

**TAKE IT TO THE AGRIPRENEUR:
FINANCIAL INSTITUTIONS AND CAPITAL INVESTMENT IN AGRICULTURE**
Panel Moderator: *Simon Winter*
October 18, 2018 - 2:00 p.m.

Introduction

Steven Leach

Member - World Food Prize Council of Advisors; President, Auburn University

Folks, we're going to get started with our next session, the first one after lunch. So if people will take their seats, we'll go in just a moment. Wow, that's an obedient group. Very good. I'm Steve Leach, for those who don't know me. I am the president of Auburn University, a member of the World Food Prize Council of Advisors and sit on the World Food Prize Foundation Board of Directors. Delighted to have you with us today as we start the afternoon with "Take it to the Agripreneur: Financial Institutions and Capital Investment in Agriculture." We're going to get to hear from the exciting panel talk about entrepreneurship, investing in good ideas, and making innovations in agriculture become a reality.

I'm going to introduce today's moderator and let him introduce his panel. The moderator, Dr. Simon Winter, Executive Director of Syngenta Foundation for Sustainable Agriculture. Dr. Winter became director of this Swiss-based Syngenta Foundation in 2017. Prior to that he was at TechnoServe, and he had recently been Senior Vice President of Development in Washington, DC and had previously led their groups in sub-Saharan Africa. He has a long, distinguished record, and I'm not going to go through all the details, but I will say he recently joined the Steering Committee of the Farm to Market Alliance and earlier career steps included management positions at McKinsey, an independent development consultancy, economic planning for the Ministry in Botswana, and roles on three continents with Barclays bank. Dr. Winter is a citizen of the UK and holds a PhD in economics. Simon, it's all yours.

Panel Members

Geoff Andersen	Director, Regional Ag Strategic Planning, John Deere Africa
B.J. Marttin	Member of the Managing Board, Rabobank Group
Hon. Prof. Ruth Oniang'o	Chair of the Board, Sasakawa Africa Foundation

Panel Moderator

Simon Winter

Executive Director, Syngenta Foundation for Sustainable Agriculture

Thank you very much. Well, good afternoon, everybody. We have an excellent panel for you, touching the financial sector in many different ways. And we hope we can bring our collective insights to address what remains to be, as we keep hearing, one of the most intractable challenges that we face as we try and develop agriculture and food systems in developing countries.

So let me quickly introduce the panel. To my immediate left is Berry Marttin. He has global responsibility for the food and agriculture bank, for Rabobank. He also heads up sustainability for Rabo and is also chair of the Rabo Foundation. And not only that, he also has time to be a farmer as well, and he has an 800-hectare farm in Brazil. So he knows about the system from both sides, which is fantastic.

Next to him we have Ruth Oniang'o. Ruth is not a farmer. Interestingly enough, she said she wouldn't take the risk to be a farmer, but she is a friend of the farmer and is the Chair of the Sasakawa Association for Africa and was the 2017 African Food Prize Laureate. And these days her work is particularly focused on nutrition.

And then finally to her left we have Geoff Andersen, who is a 23-year veteran of John Deere. He has been a corporate citizenship leader at John Deere for many years, and nowadays is the head of Business Develop for Africa for the company. So as you can hear, we have some very interesting skills that we're bringing to bear.

So as you heard from my brief introduction from President Leath (thank you), I have a background that has touched the financial sector in Africa since I first went to Cote d'Ivoire in 1984 with Barclays Bank. And it was that year in Africa that really set my personal interest in helping to deal with poverty challenges in Africa. And my career really has been about that ever since. So as a financier of agricultural exports in those days, I started to learn about this sector, and I've touched it in many ways since.

And for the last 14 years before I joined the Syngenta Foundation, I was at TechnoServe and initially the head of their African operations and then later Strategy Head. And at TechnoServe, those of you who know a little bit about TechnoServe, it's an implementation organization that really helps to build capacity capabilities and business models with entrepreneurial people who want to develop rural-based businesses in the developing world, and a lot of those are in agriculture. And we kept coming up against the constraint about access to finance for these businesses. So we were on the side of the equation, and frankly at Syngenta Foundation I remain a little bit in that camp. We're on the side of the equation where we're saying we cannot get capital to good business models. We have great business ideas, great technologies, great entrepreneurs, and we can't have capital. And then on the other hand, you often hear, "Well, there's plenty of money around." You know, the problem is not a lack of money. So the problem somehow is in the intermediation between those two stories, and hopefully we're going to dig into that a little bit today and how we might unblock some of that.

