

The Brookings Institution Center for Sustainable Development

and

The Rockefeller Foundation

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Co-Hosts:

John McArthur Senior Fellow and Director, Center for Sustainable Development The Brookings Institution

Zia Khan Senior Vice President for Innovation The Rockefeller Foundation

Guests:

Cina Lawson Minister of Digital Economy and Digital Transformation Government of Togo

Michael Faye Chief Executive Officer (CEO) and Co-Founder GiveDirectly

Episode Summary:

In this seventh interview of the "17 Rooms" podcast, Michael Faye and Minister Cina Lawson discuss building digital cash transfer infrastructure for emergency response and adaptive social protection. Faye, CEO and co-founder of GiveDirectly and Lawson, minister of Digital Economy and Digital Transformation in Togo, moderated Room 1 focused on Sustainable Development Goal number 1—on no poverty—during the 2021 17 Rooms flagship process.

MCARTHUR: Hi, I'm John McArthur, senior fellow and director of the Center for Sustainable Development at Brookings.

KHAN: And I'm Zia Khan, senior vice president for innovation at The Rockefeller Foundation. This is 17 Rooms, a podcast about actions, insights and community for the Sustainable Development Goals and the people driving them. In this episode, we will learn about the importance of direct cash transfers for poverty alleviation and why digital cash transfer infrastructure is critical for crisis response.

MCARTHUR: Zia, did you know that an estimated 186 countries have delivered or plan to deliver cash-based assistance to their populations in response to COVID 19? It's a huge number. It's an issue that in many ways is hiding in plain sight around the world. The notion of giving people cash in an emergency is pretty simple, but also pretty novel because it confronts a lot of assumptions we have about what's an okay response to a policy problem. But importantly, it's not just about that ethical or policy question. It's also a big technology question. Delivering cash effectively and efficiently is not easy, especially in lower income places where the poorest of the poor live and a lot of governments don't have enough infrastructure in place to do it. So, this is a pretty timely discussion today, and I'm excited to listen to two of the best people in the world talk about this, people who are really living the frontier of what does it take to build the technology to solve the policy problem of cash transfers for tackling poverty.

KHAN: And John, what's so exciting, too, as we'll learn, is that COVID really created the conditions where innovative thinking, innovative approaches had to take hold because the need was so great and direct cash transfers is a very simple solution, but has very complex implementation, as you mentioned. There's all sorts of questions around what are the hidden barriers when people actually don't trust the idea of giving cash to beneficiaries? And how do you responsibly use artificial intelligence or machine learning to help optimize who you're giving cash to and targeting those most in need? And our two co-moderators were so thoughtful and so insightful on this. This is going to be a great episode.

MCARTHUR: In today's episode, we're joined by Michael Faye and Minister Cina Lawson to learn about their efforts to help countries build government-led digital cash transfer infrastructure with multiple public and private partners for emergency response and social protection. Together with their SDG working group, or Room, Room 1, they produced 12 guiding principles for government-led digital cash programs. Today, they're going to talk about the brass tacks and the mechanics and the bigger issues underneath that.

Michael Faye is the CEO and co-founder of GiveDirectly, a nonprofit organization pioneering a lot of the efforts around cash transfers for several years. He's also the CEO and co-founder of Tap Tap Send, a consumer remittance company committed to lowering the price of remittances in accordance with the SDGs. Cina Lawson is the minister of digital economy and digital transformation in the government of Togo. Almost overnight, she and her team built the digital infrastructure required to deliver COVID relief money to a quarter of the Togolese population in 2020.

So, Minister Lawson and Michael Faye co-moderate Room 1, a working group for SDG 1 no poverty in this year's 17 Rooms process. For new listeners, 17 Rooms is an approach to spurring action for the Sustainable Development Goals, or SDGs. It convenes 17 working groups, one per SDG, and asks them to focus on an area within an SDG that's ripe for action

and then to define some concrete next steps that can be achieved in 12 to 18 months to make progress. Zia, this should be fun.

