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FINAL REPORT

END TERM EVALUATION OF KUCECP

Project Number: 63405



KPMG Advisory Services Private Limited



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This evaluation was commissioned by Sightsavers, however the views expressed are those of the author alone.

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List of Abbreviations

Acronym	Description
BPL	Below Poverty Line
CBO	Community Based Organization
D2D	Door to Door
DR	Diabetic Retinopathy
DUCECP	Dhaka Urban Comprehensive Eye Care Project
FGD	Focused Group Discussion
GAP	Global Action Plan
GOI	Government of India
HDM	Human Development Measure
HR	Human Resources
IAPB	International Agency for Prevention of Blindness
IEC	Information, Education and Communication
IOL	Intra Ocular Lens
KMC	Kolkata Municipal Corporation
KUCECP	Kolkata Urban Comprehensive Eye Care Programme
LV	Low Vision
M&E	Monitoring and Evaluation
MECC	Mumbai Eye Care Campaign
MFV	Mission for Vision
MIS	Management Information System
NGO	Non-Governmental Organization
NPCB	National Programme for Control of Blindness
ODU	Optical Dispensing Unit
OPD	Out Patient Department
PEC	Primary Eye Care
RBSK	Rashtriya Bal Swasthya Karyakram
RE	Refractive Error
SBCS	State Blindness Control Society
SHIS	Southern Health Improvement Samity
SiB	Seeing is Believing
SPAR	Society for Participatory Action and Reflection
SSA	Sarva Shiksha Abhiyan
VC	Vision Centre
VI	Vision Impairment
WHO	World Health Organization
YoY	Year on Year

Executive Summary

It has become imperative over the years for eye health to be among one of the highly prioritized public health problems along with other important health issues globally. As per the estimates by the World Health Organization (WHO), about 285 million people are visually impaired. It clearly states in its Global Action Plan (2014-19) that if refractive error services and cataract treatment are provided on priority basis, about two-thirds of the visually impaired population will recover good sight. More than 90 percent of visually impaired people live in developing countries, where the health sector is constrained by lack of affordable and accessible infrastructure and availability of comprehensive eye health services.¹

Vision 2020, a joint programme of the WHO and the International Agency for the Prevention of Blindness (IAPB) with an international membership of Non-Governmental Organizations (NGOs), professional associations, eye care institutions and corporations, clearly advocates the need to improve awareness and strengthen the national programmes on eye health.

The ‘Seeing is Believing’ (SiB) initiative is a global intervention aimed at tackling avoidable blindness in areas of high need. SiB is a collaboration between Standard Chartered, IAPB and leading international eye care NGOs delivering projects on the groundⁱⁱ. As a part of this initiative, the Kolkata Urban Comprehensive Eye Care Project (KUCECP) was developed with the aim of reducing avoidable blindness among the indigent people, especially among vulnerable women and children living in the urban slum areas of Kolkata. The total cost of the project was USD 1,181,265. Standard Chartered Bank contributed 80% of this amount, i.e. USD 945,012 and Sightsavers contributed the remaining 20%, USD 236,253.

The objectives of the programme were:

- To increase awareness level of the community about eye care by the end of the project period.
- To increase accessibility of eye care services for 1.49 million inhabitants of Kolkata during the project period, particularly for slum dwellers.
- To develop human resources to provide sustainable eye care services in the project area during the project period and beyond
- To establish and develop strong referral networks for both eye care and Low Vision (LV)/ Visual Impairment (VI) patients through which the community can continue to access services beyond the project period.

The overall purpose of the evaluation is firstly to understand the effectiveness of KUCECP and its approach in reducing avoidable blindness in Kolkata in the project catchment area, specifically as a result of cataract, glaucoma, diabetic retinopathy (DR) and uncorrected refractive error (RE), and secondly to understand how the project was able to incorporate elements peculiar to urban health and specifically address the health challenges in an urban setting.

The Intervention:

The KUCECP was implemented from 2010 – 2015, and was designed after the implementation of a pilot project in five slum areas of Kolkata from 2009 – 2010. The learnings from the pilot were

¹ Reference to the Roman numerals throughout the report can be found in the section of References / Bibliography.

used to design the present project. The project is a civil society initiative. Sightsavers partnered with three local NGOs for implementing this programme, namely

- Mission for Vision (MFV) along with Sankara Nethralaya
- Susrut Eye Foundation and Research Centre (Susrut)
- Southern Health Improvement Samity (SHIS)

Each of the three partners worked with different Community Based Organizations (CBOs) or Government agencies to operate vision centres (VCs) within the identified slums areas of Kolkata. There was also a fourth partner, Society for Participatory Action and Reflection (SPAR), which was dropped in March 2012 due to non-performance issues, and the VCs under SPAR were handed over to MFV and SHIS.

MFV operates six VCs, Susrut manages three and SHIS five. These VCs deployed Optometrists and Community Health Workers (CHWs) to provide screening, refractive error testing and other services at the VCs to beneficiaries from the target community located around the VCs. Patients needing higher medical treatment including cataract and glaucoma surgeries, were referred to the Partner Hospitals. Beneficiaries were also provided spectacles at a nominal amount at the VCs to correct refractive errors. As a part of the programme, school children at different schools were also screened and free spectacles were dispensed to students to correct refractive errors.

The End Term Evaluation:

This evaluation aims to assess the KUCECP programme with respect to its set goals, national priorities and Sightsavers' priorities and also understand the enabling and limiting factors for its success. The study also assesses the sustainability of the programme and provides a way forward for enhancing it and making it scalable and replicable in future.

Both quantitative and qualitative methods were used for analysis of the programme. Four VCs were selected for the study and interviews were conducted with Sightsavers' staff, partner hospitals, CBO heads, CHWs, optometrists, ophthalmologists, school teachers, government officials and beneficiaries. Observation methodology was also used in the VCs to assess the quality of the care. The target category with sample size for the study is given in **Table 2** in Appendix A.

Summary of Findings and Recommendations:

The study findings are categorized based on seven key evaluation themes. Each of the themes has been presented as separate sections in the report. The key findings on each of the themes and their respective ratings are illustrated in **Table 1** below.

Table 1: Ratings for the evaluation criteria

Evaluation Criteria	Our Assessment/ Rating	Findings	Learnings/ Recommendations
Relevance	Highly Satisfactory 	<ul style="list-style-type: none"> The programme design, geography of operations and service mix was largely relevant for the urban poor population which was the target group under the programme. The programme complemented the national eye health programme and was strongly aligned to Sightsavers' strategy. However there was scope to improve the VC location selection to cater to higher percentage of slum population (urban poor) in Kolkata. There was scope to include aspects of advocacy and improve engagement with corporates. 	<ol style="list-style-type: none"> Design a more robust methodology for rationalization and selection of VC locations. The methodology should be such so as to target urban poor and wards with relatively higher concentration of slum populations, whilst evaluating other parameters including presence of CBOs, financial sustainability assessment and others. Continue advocacy and focus on exploring opportunities to partner with key stakeholders like State Blindness Control Society (SBCS) to provide the programme with much needed visibility and further improved its relevance. Collaboration with corporates/ business houses and providing skills development trainings can help in improving employment opportunities and further improve the relevance of the programme from a restrictive health intervention to a more comprehensive social and developmental intervention.
Effectiveness	Highly Satisfactory 	<ul style="list-style-type: none"> At a consolidated level, the KUCECP was able to achieve (and in most cases over achieve) the targets set out, except for the intra-year variations. The key driver to the programmatic success was the partnerships including those with the partner hospitals, CBOs and government agencies. However, the evaluators observed discrepancies in the set targets and measurement methodologies. 	<ol style="list-style-type: none"> Logically define indicators to have internal correlation, based on previous experiences. Define a clear and methodological approach to measure these targets to avoid discrepancies. Conduct regular review meetings, especially during the initial phases of the programme. Develop a sustainable back up contingency plan especially for any deviations/ concerns. Develop and use more outcome oriented indicators for evaluating the lasting impact created by the programme.

Evaluation Criteria	Our Assessment/ Rating	Findings	Learnings/ Recommendations
Efficiency	Satisfactory 	<ul style="list-style-type: none"> Some variations were observed in cost efficiencies of services over the tenure of the programme, which was attributed to deferred payment claims or delay in reporting cases by partners, and rapid devaluation of INR against USD. Efficiencies improved with increase in beneficiaries especially for VCs, school screenings and IEC activities. Training efficiencies could not be measured, since differentials of refreshers and new trainings were not provided. However, faulty measurement methodologies and change in operational processes resulted in ‘apparent improvement in efficiencies’ especially for VC utilization indicators. E.g. towards the end of the programme, all patients visiting the VC were refracted (after screening), which helped achieve the target, but wasn’t relevant since only 25-35% had refractive errors. 	<ol style="list-style-type: none"> Revisiting targets on regular basis and using the indicative efficiency indices would be useful to review efficiency on an ongoing basis. Setting targets for CHWs and incentivizing them for exceeding these targets can be done to yield better results and improve their efficiencies. Use of cheaper and innovative technologies like Netra could further improve operational efficiencies.
Impact	Satisfactory 	<ul style="list-style-type: none"> The programme directly created a potential impact on working capability and employability by distributing more than 11,330 spectacles within the community, and treating 11,406 individuals for cataract, glaucoma, DR and LV problems. The programme created unintended impact by helping CBOs strengthen their credibility within the community and with the government, and attracting population from outside the targeted service area. The programme provided additional revenue sources for partners which enhanced their sustainability. The programme also resulted in few unintentional negative outcomes like dissention from local optical stores 	<ol style="list-style-type: none"> Impact created by the programme is often dependent on its relevance, effectiveness, efficiency, sustainability and scalability. Incorporation of the suggestions for these sections will help in enhancing the overall impact of the programme. The risk register should include local opticians and ophthalmologists among the other stakeholders, in order to elicit their responses and concerns about the programme, and determine any risks arising out of them for devising appropriate strategies to mitigate these risks.

Evaluation Criteria	Our Assessment/ Rating	Findings	Learnings/ Recommendations
		and ophthalmologists and misuse of the VC name 'Alor Disha', which however did not disturb the programme performance.	
Sustainability	Satisfactory 	<ul style="list-style-type: none"> Financial sustainability became the focal point towards the second half of the programme, while programmatic sustainability was the focus during the first half. The evaluators noted that the programme was programmatically (operationally) sustainable, however financial sustainability had significant scope for improvement. Although, business plans for all individual VCs were prepared, which went a long way in ensuring sustainable operations, there still remains scope of improving sustainability of the individual VCs and thus the programme in general. 	<ol style="list-style-type: none"> Incorporate economic sustainability as an important aspect during the design phase. The sustainability indices provided by the evaluators can be used. Increasing the reach of the VCs to screen, refract and treat more beneficiaries can help bring in added revenue. Providing range of other simple and relevant diagnostic services and charging a nominal amount for them from the beneficiaries, and introducing differential pricing options for surgeries can be another source of revenue. Linkages with local pharmacies to source back revenue to the VCs for medicines and other purchases by patients referred from the VCs. Improve procurement capabilities, since despite centralized procurement, raw material expenses for different VCs varied significantly. Collaborate with organizations involved in primary eye care, to refer their patients to the nearest VC and partner hospitals for purchasing spectacles and availing surgeries, respectively. Optimise the human resource for the VCs.
Coherence/ Coordination	Satisfactory 	<ul style="list-style-type: none"> The coordination and coherence of the programme was satisfactory, given that the key stakeholders of KUCECP shared a healthy relationship and worked in synergy. There was also a high degree of coherence between the partners and stakeholders, which would 	<ol style="list-style-type: none"> The CBOs should be involved to play a larger role under the programme. Leveraging opportunities to brand eye care for other health activities organized by the CBOs like blood testing or nutrition awareness camps, should have been exploited. CBOs should have

Evaluation Criteria	Our Assessment/ Rating	Findings	Learnings/ Recommendations
		<p>potentially ensure continuation of the intervention even after the funding is withdrawn.</p> <ul style="list-style-type: none"> The evaluators however noted inconsistencies in internal targets set under the programme. The evaluators also believe that there was scope for further involvement of government officials and other stakeholder groups including CBOs. 	<p>also been leveraged to provide volunteers for this and other health initiatives.</p> <p>20. Targets for the individual activities of the programme should be adequately rationalized and separate targets should be set for the different sub-activities.</p> <p>21. Improve engagements with other stakeholders like government and local businesses.</p>
<p>Scalability/ Replicability</p>	<p>Satisfactory</p> 	<ul style="list-style-type: none"> The KUCECP programme got reconstructed to allow scalability/ replicability after financial sustainability components were incorporated. The original design was simple asset light which could also be replicated easily. The design of the VCs, partnering with local clubs and municipalities, the simple operative and reporting modalities and training modules to engage local CHWs in screening patients, were conceptualized to support scalability. Most of the VCs were able to manage the operational expenses themselves, making this programme highly scalable in any geography. However, the evaluators believe more number and stronger partnerships are required to scale the initiative. Restructuring of current subsidies provided, especially for cataract and glaucoma, may need to be considered in light of financial scalability. Information technology (MIS) capabilities are not adequate and will need to be build up for scalable operations. 	<p>22. Reducing subsidies per person based on affordability can help ensure scalable operations and ascertain that the services are provided to the neediest population.</p> <p>23. Developing an automated/ semi-automated information management system can help in capturing relevant data for programme planning.</p> <p>24. Conducting outreach camps in more distant locations can not only help in testing viability of 'potential new' VCs in that region as a part of scaling up the intervention, but also help improve coverage to unserved areas.</p> <p>25. Use of mobile and communication technology such as bulk messaging, tele-triaging and others, to support reach and awareness should be explored.</p>

1. Introduction and Background

It is estimated that almost 20% of the disabled population suffers from some form of eye disorder. As per WHO's global data on visual impairment (2010), approximately 285 million^{III} people are visually challenged and about 80% of such ailments are avoidable or treatable. Further, an estimated 90% of these 285 million people reside in the developing world, which further symbolizes the need to address such a global health issue.

According to a survey conducted in 2001-02^{IV}, the prevalence of blindness is estimated to be 1.1% in India. A Rapid Survey on Avoidable Blindness conducted under National Programme for Control of Blindness (NPCB) during 2006-07 showed a reduction in the prevalence of blindness from 1.1% (2001-02) to 1% (2006-07). The main causes of blindness as per this survey are: Cataract (62.6%) Refractive Error (19.7%) Corneal Blindness (0.9%), Glaucoma (5.8%), Surgical Complication (1.2%) Posterior Capsular Opacification (0.9%) Posterior Segment Disorder (4.7%), Others (4.2%). The estimated national prevalence of childhood blindness/ LV is 0.8 per thousand. Cataract is the leading cause of avoidable blindness in India and the world, followed by uncorrected refractive error. India, the second most populous country in the world, is home to almost 23.5% of the world's blind. Kolkata, the capital of West Bengal, is the second largest city in India with a population of almost 14.38 million, with about one-third of this population living in the slums². At present, the ratio of slum population to the total urban population in West Bengal is higher than the national average. The growing slums have led to crowding, poor hygiene, high prevalence rate of diseases (including eye disorders), malnutrition and lack of health care facilities in Kolkata. A large section of this community suffer from or are vulnerable to eye health disorders including refractive error, cataract, DR and glaucoma. To address the need for comprehensive eye care services in these underprivileged areas with minimal healthcare facilities, the KUCECP was launched in April 2010.

The KUCECP, started in April 2010, was conceived to address comprehensive eye health care problems for the marginalized communities residing in the Kolkata slums. It targeted 1.49 million people in the city, especially women and children who are more vulnerable to eye health disorders, through a holistic approach that addresses eye health with other issues such as hygiene, sanitation, maternal and child health. The project was conceptualized with a focus on awareness and provision of primary eye care services (PEC) (focused around management of cataract and refractive errors), in lieu of the need for comprehensive preventive and awareness programmes, which may potentially increase the impact of Vision 2020 and Global Action Plan (GAP). The project, which was financially supported by Standard Chartered Bank under its 'Seeing is Believing' (SiB) initiative, aimed at minimizing avoidable blindness from the urban slums of Kolkata, specifically as a result of cataract and uncorrected refractive error.

The objectives of this project were:

1. Increase the awareness level of the community about eye care by the end of the project period

² According to 2001 Census, 32.6% of Kolkata's urban population resides in slums (4.3 million of slum population out of 13.2 million of urban population in Kolkata).

2. Increasing the accessibility of eye care services for 1.49 million inhabitants of the urban slums of Kolkata during the project period
3. Develop human resource to provide sustainable eye care services in the project area during the project period and beyond
4. Establish and develop strong referral networks for both eye care and LV/ VI patients through which the community continue accessing services beyond the project period

The overall purpose of the evaluation is to understand the effectiveness of KUCECP and its approach in reducing avoidable blindness in Kolkata in the project catchment area, specifically as a result of uncorrected refractive error, cataract, glaucoma and DR. The evaluation also attempted to understand how the project was able to incorporate elements peculiar to urban health and specifically address the health challenges in an urban setting.

Sightsavers partnered with four local organizations for implementing this project at the time of inception of the programme:

1. Susrut Eye Hospital & Research Centre and its outreach team (Susrut)
2. Mission for Vision (MFV) – mainly managing the outreach programme and referring patients to its partner hospital Sankara Nethralaya for cataract and other surgeries
3. Southern Health Improvement Samity (SHIS) and associated hospital
4. Society for Participatory Action and Reflection (SPAR)

While MFV, Susrut and SHIS worked extensively in the field of eye care, SPAR was selected for this programme to work in areas of advocacy, awareness, community engagement and participation. SPAR was later dropped as a partner during the middle of the programme because of non-performance. These partners in turn have collaborated with local agencies like CBOs, Youth Centres and Government Dispensaries to set up VCs in their existing facilities because of their understanding of the community in terms of disease profile and demographics and also to reach the remote and underserved population in urban slum clusters of Kolkata. The VCs operated by SPAR were allocated to MFV and SHIS after it was no longer a partner in this programme. MFV manages six VCs, Susrut manages three and SHIS manages five VCs. These VCs deployed CHWs, optometrists and other staff to conduct primary eye screening tests for the community at the VCs. The operational structure of the programme is represented in **Figure 13** in Appendix A.

Patients detected with refractive errors were prescribed spectacles which could be bought from the VCs itself; those detected with simple eye problems were prescribed medicines³, while those detected with cataract, glaucoma, DR or more complex eye disorders were referred to the respective partner hospitals for advanced treatment or surgery. MFV, Sankara Nethralaya and Sightsavers had a tripartite agreement, wherein primary eye care services were undertaken by MFV and patients requiring advanced care and surgeries were referred to Sankara Nethralaya⁴. All these established a strong referral network for LV/ VI patients through which the community could continue accessing services beyond the project period. The partner hospitals provided training, human resource and administrative support to operate the VCs while the CBOs and

³ Only ocular first aid (without steroids) was given at the VCs to those detected with simple eye problems.

⁴ This tripartite agreement was a special case for MFV only and none of the other two partner hospitals had such similar arrangement with Sightsavers.

government agencies, who had a pre-existent community presence a better understanding of the community in terms of demographics and disease profile, provided basic infrastructure and implementation support. Furthermore, screening camps were conducted at various schools under this programme and school children were provided free spectacles to treat refractive errors. This design and approach led to increase in the accessibility of eye care services for the urban slum population of Kolkata and developed human resource to provide sustainable eye care services in the project area. Brief details about the individual VCs are given in **Table 3** in Appendix A.

Regular awareness generation events like street shows, talking doll shows, FGDs, puppet shows, mothers' meetings and other such events were held to increase awareness among the community about eye health and eye care services. All these led to a significant increase in the awareness level of the community about eye care by the end of the project period. Additionally, stakeholder meetings (with Government and eye care NGOs), advocacy sessions for employability, sensitization events for Corporates were organized as a part of the KUCECP.

The various outputs/ activities in line with the programme objectives have been elaborated in **Table 4** in Appendix A.

A brief detail of the major changes/ modifications over the entire tenure of the programme is illustrated in **Figure 1** in Appendix A.

The focus of this evaluation is to capture the key learnings and provide suggestions for developing comprehensive and sustainable programme in future. As a part of this assessment, the evaluators have tried to gauge the performance of KUCECP in terms of its relevance, effectiveness, efficiency, impact, sustainability, coordination/ coherence and scalability/ replicability and have provided key learnings/ observations and recommendations for each of these criteria. For this purpose, the evaluators have made use of both qualitative and quantitative methods for assessment of the programme through interviews conducted with all the stakeholders involved in the programme, viz. Sightsavers' staff, partner hospital coordinators, CBO heads, CHWs, optometrists, ophthalmologists, school teachers, government officials and beneficiaries.

2. Approach and Methodology

2.1. Approach

The approach and methodology was designed to identify, document and analyse the overall success and associated challenges of the KUCECP with specific reference to community impact and programme sustainability, and also how the project was able to incorporate elements peculiar to urban health and address health challenges in an urban setting. The evaluation design leveraged on methodological approaches used for similar SiB projects (Dhaka Urban Comprehensive Eye Care Programme – DUCECP and MECC) to conduct comparative analysis and facilitate comparative learning. The evaluation design was also influenced by the methodological approach and key indicators captured during the baseline (2009) and mid-term evaluation (2012) conducted for the KUCECP.

The core focus of the evaluation was to capture the key learnings and provide suggestions for developing comprehensive and sustainable projects in future. For this purpose, the evaluation design was developed through a joint working approach with Sightsavers for identification of the key indicators/data sets, criteria for selection of VCs and other stakeholder groups and development of tools and methods of administration of these tools, for the different sets of stakeholders. While designing the evaluation study, a specific focus was laid on gender and social inclusion, using a participatory approach to ensure a rights based method of evaluation.

Literature Review: As a developing nation, India has been an experimental ground for conceptualization and implementation of innovative, impactful, low cost eye-care intervention. Different approaches have been tested for developing these models using elements like technology to improve clinical efficiencies and increase coverage, local capacity building to address manpower shortage and attrition and cross subsidization to increase financial sustainability among others. While the success of these approaches varied significantly, their core agenda has been to increase access to care for underserved communities. Learnings from these models and available literature will help in designing a more robust methodological approach, whilst aiding in identifying challenges related to implementation of eye care initiatives in India. Few of these successful models have been briefly documented in **Table 5** in Appendix A.

Sightsavers (Royal Commonwealth Society for the Blind) has also implemented similar eye care projects in India and internationally. Combining learnings from these projects (viz. best practices implemented, types of promotional events to generate awareness among the community people, leveraging partnerships with stakeholders for these programmes, capacity building of the stakeholders involved to further the reach of the initiatives, establishing performance baseline for ease of monitoring and evaluation, and initiatives to enhance financial sustainability of the programme) will be helpful in providing a comparative analysis and also providing a suggestive approach to the overall evaluation and analysis of information. For instance, the evaluators have brought out comparisons between KUCECP and MECC in **Table 6** in Appendix A, in order to comment on what could have been done better to enhance the impact and outcome achieved through KUCECP. Knowledge of these projects will also provide a comprehensive view to document cross learnings and improve structure and construct of projects in future.

2.2. Methodology and Data Collection Plan

For the purpose of the evaluation, mixed data collection methods were used. While secondary data related to the project over its five year duration was compiled, primary data was collected using various tools. The primary data collection tools focused on capturing both qualitative and quantitative data.

2.2.1. Secondary Data Collection

The secondary data collection was structured and designed to collate and compile a specific set of information from different available reports/ documents. Each of these data points helped in analysis of the specific set of information and also improved comparability of the programme over its tenure. The secondary data compilation plan and relevant sources have been cited in **Table 7** in Appendix A.

2.2.2. Primary Data Collection

Both qualitative and quantitative data was collected from the respondents. While close ended questions were used to collect quantitative information, the team led by senior researchers with extensive experience of social research, were deployed to ensure that relevant qualitative information was captured and compiled.

Sampling technique for selection of VCs:

A multi-stage sampling methodology was used for selecting the VCs to conduct the interviews of the stakeholder groups including NGOs, Beneficiaries, Teachers and VC staff for the purpose of the evaluation. Based on the VC selection methodology illustrated in **Table 8** in Appendix A, four VCs were shortlisted for primary interviews, which included **Milon Sangha, Ward 64, Behala and Dhapa**.

2.2.3. Tools for Data Collection

Based on the methodological approach and sampling technique suggested above, **Table 9** in Appendix A presents the set of data collection tools which were designed for the different stakeholders along with their suggestive sample size and rationale for selecting the tool.

The key evaluation areas and the corresponding questions to be addressed, along with the primary and secondary data collection sources and tools to be used, are elaborated in **Table 10** in Appendix A.

2.2.4. Data Analysis

Relevant data were analysed, and the tools were adjusted on the basis of emerging trends from information collected as well as field observations. Primary data was triangulated with project reports, documents and other secondary sources available such as policies, sector strategies and government surveys.

Data analysis addressed the relevant evaluation questions and provided recommendations and learning. Qualitative data were coded, or analysed thematically and presented as narrative.

Quantitative data were presented as graphs, charts and tables as appropriate and accompanying narrative was provided.

2.2.5. Key Challenges/ Limitations of the Study

While the approach and methodology of the study has been designed to adequately address the constraints and ensure a complete and comprehensive evaluation, there were certain limitations as expected.

