

"There should absolutely be a results-based financing framework for housing products that are climate-resilient and climate-friendly."

A Conversation with Gayatri Datar of **EarthEnable**

Ambika Samarthya-Howard March 10, 2025

Ambika Samarthya-Howard: Please introduce yourself and tell me about EarthEnable.

Gayatri Datar: We started about 10 years ago. The mission of EarthEnable is to make living conditions healthier for rural families, largely because housing in rural areas continues to be both very unsanitary and very unsafe, built with mud, mud walls, no foundations, and dirt floors which harbor pathogens, parasites, and bacteria. We started realizing that with earth itself we could make high quality, environmentally friendly, and affordable housing products by using ancient technology that we have modernized. Our floor is compressed earth sealed with a flax oil-based resin. Our plasters have cassava flour and lime that make them waterproof and abrasion resistant, but still very natural and very cheap. Our full houses are made of adobe blocks, which is what the vast majority of construction is built with in Rwanda, except we found ways to improve those blocks to make them much more resilient and much more structurally strong.

Ambika Samarthya-Howard: Is EarthEnable part of the climate sector, the environmental sector, or the health sector?

Gayatri Datar: Much more climate-oriented these days, but the reason I started something in housing is because it touches everything. It impacts health, jobs, climate, gender. Every aspect of social justice is wrapped up in housing because it's where people spend over half their lives. It's a huge driver of economic growth and also a huge contributor to climate change. The resilience of homes to climate change is becoming

extremely urgent. That's why these days, I'm talking about it more from the climate lens than anything else, but it truly is all of it.

Ambika Samarthya-Howard: Could you talk about your revenue model? Are you mostly philanthropy-funded?

Gayatri Datar: Yes. We're a nonprofit which owns for-profits in Rwanda, Uganda, and Kenya. We started with an Indiegogo campaign for a \$10,000 grant, and from there, we got \$50,000 grants from family foundations, then a \$100,000 grant. It was organic growth through family foundations and a bit of bilateral funding. We got USAID money from DIV in 2015 and then 2018, and then got funding from GIZ [Deutsche Gesellschaft für Internationale Zusammenarbeit GmbH] and Grand Challenge Canada. Those have largely grown, and since then, we've graduated into the mezzanine range of a couple million dollar grants in the last couple of years, but it has been very much organic growth through similar types of funders.

Ambika Samarthya-Howard: How is the USAID situation affecting you?

Gayatri Datar: We're super lucky, because it did not affect us directly at all, only indirectly. All of our scale partners are impacted, so a lot of our scale plans are on hold because USAID funded a lot of WASH [water, sanitation and hygiene] projects in Africa. I want to talk about 'results-based financing' [RBF], which is a key way for the funding community to unlock huge amounts of scale. Bilateral funders, including USAID tend to be the ones who fund big results-based financing facilities, largely often to and through government. That was where we were going next. It will impact us down the line, because USAID seems to have catalyzed a domino effect among other European countries.

Ambika Samarthya-Howard: Can you talk about bilateral funders and how this affects your funding models?

Gayatri Datar: Bilateral institutions are basically governments that give funding largely to organizations, but guided by other governments. The Kenyan government, for example, or the Rwandan government, will have a bunch of priorities that they need support on, so they'll go to funders to ask for the support they need in housing, health, or education, for example, and then projects are developed by those bilateral funders to then be implemented by implementing partners. Those implementing partners historically have been the beltway bandit types for very large NGOs, who will then sometimes subcontract to people like us to implement bits and pieces of those projects.

Ambika Samarthya-Howard: One critique of results-based financing is the idea of trust. A lot of NGOs are happy to do reports and impact studies, because they

want people to finance the things that are working. There's also a critique about it being neo-colonial, and that people are not doing long-term behavior change work. Could you talk about that in terms of the work you do?

Gayatri Datar: It depends on what the result is. If it's an output, I fully agree. That is not a result. For example, the number of books delivered is not a result, because the books may or may not make an impact on child-learning outcomes. When the result is framed in such a way that the impact is inherent in the result, it can be extremely powerful.