So I think it's also important to realize that, when we're talking about financing for agripreneurs and agribusinesses and smallholders, there are many different segments. There are many

different segments in terms of the businesses, so a subsistence farmer who is trying to commercialize is a very different kind of business than an aggregator who's trying to source from smallholders or a major input supplier, and so on. So each of those businesses has different capital requirements and different credit profiles and risk profiles and so on. So it's not by any way a homogenous sector – it's actually very fragmented, and that's part of the complexity.

The other complexity is the capital types, so it's very different if you need working capital than if you need equity investment or if you need financing for a machine. And again we'll hear more about different ways of approaching some of these different segments.

I would say from my side at the Syngenta Foundation, really we're touching this in two particular ways. One is we're all about, as President Leath said, we're all about getting innovations, innovative technologies into the hands of smallholders so they can become commercially successful, so they can improve their food security, their income, and their resilience. And in order to do that, we need to help them overcome the risk of taking on credit or using their savings to invest in those technologies.

And the piece of that that we have invested a lot of time in has been around smallholder agricultural insurance. And this is an industry that is really struggling. We just held a global conference on this at Basel, at our headquarters, about a month ago, and we are coming up with some ideas in partnership with a group called the Initiative for Smallholder Finance that some of you may have heard about. And to take that industry forward, it's an industry that has clearly a very important role to play. Clearly there are some interesting projects and some interesting small-scale institutions, but it is very far away from establishing norms and the right kind of mechanisms to scale.

And the second thing is – how do we get products and services to those smallholders. So those new technologies, how do we get them into smallholders' hands? And we're working on quite a number of business models, whether it's mechanization services or whether it's inputs whether it's extension, where we're using digital technologies to create the reduced risk, higher likelihood of success for agripreneurs who want to be offering these technologies and these services to smallholders. And again those businesses need financing.

So we're touching the system, and I'm now going to turn to our colleagues. And first of all I'm going to ask Berry to give us some introductory remarks from his perspectives as one of the leading agricultural bankers in the world who's touching this system across the globe, as much in North America as they are in East Africa. Berry.

Berry Well, thank you. Good afternoon, and thank you for all being here. But just before I start, can I just see how many farmers we have in the room? Well, like not even 10%, so we have more or less 5% of farmers. Welcome. I really appreciate you're here.

What's the issue? Rabobank, we finance farmers in more than 30 countries right now. We have more than 120 billion euros committed to the region, to this sector. But what we see is that you really have to look at the agripreneur in different ways. If you are a farmer in the U.S. or in Australia or in Europe and many of those regions, you have no problem getting capital. Okay, if you're a good farmer, you do your thing, you will get your check for finance. The real thing is – what happens when you get to the middle and

the smallholder farmer? So I would like to kind of focus on that, because I think that's where actually the 500 million smallholder farmers live or are active.

And so for those 500 million, and they need something like \$450 billion to \$500 billion dollars of financing. So 500 million, more or less a thousand dollars per smallholder farmer, so 2,000, 2 hectares, a bit less than that – that's the number. Right? So what's happening? Why is it that actually this big pool of money, opportunity, there is actually only 20% of that being provided? So there is actually a gap, a huge gap of 80%. There's many reasons, but I will come to that.

First is that out of this 500 million farmers, actually only 1% is commercially viable. So if you are commercially viable, out of that... So at 10%, 1 out of 10 is commercially viable. So that means that more or less 10% of the 20% of that should be financed by a commercial bank. The other 10% is actually financed by foundations, Development Banks, etc., etc. Then what's happening with that 80% and why is it not going out? There are some reasons.

The first reason is that it's not the financing. It's actually – what is the capital at risk that we want to put forward? The capital rules today say that you need to have between 10 and 12% of capital, risk capital on your balance sheet to be able to lend. So if we are talking about something like \$400 billion that has to be financed still to smallholder farmers, we need \$40 billion still in capital today in today's rules to be able to provide that. So \$40 billion is a lot of money – right? – especially because the smallholder farmers are seen as a high risk, so no opportunity.

So on top of that, there have been some rule changes that, if you look forward to that, the third rule change that we are having right now on the bank industry is the one related to the money laundering but regulations like Volcker rule that we know here, MiFID in Europe, etc., etc. Those rules say that, if you are financing an organization or you are- have equity in financing smallholders or other companies, you're actually fully liable for that. So if you imagine an organization that is registered in Europe trying to give a loan out in Africa where you don't have every structure and everything in place so that you can guarantee and have who is now the ultimate owner. You almost have the issue that you actually don't even have proper documentation – all those things. How are you going to guarantee that the money flow is not maybe going to the wrong...? You have to prove it. So there's a lot of issues right now, and I think that's one of the key things that, coming out of this discussion here, we should also go out there and have a discussion, we regulators – what do we do when a big organization goes to smaller farmers.

