Phone conversation between Aprovecho Research Center (Mike Hatfield, International Projects Coordinator, and Fred Colgan, Institutional Stoves Program Director) and GiveWell (Natalie Stone) on August 31, 2011

GiveWell: How is your funding/staff time distrusted among the different things you're working on?

Aprovecho: Our mission is to bring improved cookstoves to those most needing them. The are health and environment benefits. We work on almost every level: design, implementation, networking with other organizations, policy to get the technologies to people.

GiveWell: How is your funding and time distributed among the different parts of the process?

Aprovecho: There's a global network of people working on this issue. In each country there are a number of NGOs and globally there's large organizations. The U.S. government is now behind it. There's the Global Alliance of Clean Cookstoves, which is trying to bring a million stoves to people who need them in the next decade. We're the go-to technical people who have been working on this for 35 years.

We're looking to mass-produce stoves for institutional settings. We're manufacturing stoves for the UN World Food Program, the High commissioner for Refugees. We're collaborating with Mercy Corps, and many smaller NGOs. We have a two-part approach. One is to manufacture the stoves here in Oregon, and the other we call factory-in-a-box, which involves setting up product facilities all over the world to create economic opportunities and get big stoves closer to the end users.

GiveWell: Would you say that those two programs (technical assistance and institutional stoves) are your main programs?

Aprovecho: No. Technical assistance works in both realms, both with household stoves and institutional stoves. We also do a lot on the policy end. We also work on helping organizations evaluate their own products and produce the inexpensive equipment to do this. We work with the global community to define what is an improved cookstove. Also, we produce publications that document the work that we're doing.

GiveWell: Is most of your funding going to pay your staff?

Aprovecho: No, paying staff is a small part. Most of funding goes to getting stoves into the field and training other organizations. Paid staff works on research, testing stoves.

Are you trying to figure out what goes into paying staff verses projects?

GiveWell: I'm trying to figure out how the mechanics of the organization works. When you say funding is going "into the field," what is that paying for?

Aprovecho: Getting stoves to people who need them, and training organizations that are developing stoves. A lot of people are building stoves but the quality may not be where the world wants it to be. We run workshops looking at principles of stove design and how to evaluate equipment.

GiveWell: When you are training organizations, is that your own staff doing that?

Aprovecho: Yes. We have a crew of 8 people who do trainings throughout the world.

GiveWell: What is the funding used on when your "getting stoves to people who need them"?

Aprovecho: For example, we're working with the UN High Commissioner of Refugees and the World Food Programs to them build stoves to have them bring to refugee camps. We're concentrating on large relief organizations. We're now starting projects with Mercy Corps and Catholic Relief Services, all focused on delivering these stoves.

Our funding base is all self-generated. We set up a for-profit that supports the research center. That makes us unique that we can use the money from selling stoves to customers in the U.S. to pay staff salaries and makes us independent.

GiveWell: Just curious, who are the U.S. customers?

Aprovecho: Campers, preparedness people, and the Morman Church. It was a shock to us that people here are willing to pay for stoves we made for refugees. We make $20,000-40,000 per month from U.S. sales. We own the for-profit company.

GiveWell: I'm still confused about what the inputs of your process. What are you spending money on?

Aprovecho: We do research too. We just got a call from the ISO to do research on the stove standards. We develop information so the world can make intelligent decisions.

GiveWell: What percentage of your staff time is spent on research?

Aprovecho: About half.

GiveWell: What is the rest of your staff time spent on?

Aprovecho: Another about a third to a half is networking, outreach, and training. The rest policy work. Another piece is production. We've hired people locally to produce stoves for relief organizations. The big picture is most of our funding is fee -for-service contracts.

I could provide a "funding tree" to show where things go.

GiveWell: How has unrestricted donor funding been spent in the past?

Aprovecho: For example, we're trying to create regional testing centers. Right now Aprovecho is one of the few labs in the world where you can send your stove and we're working with other groups to create regional testing centers in Honduras, Uganda, and India, so people will have a more local place to get their stoves tested. We had a donation last year that went to that.

The institutional stove product is an amazing bang for the buck. You can really reduce emissions a lot. That's another place we've put unrestricted funds.

I could give you more examples.

GiveWell: What do you believe is the most pressing bottleneck to having more people use fuel-efficient stoves?

