



---

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

---

Mon, Apr 1, 2019 at 1:37 PM

Dear Elie,

Thank you for inviting Sightsavers' to apply for the GiveWell Grants for Global Health and Development in Southeast Asia and Bangladesh. This is a really exciting opportunity for us to expand our work in a country with a huge unmet need for sight restoring interventions. Our Bangladesh team have worked out the upscale that additional funding of \$250,000 would enable them to deliver.

Please see below for the answers to your questions and please see attached for some additional documentation; a Sightsavers' funding proposal developed for a major donor that gives an overview of our work and impact in Bangladesh, statistics on global blindness and a fact sheet based on two recent longitudinal cataract impact studies in Vietnam, the Philippines, Kenya and Bangladesh. There are also multiple footnotes at the end of each answer below with links to source documents and academic reviews of cataract surgery and its cost effectiveness.

Please do get in touch in you need any further information, either the team in Bangladesh or I will be more than happy to answer any queries.

Best wishes,

Amanda

### **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)?**

Sightsavers' District Eye Care Program supports sight-restoring surgeries and dispenses glasses for visual impairments across 16 districts in Bangladesh. This is one of Sightsavers' largest eye care programs.

The program covers the divisions of Rangpur, Rajshahi and Khulna, as well as two districts of the Dhaka division that border Khulna. The population in this program's target area is approximately 50 million people.<sup>[1]</sup>

This program has reduced the prevalence of blindness in Bangladesh, a country in which the numbers of blind people are huge. It is one of the world's most densely populated countries, yet it has one of the highest rates of untreated cataracts worldwide. Some sources state there are 750,000 people blind in Bangladesh and 80% of these cases are avoidable.<sup>[2]</sup>

Ranked 136<sup>th</sup>, in terms of disadvantage, on the list of 189 countries in the Global Human Development Index<sup>[3]</sup>, Bangladesh is a country in which life is particularly challenging for people who are blind. Rangpur division<sup>[4]</sup> has the highest poverty rate in the country at 42%, with Khulnam, Dhaka and Rajshahi following as the next poorest divisions (excepting Barisal). In 2018, this program supported and delivered 44,270 sight restoring cataract surgeries in Bangladesh in these divisions.

Extreme poverty and a lack of awareness about health issues mean that many people are unaware treatment is available, those that do access treatment without the support of NGOs are more likely to be men or in the wealthier quintiles of the population. Our program trains community health workers and community volunteers to identify eye health problems in rural communities for people without access to services, (with a particular focus on reaching women), this work enables this program to reach those who would not access treatment otherwise.

The program's school screening work, community awareness raising work, outreach work and health systems strengthening have resulted in over 4 million people receiving eye health screening to identify and treat visual impairments.

To achieve this Sightsavers' works with NGO and government-run hospitals. Our global technical leads identify unmet need and gaps in provision and design programs that meet the needs of local populations. We support the implementation of eye health interventions by training clinical and non-clinical staff to deliver quality services and to increase efficiencies to deliver more interventions. We supervise monitoring and evaluation and train partners on data collection to ensure resources are targeted where they are needed most. Our funding supports the delivery of cataract surgeries by paying for medical supplies and equipment where needed. All of this work enables the poorest and most marginalized to access and receive treatment.

[1] National census data 2011

2 <https://www.dhakatribune.com/bangladesh/2018/10/12/experts-750-000-people-suffer-from-blindness-in-bangladesh>

3 <http://hdr.undp.org/en/2018-update>

4 <https://www.dhakatribune.com/uncategorized/2014/08/27/rangpur-has-the-highest-poverty-rate>

## 2. What is the evidence that the program works?

**Please give links to or attach any citations demonstrating the program is effective, such as high-quality, academic evidence (that may not be specific to the charity) and monitoring and evaluation reports about the charity's activities.**

### The impact of cataract surgery

Cataract is by far the leading cause of blindness with globally an estimated 20 million people blind from cataract<sup>[5]</sup>. It is estimated that effective intervention<sup>[6]</sup> globally would save \$223 billion in lost productivity over 20 years.

In Bangladesh, the majority of blindness (86.2%) among people, over 50 years old, is avoidable, and cataract is the most significant cause of avoidable blindness<sup>[7]</sup>.

Visual impairment itself is a significant driver of poverty. Research of people visually impaired from cataract<sup>[8]</sup> in Bangladesh, by the Department of Epidemiology and Population Health, London School of Hygiene and Tropical Medicine, found that they were consistently poorer than control subjects<sup>[9]</sup>. At baseline, operated cases were poorer compared to controls in terms of household per capita expenditure (PCE) \$16 vs \$24. Post-surgery PCE had increased significantly to \$23. The study shows cataract surgery can contribute to poverty alleviation, particularly among the poorest; almost all participants in this study were living on less than \$1 per day.

