

Finance for climate resilience brought to you by CDKN “Building climate resilience through microfinance” Transcript

GUESTS:

- Tineyi Mawocha - CEO of Opportunity Bank Uganda
- Lydia Baffour Awuah - Senior Programme Manager at Opportunity International
- Puneet Chopra - Partner - Microsave Consulting in India

HOST: Kamlesh Pillay

[00:00:00] **Kamlesh Pillay:** [00:00:00] Welcome to the finance for climate resilience podcast series brought to you by the climate and development knowledge network or CDKN. And if you're curious about the policies, information, and solutions around climate change, you're in the right place. Listen in, as we discuss and debate, looking at real life, examples of practical changes that can be made for significant and lost in economic and environmental impact around the world.

[00:00:31] Kamlesh Pillay, the climate finance lead at CDKN at South South North, and I had the privilege of hosting this podcast. Today's our first episode and we're starting off with what we feel is a very important issue in the area of climate finance. In this podcast, we'll be looking at the importance of micro-financing and its role in providing solutions in climate change and underdeveloped countries.

[00:00:55] There are many interesting benefits to this, including its role in gender equality, [00:01:00] upliftment. We start off today's podcast by hearing from Sam Bickersteth the CEO of Opportunity, International, a leading enterprise in micro finance, to whom we've posed the question. What is the role of micro finance in the context of climate change? And this is what he had to say.

[00:01:17] **Sam Bickersteth:** [00:01:17] Climate finance is of course a means of catalyzing change to a more resilient and low emissions global economy. The 83 trillion global economy, which we live in, um, and publicly funded climate finance is that is critical to enable particularly the poor disadvantaged and vulnerable people to, uh, engage in this transition, this important transition to being more resilient to climate change.

[00:01:43] And if we focus only on the larger flows of finance, the central banks, the major commercial banks, the corporates, and the development, finance institutions, we may be missing the place where the poor and the vulnerable are the informal markets, the small holder farmers, [00:02:00] the traders, and these are the places where most people work in developing countries.

[00:02:04] The informal sector is the economy of so much of the developing world. Those working and living in, in this economy often need very small amounts of finance, small amounts of capital working capital to, to, to manage their businesses or grow their businesses. And they need secure places to, for their savings to enable them to manage, um, difficult, uh, periods.

[00:02:27] This is what the microfinance industry has been serving. The 600 million people in developing countries. Now over the last 50 years, it's developed, um, an effective way of reaching these people and enabling the businesses to grow and, and microfinance banks have given less attention, perhaps. To, to climate change.

[00:02:49] Uh, and that's what we want to explore in this discussion in the interface of the two. So our micro finance banks expose, or their clients exposed to climate change and what could they do to adapt [00:03:00] to that, to make it more resilient, uh, to enable small holder farmers and others to recover. Rapidly from climate related disasters.

[00:03:08] For example, climate finance can help build their resilience. Microfinance institutions have been helping in the midst of, of the global pandemic of COVID-19 helping people adjust and get through the challenges of the economic collapse. That's ensued. So climate finance, uh, can help build the resilience of these institutions.

[00:03:31] And that's what we want to explore. How savings and loans delivered through these institutions, um, can adapt to the context of the finances there to serve, uh, the adjustment to in response to climate change.

[00:03:50] **Kamleshan Pillay:** [00:03:50] Joining me around the table is Tineyi Mawocha, the Chief Executive Officer of Opportunity Bank Uganda. Lydia Baffour Awuah, [00:04:00] the Senior Program Manager at Opportunity International based in London and Puneet Chopra partner at Microsave Consulting based in India. Welcome to all of you and thank you for joining me.

[00:04:12] Um, we asked each of you here because you are the experts in the microfinancing space with a different angle on your expertise. Could you tell us a little bit about your work and how it relates to the microfinancing space? Let's start with theTineyi.

[00:04:30] Sure. My

[00:04:31] **Tineyi Mawocha:** [00:04:31] work is in providing financial services to we're aiming for the poor people in Uganda. And these are people that may not have access financial services. So we train them in financial literacy and then provide financial services.