The other thing is the Basel IV regulation, because we as a bank are looking forward. Basel IV is going to double, double the amount of capital banks will have to put forward to finance smallholder farmers or farmers, and that includes smallholder farmers. So actually the issue is not \$40 billion. The issue is – how are we going to get, as a bank industry, \$80 billion?

The last thing which I will say, why the banking industry has been reluctant is because you finance as a bank and you want to have actually finance that you want to have your money back. So that means that, if you look at how you finance, how certain are the cash flows in the value chain that you are financing. So the risk we are taking is the weakest

link in the whole chain. So if the weakest link in the chain is the storage facility, that will break there. It doesn't mean that always the weakest link is on the smallholder side. It's on the whole value chain.

So that's where actually the issues are today, but you have to tackle them. They are not impossible to tackle – right? I think that's the important thing. So because we have doing as Rabobank a lot of things there.

The first thing is that we have joined activities with Northland and FMO and we established a billion-dollar fund to invest in new banks, especially African banks. The idea here is that, if we are equity holder of a local bank so you're not actually now the owner of the whole bank but partially owner of that bank, you could influence that bank to be a better bank. And once that bank gets better, you can go out there and reach the rural areas. Think about it. If you go to Tanzania and MB Bank in Tanzania, you invest in that, you make it a strong bank, and by means of making that a strong bank, you could go out there.

So I urge everybody to think about – how could we think about different ways how to invest, instead of putting the whole capital as a bank, you put less capital and you just multiply that in the regions. Today... And that's on the middle class. The Rabo Development Banks, so we already are in 12 countries in Africa doing that and are reaching that and are reaching millions of smallholder farmers.

The other part that we have to do is to go out there and talk to the new Basel IV rule as saying – look, we actually should... If you do good in the world, if you want to take that risk, you should be able to have a capital relief.

Now, we don't worry about the bank's capital, right, because we are... We should get it ... But bank capital is a very difficult thing. It's one that you know that's where the regulators have been looking at. So I think that's what we are committed as Rabobanks together with ISC. And I don't know if ISC is here in the room. We have been writing to the Basel committee and to the regulators to give capital relief so that we can give those loans. So there's a lot of things going on, so we have to be very aware of that. So the banks are not doing those investments right now because there's a lot of uncertainty at this stage – what are the rules on the capital that we are deploying?

Simon Great. Thanks, Berry. So we're going to jump to some questions that hopefully will provoke a bit of a conversation between us up here first over the next few minutes, and then we'll open it up, and hopefully we'll get some input from some of you as well who have thoughts to contribute and hopefully some questions for our panelists.

So the first thing from my perspective, as I was alluding to earlier from my TechnoServe perspective, is we need to bring together advisory support, technical tools, and capacity building to enable the finance to flow, to enable these risks to be better understood and better managed and better assessed and to enable the business models to be strengthened so that banks and other capital providers and so on can invest.

So, question, and let me start with you, Ruth. What do you see as the role of capital capacity building in these other, let's say, infrastructural supports and so on, to enable capital to flow better?

Ruth Are you asking me?

Simon I'm asking you, yes.

Ruth Oh, okay. Let me thank Ambassador Quinn for asking me to be on this panel. And I wasn't sure I would fit here, you know, with these men, but he knew I would have something to say. Look, I like "Take it to the Entrepreneur," because Norm Borlaug, his last words we know for in Africa is that, "Take it to the Farmer." He cared about the smallholder farmer. And with having the previous excellent lunchtime presentation by Her Excellency Mercedes that 70% of the world food is supplied by smallholder farmers. We can't wish them away. But I'll tell you with the Sasakawa Association I have had opportunity to work in about 15 countries, and we see smallholder farmers. They fear banks. They fear banks. They feel like the minute they enter the door, they don't have a tie, they are not wearing dress – these are men, and you can imagine the woman won't even look there. And most of those farmers are women. So we want to talk about financing, but you provide financing. Women in Africa are trading – these are the traders, everywhere. They are illiterate, but they can actually count money.