KHAN: Both of these co-moderators illustrate the power of bringing together the scale of what government can do and the innovation of new practices and new technologies. Minister Lawson and Michael are co-moderators of Room 1, the working group for SDG 1 on no poverty. This is their story.

MCARTHUR: Minister Lawson, welcome to 17 Rooms, Bienvenu.

LAWSON: Hello John, nice to see you.

MCARTHUR: And Michael, so nice to have you here, too.

FAYE: Nice to see you, John.

KHAN: Well, thank you both for joining us today and also all your leadership in the 17 Rooms process. Michael, I'd like to ask you if you could give us your background and your story and how you came to 17 Rooms and this particular issue.

FAYE: I've been working in the field of development or poverty alleviation for a bit more than two decades now. It goes back to early work with John on some research projects and then the Millennium Project back in the early 2000s. And then decided to do a Ph.D. at what turned out to be an important time for the field of development. It was a time when economists started to apply some of the same evaluation techniques that we used to assess a drug's effectiveness to poverty programing.

And to synthesize that research, which went on to win the Nobel Prize—Michael Kremer, Abhijit Banerjee and Esther Duflo—a lot of what we found was that traditional interventions did not work as well as we would have hoped. Things like training. And this most simple of ideas, in some ways, intuitive and others counter intuitive, of giving people money to make them less poor worked remarkably well. We had a little bit of a stipend at the time—a number of us were talking about how we could give money, so we called lots of NGOs and charities to see how we might give our own money and if we could give it directly. And there really was no option.

So, lacking creativity, we created an organization called GiveDirectly to let folks like ourselves donate directly via cash transfer to those in extreme poverty. We've been building that over the years and we can talk about how we move from and have more of the analog methods to digital cash transfers. But along that journey, re-synched up with John and this initiative around 17 Rooms, one of the Goals is to end extreme poverty, and cash is playing an increasingly important role in that, especially during COVID, where there is a dramatic increase in social protection and specifically in cash programing.

And we're discussing what we might do around that. And maybe that could be the focus of 17 Rooms. And as we thought about who are the right people there, there is probably nobody better placed to talk about the acceleration of cash and the digitization of cash programs than Minister Lawson, whose Novissi program really is a model, an exemplar program for what's possible across Africa and other markets. So maybe with that, I pass it over and introduce

Minister Lawson, who I've had the pleasure of working with now over the last two years or so to explain what Togo did and why it was so groundbreaking.

LAWSON: Thank you, Michael. I'd like to talk about the Novissi program, our cash transfer program that we developed last year during the pandemic. Indeed, in in March 2020, we had our first COVID case. And in April, early April 2020, we declared the state of health emergency, which meant that Lomé, the capital city, was going to be closed. We closed the city and we implemented a curfew and also mobility restriction measures. But Togo, like many other African countries, have a very large informal sector. Eighty percent of its workforce is composed by people who actually earn their living every day. And so it was very important for us as government to find a solution, ways to support these individuals to make sure that fighting the pandemic would not be synonymous to actually having these individuals becoming poorer than what they were before the pandemic.

So, basically, we built a platform that did not require people to have internet access. The platform used USSD technology. And we were able to transfer cash to individuals through this platform. We distributed 34 million dollars, 10 million dollars of which came from GiveDirectly, 920,000 individuals, which is 25 percent of all Togolese adults. It's important because it made us understand that through cash transfers, we could fight extreme poverty. And also, we could support the poorest individuals, some of whom with this cash were able to start businesses during the pandemic. So we have anecdotal evidence and about how these cash transfers, which were equivalent to one third of the minimum wage, were able to support these individuals.

MCARTHUR: I'm wondering, Minister Lawson, you're very humble in focusing on the work of the program. You also have an extensive experience in telecoms and different international efforts and private sector and multilateral efforts. I'm wondering how that background affected your approach to the public sector crucial role that you have now in terms of bringing the different types of sectoral expertise together.