1. The KUCECP was implemented over a period of five years. During this period, the intervention underwent significant changes in terms of the change in the approach of the programme, partners, and geographical coverage among others. In this evaluation, the evaluators have attempted to provide a time series analysis of various drivers, triggers and factors contributing to the variations. However, analysis of the indicators have been dependent on the extent of standardization/ uniformity in the method of measurement of those indicators.⁵
2. Prior to the implementation of the intervention, a detailed baseline assessment and a mid-term assessment were conducted. While, the methodological design has taken these studies into consideration, the approach, data points and indicators used for these studies may not have been standardized. This have to some extent, though not significantly, impacted the ability of the evaluation to provide a comprehensive and comparable time based assessment.
3. For the assessment, while we expected cooperation from the all the stakeholder groups, however given that the community beneficiaries were highly mobile, a standard random sampling technique could not be used. Probability sampling (with randomization to the extent possible) has hence been considered for the assessment, which has statistically limited the ability to generalize the study findings.
4. The intervention was focused on awareness, identification and treatment (referral) of refractive errors, cataract, glaucoma and DR. Hence, most of the compiled data was restricted to this. However, in order to estimate the wider impact of the intervention, comprehensive data insights into treatment modalities, out patient referrals, patient follow-up management and other outcome indicators would have been useful. Due to limitations in the nature and comprehensiveness of the data compiled, the assessment's ability to provide insights on this issue was dependent on the availability and willingness of the partner hospitals to share this information.
5. While the outputs for Y5H2 (October 2014 to March 2015) were made available, actual financial spend was not available. In order to complete the evaluation, the evaluators have used forecasted expense estimates for Y5H2 to provide a comparison across the different time periods.

⁵ For example, for the initial two years, the programme documented information related to the total number of staff trained, which was in the subsequent years split into different categories, like number of government staff trained, number of non-governmental staff trained, and number of health ambassadors trained. This limited the evaluators' ability to comprehensively assess the said indicators over the time series.

3. Evaluation Results

This section attempts to provide detailed insights into the overall performance of the programme based on the OECD-DAC evaluation criteria along with additional Sightsavers' criteria. The various findings garnered through secondary and primary assessment along with the recommendations have been included in this section.

3.1. Relevance

Evaluation of the relevance of the KUCECP programme was aimed at understanding the relevance of the design, coverage, service mix and operating structure of the programme with the needs, demands and requirements of the target community with particular emphasis on the largely marginalized communities residing in the Kolkata slums, regional and national eye health priorities, and with the donor and partner organizations' strategies. This section attempts to verify if the intervention was designed on sound logic and rationale. The critical questions under this section have been comprehensively addressed below.

A) Was there a need to provide eye care services in the target geographies and communities? Was the programme's focus on provision of refractive error, cataract, glaucoma and DR services relevant, in context of regional and local priorities?

Kolkata, the capital of West Bengal, is the second largest city in India with a population of almost 14.38 million⁶ with about one-third of the city's population living in the slums. The city's economic rejuvenation in the 90s resulted in a constant influx of migrants, which created massive slums in the city. At present the ratio of the slum population to the total urban population in West Bengal is higher than the national level. The growing slums have created crowding, poor hygiene, high prevalence rate of diseases (including eye disorders), malnutrition and lack of health care facilities. In the baseline study conducted⁶, it was observed that in almost 47% of the studied households (n=614), at least one member used spectacles, while in another 9% of the studied households, at least one member of the household had undergone a cataract surgery. Further, among all households interviewed 70% complained of inability to see including near sighted and farsightedness in the last six months.

The strong demand for eye care services was coupled with poor public/ government supply. The evaluators, during their discussions with the government officials for the end-term evaluation, realized that eye care was low on the priority agenda of the state. This was revalidated by the low Cataract Surgery Rate (CSR) in the state & lower free spectacle distributions (under school screening programmes). **Table 11** in Appendix A provides a rationale by comparison of performance of two key matrices in Maharashtra and West Bengal, under the NPCB, compared to focus of eye care in Maharashtra, as evaluated under the MECC.

⁶ Report on Urban Eye Care – Knowledge and Practice among Slum Dwellers In Kolkata, prepared for Sightsavers, by GfK Mode Pvt. Ltd., 2009

These modalities of relatively strong demand for eye care services, coupled with low focus of the government on eye care, reiterates the need for provision of comprehensive eye care services in these underprivileged population.

“... I work as a Rickshaw-puller and I do not get much time to visit Hospitals. Also Hospitals and Private Clinics are very costly and I cannot afford to pay that much. However, since the VC is close by, I visit the VC as and when I get time and the services are good and affordable...” – Patient, Male / 40 years

The programme also focused on school screenings and distribution of free spectacles to children, which was critical, especially in light of low performance of the government intervention on this front.

With regard to the services provided under the programme, the KUCECP provided primary eye care services including refractive services and advanced clinical services including cataract surgeries, glaucoma surgeries, DR and LV services. KUCECP focused on a wider range of services to improve relevance given the consistent demand and the low supply (due to low priority of the government)⁷.

“... I lost my husband six months back. My relatives took me here two months back when I had cataract. The community health workers were really kind and they treated me very well. I got my eyes operated at Susrut and now I am really happy that I can see properly...” – Community Beneficiary, Female / 65 years

With regard to the geographic arrangement of the VCs, the KUCECP operated 14 VCs in Kolkata with 3 partner hospitals as detailed in **Table 12** in Appendix A. While it was suggested that the VCs were located in wards with high (more than 60%) or relatively high slum concentration (45-60%) and minimum health facilities, a location scan indicated otherwise. Of the 14 VCs, about 3 VCs were located in wards with slum population ranging from 30-45% while other 2 were located in wards with slum population of 15-30% and 2 VCs were located in wards with less than 15% slum population density. While the selection of the location of VC was also based on other parameters like availability of CBO partnerships, financial viability and accessibility, the evaluators strongly believe there was scope to improve location selection, especially since Kolkata has more than 35 wards with relatively high slum population (i.e. more than 45%).

“...I stay in South 24 Parganas, some 20 Kms away from this VC. One of my relatives who stays here have spoken highly of the services by the VC. So I have come here for the diagnosis of my eyes...” – Patient, Female / 60 years

Another significant contribution of the KUCECP was creation of awareness about importance of eye health and eye care services in the community. The evaluators, as a part of their discussion with the beneficiaries (n=80), appreciated the fact that almost all of them were aware of the major eye health services provided at the VCs and were also aware of the common symptoms of eye problems. All the beneficiaries also stressed the importance of getting an eye examination done once a year.

⁷ when compared to the MECC programme, which provided only refractive error services.

“...I and my family members always visit the VC for getting an eye check-up and even for minor eye infections, which previously we would have neglected. The VC and its staff have enhanced the awareness about eye health in the community to a large extent. Also, you cannot get better services at such a subsidized rate anywhere else...” – Patient, Female / 42 years

B) Did the intervention focus on relevant age groups/ target communities with higher prevalence of eye care disorders and lower affordability levels?

The KUCECP was designed to provide eye care services to all age groups living in the slums of Kolkata. As per the baseline study, the average monthly income of more than 63.38% of the slum population ranged from USD 33 to USD 75⁸. Interviews with community members availing these services, over the course of the end-term evaluation, showed that 87% of the respondents were local/migrant workers or daily wages workers or non-working adults. The evaluators during their discussion with the CBO representatives found that majority of the population availing the services provided under the KUCECP, were local workers or daily wages workers, for whom private facilities are beyond financial means and visit to a government hospital would lead to loss of wages.

Studies conducted by Dandona et al.^{VI} and Krishnaiah et al^{VII} suggest that prevalence of refractive error among adults is significantly high. During discussions with the CHWs, the evaluators observed that almost 50-60% of the patients come with refractive error problems at the VCs. The CHWs also stated a prevalence rate of 15%, 50% and 70% for eye problems among children (0-18 years), adults (19-60 years) and senior citizens (above 60 years) in the community, respectively. According to a study by G Venkata et al^{VIII}, cataract is responsible for 62.4% of bilateral blindness in India and its prevalence in the general population was 5.3% in 2004. The study also mentioned that by 2020, the prevalence of cataract blindness in the population aged 70+ will be four times higher than the prevalence of cataract blindness in other age groups, while the population in this age bracket increases by 108% over the period 2001-2020. The prevalence of childhood cataract on the other hand has been reported as one to 15 cases in 10,000 children in the developing countries^{IX}. During the discussions with CBO staff, it was found that around 10% of the patients who come to the VCs are diagnosed with cataract and need surgeries and over 90% of them belong to the age group of 50 years and above. However, the instances of child cataract is very less (approximately 2-5% of all cataract surgeries) and such cases were referred to partner hospitals as these couldn't be diagnosed at the VCs.

Further, according to studies, the prevalence rate of glaucoma in India is 1.2%^X. During discussions with CBO staff, it was revealed that 5-7% of the patients who come to the VCs are diagnosed with glaucoma and mostly belong to the age group of 50 years and above.

Analysis of the community user's profile showed that the KUCECP programme services were largely used by adults. 70% of the community members interviewed were adults (18-60 years) and an additional 26% were senior citizens (above 60 years), as represented in **Figure 12** in

⁸ Using a conversion rate of INR 60 for USD 1. This exchange rate has been used throughout the report.

Appendix A. Only 4% of the interviewed beneficiaries were children (less than 18 years). The programme reaches out to school children through their school screening initiative. As a part of the end-term evaluation, the evaluators also observed that the prevalence rate of uncorrected refractive error among school children is between 10% and 15% in the schools screened over the tenure of the programme. This secondary and primary data analysis revalidates the rationale of the focus of the KUCECP programme on relevant age groups/ target communities with higher prevalence of eye care disorders and lower affordability levels.

C) Was the programme design appropriate for the community's need of eye care services at affordable rates?

The programme was designed to provide primary eye care services along with using referral networks with partner hospitals to provide advanced clinical services like cataract surgeries, glaucoma surgeries, DR and LV services, to the masses at affordable prices. KUCECP was conceived to address comprehensive eye health care problems for the marginalized communities residing in the Kolkata slums. As much as one third of the population of Kolkata resides in slums with minimum facilities for comprehensive healthcare services. A large section of the community suffer from or are vulnerable to eye health disorders like LV, cataract, DR and glaucoma. Hence, KUCECP was planned to target 1.49 million people in the metro city, especially women and children who are more vulnerable to eye health disorders, through a comprehensive approach addressing eye health including other issues such as hygiene, sanitation, maternal and child health.

The evaluators noted, during their interactions with CBOs and VC staff, that purchasing spectacles at market rates could cost anywhere between INR 500 (USD 8.33) to INR 1000 (USD 16.67) and the market rates for availing eye care services is between INR 100 (USD 1.67) and INR 300 (USD 5). The evaluators, during their discussion with beneficiaries, observed that 87% of them are daily wages workers or have no income, who could not afford to pay for eye health at the existing market rates. Visiting government hospitals, where services would be available at a rate lower than the market rates, would take time, because of higher patient turnouts there, and hence lead to loss of wages. The services provided at the VCs were at a much lower cost ranging between INR 5 (USD 0.08) and INR 30 (USD 0.5), and spectacles were sold in the range of INR 150 (USD 2.5) to INR 350 (USD 5.83). The evaluators during their interactions with community users were able to appreciate that the community considered the pricing appropriate. 75% of the beneficiaries stated that the service charges at the VCs and at the partner hospitals were appropriate and affordable. Also, located within the community, the VCs were easily accessible and the CHWs and other health workers were approachable.

As a part of the programme, screening of schools was undertaken to extend the reach of this programme to school children. While the initial screening was done at the schools, children with refractive error and other eye problems were referred to the VCs. Free spectacles were distributed to school children with RE. During discussion with school teachers, the evaluators observed that most of the school children come from families of daily wage workers with very low affordability for eye health services and hence KUCECP was extremely relevant in providing comprehensive eye care services to this section of the community.

With regard to cataract surgeries, these were provided free of cost to the beneficiaries and the costs were reimbursed to the partner hospitals by Sightsavers. Depending upon patient's affordability, the patients could opt for more advanced phaco surgeries for cataract (in only one partner hospital) by paying INR 6,000. However, the reimbursements planned under the programme for glaucoma surgeries was very low at INR 400, while partner hospitals claimed that the cost for the surgery could be as high as INR 8,000. The balance INR 7,600 had to be paid by the patients, which was relatively high compared to the affordability of the target community, which was reiterated in the lower performance of this indicator, especially during the initial years of the programme. However, in the later stage of the project, the partner hospitals (Susrut and MFV) provided treatment facilities at INR 400 only. Thus, the glaucoma surgeries were highly subsidized by the partner hospitals during the later years. This is corroborated by the increased number of glaucoma surgeries in the fourth and the fifth years of the programme.

D) Was the KUCECP programme aligned to the national eye care goals?

The KUCECP was conceptualized with focus on provision of primary eye care services (focused around management of cataract and refractive errors), in lieu of the need for comprehensive preventive and awareness programmes, which may potentially increase the impact of Vision 2020 and GAP.

Objectives of the National Programme for Control of Blindness (11th Five Year Plan):

- To reduce the backlog of blindness by identifying and providing appropriate eye care services
- To develop comprehensive eye care facilities in every district
- To expand coverage of eye care services to the underserved areas
- To provide high quality eye care services to the affected population
- To enhance community awareness on eye care
- To develop capacity of institutional and health personnel

- a. The primary goal of the NPCB was to reduce the backlog of blindness by identifying and providing appropriate eye care services. The KUCECP by way of its eye check-up camps and specific campaigning, provision of screening and eye check-up services at the VCs, provision of free eye surgeries, screening and distribution of free spectacles among school children, contributed in improving detection and also appropriately provided eye care services depending upon the need of the beneficiaries. The evaluators believe that all this collectively would have definitely helped prevent blindness and reduce its backlog.
- b. The NPCB clearly identified the inadequacy of infrastructure and invested on development of comprehensive eye care facilities and expanded coverage to underserved geographies. The KUCECP conceptualized the VCs to provide primary eye care services, which were adequately equipped with basic equipment. Further, as a part of the programme, partners agencies arranged for pickup/drop facilities for the surgery patients, which further improved access to quality infrastructure.

- c. Provision of quality services and developing capabilities at institutional and human resource levels was another critical objective identified by the NPCB to strengthen eye care services. KUCECP invested heavily on training not only local CHWs, but also project staff, school teachers, government health workers and other non-government health workers to build capabilities for detection of basic eye problem and empower them to take necessary steps. The KUCECPs focus on enrolling volunteers to disseminate information related to eye care services further contributed to strengthening human resource capabilities.
- d. Finally, as a measure to increase utilization of services by the community, the NPCB identified enhancing awareness to eye care services as a critical objective. The KUCECP laid an emphasis on community awareness through various means including distribution of IEC materials, organizing outreach camps, conducting campaigns, radio and celebrity engagements, and developing and distributing visibility material.

E) Was the KUCECP programme aligned to Vision 2020?

Objectives of Vision 2020:

- Increase awareness, within key audiences, of the causes of avoidable blindness and the solutions to the problem;
- Advocate for and secure the necessary resources to implement the WHO Global Action Plan 2014-19; and
- Facilitate the planning, development and implementation of national VISION 2020/ Eye Health programmes in all countries.

Organizing awareness generation camps was a significant milestone of the KUCECP. With regard to awareness generation camps, expect for the first year, when 200 camps were organized, for the remaining part of the programme almost 300 awareness camps were organized each year, with minimal variations. Apart from this, awareness generation also comprised of a wide range of activities including development of IEC and visibility material, project launch and prelaunch activities, awareness events, stakeholder meetings, and radio and celebrity engagements. All these significantly contributed to increase in awareness about eye care services among the urban slum population of the city and thus ensured alignment with the objectives of Vision 2020. The evaluators, over the course of their discussions with beneficiaries, observed that close to 60% of them have appreciated the fact that the programme has increased their awareness about the importance of eye care among other health problems.

The programme partnered with proficient organizations for implementation, established VCs in existing facilities of the CBOs and municipalities, provided relevant trainings to develop human resource, and encouraged government and corporates for advocacy (though with limited success). All these aspects helped the programme to be closely aligned to the second goal of Vision 2020.

Though the programme was not planned and implemented on a national level, as mentioned in the third objective of Vision 2020, it was fairly successful on a regional level.

Relevance	Assessment: Highly Satisfactory	
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The KUCECP was very relevant in reference to the target population and the mix of services provided which included refractive error, cataract, and glaucoma and DR services. The evaluators also observed a strong alignment of the programme with national eye health priorities and Vision 2020 objectives. The partnerships with municipalities and service providers/ partner hospitals not only improve the cost effectiveness, but also build networks for access to eye care services, even after the programme is withdrawn. Investments of the programme into building local capabilities by way of human resource investments and establishment of VCs was very much required.

However, the evaluators observed, that the relevance of the programme could have been improved if the location for the establishment of the VCs was adequately rationalized and prioritized to target to wards with high concentration of slum populations. Further, there was more scope for engagement and advocacy with the SBCS, corporate and local business houses. This could have not only increased the relevance of eye care in the public context, but also created opportunities for comprehensive social and economic development of the communities and also enhanced the sustainability of the programme in the long run.

Sightsavers played a crucial role in identification of the relevant target population and comprehensive service mix, and also designed the programme in alignment with NPCB and Vision 2020 objectives. Sightsavers along with partner hospitals was responsible for assessing and determining locations for establishment of VCs, and also building collaborations with government and corporates.

3.2. Effectiveness

The effectiveness of the KUCECP programme was evaluated based on the extent of achievement of the intended objectives for the programme. The evaluators measured effectiveness by reviewing the half yearly reports over the duration of the project and their alignment to the targets set in the project logframe. This information was also triangulated with information received by discussion with the various stakeholders. The evaluators have also attempted to describe underlying factors which might have acted as a trigger or barrier to the success of the programme.

A) Has the programme been able to achieve the outputs and activities that were set during the programme period?

For the purpose of the evaluation, the evaluator has identified and selected the below performance indicators from the programme log frame, based on their critical relevance to the programme performance, availability of information and the ability to subsequently measure their efficiency. A detailed analysis of each of the performance indicators is dealt with separately in the below sections, and also represented separately from **Figure 4** till **Figure 9** in Appendix A.

- a. Number of people reached through IEC activities:** While the programme was able to reach more than 1.46 million people through IEC activities, almost 55% of people were reached during the fourth and the fifth year of the programme. The output reported in the first few years is not people reached, but materials produced and distributed. Much more than the number of people reported were actually reached through materials and events but the programme did not have robust ways of measuring the same. In the fourth and the fifth years, since the programme was lagging behind in the target of printing of IEC materials, more materials were printed and hence more people were reached as a result. The same also resulted in increased number of refractions, number of glaucoma surgeries, number of people receiving DR/ LV services and number of glasses sold during this time. The IEC targets during the initial three years were not met. During discussions with the Sightsavers Project Manager, it was noted that that the reported numbers were of number of IEC materials distributed and not of number of people reached, since there was no robust methodology to compute the number of people reached. If the computation methods used in the MECC programme (which was strongly questioned) was to be used in this scenario, the actual number of people reached would have been four times those recorded.
- b. Number of awareness generation events organized:** With regard to awareness generation events, except for the first year when 200 such events were organized, for the remaining part of the programme, almost 300 awareness events were organized each year with minimal variations. This largely met the targets set for the programme.
- c. Number of people screened through outreach and school screening:** The programme was able to exceed its targets with regard to number of people screened through outreach camps and through the school screening initiative. However almost 60% of the numbers in both cases were achieved during the last two years. The evaluators noted that the higher number of student screenings were attributed to the programme focusing on secondary

schools (in contrast to primary schools during the initial phase of the programme), primarily because of the higher prevalence of RE among the students going to secondary schools compared to the students going to the primary schools. With regard to targets reached through outreach, the evaluators believe that achievements were attributed to more numbers of camps being organized. The number of camps organized in the third year was 203 which increased to 274 in the fourth year⁹.

- d. Number of PEC clinics held and people availing services of the PEC clinics:** During the programme, the target for the number of PEC clinics held was not met and fell short by just 3%, however the target for patients availing services at the PEC clinics was overachieved by 69% (i.e. 62,674 individuals used the services against the target set for 37,000). While the number of PEC clinics held was consistent every year, ranging between 146 and 176 (except the first year), the number of people availing PEC services significantly differed each year. Almost 58% of total PEC services were availed during the 2nd and the 3rd year of the programme. On exploring deeper, the evaluators noted that during the initial part of the programme, there more people used the PEC clinics, since these were manned by Doctors and not restrictive to eye care, but included other specialities like gynaecology and paediatrics. However, eventually since these camps started getting organized regularly, there was a subsequent drop in footfalls, though the clinics continued to achieve higher than set targets. The evaluators believe that the high number of people availing services at the PEC clinics is primarily because of presence of doctors and the provision of comprehensive health services by general physician, paediatrician and gynaecologists.
- e. Number of advanced clinic services provided- Cataract Surgeries, Glaucoma Surgeries, DR/ LV services:** The programme was able to achieve higher numbers of child and adult cataract surgeries in comparison to the set targets. Except for third year, when the targets for adult cataract surgeries were not met, due to renovations and non-functional OTs in one of the partner hospitals, for the remainder of the programme, the achievements consistently exceeded the targets. With regard to targets for child cataract surgery, glaucoma and provision of DR/ LV services, the evaluators refrained from commenting on year on year variation since the numerical values of the set targets are very small and prone to variation¹⁰. However, on a consolidated level, the achievements for this set of services were also consistently higher than the targets.
- f. Number of spectacles distributed for free and sold:** The programme was able to overachieve both the set targets for the number of spectacles distributed for free and the number of spectacles sold, at a consolidated level. The distribution of free spectacles, during the first two years of the programme was much lower than the set targets. The evaluators noted despite targeting adequate number of schools during the first two years, the targets were underachieved primarily since primary schools were targeted. This was primarily because the prevalence of refractive errors among primary school children is lower than that in secondary school children. Also detecting refractive errors in primary school children is slightly more difficult. In the subsequent years, the targets of spectacles distributed for free

⁹ No information regarding the number of outreach camps held in the first, second and the fifth year is maintained which restricts the evaluation

¹⁰ The highest target in a year set for child cataract surgery is 40, and for glaucoma is 200

were overachieved due to change in focus to secondary and higher secondary schools and a proportional rise in the number of children screened. With regard to spectacles sold, no spectacles were sold during the initial two years. The evaluators observed that the reason for this was the existing strong competition in the local market and also the economic sustainability of the programme was not a priority during the initial two years. In 2012, economic sustainability of the VCs was given serious thought and in 2013, business plan for each VC was also set and sale of spectacles was started in more aggressive manner to enhance the economic sustainability of the programme. Subsequently, with establishment of optical dispensing units (ODUs), the VCs were able to provide spectacles at competitive prices, which enhanced sales and promoted overachievement of the targets. More emphasis on the sale of spectacles resulted in overachievement in the latter half of the programme. The evaluators also observed that preparation of business plans for each VC and patient counselling and convincing to purchase spectacles by the VC staff also bolstered the spectacle sale.

- g. Number of human resources trained at different levels:** The programme had targeted to train different level of human resources including CHWs, government staff, other non-government staff and school teachers. The number of trainings provided were much higher than the set targets. The number of CHWs, government staff and school teachers trained were higher than set targets for all years, except the first year. The evaluators observed that this was attributed to faulty measurement of indicators. E.g. the indicator on training (number of people trained) was wrongly measured to include number of trainings provided which included refresher trainings for the same CHWs. This did not actually increase the number of new people trained under the programme and resulted in overachievement of targets. With regard to government health workers, more than 69% of the resources were trained in the last two years of the programme. The evaluators noted that during the second and the third year, an outbreak of malaria had significantly restricted the availability of government health workers, while in the last two years a large number of ICDS and polio workers were trained on eye health. Similarly, almost 50% of school teachers were trained in the last two years of the programme. The evaluators observed this to be attributed to the change in strategy from training teachers from across more schools to training more teachers from within the same schools¹¹.

Financial Effectiveness

With regard to the financial effectiveness, the budgetary allocations and expense spending were reviewed. The programme cost was broadly categorized into seven headings as enlisted in **Table 15** in Appendix A.

While most of the budgetary spend showed minimal variance through the project duration, two of the allocation headings showed significant variances:

¹¹ This change in strategy also resulted in the programme targeting on fewer schools. During the first three years the programme reached on an average more than 48 schools each year, however towards the last two years the average number of schools reached each year dropped to 25. Despite this school screening targets were achieved due to focus on larger secondary schools.

- a. **Awareness Generation Events:** The Awareness Generation Events expenses showed 8% variance with respect to the revised budget, with a higher spend of USD 7,336, over the project duration. The key activities which lead to the variation included campaigns, volunteering meetings, visibility material development and stakeholder meetings. Additionally, higher spend on development of IEC materials also contributed to the variation. During assessment, evaluators noted that the higher spend was attributed to increase in number of campaigns, fairs and other related activities, in comparison to those budgeted for. Additionally, activities were conducted on special request of the government and could not have been avoided, which resulted in escalation in all the other related activity heads.
- b. **Monitoring and Evaluation Expenses:** The Monitoring and Evaluation expenses showed a variance of 47%, most of which was attributed to the funding requirement for the end term evaluation assessment.

B) What have been the major factors affecting achievement and non-achievement of the programme objectives?

There are various factors which have directly or indirectly affected the achievement of the programme goals. **The key factors which have played an enabling role are as follows:**

- a. **Leveraging available infrastructure to establish the VCs:** A core component of the programme was that it focused on leveraging existing infrastructure (physical and social), within the community, belonging to the government department or local clubs. This not only reduced operating costs and bolstered sustainability, but also improved access by being closer to the community. The social infrastructure, in terms of the brand reputation of the clubs or the visibility of municipal posts, further ensured footfalls to the VCs and provided the programme with a much needed thrust and improved acceptability.
- b. **Comprehensive eye care:** The programme was conceptualized to provide primary eye care services, refractive errors and advanced clinical services like cataract, glaucoma and DR/ LV services. The evaluators observed that this programme was more comprehensive in nature¹². This comprehensiveness of the programme allowed it to benefit a wider spectrum of community needs and hence improve the perspective visibility of the intervention, not only among the partnering stakeholders but also among the beneficiaries.
- c. **Partner hospitals:** All the three partner hospitals, Susrut, Sankara Nethralaya (MFV) and SHIS, have made significant contributions to the entire programme. Retaining the staff by providing regular trainings, exposure visits, and social recognition for high performers, were organized by the partner hospitals. Often partner hospitals borne additional cost of surgeries¹³ and provided special services at no extra cost. Susrut also plugged back earnings from paying patients referred from the VC to the VC funds, to improve their sustainability. Clearly, the high level of commitment among the partner hospitals and the

¹² As compared to MECC which was just restricted to refractive errors.