[00:04:51] **Kamleshan Pillay:** [00:04:51] Great. Thank you. And now we will hear from Puneet.

[00:04:54] **Puneet Chopra :** [00:04:54] You know, we at save, uh, consulting have been, uh, [00:05:00] in the development consulting space for what, 20 years. And you've been working and supporting a microfinance institutions.

[00:05:09] Um, uh, I regulators policy policymakers to help them evolve, uh, you know, policies as well as the implementation of micro-finance products and services, um, uh, across the world, you know, pretty much, uh, a majority of the developing countries and, um, uh, in helping, um, in the evolution of micro finance from sort of, uh, uh, uh, where it was, uh, two decades back to now that there is a lot more, uh, digitization, um, evolution of, uh, fintechs and other technologies and innovations

[00:05:49] **Kamleshan Pillay:** [00:05:49] Thank you Puneet and lastly Lydia.

[00:05:52] **Lydia Baffour Awuah:** [00:05:52] At the moment, I'm working with Opportunity International in the UK office Opportunity International work to [00:06:00] promote financial inclusion.

[00:06:02] We try to support people with us as to loans. Uh, savings my co-insurance and with the hope that we can, they can provide a more dignified way of supporting your families, transforming their communities and the household as a whole. And so that's what opportunity international does, but in the UK office, uh, we do work with implementing partners. And there's in a lots of developing countries. Our focus is more in Africa. So I work with my colleague. Tineyi in Uganda is one of our implemented partners, but at the moment I'm managing a project that is funded by the UK government to support rural women in Ghana, in the DLC to be able to improve upon their productivity and income.

[00:06:52] **Kamleshan Pillay:** [00:06:52] Great. Thank you, Lydia for that. Um, I think before we go into some of the details and the specific linkage [00:07:00] between micro finance and climate change, unpacking exactly what microfinancing is and some of the different types of products that fall into this financial category, Tineyi, maybe you can, you can kick us off with just that breakdown of exactly what micro-financing is.

[00:07:19] **Tineyi Mawocha:** [00:07:19] Sure. Uh, microfinance is a provision of, uh, financial services, um, mainly to, uh, people at the base of the pyramid. And it's about savings. It's about micro-insurance insurance products. It's also about training in financial literacy. So they able to understand how to use the different financial services.

[00:07:41] We also provide digital access. Um, to financial services because of the remote locations. So all these including training on general wellbeing, which would cover issues such as, uh, climate change, um, impact on the

environment, [00:08:00] that's all part of micro finance. We define it, it provision of financial services, plus other ancillary services.

[00:08:10] **Kamleshan Pillay:** [00:08:10] Tineyi, just to tag on to one of the issues that you mentioned about the base of the pyramid. I think that is also an important area to unpack just what that means. Um, maybe Lydia, you can talk specifically about the users and just who would be taking up micro-insurance products or micro-insurance suite products.

[00:08:31] **Lydia Baffour Awuah:** [00:08:31] When talk about the bottom of the pyramid. We are talking about people who are living below the I'll probably use a nice slide. No, we think to use a \$2 a day, but I will say use your national poverty line. So people who actually live in either below or just above the national poverty line. So it could be, these are the people that we are classifying as people, [00:09:00] uh, below the, the base of the pyramid.

[00:09:04] And basically these people usually do have opportunities. They do have skills, but what they most often lack is access to financial services to turn these opportunity into profits so they can support their families and their community as a whole. And those where micro-finance campaign. Uh, we tend to say that, uh, micro-finance focused on people who are either underserved or who do not even have us as the fund access services at all. So in some countries, you've had people who can go to bank and if you're going to bank to borrow money, you may need some sort of a collateral, maybe a landed property. You have to use your asset to go and use as a collateral. As most of these people we are working with would not have access to this facility.

[00:09:54] So the beauty of microfinance is that, uh, for when you take a typical microfinance [00:10:00] loan it's a small loan. And most of these people tend to be women. They say, we men have the face of poverty and these people do not actually have the assets or the collateral. So what they do is that they come together and they use their social capital.

