## Phone conversation between Holden Karnofsky and Stephanie Wykstra from GiveWell and Alissa Fishbane, Managing Director of Deworm the World (DtW). April 23, 2012.

GiveWell: Can you tell us more about your programs?

**DtW:** We work directly with governments to help them get school-based deworming programs up and running, and to sustain them over the longer term. Right now we're working in Kenya; Liberia; Ogun state, Nigeria; and three states in India: Bihar, Delhi, and a new program in Rajasthan.

Something that's unique to DtW is that we support only school-based programs, which are extremely cost-effective in reaching high numbers of children (both enrolled and unenrolled). Children suffer by far the greatest worm burden, and it is a critical age where we can increase their education and thereby adult wage earnings later on.

The programs are always national, except in very large countries such as India and Nigeria, where they are run at the state level. As many of the costs are fixed, national programs targeting all at-risk children in the country are by far the most cost-effective. The school delivery system has the deepest reach to children, making it possible to treat large numbers very quickly and efficiently across the country. Governments run the programs, and teachers, with support from health workers, administer the deworming in schools.

We provide assistance to governments to plan, prepare and implement the program. To get deworming programs up and running in schools, ministries of education and health need to collaborate, and both partners are hugely important. The education system brings its vast infrastructure and human resources, and the health system brings technical expertise in areas including drugs, monitoring, and planning. However, this partnership is not automatic, as typically deworming is the first time they have jointly implemented a program. We help each ministry determine its responsibilities and outline them in a memorandum of understanding (MoU) signed by all partners. We also set up a joint steering committee to oversee the program, where health and education ministries regularly meet.

**GiveWell:** Do you figure out which areas are most at risk with worm prevalence mapping?

**DtW:** Yes, this is one of the first activities we undertake so that the program can be targeted to kids in greatest need. We conduct worm prevalence surveys and map the results. (Some countries already have data on worm prevalence. In this case we determine whether there are any gaps or whether any areas need to be re-surveyed based on quality or length of time since previous data collection.)

We work with leading epidemiologists and parasitologists to develop the survey design, lead the technical aspects of data collection (assessment of stool and urine samples) and analyze and map findings.

GiveWell: Are the worm prevalence maps posted?

**DtW:** They are all on thiswormyworld.org, an open access site to which we contribute our data.

We also share data with government partners in whatever format best fits their needs. This typically takes the form of maps with government administrative boundaries and/or school locations. For soil-transmitted helminths, which are widespread in transmission, deworming needs are determined at the district level. For schistosomiasis, which is much more focal, implementation is as close to the school level as possible.

**GiveWell:** Do governments invite you in to work with them, and what specifically are they asking you to do?

**DtW:** Yes, the governments invite us to work with them. In some cases they reach out to us directly, and in others we establish the relationship by advocating for school-based deworming. In the latter case, we often work with partners, including the World Bank and J-PAL, to advocate for the program. We share the evidence showing that school-based deworming is an extremely good investment. And once we're there they ask us to stay on to help with planning and implementation. We typically sign on to work with them for several years.

An example of a government that reached out to us directly is Rajasthan. They heard of the program in Delhi, and asked if we could fly out right away. We had a donor who was interested in funding that program, so it was a nice match-up. That program will roll out in the fall with mapping done over the summer.

An example where we advocated for deworming is Bihar. J-PAL held a conference, and we invited the permanent secretary of health from Andhra Pradesh to speak about the school-based deworming program we helped launch. Bihar was excited and decided to work with us.

**GiveWell:** When governments are excited to work with you, what do they invite you to do specifically?

**DtW:** We are invited to help plan and carry out the program. In later years we focus on refining plans and operations. Let's take our first program in Kenya. Here are a few examples of what they invited us to do and how it helped:

One example is creating targeted operations plans and budgets, following results from the mapping process. When government budgets are limited, maps help focus program resources to areas with highest need. In a country like Kenya where worms are highly

concentrated in few areas rather than widespread throughout the country, being able to target resources to these needy areas made the program financially feasible with government funding.

Another example is developing a robust cascade system, which our team sometimes refers to as the "scaffolding" of the program. It enables training of personnel and efficient distribution of program materials (training kits, monitoring forms, deworming drugs, etc.) over widespread areas and reaching far into rural communities. It also facilitates a planning process that uses up-to-date local information to revise estimates created at the national level.

