



2019 GiveWell Grants for Global Health and Development in Southeast Asia and Bangladesh

Mon, Apr 1, 2019 at 2:45 PM

Dear Josh and Team:

We are pleased to submit our application for consideration of GiveWell and Affinity Impact's grant for **Global Health and Development in Southeast Asia and Bangladesh**. Attached and below is our application for our *Reading Glasses for Improved Livelihoods* program in Bangladesh.

We have also attached supplemental documents and would be pleased to talk through any and all materials.

Thank you for including VisionSpring in this opportunity. We look forward to getting to know you and Affinity Impact through the review process.

With appreciation.

Aminah Yoba

Development Officer

VisionSpring

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See well. Do well.

1. What does the charity do?

What program does the charity implement, and what role does the charity play (i.e. providing funding, technical assistance, direct implementation, or other)?

With a philanthropic investment of \$3.56 per person, VisionSpring unlocks \$262 in income earning potential over two years for individuals living on an average of \$2.60 per day in Bangladesh. How? A simple pair of reading glasses.

Eyeglasses are a powerful tool for social and economic development, yet 2.5 billion people living in mostly in low and low-middle income countries, do not have the eyeglasses they need to earn, learn and be safe on the roads. The problem arises from the systemic dysfunction of the optical market and health sector which have failed to deliver a 700-year old technology to low-income consumers.

Founded in 2001 by US optometrist Dr. Jordan Kassalow, VisionSpring set out as a social enterprise (registered in the US as a 501(c)(3)) to accelerate the uptake of eyeglasses in emerging and frontier markets by combining practices from business and non-profit sectors. We believe in de-medicalizing access to vision screening and eyeglasses because the largest part of the world's blurry vision problem can be solved with a simple pair of reading glasses.

Why reading glasses? Reading glasses correct blurry near vision that occurs with aging, a condition known as presbyopia. As adults approach age 35 to 40, our eye's lens becomes less flexible making it difficult to focus on objects that are within arm's length. This ubiquitous condition becomes more prevalent and acute with age. Presbyopia makes it difficult to perform tasks at near distances, not just reading and writing, but other occupational activities such as sewing and weaving, sorting rice, using a mobile phone, and utilizing machinery or other equipment.

Globally, 1.1 billion people just need a simple pair of reading glasses to sustain productivity and income earning potential. In Bangladesh, an estimated 20% of the population suffers from presbyopia (33 million) (Muhit, et al.: 2018), and 75% of the cases are uncorrected (Bourne et al. 2004), undercutting individuals' earning capacity, civic participation and overall quality of life.

Reading glasses are the type of basic magnifying glasses that consumers in the US and Europe can purchase at any pharmacy or book shop, and that VisionSpring can source in Bangladesh for as little as \$1.40. They do not require an optician to determine the correct power. As such, in a decade long collaboration VisionSpring and BRAC have successfully trained an active cadre of 25,000 BRAC Community Health Workers (CHWs) to conduct vision screenings, sell reading glasses, and refer for other eye conditions. By increasing income potential at the household level, *RGIL* supports the attainment of **SDG 1: End poverty in all forms everywhere.**

The Reading Glasses for Improved Livelihoods Program (RGIL): In 2006, VisionSpring partnered with BRAC—the world's largest NGO— to test the *RGIL Program* in Bangladesh starting with an initial 50 Community Health Workers (CHWs). RGIL is now implemented in 61 of 64 districts in the country. To date, community health workers have screened the vision of over 7 million people and have sold a cumulative 1.4 million pairs of reading glasses. As the program has scaled, RGIL has become the backbone of vision access in Bangladesh. To our knowledge, it's the largest single source of eyeglasses in the country.

Each year, community health workers screen the vision of over one million people and sell 180k pairs of reading glasses at a subsidized price of \$1.90. CHWs also serve as the frontline for detecting eye conditions that require higher level care, referring 15% of people screened for the treatment of myopia, cataract, and other causes of blindness and vision impairment. Generating much-needed income for their families, health workers earn a 20% commission (\$0.38) per pair of glasses sold and an additional \$1.20 per completed cataract referral (3% of procedure price)

The RGIL program represents 25% of VisionSpring's overall sales which a total of 5.5 million pairs as of the end of 2018.

Partner roles and responsibilities: BRAC implements RGIL as an integrated component of its Essential Health Care program operated by the Health, Nutrition, and Population Division. Reporting to the HNPP Deputy Director, the BRAC RGIL program manager has responsibility for daily operations including warehouse and supply chain, sales monitoring, and team recruitment; coordinates with district and sub-district health managers and oversees 88 dedicated RGIL program staff who support the CHWs in conducting vision camps.