So how can we... We say, oh, you know, they didn't do mathematics. What? But they can count money. They can give you back your change. And these are our farmers. So the model I'm beginning to hear here what Rabobank is doing working with African banks or banks based in Africa, I think the best way is to also socially, strategically let them understand the customer, understand the unbankable farmer, understand the smallholder farmer, and let them know that they too need some resources. Because really without resources you cannot make it. So we have in Europe subsidies – Africa, sorry, bureau for business. What business? I can't even feed my family. So I'm not here to complain. I'm just offering opportunity. Because the farmers are there. They have understood. They know begging is no good. We get aid because we can't help it. When the weather has wiped out all our food, what do we do? That's all we rely on, so we get food aid. But then when I see, having worked with those farmers, work that Norman Borlaug and his team started for us, what I do in Western Kenya and our farmers with technology.

I'm not a farmer, and I don't want to be a farmer. I saw my grandmother farm, I saw my mother farm, and to tell you the truth, I don't want to farm. They educated me. I came to the U.S. I'm a professor, so I don't have to farm. But I went back to see and understand their struggles, and I know there are many opportunities amongst all, a lot. And I say, you know, these technologies can work for you. So when we take good seed, we address old African soil. And my farmer with half an are, my staff farmer with half an acre we put her on the plane to South Africa, and the small farmer in South Africa has 50 acres. But my farmer has half an acre, but she's been able to uproot her 2x10, she's been able to use good seed, she's multiplied her harvest, she's able to send her children to college, she has a good house, and she can even buy a bicycle for her husband.

You see, that's what I'm talking about, that it is possible when we understand what those farmers need. But we need the banks really to be cautious of who they are helping. We need the banks to know that they can do good. They can reach a lot more people. And then that way we can move together. But making them jump from nothing, nothing to going to get a loan, it is very risky. And the woman I talk about, she say, "What will

happen to my children? What will happen to me when I die? I won't go to heaven. I have a loan, you know?" So we have to understand these issues.

So I've been talking with these nice gentlemen, yeah, and what we need is partnership but also to understand. And I know a lot of focus is normally on Africa, but I think smallholder farmers are the same everywhere. They feed us, they need respect, and we need to address them carefully, and we need long-term intervention, long-term intervention, honestly. And I understood you are there for the long term. And I understand you are there for the long term. And that's why I'm happy being amongst them. Yeah, thank you.

Simon So, Geoff, you're trying to build a business providing machines to entrepreneurs, agripreneurs, to farmers, to cooperatives and so on. What's [inaudible] the technical assistance and capacity building and helping you grow that business and access the finance?

Geoff Yeah, so thank you, Simon. You know, in listening to Ruth, I think all of us in the room who have had the blessed opportunity to work with smallholder farmers out there, actually be in their fields and see the challenges that they have, can really appreciate the passion that she shares, because it's really a unique opportunity to work in this space that we're talking about here today.

And I want to thank the team at World Food Prize for allowing me to represent John Deere and share some of my observations and our strategies on the continent. You know, when Ruth said we don't want those smallholders to go away, that's absolutely our view as well at John Deere. But unfortunately, most of those farmers that we think of truly can't afford to purchase mechanization, the kind of equipment that we offer at John Deere.

So the solution that we are focused on across the continent of Africa and in other countries as well is around service provision or mechanization service providers. So these are our versions of agripreneurs, individuals or entrepreneurs, sometimes cooperatives that can collect the money and be able to put a down payment on the equipment, the services, the training, etc., and we provide kind of a complete package to make it as easy as possible for these businesses to get established and then serve these smallholder bases on a proportional cost for the size of their property.

And the great news is that there is an economic model that is sustainable for generations to come, and we're on the cusp of getting this started across the continent of Africa. There are some challenges in getting these models going, though, so supporting these agripreneurs, you need things like training, finance, and technology., that as individual companies we can't afford to make all those investments ourselves. So therein will be a theme I think we'll talk about here later today is partnership—how do we come together as industry players to help support some of those costs. Because if we can collectively bring those things, the finance, the training, the technology that fills that gap between the agripreneur and the smallholder farmer and do that from a long-term investment standpoint, I think the opportunity with smallholder farmers and feeding themselves, their families and the growth in the population that's to come, is quite achievable. I have an extremely positive outlook in terms of the future.

Simon So, Berry, I'm going to come back to you now. So Ruth has made a passionate advocacy pitch to say smallholders can be creditworthy. They can be good customers. They just need a bit of support. They need long-term commitments and so on. Geoff is saying we can do the same with businesses that are working with the smallholders. What about the financial institutions? What capacity building requirements do they need to then be able to engage with these customers? And what's Rabo doing on that side.

Berry Well, thank you for very nice words. I appreciate them. What we are doing is the point. The first thing that you have to do, you have to get organized, and I think that the cooperative model, rather than being a cooperative bank, is a very interesting one – right – so that you can organization as a cooperative. Because then you can buy jointly a machine, and you can have joint loan, your own credit cooperative, because I think that's very important, and you can have your marketing activities and technology.