The cascade also works in reverse, sending crucial planning, troubleshooting and monitoring information back up the chain to headquarters. For monitoring and evaluation (M&E), we design the system and materials. (As we do for other program components such as training as well as public awareness and education.) In Kenya, the M&E system has also set the pace for other government processes. For example, the government has expressed interest in using the drug tracking forms developed for this program to track drug supply chain for other national health programs.

We also do independent M&E to assess program quality and coverage, which is a process separate from the program's M&E system. For example, to assess program quality we have monitors visit randomly selected schools on deworming days to check that deworming is being properly carried out (i.e. whether kids are taking the pills, teachers are filling out report forms, and posters are hanging where they're supposed to be). In addition to tracking how many teachers are trained, these monitors also show up at randomly selected training sessions to make sure teachers are attending, that they're staying to the end, and that the right materials are given.

We also have monitors return to schools in the week following deworming to validate that children listed on the report forms actually took the pill (we call this coverage validation). We've been working closely with JPAL's and IPA's teams to refine this process. Recall is tough amongst kids, and if not asked carefully children can be inclined to answer "yes" to questions. We hide our question in a longer series of questions, and we ask them to describe what the pill tasted like, and sometimes to describe what it looked like. It actually does taste like something (sometimes minty, sometimes fruity). Then we extrapolate out the coverage (we use a sample size that is large enough to reliably do so) and see how that lines up with the government M&E forms.

Epidemiologists have recommended follow-up surveys to again assess prevalence rates 3 years into the program, which is what we plan to do. However, in the between years, given resource constraints we conduct coverage validation. It is a less expensive way to measure program impact and ensure children are being treated systematically across the program (and not just a few selected sites). As long as the pills are effective (and there is ongoing testing around this in case of resistance), then we know that children taking them and the broader community will have lower infection rates. In Kenya, we are fortunate to

have funding to do both small-scale prevalence surveys and coverage validation each year.

These activities are just a sample of what the government asks us to do, and for each program we are happy to support the government in the ways they request. For example, The Gambia invited us to help with a couple pieces, specifically conducting the prevalence survey and developing a 5-year strategy. In other places, like Kenya and Bihar, we have small teams on the ground regularly working on these activities to support government needs.

GiveWell: How does DTW get funding? Do governments pay?

**DtW:** In general, governments bear many program implementation costs, including infrastructure and personnel. Governments and/or donors cover program-specific costs like transport and printing materials – this varies by program.

We raise our assistance costs from donors (although in one atypical case the government paid a portion). This includes our time and related expenses, and often also includes costs for mapping, independent monitoring, and specialized expertise such as master trainers or parasitologists. DtW directly manages the funds it raises for these activities.

**GiveWell:** Would the government have paid for the things that you fund if you weren't there?

**DtW:** No, we don't think so. We work with governments to identify what they can and cannot cover. In fact, in some cases not only would they have not paid for things we fund, they would not have funded the program. Our support leverages government funds and helps to release them. For example, the Kenya program had been funded with a line item in the budget for some time, but only when DtW came along was the line item used and funding released, resulting in a program happening.

**GiveWell:** What would the governments cut out (of your activities) if they did it themselves, without your assistance?

**DtW**: There are some programs that would not have gotten off the ground with our help. Others would have cut back or cut out on key activities such as systematic monitoring and evaluation or careful training of teachers and personnel. There are even small things that make a huge difference, like checklists for implementers at each stage.

Another thing we help with is continual improvement of materials and operations. For example with each deworming round the monitoring forms get better and better. We share learning so every program benefits, whether its improved teacher training materials or lab technician guides.

Finally, another common example of what is cut back or cut out is mapping worm prevalence to target the program. Some governments would cut out the entire process.

Others have done some work that hasn't up to international standards. Without an adequate mapping process, you cannot target the program to use resources most cost-effectively.

**GiveWell:** Would governments really just treat every child in your absence, do you think?

**DtW:** It depends on the program. It can be politically difficult for a government to not provide a program to certain areas without the evidence or rationale to do so. The maps provide this essential evidence. Additionally, many don't know that prevalence can vary across areas and that treatment guidelines differ depending on prevalence rates.

**GiveWell:** Do you have any cases where a government unnecessarily treated people i.e., did blanket treatments where these weren't needed?