Evidence suggests that many of the benefits of cataract surgery can be seen in a relatively short timeframe<sup>[10]</sup>. A study<sup>[11]</sup> of the life and economic outcomes following cataract surgery in Vietnam found improvements in quality of life and household economic circumstances indicative of positive transitions out of poverty. This research demonstrates the potential of a relatively simple, low-cost health intervention to greatly improve household economic circumstances.

Additional benefits are believed by experts to be associated with cataract surgery, including: increased education, gender equity, reduced child mortality, improved health and self-esteem, health costs averted from reduced mental illness and expanded social networks. Reduced deaths and injuries by reducing avoidable blindness by have been estimated by to be worth \$23 billion globally. A study in Vietnam revealed an 83 per cent reduction in the number of falls people said they had after their cataract surgery, compared to before.

The Rapid Assessment of Avoidable Blindness in Bangladesh, 2015, found that there were significant gender differences in the those accessing cataract surgery, with women less likely to receive surgery compared to men<sup>[12]</sup>. The study found gender-sensitive targeted interventions are needed to improve cataract surgical coverage among women.

### Cost effectiveness of cataract surgery

Research by the World Bank and others shows cataract surgery is one of the most cost-effective health interventions, demonstrating that after surgery a person will return to the same quality of life and household expenditure as their peers within a year.<sup>[13]</sup>

Essential Surgery, Disease Control Priorities<sup>[14]</sup>, a key resource in the US National Library of Medicine, states the economic evaluations of cataract surgery find it to be cost-effective, even under resource- constrained circumstances. To summarise, the volume states there is also a growing academic literature on surgery's importance in health system development<sup>[15]</sup>.

### **This program's effectiveness**

In Bangladesh after a maximum of one year, per-capita expenditure of households with people who had undergone cataract surgery had increased to the same level as those without cataract<sup>[16]</sup> and, after a maximum of six years, assets were also on a par.

Over the duration of the Sightsavers' District Eye Care Program, the district-level cataract surgical rate (CSR)<sup>[17]</sup> has increased in the project locations. Pre 2008, the CSR for most districts was 1,000 per million people per year or below. For example, a Rapid Assessment of Avoidable Blindness in Satkhira District in 2006<sup>[18]</sup>, showed the CSR as 547, by 2017 we had increased this to 1,938. In most of the districts this program works in, the CSR has increased substantially to above 2,000: For example in Chuadanga District it has increased to 3,025.

Our existing program has reduced participants' dependency on others to maintain daily life, this has huge benefit for the future prospects of children living in the household. Our experience and independent research shows people become active in economic and social activities and therefore social inclusion is improved. Evidence also shows improved learning for children following a parent's cataract surgery and contributes in reducing school dropout, as many children with a blind parent stay home to look after them.

Sightsavers' community awareness raising work and outreach eye health screening camps to rural and isolated communities effectively captures those least likely to access surgery independently; women and the poorest quintiles of the rural population.

To see our cataract surgery in Bangladesh condensed into a one and a half minute film, please click [here](#).

<sup>5</sup> <https://www.who.int/blindness/causes/priority/en/index1.html>

<sup>6</sup> Research by Frick and Foster estimates the costs of global blindness and low vision at \$42 billion in 2000. Without a decrease in the prevalence of blindness and low vision, it was projected that the total annual costs would rise to \$110 billion by 2020. However, with an effective VISION2020 intervention, this would be reduced to only \$57 billion in 2020. This equates to an overall global saving over 20 years of US\$223 billion. Frick K.D. FA. The magnitude and cost of global blindness: an increasing problem that can be alleviated. American Journal of Ophthalmology.2003; 35(4):471-476.

<sup>7</sup> Rapid Assessment of Avoidable Blindness (RAAB) in Bangladesh, 2015, [http://csf-global.org/wp-content/uploads/2015/10/Rapid-Assessment-of-Avoidable-Blindness-in-Bangladesh\\_Manuscript\\_Muhit-M-et-al\\_31-Mar-2015.pdf](http://csf-global.org/wp-content/uploads/2015/10/Rapid-Assessment-of-Avoidable-Blindness-in-Bangladesh_Manuscript_Muhit-M-et-al_31-Mar-2015.pdf)

<sup>8</sup> Does Cataract Surgery Alleviate Poverty? Evidence from a Multi-Centre Intervention Study Conducted in Kenya, the Philippines and Bangladesh <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2976760/>

<sup>9</sup> whether measured in terms of assets, household expenditure, subjective quality of life or household position in the community.