¹³ In many instances, the cost that is incurred over and above the contribution that is made by Sightsavers towards surgeries (INR 800 for cataract, INR 400 for glaucoma) was borne by the partner hospitals. Two of the partner hospitals, SHIS and Mission for Vision, also arranged for pickup/ drop facilities for the surgery patients.

shared values contributed to the programmes achievements. Also a higher level of coordination and collaboration was observed among the three partners, with regular sharing of ideas and knowledge. The evaluators also discovered that joint bank accounts were opened by the CBOs and partner hospitals, to deposit the profits earned and improve accountability and participation of the CBOs.

- d. Awareness and advocacy activities:** KUCECP was conceptualized with an all-round focus and increasing awareness was a critical component of the programme. Door to door campaigns, IEC materials, awareness campaigns, street shows, outreach camps, and radio and celebrity engagements were tools used for generating awareness and mobilizing the community to actively seek eye care services. The evaluators observed that almost 38% of the beneficiaries felt that the programme has increased awareness about eye health in the community. Almost all the beneficiaries also feel that it is important to get an eye examination done at least once in two years.

“... People today are more conscious about eye care and come to the vision centres even for minor infections or simply for an inspection ...” – CHW

- e. School screenings and teacher trainings:** To ensure comprehensiveness, school screenings were also conceptualized under the programme. In order to support school screenings and improve early detection of refractive error, the programme also trained a high volume of school teachers (468) on eye health. This clearly translated in over 28,000 free spectacles being distributed to children over the programme duration and early management of refractive errors. Further, for any other eye care ailments, students were referred to the VCs or partner hospitals to seek prompt eye care services. Discussions with the school Principal/ representatives revealed that the success of school screening clearly enhanced awareness about the services, since most of the children screened acted as ambassadors of eye health within their respective communities. It is also worth mentioning here that the programme was well-supported by the Sarva Shiksha Abhiyan (SSA)¹⁴ in school screenings, training school teachers and providing other services. Additionally, a number of child cataract surgeries, referred from the VCs, have been undertaken with support from SSA. SSA has been supporting the programme in identifying children right from the project’s inception and also supplies LV aids and appliances to children in government schools who need them, free of charge on behalf of Kolkata Municipal Corporation. The collaboration of KUCECP with SSA has been a major milestone in providing better eye care services to school children in the city.

“... Student participation has always been high on the day of the screening. Even in many cases students come and ask when the next screening will happen ...” – Head Master of a school

- f. Partnership with the government:** The KUCECP was able to initiate dialogue and partnership with the government, with three VCs being operated in government premises/ health posts. While the operating model did not change significantly, successful

¹⁴ SSA is an Indian Government project for “Education for all”.

partnership with the government created a sense of success/achievement among the project staff. This partnership was further strengthened through training of government health workers on eye health. KUCECP was able to exploit this partnership opportunity and create opportunities to enhance advocacy within the government departments.

“...We are extremely happy with the way KMC has extended help to us. We are not only getting more patients and recognition through them, but they are also involved in almost all the major operational issues since the inception...” – Optometrist working at one of the VCs within KMC premises

- g. Establishment of ODUs:** The programme also established ODUs and trained CHWs in assembling and dispensing spectacles. This actually helped the programme to bring down the cost of spectacles and improve their competitiveness in the local market. The 10 ODUs catered to the demand of the 12 VCs (no spectacles sale was allowed in two VCs run in government premises).
- h. Trained CHWs:** The role of CHWs as the first point of contact with the community, is critical and valuable in the success of the programme. Their role in the KUCECP has also been one of installing change and confidence among the community. The evaluators observed a clear sense of appreciation and respect for the CHWs and what they stood for, by the community. CHWs played a vital role not only in mobilizing the community but also in ensuring continuity and completeness of care, by regular follow ups and making sure that the patients are guided to receive proper treatment and after-care. Further, the low attrition rate among CHWs (only 4¹⁵ out of 28 CHWs had left the programme), further helped build a strong rapport with the community and improved ownership. The CHW salaries increased to more than double, over the programme tenure¹⁶. The health workers were also given around 10% increment in salaries each year, over the tenure of the programme. As a result, all these positively affected the programme viability and replication potential of the programme. However, few of the CHWs expressed concerns over how this can be sustained over a long term, once the project funding ceases to continue.

“...We are not sure how the payment of salaries of CHWs is going to happen, once project funding is stopped. Sightsavers should look to turn this into a long term programme, so that we do not have to suffer” – CHW

“...The community health workers have always followed up with me on a regular basis before and after my cataract surgery at the Susrut...” – Patient, Female / 47 years

The KUCECP also faced various challenges during its implementation which can be categorized into the following:

¹⁵ Based on discussions with Sightsavers Project Manager.

¹⁶ Based on the actual spend data sheets, the evaluators observed that the average CHW salary payouts were ~INR 3000, which rose to ~INR 6241 towards the final year of the programme.

- a. Limited focus on awareness of services provided at the VCs:** During the assessment, evaluators observed that 50% of the community respondents interviewed, were not aware about the set of services provided at the VCs, which often resulted in them going elsewhere to seek services. It was also noted that in most cases, awareness about the services was through word of mouth (62% community respondents) and there were instances where the residents of one VC had gone to another to buy spectacles. The evaluators hence believed that instead of only focusing on using IEC material for general awareness about eye health, the IEC material should also be used to provide information about the services provided at the VCs¹⁷.
- b. No standard intra- vision centre pricing structure impacting sustainability across different VCs:** The evaluators observed there were variations across the different VCs in terms of pricing for services rendered and spectacles sold. The fees charged for refraction ranged from INR 5 (Milon Sangha) to INR 20 (Behala) and INR 30 (Dhapa). During discussions the evaluators noted that the price patterns were influenced largely by local issues like affordability, influence from local CBOs and political influence¹⁸ and not based out of consideration of sustainability. A basic baseline for pricing should have been in place, from the perspective of ensuring economic sustainability and improving performance monitoring. Some of the VCs charging INR 10 and less as the service fees makes these VCs highly unsustainable economically. Also, people might tend to go to VCs with lower service fees ahead of other VCs, making the service utilization in the VCs with higher service fees much lesser than others.
- c. Gaps in conceptualization of sustainability of the programme:** The programme attempted to improve sustainability through sale of spectacles at the VCs, at competitive prices. While this initiative made provision of basic eye care services and refractive services sustainable, the long term sustainability of other components of the programme, namely cataract surgeries, glaucoma surgeries and DR/ LV services were not well conceptualized. Though one of the partner hospitals already attempted to support long term sustainability through paid cataract surgeries, other two partners are seriously concerned about the comprehensive sustainability of the programme.

“... Although we do have certain sustainability measures in place, it would be difficult to carry on this initiative in a sustainable manner in the long run if the programme is stopped ...” – Programme Coordinator of one of the partner hospitals

- d. Limited usage of available knowledge and best practices:** The evaluators noted that the partner hospitals shared their best practices with each other through knowledge sharing sessions, moderated by Sightsavers Kolkata team. However, despite this, ground implementation of these best practices was limited. For example, one of the partner hospitals swapped CHWs across VCs to conduct primary survey with the beneficiaries, in

¹⁷ The evaluators observed some of the IEC materials, which were more generic in nature and didn't provide information related to the services provided at the VCs, which could have been critical in mobilizing the community towards the VCs.

¹⁸ Ward 64 VC does free eye screening for all the residents from Ward 64, while it charges INR 30 (USD 0.5) for others beyond Ward 64, as requested by the local Municipal Councillor.

order to elicit responses about the effectiveness of the activities undertaken by a particular CHW. This was not implemented by any of the other two partners, possibly because there was no follow up by Sightsavers on its execution. The evaluators believe that Sightsavers should have taken a stronger monitoring role to push partner hospitals to adopt some of the best practices, so as to further improve the programme effectiveness. This however may have been operationally difficult given the arrangement between Sightsavers and the partner hospitals was purely in terms of achieving the programme objectives¹⁹.

“... Although we do have knowledge sharing sessions with our partners on regular basis, I have not heard them implementing any best practices we have adopted ...” – Optometrist

- e. Operational hindrances among partner hospitals:** The project identified three partner hospitals to aid in the implementation of the comprehensive eye care programme in Kolkata. However, operational hindrances like inadequate clinical infrastructure to perform complex surgeries, infection outbreak in operation theatres and renovation activities, intermittently affected the performance of the programme indicators²⁰. Discussion with an ophthalmologist revealed that one of the partner hospitals often experienced approximately 5% drop out for cataract surgeries (despite them being free for the patients), due to such operational issues. While operational hindrances for hospitals are common and in most cases unavoidable, the programme should have built in structured mechanisms²¹ to let patients and programme planners know well in advance, so that the access to clinical services for the beneficiaries is not hampered.

“...Around 5% of our patients who come from the VCs for cataract surgeries, also come with other complications with cornea or retina. These have to be treated before we can proceed with the cataract surgery. We refer them to government hospitals for these complications. However, only few of them come back to us for cataract surgeries, as the delay in government hospitals, eventually leads to patient dropouts...” – Ophthalmologist from a partner hospital

- f. Lack of rationale behind defining indicators and setting targets:** While the indicators and their targets are set based on the programme’s priority, regional relevance and programmatic structure (financial and human resource availability), and are revised over time according to the capacity and performance of the programme, there was some disconnect in terms of the indicators and their targets. E.g. A indicator was defined for screenings through outreach, but no such indicator was defined for screenings at the VC, which would have been an interesting measure especially to look at footfalls to the VCs. Assuming that the outreach screening targets included VC screening targets, the

¹⁹ While the evaluators consider a larger role of moderation by Sightsavers could have improved the programme outcomes, the evaluators appreciate the constraint of the programme staff in enforcing use of best practices among partner hospitals, especially in light of the fact that most programme indicators were performing well over set targets.

²⁰ The evaluators observed that the dropout rate, which itself was too low to have a significant impact on the overall programme performance, was attributed to a mix of reasons, the most important being unavailability of complex surgery facilities. The evaluators observed that some patients requiring cataract surgeries also needed more complex procedures (corneal and retinal ulcers) before, which resulted in the dropouts.

²¹ In this contextual scenario, the patients were transferred to Susrut to avoid dropouts. However, the evaluators believe that a better mechanism could have been in place to avoid last minute inconvenience to the beneficiaries.

screening target was set at 100,000 per annum, while refraction targets for the last three years much high at 40,000. Analysis of data on conversion available for Y3H1 indicates that the typical conversion rate between screening and refraction ranges between 20-30% (i.e. one in four screened need to be refracted). Hence, either the screening targets should have been higher or refraction targets should have been lower.

- g. Focus on only output related indicators:** Most of the indicators defined under the programme were output oriented, e.g. number of glasses sold, number of staff trained, number of people reached through IEC materials, and so on. This limited the programme's ability to assess the impact created by its various activities. While outcome related indicators require next level of information and are difficult to measure, they are ideal to measure impact. For instance, rather than number of staff trained, the programme should have documented number of trained staff competently performing their duties, which a better indicator of the impact created by the trainings provided.

C) Has the programme been effective in improving systems and processes and contributed to any increase in community demand towards eye care services?

In primary discussions with CBO representatives and partner hospitals, it was cited that over the programme lifecycle, there has been a change in trend in the patient footfalls to the VCs. During the initial years, CHWs referred patients to the VCs, however with adequate awareness generated, the VCs now see more direct walk-in patients. Discussions with CHWs indicated that during the start of the programme, the average footfalls were 10-12 per day, which has now increased to 25-30 during summers (non-peak season) and 30-35 during winters (peak season). The evaluators during discussions with the beneficiaries found that over 70% of the beneficiaries felt that the programme has increased their awareness about eye health. Clearly, the programme has been able to increase awareness among people about eye care and have systems in place which have increased the utilization of services both at the VCs and at the partner hospitals.

“...Easy accessibility, strong affordability and quality services at the vision centres have created very positive Word of Mouth and have also enhanced the demand for eye care services in the community. Previously, we had to go to slums to request people to come to VCs for eye screenings. Now they are coming on their own and also referring other people, whom they know, to come here...” – CHW

D) How effective were the human resources for the programme especially at the VCs, in providing services to the patients?

With regard to the human resources at the VC, the evaluators, through the community interviews (n=80), received positive feedback from most beneficiaries. Most beneficiaries were satisfied with the performance of the staff and confirmed the staff is efficient, well trained, paid proper attention to their needs, shared all the relevant information and were cordial and respectful. Close to 74% of the beneficiaries mentioned that the behaviour (including efficiency and training) of the staff/service providers at the VCs was very good and close to 50% of the beneficiaries also mentioned that they were quite satisfied with the time taken at the VCs for availing services. However, some of the beneficiaries (5% of the beneficiaries interviewed) also mentioned space

constraints at the VCs and absence of restroom facilities as major deterrents²². Overall, the evaluators feel the VCs may consider using patient scheduling and workflow optimization techniques, which could contribute to better turnaround time and boost overall satisfaction levels.

Effectiveness	Assessment: Highly Satisfactory	
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The KUCECP programme was able to achieve (and in most cases over achieve) the targets set out, except for the intra year variations. The key driver to the programmatic success was the partnerships including those with the partner hospitals, CBOs and government agencies. Inclusion of components like ODUs, school screening and teacher trainings, awareness campaigns and advocacy events further bolstered the achievements.

The evaluators believe that the programme was able to generate a lot of innovative learnings (viz. targeted awareness of parents of school students which could have improved acceptance of eye care among students and their families, community feedback to gauge level of satisfaction²³), which if effectively implemented, could have improved the effectiveness of the programme further. Additionally, while operational hindrances in partner hospitals are unavoidable, the evaluators believe that the programme should have developed back up plans, especially to ensure that the access to services is not restricted for the beneficiaries due to operational issues. Also, the indicators and their targets need to be logically determined through learnings of target conversions from other similar programmes. The evaluators also suggest defining certain outcome indicators, which are a stronger measure of the programme impact, along with the output indicators, during the project design and target setting phase.

Sightsavers had a fundamental role in partnering with the right implementing organizations, and was responsible for devising indicators, setting targets and monitoring outputs. Sightsavers along with the partner hospitals also implemented certain innovative activities like ODUs, school screenings, trainings for government and non-governmental health workers/ health ambassadors/ school teachers, advocacy meetings, novel awareness generation events, which helped the programme over achieve most of the targets.

²² However, neither the evaluators feel, nor the patients have mentioned, that these deterrents will lead to patient dropout. It might lead to patient satisfaction and provisions of better services if these deterrents are taken care of.

²³ Susrut used to undertake community feedback surveys. Feedback was taken from community members, not at the VCs/ hospital, but outside, so as to get a wider community perspective of the services provided by Susrut.

3.3. Efficiency

The efficiency of the programme has been assessed on three parameters – financial efficiency of programmatic activities, equipment efficiency and human resource efficiency. For this evaluation, the programme’s physical and financial data was triangulated with primary interviews to answer the questions around efficiency. The efficiency section has answered three basic questions as below.

A) How well has the programme been implemented in terms of ensuring cost efficiency for the various key activities?

The efficiency of the KUCECP programme has been assessed in terms of the expense incurred vis-à-vis the target achieved and the human resource efficiency vis-à-vis the outcome of the programme. However, since the number of CHWs and Optometrists were uniform over the tenure of the programme, the efficiency is measured vis-à-vis the number of trainings provided and not against the human resource strength of the programme. The evaluators have also suggested some efficiency indices (refer **Table 13** in Appendix A) which could be used to evaluate the efficiency of the programme on an ongoing basis. The key activities of KUCECP programme which were assessed for cost efficiency are as follows:

IEC and Awareness Generation Activities: Under the KUCECP, awareness generation comprised of a wide range of activities including development of IEC and visibility material, project launch and prelaunch activities, awareness events, stakeholder meetings, radio and celebrity engagements among others. For the purpose of efficiency the evaluators have made the following considerations,

- a. Efficiency of sub activities focused purely at awareness generation namely the awareness events, IEC material development and radio/ celebrity engagement expenses were directly measured in reference to the number of people reached or the number of activities performed. This contributed to 70% of the expenses under the heading of awareness generation activities.
- b. In absence of direct outputs to measure efficiency of other sub activities including campaigns, stakeholder meetings, and volunteer meetings, the evaluators have used other indicators like number of refractions, cataract/ glaucoma surgeries and spectacles sales, primarily since these activities were associated with these proxy outcomes. These sub activities contributed to 30% of the expenses under the head of awareness generation activities.

The expenses under IEC and awareness generation activities are illustrated in **Table 16** in Appendix A. The evaluators observed that average expenditure per awareness event ranged from USD 10 to USD 18 over the programme duration. The evaluators did not have much information around the number of people reached exclusively through these awareness events, and hence it was difficult to measure its specific efficiency. However, while measuring the overall efficiency of awareness events, radio/ celebrity engagement and IEC activities with reference to number of people reached, the average cost of per person receiving IEC ranged between 0.02

to 0.07 USD. KUCECP showed slight inefficiencies²⁴, however the evaluators believe this was more to do with the methodology of measuring the number of people reached. KUCECP actually recorded the number of IEC material distributed instead of number of people reached through IEC material, hence showing the slight degree of inefficiency.

When measuring the efficiency of other sub-activities, the primary measure was in reference to the number of people screened through outreach camps. While direct measuring efficiency in terms of outcome would not be logical, the evaluators observed that there was a strong and directly proportional relationship between the expenses on campaign, volunteer meetings, visibility material and stakeholder meetings, with increase in outreach screenings, number of glaucoma surgeries performed and number of refractions conducted at the VCs.

PEC clinics and people receiving PEC services: Organizing PEC Clinics was an integral part of the KUCECP programme. Cost per PEC clinic ranged between USD 42 to USD 63 per clinic, except the first year when it was exceptionally high, which was attributed to initial operational adjustments. The lowest cost for holding a PEC clinic was recorded in third year due to certain expenses not being claimed by the partner hospitals in that year, which were reimbursed in the subsequent years, which resulted in slight escalations in subsequent years. Despite the number of PEC clinics held each year was nearly same (except the 1st year), number of patients per PEC clinic varied significantly, which impacted the year on year efficiency²⁵. The PEC clinic expenses are analysed in **Table 17** in Appendix A.

Provision of DR/ LV services: With regard to DR/ LV services, the average cost per beneficiary ranged between USD 11 to USD 17²⁶, except for the first year, when the number of people using DR/ LV services were too low, as indicated in **Table 19** in Appendix A. The increase in utilization of DR/ LV services in the subsequent years was attributed to various camps and campaigns, the cost of which was not recorded under this head, which improved the diagnosis and detection of people with diabetic retinopathies in the fourth year, thereby contributing to improved efficiencies.

School students screened: As evident from **Table 21** in Appendix A, the cost of screening a school was low in the first two years. This was because, most expenses towards school screening were supported by the school authorities and hence not booked to the project. The money saved was used towards branding and other materials during school screening in the subsequent phases. The cost of screening a school rose in the third and fourth year. Although the number of school screenings was below target, the schools that were screened were all middle and high schools with a lot of children, so overall there was over achievement.

²⁴ Inefficiency has been measured with respect to the expenses incurred per person in the MECC because of absence of any accepted benchmark for the same. However, the figure can actually be lower than reported, as the number of people actually reached through IEC materials can be much more, given that the programme does not have any robust plans of capturing the number of people actually reached through the IEC materials.

²⁵ ~45 patients seen per PEC clinic organized in the fourth year vs. 147 patients seen per PEC clinic organized in the third year, clearly influencing the efficiencies.

²⁶ The variation is primarily because of exchange rate fluctuations over the tenure of the programme, when the exchange rate (USD : INR) varied between INR 45.5 (2010-11) and INR 61.7 (2014-15)

Vision Centres: The cost of a VC has been calculated based on the running cost of the VC²⁷, the human resource costs (salaries of CHWs and Optometrists) and travel costs for the VCs. This ranges between USD 3,300 and USD 5,500 for a single VC. The total cost of a single VC was highest in the first year, because although there were only 7 fully operational VCs, costs were incurred for setting up the rest of the seven VCs. The spending under the subhead of running cost per VC was the highest in the third year, following suggestions towards changes in VC layout and accessories and additional costs incurred due to setting up of ODUs.

On standard comparison in terms of cost per refraction, the efficiency was highest in the third year at USD 0.93 per refraction, compared to USD 2.12 in the first two years (consolidated). During the subsequent three years the average cost per refraction ranged from USD 0.93 to USD 1.38. The evaluators noted that this variation was attributed to the change in operational methodology. During the first two years, only patients requiring refraction (i.e. detected to have RE through screening) were refracted, however in the subsequent years, almost all patients visiting the VCs were refracted, post the IAPB monitoring visit when the clinical protocol was changed²⁸. The detailed analysis of VC expenses have been presented in **Table 23** in Appendix A.

Trainings for CHWs, Government Health Workers and School Teachers: Training of CHWs, staff, government health workers, school teachers was another significant aspect of the KUCECP.

- a. The CHWs were provided with two trainings per year which contributed to more than 35% of the total spend under the head of Training (i.e. ~USD 7,600 of the total spend of ~USD 21,000). These trainings were around project goal and objectives, community mobilization, counselling, sanitation and hygiene, gender and sex, communication and marketing skills. As per the programme output data, almost 356 trainings were conducted for the health workers. Since, these trainings included refresher trainings as well, the actual number of CHWs trained could be much lower. Since the evaluators did not have information on the actual number of new CHWs trained, measuring efficiency with regard to number of people trained was not possible. Analysis from **Table 24** in Appendix A shows that the cost per training per CHW ranged from USD 10.5 to USD 50. The high cost of training per CHW in the first year was primarily since this was the first training and subsequent drop in costs were attributed to refresher trainings. Also, the slight escalation in the second year was attributed to special training on ODU which was provided to the CHWs.
- b. The spending on training government staff, school teachers and health ambassadors contributed to a consolidated 30% spend on training budget. While spending on health ambassadors was the highest, at 17.4% of the total spend under capacity building, the programme did not record the number of CHWs trained and hence efficiencies could not be

²⁷ The running cost, as defined in the project financials, does not include the cost of VC equipment and typically includes expenses related to setting up of ODUs, changes in the VC layout and other typical expenses associated with running a VC.

²⁸ As the programme was lagging in terms of the number of refractions in the initial two years, during the next three years, almost all the patients at the VCs were refracted. Only in some cases (viz. patients coming with eye infection) were not refracted in the VCs

measured²⁹. With regard to government staff and school teacher trainings, per person training cost ranged from USD 0.8 to USD 7 and USD 1.2 to USD 5.5, respectively (refer **Table 25** in Appendix A for analysis). Since these values are too low, the evaluators have refrained from commenting on their efficiency.

Additionally the remaining 40% of capacity building budget was spent on project staff trainings on primary eye care, communication skills, community mobilization, governance, counselling, and networking.

The evaluators observed that all these trainings had a steady impact on the number of people refracted, people who received PEC services and school children screened, as the trainings enhanced their efficiency. In the third year, more staff trainings were conducted than planned. This was primarily to address the issue of staff attrition (training of new staff) and the topics covered were PEC, nutrition, magnitude of blindness, and need for tackling uncorrected RE among other relevant topics. As a result, both number of refractions and number of people receiving PEC services soared in the third year. Similarly, the number of school children screened is directly proportional to the number of teachers trained. From these considerations, the evaluators feel that the trainings have been highly effective in enhancing the efficiency of the CHWs, staff, govt. health workers, teachers, manifested through higher number of refractions, people receiving PEC services and school children screened. **Table 26** in Appendix A supports this evaluation.

B) How efficiently have the project activities been implemented, in terms of management and governance arrangements? Were activities and objectives achieved on time?

With regards to programme governance at a strategic level, the KUCECP was largely guided by the planning tool (programme logframe) which clearly defined the various activities to be performed, the key stakeholder groups involved and the specific annual targets. The programme logframe related information in terms of the select indicators were collected on quarterly basis. While the Sightsavers Kolkata team worked closely with the implementing partners to record and monitor the performance of various indicators, constant feedback was provided by Sightsavers India and Sightsavers UK teams based on critical analysis of the information. E.g. the components of economic sustainability were introduced in the later part of the programme after the analysis and recommendations from Sightsavers UK and India team, post the IAPB visit. Following this, the VC conceptualization workshops were conducted in May 2013.

With regards to programme governance at an operational level, the implementing partners had dedicated programme coordinators who were responsible for implementation of the entire set of activities including managing field staff/ human resources, ensuring operations of the VCs, ensuring documentations and other related activities. The constant interactions between the programme coordinators of the implementing partners and Sightsavers Kolkata team ensured

²⁹ The project financials in the first two years does not provide a breakup of trainings provided to the CHWs and other non-governmental health workers. This has been done in the next three years of the programme. As a result of the same, the evaluation has been restricted and in some cases the evaluators have taken meaningful assumptions to arrive at insights.

that operational issues and challenges were identified in a timely manner and escalated whenever required. The transparent governance system also helped in sharing learnings and best practices among the implementing partners. However, the evaluators believe that a stronger governance mechanisms was required especially to identify risks prior to their occurrence and take appropriate preventive actions.

During the first half of the programme, the achievement of objectives seemed slightly lower primarily due to focus on programmatic sustainability and garnering experience and learnings in the unique urban context. However, during the second half, the focus shifted from programmatic to economic sustainability and various other strategic modifications like establishment of ODUs, sales of spectacles, realignment of strategy to focus on secondary schools for school screening and increased focus on IEC, led to better achievements.

C) Has the infrastructure and the equipment, procured during the course of the programme, been used efficiently in contributing to achieving the desired results?

A significant expenditure of the programme was made on procuring capital equipment for the various VCs. As per the budgeting template, USD 57,362 (~5% of the total budgetary outlay of the programme) was budgeted for procurement of equipment, which were to be stationed at the VCs. The actual amount spent to date on procurement of VC equipment stands at USD 60,641. Additional expenditures on capital items including purchase of vehicles, furniture and fixtures were made to the tune of USD 4,935. The over-expenditure was on account of the fact that some of the equipment were procured at a cost that was more than what they were initially budgeted for.

