Employing Financial Inclusion to Achieve the Economic Goals of Africa's Smallholder Farmers

(Emcee) Roger Morier:
All right, we're going to begin our afternoon sessions.

The next panel is about financial inclusion, obviously, but through a slightly broader lens. It's going to ask the question: Financial inclusion - to what end? Now, there have been several references to that; economic inclusion and the betterment of people's lives. Obviously, you heard that a couple of times already yesterday and today. But this panel is going to look at financial inclusion as a stepping stone towards economic inclusion and then economic inclusion as a stepping stone towards a better life, but from the point of view of smallholder farmers.

At the Foundation, we pay a lot of attention to smallholder farmers. We have made a number of partnerships working in that area and we think this is an important topic that we need to pay attention to.

The person leading this panel is somebody who has real on-the-ground experience working with smallholder farmers. I know this because I saw the project in application in Tanzania. Sieka Gatabaki is the Digital Financial Services Manager for the AriFin Accelerate Program of Mercy Corps. And, he is going to come out and he's going to bring his panel. And, I would ask you to give him a warm round of applause, please. Sieka. [*Applause*]

Sieka Gatabaki Kungu, Digital Financial Services Lead, AgriFin Accelerate Program, Mercy Corps:
I'll try and make this very exciting and sweet. It's a very practical conversation.

Someone in the morning actually mentioned that they felt that the person that they were representing on their badge would have found the conversations a little bit higher level. So, at this panel, we're going to try and bring this conversation all the way down to the smallholder farmer.

So, the title of the session is "Employing Financial Inclusion to Achieve the Economic Goals of Africa's Smallholder Famers". It's going to be a one-hour conversation.

Yesterday, there was a conversation around whether financial inclusion is enough or are we talking about meaningful financial inclusion? And so, I was of the mind that I might want to add 'meaningful financial inclusion' to the title of this session. But, I thought to myself, because of the organizations that are represented in this panel, their close and intimate relationships with the smallholder farmer would suggest that the financial inclusion that they're offering to this smallholder farmers is, indeed, meaningful inclusion.

The challenge of employing and deploying financial inclusion to smallholder farmers is a great challenge. We all know this. We've been practicing this for many years. In fact, yesterday there was a presentation, or a presenter, that suggested that even with the great success of mobile financial services, this has only lifted 2% of households out of poverty. A very humbling statistic. Only 2%. And, for someone like me who is a former telco MNO person, who was there when M-Pesa started 10 years ago, who was competing, offering services, trying to find a way to build adoption, the pathway to great usage, and the achievements that we had, I truly believe that there is an opportunity for financial inclusion of the smallholder farmer.

An opportunity exists, we all know that, in terms of finance for smallholder farmers. About 70% of their needs are met by agri-business and the informal sector. So, there is an opportunity. There are hints of a pathway. There are ways in which we could actually build an ecosystem where smallholder farmers are included and their family practices are viable and lead to them achieving better economic goals.

Often when I come to a conference like this, I have conversations with different practitioners. And, I like to ask them how they are growing in terms of achieving the economic goals of smallholder farmers. I had a conversation with Hedwig on Tuesday morning, Hedwig from AGRA. We talked about many things. One of the things we talked about was how mechanization was changing the incomes of smallholder farmers. The time that it saves them allows them to engage in other economic activities, increasing their incomes. The productivity that is gotten from mechanization increases the output from their farms and, again, hits their incomes at the end of the day.

Finally, I also had another conversation with a lady from the insurance industry. We had this conversation at the cocktail. She mentioned that they’re offering a bundle of hybrid seed and insurance. And, she went to visit two of their beneficiaries, two single mothers. And, when she visited them she found out that these two mothers were not only farming in their land but had already started to lease out additional agricultural land because of the income they were getting from this bundle, from his hybrid seed. They had the confidence to believe that agriculture is a pathway out of poverty.

These are the conversations we're going to have today.

I am joined by great people from great organizations.

Emmanuel Yawson is a Sustainability Analyst with Barry Callebaut working with the Global Cocoa Sustainability team to coordinate financial sustainability reporting for Biopartenaire of Ivory Coast, Nyonkopa Cocoa Buying of Ghana, and Biolands International of Tanzania. He has over 10 years experience in the cocoa industry.

Dickson Naftali is the Head of MobiGrow at Kenya Commercial Bank. Kenya Commercial Bank is one of the largest retail banks in Kenya. Dickson comes with 16 years experience in the sector. He leads all MobiGrow activities in Kenya and Rwanda, including financial services provision as well as loan financial services.

Catalina Eikenberg heads the Sustainability at Bernhard Rothfos, which is part of the Neumann Kaffe Gruppe, the largest coffee trader in the world. She was previously the Account Manager at TechnoServe, an American NGO working on business solutions to solve poverty.

So, we're going to have a conversation. To kick us off in this conversation, I'm going to invite Catalina to share with us their model to include farmers financially. Thank you. [*Applause*]

Catalina Eikenberg, Head of Sustainability, Bernhard Rothfos GmbH:
This is Howawa. She is 43 years old, a single head of household, a family of five. She's got three acres of planted robusta coffee, 1,500 trees. These trees are by far her most productive asset. Last year, she sold 1,200 dollars worth of coffee and this is the one single reliable data point we've got with regard to her income or potentially her indebtedness capacity.

