

Notes from a site visit to END Fund-funded programs in Kigali, Rwanda and Idjwi, Democratic Republic of the Congo, January 30 to February 2, 2017

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Note: These notes were compiled by GiveWell and give an overview of the visit and points made by the END Fund, Amani Global Works, and Rwandan Ministry of Health officials.

Overview

Our goals for this site visit included improving our understanding of:

- END Fund's involvement in the two programs we visited: Rwanda and Idjwi Island. In particular, we tried to understand 1) END Fund's value-added in these cases, 2) whether these were funding gaps that a donor would not have been able to fill if not for END Fund, and 3) END Fund's past monitoring and planned monitoring in these locations.
- How representative the Rwanda and Idjwi Island programs were of END Fund's work generally.

- The likely cost-effectiveness of additional donations to the END Fund.
- How deworming charities coordinate with each other, whether it seemed likely that donor funds could be displacing country government funds for deworming, and other miscellaneous general deworming topics.

END Fund's Rwanda and Idjwi programs and END Fund's model

END Fund's model

END Fund's model (i.e., how it supports a deworming program) is different for different programs that it funds. The Idjwi program is at the most hands-on end of its work (i.e., END Fund helps with nearly all aspects of the program) while the Rwanda program is at the light touch end of its work (i.e., the END Fund facilitates investor relationships, provides funding, and conducts due diligence of the program in respect of best practices, program target delivery and appropriate financial management). A majority of the END Fund's funding supports programs that are more similar to the level of engagement in Rwanda than to its level of engagement in Idjwi. In particular, if you divided the programs into 4 buckets, from most intensive to least intensive involvement, the END Fund's spending would roughly be allocated as follows:

1. Hands on (capacity building assistance, detailed planning support, technical assistance, procurement support): ~20% of its spending. Examples include Nigeria and the Democratic Republic of the Congo (DRC).
2. Substantive involvement (review of program design, budget support, work planning guidance, networking support): ~20% of its spending. Examples include Zimbabwe and Angola.
3. Engaged (review of program design, budget support, technical review, networking support): ~20% of its spending. Examples include Liberia and Cote d'Ivoire.
4. Light touch (review of program design, negotiation of budget, ongoing review of program output): ~40% of its spending. Examples include Rwanda, Ethiopia and Kenya.

The END Fund expects the division of funding between these buckets to stay roughly similar over time.

Rwanda

The Rwanda deworming program has been operating since ~2007. General history of the program:

- The program was started by Geneva Global; Rwanda had no pre-existing NTD program. In 2007, a national survey of soil-transmitted helminths (STH) and schistosomiasis prevalence and intensity was done with SCI technical assistance. Geneva Global funded 4 rounds of treatment in 2008-2011.
- END Fund was established in 2011, and began contract negotiations with the government for a deworming contract under which SCI would provide technical support and the END

Fund would provide funding. SCI and the government each said they did not have sufficient funding for the program. Two mass drug administration (MDA) treatment rounds were missed during the contract negotiations.

- In April 2016, END Fund concluded a new 2-year contract directly with the government. The contract provides that both parties will work toward the government taking ownership of the deworming program and that the parties will renegotiate the budget each year. The current annual cost of the program is about \$700,000.

Selected program details:

- Rwanda's deworming program entails biannual deworming of pre-school age (1-4) and school-age (5-15) children. Pre-school age deworming is delivered in health clinics. School based deworming happens over 3 days. Albendazole for STH is delivered in all 30 districts for STH. Administration of praziquantel for schistosomiasis is limited to areas that are at risk according to disease mapping conducted in 2014.
- On our visit, the Ministry of Health (MOH) was in the process of finalizing its coverage survey methodology. There will be 8 survey areas, 16 interviewers, and villages will be randomly sampled within those areas. The survey will be carried out by staff of the Bureau of Statistics and MOH staff who are not involved in the MDA. While representative sampling whereby villages which report particularly high or particularly low coverage rates have a higher chance of being selected for the coverage survey is suggested by the World Health Organization (WHO), the Rwandan Bureau of Statistics requested that the survey sample be truly random. The END Fund estimates that this will cost \$5,000 per survey. This is in line with or slightly cheaper than surveys conducted in other countries the END Fund supports. At the time of our visit, the MOH had not yet determined what, if any, auditing of the coverage survey would occur.

The END Fund provides support for a Rwandan technical advisor who essentially oversees the planning, implementation and oversight of the program for the MOH. The Rwandan MOH runs the deworming distribution and conducts monitoring. The END Fund primarily provides funding for the program, checks that funds are being spent appropriately, advocates to the government about the importance of deworming, and provides miscellaneous small support when necessary (e.g., helping to procure sieves to be used in monitoring).

