

# GLOBAL HEALTH

## Innovation Insight Series

*KickStart's MoneyMaker Pumps are designed to help subsistence farmers lift themselves out of poverty*



Image provided by KickStart International

## KICKSTART INTERNATIONAL IV: Measuring Impact

NAIROBI, KENYA

ESTABLISHED 2005

MARTIN FISHER AND  
NICK MOON, COFOUNDERS

### THE PROBLEM/SOLUTION SPACE

The relationship between poverty and poor health is well documented. According to a recent World Bank report, “Poverty around the world creates ill-health because it forces people to live in environments that make them sick, without decent shelter, clean water or adequate sanitation.”<sup>1</sup> Unfortunately, more than 1 billion people around the world remain trapped in poverty (i.e., living on less than \$1.25 per day).<sup>2</sup> Alleviating poverty is especially difficult in Africa, where approximately 80 percent of the poor are rural, subsistence farmers. Some of these farmers have an entrepreneurial spirit, but with limited education and access to information, they have limited means to increase their income and climb out of poverty, so they remain at greater risk for disease and ill-health.

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## ABOUT KICKSTART INTERNATIONAL

KickStart was founded by Martin Fisher and Nick Moon to design tools that would enable Africa's poor to launch and sustain profitable businesses. Its first product was a line of manually operated irrigation pumps—branded “MoneyMaker Pumps”—that would help subsistence farmers transform their farms into profitable family businesses. The pumps enable year-round irrigation, which allows farmers to grow more valuable crops, reap multiple harvests each year (instead of only one or two), remain productive during drought seasons, and increase their income substantially. The original Super MoneyMaker Pressure Pump was launched in 1998. This was followed in 2006 by the MoneyMaker Hip Pump, which resembled a bicycle pump.

## ONE CHALLENGE: DEMONSTRATING IMPACT

Since its inception, KickStart had sold more than 180,000 MoneyMaker pumps.<sup>3</sup> Despite these encouraging sales figures, the company still faced the critical questions that confronted every social enterprise: What was the actual impact of the product on the people it was intended to help? And were these results cost effective?

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Fisher realized early on the need for KickStart to measure and validate its performance. Many non-profits failed to set clearly defined goals, and they often measured only the outputs of their work rather than their desired outcomes (if they measured at all). KickStart was the first to point out that the number of pumps it sold was only an output measure, which did not indicate whether it was successfully meeting its mission to help lift people out of poverty.

## THE SOLUTION: A RIGOROUS, SYSTEMATIC APPROACH TO MEASUREMENT

“One of the reasons why Nick Moon and I left a big traditional ‘aid’ charity was because they seemed disinterested in measuring the real and lasting results of their work,” explained Fisher. “So as we were building the model for KickStart, we built our monitoring efforts.”<sup>4</sup> He added, “KickStart’s mission is to get poor people out of poverty, so our most important indicator is how much more money the people who buy our technologies make.”<sup>5</sup>

To uncover this information, KickStart developed a systematic and replicable methodology to evaluate the impact it was having on its customers and their families.<sup>6</sup> Every MoneyMaker pump that was sold through a retailer came with a guarantee form. The purchaser used the form to provide basic identifying information to KickStart, including his/her general location (since traditional addresses in rural Africa were rarely available). The forms served a marketing function by providing a guarantee of product quality, which lowered the perceived risk of investing in a MoneyMaker pump. They also enabled KickStart to build a database of its pump users.

Each year, KickStart selected a randomized, statistically valid cohort of individuals (usually around 50-60) who had recently purchased MoneyMaker pumps. Two KickStart staff members—typically a man and a woman—then visited and interviewed each

*KickStart's measurement system provides the organization with reliable information about how it is positively affecting the lives of its customers and their families*



Image provided by KickStart International

pump owner at three different intervals. The first visit, which occurred within one month of purchase, provided baseline data. The second and third visits took place 18 months and three years later, and were designed to enable KickStart to assess what changes in income and quality of life were being realized over time.