The traditional provider of financial services of Howawa is the local village coffee trader sometimes called *koyote.* The way it works is when Howawa has a need, let's say for school fees, medical emergency, she will go to this person. She will get maybe 50 dollars and, in exchange, she will pre-sell part of her harvest.

There was a GSS study in 2015 that estimated when Ugandan coffee farmers engage in this kind of pre-selling, they end up paying a monthly, monthly effective interest rate of between 75% and 140%. Unfortunately, the study also estimates that 95% or more of the 1.5 million Ugandan smallholders engage in these kind of transactions because it's the only way they can get cash whenever they have an urgent cash need. And, what happens is, they're trapped in this cycle of poverty where they are struggling to meet the day-to-day needs. And, obviously, they never get to invest long-term in their farms.

So, the good news is that as of last March, things have changed for Howawa She's got another option. Her farmer group started working with our farmer financing unit, which we began at the beginning of this year, also with the support of the Mastercard Foundation Fund for Rural Prosperity. She applied and was approved 200 dollars more or less worth of fertilizer and 70 dollars worth of cash. In July, she met her repayment target through bringing coffee to her groups who were secretly coming to us. And, in August, she applied for the next round of fertilizer, the next round of cash. This means she is on track in our two-year Crop Nutrition Program. This means she is on track to doubling her productivity within two years.

And, Howawa is, in many ways, our classic client. So, she has been producing coffee for more than 10 years, but she has never used chemical fertilizer. What that means is that her soil and her trees are incredibly responsive to nitrogen because they have never received this nutrition. So, the potential return on investment on that fertilizer application is between 100% and 300%. And, this is exactly the value creation opportunity that we want to unlock. It's basically bringing the green revolution to Africa, and actually not just to Africa. We know that the exact same challenges that she faces are also happening to smallholder farmers in Indonesia, in Honduras, in Mexico - exact same thing.

So, we have decided that we want to do this, not just for Howawa but for many more farmers. And, in all honesty, we're not doing because we want to lift people out of poverty. We're not an NGO, we're not a charity. We are the largest coffee trading group in the world and we want to do this because we want to remain the largest coffee trading group in the world 50 years from now. We know if we want to achieve that, we've got to get close to farmers like Howawa We've got to understand very intimately how she can produce more, and if she can produce more and if she can sell more coffee to us, then we can also make more money.

So, we first approached financial service providers and we said to them, "look, here's an opportunity. More than 100% return on investment for fertilizer application, for 'x' million of smallholder farmers". And the standard response is, "it's too complicated. It's too risky. Farmers are too atomized. The costs much outweigh the potential returns that one could make lending to them". So, we said, "okay. Well, I guess we've got to do it ourselves. We got to try it out ourselves". So, this is what we're doing now. We believe that we're innovating to make sure that we can do it in a responsible manner, in a manner that is commercially viable.

And so, I'm going to tell you a little bit about how we think we're innovating.

So first, we've got a very thorough farmer-centric product design. So, we've got two products.

We've got a fertilizer value-creation advance where we give farmers fertilizer at the right time of the year when soil needs to be fertilized, that's during the rainy season. We give them the best fertilizer available. We've conducted soil tests to make sure the chemistry that we're providing them is exactly what they need.

And, we are also making sure the fertilizer is delivered to their doorstep because distribution is a huge issue.

So, that's one part.

The second product is the consumptions moving cash advance. And the way it work is more like a permanent credit line. So, we pre-approve a total cash amount for each farmer based on past coffee deliveries. And then, the farmer tells us when he or her wants the disbursement to happen. And, they tell us by sending us a USSD code. The moment we get the USSD code, the disbursement happens through a mobile transfer immediately.

So, we're going pretty aggressive her in replacing the local *koyote* as the source of cash for smallholder famers. Because we know if we cannot get them out of that cycle of pre-selling the harvest at hugely discounted rates, then the farmer is never going to be able to ultimately bring their coffee to us. But, at the same time, we know we cannot give them just cash because cash *per se* is not going to increase their income. So, this is why the fertilizer, as well, is so important because that's what's going to increase their productivity, increase their income, and ultimately really get them out of that poverty cycle.

For both products, the repayment happens during the harvest season of the coffee. So, we get repaid through coffee beans. And, we really don't want to get repaid through money because we're not really interested in money. We're interested in coffee.

And then, the second part of our innovation is partnership. So, it looks pretty complex and it is. When we first started on this, we were very aware we're not micro-finance people. We're coffee traders. We decided we need help from microfinance experts and we chose IPC because we believe they're the best at what they do. They've created microfinance institutions from scratch again and again in a pretty systematic manner. Most of you will probably know the pro-credit banks. IPC is helping us navigate this journey of figuring out how to structure products and processes that are tailor-made for coffee farmers.

We've also got a technology company called Fieldbus who has an app. It works on the smartphone. And, through that app, we receive applications, we track coffee deliveries. So, if you will, we don't really have a bank branch. Basically, the bank branch for us is replaced by a smartphone that sits at a farmer's group.