And the other side is that you have to produce something that somebody wants to buy, so very important is that we change the way... If you look at Rabobank today, through our foundation we are reaching 5 million smallholder farmers, that every day we are helping them. It's 212 projects we are running today. But the key of the projects to be successful is that every time we go in there we first try to find a market for the products. The worst thing that you can have is a smallholder farmer producing tomatoes, going along the road trying to sell the tomatoes and actually nobody buying them. We know that what you want is that every tomato gets cash flow – right? So that's what we are trying to do. So we also know that's the only thing that works.

So today Rabobank is looking at – how can we make sure that the bottom of the department gets organized. By means of getting organized, the women, smaller farmers, doesn't need to go to the bank to ask but go to the credit cooperative where she also has a vote. And that's what we are trying to do. And we form those cooperatives so that they can be successful and so we can set it up. We want to have the machines in a cooperative so there is somebody doing it, and you as a farmer, you are part of the cooperative. And we do that. We want the dairy farmers to be the owner of their own dairy processing plant. Those are the things that we have to look. And when we make those ownership structures happening, step by step we build them up, I think then we will empower the smallholder farmer. We will take that 400, 500, actually today 450 million smallholder farmers, into the commercial activity so that they can have a normal life. I think that's what should be the commitment. That's the commitment of Rabobank. We want to have partnerships throughout the way of thinking of cooperatives to where we're thinking about the whole value chain that we link them.

And then if you have that value chain as I was saying, you can actually finance that in a much better way, because then you understand the risks which are there, and then capital will come. So that's the actual pointer I wanted to make and what we have to realize that to be able to finance a smaller farmer, you have to know that we cannot comply to all Western rules because they are different. So that's my plea, and that's what I am doing every day in Brussels and in Washington and New York, trying to understand that doing good should also be rewarded.

Simon Great, thank you. So just building on your points about policy, I want to come back to our other panelists. So from my involvement with root capital and the Council for Smallholder Agricultural Finance, which Ruth has been a part of and Rabo has been a

part of, as well as many other institutions that are trying to put capital to work with cooperatives with these aggregators and small and medium enterprises, that's one of the most difficult and challenging parts of the whole financing system is to get the so-called "missing middle" served by financial institutions. And there's been a lot of work done recently to say, you know, this is not a sector that can be served anytime soon in a purely commercial way. There is a role for smart subsidies, catalytic finance, blended finance solutions and so on, to come in and serve this market.

So, Ruth, as you engage with policymakers – you're a former politician yourself – how do we get this message about, not at the global Basel level that Barry is talking about, but in countries, the national change in policies that can embrace the use of government policy and so on in a way that can crowd in positive behavior by financial institutions? What are your thoughts about that?

Ruth Yeah, I'm still a politician. I guess I'm a former parliamentarian. Yes, yes.

Simon Thank you for clarifying.

Ruth But just coming back here to cooperatives, you know, I tell you if you take Kenya as an example, we had cooperatives at independence, and they were working excellently well. But for some reason governance became an issue, and so people lost faith in the cooperative movement. But now they are coming back. And I think as they come back, we need capacity building there. And that's why I'm talking about when you come and you are collaborating with our local banks, you can also bring some of those good ideas like from Europe that this is how our cooperatives are run, and they are run a long time, so they don't have to collapse. And, yes, smallholder farmers by themselves, there's no where they can go unless they have a grouping. So we have some of that, this progress made, is going on. And of course we need also to train the farmers to understand what banking is. Because some, up to now, still keep their little monies in their households. So that is important.

Now, policy, policymaking, we have great policies right now. We are not short of policies. We even write policies in better English than yourselves. They exist. They are nice, borrowed from here and the paste, cut and paste from here, and some we actually think were great policies. The problem is in the implementation, implementing. So the policy environment is great, and so many times I come here and I tell people – come to Kenya. Come to my village. Come to Africa. Of late, since I was here two years ago, I've had some arrive in my village, and it's very good. But policies are very important, and I know we have policies which say banks, can you open up space for farmers, for agriculture, and they do. But sometimes when I check, their interest rates are higher than what they should be.

So we need to think of that farmer. Why should we get a farmer to pay 20% interest rate on some small loan of \$1,050 dollars right? Why should we do that? So we need different products. And I know you're Rabobank – I'm looking at you. I think this Rabobank can do this. Have a special package. Have a special package, really, for smallholder farmers and you share your focus on them.