LAWSON: Yes, I started my career at the World Bank in D.C. in the telecommunications department. Then because I really wanted to contribute, I wanted to deliver impact, and I felt very strongly that it was using new technologies that we could do that in an effective manner. But then very quickly, I also understood that it was very important for me to work in the private sector because it was moving quicker. It helped me also to understand execution. So I went and joined a mobile telecom operator.

And I've been a minister for 11 years now. And what I think I was able and am able to bring to this position is my experience both in the international development space, but most importantly I would say in the private sector space because I was able to learn about how important it was to execute.

And so I strongly also believe that when you have a public position, it's really about how you positively impact the lives of others. So at the start of the pandemic, it was impossible for the team and I to just sit there and not do anything. And we knew that we had the tools to actually reach out to everybody in Togo, everybody who had a phone. So for us, it made sense that we needed to find a solution, and very quickly an efficient solution. So I think that that's why we developed this platform.

Also because it was important to show how useful these new technologies are, because a lot of people talk about digital and maybe it's fashionable, but at the end of the day, these are tools that positively transform society and the economy. So when you face a pandemic and you have these tools, you need to be able to actually put your money where your mouth is. And that's exactly what we were able to do through this program.

KHAN: Michael, I'm curious, you touched on this in your earlier comments about how cash transfers can be both intuitive and counterintuitive. And it seems that if you wanted to alleviate poverty, then giving cash would be an obvious solution. Yet it's not done that commonly, and there are some people who resist it. Could you share with us what some of those arguments are and how do you convince people that this is the right thing to do in whatever are the right circumstances?

FAYE: A lot a lot of people will start with the question of why cash, and almost ask the recipients themselves to justify why giving them capital to make the decision is better than spending it through some other way. And I actually think we need to flip that question from the beginning and say, why not cash? We should start in a position where the recipients, those in poverty, get to make the choice for themselves, get the dignity of that choice.

And we, as a sector, should have to justify if we're going to do something else. And the way we talk about it internally at GiveDirectly is, what would you feel comfortable explaining to a recipient? Could you articulate why you made a decision instead of giving them cash? And there will certainly be things—vaccines won't discover themselves unless we fund them. Roads won't build themselves. So there's certainly public goods that need to be built. But I think we do need to flip the question.

In terms of the specific critiques you'll hear, I think there are the spoken critiques and the unspoken critiques. I think the first generation of spoken critiques were things like, won't the recipients drink alcohol or take drugs or use the money for something that we might not agree on. The evidence on that is very clear: it doesn't happen. The next wave was, won't the recipient stop working? Won't this just make people lazy? The evidence on that is also very clear: it doesn't happen. And there's a great paper by Abhijit Bannerjee and colleagues called "Debunking the myth of the lazy welfare recipient." And so that was the second generation.

Then you get into some of the more theoretical points, like giving cash will lead to inflation. And there are undoubtedly places where that will be the case. The reality is the vast majority of places where cash has been evaluated have not seen inflation. One of the most robust cash studies done on a GiveDirectly project found that after dropping 15 percent of GDP—so a really large amount of money—prices went up about 0.1 percent. Those are the classic arguments against cash.

I think you have to also understand the constraints that cash is going against. There is a very human constraints. Things like, cash is a somewhat unsatisfying thing to give to someone. It's not a cuddly sheep or something else. You're just giving cash and you don't even know what the recipient is going to spend it on. You're giving control. It's not cuddly. There are a lot of reasons why cash is just unappealing as something to give.

But there are also some structural reasons right. For good reason, the sector has evolved along silos. So there's a group focused on malnutrition, there's a group focused on shelter, there's a group focused on health, and so on. And by definition and mandate, those groups

need to focus on those specific outcomes. So, what's the best intervention for nutrition? What's the best intervention for health? But that's not the way that people make decisions. There's not Health Week, where the family just focuses on health this week, and then next week we'll just focus on education. It's a really complicated, almost impossible problem for families to make. Imagine being in a situation where you are choosing whether to send your daughter to secondary school or to feed your newborn. Or to invest in your husband's business. It's an almost impossible choice. And me sitting in London at the moment is the last person that should be making that choice for a family.

