

A conversation with Martin Fisher on September 4, 2014

Participants

- Martin Fisher – Co-Founder & CEO, KickStart International
- Elie Hassenfeld – Co-Founder and Co-Executive Director, GiveWell

Note: This set of notes was compiled by GiveWell and gives an overview of the major points made by Dr. Fisher.

Summary

GiveWell spoke to Dr. Fisher about KickStart's work.

Background on KickStart

KickStart produces and distributes irrigation pumps in numerous African nations, which enable small-scale farmers to grow higher-value crops at higher yields and to continue to produce crops during the dry season.

Monitoring and evaluation

KickStart has an annual budget of about \$6 million. About 5% of this is spent on monitoring and evaluation.

KickStart compiles a database of all of its customers and performs a baseline survey of a randomized set of customers immediately after they acquire pumps to gather information about the customer's current situation and their life during the previous year. KickStart returns 18 months later to survey customers again (KickStart believes that it takes about six months for a new irrigation farmer's business to get fully underway, so a follow-up at 18 months allows for about a year of real use of the pump). It performs another follow-up one year later and sometimes at the three-year and five-year marks as well.

Farmers' annual income generally increases by about \$700 in the first 18 months of practicing irrigation. The total impact is greater because farmers earn the majority of this money in the dry seasons (between the rain-fed harvests) so they smooth out their farm income, and tend to make other income-generating investments with the money from the irrigation.

Kenyan study

The International Food Policy Research Institute (with funding from Gates Foundation and 3ie) attempted a large scale study of KickStart's impact in Kenya and Tanzania but ran out of funding partway through, mainly because bad roads in the rainy season only allowed researchers to visit one farmer per day instead of the planned three. The full analysis of the baseline and midline data from the unfinished study was also never completed. KickStart has now raised money and recruited Jeremy Shapiro and the Busara

Center to finish the study in Kenya (it has removed the Tanzania portion of the study to save about \$400,000). This study will likely be finished within a year.

Prices and distribution model

KickStart has sold 250,000 pumps to date (since 1999) and aims to sell another 275,000 by 2021.

In Kenya and Tanzania, KickStart sells pumps through a network of local private-sector agri-vet retail shops. At retail, the MoneyMaker Max (MMM) pump costs ~\$170 and the MoneyMaker Hip Pump costs ~\$70 including a full set of hosepipes and spare parts.

In the rest of Africa, KickStart “launches” its product to local groups working with smallholder farmers (e.g., NGOs, private sector companies, governments) and introduces these groups to appointed local importer/distributors. KickStart then sells containers of ~1,400 pumps to these distributors, who in turn make sales to:

- NGOs
- UN Agencies
- Government programs
- Smaller community-based organizations
- The distributor’s retail network
- The farmers directly. Not many farmers buy directly from distributors (except in Malawi, where about half of pumps are sold directly to farmers).

Major NGOs (e.g., Total Land Care, World Vision, Save the Children) buy pumps from the distributors (or in exceptional cases from KickStart directly) and integrate distribution of the pumps into their existing work with local farmers. For the most part, these NGOs do not give pumps away to farmers for free. For example:

- Total Land Care has bought 23,000 of the MMM pump from KickStart for about \$105 wholesale and resold the pumps to farmers at that price.
- World Vision, in most cases, gives farmers pumps on credit with one year to repay the cost.
- Heifer International gives pumps to farmers but then the farmer has to use the pump’s revenues to buy a new pump for another recipient

Challenges of behavior change

Educating farmers on the benefits of irrigation and persuading farmers to switch to irrigation farming is a major challenge. Irrigation farming involves different crops and requires a different type of lifestyle than traditional farming (which involves waiting for rain and harvesting based on rain cycles). Irrigation farming requires working every day.

Information on the advantages of irrigation spreads slowly because farmers who irrigate are reluctant to talk about the benefits that they experience. If a farmer’s family or neighbors learn of the farmer’s increased income, they might beg for money, or steal or destroy the pump.

The reputation of bad pumps

In some areas, treadle pumps have a bad reputation among farmers because of previously distributed pumps that did not work (e.g., pumps distributed by iDE in Zambia, knock-off pumps bought by the government in Malawi and Ethiopia). It has been necessary for KickStart to rebuild the pumps' reputation in these areas and demonstrate that not all treadle pumps are the same. There is a significant difference between well-designed and poorly-designed pumps.

A number of donors are skeptical of the potential impacts of human powered irrigation pumps because in the past, so many pumps in the field have proven not to work. Others feel that human powered irrigation is promoting “drudgery”. However, labor is plentiful in most of rural Africa and using an irrigation pump is much easier than the alternative of using a rope and bucket to irrigate crops.

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