Aside from that, we've entered a public/private partnership with GIZ, the German government, who provides financial literacy and good agriculture practices training, to farmers through the Neumann Foundation. And, we partner with Yara who, we believe, has the best fertilizer today. And, Yara makes sure the fertilizer is delivered at the farmer's doorstep, as I said.

And, last but not least, in the back stage of all this, we are risk sharing, we're sharing the risk in the portfolio of loans to the farmers by 50/50 with ABN Amro, who provides the financing lines for us. And, we've also got a first sell guarantee from IDH for the first five years.

Without this sharing, it would have probably not been possible to engage in something that's so new for a coffee trading group like us. And, we know the partnership structure is complex, but we are also very, very much aware we cannot do this alone. Thank you very much. [*Applause*]

Sieka Gatabaki Kungu:
Thank you, Catalina. When she talked about them getting to a business as an MFI and them being a large coffee trader, it reminded me of the days when we were in the telco market and we're

saying, "well, financial services, maybe this is a bank product. Are we sure are we the ones who are able to do this? Can we ideate, can we come up with solutions that are relevant to customers?" But, we've taken that question much further.

Allow me to ask Emmanuel to kindly share with us a little bit about their solution and how they're working with cocoa farmers in Ghana.

Emmanuel Yawson, Sustainability Analyst, Barry Callebaut:
Thank you, Sieka.

Biopartenaire or Biopartenaire as we say it in French, is a cocoa source and business and is part of the Barry Callebaut Group. Barry Callebaut is the world's leading producer of industrial chocolate with our head office in Switzerland. Then, we have 53 or 55 factories across the world. And, we also have sourcing companies in all the origins where we have our factories.

So, what Biopartenaire does mainly is to source cocoa beans from the farmer. Now, we go to the very remote areas where cocoa is grown in Ivory Coast to buy cocoa from the farmer. And, we want to by cocoa in a sustainable manner and, for that matter, we want our farmers to produce cocoa using the best economic practices, and using their practices that will ensure that cocoa production is sustainable. And so, we do our own in-house research to see the best way of producing cocoa. And then, we go to the ground and see how these farmers are also cultivating the cocoa. And then, we realize there is a gap between the knowledge the farmer has and the knowledge that we also acquired from our research on the best way of cultivating or producing cocoa.

So, what we did was to design a product that will fit into our sustainability agenda. And, the product was designed in a bundled form where we plan to give inputs, agro inputs, to the farmer. We plan to provide professional agricultural services to the farmer. And, we also plan to give crop protection to the farmer. And, this we do based on the research we have.

But, we know the farmer or the smallholder is our customer and he's the one who's going to use the product and we need his consent to be able to provide these services. So, we go down to the farmer. Using our system of coaching, that is we employ people as coaches, we train them. They go to the farmer, sit with the farmer, talk to the farmer to assess the level of knowledge that the farmer has. They assess the condition of the farm and then, together, they agree on a product that is good, that will be good for the farmer to implement in order to sustain his farm and also to improve the yield from the farm.

And so, we came up with what we call the Productivity Package, which comprises crop protection, fertilizer application, and professional agriculture labour services like pruning and spraying services. And, we put them together as one product and deliver it to the farmer. The main idea is that the farmer in using the products will see improvement in their yields and, therefore, see increase in incomes so that he can come back and buy the products and continue to produce cocoa for us to also process.

Sieka Gatabaki Kungu:

Thank you, Emmanuel. From your presentation and Catalina's, I'm hearing a lot of speak with the farmer, talk to the famer. A lot of costs have been collected or gathered in this research activity to actually put the customer in the center, to actually meet the needs of these farmers.

But, before you answer that question, I'd like to go to the far end and talk to the banker in the room, the banker in this space, and see what are they doing, a large retail bank, that's looking to directly target smallholder farmers.

Dickson, could you please share with us your model.

Dickson Naftali, Head of MobiGrow Program, KCB Bank

Yes. So, as a bank, we were tired of sitting and waiting for large farmers with large tracts of land working to ask for these big loans and facilities, or aggregators who have the financial muscle or the off-takers. And, for a long time the bank has been asking themselves, 'how do they get into this mobile smallholder farmer space?' And so, studies were done and they revealed many results that showed a lot of, thousands, millions of smallholder farmers neglected and sort of left out. So, this study also went ahead to say that an institution that really wants to be dedicated to smallholder farmers has to go out of their way to come up with a business model that is different to target this segment.

And, one of the challenges in this segment is that the smallholder farmers will not have the collateral that the large banks would want to come and attach to a facility. They lack securities, they lack credit history. And so, the bank had to come up with a business model that replaces this collateral and securities with farm production data.

Now, the other tricky bit again is farmers don't keep records. So, where do we get the farm production letter to be able to lend to the smallholder farmers? So, again, it was by looking at the other value chain actors where the farmers take their produce like the buyers, like the aggregators like the off-takers, and trying to get that information and create a credit score out of it, put a value out of it based on average prices, and get a score and then inform the famers of the limit of how much they can borrow. So, this was done through a partnership.