During the interviews, the staff members sat down with and engaged pump users and their families in “long and wide ranging” conversations.<sup>7</sup> The interview process employed culturally appropriate methods to ensure the comfort of and respect for the participants. To verify the accuracy of the information being shared, the KickStart team was trained to ask questions in a number of ways. They also directly observed household and field conditions as another source of information. More often than not, the evaluation team developed genuine rapport with the farmers and established ongoing relationships that enabled KickStart to gather increasingly detailed outcomes data.

KickStart used the information it gathered from the interviews to quantify the effects of MoneyMaker pumps on all farm activities, including areas under cultivation, crop yields, and income. It was similarly interested in the effects of pump use on the quality of life for the families it interviewed, which included their health, nutrition, educational opportunities for children, marital harmony, and social status. Defining a specific measure for the desired end state of getting someone “out of poverty” was challenging, because some of the most important impacts such as the effects of MoneyMaker pumps on quality of life could not be fully quantified. KickStart therefore employed a functional definition that classified a family as being “out of poverty” when it met three key criteria: (1) It had enough income to provide each family member with food, shelter, clothing, and basic health care, (2) It had enough income to enable each child to attend school, and (3) It still had income remaining after all expenses to make investments in the future.<sup>8</sup> When a family met these criteria, KickStart believed it had achieved a basic level of “economic freedom.”<sup>9</sup>

In parallel, KickStart used the data it acquired to measure the cost-effectiveness of its efforts and to maximize its return on investment. The company calculated the average dollar amount needed to help a family out of poverty, as well as a ratio that it called “Bang for the Buck.” The latter was the sum of the increase in income earned by MoneyMaker pump owners and the salary earned by their new employees during their first 3.5 years of pump operation, divided by total donor funds KickStart had received over the same period. Although pump users were expected to continue earning income on an ongoing basis, 3.5 years was used because this was the estimated design life of a MoneyMaker pump. In 2012, KickStart’s Bang for the Buck ratio was 1:15, meaning that a farmer earned \$15 for every \$1 donation to the organization. Based on the results of its measurement system, the company also believed it was able to lift a family out of poverty—forever—for \$300.<sup>10</sup>



*An early billboard advertisement (left); the Super MoneyMaker pressure pump (right)*

KickStart’s impact monitoring program required a sizable ongoing investment by the company. However, according to the company’s website, “This is how we can offer our impact numbers with confidence.” It went on to describe the system as “Difficult. Time-consuming. Priceless.”<sup>11</sup> Although its measurement approach was considered to be among the strongest in the sector, KickStart planned to invest an additional \$300,000 in expanding the system over the next several years.<sup>12</sup> ♦

#### NOTES

- 1 “Dying for Change: Poor People’s Experience of Health and Ill-Health,” World Bank, <http://siteresources.worldbank.org/INTPAH/Resources/Publications/Dying-for-Change/dyifull2.pdf> (March 21, 2012).
- 2 “World Bank Updates Poverty Estimates for the Developing World,” Research at the World Bank, August 28, 2008, <http://web.worldbank.org/wbsite/external/extdec/extresearch/0,,contentMDK:21882162~pagePK:64165401~piPK:64165026~theSitePK:469382,00.html> (March 21, 2012).
- 3 Impact & Statistics, KickStart International, <http://annualreport.kickstart.org/impact-statistics.html> (April 5, 2012).

- 4 The Old Ways of Ending Poverty Are Not Working," OneWorld.net, January 27, 2009, <http://us.oneworld.org/perspectives/peopleof2008/359738-online-dialogue-with-martin-fisher> (April 3, 2012).
- 5 Martin Fisher, "Income Is Development: KickStart's Pumps Help Kenyan Farmers Transition to a Case Economy," *Innovations*, Winter 2006, <http://www.mitpressjournals.org/doi/abs/10.1162/itgg.2006.1.1.9> (April 3, 2012).
- 6 "Our Impact," KickStart International, <http://kickstart.org/what-we-do/impact/> (April 5, 2012).
- 7 Ibid.
- 8 "When We Say..." KickStart International, <http://www.kickstart.org/about-us/when-we-say.php> (April 5, 2012).
- 9 Ibid.
- 10 "Our Impact," op. cit.
- 11 Ibid.
- 12 Ibid.