Monitoring of the program includes:

- A country-wide mapping of worm prevalence and intensity in 2007 and a remapping in 2014. The 2014 remapping showed substantial drops in worm prevalence and intensity nationwide. In its 2014 remapping the MOH used a new test ("CCA," rather than Kato-Katz) to determine the prevalence of schistosomiasis in the country. This test is more sensitive, and it determined that ~700K additional children needed to be treated for schistosomiasis who weren't identified as needing treatment by the 2007 disease mapping. The END Fund noted that treating more children for schistosomiasis didn't add any cost to the overall deworming program, since the MOH was already treating those children for STH.

- From 2016, sentinel site surveillance in 20 health centers around Rwanda. These health centers test and treat patients for STH and schistosomiasis as and when they present with symptoms.

There have not been coverage surveys of the program in the past.

END Fund is optimistic that the Rwandan government will fund the deworming program in the future.

Idjwi Island

- Context: Idjwi Island is located in Lake Kivu, in the eastern DRC (on the border of DRC and Rwanda) with a population of ~220,000 people. A survey conducted by students from the Harvard School of Public Health in 2010 found that average income on the island was ~\$0.26/day (adjusted for purchasing power parity) and the infant mortality rate was ~3.45%. The cost per child treated is also substantially higher than normal: the END Fund's internal cost per treatment estimate (which excludes government and other in-kind costs) is over \$1 per person treated per year. The program includes water, sanitation and hygiene (WASH) elements and END Fund staff are highly involved in capacity building.
- Implementing partner: The END Fund works with Amani Global Works (AGW) on Idjwi. Before it partnered with END Fund to do deworming, AGW was focused on improving the hospital/clinic capacity on Idjwi and running other programs, for example programs to reduce severe acute malnutrition. END Fund presently accounts for ~30% of AGW's funding, and it restricts that funding to MDA related activities.
- History and status of AGW's deworming activities on Idjwi:
 - In December 2015 and January 2016, AGW distributed ivermectin for lymphatic filariasis (LF) and albendazole for STH. In April 2016, AGW did a second distribution with praziquantel.
 - AGW's goal was to have another distribution of albendazole in November/December 2016 but its supply of the drugs was delayed in Kinshasa. During our visit, AGW advised that it expected to hold 4 days of school based deworming as soon as the drugs were available.
 - Thus Idjwi is behind schedule for STH treatment of children (which should be biannual) but not for schistosomiasis and LF.
 - In the first two distributions, AGW did community-based deworming, attempting to reach everyone on the island. It expects to conduct community-based deworming going forward.
- The END Fund has had very deep involvement in all aspects of the Idjwi program, including facilitating an introduction between AGW and the national NTD program (part of the MOH), which has been critical to securing medication. The END Fund also assisted AGW by writing a budget for the program, planning the distribution logistics and trainings, connecting AGW with technical experts in Rwanda's MOH to help with monitoring and mapping schools, visiting Idjwi island to help build community support for deworming, facilitating meetings

with government in Kinshasa and South Kivu, helping to secure drugs, building capacity to follow WHO guidelines, etc.

- The END Fund and AGW's collaboration came about following a meeting between the END Fund and AGW's Executive Directors at a conference. We asked AGW about alternative paths where it would have done deworming, possibly with less involvement from the END Fund; AGW insisted that END Fund was necessary.
- AGW aims to work with the provincial government to expand and provide integrated treatment to South Kivu (the province Idjwi Island is in) to conduct community-based deworming programs for an additional ~2 million children. There will be a coverage survey for the distribution.

On Idjwi we:

- Observed a deworming distribution. The deworming was near an AGW clinic and so had more trained staff than a typical distribution. It was a showcase deworming day of 3 schools (of 184) and ~500 students, using drugs leftover from the last MDA. Some observations from the distribution were:
 - Before the distribution, the leaders of the distribution used a megaphone to tell the children that they were being dewormed to help them grow up strong and smart, and that they had not been dewormed in a while they should remind their teachers that they need the pills.
 - The distribution was chaotic at first, with children pushing to get to the front, which made it hard for the implementers to carry out the process correctly. Mr. Lancaster told us that this was unusual and was probably happening because the children were really excited that we were there.
 - Each child was supposed to go through a process where 4 things happened: 1) They get a pill, 2) They get stopped by someone marking a tally sheet so that they can be counted, 3) They get crackers and a lollipop (to reduce the chances of side effects such as nausea), 4) They get marked with a marker on their fingertip, so that they aren't treated twice.
 - We followed several children through the whole process. Video here: http://files.givewell.org/files/DWDA%202009/END_Fund/11_distribution_2.mov. The first child didn't get their finger marked. All of the other children completed all aspects of the process.
 - At one point, AGW stopped the distribution and made the children get into more formal lines. A video of the more orderly distribution is here: http://files.givewell.org/files/DWDA%202009/END_Fund/13_distribution_4.mov.
- Tried to understand and vet AGW's administrative coverage estimates of its past deworming campaigns. The END Fund told us that it thought AGW's administrative coverage monitoring was high quality. We approached AGW's monitoring as follows:
 - First, we checked whether the number of pills distributed (as recorded on tally sheets) were being added properly to reach an accurate summary number. We asked for a binder of AGW's tally sheets (example photo: http://files.givewell.org/files/DWDA%202009/END_Fund/15_monitoring_docs_AG

[W 2.jpg](#)) and checked whether the individual distribution tally sheets added up to the summary coverage number for a particular district (example photo: http://files.givewell.org/files/DWDA%202009/END_Fund/17_monitoring_docs_AGW_3.jpg). In the few cases we checked, the math was correct.