For example, for our work, we know there is a good chunk of the population who can't afford a floor or a plaster. However, if there was a third-party payer paying some percentage of it, they could afford it at a subsidized cost. We tested that when we introduced a subsidy, anywhere between a 30% and 80% subsidy depending on the income categorization of the customer. It's similar to Medicaid, for example, in the United States. Medicaid is the government paying part of the cost of the service. Since people can't afford to pay the entire amount, the private clinic still has a way to serve an underserved population, because they're being made whole by a third party payer.

What I like about this is that it's a bottom-up subsidy, so you're ensuring that funds are utilized extremely efficiently. You know that for every dollar I spend, I'm going to get a product, versus the top-down subsidy that would basically be gross-profitable on the field level, but then overhead and training is covered, and other things like that.

It depends on the way funds are channeled and how you think about it. What I like about the results-based financing approach, which we're now starting to use for the first time, is that this should not exist only for EarthEnable. There should absolutely be a results-based financing framework for housing products that are climate-resilient and climate-friendly. Anybody who builds products that meets those two criteria should be eligible for this subsidy.

Imagine the private sector participation of people like local contractors who would be able to come in to serve the mass market as long as products meet these two criteria. It solves the problem of climate change and the fact that currently, the status quo is either a very low-quality building that doesn't have a foundation and will fall down in the rain, or a very environmentally heavy building, which is concrete, steel, and bricks and things like this, which will cause much more climate change.

Our homes are made of sustainable materials, but they still have proper foundations and are thus climate resilient, which can save 20 tons of carbon compared to a home with conventional materials. Imagine the impact it could have on both resilience and mitigation by enabling developers who right now don't have a way to serve people below a certain income level with climate-resilient materials, but they could do so because RBF [revenue based financing] would pay for the foundation, for example.

Ambika Samarthya-Howard: You're tying results to impact. Do you think more about health indicators or about carbon savings?

Gayatri Datar: The result for us is very much carbon, because carbon is an indicator for many other things, but also because it's inherent in building a home of higher quality. Carbon has already been saved, and the climate adaptation part is already more resilient because that house exists. That makes it a lot easier for us. If we were just to build concrete floors everywhere, for example, in that case, we would then have to demonstrate that the result we're looking for is a parasitic infection reduction, or it would cost the health system, or something like this. We would do a huge RCT [randomized controlled trial] to measure the results, and that would be the basis. There has been a study in Mexico showing up to 49% reduction in parasitic [diseases] and diarrhea, and a 78% reduction in parasitic infections by having a floor, but is that replicable to the Ugandan, Rwandan, and Kenyan context? More work would have to go into it.

That's often how RBFs are structured. It's very similar to a carbon credit. With a carbon credit, you get money for saving carbon. The reason we're structuring our venture as a results-based financing fund is that currently no carbon is being emitted by having a dirt floor. You just have a dirt floor. Now, when you upgrade to something else, you are emitting a little bit more. Similar to solar companies, where people were using small amounts of energy from kerosene lamps. Once you introduce solar, they're using much more energy. However, that much more energy is massively impactful to their quality of life. That energy should also be funded through an RBF because the impact is so big. This is a way to think about it. It's similar to a carbon credit, although it's more like prevention than treatment. Instead of reducing carbon emissions that are already there, let's prevent them from happening through an RBF.

Ambika Samarthya-Howard: How do funders like Rippleworks fall into both impact-based and results-based funding categories?

Gayatri Datar: The Big Bangers and Rippleworks are awesome because they offer unrestricted funding for innovation to figure out how to do any of this, to begin with, to figure out the market, the training, the product, the sales strategy, the team, all of that. It basically gives you funding to build. At this point for EarthEnable, we have figured out the basic parts of the model and we just need to get this out everywhere. We know we can't do it alone and we need other people to replicate what we're doing. We know that people will not replicate what we're doing unless tons of grant money descends upon them, which frankly skews towards people who have access to resources or funders, which traditionally is not the local contractor in Rwanda. The funding that Rippleworks and the Big Bangers provide is critical to get innovations to a specific stage. To scale them is usually where either government comes in directly, or bilaterals come in via governments, or possibly a different type of fund emerges maybe using philanthropy or something else. You can scale when you have lots and lots of people copying your model. You might have heard this from the Mulago Foundation, and I agree with it. EarthEnable is not going to build 400 million homes, and that's what's needed in Africa over the next 25 years, plus addressing the housing needs of 1.3 billion people who still have a dirt floor. There's so much work to do that a huge number of people need to be doing it.