**DtW:** We work with the governments we partner with to do the mapping. We do see governments that want to do once or twice blanket coverage to get everyone treated, and then move to a more targeted approach. We've worked with all our programs from the start and provide them with treatment recommendations following global standards published by the World Health Organization.

**GiveWell:** Are there cases you know of where a deworming program did blanket treatment?

**DtW:** There are programs out there that I think aren't perfectly aligned with maps. I'll give you an example of one of the programs where we work: in Delhi, we had huge ranges within districts of worm prevalence; given the high degree of mobility within the national capital territory, the government decided to treat all children at least once. You've asked about other programs where DtW isn't working: many organizations follow maps but there are some that do blanket treatment.

In Bihar, Delhi and Rajasthan, we advocated for mapping from the beginning. Kenya had a lot of mapping already, and another round is being done this year. We are also bringing in resources to finish schistosomiasis mapping in Kenya. In Nigeria we spent a lot of time on site collecting all the data, which we fed back to www.thiswormyworld.org. From there we had enough data to do Ogun and to help the government identify which other states need more data to move forward. In Liberia we helped them with the mapping a few years ago with a little bit of technical assistance. They'd primarily done it themselves.

GiveWell: What does training look like?

**DtW:** For the prevalence surveys, we train lab technicians on the gold standard process. For soil-transmitted helminthes and intestinal schistosomiasis, it is the Kato-Katz method. We bring in global experts to train local teams. Our staff trains local managers how to run a survey in the field. There is also the training for the deworming program through the cascade system. This process trains teachers, health workers and government officials on how to implement the program. We work with governments to determine the optimal structure of this cascade system within the country context.

We have also developed an entire portfolio of materials to support the training cascade. They cover important aspects of the program, including training on worm transmission, effects and treatment; how the cascade works and what materials and supplies are distributed at each stage; drug administration, reporting and monitoring; education about the program for students and the community; and the role of different stakeholders.

**GiveWell:** Can we walk through the programs in each country and talk about how you got involved there?

**DtW:** Kenya: Initially, there was already funding in place by late 2008 (which is when DtW really got off the ground). However, despite the funding it wasn't moving forward and so we offered our help to plan and roll out the program. The first round was implemented in 2009. The following year funding stopped, and so we worked with a donor to bring in funding for 5 years.

Nigeria: In 2010, we helped them to collate and map existing data on worm prevalence. Following the results, they suggested starting in Ogun state and requested our support. Our plan right now is to stick with Ogun state and see how things go with the funding.

Liberia: In 2009, we had a stakeholder meeting with Gambia, Liberia and Sierra Leone, where we helped with planning and proposal writing for school-based deworming. That's when we were able to figure out that Sierra Leone could reach national coverage with additional drug donations, and we helped them source the missing drugs. In the Gambia we did some mapping, and helped them put together a 5-year strategy. In Liberia we've developed training and monitoring materials and trained their master trainers. We previously helped Liberia put together the operational plan/general NTD plan. We went in to help on their invitation.

India: in Andhra Pradesh, we helped launch a pilot. Our coordinator was then hired into the government and we stepped out as a result. We plan to check in again to see how things are going later this year.

Bihar: J-PAL held a conference there; we brought in a political peer from Andhra Pradesh who spoke about our work, and they were really excited.

Delhi: We got involved through our advocacy, letting them know we were in Andhra Pradesh and Bihar, and they invited us to support them launch a program in preschools and schools across the National Capital Territory.

Rajasthan: They contacted us after learning of the Delhi program.

**GiveWell:** When people are reluctant to begin a deworming program, what gets them on board?

**DtW**: We talk to them about the evidence, and specifically the large impacts on children's health and education. We also discuss how incredibly cost-effective the program is. When we approach governments, we target areas that we think will have a high prevalence. There are a lot of factors we consider. These include: Is there an anticipated high prevalence of worms? Do we think there may be political will? Donor interest can often drive activity in one location over another, given that there are a number of areas where treatment is needed but not already happening.

GiveWell: How do you explore where there is political will?

**DtW**: Generally we do this through meetings with ministries of education and health. We speak with ministers and permanent secretaries as well as program directors. In some cases we interact with higher offices, such as the Office of the Prime Minister in Kenya or the Chief Ministers' offices in Indian states. In Nigeria we work closely with ministries at both the federal and state level. There have been governments where we didn't think they were in the right place to scale up a program, and so we didn't push it.

**GiveWell:** Are there cases where you think that a program will probably happen without your advocacy, so you decide not to get involved there?