MCARTHUR: I'm curious, Minister, these arguments, you must be living them both domestically, and in the middle of the international spotlight, it's on so much of what Togo is doing right now. Curious, how do you see these arguments evolving within Togo, and also in terms of your interactions with the international community?

LAWSON: So, first of all, I want to say that what Michael said, I mean, Michael is spot on. I really like the, "why not cash?" by the way, because when the pandemic started, a lot of people were in favor of distributing food. And so at the time, part of the government of Togo wanted to distribute food and another part of the government like us who wanted to distribute cash, and why not cash? Because we felt that we could give cash to people in a way that was respectful of mobility restrictions and they could do something. They were responsible people.

And actually, they were responsible people because they used this cash to acquire goods that they could resell. The cash was used to invest in their activities, in their small businesses, which was, by the way, much better than microfinance loans because you have to reimburse the loans. So sometimes in life, when you deal with responsible people, they just need to get some help for a period of their lives. It's not help that should be going on forever. You can say that as a government our responsibility is to support the most vulnerable of our citizens and maybe not do it, like I said, on an ongoing basis. Who knows? But that certainly do it during crisis situations.

And I think it's all the more important that as government, you have to show that you are legitimate. So if you're not able to support your citizens during a pandemic, then why are you there? Why would we have government if they weren't able to be there when we needed them?

And I think that it's very important also because in the world, not only in Africa, everywhere in the world, governments are embattled. The authority of governments is something that is questioned throughout the world. And so you need to you need to get people to understand the value of institutions. And I would say that by responding to this crisis and supporting our citizens, we did just that.

I also want to say that it's true that most of the people that we supported were not people who used the money. They weren't lazy people. There were people who had no choice. They didn't have any support system. One of the characteristic of being poor is having no savings. So when you face a crisis, it's the end of the world for you because there is no fallback plan, nobody is going to come and support you. And so you're very quickly in a dire situation. And so the fact that we designed these cash transfer programs is very important because the world is going through crises, we have climate change and we will have lots of crises moving forward. We need to set up a platform that can distribute very quickly cash to anybody, anywhere in the world.

And so the Novissi program is a Togo experience, but it should be done everywhere in the world, not only in Africa, but throughout the world, you need to be able to just distribute cash for a limited period of time in crisis situation. And that's what we do as human beings when we support our fellow citizens.

FAYE: It's such a good point, Minister Lawson, and I think it speaks to what the COVID crisis really required. So over the last 18 months or so, we saw a dramatic increase in cash programs and in digitization of cash programs, which of course begs the question of why. And the reason was traditional programing, door-to-door programing wasn't feasible if you had isolation. So you now needed to find a way to scale things remotely faster than we've ever done before globally. And Togo and others have shown the way. Now this shouldn't be a one-time solution. There will be more crises and we should be doing digital transfers, but we should also be building the infrastructure for social protection and using what we've built in the crisis and expanding upon it for the baseline for social protection more broadly.

LAWSON: If I may, I want to also say that when you use digital means, you can improve traceability of what you're doing. And what we were able to do was to build a database available to Togolese, and we were able to support them during the pandemic. We can now see in a couple of years how these individuals evolved over time. And this is made possible because we used a digital platform.

So what with this program also meant was that it was the first step in building a social registry. And I think it's also very important because when we talk about social protection, many countries in the world right now don't have unified social registries. So lot of programs exist, but they are not consolidated somewhere so that there could be an analysis of impacts of what is it that governments are doing or donors are funding.

And so I think that it's also very modern of us to want to see the impact of cash that we spend, impact of policies that we are designing, and that we can consolidate because we're using new means—digital platforms. But also in the case of our collaboration with GiveDirectly and UC Berkeley, we also use artificial intelligence. So what this whole cash transfer programs is also about is tech for good, I would say. When we start talking about associating tech and good, that's what I want to be proud of. Otherwise, it's a buzz word. It's fashionable. I'm a minister of digital transformation, but if I can use this digital transformation to improve the state of society, then what I do makes sense, I would say.

