

A conversation with Alix Zwane and Christina Riechers on July 24, 2014

Participants

- Alix Zwane – Executive Director, Evidence Action
- Christina Riechers – Director, Business Development and Strategy, Evidence Action
- Elie Hassenfeld – Co-Executive Director, GiveWell
- Sean Conley – Research Analyst, GiveWell
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Note: This set of notes was compiled by GiveWell and gives an overview of the major points made by Dr. Zwane and Ms. Riechers.

Summary

GiveWell spoke with Dr. Zwane and Ms. Riechers about the carbon credits market, which Evidence Action will use to fund its Dispensers for Safe Water program, and about Evidence Action's new programs.

Dispensers for Safe Water (DSW)

Carbon credit funding

The compliance market and the voluntary market

Evidence Action expects to be able to receive funding for Dispensers for Safe Water via carbon credits. It could sell a very large number of carbon credits through the compliance market at lower prices, but it expects to receive higher prices by selling credits on the voluntary market. In its cost-effectiveness model for 2013-2017, Evidence Action modeled that 75% of credits for Dispensers for Safe Water (DSW) would be sold through the compliance market. In reality, almost 100% of credits will be sold on the voluntary market in 2014 and 2015 and Evidence Action predicts that the share of credits sold through the compliance market will grow to up to 90% by 2018.

The price of carbon credits sold through the compliance market has normally been between \$0.50 and \$1.00 per ton of carbon dioxide emissions. Evidence Action considers \$0.50 per ton to be the lower bound at which it will sell credits. Though the prevailing price has been below \$0.50 recently, Evidence Action expects to sell credits at prices above \$0.50 for two reasons. First, consumers in the compliance market are willing to pay a premium for Evidence Action's credits because it supports high-quality projects in the developing world. Second, some fees are waived because of the fact that its programs are in the developing world. Based on premiums paid for clean cook stoves, Evidence Action predicts that consumers will be willing to pay premiums between \$0.50 and a few dollars per ton. Savings from waived fees will be worth about \$0.10 per ton.

The voluntary market is limited in size, so Evidence Action assumes that it can only sell 10% of its credits through the voluntary market by the time it is selling millions of credits. The main consumers in the voluntary market are businesses that voluntarily choose to buy carbon credits and foundations, multinationals, and European governments that buy carbon credits in order to support the creation of a market with higher-priced credits. Credits on the voluntary market typically sell for about \$6 per ton.

Evidence Action has sold over 8,000 credits on the voluntary market at good prices, and is in discussions about a multi-year futures contract for some of the anticipated credits.

Evidence Action has not sold more credits through the voluntary market yet because the voluntary market is illiquid. Customers are often motivated by what brokers say about carbon credit programs, so Evidence Action's broker is working to sell more credits.

Evidence Action could sell additional credits at a lower price, but wants to wait and sell them for prices above \$5.50/ton to capture the premium based on the program's compelling story, its Gold Standard certification, and the transparency and conservativeness of its measurements of carbon emissions.

The current credits for the DSW program in Kenya are only labeled for the voluntary market, but Evidence Action will be adding a new carbon project in Kenya that will issue dual labeled credits, so that they can also be sold on the compliance market. The credits for the Uganda program will also be dual-labeled.

Future of the credits market

Evidence Action needs to sell additional credits. It does not believe that its current prices of over \$5 per ton will be sustainable when selling large numbers of credits in the future.

Evidence Action expects low prices in the carbon credits market through 2015, due to uncertainty about the changes in international markets that will occur when the new rules of the Kyoto Protocol are announced. It is unclear how global carbon caps and the rules for trade between regional markets will change.

Low carbon credit prices will probably continue between 2015 and 2017 as the market evolves and operationalizes new rules. If new carbon caps are low and expected to be binding, prices will begin to rise in 2018 as people prepare to meet the goals for 2020.

Other sources of funding

Evidence Action has received funding in the form of loans to cover some of its cost until it is able to sell larger numbers of credits.