[00:10:17] What do I mean by the associate capital? What they do is that we know that we are all in this together. So if you fail to pay the loan. I will help you to repay the loan so they don't need any form of assets. It's just that they pray to each other, that we will support each other. That's like the Ubuntu in South Africa, we will support each other to do well.

[00:10:38] So if your business is doing well, it means that you can pay the loan and I can pay the loan and we can all benefit equally from it. Then we also work with a lot with small holder farmers. And I think for small for holder farmers for me is very critical, especially when it comes to the issue of climate change, because their whole livelihood depends on the climate.

[00:10:58] So if you are [00:11:00] able to help them to maximize the resources that they have in terms of giving them improved seeds, helping them to, as Tineyi was trying to mention, give them training in terms of how they can

really do their family, better and maximize, the little resources that they have, then that will have a big implication also on the primates as well.

[00:11:22] So that is one aspect. And of course, in all of these things, what is most important, especially for the poor people is always, it's not always about loan, but assets to saving is very important for them to be able to build that financial resilience.

[00:11:38] **Kamleshan Pillay:** [00:11:38] I, I think, um, just before we go into the specific linkage between climate, um, and micro-insurance beyond the, the different types of product line, I just like to bring Puneet in to the conversation and maybe ask the question of, you know, so what I think, uh, you know, we have a micro-insurance and we're trying to promote [00:12:00] financial inclusion to the poorest of the poor and my question would be, you know, why should typically poor people require access to microfinance? What do you see as some of the kinds of benefits that microfinance can deliver to these poor communities? Uh, in terms of financial inclusion and maybe some of the other benefits that you've seen.

[00:12:22] **Puneet Chopra :** [00:12:22] No financial services are really the backbone for, uh, for, uh, for any individual or family. Uh, the way we use a mix of different financial services, you know, it's, it's, it's similar need for the low income segment. And in fact, their needs are even more acute because they do not have steady incomes. They have a lot of risks that they have to, that they encounter in their lives and they have to manage.

[00:12:50] As Lydia was mentioning segments like a smaller farmers or those who aren't in informal employment. They don't have a certain of [00:13:00] income. Many of them were on the extreme poverty side, or maybe ultra poor. Don't even know where the next dollar is going to come from or how they're going to own the next meal. So education and higher order services may be a luxury for them.

[00:13:16] So it's really mixed. So financial services and that's where very rightly and steady was saying that. Uh, credit savings, insurance payments, all of these together, and then perhaps additional services, even in some other markets investments.. So that the money can grow. These are all very relevant for the low income segments for, uh, again, uh, you know, using, using them in a variety of ways to manage that financial lens, whether it is a smoothing of incomes or investment in a business, or maybe investing in a income generating activity for women, it is actually a very important source of [00:14:00] empowering them in terms of helping them stand on their feet, become independent, and then be able to take it.

[00:14:06] **Kamleshan Pillay:** [00:14:06] Puneet you and Lydia make very key points in terms of the importance of finance generally to manage household risks. And I think beyond the climate change argument. Financial inclusion is

always going to provide upliftment at the community level. And I think that's what, you know, most countries are aspiring to.

[00:14:28] Of course, theoretically. You know, we understand that climate change and climate adaptation specifically is going to be needed at the household level. Uh, particularly in Africa, noting that we have, um, significant, uh, deficiencies in terms of our adaptive capacity. Um, and, and. Also the, the kind of climate hazards that are going to be, um, our continent is going to be facing.

[00:14:52] So it makes the need for these types of financial instruments. Quite key on that note, Tineyi, what I [00:15:00] would ask is. How has micro finance been used in a climate change context? And I think what I'm looking for is just beyond the loans, you know, what are the kinds of microfinance products have been used specifically to manage climate change risks?