MCARTHUR: I find this so fascinating because my understanding is that the AI layer helped with a form of rapid hyper-targeting to get money to the people most in need way faster than would have been possible even a couple of years ago. I'm curious, A, is that correct, Minister Lawson, as you think about what's possible today versus what was possible just a couple of years ago? But B, what do you think might be possible next? Do you see things that could be done even better than what's being done today? How do we understand this role of technology?

LAWSON: In the case of cash transfer programs, we were able to use satellite imagery to determine the poorest district of Togo, Togo has 400 districts and we were able to rank them from the poorest to the richest. That was number one, using artificial intelligence and satellite

imagery. Number two, we were also able to determine who the poorest individuals were within these poorest areas using artificial intelligence and mobile operators' metadata. And again, that is how we worked with GiveDirectly. And I think this is unique because what we did with using artificial intelligence was that we were able to pay 140,000 people based on what an algorithm said. And I think that's revolutionary.

And so moving forward, we need to train this algorithm to be used in other countries because right now the algorithm is trained on Togo data, and it should be trained on Nigeria data, Egypt data, other countries, Indian data, et cetera, et cetera. And that would really change social protection throughout the world and the understanding of what is it that we're doing.

So what we did is that today we know how to reach anybody actually anywhere in the world, provided that this individual has a phone. And so it's just a matter of using technology, of defining a rule. And really with the team of GiveDirectly, the question was can we determine who are the individuals who earn less than one dollar twenty-five per day? And using this algorithm, we have the phone numbers of these individuals, we send them SMSes to say, please do register using your voter's I.D., which is a biometric I.D., if you want to receive financial aid. And so I'm saying that with this methodology, anywhere in the world, you have wars, you have warzones in places where you want to be supporting one area, one particular region, we can do that now. The technology's there and we've tested it in Togo, so we could do that anywhere in the world.

KHAN: One challenge I've seen with using AI and hyper-targeting in other situations is that unless communities understand how decisions are being made, it can feel unfair. It can feel that some computer somewhere is making decisions about who is getting benefits and who isn't. Did you run into that situation at all in Togo?

LAWSON: So the methodology when you use AI is that you need to have human verification. So basically, our National Institute of Statistics were able to call 15,000 individuals to make sure that what the algorithm said was accurate through some verifications. But yes, it's true. But the thing is, imagine that you are facing a crisis and you're supporting a majority of individuals who never imagined that they would receive any kind of support. We've never done it in Togo before to just distribute cash to 25 percent of all adults of the country. So there may be some people who are frustrated, but the overwhelming majority of individuals were grateful. No program has ever been that successful and that's well supported by citizens in Togo than this one.

FAYE: I think any time you're using AI or machine learning, you need to be extremely cautious and thoughtful, as I think the Togo government was. One, you realize that not everyone is going to have a phone be reached, so it absolutely needs to be complemented with old fashioned boots on the ground, proxy means test, going door-to-door and figuring out who's been left out and covering them.

Two, you need supersensitive communications. One of the things we have learned time and time again at GiveDirectly is how important comms are. You are communicating to some of the most vulnerable and most impressionable people in the world. Getting it right can make a huge difference and be the difference between success and failure of a program.

And then the third part is the verification of the AI algorithm and its fairness, which I know both GiveDirectly and the government spent a fair bit of time on third parties and otherwise to ensure the fairness of the algorithm. You do want to be quite thoughtful about that.

MCARTHUR: Given the wide range of actors that seemed to come together just for the Togolese program—there's the government, there's the telecoms, I'm sure there's a financial system component to this, there's the AI science bit, there's the nonprofit partners, so many pieces—I'm curious, what are the implications of this outside of a crisis for other countries that want to learn how to do this? How do we carry forward these extraordinary lessons that you've developed for the world so that others can continue to build on them?