**DtW**: We only get involved if we think we are needed. In every case (whether they approached us or we approached them), they have requested the support they need from us. We are also careful to not replicate work of other partners. For example, in Liberia we are working with other partners (SCI, CNTD) to achieve one unified, national program.

**GiveWell:** Might an example of where the program may have well happened on its own be Kenya, prior to the funding problems?

**DtW:** We were not involved initially, when the funding was originally allocated for the 2008-09 fiscal year. However, by December 2008 there was no movement on the program and funds allocated for the program were going to expire in June 2009. We realized chances of getting funding allocated again would be slim at best if nothing happened in the first year, and we realized we had to do something. We had a small team on the ground and the government was happy to receive the support. We helped them with all steps to plan, design, budget and implement the program on time. Sometimes also the small every day things make a big difference in moving programs forward, for example creating presentations for the program officers to then go and talk about the program with colleagues in their own and other ministries.

Another example of a turning point is in Delhi. Health ministry officials changed hands and there was a bit of a lull in the midst of program planning. No program was moving forward from the health side. We kept up our efforts throughout this period, and later one of the senior officials told us "your support keeps the deworming program at the top of the priority list."

GiveWell: How does your presence keep deworming on top of the priority list?

**DtW:** We help to keep the momentum up through a number of ways – both initially and over time. This includes meetings with officials at various levels, press conferences and media attention. One of the most important ways to keep the priority high is by delivering a strong program. Deworming is an efficient and cost-effective win for ministries: it noticeably improves children's health and school participation, reaches large numbers of children, and is a great way to show results.

Some programs are more complicated than others, for example we work with 5 different government departments in Delhi. We have staff that work well with governments and understand how to keep things moving forward. In Bihar, we started with school age kids, and another department asked us if we can help with their program for preschoolers.

GiveWell: Do you do preschool deworming?

**DtW:** Yes, we help launch preschool programs where they are not already in place. This includes Kenya, Delhi, and Rajasthan (and potentially Bihar). UNICEF is usually the biggest under-five dewormer, but UNICEF is not conducting preschool deworming in these places.

**GiveWell:** SCI says the prevalence is lower among under-5 children. Do you agree with this?

**DtW**: The worm burden is lower, but if you look at some of the rigorous evidence, such as Owen Ozier's research, you see massive cognitive development [as a result of deworming] among much younger populations. We agree that there needs to be more evidence, but it's reasonable to believe that even if the infection is relatively less intense (i.e. less number of worms) that worms can be harmful to a younger immune system and that deworming could have a very large impact. For example, you see very large cognitive gains in the under 1 population in Owen's paper that you don't see in the older kids.

All of the programs we support are focused on children and are school-based (or preschool-based). We don't do programs deworming adults, however teachers are allowed to take the pills. We also have quite a few children who are not enrolled in school come to participate, and we actively recruit their participation through community awareness campaigns. For example, in Kenya 9% of children treated in the last round were not enrolled. In Bihar, it was 6% (which there translates to 1 million children).

GiveWell: How are the programs publicized outside of schools?

**DtW:** It is always a mix of methods. All programs have radio and/or TV publicity. We also have posters and banners as well as community announcements, such as local plays, community processions and 'miking.' We try to piggyback as much as we can; for instance, in Bihar last year, there was a "right to education" movement, and we embedded deworming messages into their community skits. We also incorporated deworming messages into programming of student clubs that are widely found in schools, such as model UN-type clubs and girls' clubs. In Kenya we are providing information to teachers and health workers about how to best communicate with different audiences about the deworming program. We're also exploring options with literacy volunteers, since worm infections are correlated with maternal illiteracy.

GiveWell: How long do you give support to a program?

**DtW:** Each program has its own needs and timeline. However, we project 3-5 years on average, with decreasing support over time. By the second and third year, we are focused on optimizing and refining program operations. Delhi is a smaller program and we may be able to back out staff by the third year. We'll be in Kenya for at least five years. Our programs are still young.

**GiveWell:** In the case of Andhra Pradesh, why did you decide to leave and how many rounds had it had?

**DtW:** The government hired our coordinator after the first round. We will assess how this worked out, and compare with programs where we have been for longer periods.

The predictive maps we had showed that Andhra Pradesh would be one of the higher prevalence areas in India, however when we conducted the mapping the rates were not as high as expected. Given this we were comfortable experimenting with this model.