A high-level efficiency evaluation of the capital investment was performed, with the following assumptions,

- a) KUCECP programme provided the following pieces of equipment to the operational VCs, namely:
 - Major equipment
 - Slit lamp
 - Vision Drum/ trial frame & lenses
 - Retinoscope
 - Other supporting equipment
 - Edging machine, grinding machine, lensometers
 - Applanation tonometer
 - Ophthalmoscope
 - BP machine (Sphygmomanometer)
 - Glucometer
- b) In an ideal scenario, average time a patient would spend on a particular equipment would be 10 minutes (8 minutes of service time and two minutes of changeover/ setup time) and all patients would be using all the major equipment.
- c) A single optometrist is screening the patients. Hence, only one patient can be screened in a VC at a time.

- d) Ideal equipment utilization was assumed at 90% and the facility was assumed to be ideally operational for 6 hours, 3 days a week.

Based on the assumptions, optimum utilization of the equipment would imply that a VC should be able to refract ~5,600 patients in a year. Currently, average refractions per VC stand at ~3,200 annually which is around 57% of the best case utilization³⁰. As per this analysis, the equipment at the VCs are underutilized. While, the limited demand for the services (due to absence of marketing and effective IEC strategy, VCs were operational on limited number of days in a week) was the prime reason for this underutilization of equipment, there was a clear scope of enhancing operational efficiency of the capital equipment procured for the VCs³¹.

Efficiency	Assessment: Satisfactory	
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The evaluators during the assessment realized that evaluating efficiencies for activities including cataract surgeries, glaucoma surgeries³² and free spectacles distribution was not relevant since Sightsavers contributed a fixed cost to these services. The evaluators, however, observed variations in cost efficiencies of these services (refer **Table 18, Table 22 and Table 20** respectively), which were primarily attributed to devaluation of INR and delay in claiming the expenses or delay in reporting the cases by partner hospitals in the same period. With regard to cost efficiencies of IEC activities and PEC services, higher coverage of beneficiaries resulted in better cost efficiencies. With regard to VC efficiency, it was observed that the VCs become efficient towards the second half of the programme primarily since economic sustainability was not given a serious thought, until June 2013. Also, since all patient started being refracted at the VC, irrespective of the need, efficiency apparently improved.

The evaluators have used financial matrices to compute efficiencies, however they believe the importance of programmatic efficiency and balancing financial and programmatic efficiencies is critical. The change in strategy to refract all patients visiting the VCs created a sense of apparent increase in efficiencies but contributed little to programmatic efficiency and unnecessarily overburdened by optometrist/ CHWs. E.g. initially only about 25-30% of patients visiting the VCs were refracted, however due to a change in clinical protocol post the IAPB visit, all patients visiting the VCs were refracted. Similar pattern was also observed whilst computing efficiency of training. Also the programme had set aside allocations and targets for training, however, the measurements included refresher trainings for already trained health workers. While refresher trainings do contribute to continuance in capability building, training the same set of resources failed to build ‘real capabilities’ within the community, as per the strategic vision of the

³⁰ The above calculation does not take into account the major critical limiting conditions including the availability of the optometrist or technician for the screening of the patients at the VCs.

³¹ The discussion is solely based on observations made by the evaluators as part of the assessment and assumptions taken to simplify analysis. Also, the average operating hours and average number of refractions have been arrived at based on the programme financials and outputs and observations made by the evaluators.

³² Although cataract and glaucoma surgeries were conducted by the partner hospitals, these have been included for the calculation of the efficiency of the programme. This is because the referrals for these surgeries at the partner hospitals were through the VCs, where the patients were initially screened for cataract or glaucoma.

programme. As a result, the evaluators could not evaluate human resource efficiencies, since no targets were set at individual levels. Also, setting targets for CHWs and incentivizing them for exceeding these targets could have yielded better results and improved efficiencies.

Regular monitoring and reviewing of targets by Sightsavers resulted in most activities and VC staff achieving efficiency. The training content and approach designed by Sightsavers also brought in improved efficiency among the VC staff.

3.4. Impact

This section provides insights into the positive change brought about by the KUCECP, in terms of tangible or intangible benefits, for the different stakeholder groups. The output indicators defined as a part of the KUCECP logframe and baseline study have been employed to determine the impact. A few output criteria however were designed by the evaluators, using an analytical approach based on quantitative and qualitative data compiled during the evaluation. This section also attempts to elicit certain unintended negative impact created through this programme.

A) What is the impact and outcome that the project outputs and activities have led to? How did the programme perform with reference to specific output indicators?

The impact created by the KUCECP was measured in terms of the progress achieved by the programme across key performance indicators, defined by the logframe and evaluators.

The impact created by the programme has been illustrated in **Table 27** in Appendix A against specific impact indicators. The programme addressed 4 of the 6 WHO Building Blocks for Health Systems Strengthening, namely Health service delivery, Health workforce, Health systems financing (through funds received from Standard Chartered Private Bank), and Leadership & governance (through the operational hierarchy, with Sightsavers as monitoring agency and partner hospitals as executing agencies).

The programme was able contribute to building human resource capabilities by training local community and government resources for primary eye care services. The achieved output numbers however do not reflect the total number of individuals trained as it took into account refresher trainings as well. The programme screened more than 33.7%³³ of the target population and performed refractive testing of more than 12.3%³⁴ of the target population. Through its awareness and IEC activities, the KUCECP reached ~1.47 million people, much higher than the set targets.

Additionally, 21,180 patients benefitted from cataract surgeries performed as a part of this programme, and 1,248 patients received glaucoma, DR and LV treatment.

The programme provided eye care services to 22,736³⁵ individuals from the economically productive age group, thus contributing to 'potential' improved employability of these individuals. KUCECP also immensely benefitted 28,133 school children by distributing free spectacles.

“...There have been cases where children were not able to read what was written on the blackboard and disturbed other children in the class. After wearing specs, they can now read even from the last bench and have scored better marks than before...” – Teacher

³³ Number of screenings (501,773) / Total target population (1,490,000)

³⁴ Number of refractions (183,778) / Total target population (1,490,000)

³⁵ This indicator is calculated using the total number of spectacles sold, adult surgeries performed and people receiving DR/LV services, over 5 years (44,320), based on the percentage of people in the employable age group (20-59) requiring eye care services (51.3%). Source: Key Indicators of Employment and Unemployment in India, 2011-12, NSS KI. (68/10).

Based on the data derived from beneficiary interviews, when asked about the major benefit of this programme to the community, 19% of beneficiaries felt that the programme has led to an increase in awareness about eye health among the population, over 43% were of the opinion that it has made low cost care available to the poor masses, while 32% of them suggested that the programme has improved accessibility to eye care services for those in need.

In addition to this, close to 60% of the beneficiary respondents indicated significant or very significant reduction in dependency on family members due to the treatment availed through this programme, 44% of them suggested significant or very significant improvement in social position/respect, and almost 90% of them conveyed significant or very significant enhancement in employability/ working capacity.

B) What were the unintended positive as well as negative impact and outcomes of the programme? What extent of change did the programme bring about in the unintended outcomes?

Apart from positively impacting the target population, KUCECP also produced some encouraging supplementary impact on all the stakeholders – community, partner hospitals, programme staff, municipality, schools and CBOs. These positive unintended effects are illustrated below:

a. Utilization of services by the community outside of the primary service area

Primary discussions with the CBOs and VC staff revealed that few walk in patients every month were from outside the primary service area (from outside the ward in which the VCs were located, and also from outside the city). 17% of the interviewed beneficiaries reiterated this fact, quoting that their friends and relatives from outside Kolkata have availed of primary eye care services at the VCs as well as surgical services at the partner hospitals.

“...My maternal aunt who lives in Howrah was unable to see properly. I recommended this service to her and she travelled all the way here to get treated for cataract. She is able to see properly now...” – Beneficiary, Female / 34 years

b. Credibility for CBO in the community

Most CBOs, before the commencement of this programme, carried out initiatives like English speaking coaching, spiritual activities, computer training, gymnasium and other such similar activities. Their involvement in this programme helped them increase their reach, visibility and popularity not only within the community but also outside of it. As per discussions with the CBO representatives, as a result of this programme, the community members, other CBOs in the community as well as the Kolkata Municipal Corporation have now become more receptive towards various activities undertaken by these CBOs.

“...This programme has also increased our credibility with the KMC. KMC is now working with us on initiatives like pollution control. The ward Counsellor visits the vision centre 3-4 times in a year to take account of activities and progress...” – CBO

c. Increased reach and revenue for the partners

Before this programme, all the three partners had their respective outreach programmes but with a fairly limited reach in terms of geography and patients. KUCECP created a platform for these partners to increase their geographical reach, widen their patient base and benefit the larger community, thereby helping them achieve their objectives. In addition to this, partners were able to generate additional revenue through sale of spectacles, registration charges, diagnostic services and eye surgeries for referred patients at their facilities. Many cataract patients have also willingly chose to pay USD 100 at one of the partner hospitals to avail of the advanced phacoemulsification (phaco) surgery. This has resulted in significant fund inflow for the partner organisation. While actual revenue enhancement data was not made available, partner hospitals confirmed both reputational boost in terms of more people/organizations/government recognizing them and their efforts, and financial boost in terms of added revenue sources, through the programme.

d. Enhanced employment capability for CHWs

The CHWs were imparted short trainings on primary eye care once every 6 months as a part of KUCECP. Some of the health workers were also trained to work on lens edging and grinding machines to cut and fit lenses onto the spectacle frames. These trainings and upskilling of the relatively unskilled CHWs has helped them gain relevant practical experience and knowledge, which has increased their employment capabilities for future job roles.

“...Salary received through this programme helps me contribute towards household expenses and financially support my family...” – CHW

e. Aiding in increasing the importance of eye care in the Government’s overall health plan:

Three of the 14 VCs were housed in government facilities. Primary discussion with the KMC official indicated that some patients who visited these government facilities for other health issues also invariably availed of the VC services. There was also strong backing from the local ward counsellors for operating the three VCs. Additionally, government health workers were provided trainings on primary eye care under this programme. Benefits accrued to the community from this project led the government to notice the work and efforts of the partner hospitals, Sightsavers and VC staff in providing comprehensive eye care services to the community, and take a note of the importance of eye care among its other health priorities.

“...The local ward Counsellor helped set up the vision centre in the municipal premise. She takes active interest in this programme and its activities...” – Ex-medical Officer at a municipality ward office

f. Encouraged partner hospitals (who mostly work not for profit) to look at sustainability:

The social wings of the three partner hospitals catered to patients from lower socio-economic strata and provided primary and surgical services for free or at extremely subsidized rates. Financial sustainability was not an integral part of social activities undertaken by these partners. KUCECP made them look at every programme activity from the point of view of sustaining these

activities beyond the project duration, and encouraged them to incorporate elements/changes in the programme structure in order to make all VCs self-sustainable.³⁶

Along with the positive impact, the programme also produced some negative outcomes, which according to the Sightsavers Project Manager did not have a significant effect on the programme performance and indicators. These inadvertent negative outcomes are described below:

a. Negative remarks from local optical stores:

Primary discussion with the Sightsavers Project Manager revealed that the sale of spectacles at the VCs was resented by the local optical store owners. This was primarily since most of the community people bought spectacles from the VC due to lower price and similar/ better quality. Subsequently, the store owners made negative remarks about the quality of spectacles at VCs among the community, with an intention of enhancing their own sales. This however did not stop the beneficiaries from purchasing spectacles from the VCs.

b. Dissent among private ophthalmologists in the locality:

Free primary eye care services at the VCs and free surgeries at the partner hospitals under KUCECP led to more people availing services at these facilities. The private ophthalmologists practicing in the vicinity who catered to a portion of this population, expressed concern over decreasing number of patients at their clinics, to some of the community people. However, this did not lead to any implication of negative remarks, as was the case with the local optical stores.

c. Misuse of ‘Alor Disha’:

All the VCs under KUCECP were branded under the name of ‘Alor Disha’ (meaning ‘journey towards light’) for the purpose of standardization. As per discussion with Sightsavers Project Manager, some organizations/ individuals approached few community households to collect advance user fees for providing primary eye screening services at the VC. On being informed about such deceitful activities, Sightsavers and partner hospitals made the CHW visit every household and inform people to be weary of such individuals/ organizations.

Impact	Assessment: Satisfactory	
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The KUCECP programme trained local resources and created basic VCs and ODUs within the community, which helped them screen more than 500,000 people and refract 183,778. Additionally, the programme was able to reach ~1.47 million people through its IEC materials. KUCECP was also able to serve 34,962³⁷ of the neediest individuals through the VCs and partner hospitals. The programme also directly created a potential impact on working capability and

³⁶ Based on primary discussions with programme coordinators of partner hospitals.

³⁷ Sum of ‘Number of individuals with no income or unsteady income provided spectacles at subsidized rates’ and ‘Number of people with no income or unsteady income provided free surgeries’ from **Table 23**, assuming that there is negligible overlap between people who availed of surgeries and those who bought spectacles.

employability by distributing 11,330 spectacles, and treating 11,406 individuals for cataract, glaucoma, DR and LV problems, in the economically productive age group. The programme helped increase the 'potential' productivity among school children by distributing 28,133 free spectacles and undertaking 194 cataract surgeries in children.

The programme also created an unintended positive impact by helping CBOs strengthen their credibility within the community and attracting population from outside the targeted service area. The programme also provided additional revenue sources for partners which enhanced their sustainability. The CHWs were also benefited as they got training and practical hands-on experience of primary eye care. The activities undertaken as a part of this project were also acknowledged by the government.

Despite creating a significant impact on all the stakeholders, the evaluators believe that implementation of certain recommendations from the earlier sections, like designing a more robust methodology for rationalization and selection of VC locations, collaboration with SBCS, corporates and local business houses, developing a sustainable back up contingency plan, setting targets for CHWs and incentivizing them, would have enhanced the impact of the programme as a whole. The evaluators also suggest that the local optical store owners and local ophthalmologists should have been included in the programme among the other stakeholders and should have been consulted before and during the programme to elicit their views and concerns. Also, these category of individuals should have had a mention in the risk register in order to better understand the risks arising from them and take adequate steps to mitigate these risks.

Along with the positive impact, the programme also experienced negative outcomes which included derogatory comments about the quality of spectacles from the local optical stores and dissatisfaction about the programme from the local ophthalmologists due to sense of competition. The VC brand name 'Alor Disha' was also exploited at one of the locations, by some individuals posing as fake staff from the VC and receiving money upfront from the community people for availing primary eye services in the future. These negatives however did not affect the smooth functioning of the programme and its activities.

The programme design, structure, governance and approach formulated by Sightsavers led to the programme creating the desired impact. Sightsavers also involved all the stakeholders in decision making which further enhanced the impact. It also reacted swiftly to counter some of the negative outcomes.

3.5. Sustainability

Sustainability refers to the continuation of a programme or its effects^{XI} and is a critical component of an evaluation study. This section will go a long way in helping policy makers and practitioners understand the long term viability of a programme, in lieu of scarcity of operational and financial resources. While effectiveness and efficiency attempted to review the level of optimization of the programme, this section is concerned with understanding whether the programme and its impact will continue post withdrawal of the funding support. In this section, the evaluators intend to answer if the current programme structure or the modifications made over the course of the programme, are sustainable. This section also elicits ways and means to enhance the programmatic and financial sustainability of KUCECP.

A) Modifications in the programme to improve sustainability and the associated challenges

Amidst the programme tenure, it was realized that the VC design and operations should also ensure financial sustainability, which was also indicated by IAPB during the latter part of the programme. It was then that the need to prepare individual business plans for each VC was felt. Some operational and structural modifications which were brought about during the course of the programme to incorporate the element of sustainability, have been elaborated below.

a. Commencement of sale of spectacles:

When the programme started in 2010, patients who were screened at the VCs and diagnosed with refractive error, were just prescribed spectacles, which had to be then bought by the patients from a local optical shop. It was realized over a period of time that instead of the patients buying spectacles at market price, these can be sold at the VCs at subsidized rates and profits can still be accrued. Hence, the sale of spectacles was started at all VCs, except the three centres located in the government/municipality premises, from March 2013. The spectacles were sold on cost plus basis, which always ensured positive net revenue from the sales.

The spectacles however could not be sold at the VCs housed inside the municipal facilities, as the municipal officials argued that they are not allowed to carry out any commercial activity from the municipal facility.

b. Establishment of ODUs:

10 ODUs were established during the course of the programme where lens grinding and lens edging machines were set up. CHWs who were trained in using these machines, were involved in cutting of the spectacle lenses and fitting them onto the spectacle frames, besides performing their regular set of activities. This in-house fitting and assembling of spectacles saved considerable costs, thus enhancing the financial sustainability of the programme.

c. Centralized procurement of raw materials:

When the sale of spectacles was started in March 2013, each of the partners procured raw material components meant for spectacles from different vendors based on their preferences. It

was later realized by Sightsavers that significant costs can be saved if the partners procured each of the components from common vendors, primarily due to discounts received for bulk purchase and neutralization of price differentials. In lieu of this, 3 vendors were shortlisted for each component of spectacle raw materials (lenses, frames, cotton cloth and boxes) and the partners were asked to procure raw materials only from them.

d. Introduction of paid phaco surgery for cataract patients:

Identification and treatment of cataract was an integral component of KUCECP. Patients referred to the partner hospitals for cataract mostly underwent the normal Small Incision Cataract Surgery (SICS), unless contraindicated. This surgery was done for free for the beneficiaries and Sightsavers reimbursed USD 13.33 per surgery to the partners. One of the partners, towards the later part of the programme, realized that if patients are made aware of the advantages of phaco surgery, they would be willing to pay a price for it. Subsequently, the option of paid phaco surgery was made available to patients from three VCs, from October 2013 for USD 100. The cost of the phaco surgery was estimated at USD 50 per surgery, leaving a profit margin of USD 50 which was then ploughed back into VC operational expenses. The programme was able to raise a revenue of USD 14,900 and a profit of USD 7,450^{XII} from these paid surgeries, between October 2013 and September 2014³⁸.

The other two partners in KUCECP however did not follow the concept of paid surgeries as it was against their organizational policies to charge patients from outreach activities for surgeries.

B) Is the programme designed to be financially sustainable?

A total of 14 VCs were established over the project duration, of which 10 VCs have recorded profits towards the end of the programme (Y5H1³⁹), and the operating costs for the remaining 4 borne by the partner organizations. **Table 28** in Appendix A below provides the net profit or loss generated by each of the VCs over the project duration.

In the first half of year 3 (April 2012 – September 2012), only two of the VCs were returning profits, primarily due to sale of more premium spectacles at these VCs as compared to others. However, as the programme progressed, six VCs turned out to be profitable during October 2013 – September 2014 due to significant increase in the number of spectacles sold as compared to the previous period. Subsequently, four more VCs became sustainable towards the end of the programme, primarily due to the introduction of paid phaco surgery option, thus taking the total number of sustainable VCs to 10. Additionally, as illustrated in **Table 29** in Appendix A, it is interesting to note that the average price of spectacles sold across all VCs showed an increasing trend from USD 1.9 in Y3H1 to USD 4.9 in Y5H1. This analysis points towards the fact that the number of people buying premium spectacles increased year on year, which again led to more VCs achieving sustainability.

³⁸ The data for paid surgeries for Y5H2 was not available.

³⁹ Ideally the last programme time frame should be considered since sustainability tends to improve over a period of time. However due to non-availability of information of Y5H2, this time frame was intentionally considered.

The VCs under KUCECP will continue to be sustainable, and some of the unsustainable ones will achieve breakeven, post withdrawal of the funding, due to the trend of increasing quantity of premium spectacles sold and growing number of patients enrolling for paid surgery, which can be largely attributed to increase in awareness about eye care and willingness to pay for quality and intensification of counselling for phaco surgery.

“...We always urge our health workers to counsel cataract patients for paid phaco surgery. We have even imparted them a formal training on effective counselling...” – Programme Coordinator of a partner hospital

C) What can be done to make the programme sustainable?

It is imperative to have a detailed understanding of the VC business plans which should take into account the following four possible options to enhance sustainability, without actually altering the current programme structure.

i) Increase coverage:

The population density of Kolkata is 24,252 people per sq. km^{XIII}. Considering that one VC covers a population within the radius of one km around it, a VC caters to 76,151 people⁴⁰. As per the current prevalence of eye disorders (Refractive errors – 36.68%^{XIV}, Cataract – 1.49%^{XV}, Glaucoma – 2.6%^{XVI}, DR – 12%^{XVII}), there is a requirement of 40,184 people to be serviced per VC. However, according to the output data from the half yearly finance reports, the average number of people receiving eye care services⁴¹ per VC through this programme stands at 22,793. In lieu of this, there is a scope of significantly increasing the coverage to serve more areas and cater to more people, in the current construct of the programme.

ii) Increase offerings by including wider diagnostic services:

Currently the VC model provides primary eye care services to the masses along with free blood pressure measurement and blood sugar tests. In order to bolster the value chain of services provided, additional services, relevant for advanced clinical services provided by partner hospitals like other blood tests, urine tests, and ECG can be made available at timings other than the VC operational timings (given the space constraints). Provision of these services would not require a highly skilled person, and can be managed by a paramedic with basic training in collecting and handling samples. This resource can be an existing employee of the partner hospital and can be deployed to work at the VC at a nominal extra cost. These services can be provided using ‘sample collection centre’ formats and can be charged for at subsidized rates. Based on the output data for surgeries for last year of the programme (Y5H1 and Y5H2), if a

⁴⁰ Population residing in 1 km radius can be computed by 3.14 x population per sq. km (3.14 x 24,252)

⁴¹ This includes people receiving PEC services, people receiving DR/ LV services, adult cataract surgeries, child cataract surgeries, glaucoma surgeries, glasses provided free to children, and glasses sold.

diagnostic test is charged at an average rate of USD 1.5⁴² at the VC, an additional of USD 7,264⁴³ of revenue can be generated per year.

iii) Rationalize the cost of raw materials:

The expense on procurement of raw materials for spectacles is one of the major cost heads and contributes to almost 47% of the total VC costs (fixed as well as variable) based on the VC wise data for Y5H1. Analysis of the cost of raw materials and spectacle fees raised for all VCs over the programme duration, illustrates that despite all the partners procuring raw materials from the same vendors, there is a significant variation in the raw material costs between VCs, as demonstrated in **Table 30** in Appendix A. As per the analysis in the table, six VCs have spent more on raw materials than the overall median, and need to cut this expense down to the level of the overall median (62.42%).

If the raw material procurement costs are reduced to the level of 62.42% for VCs having higher procurement costs, keeping the procurement cost for remaining visions centres same, the programme can save up to USD 1,541 (INR 92,436) per year, as depicted in **Table 31** in Appendix A, thereby enhancing sustainability of individual VCs and subsequently of the overall programme.

iv) Differential pricing for paid surgeries:

The basic SICS surgeries performed under KUCECP for cataract are free for all the patients, and the advanced phaco surgery costs USD 100 (INR 6000). There is a huge gap in terms of pricing of these surgeries (USD 0 – USD 100). The evaluators believe that there is a section of the population who wish to avail the advantages of an advanced surgical procedure but cannot afford to pay USD 100 for it. The evaluators therefore propose introduction of pricing slabs for surgeries for such patients, thereby providing them with more options based on their affordability and need. For example, USD 8.3 (INR 500) can be charged for surgeries similar to SICS but with a better quality of Intra Ocular Lenses (IOLs). Or USD 16.7 (INR 1000) can be charged for surgeries which lead to quick recovery, thereby preventing loss of income days for the working population. The intention of introducing differential pricing for cataract surgeries was also indicated by one of the partners during the primary discussions.

v) Sourcing back revenue from the local pharmacies:

In the current operational model of the VC, the specialist doctor (ophthalmologist, gynaecologist or paediatrician) prescribes medicines to patients during PEC clinics, who in turn purchase them from the local pharmacy shop at market prices. The most profitable approach of generating revenues from sale of prescribed medicines is vending these medicines to patients in-house within the VCs. This however would not be feasible given the regulatory restrictions around

⁴² KPMG analysis suggests that the market price of basic diagnostic procedures on an average ranges between INR 200 to INR 250 (USD 3.3 to USD 4.2). The evaluators suggest charging an average price of USD 1.5 per test (almost one-third of the market price) for more people to be able to avail these services, similar to the average pricing of spectacles at the VCs (USD 3) which sell in the market at ~USD 9.

⁴³ This includes total number of adult cataract surgeries, child cataract surgeries and glaucoma surgeries performed in the last year (Y5H1 and Y5H2).

dispensing of medicines, which demand that medicines cannot be dispensed in the absence of a qualified pharmacist or a doctor. In light of this, the evaluators suggest having an arrangement with certain local pharmacy stores in the vicinity of each VC, to provide a 10% discount to patients who have a valid prescription from the specialist doctor visiting the VC, when buying medicines from those particular stores. A referral fee of 5%⁴⁴ of the total bill of patients' medicines can be charged from these stores for referring patients from VCs. This will not only increase revenues of the VC and the local pharmacy, but also encourage more patients to buy medicines due to the discount.

vi) Association with other organizations involved in primary eye care for surgeries and sale of spectacles:

During primary discussions, the evaluators discovered that there are some organizations like government/municipality hospitals, certain charitable health centres in Kolkata and other similar organizations, which do not provide spectacles after primary eye screening. Most of the patients from these facilities have to buy spectacles from the local optical stores at market rates. Additionally, eye surgeries at government hospitals take a very long time, from many days to sometimes couple of months, as conveyed by most of the interviewed respondents. An arrangement can be made for patients from these facilities to be referred to the nearest VC for availing spectacles and to the partner hospitals for availing surgeries. Some of the surgery patients can be converted into paid patients with one of the differential pricing options mentioned above. This will result in increased revenue flow for the VCs and partner hospitals, thus enhancing economic sustainability.