<sup>10</sup> <https://www.hollows.org/getattachment/au/What-We-Do/Ending-Avoidable-blindness/Research/PwC-Investing-in-Vision.pdf>

<sup>11</sup> A multicenter prospective cohort study of quality of life and economic outcomes after cataract surgery in Vietnam: the VISIONARY study.

Issue BM1, Li Q2, Hackett ML2, Keay L2, Iezzi B3, Tran KD4, Tan Phuc H4, Jan S2; VISIONARY Study Team. <https://www.ncbi.nlm.nih.gov/pubmed/25012931>.

<sup>12</sup> Rapid-Assessment-of-Avoidable-Blindness-in-Bangladesh, 2015, p8, [http://csf-global.org/wp-content/uploads/2015/10/Rapid-Assessment-of-Avoidable-Blindness-in-Bangladesh\\_Manuscript\\_Muhit-M-et-al\\_31-Mar-2015.pdf](http://csf-global.org/wp-content/uploads/2015/10/Rapid-Assessment-of-Avoidable-Blindness-in-Bangladesh_Manuscript_Muhit-M-et-al_31-Mar-2015.pdf)

<sup>13</sup> World Bank <https://openknowledge.worldbank.org/handle/10986/21568>

<sup>14</sup> third edition (DCP3) series. This book is intended to inform program design and resource allocation at the global and country levels by providing a comprehensive review of the effectiveness, cost, and cost-effectiveness of priority health interventions.

<sup>15</sup> for example, Paul Farmer and Jim Kim's paper observes that "surgery may be thought of as the neglected stepchild of global public health" (Farmer and Kim 2008, 533).

<sup>16</sup> Does Cataract Surgery Alleviate Poverty? Evidence from a Multi-Centre Intervention Study Conducted in Kenya, the Philippines and Bangladesh, <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2976760/>

<sup>17</sup> Cataract surgical rate, CSR, an internationally recognised proxy indicator of access to cataract services in a country, measured as the number of cataract operations per million population per year

<sup>18</sup> <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC1857455/>

### 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.**

In 2018<sup>[19]</sup>, the existing program's total expenditure, including all overheads was \$880,366. This expenditure delivered 44,270 cataract surgeries in Bangladesh.

Description	Cost in USD	Value of partners in kind contribution
Project running costs	\$220,313	\$206,680
Organizational overheads at 13.51%	\$29,764	
<b>Total</b>	<b>\$250,077</b>	<b>\$206,680*</b>

\* This figure is the estimated in-kind contribution from two partners that we would anticipate towards delivering 11,890 cataract surgeries, if we had \$250,000 of additional funding to fund these surgeries..

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

An additional \$250,000 will restore, improve or save the sight of 13,890 people with little access to eye health services.

Funding would be used to screen 117,000 people for eye health problems and visual impairments, support 11,890 cataract surgeries and dispense 2,000 free glasses to school children and low income adults.

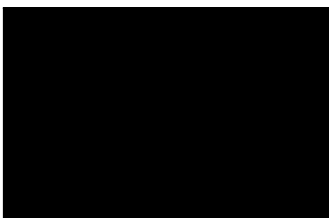
Funding will increase demand for cataract surgery in communities unaware treatment is available and will increase accessibility to eye health services, especially for marginalized groups; including women, people with disabilities, people living in rural areas and lower income groups<sup>[20]</sup>.

The activities we will need to complete to achieve these goals are as follows:

- Raising awareness of eye conditions such as cataract, including how and where such conditions can be treated and then ensuring people have a pathway through to receiving treatment.
- Delivering primary eye care including establishing 'eye corners' at primary health facilities to offer eye examinations, dispense spectacles and refer patients with more complex conditions.
- Training community health workers to identify and treat people in need of eye care services or to refer patients for further assessment / treatment.
- Working with all providers of eye care in Bangladesh to boost the quality of services and develop standard indicators and improved monitoring.

<sup>19</sup> 2018 outputs and expenditure are currently being verified

<sup>20</sup> According to the World Health Organisation, women account for approximately two-thirds (64%) of the world's blind population. Women are more likely than men to have cataract blindness and vision loss, accounting for up to 72% of people living with cataracts yet they are much less likely to access cataract surgery than men without support. Women can also face barriers regarding access to treatment.



GiveWell, a charity evaluator that recommends outstanding charities to donors, rates Sightsavers as one of its eight top charities for deworming. Please find out more by clicking [here](#).

**What we do:** To watch Sightsavers' new film that shows how we change lives around the world, please click [here](#).



There are 36 million blind people in the world, but 75 per cent of blindness could be prevented or cured. We want to eliminate avoidable blindness and support people who are irreversibly blind or disabled to live independently.