[00:15:18] **Tineyi Mawocha:** [00:15:18] In our context, we've found that in especially to take care of the risks of climate change, we need to work with partners. So even when, when it was, uh, uh, Puneet was talking about the services that in some areas, they just getting kind of vanilla products, your savings products. You'll find that if you have partners that are working in the area. They will work in their areas of expertise.

[00:15:43] We work with partners in provision of water and provision of irrigation. In solar, we, when we partner solar companies, we were partner Opportunity International or helps us in training with pharma support agents. [00:16:00] So I think it's very important that in provision of microfinance services, we come in with partners and the partners will help us to address some of the issues around climate change. And it also helps us when we have the right partners.

[00:16:18] **Kamleshan Pillay:** [00:16:18] Can I ask a up to get an understanding of how microfinancing product lines have specifically been used in conjunction with communities? I think this will help us get a better understanding of the financial structure within the community.

[00:16:31] **Tineyi Mawocha:** [00:16:31] In, uh, the areas outside from these plantation areas, we normally encourage our clients to start by saving and they create what we call a loan security fund, where they kind of co-guaranteeing each other in terms of their loans. But when we went into this particular community, they wanted to make sure that the funds that they are getting for preserving that community and doing all the good practices would go to good [00:17:00] use.

[00:17:00] So they dedicated these funds to become their loan security fund. So it becomes like, um, a seed capital. So at that came in, uh, and was, uh, saved with us. And then we were able to leverage six times that amount of money to do individual loans to the members of the community. So we do see these micro, uh, loans, knowing that there's kind of a guarantee which

we're leveraging, but six times for the first time and, um, so that's how they benefit. Um, and it's just kind of adapting what we've done in traditional microfinance to suit this particular environment and we've seen it's working and, um, this, uh, forestry company, there are other companies that are actually coming to study what they're doing, because it's really been groundbreaking.

[00:17:56] **Kamleshan Pillay:** [00:17:56] Puneet I would like to ask how microfinance has been [00:18:00] used in the Asian context for climate change initiatives, specifically with the focus on small holder farmers. And if there are any insights from your work at micro save.

[00:18:10] **Puneet Chopra :** [00:18:10] Now as far as the insurance to small holder farmers is concerned, not production. The smaller farmers is concerned.

[00:18:16] They, there are, uh, you know, products such as crop insurance or livestock insurance. And there again, um, we see that, uh, that has been a lot of innovation by the insurance of who I have been in, innovating in product development. And we also see a lot of. insure techs. You know, I mean, this is sort of building on the fintechs that new generation insurance providers, you know, call insureTechs are getting into innovative low-cost and B um, customized products.

[00:18:50] Or, uh, agree and climate smart agriculture related sort of offerings, the insurers, or many of these InsureTechs have come together [00:19:00] with a microfinance institutions who are the network and the front and bundle their offerings and offerings with the micro finance company. So microfinance institutions, uh, helping, um, in a lead generation or origination.

[00:19:16] Some of them maybe also helping in, um, supporting underwriting la sector and the product offering and the, uh, you know, coverage is, is, is from the insurance companies.

[00:19:27] Thank you Panetta.

[00:19:28] **Kamleshan Pillay:** [00:19:28] I think we definitely will see a greater evolution of, of microfinance, uh, particularly for climate risks as the risks become more apparent. And I think, um, the same is, is, is true for microfinance products, which are focused more on women. I think. Theoretically, we understand that that women are going to be significantly more effected under climate change scenarios in the future. And therefore tailored products are going to become more important in, in the [00:20:00] future.

[00:20:01] Um, Lydia I'd like to, to get your insight into how micro-financing has currently been able to deliver benefits to, to women at the community level. And perhaps just some further insight into what you think needs to be done

differently to avoid some of the gender stereotypes that micro-financing can, uh, inadvertently enable.

[00:20:28] **Lydia Baffour Awuah:** [00:20:28] In terms of the positive side for, uh, as you might know, um, women probably all over the world. I won't say just Africa because of their reproductive role and the big role that they play in the household. They are the people that make sure that we have food. Although the men will think they provide the funding for us to provide the food.

