Reading Vision Test for Far Sighted People

Estimates for the number of poor people worldwide who need eyeglasses are startling. The World Health Organization reports approximately 517 million people in developing countries are visually impaired because they do not have access to corrective treatment. The Centre for Vision in the Developing World at Oxford University has a higher estimate: More than 1 billion people need but do not get vision correction. There is a simple, old, and cost-effective technology to solve this problem— eyeglasses. Yet the problem persists on a vast scale. For the poor, eyeglasses often are either inaccessible or unaffordable, forcing hundreds of millions of people to live below their full potential.

Visual impairment is more than just a health problem. It has economic, educational, and public safety implications. In Tanzania, for example, 71 percent of people who are farsighted are dissatisfied with their ability to do near work, such as winnowing grain, sewing, reading, and cooking food. But only 6 percent of people in Tanzania who are farsighted have eyeglasses.[1] In India in mid-2000, only 7 percent of the population wore spectacles, whereas about 65 percent of the population needed them.[2]

A simple pair of eyeglasses could dramatically improve the lives of the poor, by increasing earning power and occupational and public safety, improving educational opportunities, and fostering the ability to perform everyday tasks. Even the straightforward economic return from eyeglasses for the poor far exceeds their cost. A variety of approaches have been tried to solve this problem, using for-profit businesses, social enterprises, and innovative technologies. To date, none have succeeded on a large scale.

Given the high economic value and low cost of eyeglasses, it would seem that private companies could profitably supply eyeglasses to the poor—an ideal situation for applying the bottom of the pyramid (BOP) approach popularized by C.K. Prahalad. In 2005, Essilor International, a publicly traded French company, launched a BOP initiative targeting the Indian rural poor. But the project has yet to make a profit.

Vision Spring, founded in 2001 as a nonprofit dedicated to reducing poverty and generating opportunity in the developing world through the sale of affordable eyeglasses, uses a social entrepreneurship approach. In 2009, Vision Spring sold 201,000 pairs of readymade reading glasses. It is now trying to scale up its efforts and hopes to sell 1 million pairs of eyeglasses per year by 2012. Yet even if Vision Spring achieves this goal, the impact is too little, given that between 500 million and 1 billion people need eyeglasses—and the number is growing.

Another approach to solving the vision problem emphasizes technological innovation to provide low-cost, self-adjustable spectacles. These eyeglasses are called AdSpecs, and they are being developed by Joshua Silver, a physics professor at Oxford University. At least two other organizations are also offering adjustable spectacles, but none has achieved significant scale,

probably because they are not cost-effective and have not gained customer acceptance from a style perspective.

Many challenges confront the provision of eyeglasses to the poor in developing countries. Chief among them are a lack of awareness about the value of corrected vision, access to eyeglasses, and affordability. A 2006 study of the principal barriers to eye care in Andhra Pradesh, India, reported that 23.8 percent of the 2,615 respondents believed they did not have a serious vision problem, with 23.4 percent stating that they were able to see adequately, 20.4 percent that other obligations prevented an eye checkup, and 17.5 percent that they did not have the money.[3]

One of the problems is that many poor people do not know that a simple, affordable product exists to restore their clear vision; they assume that only expensive eyeglasses will solve their vision problem. Others do not fully appreciate the benefits of good vision.