Aprovecho: Local production and distribution networks. We have amazing designs.

GiveWell: How does distribution work? Are they sold, subsidized, given out for free?

Aprovecho: With the institutional stoves, it's a combination. Our primary customers are agencies like the World Food Program and the High Commissioner for Refugees. We're about to start a factory in early 2012 in Nigeria to market stove to school feeding programs and develop commercial markets for the stoves. The approach is pretty widely varied.

GiveWell: How do UN agencies distribute the stoves?

Aprovecho: They run programs in refugee camps. I just sent 200 stoves to Darfur for the World Food Program who is going to install the stoves in 100 schools and they'll feed 80,000 kids. In Ethiopia, I'm building 60 stoves for a pilot project and those will go to refugee camps for Somali famine refugees. Along the way we're going to pick up opportunities for commercial applications and hopefully these regional manufacturing centers will see a lot of stoves distributed around the developing world.

GiveWell: Are the stoves distributed by the UN agencies for free to the institutions?

Aprovecho: Yes. The UN High Commissioner supports 31 million people in camps around the world. They spend a huge amount of money on fuel so they're very interested in getting fuel-efficient stoves to the refugee centers. My expectation is that they're going to buy 10s of thousands of stoves.

GiveWell: Have you seen evidence that these stoves are being used and used in the way you intended?

Aprovecho: This is basically a 5-year start up. We made our first prototype 5 years ago in Uganda. We have a lot of field experience. They're out there. There's a pretty empty space for institutional stoves. There are a few producers but no one else mass produces. We can get lots of high quality stoves out there. We're just taking off. For us, we feel like the flood gates are just opening and this project is really taking off. The world community is suddenly more interested in stoves than they've ever been. We're finding a lot of doors opening for people who want to help to get our technologies and other technologies with our help out to people who need them.

GiveWell: Is there demand for these stoves? It seems plausible that people might prefer their current stoves and not be interested in using the new stove.

Aprovecho: In the refugee camps, they're cooking on open fires. They have no stoves. The general cooking technology around the world for poor people is cooking on open fires, what we call 3-stone fires. If we can get an improved stove in people's hands, we've made a paradigm shift.

There are risks to their life if they go out and find fuel wood.

We had a design process that incorporates user feedback and makes sure the stove is useable and that there's user acceptance and when you combine that with reduced fuel and smoke, it's pretty a guarantee that the stove will get accepted.

GiveWell: We'd be interested in seeing the results of user testing and what changes you made.

Aprovecho: We have many different designs and for each we work with design committees that include local manufacturers and local cooks, who change the stove away from it's ideal fuel-efficient form to what a user will actually use.

GiveWell: Are there reports from that process that you could share?

Aprovecho: I think so. Most reports are summaries of the whole project.

GiveWell: How many stoves have been distributed, where, and by whom?

Aprovecho: We can give you some numbers. We're often providing technical assistance. There are many stoves that we've been involved in, but which we didn't

produce. There are millions of rocket stoves (the type of stove we designed) in the world now. We are part of the quality control.

GiveWell: What is the history of the organization?

Aprovecho: The quick history is that we started in the late 70s designing a stove, but we didn't have the science. The stove wasn't as good as we thought it was. We went back to the drawing board and spent the next 10 years looking at what makes a good stove and designing the Rocket Stove, which is a series 10 principles that if you follow you will get a good stove. Then in the mid-90s, we got involved in a project in Central America and in the last 15 years there's been close to 100,000 built of this one design. Since then, we've gone to a lot of countries around the world and worked with design committees to produce a stove that is liked by the local users and will save fuel and smoke.

GiveWell: Are the local committees non-profits?

Aprovecho: Mostly NGOs. We need a local organization to do the implementation. They bring in local cooks to give input. Then there's also a manufacturer.

GiveWell: Do you follow up with or monitor the NGOs after you provide technical assistance?

Aprovecho: Follow up is one of our keys to success. Returning to projects is key.

GiveWell: Do you have a set process for that?

Aprovecho: It's based on each situation. Each organization has a different capacity. Over the years, the technology and our knowledge and skills have improved so that it's easier. With the organization we first worked with in Honduras in the 90s, we followed up every 6 months to a year for 7 years. That's an extreme case. Now within a few return visits and emails, we're done.