[00:20:50] Uh, we are working in partnership, but, uh, as they take care of the home, if I should put it that way, it's very, very important [00:21:00] that they can also have access to resources because they will be the ones who will be deciding whether they can provide healthy food for their children. They'll be the ones who will be supporting their husbands and their spouses and their community.

[00:21:16] So it's really important that we engage with the women as well. So in terms of the benefit of microfinance, as one of the things that I think micro-finance is helping. Yeah. Is helping women to become a little bit financially independent. And once they become financially independent, one of the studies that we actually did in Ghana was that when we men have assets to finance, the first thing that they do is they use it to support the household.

[00:21:43] They make sure that their children are going to school. They make sure that they have beta and nutritious food in the household and they're make sure that's the burden of taking care of the home is not just lying in, uh, with the men in the household, which we know from our research that we just [00:22:00] done that the men really appreciate that aspect of it, because in the past, by the culture, the social culture is like that.

[00:22:07] Maybe the men have to be the breadwinners, all the people who provide for the household. So almost. Every product financial products that we have will be more or less be targeting the men because they will have, eh, the results, the collateral, as we've talked about to be able to engage with the banks and the financial institution, but based on what I've just said, it means that we need to really have that kind of balance so that both men and women can actually have access to the financial resources because they all have a key role to play in the household.

[00:22:44] So that's one aspect or the, the benefit of micro-finance and another key aspect that is very important, The financial side is a, the social networking more in most countries, as we [00:23:00] know, uh, When it comes to the education of women and girls, again, because of the social culture and norms that we have, we tend to favor the education of say boys and men than the education of women.

[00:23:15] And that's kind of. Subs down along the line. So it kind of also, so some of the opportunities that they will have in future. So one of the things our

micro-finance helped women to do is to bring them together so they can share ideas. They can establish friendship, they can pull their self esteem and self confidence.

[00:23:35] And once this is established, you can actually see it also in the household because they are now also more involved in decision-making that affect their life. They're also involved. In the decision making within the community.

[00:23:49] **Kamleshan Pillay:** [00:23:49] Thanks Lydia. And, and just to, to, to conclude on some of your points, I think, um, I think what we see with, with, with gender and micro-financing is [00:24:00] that gender is not an isolated issue.

[00:24:02] And, and often micro-financing is going to assist in enabling a better environment to kind of avoid gender based violence, but it's not going to do it in its entirety. And, um, I think it's, it's an important point that you make that. Uh, you know, gender does not only focus on women and that it is a conversation that needs to include men at the household level.

[00:24:25] If it's going to deliver, you know, the transformative change that we want to see at household level and going beyond the kind of status quo, you know, just providing women with, with more finance, you know, essentially, um. We're coming to the end of our discussion. And what I'd like to conclude with is, um, a very simple question about what can we do.

[00:24:48] I think often in the, in the micro-financing context, um, given that we are doing some things right in the market is growing in Asia and, and in Africa, [00:25:00] um, my question would be if you had to provide. Recommendations to policy makers or, um, uh, decision makers who are in positions where they can influence the microfinance market.

[00:25:11] Um, what would that be? And noting that there are challenges in, in, in micro-financing. Um, but there may be specific policy leavers that would be. Um, that could be enabled to deliver microfinancing at scale. Um, so Tineyi, maybe I'll start with you and, and please feel free to speak specifically about the Ugandan context or, or any other, um, um, areas that you feel comfortable with speaking about.

[00:25:43] **Tineyi Mawocha:** [00:25:43] I think in terms of policy. Where it's possible to introduce guidelines, be it through regulatory institutions and other partners or government arms, it would be good. One of [00:26:00] the big areas is around cutting down of trees. Because that has an impact on climate change. So, uh, if rules can be put in place that, uh, for every tree that is cut, another one must be planted.

[00:26:15] And if there are any financial services that are being provided in those areas, one, uh, works on ensuring that there is renewable planting of, uh, of trees and, uh, taking care of the environment. You also can have

exclusion lists that come through organizations and we're familiar with those, you know, those that are in, um, sort of, uh, international groups.