A dedicated VisionSpring RGIL technical advisor spends two weeks each month with the BRAC team. VisionSpring supports budget development and demand forecasting, manages production planning with the local glasses' manufacturer, leads sales training for program staff and master trainers, plans marketing and community activation events, supports remediation in low performing sub-districts, and facilitates impact assessments.

VisionSpring provides grant funds to BRAC for the program, and both organizations monitor use of the revolving fund through which earned revenues are redeployed in the program.

2. What is the evidence that the program works?

See links and attachments section at end

Reaching Our Target Customer: Across all global programs, VisionSpring aims for 80% of customers to be in the low-income segment defined as living on less than \$4 per day; and for at least 50% of customers to be first time wearers of eyeglasses. The RGIL program in Bangladesh far exceeds these targets.

Community health workers effectively mobilize the right people to attend the vision camps such that the majority of participants (64%) present with presbyopia and could benefit from reading glasses. Routine program monitoring and a 2017 representative demographic survey reveal that of people acquiring reading glasses through RGIL:

- 69% live on less than \$2.50 per day (defined according to the Bangladesh Progress out of Poverty Index).
- 75% are purchasing their first-ever pair of glasses
- 74% are in their prime working years (between ages 35 to 54 years old)
- 63% are women

Increasing Income Productivity: In 2018, we published the results of an RCT in *The Lancet Global Health* which has documented the largest increase in productivity from a health intervention to be recorded in a trial. For tea pickers in Assam, reading glasses were shown to have increased productivity by 22% on average and up to 32% for workers over age 50, as measured in kilograms picked per day.

Increasing Income Earning Potential: At the end of 2018, we completed a randomized control trial to understand the impact of the RGIL program on income and quality of life in Bangladesh. In 59 rural villages and from 10,877 households, 1,086 individuals between the ages of 35 and 65 were randomly selected to participate in the study. Participants were then randomized into two cohorts. With limited attrition, at endline the treatment group was 521 people and the control 510 people. The demographic and occupational profiles of the groups were very similar: average age of 47 years, engaged in income earning activity (T:75%, C:74%), monthly mean income (T: BDT 3,506; C: 4,085), majority occupations in agriculture or livestock (T:32%, C:28%) and artisans (T:28% and C:30%),

The study has not yet been peer-reviewed, but preliminary findings from regression analysis shows that six months after receiving their very first pair of reading glasses, participation in the intervention had a significant positive impact on income. The treatment group's income increased by BDT 840 per month (USD 10.77), or **18% more than the control group's mean income** at endline. At the lower end, the intervention increased income by BDT 479 (USD 6.14) or 10.5%, and on the upper end by BDT 1,295 (USD \$16.60) or 28.4%.

Additionally, the intervention group was **40% more likely to be employed** as compared to the control group, suggesting that reading glasses increases employability.

Improved Quality of Life: Several studies show that people with presbyopia in rural communities' experience difficulty in reading and other near vision tasks and that presbyopia is negatively associated with quality of life (McDonnel, Lee & Spritzer, 2003 and Luo et al., 2008). According to studies undertaken in China, Tanzania (Patel et al, 2006 and Lu, Congdon & He, 2011), and Fiji (Williams, Brian & Toit, 2012), negative impacts of presbyopia include difficulties with sorting rice, threading a needle, writing letters, winnowing grain, seeing displays on mobile phones, etc.

Preliminary results from the RGIL RCT has quantified the extent to which reading glasses improve daily functioning, productivity in the household and overall quality of life.

In terms of **teaching the Holy Quran to children, sorting rice, and sewing**, the odds ratios indicate that the women in the treatment group experienced **84%, 72%, and 84% less difficulty** in accomplishing these tasks than women in the control group. Additionally, women with reading glasses were **69% less likely to be limited in the amount of household work performed and 67% less likely to limit their duration of work** as compared to the control.

Reading glasses were also shown to increase independence. Based upon RCT questions pertaining to functional dependency and social functioning, persons in the intervention group were **65% less likely to report requiring help from others** due to their vision.

Similarly, the odds of **feeling ashamed or embarrassed because of poor vision was 55% lower** than that of the control. Persons in the control group were also less likely to experience headaches and discomfort around their eyes.

3. What is the program's budget?

Please include budgetary information to help us estimate cost-effectiveness. If possible, please include known information about the total costs of a program (including indirect costs and funding contributed by other charitable and government entities) and the total number of people served by a program.

