scott Leland:

Thank you, Ndidi. Bill, back to you, you'll get the final word.

William Clark:

Okay. This has so many great, really serious questions, so I'm going to end with a slightly less serious and very selfish one. I am so old that I remember a time in the United States when many of us who had the opportunity were highly appreciative of French food at the time. We diligently tried to get ourselves opportunities as students, or as successful business people to go to France to eat French food. But you didn't eat French food in the United States because nobody knew how to cook it. Few French people knew how to cook it. But basically it was not something that was done in the average kitchen in the United States. A combination of, you didn't know the translation of ingredients, you didn't know the right equipment and so on.

William Clark:

Now, looking at your wonderful website and your list of chefs and some of amazing recipes they have is great, but I don't see yet on it the equivalent of the Julia Child phenomenon in the United States. She is the one and I realized, this is difficult. This was not a French woman. This was an American woman teaching Americans to cook and appreciate French food.

William Clark:

That may not be the vision you want, but right now, if you could guide me or create the Julia Child of African or Nigerian cooking that would help me do the combination of, to satisfy these things tastes you really like, these ingredients that I can read how I would get them if I were in Nigeria, but not here, and this equipment. Where's that book or blog site or whatever, so I can learn to cook African?

Ndidi Nwuneli:

I'm so glad Bill, you asked that question and I'm delighted that there's a new interest. I actually told Scott that my next visit to the Kennedy School that they're not going to be serving pickles outside the room or sandwiches that it has to be some jollof rice, and so yeah.

Ndidi Nwuneli:

But there are actually a rising number of chefs actually now based in North America and on Instagram, we have an amazing one called Kitchen Butterfly. She also has a website and a blog, but they're growing number and they actually doing fusion. They do fusion of African, Western, Asian, and they're making it hip and cool and the presentation is amazing.

Ndidi Nwuneli:

I'm just excited about these emerging chefs and cooks who are redefining... there's another one called African Foodie, I think she's based in Toronto or Washington, D.C. one of these places, but they are a growing number. I'm just really excited about this renaissance and I hope that the challenge I'm giving Harvard University is that we need to make sure that in the menu, serve right there and HKS restaurants, there's a menu with some of our very easy to cook food, and then we'll be teaching you.

Ndidi Nwuneli:

That's an opportunity for more chefs and more cooks and more Julia Child to emerge. I look forward to seeing that happen in my lifetime and collaborating with some of you. Thank you for that challenge Bill, and we're taking it on. Thank you very much.