[00:26:44] They normally have exclusion lists that say, if someone comes to you and that they, uh, wanting a loan for something that's going to destroy the environment, then it's excluded. You also can [00:27:00] make sure that, um, you give a benefit to those who use renewable energy. Those that are purchasing solar products for instance, they may have some benefit that comes..., so that there's an incentive for them to use solar as opposed to using firewood. I've also seen in other environments, um, where there are companies that are coming in with these alternative cookstoves that are very fuel efficient, uh, that use briquettes that use very little charcoal that sort of thing.

[00:27:38] So promoting that and really driving the use of that and the general awareness, uh, which, uh, governments and other institutions can do that. Um, If we don't take care of our environment, then we will be in trouble and we'll compromise, uh, you know, impact climate change. So those are things [00:28:00] that, uh, through micro finance and the partners that work with micro finance institutions, we certainly need to spread the message.

[00:28:08] We need to create an awareness we need to, uh, to showcase, uh, best practices.

[00:28:14] **Kamleshan Pillay:** [00:28:14] Thanks to me, Connie, do you have any further insights to add?

[00:28:19] **Puneet Chopra :** [00:28:19] I think, um, uh, bilateral institutions and governments, uh, can play a very important role to, uh, to enable, um, you know, microfinance, uh, for, uh, uh, mitigating cam trusts and in supporting, uh, climate change adaptation and mitigation measures, uh, as, as a whole.

[00:28:41] So for example, there is an Alliance for financial inclusion, which has membership of far more than 150 countries and the regulators and policy makers are members of the Alliance for financial inclusion. They have formed a group called less, uh, initiating for [00:29:00] green finance, uh, which has, uh, endorsement of over 75 countries with the ... and government gender, they are guiding and mentoring comments, um, helping in cross-learning sharing of experiencing, uh, experiences, sharing of best practices around green finance, uh, product development and so on. And, uh, they have come up with a 4P framework for policies to be guided.

[00:29:28] In these countries and these, these four P's are Promotion, uh, Provision, Protection and Prevention, uh, uh, related policies, uh, you know, for, uh, specifically to green finance. Uh, apart from that, uh, uh, governments, uh, can also provide a lot of support to microfinance solutions directly. Uh, one of them is in terms of, uh, the rules and regulations and policies that guide what microfinance institutions [00:30:00] can and cannot do.

[00:30:01] And also other, uh, sort of, uh, direct and indirect financial support that's provided. So in markets like India, that, uh, the central bank has come up and, uh, differentiated banks. And, uh, these are, uh, banks which can focus on specific, uh, products or services. And they're gone as a payment banks or small finance banks.

[00:30:26] So small finance banks, um, are kind of getting a ... Many of the microfinance institutions have. Uh, no. So there is a licensing process and then almost, over 12 microfinance institutions have upgraded them into small finance banks and did that. Actually, they are able to offer a more balanced portfolio of financial services, which many of them could not offer as microfinance institutions.

[00:30:53] So that's a good example of, uh, enabling microfinance institutions to do more combined savings [00:31:00] insurance and other products and offerings in their portfolio.

[00:31:04] **Kamleshan Pillay:** [00:31:04] Thank you, Puneet. Um, and, and lastly, uh, Lydia, if you have, um, any thoughts about, about the role of the policymakers in, in enabling the market?

[00:31:15] **Lydia Baffour Awuah:** [00:31:15] I think, I agree with all the things that colleagues have mentioned, but one of the things that I wanted to also add is that in all these policies, we have to really look at it with a gendered lens, to know who we are leaving behind as far as policy is concerned, because as we rightly said in the beginning, when it comes to the issue of climate change, it affects.

[00:31:37] Men and women quite differently. So we have to really put on our agenda lens to see who is being included in or excluded from the policies that we are coming out with in particular, when it comes to the issue of women, for example, They, are the consumers, they also, they can be decision makers and they make some critical [00:32:00] decisions in their hustles.