LAWSON: So I think that's the reason for a Room 1, I would say. But I will tell you that, number one, we need to make sure that we throughout the world G2P payments are digitized. Number two, you said there were lots of components to make this program works. We need to build this platform and set things in motion before any crisis happens. It's very important to build a platform that would be an African or Asian or global platform and set things in motion prior to any crisis so that when the crisis happens, then money is disbursed very quickly. Because you can't wait for the crisis to happen to start building the platform and putting all the pieces together. In Togo because it was an exceptional situation, it was the pandemic, we did everything as it was coming. But now that we know better, we should set a platform, put it in place, organize things in many countries prior to anything happening so that it's there and then we can roll it out when there is a crisis.

FAYE: I unsurprisingly agree, as you'd expect. These things are massive undertakings. The number of partners involved—we had Sega and Josh Blumenstock help building the AI and machine learning algorithms. You had partnership with the telcos. You had the government and their partners for building things. You had GiveDirectly helping with some of the design and operations. And other programs even more. You can have the CRM provider, you can have the workflow management provider, and you need to bring this all together, and it does take a bit of work. But what Togo has shown us is that it's very doable.

KHAN: You've both painted a call to action that this should be adopted more regionally by more countries and ideally globally. If you think about the year 2030, what would you like to see concretely in the world that would demonstrate to you good progress has been made with digital cash transfers?

LAWSON: For me it's an easy one. The platform, like I said, needs to be in place. That's the first part. The cash transfer platform should be positioned everywhere in the world. Then the methodology of using machine learning and artificial intelligence should also be implemented because the data is there. When we used, for example, telecom operators' metadata, it existed, it's just that nobody was using it in order to support social protection. So it's just that in 2030, I want to see the platform there, I want to have governments throughout the world committed to this methodology and to using this platform, and I also want to see studies on the impact of these cash transfers over time. And 10 years down the road, we will have studies made and we will have a better understanding of even the amounts to give, the frequency to give this cash and all this information know.

KHAN: And Michael, how about you?

FAYE: I think the idea of having this pre-positioned everywhere is incredibly powerful. And you just start to imagine what that would mean if we have these digital financial pipes pre-positioned everywhere. Earthquake hits Nepal—rather than scramble and figure out the supply flights and whatnot, you could literally hit a button to send payments to those within 100 miles of the epicenter or those affected. Or how about weather insurance, when there's a drought in eastern Kenya and payments automatically flow from the insurance company to all the individuals on mobile money. And the list goes on. Once this is built, the amount of programing that can be pushed through it efficiently, quickly, and securely is really profound.

And the second thing I would like to see shift is a perspective from asking the question of why cash and placing the burden of proof on the recipients, to assuming the burden ourselves and saying why not cash? Let that be the default, let that be the starting place. And of course, there will be other things we need to spend on. But let's shift that perspective. Because what's achievable is pretty remarkable. Brookings put out a recent paper estimating the poverty gap to be about \$95 billion. That's 0.1 percent of global GDP. Not a lot of money. Ending poverty is well within our financial reach. It's now well within our technological reach, and it just becomes a matter of will for when we do this.

MCARTHUR: I think that statement is one I very much agree with, a colleague of mine having written that little piece. But this notion of the technology having come so far, and the cost of that global extreme poverty gap having gotten so low—95 odd billions, that's a lot of money for most individuals, but it's a very small amount of money for the world. It does seem like you are showing in Togo and through this broader arc that we could buy our way out of extreme poverty in the absence of other better solutions. That's my big takeaway from this. I'm wondering, though, what would you want—and I'm afraid we do have to bring this amazing conversation to a close—but what would you want someone's big takeaway to be if they're listening to this? If they're watching this space, if they're tracking cash transfers, if they're wondering about these concerns about AI, if they're just wanting to follow the frontier, what's something that you would ask they take away from this conversation? Maybe, Michael, and we'll give the last word to the minister.