“...We have a good relationship with the charitable healthcare centre in the neighbourhood. They provide only primary eye screening. Ophthalmic patients from there can be referred to the vision centre for spectacles...” – Ex-medical Officer at a municipality ward office

vii) Reduce the number of CHWs:

The evaluators noted that two CHWs were deployed at each VC, throughout the course of the programme⁴⁵. However, the evaluators feel that one CHW per VC would be adequate, considering the amount of work/activities undertaken by them. In lieu of this, there is a scope to reduce the number of CHWs to improve economic sustainability. As per the last annual salary of INR 84,000 (USD 1,400) paid to the CHWs, the programme can save up to INR 1,176,000 (USD 19,600) per year. This is excluding the cost savings on the two bi-annual trainings for these CHWs.

Sustainability	Assessment: Satisfactory	
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⁴⁴ This is based on KPMG analysis that standalone pharmacies sell medicines at a profit margin of 25-40%.

⁴⁵ Unlike the MECC programme where CHWs had specific screening targets, under the KUCECP, no screening targets were set for CHWs. The target of 50 spectacles to be sold per month per CHW was too less. Also, CHWs were paid almost twice as much salary when compared to the MECC. Given these parameters, the evaluators feel the need to either improve the job description of the CHWs (or provide higher and specific targets) or reduce their numbers.

The evaluators observed that economic sustainability was not an integral part of the initial programme design. However, after the need for ensuring sustainability of the programme was realized and suggested by IAPB, business plans for all individual VCs were prepared, which went a long way in ensuring sustainable operations. The KUCECP had 10 out of the 14 VCs sustainable after slight change in the programme structure around introduction of spectacle sale, centralized procurement of raw materials, and introduction of paid phaco surgery. CBO interviews suggested that they did not play any active role in ensuring programme sustainability, as they were not included in discussions on this matter.

The evaluators believe that there is still further scope of improving sustainability of the individual VCs and thus of the programme in general. Increasing the reach of the VCs to screen, refract and treat more beneficiaries can help bring in added revenue. Providing range of other simple and relevant diagnostic services and charging a nominal amount for them from the beneficiaries, and introducing differential pricing options for surgeries can be another source of revenue. Despite centralized procurement, lack of standardization of raw material costs across VCs was observed, which the evaluators believe could be attributed to inefficient procurement systems/processes. The evaluators have also computed indicative savings that could be achieved by efficient procurement systems.

Sightsavers played a vital role in encouraging the partners to prepare business plans for each VC and work towards making them economically sustainable. Sightsavers also incorporated certain sustainability elements like ODUs, sale of spectacles and centralized procurement of raw materials. Further, it also supported one of the partners in its decision to make paid phaco surgery option available to patients, in order to generate additional revenue.

3.6. Coordination/ Coherence

This section attempts to explore the coherence or alignment of the programme with reference to its design, partnerships with different stakeholder groups and its operational aspects. Reviewing the overall coherence of the KUCECP will be critical given that it involved participation of multiple stakeholder groups with diverse agenda, background and differing capabilities. Evaluators have attempted to comment specifically on whether there was adequate coherence to ensure smooth functioning of the programme, amidst the larger health development agenda of the community and the programme in specific.

A) What was the level of coordination in the partnership between Sightsavers and partner agencies? How effective was their partnership?

The evaluators observed that the partner organizations were appreciated and worked in strong coherence with Sightsavers for the intervention. Susrut extended its support to the programme by contributing USD 2,937, earned as revenue from phaco surgeries from the VCs, to bolster its sustainability in the fifth year. This clearly indicated a strong coherence to the larger programme objectives, and a strong coherence between Sightsavers and Susrut.

During the primary discussions, one of the partners indicated resentment over the allocation of human resource post taking over of two VCs from SPAR. The programme coordinator argued that despite operating five VCs, it received funding for only one full time and one part time optometrists, while it was entitled to have at least two full-time optometrists as per allocations made to other partners. Sightsavers Project Manager however indicated that the number of optometrists were sufficient based on the operational days and hours of VCs under this partner.

“...When we took over two VCs from SPAR, the funding given to us for VC staff was insufficient. This was the reason for our subsequent poor performance. I think it was a mistake to take two VCs from SPAR...” – Programme Coordinator of one of the partners

Interestingly, there was a high level of coordination among the three partners, with regular discussion meetings organized with Sightsavers Kolkata team. These sessions created a rich opportunity to discuss ideas, targets, best practices and approaches.

The local clubs were also an important stakeholder for the implementation of the project, however their role in project implementation was restrictive in nature, i.e. limited to provision of space and basic infrastructure to render the services.

B) How well was the project coordinated with local health authorities in Kolkata, especially the State Blindness Control Society, and how did this contribute to the project achievements?

Under the KUCECP, three VCs were established in existing municipal premises, which were indicative of coordination with local health authorities, one operated by each of the partner agencies. The municipal units were not equipped with eye care services and hence the

community was forced to either use private facility or tertiary care facilities like the Kolkata Medical College. Provision of services at these municipal units definitely improved access for the local community, but would also have contributed to reduced burden on the secondary and tertiary health facilities, as indicated by one of the government officials. Despite the effort, the evaluators observed that local authorities did not consider provision of primary eye care services a critical health priority and hence the level of engagement was restricted to allowing use of basic infrastructure. The provision of services within the municipal premises clearly improved the access to eye care services for a large segment of the community.

“...Eye care is not a priority for the municipality or government. Although there has been some funding by the government to eye care NGOs, there is nothing much that the government is actively doing for eye health of the population...” – **Ex-medical Officer at a municipality ward office**

Additionally, the evaluators did not observe any direct collaboration between the State Blindness Control Society, Sightsavers and the partner agencies, which could have limited the ability of the project to scale up to other units. Discussion with a government official revealed that an arrangement has been made with Sightsavers for referring a minimum of 300 patients every month to government hospitals for eye surgeries to help them achieve the prescribed targets under NPCB. This however did not form a part of KUCECP and was initiated just recently. With regard to collaboration/ synergies with similar or other sectoral interventions/ approaches in the region, Sightsavers distributed free spectacles for children screened under SSA and Rashtriya Bal Swasthya Karyakram (RBSK), in association with the partner hospitals.

“...I do not know much about this programme. People from Sightsavers visit my office once in a while to just give some report to me. Collaboration between Sightsavers and Government has been initiated very recently...” – **A Government Official**

C) Are the programme objectives, approaches and design coherent and complementary with each other?

The key objective of the programme was to provide access to eye care services both basic and advanced clinical services, given their relatively low priority in public health agenda of the West Bengal government and local Kolkata health authorities. **Table 32** in Appendix A provides an assessment of the alignment of the objective, approach and design and whether they complemented each other⁴⁶.

The evaluators observed that with regard to the project objectives, extent of government support and general condition of eye care services in Kolkata, there was a clear alignment. The project was clearly designed to provide access to not merely basic eye care services, but clinical services like cataract surgeries, glaucoma surgeries and DR/ LV services. The set targets for cataract surgeries and spectacle dispensing were intentionally kept high, given the low interest of public authorities towards eye care and impending need to promote measures for avoidable blindness.

⁴⁶ The data using the documents provided by Sightsavers (Planning tool- Logframe- Phase IV- Kolkata)

This low interest and focus could be revalidated through lower Cataract Surgery Rate (CSR) in the state and lower free spectacle distributions (under school screening programmes), as indicated in **Table 11** in Appendix A, when compared to the focus of eye care in Maharashtra, as evaluated under the MECC.

Assessment of the preceding evaluation criteria indicate that the proposed approach/strategy for achievement of the objectives was also in robust alignment. However, the evaluators observed some disconnects in terms of the decided targets for each of the activities. Obvious disconnects were observed in targets set for cataract surgeries and spectacles to be dispensed, when compared to the targets set for the VCs (which were presumably the first point of contact). Also the screening targets set were much lower, when compared to the target set for the VCs.

The evaluators also observed that there was a need to design targets for specific sub-activities. E.g. targets for IEC activities included both awareness achieved through distribution of pamphlets and through the scheduled 336 awareness events each year. For better accountability, it would have been useful if targets in terms of individuals reached were separately defined for the two sub-activities under IEC.

Coherence/ Coordination	Assessment: Satisfactory	
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The key stakeholders of KUCECP, namely Sightsavers and partner agencies including the base hospitals shared a healthy relationship and worked in synergy to achieve the programme goals. While there were some minor concerns raised by one partner agency, in principle, the coordination and coherence was satisfactory. The evaluators observed a high degree of coherence between the programme objectives, the current eye health scenario in Kolkata and the programme design and approach. There was also a high degree of coherence between the partners and stakeholders, which would potentially ensure continuation of the intervention even after funding is withdrawn.

However, the targets set for some activities seemed low or inconsistent with targets set for other activities, which had some co-dependencies. E.g. Spectacle dispensed targets were high but was dependent on patient refraction targets which were relatively low, which in turn was dependent on screening targets which were again significantly low.

The evaluators believe that focused advocacy activities with government authorities could have improved the coherence/ coordination of the project with government authorities. Further, evaluators believe that targets should have been adequately rationalized and separate targets for the various sub-activities should have been defined.

Sightsavers worked effectively towards instilling coherence and coordination between the various stakeholders under this programme, by way of organising regular partner discussions, CBO meetings, consultative decision making, learning and exposure trips, and providing adequate technical and financial support to the partners. Sightsavers also had the responsibility of collaborating with government, NGOs and corporates, which however did not yield significant results.

3.7. Scalability/ Replicability

Scalability is defined as the potential of implementing the programme on a larger scale, for instance, by extending the programme from one district to the entire state/ region. Scalability is a vital parameter and is tied into sustainability, as it becomes imperative for such initiatives to go beyond the geographies it caters to. At this juncture, it is important to review the current construct of this programme and garner insights into how the programme can be structured better to ensure scalability. This section attempts to discover if the current programme design and structure have adequate resources (financial, operational and human) to ensure successful scaling up of this intervention.

A) Does the programme model have robust operational and administrative methodologies in place to ensure a rapid scale up?

In an attempt to understand the operational and administrative scalability of the programme, the evaluators have looked at the following components,

- a. **Scalable programme design:** The programme design conceptualized VCs within the community to provide primary eye care services, which are easily accessible to the community. These VCs were low cost 'asset light' formats, with minimal capital equipment required to operate. The VCs were established in infrastructure/ buildings owned by local clubs and didn't require creation of new physical infrastructure. Also, these clubs (CBOs) did not charge any rent from the partner hospitals for accommodating these VCs. Further, the VCs did not restrict themselves to providing refractive error services⁴⁷, but also provided a host of other services including detection, referral and follow-up for cataract, glaucoma, and DR. This comprehensive model design made it pertinent to be used by a wider set of community members and hence made it more relevant for scalable operations. Additionally, the VCs were designed with a due consideration to a referral system, making specialized services accessible via partner hospitals. This typical 'hub and low cost spoke' model of care allows the project design to be rapidly scaled across multiple locations.
- b. **Scalable reporting processes:** The reporting processes related to maintaining the patient database, spectacles dispensed, surgeries performed and other output data were fairly simple allowing easy scale up. The evaluators however are concerned about the adequacy of a manual and simple process in compiling information if the operational size is more than double the current operational coverage. Also the current reporting system captures limited modalities in terms of number of beneficiaries reached and fails to appreciate the demographic, social and economic differentials, which may be relevant to measure a comprehensive impact and also aid in ongoing monitoring. A non-complex, automated MIS (management information system) tool will not only ensure completeness and comprehensiveness of data, but also help in avoiding errors caused due to manual inputs. The evaluators however suggest that the newer operational processes and MIS should continue to remain simple to allow rapid scalability.

⁴⁷ like in the MECC

- c. Scalable operational processes:** The operational processes and protocols comprising of patient registration, screening, prescription and referral are also very simple and can be rapidly scaled up. Also the programme has efficient and well developed training modules for different cadre of staff, which can be used to train adequate number of human resources required for scaled up operations.

While the programme appears scalable administratively and operationally, the evaluators observed some other parameters that may limit the scalability. For example, the programme engaged with three partner hospitals which limited the geographic scale of operations and more partnerships with such organizations need to be built for a wider scalable operation. The evaluators also observed that a simple but comprehensive & integrated IT solution could help improve and integrate management of data between VCs and partners, and documenting of best practices and programme learnings.

B) Can the programme ensure adequacy of human resources to scale up?

Availability of training and qualified personnel is critical for scaling up the primary eye care services programme. In the current design, the partner hospitals identify and train CHWs to conduct screening activities and support awareness initiatives. Evaluators believe that it would be relatively easy to identify and train community personnel. The evaluators also observed that the retention of human resources in the KUCECP was highly satisfactory since they were compensated and rewarded well. Additionally, KUCECP explored opportunities for multitasking of human resources by training CHWs in ODUs to grind and fit lenses into the spectacle frames, and optometrists in managing a wider spectrum of eye care disorders. This provided a greater thrust to improve retention and increase relevance of the human resources, rather than giving very restrictive roles.

However, recruitment of more specialized personnel, like optometrists and programme coordinators, is envisaged to be difficult and may negatively impact scalability. The evaluators feel that while retaining these resources doesn't seem to be difficult given the current programme construct, finding and training them is the real challenge. Based on discussions, the KUCECP leveraged qualified personnel from the partner hospitals and their capabilities and personnel pool will significantly influence the scalability of the programme.

C) Does the programme have the necessary partnerships in place to support scale up?

For scaling up to new geographies, it is critical to partner with healthcare institutions/ organizations with similar ethos and vision. The KUCECP partnered specifically with institutions with special set of expertise in provision of eye care services. It also partnered with the local municipal offices in certain wards and supplemented their health services with the provision of primary eye care services within their facilities.

The evaluators however observed that while KUCECP had developed adequate collaboration and partnership for provision of services, partnerships with corporates and other NGOs/clubs was lacking which could hamper scalability. The evaluators believe that in order to develop a

successful scalable intervention, mere focus on programmatic delivery would not be enough and a greater focus on collaboration with wider set of partners including government, corporates and other NGOs will be critical to advocate and garner ongoing support for the specific eye care intervention. For example, the programme could partner with corporates for advocacy and employment of the visually impaired. Other clubs/CBOs in the community can be motivated to refer community members they cater to, to the VC, by appreciating their efforts through an award/certificate.

D) Does the programme model have adequate financial resources (or modules to generate revenue) to support a rapid scale up?

Adequacy of financial resources to set up more VCs, cover more geographies, hire more human resource and sustain operations is a critical parameter for evaluation of scalability. 10 of the 14 VCs became self-sustainable by the end of the programme. This builds a strong footing for ensuring successful scalability of the programme. This was due to introduction of a paid advanced cataract surgery option, central procurement of raw materials, in-house cutting and edging of lenses to spectacle frames, absence of rent and efficient rotation of human resource between VCs and for camps and events.

However, the evaluators observed that while VCs may have become sustainable, serious concerns were raised by some of the partners, with regard to adequacy of financial resources to provide advanced medical services like cataract surgeries, glaucoma surgeries and DR and LV services. These services, which were subsidized largely by Sightsavers, played a significant role in making the VC conceptually and programmatically more comprehensive and sustainable⁴⁸. To ensure scalability of the design, it would be critical to specifically give a more detailed consideration to how these services can be continued to be provided, whilst reducing financial support currently provided by Sightsavers. The initiative of referring a minimum of 300 patients every month to government hospitals for eye surgeries, as discussed in the earlier section, could have helped bolster scalability, if it was undertaken as a part of this programme.

“...We received a reimbursement of INR 800 (USD 13.33) per cataract surgery from Sightsavers, however our cost was around INR 1100 (USD 18.33). The extra expense was borne by us...” – Programme Coordinator of one of the partners

The evaluators therefore recommend that in order to ensure financial sustainability, Sightsavers will need to reduce the amount of subsidies provided for advanced clinical services and also look at opportunities for cross subsidization. E.g. differing levels of subsidies based on affordability of the patients/ beneficiaries. A thorough discussion with partner hospitals and logical assessment

⁴⁸ The evaluators believe that willingness to pay for services at the VC, especially spectacles, could to a large extent be attributed to comprehensiveness of services provided, especially the availability of free advanced clinical services at the associated partner hospital. If the advanced clinical services are not provided in the scalable format, the KUCECP will face similar financial challenges as the MECC and the VCs may not continue to remain relevant for the local communities, hence impacting their sustainability.

of paying capability of the community will be critical to design these subsidies, which eventually should be taken into consideration while preparing business plans for individual VCs.

<p>Scalability / Replicability</p>	<p>Assessment: Satisfactory</p>	
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The KUCECP programme was designed with significant thought to ensure scalability. The design of the VCs, partnering with local clubs and municipalities, the simple operative and reporting modalities and training modules to engage local CHWs in screening patients, were conceptualized to support scalability. Also, the fact that most of the VCs were able to manage the operational expenses themselves, makes this programme highly scalable in any geography.

However, the evaluators believe that in order to scale the programme to newer geographies or extend the coverage within the city, stronger partnerships with other set of stakeholders including civil society and corporates will be imperative. Additionally, existing subsidies, especially for advanced clinical services need to be reconsidered in light of a potential for scalable operations. Additionally, automated but simple MIS should help hasten the scalable process and reduce burden on the programme staff, thereby improving easy scaling up capabilities.

Sightsavers was accountable for incorporating sustainability into the programme, and designing the asset light structure of the VCs, simple operating protocols and reporting mechanisms, efficient training modules, which enhanced the scaling capability of the programme.

4. Summary, Conclusion and Recommendations

This section presents the overall conclusions on the strategic evaluation of the KUCECP programme across the suggested evaluation criteria (relevance, efficiency, effectiveness, impact, sustainability, scalability/ replicability, coherence/ coordination). The evaluation conclusions are followed by key lessons learnt and recommendations to improve the performance and effectiveness of the KUCECP and suggest approach for future use and draw on the evaluation findings and the evaluators’ judgment.

Relevance	Assessment: Highly Satisfactory	
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Lessons Learnt/ Recommendations

- 1. Geographic assessment before establishment of VCs:** While selection the location of a VC was influenced by a host of parameters, it is critical to place VCs around communities which need them the most, to improve programme impact. A thorough site demographic assessment by Sightsavers Kolkata in association with partner hospitals would have helped locate the vision centres in the most appropriate and most needful wards. The parameters for the selection of wards, should also have been given weights, so that most relevant parameter has the highest weight i.e. slum population concentration. The assessment framework should also include other parameters like population affordability, availability of CBOs, and local counsellor’s support.
- 2. Strengthen engagement with State Blindness Control Society:** While the programme did interact with SBCS officials, their engagement levels were very low⁴⁹. Engagement with government’s officials is always difficult, especially given that eye care was a low priority for the state. However, the evaluators believe that given the initial breakthrough with municipalities by partner hospitals, there was a scope for better engagement with SBCS by Sightsavers Kolkata, which would have further created greater visibility for the programme.
- 3. Strengthen advocacy and work towards skill building to improve participation with Corporates and Local businesses:** The programme had a dedicated focus on advocacy initiatives. The corporates and local businesses were involved to provide training on employability to the participants. As an extension, Sightsavers Kolkata/ partner hospitals could work towards partnering with an NGO with dedicated experience in skill building and develop human resources as per the needs of the corporates/ local businesses. Skill building in computer technology, hospitality services, hospital services and other relevant areas, could improve employability and placement of the participants which in turn would encourage corporates and local businesses to recruit these visually impaired individuals. The evaluators believe that this could boost relevance to Sightsavers’ objective of social inclusion and maximize relevance to its larger organizational strategy.

⁴⁹ It was noted by the evaluators that the interaction with NPCB was restricted to sharing progress reports and other relevant documents. The NCPB official felt there was a need to actively seek their support or provide support for interventions.

Effectiveness	Assessment: Highly Satisfactory	
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Lessons Learnt/ Recommendations

4. **Logically defining indicators and setting targets:** While the indicators and their targets were set based on the programme’s priority, regional relevance and programmatic structure (financial and human resource availability), there was some disconnect in terms of the indicators and their set targets⁵⁰. Also, there was a scope for including some indicators that could have provided insights on other aspects of the programme⁵¹. Hence it becomes imperative for Sightsavers Kolkata to leverage learnings of target conversions from other programmes, prior to setting the targets. Also, regular updating of these targets by Sightsavers Kolkata in consultation with the partners would prove to be useful.
5. **Align indicator measurement methodologies to larger programme objectives:** The evaluators also observed that in some cases, measurement of indicators was not aligned to the larger objectives⁵². Regular target and measurement methodology reviews by Sightsavers Kolkata with partner hospitals, especially during the earlier phases of the programme, may help in eliminating such disconnects.
6. **Develop contingency plan:** In the event of an emergency, a suitable back up plan needs to be in place to avoid non-performance issues and restricted delivery of care to patients. This back up plan should be built in by the partner hospitals and documented and validated by Sightsavers during the programme design phase so that there is no significant deviation from the original programme structure and processes in case of any operational hindrance, and targets set are comfortably achieved.
7. **Focus more on outcome oriented indicators compared to output oriented indicators:** Most of the indicators defined under the programme were output oriented. While it is easier to measure output related indicators, there is a need for Sightsavers to define outcome oriented indicators at the programme design stage, to accurately determine the impact created by the programme. For example, rather than measuring number of eye glasses distributed to students, measuring number of students showing improvement in educational/ sports or other activities after distribution of eye glasses would have been a stronger indicator. A detailed brainstorming and internal discussion should be done to design and validate relevant outcome oriented indicators.

⁵⁰ E.g. the screening target was set at 100,000 per annum, while refraction targets for the last three years much high at 40,000. Analysis of data on conversion available for Y3H1 indicates that the typical conversion rate between screening and refraction ranges between 20-30% (i.e. 1 in 4 individuals screened needs to be refracted). Hence, either the screening targets should have been higher or refraction targets should have been lower.

⁵¹ An indicator was defined for screenings through outreach camps, but no such indicator was defined for screenings at the VC, which would have been an interesting measure, especially to evaluate footfalls to the VCs.

⁵² E.g. the indicator on training (number of people trained) was intended to build human resource capabilities within the community, government and other relevant stakeholders. However, the measurement of performance of this indicator was faulty. The programme while measuring number of people trained, actually measured the number of trainings provided (which most commonly included refresher trainings). This led to an apparent sense of overachievement of targets, without significant contribution to the larger programme objectives.

Efficiency	Assessment: Satisfactory	
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Lessons Learnt/ Recommendations

8. **Revisit targets intermittently and use the efficiency indices to improve efficiencies:** All programmes evolve and it is critical to appreciate a constant feedback mechanism can help improve performance and efficiency. Redefining targets based on the trends can help improve efficiencies, both financial and human resource. Revisiting targets could also help build in efficient monitoring mechanisms so that faulty target driven approaches don't get instilled into the programme, which can be detrimental to the overall programme performance/ achievement. The evaluators have provided some select efficiency indices in **Table 13** in Appendix A, which can be measured by Sightsavers Kolkata on an ongoing basis and can be used to redefine/ revisit targets if required.
9. **Measure human resource efficiencies on an ongoing basis and incentivize them for good performance:** The evaluators observed that no specific targets were set to measure the performance of the health workers/ optometrist/ field staff. While the evaluators strongly believe, based on their assessment, that this didn't have any negative impact on programme efficiency, incentivizing resources by Sightsavers Kolkata could have improved efficiencies further. An incentives-driven approach has been consistently proven to be a stronger motivation compared to accolades and acknowledgements.
10. **Use cheaper innovative technologies:** Newer solutions like Netra^{XVIII} can be brought in by Sightsavers to help reduce the costs of refractive error testing and associated costs of deploying trained and expensive human resource. While these solutions are being tested in the market for their efficiency, aligning to such solutions is imperative.

Impact	Assessment: Satisfactory	
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Lessons Learnt/ Recommendations

11. **Incorporate recommendations from other sections:** the evaluators believe that by incorporating suggestions made in the previous sections of Relevance, Efficiency and Effectiveness, such as undertaking geographic assessment before establishment of VCs, better collaboration with SBCS, corporates and local businesses, developing a contingency plan, designing outcome oriented indicators along with output oriented ones, reviewing targets and human resource efficiencies regularly, and providing financial incentives to the staff for good performance, the programme impact on all the stakeholders can be significantly enhanced. Recommendations from the subsequent sections can also bolster the overall programme impact.

12. Include local opticians and ophthalmologists in the risk register: In view of the negative remarks about the vision centre by local opticians and practicing ophthalmologists, the risk register should include these stakeholder categories as well, in order to draw their responses and concerns about the programme, and determine any risks arising out of them for devising appropriate strategies to mitigate these risks.

Sustainability	Assessment: Satisfactory	
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Lessons Learnt/ Recommendations

- 13. Consider economic sustainability at the project design stage:** Rather than incorporating the concept of economic sustainability in the middle of the programme lifecycle, it would be wise to imbibe this when the programme structure is designed by Sightsavers. This would avoid changes in the programme operations at a later stage, thus ensuring smooth functioning of the programme and effective documentation of comparable outputs/ outcomes. The evaluators have suggested some sustainability indices in **Table 13** in Appendix A which Sightsavers and partner hospitals can use right from the start of the programme, to help build economic sustainability.
- 14. Increase reach and coverage:** Deriving from the population density of Kolkata and the current prevalence of eye diseases, the VC coverage needs to be extended in order to perform more screenings and refractions and sell more quantity of spectacles and surgeries. This can be achieved by increasing awareness generation activities and efficient distribution of IEC materials by the VC staff.
- 15. Increase diagnostic service offerings:** The currently available diagnostic services within the VCs should be expanded to include other relevant basic diagnostic tests as well, such as other blood tests, urine tests, and ECG. These can be made available by partner hospitals and CBOs at timings other than the VC operational timings, so that sufficient space is available to perform these tests proficiently. These services can be provided using ‘sample collection centre’ formats and can be charged for at subsidized rates, which can lead to additional revenue for the VCs. The human resource to provide these services can be provided by the partner hospitals at a nominal extra cost.
- 16. Rationalize raw material costs:** The analysis of the raw material costs in the section of Sustainability infers that despite the centralized mechanism of raw material procurement, considerable disparity is observed in the raw material costs as compared to the number of spectacles sold between VCs and between partners. The procurement systems for each VC/ partner needs to be relooked at by Sightsavers Kolkata, and gaps must identified and addressed to avoid needless wastage of funds. As per evaluators’ analysis, if the raw material procurement is carried out efficiently by the partners, the programme can save up to USD 1,541 per year and consequently increase profits for the VCs.