Now, the next thing was how do you then also de-risk this farmer so they can be able to repay a facility when you give them? And, this had to be done through looking at the value chains that the farmers are in, understanding the farmers more, and if they have knowledge, the right knowledge, for this value chain. If they are receiving timely and quality inputs, and if they have a market to sell to. So that, if you give them a facility, they're able to stay in business and repay that loan. So, that's how the bank got involved into non-financial activities and through partnerships with AGRA at the beginning and the Mastercard Foundation at this point, this is about to be done.

So, we are hoping to demonstrate a model of financial services that is going to assure our investors and stakeholders a good return on investment eventually. So, this is what we are doing. And, it's a digital product just so that we can reach the geographies that are vast and tapping into technology, the whole ecosystem that has been created by M-Pesa just to ensure that we reach out to these farmers at all corners of the country.

Sieka Gatabaki Kungu:
Thank you, Dickson. You mentioned partnerships quite a bit. Catalina also in her presentation talked about partnerships, even though they actually are the primary person lending. Emmanuel talked about partnerships working with financial institutions to actually offer this productivity package.

But, back to Emmanuel and Catalina.

The question on the research, the cost of research, the cost of getting to know and being intimate with your customers, with your farmers, so that you can understand their needs and come up with these financial products. What does it cost to raise organizations? And, what kind of activities do you guys conduct on a day-to-day basis to get this intimate knowledge?

Catalina Eikenberg:
So, there's definitely a specific effort we've made as we made the decision that we wanted to engage in this but, in all honesty, we've been working with, we've been buying coffee from these farmers for almost a century. So, we buy coffee from between two to five million farmers every year, year-in-year-out. We do these transactions with them. We did already have a pretty good sense of their challenges. And, it was more a matter of making the decision to go out there and then start asking them some other specific questions. So, for example, on mobile money, what kind of penetration there was? And, for those that have never used it, trying to bring the mobile providers. But all-in-all, I would say the relationship with them is already there. We're already interacting with them constantly and it's more starting to pay attention now on this angle around financial services. But, I would say the cost is not huge. It's more actually thinking about it and planning it within the operation, but the operation is already there, the interaction is already happening.

Sieka Gatabaki Kungu:
Thank you. Emmanuel, do you want to add to that?

Emmanuel Yawson:
Yes. It's similar to what Catalina has said. We have also been in the cocoa business for more than 187 years. So, we have very long years and good research has been done over so many years. And, we have the data working with the farmers, as well.

So, what we do in terms of the cost is also try to talk our partners and our clients into the need to ensure sustainable production of cocoa. And, I think over the last two decades, the key has been sustainable so sustainability, sustainable. How sustainable are we in the use of our resources? So, our clients are basically buying into that.

And, whenever we develop a product, we go to them, we discuss with them, and we seek their support and their partnership to be able to implement this product for the farmers.

And then, on the ground, we also look for partnerships. Because we are selling products to the farmers, but we sell this product on credit. We realize that we are not a bank and we are not a financial institution and we do not want to do that. So, we want the farmers to be able to, to link them up with the financial sector. So, what we do is that we find partners in the financial sector who will collaborate with us, open bank accounts for the farmers, encourage them to save. And then, through their savings, we give them this productivity package. The idea is that the farmer will continue to save and create a history with a bank or with a financial institution so that in the long-term, he can independently go and access financial services for his farm and we don't need to come in again.

Sieka Gatabaki Kungu:
Thank you very much, Emmanuel.

Dickson, you mentioned partnerships. For your product to work and for your model to work, you need to have a close relationship with the agri-businesses that are supporting these smallholder farmers. What have been the challenges that you've faced forming these partnerships with these agri-businesses? How do you solve them and tackle them on a day-to-day basis?

Dickson Naftali:
Yeah, thank you for that question. It's actually one thing that we've struggled with. We've not had a problem with agri businesses that are nascent, that are starting, because they're also looking to provide some value to their member farmers so that they don't do side-selling. So, they want money for inputs for their member farmers. And, it becomes easy for them to give us the data. The only thing is that the data is not as clean as we want it. And, since this is a digital product, we have to invest a little bit in cleaning up the data and plugging it into our system and for us to be able to deliver the services to them.

The tricky bit comes with the more mature agri-businesses because these ones already have a financial service association going on within. And so, they see us as competitors. So, what we've been trying to communicate to them little by little is to say that we can back-stop them. They understand their members better. They can do the business-to-consumer loans. But, we can give them the loans at a business level so that they're able to efficiently offer services without getting stuck at any one point. So, that's how we've been approaching this particular partner.

Then, of course, there are other partners like the online trading platforms, who are doing the retailing and then there's the need for finance. And so, they say that if you plug into our system, you already have all this data that can convert into financial services. And, for us, we say our best partner is the one that wants to give us this information for free because they care for the smallholder farmer, anyway, and, they say "hell, no". So, we have come up with a data partnering policy, that we're still polishing this time, to see how we can do some commissions to data that we receive from this kind of partners.