Kiva provided a \$300,000 loan last year and is currently conducting additional due diligence for a larger loan (~\$600,000) in 2014-15. In addition, one foundation has agreed to a \$2 million interest-free loan. Another foundation is considering a program related investment (PRI) similar to the previously described loan. Lastly, another organization

may offer Evidence Action loan funding were it to finalize the futures contract mentioned above.

New programs

Kenya's volunteer-based remedial education program

Evidence Action is providing technical support for a volunteer-based remedial education program in Kenya. The program is currently in the beta phase, so it is not a flagship program for Evidence Action. The Children's Investment Fund Foundation (CIFF) and the George C. Marshall Foundation are providing additional funding, and the Kenyan government is funding implementation.

The program will be launched at a small scale in September 2014, and Evidence Action will monitor the program's effects on educational outcomes as it is scaled up.

Seasonal income support

(Notes from a previous conversation on this topic here:

[http://files.givewell.org/files/conversations/Alix%20Zwane%20and%20Mushfiq%20Mobarak%204-18-14%20\(public\).pdf](http://files.givewell.org/files/conversations/Alix%20Zwane%20and%20Mushfiq%20Mobarak%204-18-14%20(public).pdf).)

In August 2014, Evidence Action will collect data in Bangladesh to investigate the possible scale-up of a program to provide seasonal income support to people who wish to migrate from rural to urban areas. In particular, it aims to collect data that will inform how the program's effects may be different at larger scale than in the initial study.

Evidence Action is also collecting qualitative data on seasonal income support in Malawi. In Africa, the decision to supplement income by migrating is more complex, because even extremely poor people have some crops and land. Thus working outside agriculture in one season involves a tradeoff, because it reduces the ability of a subsistence farmer to invest in his farm and increase his crop yields. Kelsey Jack did a randomized controlled trial in Zambia in which farmers were given interest-free loans of maize, which allowed them to optimize between working outside agriculture and investing in their farms, while having guaranteed access to food during the non-growing season.

Seasonal income support may be politically difficult to implement, while in-kind loans to farmers may be more politically appealing.

Exploratory research

Funding required for the following projects is about \$50,000-75,000.

Fertilizer subsidies

Michael Kremer, Esther Duflo, and Jon Robinson recommend selling subsidized fertilizer to farmers at harvest time. Evidence Action is sending one of its fellows to Kenya to research this possibility.

Nutritional education through DSW

Evidence Action is investigating the possibility of having the dispenser promoters in the DSW program provide nutritional education. There is some research showing that volunteers can be effective in providing basic nutritional information, such as that beans are healthful and that children should be given milk rather than diluted broth. Evidence Action is researching whether these results could be replicated at a larger scale and in a less controlled environment.

Funding needs

Evidence Action will need an additional \$2 million in 2015 in order to continue its current rates of expansion in Kenya, Uganda, and Malawi. It also does not have resources to explore partnerships with organizations in other countries. For example, Evidence Action would like to partner with NGOs that have rural networks in other African countries to help with operating chlorine dispensers. Evidence Action would need to use its unrestricted funds for this.

Evidence Action aims to have 10% of its funding reserves be unrestricted funding, but currently only 3-5% is unrestricted.

In 2013, Evidence Action wanted to prove that it could obtain non-grant funding, so that was its primary focus. Evidence Action thinks that the optimal level of debt financing for the dispensers program is 35%. It is currently higher than that, so Evidence Action will now focus future fundraising efforts on grants for bridge financing until more carbon revenue comes in.

Initial conversations with investors about obtaining funding for dispenser have not been fruitful. It is difficult to receive equity funding as a nonprofit, and it may require a new legal entity. There has been less enthusiasm among funders for equity funding compared to loans and grants.

Organizational changes

One of Evidence Action's goals for 2014 was to complete its separation from Innovations for Poverty Action (IPA). On July 1, 2014, all of IPA's employees working on DtWI in Kenya transitioned to Evidence Action. The DSW employees will be transitioned to Evidence Action on October 1, 2014.

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