This e-mail may contain confidential information and/or copyright material. It is intended for the use of the addressee only. Any unauthorised use may be unlawful. If you have received it in error, please delete it from your system, do not use or disclose the information in any way and notify me immediately. The contents of this message may contain personal views which are not the views of Sightsavers, unless specifically stated.

---

[1] National census data 2011

[2] <https://www.dhakatribune.com/bangladesh/2018/10/12/experts-750-000-people-suffer-from-blindness-in-bangladesh>

[3] <http://hdr.undp.org/en/2018-update>

[4] <https://www.dhakatribune.com/uncategorized/2014/08/27/rangpur-has-the-highest-poverty-rate>

[5] <https://www.who.int/blindness/causes/priority/en/index1.html>

[6] Research by Frick and Foster estimates the costs of global blindness and low vision at \$42 billion in 2000. Without a decrease in the prevalence of blindness and low vision, it was projected that the total annual costs would rise to \$110 billion by 2020. However, with an effective VISION2020 intervention, this would be reduced to only \$57 billion in 2020. This equates to an overall global saving over 20 years of US\$223 billion. Frick K.D. FA. The magnitude and cost of global blindness: an increasing problem that can be alleviated. American Journal of Ophthalmology.2003; 35(4):471-476.

[7] Rapid Assessment of Avoidable Blindness (RAAB) in Bangladesh, 2015, [http://csf-global.org/wp-content/uploads/2015/10/Rapid-Assessment-of-Avoidable-Blindness-in-Bangladesh\\_Manuscript\\_Muhit-M-et-al\\_31-Mar-2015.pdf](http://csf-global.org/wp-content/uploads/2015/10/Rapid-Assessment-of-Avoidable-Blindness-in-Bangladesh_Manuscript_Muhit-M-et-al_31-Mar-2015.pdf)

[8] Does Cataract Surgery Alleviate Poverty? Evidence from a Multi-Centre Intervention Study Conducted in Kenya, the Philippines and Bangladesh <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2976760/>

[9] whether measured in terms of assets, household expenditure, subjective quality of life or household position in the community.

[10] <https://www.hollows.org/getattachment/au/What-We-Do/Ending-Avoidable-blindness/Research/PwC-Investing-in-Vision.pdf>

[11] A multicenter prospective cohort study of quality of life and economic outcomes after cataract surgery in Vietnam: the VISIONARY study.

Essue BM1, Li Q2, Hackett ML2, Keay L2, Iezzi B3, Tran KD4, Tan Phuc H4, Jan S2; VISIONARY Study Team. <https://www.ncbi.nlm.nih.gov/pubmed/25012931>.

[12] Rapid-Assessment-of-Avoidable-Blindness-in-Bangladesh, 2015, p8, [http://csf-global.org/wp-content/uploads/2015/10/Rapid-Assessment-of-Avoidable-Blindness-in-Bangladesh\\_Manuscript\\_Muhit-M-et-al\\_31-Mar-2015.pdf](http://csf-global.org/wp-content/uploads/2015/10/Rapid-Assessment-of-Avoidable-Blindness-in-Bangladesh_Manuscript_Muhit-M-et-al_31-Mar-2015.pdf)

[13] World Bank <https://openknowledge.worldbank.org/handle/10986/21568>

[14] third edition (DCP3) series. This book is intended to inform program design and resource allocation at the global and country levels by providing a comprehensive review of the effectiveness, cost, and cost-effectiveness of priority health interventions.

[15] for example, Paul Farmer and Jim Kim's paper observes that "surgery may be thought of as the neglected stepchild of global public health" (Farmer and Kim 2008, 533).

[16] Does Cataract Surgery Alleviate Poverty? Evidence from a Multi-Centre Intervention Study Conducted in Kenya, the Philippines and Bangladesh, <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2976760/>

[17] Cataract surgical rate, CSR, an internationally recognised proxy indicator of access to cataract services in a country, measured as the number of cataract operations per million population per year

[18] <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC1857455/>

[19] 2018 outputs and expenditure are currently being verified

[20] According to the World Health Organisation, women account for approximately two-thirds (64%) of the world's blind population. Women are more likely than men to have cataract blindness and vision loss, accounting for up to 72% of people living with cataracts yet they are much less likely to access cataract surgery than men without support. Women can also face barriers regarding access to treatment.

---

**3 attachments**

 **Sightsavers' Eye health in Bangladesh, an overview.pdf**

775K

 **Blindness stats for South Asia.pdf**

119K

 **Fact-Sheet-Trusting-Evidence-of-our-Eyes-VISIONARY-study-2014.pdf**

248K