GiveWell: Can you tell me more about the Fast Track Initiative?

**DtW:** It was recently renamed the Global Partnership for Education. This is a joint initiative (of various multilateral and bilateral institutions) providing funds to fast track low-income countries with credible education sector plans. One of the big wins earlier was working with them to include deworming as part of that package.

GiveWell: What is DtW's room for more funding?

**DtW:** Our big flashing light right now is Bihar. Bihar is by far our biggest need, and there are various reasons why it hasn't worked out with funders (for example, they favor a different region or type of environment, the timeline doesn't work or the gap is too big or too small). For this year, we're trying to raise \$420k, and we've raised \$80k so far.

GiveWell: What was your total budget last year?

DtW: Our total budget last year was over \$1 million.

GiveWell: What is DtW's relationship with Innovations for Poverty Action (IPA)?

**DtW**: We decided it was more cost-effective to run DtW as an initiative of IPA rather than its own organization. IPA already has fully functioning administration, finance, and HR and is working in 48 countries. To register in countries in order to hire staff is an enormous process and compared to how much our projects cost and are intended to last, it doesn't make sense for us. With this arrangement, we can keep administrative costs low and focus on the programs.

GiveWell: Does IPA direct unrestricted funds to DtW?

**DtW:** IPA has not provided funding to DtW since 2009 and none is planned going forward. They did provide some initial start up support (both financial and in-kind), in 2008-09.

GiveWell: Does IPA have unrestricted funds that it could direct to DtW?

DtW: There are no plans to direct IPA's unrestricted funds to DtW.

GiveWell: What about funding through IPA's Proven Impact Fund?

**DtW:** They're going to provide about \$20k to our partner in India to help cover costs for the Bihar program. (That's probably a one-time grant only.) The fund is intended to invest in a variety of proven solutions, and a variety of different organizations.

GiveWell: What are the funding gaps other than Bihar?

**DtW:** In Liberia and Nigeria we will have gaps. In Kenya, Rajasthan and Delhi, we are optimistic about funding. In Kenya, there's only a small gap, which is for an area that has Schistosomiasis only, and CIFF [the funder there] is covering schistosomiasis treatment only in areas where soil-transmitted helminths merit district-wide treatment. We're working with The End Fund on this. We're talking with SCI right now about how we can work together in Liberia.

In general mapping and monitoring are high funding priority areas to ensure continued strong and evidence-based programs. These are critical components for every program, however the need is greater in some areas just to get programs going. For example, Indian states have been largely unmapped, and much less so than African countries, despite their large size.

We're also trying to raise funds to support global cross-program activities. This includes hiring additional technical support to continue advancing quality and consistency across programs. It also includes having more regular support to do things like writing up and posting program results and documenting best practices.

GiveWell: In places where you've been the longest, do you have data on prevalence?

**DtW**: We have baseline data for all locations. By the end of this year we will have only done 2 rounds in any location, and in general we will measure prevalence again after 3rd round. The first follow-up results we expect are in Bihar at the end of 2013. In Kenya it's going to be a little bit different, because they're doing a new baseline this year, and there will be 3 large studies over 5 years to measure long-term changes in prevalence and intensity. There will also be pre- and post- tests in a smaller number of selected sites after each annual deworming round.

In terms of worm prevalence [at baseline], we can share maps, or they can be found on thiswormyworld.org. In Bihar, average prevalence is above 50%. In Andhra Pradesh, the districts we mapped ranged up to 21%. The average across Delhi is around 16-17%.

**GiveWell:** In the studies on the impacts of deworming, prevalence is often much higher than 16-17%. How do you think about relying on these studies to estimate impacts, when the prevalence is so much lower in some of the areas where you're working?

**DtW**: While it is reasonable to expect that effects are likely weaker in areas with lower prevalence, deworming is so cost-effective that it's likely to be worthwhile in any area with prevalence above the official guidelines.

One reason that we don't see more research on this is that there's a feeling among the neglected tropical disease (NTD) community that it's not ethical to be doing RCTs anymore around deworming.

GiveWell: Have you modeled various assumptions? We're not sure this is true.

**DtW**: Let us know if you would like us to get you more information on this or help set up a conversation with the researchers.

**GiveWell:** Have you declined to go in and help any particular country/group because prevalence is too low?

**DtW:** All countries or states where we work have areas that need mass treatment. However, we would turn down a request if it was clearly quite low, and we have done this in one country. The WHO threshold [for recommending mass deworming] is 20% now but they've been investigating this for a while and this threshold will likely be reduced.