Unless it's fully profitable, if you are looking for profitable social enterprises exclusively serving the poorest people on earth, Godspeed. There are very, very few of them for a reason. The poorest people on earth don't have a lot of money, and because of that, it's going to be very hard to make a fully market-based approach that works. Because frankly, if it was that easy, someone would have done it.

The other thing that is not fully understood is that in especially the rural markets where a lot of poor people live, there are diseconomies of scale because there's so much spread and reach. If one of our salespeople can handle 1,000 households, and we're serving a district that has 70,000 households, we need 70 salespeople. Now the question becomes how many middle manager layers do we need to make this work?" With rural distribution, distances are so far that you just need a lot of humans to actually get to those places. Those people need managers, and those other people need managers, and that ends up being very ineffective. However, if we have many decentralized organizations without a lot of management layers, i.e. lots of franchises, this would make much more sense.

So how can those franchisees emerge, and how can they be accessible for lots of rural entrepreneurs who are interested but don't have the ability to go to California and fundraise? An RBF. That's why the government should come in and provide this, similar to what Medicaid does. That's not the best example of the most efficient system, but my point remains that RBFs could be a great bottom-up subsidy.

Ambika Samarthya-Howard: Have you started considering franchises? Who is your model in the social innovation field?

Gayatri Datar: Yes, our board chair, Julie McBride, is a social enterprise franchising expert. Jibu has a successful franchise model in Africa, and Kidogo is playing with franchise-adjacent models. Quite a lot of people are now trying to figure out this decentralization approach. Most of us have to consider decentralized operators, because otherwise our mission is impossible. You get so huge and bureaucratic if you

try to do it alone. Most of us have tried to figure out some decentralization or contractor model or agent model.

Ambika Samarthya-Howard: One priority for funders like Rippleworks is making sure that funding goes directly to people who are doing the work, and that their capacity-building and talent-building grants are helping the local people who need it. In your relationship with funders, what could they do better?

Gayatri Datar: Rippleworks is one of a couple that offer one-time grants. I understand why it's there, but it's also difficult to manage a one-time grant if you're dependent on grants. EarthEnable and 85% of the Big Bang organizations as well as the Rippleworks portfolio are not profitable because, again, it's very difficult to get to true commercial viability. Because of that, most of us are dependent on some amount of grant funding.

EarthEnable has now gotten to a place where our core grant-funded operation is \$2 million, and it looks like it will stay that way indefinitely. The only thing that will scale is the RBF money, because we've gotten to the point of figuring it out, and we've gotten to a scale where we have built out a senior management team who can scale quite extensively. We don't need to double our team if we double our reach.

That's not the case in the early days if you tend to have diseconomies of scale for a little while until you reach a certain plateau level. Because Rippleworks works at the mezzanine level, they target people like us, who can use that \$2 million just to get more reach. They wouldn't fund someone tiny with that \$2 million. They wouldn't have funded EarthEnable five years ago because our budget then was \$500,000 a year.

Understanding the marginal cost per impact at the organizational stage very well is important if you're going to do a one-time grant. One way that a one-time grant could work is if you tell the government, for example, that you're going to pay out \$20 million for the next two years, and then get them to take over after that.

Other than that, I liked Rippleworks' due diligence process. It was intense, but it was very fair. They were very transparent in their process.

Ambika Samarthya-Howard: How can funders center the voices of the people who are most affected by the problems you're trying to solve?

Gayatri Datar: A little disclaimer, I also run a foundation on the side as a volunteer project. That foundation has a guy on a motorcycle who goes village by village advertising a grant opportunity. People can call a free hotline to apply, and our interns write up their concept notes. No one has to speak English, no one needs to know what a budget is. No one has to do anything other than have an idea and entrepreneurial grit,

which 85% of the population in rural villages have. From there, we have a randomly selected group of people who review the proposals and ask questions.