Sieka Gatabaki Kungu:
Monetizing data, I mean, that's an exciting topic, but maybe not a topic for this panel.

At this juncture, I'd like to ask the audience if they have any questions or comments to the panelists.

Female Audience Member:
I have a question for Biopartenaire and Neumann Kaffe.

From our experience, farmers are willing to invest in their farms and increase productivity if they know they are going to earn more. Do you guarantee a floor price for the coffee and the cocoa? Because as the markets get flooded with more coffee and more cocoa, if people invest in their farms, I mean, how do farmers know that the price is not going below, is not decreasing, so that in the end they are no better off?

And then, the alternative question is, of course, instead of providing farmers with fertilizers, etcetera, why have you not increased the price of their cocoa and coffee in order to improve their incomes? And, have farmers decide where they want to invest their money?

Sieka Gatabaki Kungu:
Thank you. Are you ready to answer? Okay. Please go ahead. Before we get the next question, the panelists. So, Catalina.

Catalina Eikenberg:
Yes. So, there's a couple of parts to the answers.

So, first of all, on the coffee price. Even if coffee farmers all over the world were to double production, that wouldn't necessarily have such a huge impact on price because, actually today, these speculative parts of the volumes traded in New York City or the London Robusta Market, are like more than 10 times the real volume. Okay? So, the big drive of price today is not the real production, it's speculation. So, that's one.

Number 2. So, we don't enter a price fixation for the future, the reason being is if we fix a price with a farmer today...so, let's say we give him the fertilizer and we say, "you pay us with coffee". And, we fix the price for six months from now. If six months later, the actual market price is above what we had fixed, this farmer will not bring the coffee to us. That's for sure.

Sieka Gatabaki Kungu:
Can you put a floor price?

Catalina Eikenberg:
Ah, a floor price. A floor price is complicated. This is basically what fair trade coffee is, there's a floor. But, it only works if we can also sell with that floor to our customers. So, our customers are Starbucks, Nestle, all of the big roasters, right? And, if we don't have a floor with them then we would just lose money, right? And so, we could not enter that transaction. If we say, "we put a floor for the farmer, but our customer is not giving us a floor". So, that's why we can't really do that. We would just kind of go bankrupt basically.

Sieka Gatabaki Kungu:
Emmanuel, maybe you want to add to that conversation from the cocoa perspective.

Emmanuel Yawson:
Yes. For us, in the cocoa sector, it's very difficult to set a price, a floor price, or a ceiling on the price because we don't control the prices. The price of cocoa is really determined by demand and supply in the global marketplace. And, in West Africa like Ghana and Côte d'Ivoire, the government also sets the minimum price we pay to the farmer in every crop depending on the terminal prices of cocoa. So, we are not able to do that.

But, because we are training our farmers to produce cocoa in a sustainable manner, our clients are also willing to pay us a premium for the efforts we do. So, in addition to the prices that are set by the government, we pay a premium to the farmer when they produce in a sustainable manner.

And then, to add to their income also we try to encourage them to cultivate other crops. Of course, in Côte d'Ivoire and Ghana, it is difficult to find a farmer who cultivates only cocoa. They will do other staple crops like maze, like cassava, banana, or plantain, in addition. So, we are trying to do is to also help them and provide them with some kind of either seedlings or other incentives that they need to cultivate other crops, to augment their income that they will make from cocoa farming. So, if the price should drop, yes they get a shock. And, if the price goes up, they get a shock, they get the boom, as well. But, we always try that they get their premium and also support them to get income from other crops, as well.

Sieka Gatabaki Kungu:
Thank you very much, Emmanuel. Next question. We'll here from the lady there and then from Leesa next.

Female Audience Member:
Thank you. I want to talk about client protection. When financial institutions are financing through loans for farmers, we have to respect very specific client protection principles, transparency and pricing, the respect in the treatment we are giving to the clients, and the difficulty with the mechanism where traders are usually financing is that nothing of this is clear. In Côte d'Ivoire, we saw a lot of abuse from traders that have a lot of power throughout the farmers and for them to take the products through them and put whatever margin they want on

it. And, therefore, financial services is no longer giving more power to the farmer. But, rather, having a new business model on input by the traders.

So, my question to you is if you were to advise what kind of client protection principles were to be put in the system where traders are financing it, what would be your recommendations?

Sieka Gatabaki Kungu:
Thank you very much. You didn't mention your organization and name. Catalina, are you ready to start and then Emmanuel? Oh, we started with Emmanual and then Catalina this time.

Emmanuel Yawson:
Yes. Protecting the farmer against, I mean, how do you call it, 'traders who want to make more profit from them', is a very difficult one. And, I would say it requires a holistic effort from the industry players to prevent this thing from happening. Of course, we have the cocoa traders, we have the agro input dealers, as well, who are all into this market of providing credit to farmers.

But, for us, we believe that we need to do business in an ethical manner. And, we also need to make sure that the production is sustainable. If I sell a product to a farmer this year and he's not able to pay, or he ends up using all his income to pay for the product, he's not likely to come back next year. So, for us, adoption is key. And, adoption is that the farmer buys a product, he sees improvement and the following year, he will come back to buy again. That is the driving force behind what we do. It's not about making profit from the farmer. Our profit is at the high-level processing of the chocolate and not necessarily selling inputs or buying cocoa from the farmer.