[00:32:00] So they can be part of the solution in terms of, uh, implementing adaptation measures to help care the issue of climate.

[00:32:12] **Kamleshan Pillay:** [00:32:12] What a rich conversation. This has been in wrapping up this episode, we felt it important to include the voice of a recipient of micro-financing support.

[00:32:23] **voice note:** [00:32:23] .. Thirty three years of age. I am Farmer and also in trader. I'm from, Ashanti region Ghana. I had four kids and a husband. They give me, I say, working capital, and it has helped me in farming and trading.

[00:32:46] **Kamleshan Pillay:** [00:32:46] And then we have it. Micro-financing and action. In closing, some things that have stood out for me during this

episode is that micro finance offerings are gaining momentum as a mainstream product line.

[00:32:58] However, more [00:33:00] capacity building at the community level enabled by government policy can allow for the scaling of this product beyond the current market segment. Multilateral financial institutions also have a critical role to play in providing enabling incentives while implementing safeguards in the most vulnerable communities.

[00:33:20] Lastly, balanced micro finance products can deliver climate benefits and impact while being financially feasible and avoiding negative unintended consequences. If correctly designed. Ultimately the protection of livelihoods in combination with climate benefits allows for microfinance to create a multiplier effect, thereby improving social wellbeing in community.

[00:33:48] Thank you for joining us for this episode in unlocking climate action. We hope that you feel empowered and able to create a culture of resilience in your world. Join us again next time. As we continue to explore climate [00:34:00] and development challenges within and across borders. If you'd like to find out more, please visit cdkn.org here, you will find an email address for the team in your region.

[00:34:10] You can also follow us on Twitter at CDKN network or at South South North. Make sure to check the show notes of this podcast for more info.

References

African Microfinance Week (2018) Working paper series African Microfinance Week.

Bichler, M. (2015) 'Climate change and microfinance An urgent need to be managed, an opportunity to be seized', *Passerelles*, 1 (April), pp. 10–15. Available at: http://www.findevgateway.org/sites/default/files/publication_files/ada_passerelle1-a4_en-web.pdf.

Chikalipah, S. and Makina, D. (2019) 'A Survey of Microfinance Institutions and Informal Finance in Africa', in *Extending Financial Inclusion in Africa*. Elsevier, pp. 113–135. doi: 10.1016/B978-0-12-814164-9.00006-2.

Convergences (2019) Microfinance Barometer 2019.

Hamill, A., Matthew, R. and McCarter, E. (2008) 'Microfinance and climate change adaptation', *IDS Bulletin*, 39(4), pp. 113–122. doi: 10.1111/j.1759-5436.2008.tb00484.x.

Kaboski, J. P. and Townsend, R. M. (2012) 'American Economic Association The Impact of Credit on Village Economies', *American Economic Journal: Applied Economics*, 4(2), pp. 98–133. doi: 10.1257/app.4.2.98. The Mersland, R. and Øystein Strøm, R. (2013) 'Microfinance: Costs, Lending Rates, and Profitability', in *Handbook of Key Global Financial Markets, Institutions and Infrastructure*. Elsevier Inc., pp. 489–499. doi: 10.1016/B978-0-12-397873-8.00046-3.

Oldenburg, D. W. et al. (2004) Closing the gap between research and practice in EM data interpretation, SEG Technical Program Expanded Abstracts. doi: 10.1190/1.1851089.

Rippey, P. (2012) 'Microfinance and climate change: Threats and opportunities', *Greening the Financial Sector: How to Mainstream Environmental Finance in Developing Countries*, (53), pp. 215–240. doi: 10.1007/978-3-642-05087-9_8.

van Rooyen, C., Stewart, R. and de Wet, T. (2012) 'The Impact of Microfinance in Sub-Saharan Africa: A Systematic Review of the Evidence', *World Development*. Elsevier Ltd, 40(11), pp. 2249–2262. doi: 10.1016/j.worlddev.2012.03.012.

SEB Investment Management AB (2019) *SEB Microfinance Fund I Final report*.