Through the RGIL program in 2019, CHWs will screen over 1.2m people in 61 of the 64 districts in Bangladesh. 180k people are anticipated to purchase reading glasses, and 15% of people screened are expected to be referred for prescription glasses or another eye condition such as cataract. The donor contribution per customer acquiring a pair of eyeglasses is projected to be \$3.56.

Program expenditures total \$982k. The sale of eyeglasses produces \$338.5k in earned revenue which is sufficient to cover the cost of goods plus health worker commissions, and generates \$31k in gross margin, which goes toward project operating costs. The total philanthropic requirement for the RGIL program is \$643.5k. Cartier Foundation currently contributes \$300k per year to the budget, leaving a funding gap of \$343.5k.

Budget summary in Annex 1.

4. How would the charity use an additional \$250,000?

Aligned with Affinity Impact's priority to support organizations in Southeast Asia and Bangladesh with global health and development programs, VisionSpring would respectfully apply a grant of \$250k to help fill the funding requirement for the RGIL program in Bangladesh.

The funding need for RGIL in 2019 is \$643,462. The additional \$250,000 would be paired with \$300,000 secured from the Cartier Foundation to support the implementation of the program.

Affinity Impact's funds will enable continued market penetration of the program, including a **strategic expansion in the district of Shepur**. In Shepur district, VisionSpring and Brac are collaborating with eight other organizations, including the Ministry of Health, that have come together in a coalition effort to dramatically increase access to eye care and vision correction with glasses in one district.

In Shepur, members of the **Clear Vision Collective (CVC)** are each deploying their unique market-based and charitable solutions with an unprecedented level of coordination, in order to develop a model that might be replicated in other districts across the country. As the provider of community-based screening, RGIL will account for the greatest number of people in the district to be screened and to acquire glasses during the CVC pilot.

To increase access to vision services in the model district, our Shepur plan calls for VisionSpring and Brac to expand the community health workforce from 250 to 600 mostly women by Q1 2020. Other partners are opening 4 vision centers, establishing 25 optical shops, initiating first-ever school screening, and will conduct 4,000 cataract procedures. Based on our presbyopia expertise, VisionSpring (with another partner, Jeeon) will be introducing reading glasses into 200 rural bazaar pharmacies. (PowerPoint about the Clear Vision Collective attached).

Additionally, Affinity Impact's dedicated grant would enable VisionSpring to redeploy unrestricted funds that are currently sustaining the RGIL program to other innovation and growth priorities including the **early replication of RGIL in Uganda and model adaptation in Kenya; and the development of a presbyopia screening APP**.

Over the next several years, the growth of our RGIL program will come from deepening penetration in districts in Bangladesh. Future growth lies in replicating the program particularly in Africa with BRAC, currently in Uganda and Amref starting in Kenya.

In Uganda, we are in year two of a three-year plan to train 3,000 CHWs, creating access to basic vision correction for more than 660k households. This year we are conducting a multi-district roll-out and will increase the CHWs selling reading glasses from 800 to 1,800.

In Kenya, we are in the first year of adapting the RGIL program where health workers, who have traditionally been involved in education and activities like vaccine mobilization, will be selling a commodity for the very first time. Pending the success of this year's pilots, we plan to grow the Amref Kenya program to an initial 3-5k health workers.

Overall, there is great potential to replicate RGIL in Sub-Saharan Africa, where Amref and Brac work in 10 countries. Liberia is our next priority country with BRAC, where we will dovetail into a consortium effort lead by EYEAlliance to increase access to eyeglasses nationwide with the Ministry of Health.

It is important to note that the RGIL program has also served as the foundation upon which we have expanded into other channels. Building on our RGIL capabilities and supply chain, VisionSpring has extended its reach in Bangladesh into garment factories, rural medical providers (pharmacies) and other health service providers.

ANNEX 1: Supporting Documents

A. Evidence

- **Lancet Global Health 2018 RCT India:** Effect of providing near glasses on productivity among rural Indian tea workers with presbyopia (PROSPER): a randomized trial
- **BRAC Institute of Governance and Development, Working Paper 2019:** *The Effects of Reading Glasses on Income, Productivity, and Quality of Life: Evidence from Rural Bangladesh.*
(Please note that this study document has not been finalized. We kindly ask that the report be used for internal reference only as we expect to submit a version for publication in the coming quarter).
- **BRAC Research and Development Division 2015:** *Randomized trial for comparing different provider models of screening presbyopia in the community: An assessment of BRAC reading glass project.*
A trial conducted to inform the effectiveness of delivering RGIL through different types of health services providers (Program Officers, Upgraded Health Workers and existing Health Workers). Includes an assessment of customer demographics, knowledge about presbyopia, and vision correction seeking behavior.
- **BRAC Research and Development Division 2009:** *Improving the Quality of Life of the Presbyopic Patients: The Reading Glass Project of BRAC*
A cross-sectional quantitative survey conducted to inform the decision to scale-up RGIL nationally by understanding the program's impact, consumer's knowledge, and areas for improvement.