- 17. Introducing differential pricing for paid surgeries:** The evaluators believe that a substantial amount of VC revenue is lost due to absence of cataract surgery options cheaper than USD 100. A significant number of beneficiaries who can afford paying less than USD 100 end up undergoing the free SICS surgery, with the partner hospitals having to pay for these surgeries from their own fund pool. These surgery patients can be tapped by the partner hospitals by providing them with more economical surgery choices with superior advantages than the free one, like better quality of lens or better recovery speed after surgery. The evaluators recommend introducing two pricing slabs of USD 8.3 (INR 500) and USD 16.7 (INR 1000) which can help convert sizeable number of free patients into paying ones.
- 18. Sourcing back revenue from local pharmacy stores:** Instead of just prescribing medicines at the VCs, the evaluators have recommended partner hospitals to associate with the neighbouring pharmacy stores for a 10% discount on medicines to the VC patients and also charging 5% of the total medicine bill as referral fee. In order to monitor and validate the medicine sales, a simple manual check can be put in place by the CHWs.
- 19. Collaboration with other organizations involved in primary eye care for surgeries and sale of spectacles:** A suitable arrangement can be made by Sightsavers Kolkata and partners, with facilities like charitable health centres, government hospitals and other similar organizations for their patients to be referred to the nearest VC for buying spectacles and to the partner hospitals for availing surgeries. Some of the surgery patients can be converted into paid patients with one of the differential pricing options discussed earlier. This will result in increased revenue flow for the VCs and partner hospitals, thus enhancing economic sustainability.
- 20. Reduce the number of CHWs:** The evaluators noted that two CHWs were deployed at each VC, throughout the course of the programme. However, the evaluators feel that one CHW per VC would be adequate, considering the amount of work/activities undertaken by them. In lieu of this, there is a scope for the partner hospitals to reduce the number of CHWs to improve economic sustainability.

Coherence/ Coordination	Assessment: Satisfactory	
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Lessons learnt/ Recommendation

- 21. Coherence of target setting:** As mentioned earlier, the evaluators believe there is a need for Sightsavers Kolkata to ensure that the targets set for various sub activities under the programme are consistent with each other. E.g. the screening targets determine the number of patients refracted which in turn determine the number spectacles sold. Targets should ideally be set using basic understandings of conversions from screening to

refraction and refraction to spectacles sold, such that screening targets should be four to five times the targets for refraction⁵³.

22. Improve CBO engagement: The role of the CBO in this programme should not merely be restricted to providing space for the VCs. In most cases, CBOs would organize standalone health activities like distributing free/ low-cost medicines, organizing diabetes identification camps, providing nutritional advance, and other such events. These platforms should be leveraged to brand and create more awareness regarding eye care. Additionally, Sightsavers and partner hospitals should encourage the CBOs to provide volunteers who are well-recognized in the community for advocacy of the programme.⁵⁴

23. Strengthen engagement with Corporates and Local Businesses: Sightsavers had considered certain advocacy initiatives under the programme, during which corporates provided training on employability to the participants. However, there was a need for Sightsavers to encourage and advocate corporates and local business houses to participate in placement sessions for the visually impaired population, which would have helped boost relevance to Sightsavers' objective of social inclusion and maximize relevance to its larger organizational strategy.

Scalability/ Replicability

Assessment: Satisfactory



Lessons learnt/ Recommendation

24. Revisit and restructure existing subsidies: Current subsidies by Sightsavers on cataract and glaucoma surgeries have significantly aided the utilization of advanced clinical services by the local communities. However, while considering a more scalable model, it would be imperative for Sightsavers to either reduce subsidies per person or relook at subsidies based on the affordability, need and profile of the beneficiaries. This will help ensure scalable operations going forward and ascertain the services are provided to the neediest populations within the community.

25. Implement and develop a simple automated information system: To support scalability, it would be critical for Sightsavers and partners to conjointly develop an automated/ semi-automated information system, which would help in capturing relevant data for programme planning and also ensure comprehensive information is captured for scientific evaluation and assessment. The automated system will also optimize the effort and time spend by resources currently on documentation and would help overcome manual errors and manipulations.

26. Increase outreach camps and campaigns to newer geographies: While the VC staff did conduct outreach camps in locations around the existing VCs, the evaluators believe

⁵³ This is based on KPMG analysis of the conversion trends observed during the first three years of the programme

⁵⁴ The evaluators noted that during 2013-14 all CBOs received a two lakh rupees one time grant from the Municipalities, which could have been used for such activities.

that conducting outreach camps in more distant locations can not only help in testing viability of 'potentially new' VCs in that region as a part of scaling up the intervention to newer geographies, but also help improve coverage to unserved regions.

27. Using mobile and communication technology optimally: Use of modern technology to support reach and awareness need to be actively considered. Using bulk messaging services to reach out to the community should be explored. Exploring opportunities for tele-triaging, especially for eye care provision can go a long way in improving access for the masses, where a specific telephone number be made available to the community to seek information related to eye health services. These tools and technologies have to be developed/ procured and implemented in collaboration and consultation with all the stakeholders.

5. Appendices

5.1. Appendix A: Tables and Figures

Table 2: Target category and sample size for primary interviews

Sr. No.	Target Category	Sample Size per VC
1	Community based organizations (CBOs) operating the VCs	1-2 key persons from the CBOs per VC
2	VC staff – Optometrists	1 Optometrist
3	VC staff – CHWs	1 CHW
4	Beneficiaries availing/ having availed services under this programme	10 Beneficiaries from the community and 10 Patients visiting the VC
5	Teachers in schools in the service area around the selected VCs	1-2 Teachers from each school
6	Partner hospital staff	1 Ophthalmologist and 1 Project Management staff from each partner hospital
7	Government Officials in the selected VC and at the State government level	1 Government Official from the selected VC and 1 Government Official under NPCB
8	Sightsavers Kolkata staff	1 Area Director and 1 Project Manager

Table 3: Vision centers established under KUCECP

S. No.	CBO Name	Location of VC	Operational Days	Timing	Partner
1	Entally Bani Institute	Entally	Monday – Saturday	2.00 pm – 5.00 pm	MFV
2	Beleghata Agrani	Beleghata	Monday – Saturday	2.00 pm – 5.00 pm	MFV
3	Sinhi Korus	Sinhi	Monday – Saturday	9.00 am – 12 noon	MFV
4	KMC Health Unit	Ultadanga	Tuesday, Thursday & Saturday	9.00 am – 12 noon	MFV
5	Tarun Sammilani Club	Ahiritola	Monday – Saturday	9.00 am – 12 noon (Mon, Wed, Fri) 9.00 am – 5.00 pm (Tues, Thurs, Sat)	MFV
6	Barisha Sabujasathi Club	Behala	Monday, Wednesday & Friday	9.00 am – 5.00 pm	MFV
7	Milansangha Club	Beleghata	Monday & Saturday	10.00 am – 4.00 pm	Susrut
8	Saraswati Ekta Club	Tangra	Saturday	10.00 am – 4.00 pm	Susrut
9	KMC Health Unit	Rajabazar	Wednesday	1.00 pm – 4.00 pm	Susrut
10	Bangaban Sangha Club	Panchannagram	Monday, Tuesday & Thursday	9.00 am – 1.00 pm (Mon, Thurs) 9.00 am – 5.00 pm (Tue)	SHIS
11	In a rented room	Kohinoor Market	Monday & Wednesday	2.00 pm – 5.00 pm	SHIS
12	KMC Health Unit	Ward 64	Thursday & Friday	2.00 pm – 5.00 pm	SHIS
13	Dr Ambedkar Club	Kalighat	Friday & Wednesday	9.00 am – 1.00 pm 2.00 pm – 5.00 pm	SHIS
14	Basti Local Committee	Khidderpore	Wednesday & Thursday	9.00 am – 1.00 pm	SHIS

Table 4: Outputs/ activities based on programme objectives

Sr. No.	Programme Objectives	Outputs / Activities
1	Increase awareness level of the community about eye care at the end of the project period	<ul style="list-style-type: none"> • 1.4 million people targeted to be reached through IEC activities • 336 awareness events targeted to be organized on annual basis
2	Increase accessibility of eye care services for 1.49 million inhabitants of Kolkata during the project period, particularly for slum dwellers	<ul style="list-style-type: none"> • 14 VCs were operationalized in the slums of the community and equipped with basic refractive and primary eye care equipment • The VCs were conceptualized to refract 0.17 million people and provide 37,000 people with primary eye care services. • Screening camps held in community to reach 100,000 persons annually and in schools to screen 20,000 students over the project duration across 200 schools • Make advanced surgical and clinical services to include 20,000 adult cataract surgeries, 130 paediatric cataract surgeries, 720 glaucoma services and 150 LV/ DR services at base hospitals • 137,000 spectacles to be dispensed with 109,600 paid for through VCs and 27,400 through school screening programme
3	Develop human resources to provide sustainable eye care services in the project area during the project period and beyond	<ul style="list-style-type: none"> • 25 staff (optometrists) were to be trained through the five years. • 140 health workers and 300 government health workers were to be trained through the five years. • 200 school teacher trainings were planned through the five years
4	Establish and develop strong referral networks for both eye care and LV/ VI patients through which the community continue accessing services beyond the project period	<ul style="list-style-type: none"> • Patient referral networks established and referral cards distributed to the patients and partner hospitals • Five state level stakeholder meetings to be conducted over the project duration • Three special events were to be organized to promote greater and focused awareness • Three sensitization workshops for corporate personnel and eight Advocacy meetings for employability over the project period were planned

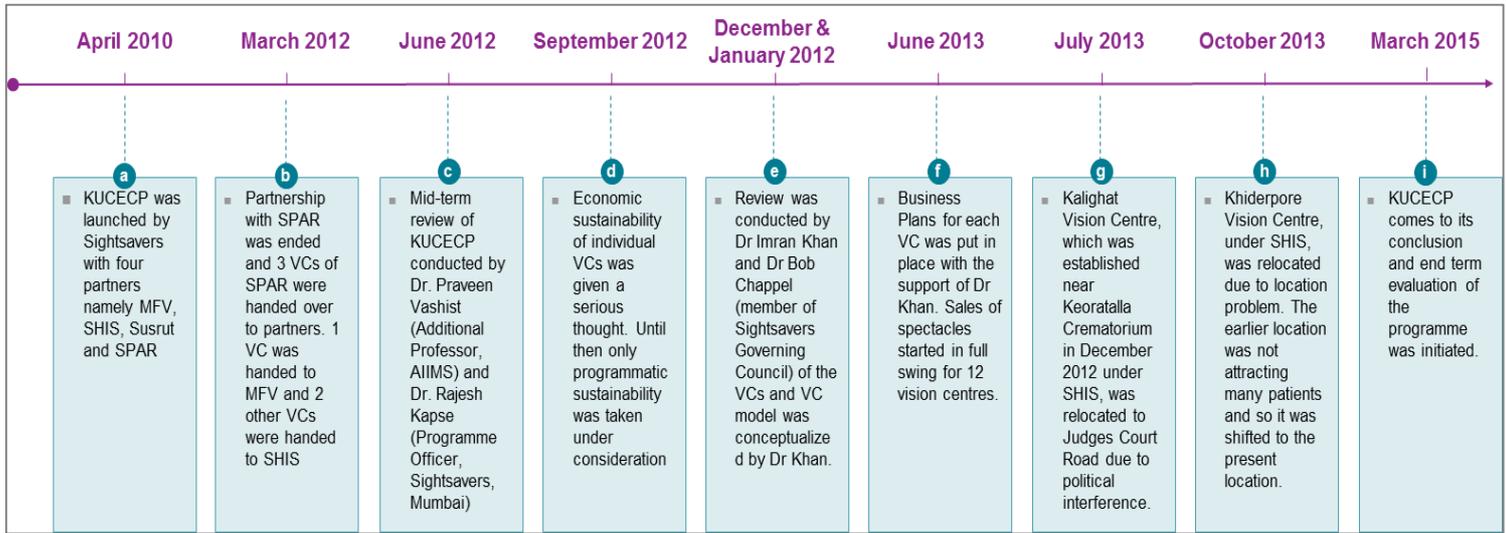
Figure 1: Vital modifications over the programme lifecycle


Table 5: Successful eye care models in India

Sr. No.	Name of Organisation	Description of the Model
1	Aravind Eye Care System	<p>The Aravind Eye Care System provides diverse eye care services like patient care activities, teaching, training, research, policy advocacy, capacity building, production of ophthalmic supplies and publications. The model specifically uses telemedicine technology and trains local resources to provide primary eye care services. Though a robust and clinical sound process, the model focuses on identification of complex cases and uses its referral network of hospitals to deal with a host of eye care disorders. The model has been able to provide treatment to about two million patients from different parts of the country. Records suggest that Aravind eye care system conducts 200,000 surgeries each year. The model has also received praises for its low cost care provision and free care to millions of people in the country.^{xix}</p>
2	Sankara Nethralaya	<p>Sankara Nethralaya provides a gamut of eye care services such as post-operative patient care, contact lens, LASIK and orthoptics clinics, training and education including e-learning capabilities, publications and also runs a research institute by the name of Kamalnayan Bajaj Institute for Research in Vision and Ophthalmology. It also offers fellowships in various courses including ophthalmic nursing in collaboration with BITS Pilani. The institution was one of the early adopters of EMR technology and the entire OPD is presently run through an online system. It has also made inroads into the field of tele-ophthalmology and offers primary eye care services to villages within a 100 km radius of Chennai with a mobile bus. Such an initiative has helped in its vision to deliver low cost eye care services to rural population. As per records, this institution of 1,000+ employees can service nearly 1,200 patients per day, with 100 surgeries (per day). It functions as a not-for-profit institution across Chennai, Bangalore, Kolkata, Rameshwaram and Tirupati.^{xx}</p>
3	L V Prasad Eye Institute	<p>L V Prasad Eye Institute is a comprehensive eye care facility centred in Hyderabad. This institution provides diverse eye care services like post-operative and rehabilitative patient care activities, teaching, training, research, capacity building and publications. The institution leverages video-conferencing facilities for distance learning through the Karam Chand Thapar Tele-Education Academy. A four year BS course in optometry is also offered in conjunction with BITS Pilani. It also runs Bausch & Lomb School of Optometry and LVP-Zeiss International Academy for Advanced Ophthalmic Education with diagnostic procedures using computerized imaging systems. It is a World Health Organization Collaborating Centre for Prevention of Blindness and operates as a not-for-profit trust. Focused on the area of low cost community eye care, this institution caters to Telangana, Andhra Pradesh, Odisha and Karnataka through 100+ PHCs, 11 secondary and three tertiary centres. To date, the institution has served nearly 18 million patients, free treatments constituting almost over 50% of these.^{xxi}</p>

Table 6: KUCECP vs. MECC

Evaluation Criteria	Sr. No.	KUCECP vs. MECC	Implication
Relevance	1	KUCECP provided a wider range of services including refractive error services, cataract surgeries, glaucoma surgeries, diabetic retinopathy and low vision services. MECC was just restricted to providing refractive error services, though it facilitated the establishment of referral network for advanced clinical services.	This made the KUCECP service offerings more comprehensive and more relevant to the needs of the community.
	2	Only 7 out of the 14 wards where VCs under KUCECP were located, had a high concentration of slum population. The VCs under MECC were all located in areas/ wards with high slum population density.	The locational advantage of the MECC VCs made them more geographically relevant, as opposed to the VCs under KUCECP.
Effectiveness	1	The attrition rate among CHWs in KUCECP was lower, due to higher salaries. The MECC programme saw high attrition rate among CHWs due to low salary payouts.	Lower CHW attrition rate helped CHWs in KUCECP build a strong rapport with the community and improve ownership. Higher CHW attrition rate in MECC impacted the overall performance and success of the programme.
	2	Significant number of children were screened through the school screening camps undertaken as a part of KUCECP. No school screenings were undertaken as a part of MECC, though they were conceptualized under the programme.	The school screening activities made KUCECP more effective in terms of reaching diverse age group of the target population and detecting and treating eye problems at an early age.
	3	KUCECP provided a wider range of services including refractive error services, cataract surgeries, glaucoma surgeries, diabetic retinopathy and low vision services. MECC was just restricted to providing refractive error services, though it facilitated the establishment of referral network for advanced clinical services.	The comprehensiveness of services under KUCECP allowed it to cater to a wider spectrum of community needs as compared to MECC, and hence improve the perspective visibility of the intervention, not only among the partnering stakeholders but also among the beneficiaries.
	4	KUCECP did not have specific targets for screenings for the CHWs. CHWs in MECC were given per day targets for community screenings.	Setting these targets for CHWs in KUCECP would have yielded better results and improved efficiencies.
Efficiency	1	The three partners in KUCECP procured raw materials centrally from 3 shortlisted vendors. The two partners under MECC procured spectacles on their own from their respective preferred vendors, thus leading to differences in the cost of procurement.	The centralized mechanism in KUCECP made the procurement more cost-efficient due to bulk orders and standardization.
	2	KUCECP showed slight inefficiencies in the expenses on IEC and awareness generation activities, when compared to MECC.	The evaluators believe that this was more to do with the difference in the methodologies for measuring the number of

			people reached through IEC under both the programmes.
Impact	1	<p>KUCECP created a significant impact on cataract, glaucoma and DR patients by providing them with advanced clinical services at the partner hospitals.</p> <p>The impact created as a result of these advanced services could not be measured in MECC due to unavailability of this data, as these eye diseases were not included under the purview of the programme.</p>	<p>Though MECC created some impact on patients with advanced eye problems, the impact of KUCECP on such patients was much greater, as treatment of these diseases formed a part of the objectives of KUCECP.</p>
	2	<p>Significant number of children were screened through the school screening camps undertaken as a part of KUCECP.</p> <p>No school screenings were undertaken as a part of MECC, though they were conceptualized under the programme.</p>	<p>The school screening camps under KUCECP created considerable impact by potentially increasing productivity of school children who were given free spectacles or were treated for other eye problems.</p>
Sustainability	1	<p>Post the suggestion made by IAPB on incorporating economic sustainability in KUCECP, individual business plans were made for each VC to help them become self-sustainable.</p> <p>The VCs under MECC were not looked upon as individual entities and no formal business plans were formulated for these VCs.</p>	<p>These VC business plans in KUCECP went a long way in ensuring economic sustainability of the programme. 10 out of the 14 vision centres became self-sustainable towards the end of KUCECP.</p> <p>The vision centres under MECC on the other hand continued to be unsustainable due to absence of any sustainability initiative, except for the passive sale of spectacles started in the fourth year.</p>
	2	<p>The spectacles under KUCECP were sold on cost plus basis but at highly subsidized rates, which always ensured positive net revenue from the sales.</p> <p>MECC provided spectacles to the beneficiaries for free, until the donor agency raised concern over this in the fourth year.</p>	<p>Revenue from sale of spectacles in KUCECP enhanced sustainability of each VC and consequently of the overall programme, which missing from MECC.</p>
	3	<p>KUCECP introduced a novel concept of optical dispensing unit (ODU), wherein the CHWs were involved in cutting and edging the lenses onto the spectacle frames, thus minimizing the cost of spectacles.</p> <p>There was no concept of ODU in MECC.</p> <p>Readymade spectacles were directly procured from vendors which increased the cost of spectacles.</p>	<p>The ODUs established under KUCECP resulted in enhanced sustainability due to lower cost of spectacles as compared to MECC.</p>
	4	<p>One of the partners in KUCECP introduced paid cataract surgeries, the profits of which were ploughed back into the programme.</p> <p>MECC failed to garner revenue from these surgeries, as the programme was restricted to just referrals and surgeries did not from a part of the programme objectives.</p>	<p>These paid surgeries in KUCECP significantly enhanced the financial sustainability of the vision centres under that partner.</p>
Coherence/Coordination	1	<p>KUCECP was able to exploit partnership opportunities with the government by</p>	<p>This partnership led KUCECP to engage the government for advocacy and support,</p>

		establishing three VCs in the municipality premises and training their resources in primary eye care. MECC failed to build such partnerships and engage with the government.	resulting in enhanced awareness about the programme, among the community and other stakeholders, as compared to MECC.
	2	Joint bank accounts were opened by the CBOs and partner hospitals under KUCECP, to deposit the profits earned from each VC. The CBOs were paid a fixed fee for provision of space.	The KUCECP design improved accountability and participation of the CBOs, while MECC delinked them from the larger programme objective, thus negatively affecting coherence of CBOs with partner hospitals.
	3	A higher level of coordination and collaboration was observed among the three partners in KUCECP, with regular sharing of ideas and knowledge, which was clearly missing in the MECC.	These knowledge sharing sessions in KUCECP created a rich opportunity for the partners to discuss ideas, targets, best practices and approaches, and consequently improve their respective performances.
Scalability/ Replicability	1	The clubs (CBOs) under KUCECP did not charge any rent from the partner hospitals for accommodating the vision centres. In MECC, one of the partners had to shell out around USD 50 per month towards rent for each of its vision centres.	The rent free model of vision centres and the comprehensiveness of services under KUCECP made the programme more appropriate for scalable operations, when weighed against MECC.
	2	The retention of human resources in the KUCECP was better since they were compensated and rewarded well compared to the MECC programme, which was plagued with high attrition rates due to relatively lower payouts. Additionally, KUCECP explored opportunities for multitasking of human resources by training CHWs in optical dispensing units to grind and fit lenses into the spectacle frames.	This provided a greater thrust to improve retention and increase relevance of the human resources in KUCECP, which in turn positively affected the programme viability its replication potential.

INTRODUCTION TO MECC

The Mumbai Eye Care Campaign (MECC), a Phase IV project of the ‘Seeing is Believing’ (SiB) initiative, was designed to target those living in poor urban communities and slums of Mumbai. The programme targeted key stakeholder groups with a low socio-economic status such as rickshaw drivers, taxi drivers, construction workers and domestic workers, very similar to the KUCECP.

MECC: Goal

The overall goal of the programme was to contribute to reducing avoidable blindness in Mumbai, specifically targeting the growing problem of uncorrected refractive error. The indicators set to achieve the goal were:

- a. Thirty five percent reduction in the prevalence of uncorrected refractive error in the programme geography
- b. Twenty percent increase in people voluntarily accessing eye care services

MECC: Programme Model

The programme structure and design of MECC was similar to KECECP, except a few modifications. For the purpose of implementing MECC, partnership with two key eye care institutions in the city – K.B. Haji Bachooali Hospital and The Lotus College of Optometry, were structured. These partners along with local CBOs, established 15 vision centres over the duration of the programme. The partner hospitals were responsible for providing the technical staff and capabilities, while CBOs were expected to leverage their presence in the community to help implement the initiative, like in the KUCECP. The partner organizations were also responsible for the capacity building of the CBO staff. These 15 vision centres deployed community health workers (CHWs) to conduct screening tests in the target community. Beneficiaries identified with refractive errors were referred to the vision centres, which operated once or twice a week, to undergo a more detailed eye examination and prescription of spectacles. Beneficiaries detected with cataract or other eye care problems were referred to the respective hospitals for treatment. While these treatments were not covered as a part of the programme, the programme played a critical role in the identification of patients needing specialized care.

The partner hospitals provided training, human resource and administrative support to operate the vision centres while the CBOs who had a pre-existent community presence, provided basic infrastructure and implementation support.

MECC: The Programme

The objectives of the MECC were:

1. Detect and treat 1.5 million people for refractive error (adult population)
2. To work towards raising eye health awareness amongst poor urban population of Mumbai – 10 million people
3. To establish permanent, quality and affordable refractive error services through community based organizations and hospital partners
4. To develop and strengthen human resources and capacities in Mumbai

The programme underwent some modifications after October 2013, over the course of its implementation, primarily due to concerns raised by donors regarding the sustainability of the vision centres, their high operational costs, and the fact that the desired outputs were being largely met by eye camps. The lack of a comprehensive demand-supply assessment for the conceptualization of the vision centres resulted in key changes, namely charging for spectacles, restructuring of CBO partnerships and reduction in allocated human resource, to improve concept viability.

Table 7: Compilation of secondary data and sources

Sr. No.	Secondary Data Source	Proposed use of the data source (analysis)	Specific and suggestive set of indicators to be reviewed
1	Project Proposal and Project Logframe	Project concept and structure, key indicators to be measured, compare outcomes to targets	<ul style="list-style-type: none"> • Programme targets for different sets of activities
2	Baseline study and Mid-term study	Time series comparison, impact assessment/ progress	<ul style="list-style-type: none"> • Socioeconomic status • Health/ Eye care Expenditure patterns • Awareness levels • Availability of services
3	Individual VC plans, VC workshop report, Annual Reports, Six Monthly Reports, Monthly Reports	Comparative performance of different VCs, overall performance of the project	<ul style="list-style-type: none"> • VC business plans • Hospital related information – OPDs, Surgeries, IEC • Budgetary spending • VC related information – walk-ins, referrals • School screenings related information – Number of refractions, prescription of eye glasses
4	WHO six building blocks, Vision 2020 goals, NPCBP, State PIP	Conformity of the project concept to national and internationally proposed project structures	<ul style="list-style-type: none"> • National/State average CSR • Global/National/State average rate of visually disabling refractive errors
5	Census and District Administration data	Socio-demographic data, population distribution details, gender and educational profile	<ul style="list-style-type: none"> • Population distribution • Economic status
6	Other document including spectacle compliance report, IHMR, spot check report	As were relevant	<ul style="list-style-type: none"> • Cataract surgery outcome

Table 8: Selection of vision centers from each group

Vision Centres	Profit/Loss account for Y5H1 (INR)	Integrated into government set-up?	Number of visitors	Number of Refractions	Number of spectacles prescribed
Entally	60,124	No	2,507	2,507	810
Milon Sangha	1,06,212	No	1,530	1,510	658
Kohinoor Market	32	No	2,147	1,614	586
Belegkata	5,660	No	2,287	1,976	581
Aharitola	1,000	No	2,021	1,575	521
Ward 64	1,565	Yes	1,422	1,058	457
Ultadanga	-36,775	Yes	2,010	1,312	449
Panchannagram	781	No	1,982	1,561	400
Kalighat (New)	-22,994	No	1,474	1,014	394
Behala	-31,987	No	1,200	803	348
Khidderpore (New)	-25,942	No	1,125	829	324
Razabazar	4,402	Yes	1,190	792	247
Sinthi	1,100	No	909	906	227
Dhapa	48,321	No	1,079	1,076	194

Methodology for selection of the VCs:

A total of four VCs were selected for the evaluation. A systematic sampling technique was used to identify VCs for the assessment to ensure that the evaluation is unbiased and comprehensive.