But also I saw this – John Deere, you don't have this, you know. This is a nice, small..., from the University of Missouri I've got... Kerry Clark showed me this. I said, gee, our

young farmers, even the women farmers, would love to drive that small tractor. It's so sexy looking, you know. But when it is made in country, it is actually affordable. And when you have them together as a cooperative or as a group, we work with the groups. They can come together. They buy one, and actually it is now able to farm each farm, each small farm.

So yes, policies many times actually exist, and you can work on them to exist. That's not a problem at all, but the implementation now will have to have the commitment. So I like this DG spirit that we have to work in collaboration with each other. And it doesn't matter where you are. You have to have an African partner that you can trust. It's all based on trust. And then you have others who have things that they can offer, and you have to be committed like you said, committed to doing good, not just doing business but also doing good.

Simon Let me jump to my last... Thank you. Let me jump to my last question to the panelists so that we still have a bit of time for your questions. And, Ruth, I mean, yes, I agree with you that there are policies, but some policies are better than others. And in Kenya I think the recent experience with the interest rate cap was perhaps a policy that was a little too blunt. So it wasn't just execution, it was also having more intelligence, I'd say, and the sophistication about how that policy gets applied to different segments, again, back to my earlier point. And I know that's under review now, and hopefully we're moving into a more productive space.

How to get those policies to be smarter, to be more nuanced, to be tailored to the needs of specific segments and so on comes back, I think, to the question about partnerships, bringing different stakeholders together to take a close look at these things and not just to have the government say, "Well, we're going to mandate something," or the private sector say, "Well, we're just involved in our own profitable part of the ecosystem, and we don't worry about the rest." So I'd love each of you talk about – what do you see as the potential for multi-stakeholder partnerships to come together.

And, Berry, let's come back to you. Syngenta and Rabobank are both participants in the Farm to Market Alliance. That is one of these platforms. It's still not working as well as it should, although it's achieved a lot of progress. I think it has enormous promise, and I think we need to stick with that one and really make it work well. But what's your take on this Berry?

Berry I think on the Farm to Market Alliance is that it's really bringing all the partners and partnerships together, not only companies but also the private and public sector working together with cooperatives and smallholder farmers and always with the philosophy – let's look at the whole value chain. And how can we make sure that the value chain doubles the productivity at the smallholder farms, and at the same time you have a buyer on the outside.

So what we have been looking at first, before we set up the value chain, we first have somebody who wants to buy. One example, the World Food Program buys 10 million tons every year, so why don't part of that program could not be purchased from smallholder farmers in the whole value chain? Then you go and you go step by step in the value chain and you look – what do you need? Well, you need fertilizer, you need seeds, you need transportation, you need insurance, you need equipment. And you

build up step by step of those things, and you create a value chain. And suddenly you have a value chain which is very financible, because every part of that is modeled... The cash flows flow in the right way, and they actually reach actually the one that started, which is the smallholder farmer, which is usually the one that sees the fewest of the money in the whole value chain. And most important, we ask that every party in the value chain also takes risks. So there is also losses that you could have if it doesn't work. So that's the only way it works is really establish those value chains. And then establish those value chains in country. Think about poultry value chains where you have the smallholders, you have the processing, the cold storage until it gets to the supermarket.

And that's why we also invest in local banks, because to be able to finance those value chains, you also need local currency, and you need local, good local banks that can generate that currency, have credit offices that can do the credit approval, etc., etc., and don't think—oh, it's very risky, and that's why it's 20%. The more in which we understand the value and the risk of the value chain, you can't do the proper pricing. So those partnerships are the only ones that are going to make that we go from the currently totally inefficient financing, for the smaller farmers to actually fill their bucket. Because now we know of those, 70% of all food is going to come from the smaller farmer. And if we don't solve this problem, it's going to be our problem.

Simon So we've had this panel talk a lot about sub-Saharan Africa. John Deere, of course, is a global company, as is Rabo. Geoff, thinking about lessons from elsewhere and how to build effective partnerships, what's your take on this?

Geoff Yeah, thank you, Simon, and I'll answer that in just a second. But I do have to respond to Ruth's comment about the sexy woman farmer on that tractor. You know what they say about green. I really think a lady on a green tractor is very sexy.

But, Simon, this question around partnerships and so forth I think really gets to the heart of the soapbox that I get on at John Deere. And that is, you know, companies like ours, NGOs like TechnoServe and others, governments, have all proven that there are financially, economic, sustainable models on the continent—but we do that in small scale, in pilots; and we put those numbers in our reports, and we're all pleased with the results and so forth. And then we step back and look—you know, how do we scale that up? And I just think it's incumbent upon us to come together.