MCARTHUR: I think I have the simplest of takeaways. For about a dollar fifty a day, you can take another human out of poverty. That was theoretical a decade ago. Today, it's practical. You can do that. And if we all do that together and donate a bit more than 0.1 percent, we have a chance of ending extreme poverty. It's powerful at an individual level, it's profound at a global level, and we should all start today.

LAWSON: I could not agree more. So I would say that giving cash to individuals can enable them to actually start businesses. We ought to understand that at the end of the day, it's just giving them a bit of financial aid so that they can do something positive about it. And so yes, there are concerns in terms of using artificial intelligence and technology, whatever. But we're in the 21st century, so we use the tools that we know are the most efficient.

And so I would say that given the experience and what we saw in Togo, cash really did people a lot of good, and actually they were able to start businesses, pay off some debts, and feel that they were supported by their countries, that they belonged to a nation. When you look at what is happening throughout the world right now in terms of even terrorism and so on and so forth, it's often times that a lot of people feel abandoned, especially when they face hard times. So I think that it's important as governments, as humanity to come together and be able to use these tools to really deliver positive change. **MCARTHUR:** Zia, I think we have a lot to digest, and we can thank the minister and Michael for all their contributions, both to this conversation, but most importantly to the world and showing what's possible and helping in this very particular case of Togo. An extraordinary number of people, whether an extraordinary crisis in the world, but more broadly show exactly as you've said, the possibilities that lie in front of us all. Thank you.

KHAN: John, when I take a step back, I and my team do a lot of work on how to use artificial intelligence and new data science technologies for positive impact. And there's a lot of mistakes you can make, but this is such a powerful application, and the minister and Michael talk about how they thought through all of the risks and potential downsides that you see too often with technology that I think it's a good lesson. More broadly, beyond cash transfers of how to use artificial intelligence to help accelerate progress towards the Sustainable Development Goals.

MCARTHUR: I feel like this conversation represents some form of fusion, Zia, of our respective professional interests and domains. These questions of how to use frontier technologies, right, and leverage their power, but in ways that are just and ethically sound while also tackling what is arguably a first among equals of the Sustainable Development Goals, the end of extreme poverty, literally SDG 1.1, it's the first target to end extreme poverty by 2030. This conversation really highlights how far the world has come in its capacity to solve that problem, but also how quickly it's evolving in the opportunity to solve that problem. So, I am excited to think about how the Room's work, Room 1, led by Minister Lawson and Michael Faye, collaborated to produce a set of guiding principles for government-led digital cash transfer programs. It's meant to be used as an actionable checklist for maximizing the impact of digital cash delivery. But this is a story that, like so many of the rooms that we're meeting with, is in many ways still being written. And I think a lot of our listeners will have their own views on the best way to carry it forward. But that's exactly the excitement that I feel around this, is that there are so many people who are going to be contributing to carrying it forward.

KHAN: And to learn more about Room 1's 12 Guiding Principles for digital cash transfer programs, go to Brookings Dot Edu Slash 17 Rooms podcast. Coming up next, Room 3 with Steve Davis and Pardis Sabeti on the uptake of participatory digital health tools for pandemic preparedness.

MCARTHUR: I'm John McArthur.

KHAN: And I'm Zia Khan, and this has been 17 Rooms.

MCARTHUR: Our thanks go out to the guests you heard today, and also to the production team, including Fred Dews and Alexandra Bracken, producers; Jacob Taylor, associate producer; Gaston Reboredo, audio engineer, and Nicolette Kelly, audio intern. The show art was designed by Katie Merris. Additional support comes from Shrijana Khanal, Ian McAllister, Soren Messner-Zidell, Andrea Risotto, Marie Wilkin, Chris McKenna, Esther Rosen, David Batcheck, and Caio Pereira at the Brookings Institution, and Nathalia dos Santos, Sara Geisenheimer, Hunter Goldman, and Miranda Waters at The Rockefeller Foundation.

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