- Then, we asked a variety of questions to better understand what checks AGW does to ensure that the tally sheets are accurate (i.e., "How would you know if someone were being lazy and just marking the sheet without treating children?") and how AGW knows that they're not missing children. One example piece of AGW's process that we learned about is that it has supervisors from both AGW and from the general health system attend distributions and fill out forms (example photo: http://files.givewell.org/files/DWDA%202009/END_Fund/16_monitoring_docs_AGW.jpg) about the quality of those distributions, so if a distribution simply weren't happening, hopefully a supervisor would report it. AGW's Executive Director also noted that he asks trusted community members, unaffiliated with AGW, to show up to some distributions and report to him on how they're going. That said, this form of monitoring (i.e., using the Executive Director's personal network) likely will not scale beyond Idjwi Island. The END Fund told us that formal supervision of AGW and MOH distributors and supervisors by hospital staff is expected to be part of the South Kivu expansion.
- AGW told us that the final coverage estimate for its distributions was significantly greater than 100%, likely because the size of the population was underestimated.

Monitoring

The Rwandan MOH was in the process of amending its coverage survey protocol in response to a request from the Bureau of Statistics during our visit. On Idjwi, the plans for coverage surveys were not fully developed. For example, the AGW staff we talked to were unsure about who would conduct the surveys. The END Fund advised that in other parts of the DRC, experts from the local university are usually contracted for this work.

Cost-effectiveness

We asked some questions relevant to estimating cost-effectiveness of marginal funds to END Fund. We learned the following:

- A significant amount of END Fund's past unrestricted funding has funded deworming and a high percentage of its future unrestricted funding will likely fund deworming as well.
- In 2016, 5% of the END Fund's overall costs were fundraising costs. Its fundraising efforts are focused on encouraging private funders to give to NTDs.
- The END Fund has focused on deworming in the past because it believes it is a cost-effective, high impact intervention, and because traditionally and relative to other diseases it has received less attention from funders.

- The END Fund prioritizes “end goals” for five diseases as outlined in the WHO Treatment Recommendations & Targets for NTD Control and Elimination. Per WHO recommendations, three of these diseases (intestinal worms, schistosomiasis, and river blindness) have control “end goals” while two (trachoma and LF) have elimination goals by 2020.
- The END Fund’s flexibility allows it to take advantage of grant opportunities others cannot, and some of those grant opportunities are highly cost effective. The END Fund reserves a portion of its annual budget to fund opportunities that emerge in the END Fund’s proactive assessment of the NTD landscape where there may be gaps left by other funders or catalytic opportunities.

Deworming funding landscape

We also tried to learn and test our assumptions about the deworming sector and its room for more funding:

- Coordination among organizations working on deworming is informal and the organizations are well connected to each other.
- "Integrated" NTD work, generally means 'treating for any of the five NTDs that exist in a given country for which mass drug administration is appropriate (whether or not the treatment areas overlap)' rather than 'providing overlapping treatment in areas with multiple NTDs.'
- There may be a much larger funding gap for deworming in the future. USAID previously provided significant funding for efforts to eliminate LF, and that initiative is close to being completed. There's a big question about whether USAID will reallocate that funding to other NTD work.
- The World Bank has, on request by an endemic country, made deworming part of its loans to that country. Schistosomiasis in Yemen is funded by \$20 million from a World Bank loan, for example.

What we did

- Day 1: Met with END Fund staff (Ms. Martel, Mr. Lancaster, and Ms. Tallant) to discuss the Rwanda program. Dined with Dr. Umulisa, Dr. Ruberanziza, and Dr. Condo from the Rwandan Ministry of Health.
- Day 2: Travelled to Idjwi Island with Ms. Martel, Mr. Lancaster, and Sarah Jeffery (International Health Programme Manager, Vitol Foundation – another funder of the END Fund's work with AGW), Dr. Sebisaho and Dr. Mudekereza (AGW staff).
- Day 3: Observed an MDA, met with village chiefs and South Kivu government officials, visited the AGW clinic, inspected the monitoring documents from past MDAs, and spoke with Amani staff involved in its implementation.
- Day 4: Travelled back to Kigali with Mr. Lancaster.

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