The process for selection of the VCs is as detailed below,

- i. All the VCs were sequentially arranged, based on the number of spectacles prescribed at each of the centre, over the duration of six months. This arrangement of the VCs based on number of spectacles distributed was designed to help in performance-cum-impact based segregation of the VCs. Continuous data of Y5H1 (first half of year 5, i.e. April 2014 to October 2014) was used for the analysis, as depicted in **Table 5** in Appendix A.
- ii. Beginning randomly from the 2nd VC in the list, every 4th VC was selected. This approach allowed selection of VCs with significant variations and thereby improved the ability of comparison based on performance, coverage, geography and impact. The four VCs thus selected for the assessment are provided in **Table 5** in Appendix A, which included **Milon Sangha, Ward 64, Behala and Dhapa**.

Table 9: Stakeholders categories, sample size and tools for data collection

Stakeholder Category	Sample Size	Tool for Data Collection	Remarks/ Rationale
Community based organizations (CBOs)	6 individuals	Interview Schedule	An interview schedule helped capture point of qualitative data (view or opinions). A standardized question set is required to ensure comparability.
VC Staff – Optometrist	4 individuals		
VC Staff – CHWs	6 individuals		
User Beneficiaries from the community	40 individuals	Semi-structured Interview Schedule	A semi-structured interview schedule helped capture point of qualitative data (view or opinions). A schedule helped ensure depth of qualitative data along with quantitative data.
Beneficiaries (Exit Interviews)	40 individuals	Structured Questionnaire	Specific information related to access, awareness and quality of services was compiled.
Teachers of schools in the service area around the selected VCs	6 individuals	FGDs Or Semi-Structured Interview Schedule	FGD dependent on availability of teachers was conducted. A schedule helped ensure depth of qualitative data along with quantitative data.
Programme coordinators and Ophthalmologists from Partner hospitals	3 Programme coordinators, 3 Ophthalmologists	Semi-Structured Interview Schedule	An interview schedule helped capture point of qualitative data (view or opinions). Flexibility was required to ensure depth of qualitative data.
Government Officials	2 individuals	Unstructured Interview Guide	Greater flexibility was required to ensure depth of qualitative data and capture information not currently available/known.

Table 10: Evaluation Matrix – Key evaluation questions, sources and tools

Evaluation Criteria	Key Evaluation Questions to be Addressed	Data Collection Technique		
		Primary Data Sources	Secondary Data Sources	Data Collection Tool
Relevance	<ol style="list-style-type: none"> 1. How relevant is the project to the identified needs of the target beneficiaries? 2. Did the intervention focus on relevant age groups/ target communities with higher prevalence of eye care disorders and lower affordability levels? 3. How well, and in what ways, does the project align with India eye health priorities (i.e. National Plan, State and City level eye health plans) and with Vision 2020 2009-2013 Action Plans? 4. Is the intervention appropriately designed and based on available evidence to create maximum impact? 	<ul style="list-style-type: none"> • Beneficiaries • CBOs / KMC • CHWs • Government officials • Sightsavers staff • Teachers • VC staff • Partner hospitals 	<ul style="list-style-type: none"> • Baseline study report • Mid-term evaluation report • Public reports • Policy documents • Project documents • Project logframe 	<ul style="list-style-type: none"> • Interview guide • FGDs
Effectiveness	<ol style="list-style-type: none"> 1. How effective has the project been in meeting its intended objectives? 2. How effective have mechanisms been which sought to increase awareness and stimulate community demand for eye care services? 3. How effective are the referral mechanisms developed for eye care, LV and VI at different levels? 4. Was the programme able to elevate the level of awareness regarding eye care and its services in the target population? 5. To what extent are the staff trained through the project, competently performing their duties? 6. Does the community now have better access to primary eye care services in the target focus area? 7. Have the cataract surgical volumes at the partner hospitals changed over the life of the project, based on available data? 8. To what extent have hospital partners been able to manage increased volume of cases as a result of this project? 9. What have been the major factors affecting achievement and non-achievement of the project objectives? 	<ul style="list-style-type: none"> • Beneficiaries • CBOs / KMC • CHWs • Sightsavers staff • Teachers • VC staff • Partner hospitals 	<ul style="list-style-type: none"> • Annual project reports • Half yearly data / MIS • IEC materials • Baseline study report • Project logframe • Mid-term evaluation report 	<ul style="list-style-type: none"> • Interview guide • FGDs
Efficiency	<ol style="list-style-type: none"> 1. How efficiently have the project activities been implemented, in terms of management and governance arrangements? 2. Were the activities and objectives achieved on time? 3. Was the programme or project implemented in the most efficient way compared to other types of approach which might have been taken? 	<ul style="list-style-type: none"> • Beneficiaries • CBOs / KMC • CHWs • Sightsavers staff • Teachers • VC staff 	<ul style="list-style-type: none"> • Annual project reports • Half yearly data / MIS • Equipment data 	<ul style="list-style-type: none"> • Interview guide • FGDs

Evaluation Criteria	Key Evaluation Questions to be Addressed	Data Collection Technique		
		Primary Data Sources	Secondary Data Sources	Data Collection Tool
	4. Were the staff, infrastructure and equipment sufficient and efficient in contributing to achieving the desired results?	<ul style="list-style-type: none"> • Partner hospitals 		
Impact	<ol style="list-style-type: none"> 1. Has delivery of the project outputs and activities led to the anticipated and desired outcomes and impact? 2. Was this intervention able to create social and economic impact on people with eye disorders? Is this impact lasting? 3. As an extension, did the intervention help improve employability and mainstreaming of people with LV? 4. Has the intervention been able to change attitude of the community with regards to willingness to pay for eye care services, out of pocket? 5. In the context of relevant WHO building blocks for Health Systems Strengthening (e.g. HR training, Infrastructure, Service Delivery), what are the main changes produced by the programme, positive or negative, and what are the key factors behind these changes? 6. Did the intervention lead to better access to primary eye care services in the target focus area? 7. What is the perception of all the key stakeholders of the project and its impact? 8. Has the project intervention lead to any unintended outcomes or impact? 	<ul style="list-style-type: none"> • Beneficiaries • CBOs / KMC • CHWs • Sightsavers staff • Teachers • VC staff • Partner hospitals • Government officials 	<ul style="list-style-type: none"> • Annual project reports • Half yearly data / MIS • Baseline study report • Mid-term evaluation report • Project documents • Project logframe 	<ul style="list-style-type: none"> • Interview guide • FGDs
Sustainability	<ol style="list-style-type: none"> 1. To what extent are the project deliverables likely to be technically, financially and programmatically sustainable after Sightsavers/ Standard Chartered's support comes to an end? 2. Were mechanisms of financial and operational sustainability built into the overall programme? Were they implemented in tandem with the community needs? 3. How can the existing model be restructured (in terms of additional services or removal of select services) to bolster sustainability? 4. Specifically, are the VC's financially viable? Do the CBOs and hospitals managing the VC's want to continue supporting them? 5. What have been the challenges in attaining sustainability? 6. What specific modifications, if any, in approach and actions could have brought about greater sustainability of the VCs? 	<ul style="list-style-type: none"> • CBOs / KMC • Government officials • Sightsavers staff • Partner hospitals • Teachers 	<ul style="list-style-type: none"> • Half yearly reports / MIS • Policy documents • Project logframe 	<ul style="list-style-type: none"> • Interview guide

Evaluation Criteria	Key Evaluation Questions to be Addressed	Data Collection Technique		
		Primary Data Sources	Secondary Data Sources	Data Collection Tool
	7. How effectively has the project involved the community, especially the CBOs, to address issues of sustainability?			
Coherence/ Coordination	<ol style="list-style-type: none"> 1. Have there been any specific gaps in coordination which have impacted the smooth functioning of the project? 2. Was there a mechanism to facilitate best practices and knowledge sharing between the partners, CBOs and schools? 3. Specifically, how well has the project coordinated with the local health authorities in Kolkata, especially the State Blindness Control society, and how has this contributed to the achievements of the project? 4. How have the project activities been coordinated in light of similar or other sectoral interventions/approaches in the region? 5. Are the project objectives, approaches and design coherent and complementary with each other? 6. Did the programme work in tandem with existing public and private infrastructure to optimize access to quality services? 	<ul style="list-style-type: none"> • CBOs / KMC • Government officials • Sightsavers staff • VC staff • Partner hospitals • Teachers 	<ul style="list-style-type: none"> • Policy documents • Project logframe • Annual project reports • Mid-term evaluation report 	<ul style="list-style-type: none"> • Interview guide
Scalability/ Replicability	<ol style="list-style-type: none"> 1. Which aspects of the programme are suitable to be scaled or replicated by participating partners, other agencies or government? How likely is this to occur or what conditions need to exist for this to happen? What factors or constraints might inhibit this process? 2. What evidence and learnings have been generated by the project to support efforts to scale up the project? 3. Would greater potential for scalability or replicability have been achieved if there had been specific actions and/or modifications in approach? 4. Is the programme easy to be scaled up across multiple locations? What are the kinds of investments that would be required? 5. Is there adequate demand in the community to scale the intervention? 6. Can the programme be scaled up whilst ensuring sustainability? What are the minimum patient footfalls per centre to make it financially sustainable? 7. How can the existing model be restructured (in terms of additional services or removal of select services) to bolster scalability? 	<ul style="list-style-type: none"> • CBOs / KMC • Government officials • Sightsavers staff • VC staff • Partner hospitals • Teachers 	<ul style="list-style-type: none"> • Annual project reports • Half yearly data / MIS • Policy documents • Project logframe 	<ul style="list-style-type: none"> • Interview guide

Table 11: Indicative comparison of importance of eye care in public health agenda of Maharashtra and West Bengal based on achievements under the NPCB

State	Cataract Surgery Rate (CSR)	Free Spectacles dispensed through school screenings (% of target achieved) ⁵⁵
Maharashtra⁵⁶	4250 (2012)	49.35% of target achieved (Target: 80,000 spectacles to be dispensed Achieved: 39,481 spectacles to be dispensed)
West Bengal	353 (2010) ⁵⁷	27.4% of target achieved (Target: 75,360 spectacles to be dispensed Achieved: 20,696 spectacles to be dispensed)

Table 12: Ward-wise vision centers locations and Percentage of slum population

Partner Hospitals	VC Locations (Wards)	Percentage Slum population in the VC Location Wards
Susrut	57	>60%
	34	45%-60%
	28	30%-45%
MFV	2	30%-45%
	19	45-60%
	14	>60%
	33	30%-45%
	56	>60%
	123	<15%
SHIS	64	45-60%
	66	>60%
	108	<15%
	89	15%-30%
	92	15%-30%
	88	45%-60%
	76	45%-60%

⁵⁵ National Programme for Control of Blindness, State wise targets & Achievement for various eye diseases during 2014-15*, Report as on 03-03-2015, accessed from npcb.nic.in

⁵⁶ Mumbai Eye Care Campaign, End Term Evaluation Report, 2015

⁵⁷ Cataract Surgery Rate in West Bengal, accessed from

http://www.wbhealth.gov.in/mar_stat_2009.asp?pass_file_id=25&stat_main_id=100, on 8th May 2015

Figure 2: Decadal change in total and slum population in Kolkata

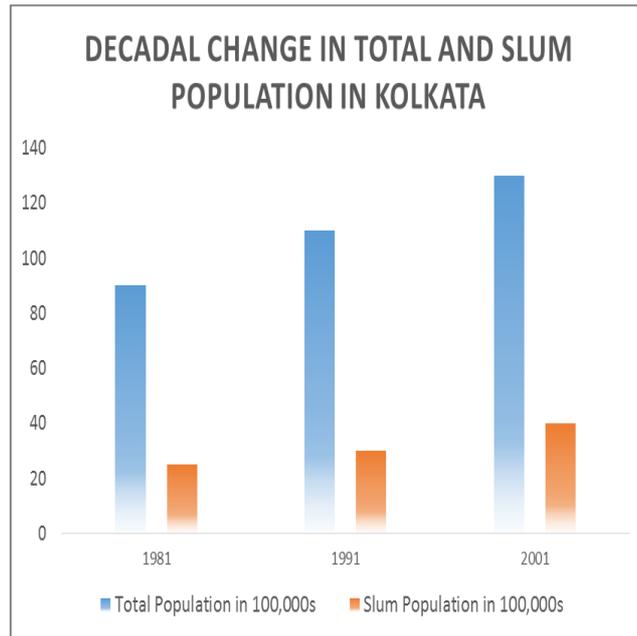


Figure 3: Location of VCs and corresponding slum population density

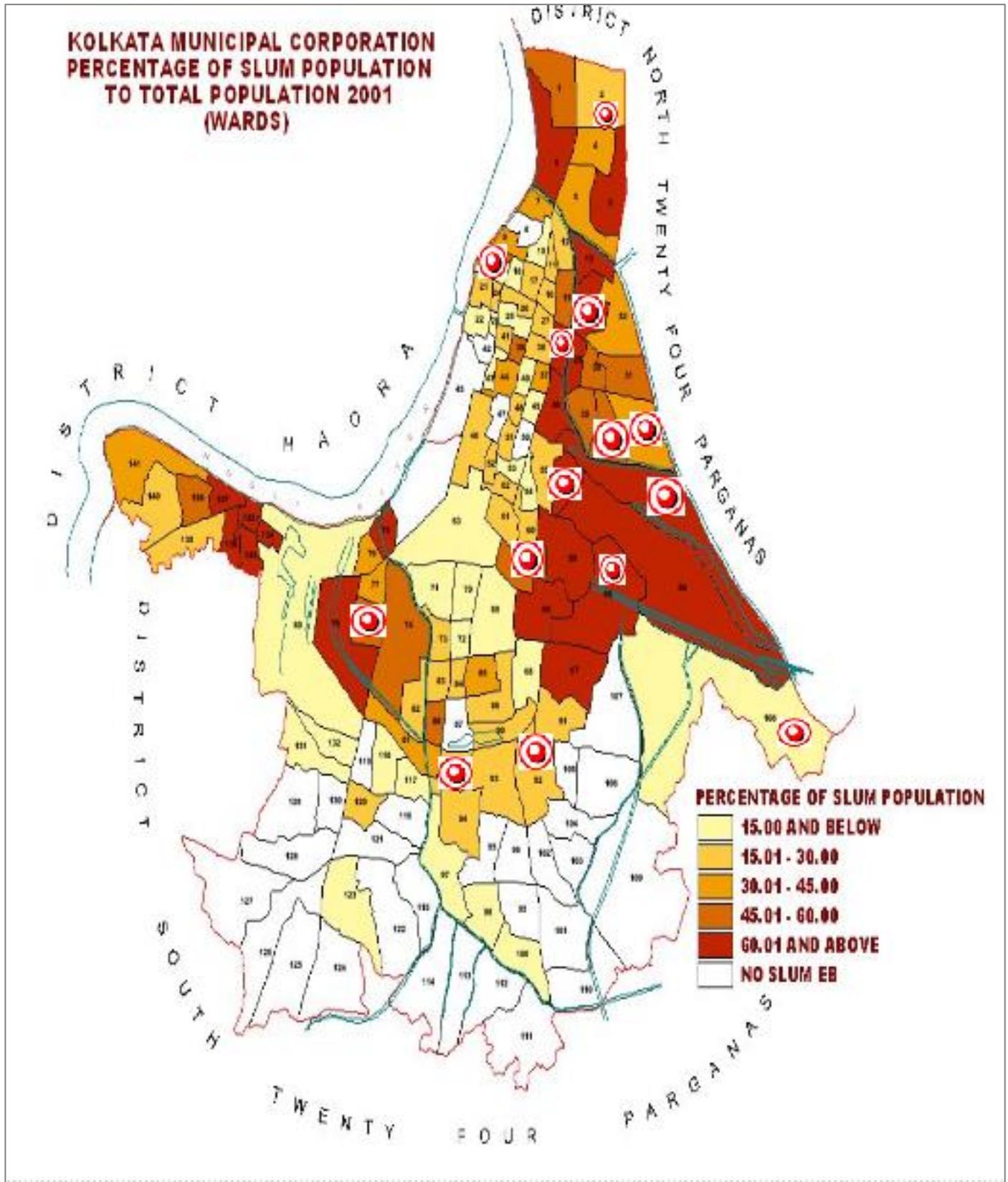


Table 13: Efficiency and Financial Sustainability Indices

Programme Parameters	Efficiency Indices	Usage Methodology	Financial Sustainability Indices	Usage Methodology
IEC and Awareness Activities	Spend on IEC activities per primary footfall	Lower means efficient	Ratio of spend on IEC activities to revenue generated through provision of eye care services	Lower means sustainable
Primary Eye care services (PEC clinics and VC)	Average time spent per patient at the VC (including VCs and PEC clinics)	Higher means efficient	Ratio of spend on primary eye care running costs to revenue generated through provision of eye care services	Higher means sustainable
	Average primary eye care running cost per centre per month	Lower means efficient	Revenue generated through provision of eye care services per VC per annum	Higher means sustainable
	Number of patients per 1000 primary footfalls purchasing spectacles	Higher means efficient	Average cost plus earnings per 100 spectacles sold	Higher means sustainable
Advanced clinical services (cataract, glaucoma and DR/ LV services)	Number of patients per 100 footfalls to VC availing advanced clinical services	Higher means efficient	Revenue generated through paid cases as a percentage of total revenue generated through provision of eye care services	Higher means sustainable
Manpower Trainings	Spend on trainings per person trained	Lower means efficient	Spend on manpower trainings as a percentage of total revenue generated through provision of eye care services	Lower means sustainable
	Number of resources trained per 1000 primary footfalls	Lower means efficient	Revenue generated through provision of eye care services per resource trained per annum	Higher means sustainable

Legend/ Reference	
Revenue generated through provision of eye care services	Includes all revenue generated through sale of spectacles, paid surgeries (of patients referred through VCs/ PECs), diagnostics, and sale of drugs/medications)
Primary footfall	Includes all beneficiaries of outreach camps, VCs and PEC clinics organized at VCs
Spend on primary eye care running cost	Includes HR cost, Operational costs and miscellaneous costs applicable for the VC and PEC clinics
Cost plus earning	Earnings after elimination of costs (including procurement, transport and logistics, packaging and manufacturing costs)