**GiveWell:** Have there been place where there's high prevalence and you've tried to go in to help them and it hasn't worked?

**DtW:** There has only been one place so far where we've gone where we didn't think it was the right environment.

We'd love to hire a team to map India or map what we think are the high burden states. West Bengal, Jharkhand and Karnataka (among others) all rank highly [as places we may want to go].

GiveWell: So is it mostly places in India that you want to go?

**DtW:** In general the need for mapping is much greater in India than in African countries. We're also moving much faster in India than in Africa. It's easy to move quickly there because the government has the resources to scale up implementation quickly, and you can get programs up and running faster.

GiveWell: What's your hiring situation?

**DtW:** We need to staff for the Rajasthan program, and we need to recruit a regional director in India. We're looking to expand for some specialized roles to support across programs; for example, we want a global monitoring and evaluation person. We also want to hire a global training and resources person.

GiveWell: Do you think this model could generalize?

**DtW:** Yes, although where we've ended up is different from where we started. At the beginning we knew the evidence was there but programs were not widely scaling, and the specific barriers weren't clear. For some programs it was access to drugs, and so our first large activity was a Clinton Global Initiative commitment where we worked with several organizations and governments to fill these drug gaps. However we soon realized this was not enough. Even with drugs or funding in place, some programs weren't moving forward. That's how DtW evolved to its current form, where we are providing on the ground technical assistance and capacity building to help start up and maintain programs.

**GiveWell:** It seems as if "technical assistance and capacity building" are used to mean a lot of different things. Another time I'd like to really go through the nuts and bolts of who gets paid to do what.

DtW: We'd be happy to do that with you.

**GiveWell:** Would things look differently if you hadn't been there? How do you think about that generally? Do you think these programs wouldn't exist at all? Would they exist and just be a lot smaller? Would coverage be poor?

**DtW:** Although each program is little different, we wouldn't be working with any of them if we didn't think we made a significant contribution. Let me give you some examples of ways we are able to make a difference.

First, for every program we've brought in funds to leverage the government's investment. With these funds we've been able to carry out activities or hire specialized expertise that directly improve program quality, reach or cost-effectiveness. For example, we often raise funds to determine worm prevalence across the country so the program can be targeted to these at risk areas. We also bring in funds to monitor program quality and coverage. Examples of the specialists we bring in include master trainers for the training cascade, epidemiologists to design prevalence survey methodology and analyze and map results, local communications and / or language experts to create and adapt contextualized public awareness and education materials; and monitoring and evaluation experts to help us test and refine processes and forms.

Mapping would not have happened in some countries. In others, we worked with teams to train them on international methodological standards, both in terms of survey process (i.e. using the Kato Katz method) and sample sizes for representative data. One country had been surveying far too few schools and running programs off of that, and they are now running surveys according to WHO protocols and regularly updating www.thiswormyworld.org with data.

For training, one program was planning to train 1,000 teachers at once (in a single location), which wouldn't work well. (This is where teachers learn how to administer the deworming drugs, and programs generally train up to 40 teachers at a single time.) Another program was reluctant to carry out training after the first round. We did an assessment of personnel involved in the cascade and found that roughly one-third had been transferred to another department. We also did some knowledge testing for recall from the previous year and found that training needed to be refreshed year to year.

Public awareness campaigns are another essential program component, to educate the community on the benefits of deworming and safety of the medicines. One program was going to roll out without this, which we think is a big mistake. It's also hugely important to reach out to un-enrolled kids so they participate, and these campaigns are how they typically learn of the program. We encouraged them to adopt this component and are helping to raise funding for this.

Logistically there are ways we help programs too. For example, pills are often provided in 1000 unit bottles, however school sizes are often 50 to 250 kids. We are able to make the pills go much farther by dividing them up into smaller unit bottles, yet this is not something that is typically not considered or built into the timeline otherwise.

Finally, all programs benefit from materials and procedures that have been tested and refined in previous deworming rounds. We help adapt them to local context, and having this support rather than designing a program from scratch is an enormous help. We have learned what works well and what doesn't work, and we continue to learn and apply this to knowledge to programs.

We aim to reach as many at risk children as possible within each country, and everything we do is centered on helping programs to achieve that goal.