With the institutional stove project, we're setting up ongoing relationships. We continue to supply parts and be involved in quality control and training of production people. It's all based on collaborative models. We need lots of agencies on the ground to make successful stove projects happen.

GiveWell: What have you seen in these follow ups? Anything surprising? Successes? Failures?

Aprovecho: I've been doing this for 15 years now and it runs gamut. We had a project in Indian where there was a driver who had dropped out of high school now he helps runs the project in India. We've had organizations that you thought looked good on paper and they needed a lot more handholding.

GiveWell: What have you seen in terms of the uptake of stoves and people's willingness to use them?

Aprovecho: We've been pleasantly surprised. They have a small combustion chamber that requires people not to use large sticks and we though maybe that would be something people didn't like, and sure enough some people didn't like that but in 90% of the time there's exceptance.

GiveWell: How are you measuring this acceptance?

Aprovecho: We do surveys though ideally third parties are doing this.

GiveWell: Could we see those surveys?

Aprovecho: There should be some reports we could bring up.

GiveWell: Have you sold stoves in developing countries?

Aprovecho: A model we often work with is to try to make it a marketable model. In many places, stoves are sold for what people can pay because people will value something more if they have to pay something for it.

GiveWell: Are you able to monitor sales over time?

Aprovecho: We don't monitor that, but organizations we work with do because that's an important part of their accounting. I'd have to look to see whether we have that data.

GiveWell: Why give to Aprovecho over other clean cookstove organizations?

Aprovecho: I believe the work we are doing is pretty authentic and cost-effective. We have a proven history of good bang-for-your-buck. We work for modest compensation. Most of the money that come in goes out to real products, real services, and real design work to benefit the poor.

GiveWell: Do you have a need for more funding?

Aprovecho: Money right now will translate into stoves in the field. For institutional stoves, we're now working with a bunch of agencies to get these stoves to the refugees from Somalia, which is turning into the catastrophe of the century there. We operate on a small budget. If we had a larger donor base, we could radically increase our ability to deliver.

GiveWell: What would you spend more unrestricted funds on?
Aprovecho: Getting institutional stoves into pilot projects. There are numerous places around the world that are ready to have pilot projects, to have stoves sets up,

see if they're economically viable, if people like them.

Also, regional testing centers, a local resource for people who are trying to build stoves around the world.

GiveWell: For the pilot projects, who would run these?

Aprovecho: They would be collaborative. We don't have the wherewithal to initiative projects.

GiveWell: Have there been agencies that have approached you about this that you've turned down because of lack of funds?

Aprovecho: We have 20 pilots pending for lack of funding. We also have an autoclave that fits our institutional stove for sterilizing hospital instruments and we just put out a questionnaire on a list on the web and we got 40 inquiries from clinics and hospitals throughout the world who would love to try out this technology, but we don't have enough money to deliver the units, to make people realize that the technology is available a very low cost. We're trying to create a big distribution network and we're doing it with very little money.

GiveWell: So in that case, you need money for manufacturing and shipping of stoves?

Aprovecho: That would be part of it, plus the consultancies to bring technicians out to the field to do the installations, trainings, and testings.

GiveWell: Would you need to hire more people?

Aprovecho: We're looking to expand our staff as our programs grow, especially the institutional stoves. We looking at double and redoubling our staff for this.

GiveWell: What would you need to spend money on for the regional testing centers?

Aprovecho: We have numerous organizations, mostly universities or NGOs who are building stoves, who right now can only look at the fuel efficiency of the stoves. They can see the stove producing smoke, but can't evaluate what that is. We want to get the simply testing equipment into their hands and providing our staff to set it up and make sure they know how to use the equipment.

GiveWell: Do you give the equipment for free to the organizations?

Aprovecho: No, that's something we produce and it costs us to produce it, so there's a cost to production at a bare minimum. We work with the organizations to find funding. We don't have the funding for that. The end product isn't that expensive to

produce, but we're not in the position to give it away.

GiveWell: Have organizations approached you about that and you've turned them down because of lack of funding?

Aprovecho: Yes, we get least one inquiry per week about our testing equipmant and what it cost and that's pretty much where it ends because of the cost. It's not a huge cost but for an NGO trying to get a lab together an extra $5,000 to $15,000 can be a big chunk.