If you're really trying to localize, it's contradictory to require applicants to speak English. Everyone has to be realistic about what the capabilities are in getting super local. Rippleworks does a good job of this. They have an employee now in Nairobi, for example, who is able to get a little bit closer and understand the context from the Kenyan perspective, which is great.

It's a big new trend to have former doers on foundation staff. This is great because they know what to look out for. It makes a lot of sense for the efficacy of the philanthropic foundation, but also from our perspective because then we can talk to someone who gets it, and they're not holding you to crazy standards.

Ambika Samarthya-Howard: Have you done anything with the Rippleworks Leaders Studio, Office Hours, or talent grants?

Gayatri Datar: We've done two projects and one or more of their Office Hours, which are very helpful. They get good people, and the projects are very helpful. They offer a project manager, someone we don't have to pay for, who manages the project, which is great because none of us have time to keep it on track. That's been really good. I would tell them that the Leaders Studio and the talent grants need to have more ongoing engagement.

Another disclaimer, I have another company called Unlock Impact, which is a coaching company to solve the exact problem that Leader Studio is trying to solve, except ours is a year-long fellowship with weekly coaching sessions and integration into their day job with their supervisors. I designed that specifically because EarthEnable really needed it because we didn't have any middle managers, and we couldn't find any on the market, so we had to build them ourselves. I would not have started that if I thought other training models worked. A two-week training for a couple hours a day is just not going to work, because it doesn't build habits. People need to be integrated into the material and systematically work on something to change management behaviors.

When you think about how you or I learned, it was because our bosses gave us feedback all the time. We were stretched into projects. We did on-the-job learning. We learned from people around us. The way to get really good at work is almost never going to be through training, unless it's a technical skill, like trying to learn Excel. Then you can just go on YouTube for that. If it's a management skill, that has to involve more ongoing and more consistent coaching.

Ambika Samarthya-Howard: What are three things you need to scale and be sustainable outside of funding?

Gayatri Datar: Outside of funding, we need a systematic way to get teammates onboarded quickly, including independent operators. It's mostly people. If I could, I'd just respond by saying people three times. That's what we need to scale and be sustainable. Otherwise, to be sustainable would require a fundamental change in the market. The market would have to get richer, which is not in anyone's control. Maybe through government policy, but that's been pretty straightforward for us to manage and move forward with. We need people.

Ambika Samarthya-Howard: If you had to advise yourself 10 years ago, what would you have said?

Gayatri Datar: Probably to have much more mental health and emotional support. I slept four hours a day every day for years from a belief I had, which I now realize is not true. I worked so much that I ran myself into the ground. Honestly, had I properly slept every day for more hours, there's no chance that things would have been worse. I would have been far more productive and far happier had I actually taken care of myself, and more stuff would have gotten done. Especially if you're a woman of color, we have this belief that we're not doing enough, and then we just constantly run ourselves into the ground. The nicest thing a funder ever did for me was pay for an executive coach, which was game changing. That's something Rippleworks does through the talent grant. You're allowed to then pay for executive coaching for teammates, which we've done, which is great.

Ambika Samarthya-Howard: What are some of the major things that haven't worked?

Gayatri Datar: The hardest part for us was at first, our product didn't even work. We had to figure out what product makes a floor last. Our floors lasted only a couple years, and so we had to go back to redo all of our products three years later in our very first district. That was a mess.

Ambika Samarthya-Howard: You're one of the only people I've spoken to who's doing a housing product.

Gayatri Datar: There's probably a big reason for that. Housing is a huge challenge. It's so hard. There have been so many market failures. There's a reason people live in the same mud huts that they did 200 years ago. Housing is expensive, it's big, and it requires masonry. Hopefully the RBF will fix this dilemma, because then lots of other people will do this work.

Ambika Samarthya-Howard: Thank you.

Ambika Samarthya-Howard (she/her) is the Solution Journalism Network's Chief Innovation Officer: She leads on innovation and technology, leverages communication platforms for the network strategy and creates cool content. She has an MFA from Columbia's Film School and has been creating, teaching and writing at the intersection of storytelling and social good for two decades. She has produced content for Current TV, UNICEF, Havas, Praekelt.org, UNICEF, UNFPA, Save the Children, FCDO, Global Integrity and Prism.

* This interview has been edited and condensed.