B. Global Prioritization of Reading Glasses

- **Global Partnership for Assistive Technologies 2019:** *AT Scale Strategy Overview*
Following the 71st World Health Assembly's 2018 resolution on improving access to Assistive Technology, reading glasses have been selected as one of the top five assistive technologies to be prioritized for increased access and market making.
- **World Health Organization 2016:** *Priority Assistive Products List*
Following in the footsteps of the WHO Model List of Essential Medicines, WHO developed the PAPL to mobilize resources and promote access to assistive technologies including reading glasses

3. Issue Overviews

- **The New York Times 2018:** *A Simple Way to Improve a Billion Lives: Eyeglasses*
Overview of "the biggest health crisis you have never heard of."
- **World Economic Forum 2016:** *Eyeglasses for Global Development: Bridging the Visual Divide*

Whitepaper outlining the case for investments in eyeglasses as a tool for social and economic development

- **Public Radio International 2017:** *Seeing into the Future*
Radio interview with VisionSpring founder, Jordan Kassalow, and President, Ella Gudwin, which includes a discussion of the RGIL program

4. Market Penetration: Sherpur District

- **Clear Vision Collective, March 2019:** *Coalition Description and Sherpur District activity update*
Highlights the role of RGIL in a coordinated effort among 10 organizations to increase access to vision services in a model district.

ANNEX 2: Budget


Reading Glasses for Improved Livelihoods (RGIL) Project Budget 20 19

Sales Projection: Reading Glasses (units)	180,535
Total Revenue and COGs	
Total Revenue	\$ 338,503
Total Cost of Goods	\$ 228,377
Total CHW Commission	\$ 78,984
Gross Margin	\$ 31,142
Project Operational Expenses	
Salary & Benefit	\$ 424,136
Travel and Transportation	\$ 97,945
Warehouse and Supply Chain	\$ 52,351
Marketing and Sales Promotion	\$ 38,240
Telecommunications & other	\$ 6,932
Total Direct Operating Expenses - pre M&G	\$ 619,604
Management & General_Overhead	\$ 55,000
Total Implementation Costs	\$ 674,604
Total Philanthropic Requirement (after gross margin)	\$ 643,462
Philanthropic Funds Committed and Requested	
Contribution Committed by Cartier Philanthropy	\$ 300,000
Contribution from VisionSpring Unrestricted Funds	\$ 93,462
Contribution Requested from Affinity Impact	\$ 250,000




ANNEX 3: REFERENCES

1. Muhit, M., Minto, H., Parvin, A., Jadoon, M. Z., Islam, J., Yasmin, S., & Khandaker, G. (2018). Prevalence of refractive error, presbyopia, and unmet need of spectacle coverage in a northern district of Bangladesh: Rapid Assessment of Refractive Error study. *Ophthalmic Epidemiology*, 25(2), 126-132.
2. Bourne, R. R., Dineen, B. P., Huq, D. M., Ali, S. M., & Johnson, G. J. (2004). Correction of Refractive Error in the Adult Population of Bangladesh: Meeting the Unmet Need. *Investigative Ophthalmology & Visual Science*, 45(2), 410-417.
3. McDonnell, J. P., Lee, P., & Spritzer, K. (2003). Associations of presbyopia with vision-targeted health-related quality of life. *Arch Ophthalmology*, 121(11), 1577-1581.
4. Patel, I., & Sheila, W. K. (2007). Presbyopia: prevalence, impact, and intervention. *Community Eye Health*, 20(63), 40-41.
5. Lu, Q., Congdon, N., & He, X. (2011). Quality of Life and Near Vision Impairment Due to. *Investigative Ophthalmology & Visual Science*, 52, 4118-4123.
6. Williams, S., Brian, G., & Toit, R. d. (2012). Measuring Vision-specific Quality of Life among Adults in Fiji. *Ophthalmic Epidemiology*, 19(6), 388-395.

5 attachments

 **RGIL 2019 RCT Income and Quality of Life - WORKING DRAFT.pdf**
837K

 **Clear Vision Collective Update March.27.2019.pdf**
1828K

-  **2015 Study of Brac CHW Effectiveness.pdf**
444K
-  **2009 BRAC RGIL Impact study results.pdf**
195K
-  **GiveWell-Affinity Impact-VisionSpring 2019.04.01.pdf**
266K