So, it's kind of difficult. You have other traders who just buy the cocoa. They don't do anything else. So, all their source of income is from buying the cocoa and that is where the difficulty is. We need some regulatory authority to be able to regulate how they do this kind of lending to the farmers.

Sieka Gatabaki Kungu:
Catalina, do you want to add to that?

Catalina Eikenberg:
Yes. So, in our case, this whole part around client protection and transparency has been very very much at the heart of the design from the beginning, as well. And, actually part of that PPP that we've got with GIZ is focused exactly on that. Because even though we want to be transparent and we're putting it all out there, the information on what you know the interest rate is, what it means for them. But, the level of literacy for our customers is on average not even completion of primary school. So, it means we've got to start from a very, very basic understanding of what's an interest rate, what's a loan, really. And, the way GIZ is helping us is they have brought in financial literacy experts to design a whole training module, like 10 sessions to be deployed actually independently from us. So, I think that's even better in the sense that it's not us explaining to the customer, but actually GIZ is making a very kind of independent assessment of what our product is, explaining it to the customers.

And, in fact, what we've seen is that other financial service providers that are operating close to us, are being much less transparent than us, saying, "the interest rate is like 12%-14%". Then, when you go to see it, it's actually something very very different from that. If you add all the fees and administration thing here da-da-da-da. So, I think it's huge. And, actually yes there could be abuse because if these people barely been to school, it can lend itself for abuse.

But, I think if one makes the decision as an organization that you want to go really transparent and you want to do things right and you want to setup something with a solid basis, well we're not thinking like we're just going to kind of take away from them as much as we can and next year we're not going to be around, right? We want to be around 50 years from now working with that same farm, with that family. So, the last thing we would think of doing is trying to trick them over something so that two years from now, they don't want to work with us anymore, right? We want to build a long-term thing with them.

Sieka Gatabaki Kungu:
Thank you very much, Catalina. Question from Leesa.

Leesa Sharder, Mercy Corps:
Hi. I'm Leesa Sharder with Mercy Corps in the AgriFin Accelerate Program.

Financial services to farmers is hard because the process is so complex and so long. And, I thought it was interesting that Catalina said that you built an android app that was helping you to essentially make this process work and incorporate the financial services. We've done a little bit of this with the World Food Program, helping them build an android app that helps follow this path and bring in lots of partners. But, we have had a hard time you know pushing it down to the farmer level. It's really at the aggregator level. Then, we have Dickson essentially saying, how important it is for the banks to get this data.

So, smartphones represent a really rich interface I think that can begin to transform agricultural systems and put farmers on grid. But, we're waiting to see when will smartphones really begin to penetrate the rural areas and make a difference. We know that M-KOPA Solar is the largest reseller of smartphones and that's all in rural areas in Kenya.

So, how do you guys see smartphones, android apps, and this kind of technology penetrating into your markets in the next 10 years? And, what will that change?

Sieka Gatabaki Kungu:
Because Dickson hasn't spoken for a while, I will allow him to start with this one.

Dickson Naftali:
Yeah. So, you realize that just you rightfully put it, Leesa, the feature phones are the most common and they are still in the hands of most of our smallholder farmers. And so that's why our products, for now, are tailored around the USSD and not the smartphones. And, the USSD is

helping in terms of even information that we pass to the farmers. USSD can link to the SMS model using the SMS chat bots. So, you can see we are still using USSD and SMS model more than anything else. But, for the years to come, the transformation becomes easier and lives become better. Anyone who's been using a smartphone right now going back to a feature phone is really difficult. It makes the customer lazy and I think that transformation is going to happen at that point. But, right now, 70% of the farmers that we expect are still on a feature phone. What we call when we become lazy in Kenya.

Sieka Gatabaki Kungu:
Thank you, Dickson. Catalina.

Catalina Eikenberg:
Yes. So, in our case...just clarification, first. We didn't build the app ourselves. We hired a company whose core business is to build these apps for tracking field operations. And, we told them what we wanted and they did it, which I think is great, to be honest, because they are just really good at what they do. I don't think we could have been able to do that on our own, to be honest.

Now, on smartphone penetration, the communities where we are in Uganda, farmers don't have smartphones. So, you know, just kind of...we've been having this discussion about smartphones and technology. But, right now today, in rural Uganda, the grand majority of farmers have the old phones. So, we're introducing one smartphone per farmer group, which is one smartphone for 500 farmers, and it's pretty disruptive. It takes a lot of work and, again, you know, thanks to a lot of our partners, we're going through trainings and explaining how it works and how this is basically becoming the operational software of these farmer groups.

So, before, these groups were noting down all transactions of buying coffee from members in pen and paper. And now we're saying, "let's try to do it digital so that we can have a digital track record at the end of the year". And, we're trying to explain to them, "look, if you do this, you're going to have a digital track record of your income". And, then, you can potentially also go to a bank and tell them, "look this is what we've done this year". It's digital and it can be in Excel. But this has been tough. There's resistance and I would say the biggest resistance is around vested interests of leaders in the groups who actually benefit from the lack of transparency that the pen and paper provide. And so, once you've got digital, the numbers have to add up, right? Like, it cannot be like, 'oh, this money got lost' or 'this just doesn't add up'. Like, the numbers have to add up. And so, this is part of the process, I think, and hopefully it's going to go faster.