We can make our investments in our business, and we have dealers on the continent of Africa that are big companies, and we did that specifically, companies like Tata and AFGRI and Agro, who are there for the long-term commitment, companies with big, deep pockets. And they can support the smallholder farmers. But there are just things that collectively we will get so much further down the road if we can come together as companies, NGOs and government in areas like I mentioned earlier: Training—it's absolutely essential, and we're going to be a lot more successful if we do that collectively. Finance—and I think there is a role for government in finance, but I think that role is limited to providing loan loss guarantee, being a backstop to give the commercial bankers the confidence to loan to this sector. So I think there's partnerships to be had there for sure, public and private. And then in the technology area—and you and I have had discussions. You're working with the technology business that's focused in this agripreneur sector. We're working with the company, Hello Tractor, who supports that contracting business. You know, let's make sure we do that smartly and as

much as possible together so that we're not duplicating and replicating investments unnecessarily.

So I just think there's a huge opportunity there, and I really challenge us collectively to come together quickly and start pooling our investments and our talents and our projects for everybody's benefit.

Simon So just building on that point, some of you were at a breakfast that I participated in this morning on scaling up agricultural technologies and agricultural solutions for smallholders. And there's a lot of emphasis now, I think, by public sector organizations, in particular funding organizations as well as private sector companies and so on, on getting away from the project cycle and getting really towards these problems that are not just going to run smarter projects but are going to really foster system change at a large scale to benefit the 500 million, or whatever that number is these days, smallholders that really needs these kinds of support.

Ruth, coming back then to the farmer perspective on this – often when we're in this space of talking about public/private partnerships or multi-stakeholder initiatives we're thinking about businesses, we're thinking about NGOs, but often they're international NGOs, and we're thinking about governments, and so on. But the farmers at the end of the day, as you have very eloquently said, are the customers of all of this. They are the beneficiaries if these things work. How do we get farmer voice into these partnerships?

Ruth Look, most of the farmers, smallholder, I work with, I know of across Africa have half an acre to two acres of land. It's very tiny. Many of them, many of them have no legal right who have those small plots. They are voiceless; nobody knows they exist. And so that's why we say people like me and others who understand what's going on globally and what can be brought down locally... There are a lot of technologies, and especially now with the mobile phone, the internet. If you take Kenya we have 80% penetration, where in Ethiopia it's increasing, I think it's 60% penetration. They have these things even if they can't read what is there. It empowers them, but there's a lot you can do with that.

So the farmer or whatever we do, all of us, here, we have the farmer in mind – right? Norman Borlaug said, *Take it to the farmer*. He died thinking of the farmer, but what do we really do with the farmer? Just like Geoff said, we just write nice reports, three years, and we're out. Yeah? Oh, yes, nice reports show some farmer, nice women, and you get your grant. When I hear there's a lot of money committed. It's going to help smallholder farmers-. It's going to Africa. I go back to my village. I go back to my communities. I don't see a single difference. I don't see a change. So we take one entrepreneur, one farmer who has done well, and we use them like a star – you know, this is what we have done. But really I think we can do more, and I believe, Simon, there's a lot of money around. And for the young people who are here, I now have young people coming to the village. They come out completely transformed. But they also transform the village. Yeah, you have people who are suddenly happy – “We matter. We are valued. I can do a lot for myself.”

So bringing the smallholder farmer to the international arena is not carrying that woman to bring her to Des Moines. She can't survive the trip. She'll go back and don't find the husband will be gone – right? So we need a number of us to be advocates for the

smallholder farmer, to understand what they're all about. And it's better even when it is... It doesn't have to be me born there. It can be anyone else. We have many people here who are working in difficult situations who know more about Africa than I do. They're in Cambodia and Yemen. They're where... You know, I had one yesterday. It's amazing. So we can be advocates for the smallholder farmer. And I would like, God willing, if I come back. When I come back next year, I'll be approached by people who say, "I went down there, and this is what I found. And this got changed. I was able to effect." It's not just about money." It's about having a presence as well and showing that we care.

Q&A

Simon Thank you. We're almost out of time, but let's take time just for three questions, and if you can ask it of just one panelist, so much the better; because then we can have three short answers. But we'd love to get a little bit of voice from you, and we're going to start over on the left. Please introduce yourself, and please point your question.

Q My name is George Commins, a retired extension agronomist and a farmer, educator. I'd like to ask Ruth to share three successful programs in Kenya and Africa. The first would be like the Kagatsawani Community Development model. I would call it a self-financing credit union among the women's group, Janet Rumo, Sharon Munnayo. That would be the One Acre Fund in Sasakawa that are packaged programs that include finance insurance marketing.