And, at the beginning, as well, we kind of very quickly realized we've got to find young farmer leaders who are actually interested in technology because trying to do this with somebody who is in their 60s or 70s, it's not going to work. Well, when we tried to do it with people who are in their 20s, they're actually much more receptive. They learn fast. They are open-minded. And so now, we've got a bit of a strategy going on where we're just trying to identify young leaders in each of these groups and those are the ones we train on the smartphone. And, we try to make them the champions of the new technology.

Sieka Gatabaki Kungu:
Thank you very much, Catalina. Time for a last two questions. Nathan, alright.

Nathan Were, FINCA
Thank you, Sieka. My name is Nathan. I'm from Uganda. And, I'm very happy to see what you've done in my country. It really gives me a lot of motivation.

From your description, you say that you're providing input credit to these smallholder farmers. How do you envision because the research that we did in Uganda indicates that farmers are looking for holistic suites of financial services. They're looking for insurance, they're looking for payments, they're looking for paying for school fees. They're also looking for saving options. How feasible is it, probably in the medium to long-term, to get your solution platform integrated with other financial service providers so that these farmers are not only getting input credit but they're also able to access insurance, and the range of financial services that they're basically looking for. Thank you.

Sieka Gatabaki Kungu:
Just hang on to that. Let's hear the second question because of time.

Atul Tandon, Opportunity International:
I don't have a question. I have a lament. Opportunity International. Atul Tandon, head of the network.

I grew up in India at the time of the Green Revolution, you mentioned that. And, I now live in the U.S. And, my lament is this.

The world's richest farmers in the way you see the countries, in 2013 received 252 billion dollars of farm support price help assistance from the government. Twenty percent of total receipts of farm revenues were from the government. So, we give them a handout. We're talking here about the lady who lives on 1,200 dollars a year, and we are talking about giving her not a handout but a hand up. And, I think all of us are striving to give more of that small farmers that hand up. I'm not sure that without the support from the local governments, the hand ups will ever get to where they are living on sustainable incomes. Because the evidence in the developed world actually points to the contrary. You continue the need for farm support.

Sixties growing up in India, part of the Green Revolution wasn't simply technology, it was farm support, pricing, which continues till today, right?

So, I would say (1) my hero is the smallholder farmer and, second, all of us and all of you for trying this solve it and standing with them. But, I do believe that we should come together and work with our local government, the point you made about regulatory approvals and changes and laws, both on the question of subsidy, but as well as on distribution being on a fairer basis. So, just a comment. Back to you.

Sieka Gatabaki Kungu:
Thank you very much. So, back to Nathan's question. At what point do you see that bundling additional financial services will happen under your model? I will also ask Dickson to talk about what they see as the future for their products provided to smallholder farmers.

Catalina Eikenberg:
So, we don't envisage becoming the provider of all the financial services. So, the way we see it is more like when the farmer is ready and wants to go to the bank, we are more than happy to link them to the banks so they can do their savings, see if they want to do a mortgage, or whatever other more complex services they want to access.

Right now, unfortunately, the way we see how these farmers lives are, it seems like they are pretty far from that. They are really just trying to survive and they are very scared of walking into a bank. But, at some point hopefully, they will make the transition. And, we will be very happy to provide that bridge, basically.

Sieka Gatabaki Kungu:
Thank you, Catalina. Dickson.

Dickson Naftali:
You know simply said, this is a journey. We started by creating a culture of savings. So, accounts are open, deposits go in there. Scoring is done. And, we are also providing a service to off-takers to do bulk payments to individual accounts for the members who supply to them. So, they have this big account and then there are many small accounts. And, they send us instructions and say, "deposit to Farmer 'X' this, Farmer 'Y' this, Farmer 'Z' this every month". That builds a history. So, from that history of the farmers already we can be able to score and give a limit of how much they can borrow. And, the next time we receive the instructions, we send back a statement to the off-taker and say, "you told us to do this, but this farmer already had a small loan with us of 50 dollars and so we deducted that and this is the balance that we deposited", just for clarity.

So, where I see us going is another insurance product bundled to this. There's a lot of MFI non-financial income that we are seeing, which is movement of cash to other wallets back and forth. So, a lot of income is not going to come from interest from the loans but from the transaction fees.

Sieka Gatabaki Kungu:
Thank you very much Dickson. I have time for just one last question before we wrap up this session. And, this question will go to all the panelists.

Vera Kafui Mills-Odoi, Global Communities- YIEDIE:
My name is Kafui. And, I'm coming from Global Communities - YIEDIE.

I am trying to ask something in connection with how we can enable farmers to achieve the sustainable goals that they set for themselves, smallholder farmers. And, the challenge they have, one critical challenge, is with agric extension; that's a specialized area, anyway. And, I'm wondering if any of you or any of the financial institutions or interventions that you're putting together, is thinking of adding this critical bit of the loop that is missing to the products that you give?

Because, if you give money and what they actually also need in addition to turning that money around has to do with getting specialized information or critical consultation that has to do with issues around pests, issues that have to do with the type of crops that they have to plant, harvest and then post-harvest losses, etcetera. How do we all think about making technical advisory services a part of the financial interventions that we give to smallholder farmers? Thank you.

Sieka Gatabaki Kungu:
Thank you very much. In fact, that was almost my last question, as well. So, well done.

I'll just add something to that. On top of the need to give this extension and non-financial support to the farmers, how do you justify this in your organizations? In your case, actually offering those financial services and the extension which is normal for you.

In Dickson's case, at MobiGrow offering the same services, how do you justify? What is the business case of this? Emmanuel, would you like to start?

Emmanuel Yawson:
Yes. Thank you for your question.

I would say that our productivity package, as I mentioned, has about three or four components (1) is inputs, (2) we provide agricultural tools and then, (3) we provide services. And, the services we provide are many specialized services like phone-in services, training services. We don't give money to the farmers because and we don't also just give fertilizer for crop protection. We train the farmers and give them the right knowledge on how to apply their fertilizer, how to apply crop protection. Because, we realize that without the right knowledge on how to use this product, it is worthless, regardless of the amount of fertilizer you give them.

For instance, with fertilizer application, you have to look at the age of the trees. If the tree is very old, a cocoa tree over 25-30 years, regardless of the amount of fertilizer you apply to this tree, it will not yield any results. So, that's why we have our coaching system. It's a kind of extension service that we provide to the farmer. I try to access the state of the farm, the age of the trees, and let the farmer understand what is best for him. If the cocoa is so old, over 30 years, then our best solution is replanting. So, we talk the farmer through replanting, cutting down the tree, and planting a new one. We don't just sell the services to them.

And also for our business case, I mean, for us in Barry Callebaut, we have a mission of having 100% sustainable chocolate by 2025. And by that, we are doing this on three key thematic areas.

We want to uplift 500,000 farmers globally from poverty. We want to eradicate child labour from our supply chain. And then, we also want to be carbon positive. We want to thrive and make sure that agriculture services does not lead to deforestation, for instance.

Sieka Gatabaki Kungu:
Thank you, Emmanuel. I think that's good enough time. Catalina.

Catalina Eikenberg:
Yes. So, first of all, we also include training, extension in the package because it's critical. Like, we cannot just give them fertilizer if they don't know how to apply it. So, it's included.

And, on the business case, I think there's something interesting. We are not looking to make money out of the financial service provided to the farmer. We're hoping or we're aiming at our farmer financing unit more or less breaking even. But, where we make the money is on the coffee. So, we get paid back with coffee beans and then we trade those beans and we make money out of that. So, I think that give us a bit of an advantage, if you will, with the normal costs of reaching that farmer with that financial service because we have another revenue stream, which is the actual commodity. So, I guess this is where it's a little different and we can go a little farther and take those costs because of that.

Sieka Gatabaki Kungu:
Thanks a lot, Catalina. Dickson, last but not least.

Dickson Naftali:
So, you wonder why a banker wants to get involve in agronomy. We do get involved. We have no choice. We have to train on land preparation, soil facility management for protection, harvests for service handling. And, we use a hybrid model where we also use domestic and field extension service providers who are not too many, but we use the model of also training of trainers, especially for those farmers, for these organizations that have workers that work around them.

But, just to wrap up this thing of return of investment. You realize that organizations that choose smallholder farmers to be part of their suppliers, to supply raw materials let alone even customers giving them services, but to make them part of the value chain. Then, support services are inevitable because smallholder farmers are many and it is hard to make them a supplier who'd understand your needs in terms of quality, quantity, and the timelines that you want that supply to be done. There are few organizations that have tried this. Diageo has supported a lot of sorghum farmers. They've invested millions of dollars when it comes to training them so that they can be able to supply. They cannot talk to 3,000 farmers at a go, but that farmer group has to have a marketing coordinator who understands the needs and communicates that back to the group. It operates like any other formal organization that should be able to deliver that crop. We've seen Nestle doing a lot in coffee and cocoa and we've seen the Cocoa-Cola company doing mango and passion fruit work in East Africa, a project that I managed on a 3-P award, a private/public partnership impact in New York.

So, moving forward, this is a conviction I'm trying to make to my also executive committee, that it is going to be long. Return on investment is longer because it's little money but we're looking at masses. And, when they come in, everybody will smile.

Sieka Gatabaki Kungu:
Thank you very much, Dickson.

Ladies and gentlemen, that's all the time we have for this conversation.

In terms of wrap-up. We heard a lot of points around really knowing your customer, really knowing the farmer, understanding what their needs are. As the lady mentioned, bundling financial and non-financial services, leveraging technology as a key point. And last, but not least, partnerships. The only way to get this done, the only way to really get the smallholder famers included financially, is largely through a lot of partnerships. Thanks a lot. Let's continue this conversation throughout the rest of the days of the conference. [*Applause*]