Simon Thank you, Ruth. Just very, very quickly, three of your favorite examples.

Ruth Yes, yes. Africa is about projects. It's not for lack of money. It's a lot of money that has gone to that continent, a lot. Many projects I'm not even aware of. But I'm here, I'm here, I'm here. It's like a puzzle with the different pieces scattered all over the place. How do we bring them together? Great work going on, just by here, here and there, but we still see hungry children, we still see hunger in the women, poor, poverty all over. Yeah, Pedro, you know that. It's all over. But it's like a puzzle with pieces scattered all over. How do we bring them together so we can begin to see impacts? How do we avoid duplication? How do we collaborate? There's a lot of opportunity for that.

Simon Okay, thank you. Question over here, please?

Q My name is James Fairchild. I'm a part of the Global Youth Institute, and my question is – What role do micro-loans play in smallholding farmers?

Simon So your question is how do micro-loans help smallholder farmers. Yes?

Q Yes.

Simon Berry, do you want to take that one?

Q Oh yeah, key. The good thing is that the reality is that if you look at our statistic as bank, if you give micro-loans through cooperative credit unions, actually the default rate is almost zero. Right? And because it's well organized. So I think there is no crop without cash. And I'll just put it out. Let me be sure – if you cannot fund your crop at the right

moment and when you have to buy the seeds or you have to buy the fertilizers or you have to buy food so that you can wait until you have to market your crop, it's not going to be successful. You will remain on, let's say, on the 2 tons per hectare instead of going to the 5 or 6 tons. So micro-loans is actually the lifeblood of being able to produce food.

Simon And I would just add to that that loans on their own typically don't work. They have to come with a package of other things. We just heard about One Acre Fund as one such solution where it's a package. And the loan is at the heart of the package, but you need the rest of the package. Sir, over here, last question.

Q I am Bill Crabtree from the Global Farmer Network. My question is to Mr. Andersen. I didn't see your sexy John Deere grain machine. I'd like to see you hold up a photo that was a similar cost, maybe a different color. Do you have such a machine, and is it made in Africa?

Geoff Thank you for the question. We do not have machine forms like what Ruth shared. And we've looked at that a number of times and decided it's not the right machine for John Deere necessarily. But we certainly see the value in that machine form. And until we have zero hungry people in this world, every solution is a good one. But that's not one that we are invested in or plan to invest in.

Simon Thank you. I'm afraid that's all we have time for. I'm just going to share a couple of my own takeaways from this very interesting discussion. I think first of all we have to have the farmer at the center. The farmer is the ultimate customer. Whether the loan is going to a cooperative or the loan is going to an agripreneur. Who's working with the farmer? If we're not serving farmer needs, we're not really solving the problems that we're all here trying to solve. So I think for me, Ruth, your passion and your devotion to this cause is very admirable, and thank you for bringing that to the table.

I think to Geoff's points, we need good business models, however. We need good business models that can get the innovations, whether they're machines, whether they're irrigation, whether they're seeds, whether they're crop protection and fertilizers. We need good business models, and we need good entrepreneurs and good businesses behind those business models. And they have their financing requirements, and they can become channels for the financing.

And then to Berry's points, we need the financial institutions to come to the table, but they can't come to the table on their own. They have to come to the table through partnerships, they have to come to the table through better regulatory environments that are really enabling the causes that we're trying to pursue to be solved and not just to satisfy maybe, you know, folks in Basel where I'm based or in the financial capitals of London and New York and Singapore and so on.

So I hope you've all learned something. I'm going to take the moderator's prerogative and just for one moment wave something else at you. And that is a book that we just put out at Syngenta Foundation in partnership with the Indian Center for International Economic Research, and it's about *Supporting Indian Farms the Smart Way*. This book is not available in the United States yet, except at this venue, and it is upstairs on a table on the third floor. Those of you who want to understand how policy can enable finance to flow, enable technologies to flow, building off Indian examples, you might want to go

and grab a copy. It's available for free today, and if you're going to India you can buy it. We have about 25 copies upstairs, so run upstairs, go grab a copy.

Thank you all for joining us for this discussion. Thank you very much to my fellow panelists, and we look forward to the rest of the afternoon.

Ambassador Quinn

Thank you. Well, great job! So, Simon, thank you. I was with Simon in Kegali, and what a fantastic moderator he was there, repeating it here. Berry Martin. Thank you, Geoff. But, you know, Ruth is my dear friend, and I just want to say – You know, Ruth, you have to be a little bit more outgoing. You know, you shouldn't hold back. So thank you very much.