Figure 4: Target and Achievement of IEC materials distributed

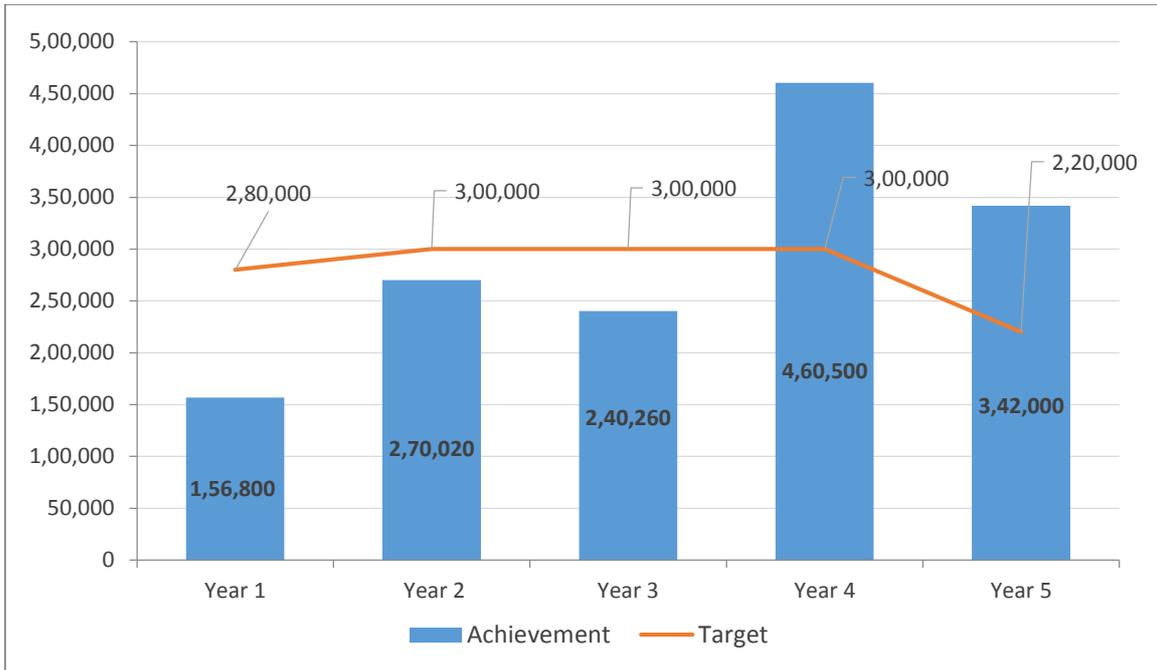


Figure 5: Target and Achievement of Adult cataract surgeries

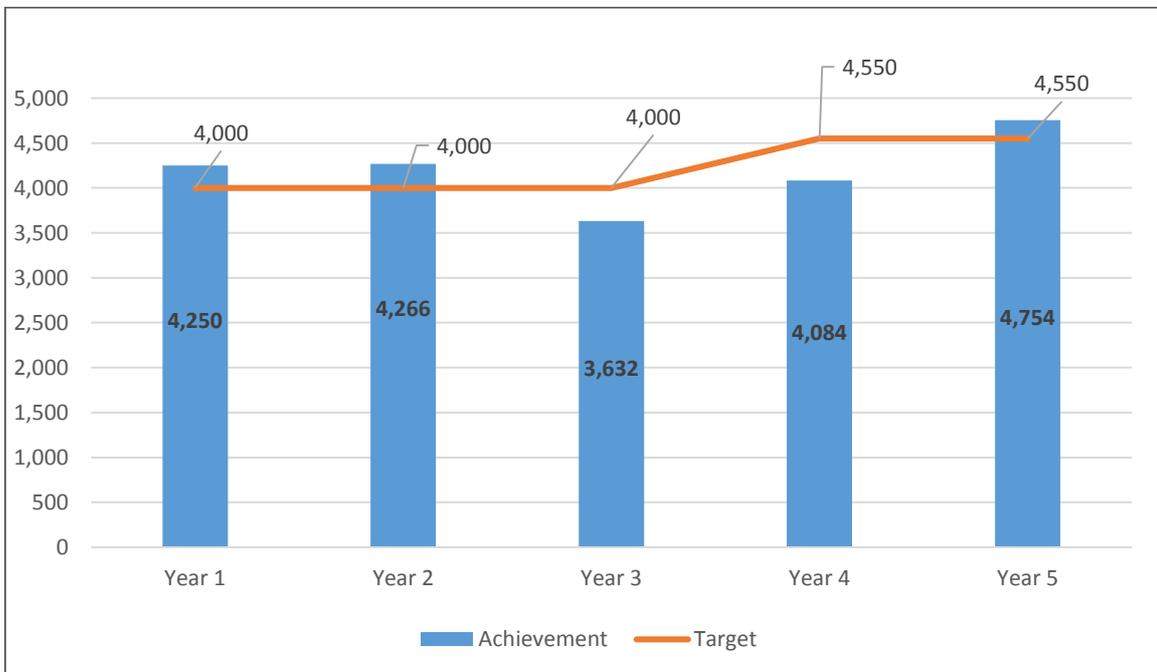


Figure 6: Target and Achievement of Child cataract surgeries

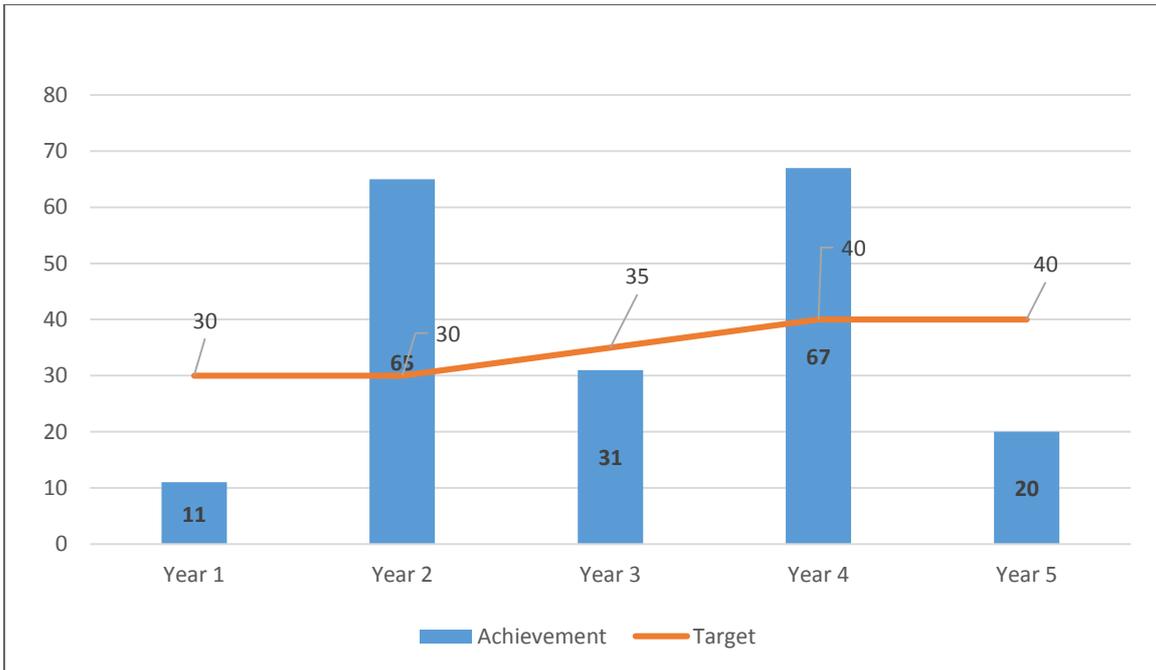


Figure 7: Target and Achievement of Glasses sold

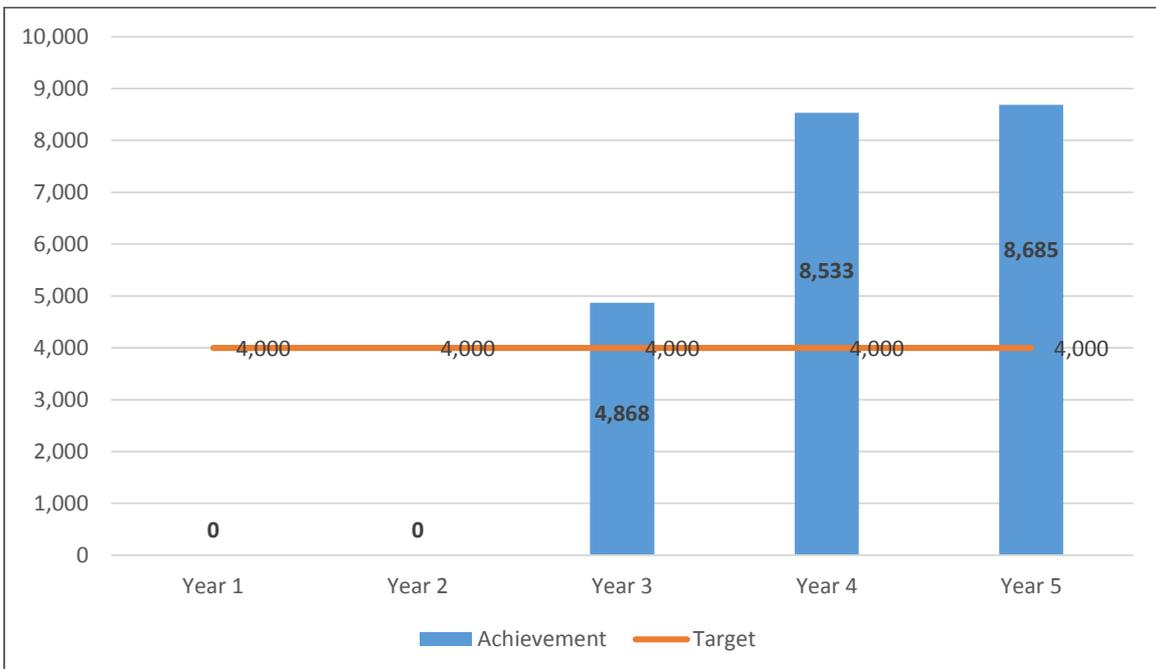


Figure 8: Target and Achievement of Glasses provided free to school children

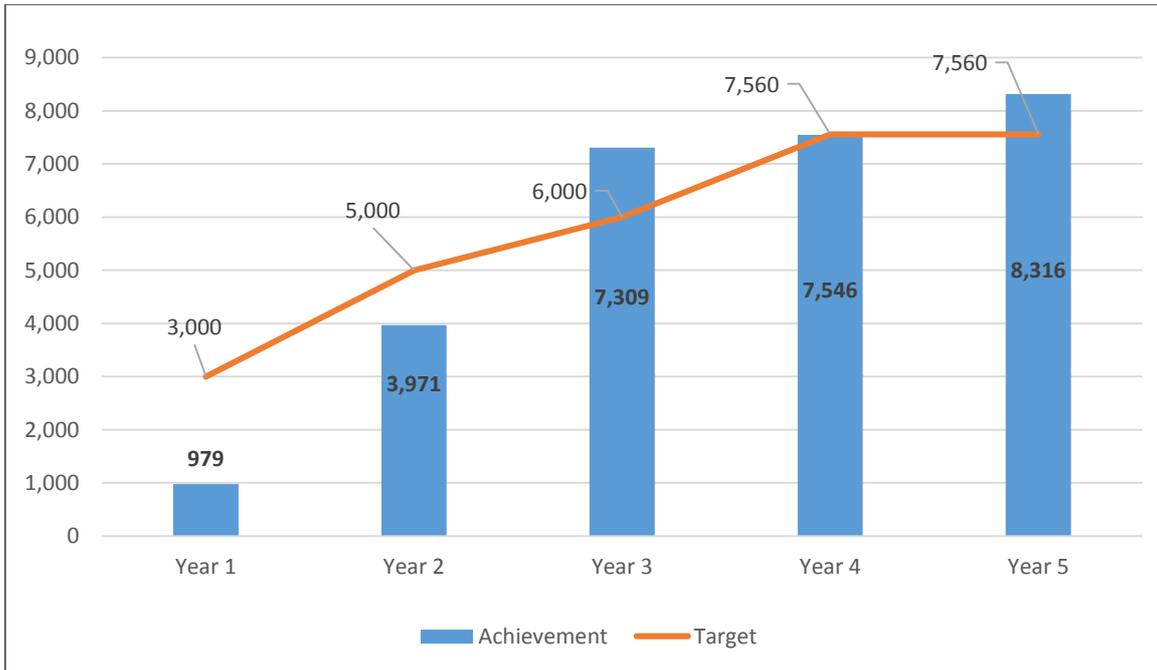


Figure 9: Target and Achievement of People refracted

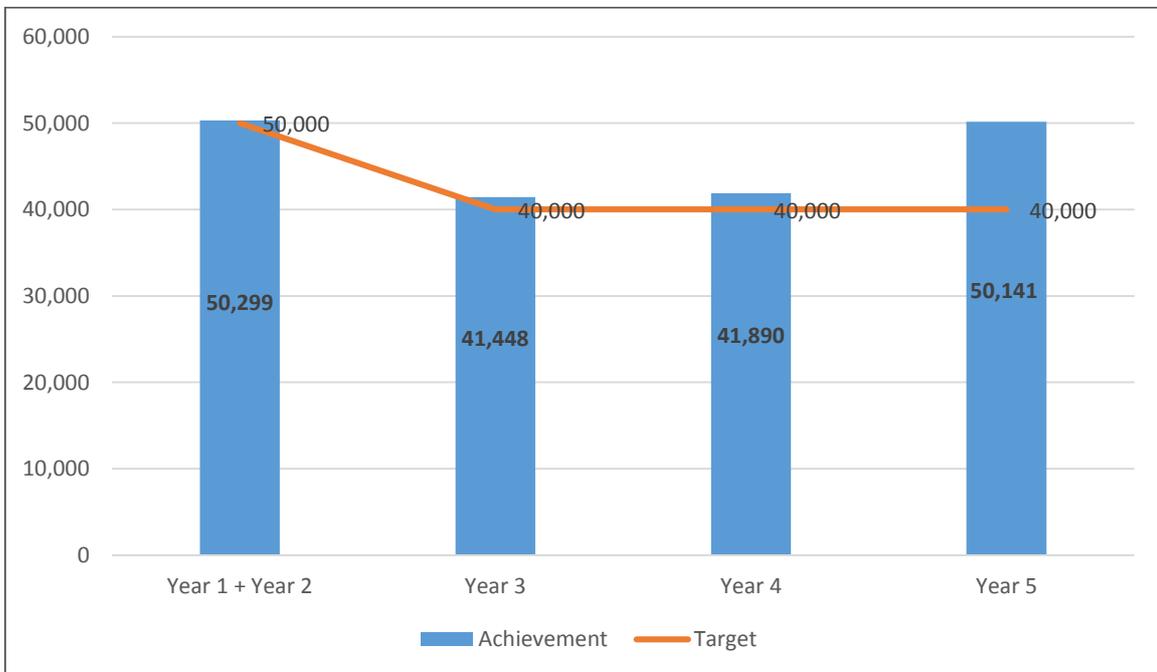


Table 14: Summary of the overall Target vs. Achievement of the output indicators

Outputs	Total Achievement	Total Target
People receiving IEC	14,69,080	1,400,000
Awareness generation event	1,480	1,680
People screened through outreach camp	501,773	500,000
PEC clinics held	718	740
People receiving PEC services	62,674	37,000
People receiving DR/ LV services	664	583
Adult cataract surgeries	20,986	21,000
Child cataract surgeries	194	175
Glaucoma surgeries	584	540
School screening events	197	200
Children screened in school	84,361	20,000
Glasses provided free to children	28,133	29,120
People refracted	183,778	170,000
Glasses sold	22,086	20,000
Staff trained	40	25
CHWs trained	217	140
Government health workers trained	656	300
School teachers trained	468	200

Table 15: Budgeted vs. Actual Expenditure

Cost Category	Budgeted Expenditure (USD)	Actual Expenditure (USD)	Variance (%)
Management Expenses – Sightsavers HR & Admin	105,775	101,258	(-) 4%
HR and Admin Cost of the Implementing Partners	355,291	352,539	(-) 1%
Service Delivery Cost	529,610	505,396	(-) 5%
Awareness Generation Events	88,590	95,927	8%
Human Resources Development	20,389	20,980	3%
Advocacy Events	30,474	29,910	(-) 2%
Monitoring and Evaluation Expenses	50,854	74,977	47%
Total	1,180,985	1,180,987	0%

Source: KUCECP Y5H1 finance report

Table 16: Expenses on awareness generation events and people receiving IEC material

	Year 1	Year 2	Year 3	Year 4	Year 5
	Actual	Actual	Actual	Actual	Actual + Forecast
People receiving IEC	156,800	270,020	240,260	460,500	342,000
Awareness generation events	200	338	284	336	322
TOTAL expense under IEC material development, Awareness campaigns and Radio/ celebrity engagement	7,762	11,069	18,007	11,405	17,836
Expense per awareness event	10.15	5.18	12.92	10.75	17.89
Expense per person reached	0.05	0.04	0.07	0.02	0.05

Table 17: Expenses on PEC clinics

	Year 1	Year 2	Year 3	Year 4	Year 5
	Actual	Actual	Actual	Actual	Actual + Forecast
Cost of PEC clinics (USD)	11,623.63	7,046.71	7,032.89	9,807.51	12,430.00
Number of PEC clinics	60	146	167	176	169
Cost per PEC clinic (USD)	193.73	48.27	42.11	55.72	73.55
Number of people received PEC clinic services	9,500	11,928	24,625	8,046	8,575
Cost per beneficiary (USD)	1.22	0.59	0.29	1.22	1.45

Table 18: Expenses on adult and child cataract surgeries

	Year 1	Year 2	Year 3	Year 4	Year 5
	Actual	Actual	Actual	Actual	Actual + Forecast
Total cost of adult cataract surgeries (USD)	49,528	70,766	56,246	53,613	68,648
Number of adult cataract surgeries	4,250	4,266	3,632	4,084	4,754
Cost of single adult cataract surgery (USD)	11.65	16.59	15.49	13.13	14.44
Total cost of child cataract surgeries (USD)	211	648	458	2,740	705
Number of child cataract surgeries	11	65	31	67	20
Cost of single child cataract surgery (USD)	19.22	9.97	14.77	40.90	35.24

Table 19: Expense on DR/ LV services

	Year 1	Year 2	Year 3	Year 4	Year 5
	Actual	Actual	Actual	Actual	Actual + Forecast
DR/ LV cost (USD)	66	887	806	4,212	3,235
Number of DR/ LV services	10	63	71	247	273
Cost of each DR/ LV service (USD)	6.59	14.08	11.35	17.05	11.85

Table 20: Expense on free spectacles for children

	Year 1	Year 2	Year 3	Year 4	Year 5
	Actual	Actual	Actual	Actual	Actual + Forecast
Spectacles for children	736	3,253	4,600	24,775	25,754
Number of free spectacles for children	979	3,971	7,309	7,546	8,316
Cost per spectacle	0.75	0.82	0.63	3.28	3.10

Table 21: Expenses on screening of school children

	Year 1	Year 2	Year 3	Year 4	Year 5
	Actual	Actual	Actual	Actual	Actual + Forecast
Cost of schools screened (USD)	2,078.64	359.33	993.05	428.78	716.60
Number of schools screened	50	50	46	24	27
Cost per school screened (USD)	41.57	7.19	21.59	17.87	26.54
Number of school children screened	18,419		15,580	29,451	21,001
Number of school children screened per school	184.19		338.70	1,227.13	777.81
Cost of screening per school child (USD)	0.13		0.06	0.01	0.03

Table 22: Expense on glaucoma surgeries

	Year 1	Year 2	Year 3	Year 4	Year 5
	Actual	Actual	Actual	Actual	Actual + Forecast
Cost of Glaucoma surgeries (USD)	18	320	703	2,531	278
Number of Glaucoma surgeries	2	48	45	385	69
Cost per Glaucoma surgery (USD)	8.79	6.67	15.61	6.57	4.03

Table 23: Expenses on running VCs

	Year 1	Year 2	Year 3	Year 4	Year 5
	Actual	Actual	Actual	Actual	Actual + Forecast
Running cost of VCs (USD) ⁵⁸	2,898	2,322	6,729	0	4,553
Human resource cost at VCs (USD)	33,264	35,623	40,689	42,565	53,460
Travel cost (USD)	2,435	3,513	3,088	3,788	5,821
Total cost (USD)	38,597	41,458	50,507	46,353	63,834
Number of fully functional/operational VCs	7	12	14	14	14
Cost of a single VC (USD)	5,514	3,455	3,608	3,311	4,560
Number of refractions	50,229		41,448	41,890	50,141
Number of people receiving PEC services	9,500	11,928	24,625	8,046	8,575
Screening to Refraction conversion (conversion efficiency) at the VCs	-	-	65.89%	82.48%	80.99% ⁵⁹

Table 24: Expenses on trainings of CHWs

	Year 1	Year 2	Year 3	Year 4	Year 5
	Actual	Actual	Actual	Actual	Actual + Forecast
Spending on CHW trainings related to primary eye care	1,769.28	1,444.76	513.86	-	622.73
Spending on CHW trainings related to ODUs		3,276.03			
Total spend on CHW trainings	1,769.28	4,720.79	513.86	-	622.73
CHWs trained	35	160	49	56	56
Cost per CHW training	50.55	29.50	10.49	-	11.12

Table 25: Expenses on training school teachers, government health workers and health ambassadors

	Year 1	Year 2	Year 3	Year 4	Year 5
	Actual	Actual	Actual	Actual	Actual + Forecast
School teachers trained	50	134	62	88	134
Government health workers trained	30	90	83	279	174
Spending on school teacher trainings	196.8	170.6	0.0	92.0	740.2
Spending on government health workers trainings	0.0	646.0	8.0	225.8	243.2
Spending on health ambassadors trainings	426.6	575.3	260.1	1,199.3	1,688.9
Total spending on health ambassador, government health workers and school teacher trainings	623.4	1,392.0	268.0	1,517.1	2,672.3

⁵⁸ The running cost, as defined in the project financials, does not include the cost of VC equipment and typically includes expenses related to setting up of ODUs, changes in the VC layout and other typical expenses associated with running a VC.

⁵⁹ The figure includes screening and refraction at the VCs for the first half of the fifth year.

Table 26: Number of staff, CHWs, government health workers and school teachers trained

	Year 1	Year 2	Year 3	Year 4	Year 5
	Actual	Actual	Actual	Actual	Actual
Number of staff trained	0	0	28	7	5
Number of CHWs trained	35	56	49	56	56
Number of government health workers trained	30	90	83	279	174
Number of school teachers trained	50	134	62	88	134
Non-government health workers trained	132		68	162	174
Number of refractions	50,229		41,448	41,890	50,141
Number of people received PEC clinic services	9,500	11,928	24,625	8,046	8,575
Number of schools screened	50	50	46	24	27
Number of school children screened	18,419		15,580	29,451	21,001

Table 27: Indicators to measure impact and their overall performance

Impact Domain	Indicator	Progress
1. Development of human resources to provide sustainable eye care services in the project area during the project period and beyond	Number of trainings conducted for Health Workers	During the course of the programme, 217 trainings in primary eye care were provided to 28 CHWs, 656 to government health workers and 604 to non-government health workers.
	Number of Optometrists trained	Over the programme period, six Optometrists were trained and gained extensive experience in providing primary eye care services.
	Number of trainings conducted for School Teachers	468 trainings were provided to school teachers in detecting eye disorders, largely refractive errors, in school children, over five years of the project.
2. Ensuring Accessibility and Availability to Comprehensive Eye Care Services	Number of VCs and ODUs established within the community	A total of 14 VCs and 10 ODUs were established within the community across Kolkata. Additionally, these VCs were equipped with basic sets of refractive and primary eye care equipment during the tenure of the programme.
	Number of operational days per VC per week	The VCs were conceptualized to operate for a minimum of four days ^{xxii} a week to meet the community's need. Most of the VCs however operated for twice or thrice a week.
	Number of screenings per 100,000 target population	An estimated 33,676 ⁶⁰ people per 100,000 population within the programme purview were screened.
	Number of refractions per 100,000 target population	12,334 ⁶¹ patients per 100,000 population were refracted for eye disorders over five years.
	Number of individuals provided with spectacles per 100,000 target population	Approximately 3,370 ⁶² people (adults as well as children) per 100,000 population were provided with spectacles.
	Number of beneficiaries catered to per 100,000 target population through PEC clinics	4,206 ⁶³ individuals per 100,000 population received PEC services through 718 PEC clinics held over the project duration.
3. Increase in Community Awareness regarding eye care and VC services	Number of people reached through IEC material per 100,000 target population	During the course of the KUCECP, 98,596 ⁶⁴ individuals per 100,000 target population were reached through IEC material.
	Number of individuals made aware about VC services through IEC activities, events and outreach camps	As per the primary interview data, 34% of the interviewed beneficiaries had heard about the VC services through IEC materials and activities, awareness spread by CHW and outreach camps.

⁶⁰ This figure was computed using the total target population (1.49 million) and total number of screenings performed, from the KUCECP Half Yearly Reports (501,773 x 100,000 / 1,490,000).

⁶¹ This figure was computed using the total target population (1.49 million) and total number of refractions performed, from the KUCECP Half Yearly Reports (183,778 x 100,000 / 1,490,000).

⁶² This figure was computed using the total target population (1.49 million) and total number of spectacles provided (sold as well as free), from the KUCECP Half Yearly Reports (50,219 x 100,000 / 1,490,000).

⁶³ This figure was computed using the total target population (1.49 million) and total number of people receiving PEC services, from the KUCECP Half Yearly Reports (62,674 x 100,000 / 1,490,000).

⁶⁴ This figure was computed using the total target population (1.49 million) and total number of people receiving IEC material, from the KUCECP Half Yearly Reports (1,469,080 x 100,000 / 1,490,000).

Impact Domain	Indicator	Progress
4. Benefitting Economically Productive Age Group ⁶⁵	Number of people in the age group of 15-59 years provided spectacles	An estimated 11,330 ⁶⁶ individuals within the age group of 15-59 years were provided with spectacles under the KUCECP programme.
	Number of people in the age group of 15-59 years who underwent advanced treatment/surgery	Nearly 11,406 ⁶⁷ people in the 15-59 years age group underwent surgical procedures or other advanced treatment modalities.
5. Ensuring Affordable Care to the Needy	Number of individuals with no income or unsteady income provided spectacles at subsidized rates	An estimated 17,669 ⁶⁸ individuals with no income or unsteady income were provided spectacles at highly subsidized rates.
	Number of people with no income or unsteady income provided free surgeries	Close to 17,293 ⁶⁹ people with no income or unsteady income were provided free surgeries at the partner hospitals.
6. Establishing a strong referral network for eye care	Number of beneficiaries provided with cataract surgery (adults and children) per 100,000 population	Nearly 1,421 ⁷⁰ individuals including children underwent cataract surgeries per 100,000 population.
	Number of beneficiaries per 100,000 population provided with complex eye care services including glaucoma, DR and LV services	84 ⁷¹ individuals were provided with Glaucoma, DR and LV services per 100,000 population, during the course of over years.
7. Ensuring early detection and treatment of causes	Number of children screened per 10,000 population of children ⁷²	2,574 ⁷³ children per 10,000 children population were screened mostly for refractive errors through 232 school screening camps across the city during the project duration.

⁶⁵ Benefitting economically productive age group (social inclusion) and providing affordable care are integral parts of the Sightsavers' Strategic Framework 2012-18. The evaluators have added these two impact domains despite them not being a part of the original programme objectives, since these are relevant impact measures from an overall Sightsavers' strategic perspective. [Sightsavers (2010), "Making the Connections, Strategic Framework 2012-18"].

⁶⁶ This figure is calculated using the total number of spectacles sold over five years (22,086), based on the percentage of people in the employable age group (20-59) requiring eye care services (51.3%). Source: Key Indicators of Employment and Unemployment in India, 2011-12, NSS KI. (68/10).

⁶⁷ This figure is calculated using the total number of adult surgeries performed (cataract, glaucoma, DR, LV) over five years (22,234), based on the percentage of people in the employable age group (20-59) requiring eye care services (51.3%). Source: Key Indicators of Employment and Unemployment in India, 2011-12, NSS KI. (68/10).

⁶⁸ This figure was calculated using the primary data finding that 80% of the interviewed respondents had no or unsteady income, and the number of spectacles sold (22,086 x 80%). This includes daily wage workers and non-working adults.

⁶⁹ This figure was calculated using the primary data finding that 80% of the interviewed respondents had no or unsteady income, and the number of all free surgeries undertaken (21,616 x 80%). This includes daily wage workers and non-working adults.

⁷⁰ This figure was computed using the total target population (1.49 million) and total number of adult and child cataract surgeries performed, from the KUCECP Half Yearly Reports (21,180 x 100,000 / 1,490,000).

⁷¹ This figure was computed using the total target population (1.49 million) and total number of adult and child cataract surgeries performed, from the KUCECP Half Yearly Reports (1,248 x 100,000 / 1,490,000).

⁷² This indicator has been used as a proxy for the number of correct diagnosis, since data for the latter was not available.

⁷³ This figure is calculated based on the proportion of children (0-14 years) in the urban areas of West Bengal (22%) in 2010 and the number of school children screened through KUCECP (84,361 x 10,000 / 22% of 1,490,000). Source:

http://www.censusindia.gov.in/vital_statistics/srs/Chap_2_-_2010.pdf

Impact Domain	Indicator	Progress
of preventable blindness	Number of children who received free spectacles/ underwent cataract surgery per 10,000 children population	864 ⁷⁴ school children per 10,000 children population were provided with free spectacles or underwent cataract treatment during the course of this project.

Table 28: Trend in sustainability of vision centers

VC Location	Net Profit / Net Loss (INR)				
	Y3H1	Y3H2	Y4H1	Y4H2	Y5H1
Entally	-7,220	11,609	94	8,420	60,124
Belegkata	8,859	20,982	17,922	14,587	5,660
Sinhi	-30,120	9,821	589	3,325	1,100
Ultadanga	-32,225	-28,465	-38,210	-33,740	-36,775
Aharitola	4,670	14,066	4,716	9,111	1,000
Behala	-39,850	-17,681	-11,163	-12,783	-31,987
Kohinoor Market	-5,996	-1,739	-23,363	491	32
Panchannagram	-5,095	20,231	1,625	11,638	781
Ward 64	-5,748	14,803	1,202	6,688	1,565
Kalighat (New)	-13,800	-12,863	-27,523	-15,837	-22,994
Khidderpore (New)	-13,750	-18,676	-26,209	-28,115	-25,942
Milon Sangha	-23,360	-29,865	-25,630	73,705	199,212
Dhapa	-35,260	-29,925	-34,497	58,280	96,321
Razabazar	-35,000	-30,000	-38,000	52,000	37,402
Total	-233,895	-77,702	-198,447	147,770	111,499

Table 29: Trend in average price per spectacle

	Y3H1	Y3H2	Y4H1	Y4H2	Y5H1
Average Price per Spectacle⁷⁵ (USD)	1.93	3.38	3.44	3.65	4.87

⁷⁴ This figure is calculated based on the proportion of children (0-14 years) in the urban areas of West Bengal (22%) in 2010 and the number of free spectacles distributed to children through school camps and number of child cataract surgeries undertaken (28,327 x 10,000 / 22% of 1,490,000). Source: http://www.censusindia.gov.in/vital_statistics/srs/Chap_2_-_2010.pdf

⁷⁵ Average price per spectacle for each period is calculated using “Total spectacle fees raised / Total number of spectacles dispensed”.

Table 30: Cost of raw material as a proportion of Spectacle fees raised

VC Location	Raw material / Spectacle fees raised (%)						% cost reduction required
	Y3H1	Y3H2	Y4H1	Y4H2	Y5H1	Median	
Entally	28.47%	69.36%	81.62%	62.64%	52.38%	62.64%	0.22%
Belegkata	27.92%	55.29%	49.74%	50.29%	66.52%	50.29%	-12.13%
Sinhi	27.86%	59.70%	58.69%	51.80%	58.59%	58.59%	-3.84%
Ultadanga	NA	NA	NA	NA	NA	NA	NA
Aharitola	20.75%	62.20%	67.75%	56.26%	69.05%	62.20%	-0.22%
Behala	200.00%	79.16%	80.07%	66.84%	84.93%	80.07%	17.65%
Kohinoor Market	37.57%	66.92%	79.71%	54.63%	49.61%	54.63%	-7.80%
Panchannagram	36.04%	50.43%	65.00%	49.03%	56.68%	50.43%	-11.99%
Ward 64	34.77%	56.19%	49.65%	61.95%	55.97%	55.97%	-6.45%
Kalighat (New)	NA	79.39%	77.88%	57.08%	72.42%	75.15%	12.73%
Khidderpore (New)	NA	201.84%	83.61%	80.62%	70.83%	82.12%	19.69%
Milon Sangha	44.09%	100.00%	68.96%	68.08%	59.32%	68.08%	5.66%
Dhapa	138.75%	100.00%	65.85%	73.33%	33.17%	73.33%	10.91%
Razabazar	NA	100.00%	NA	NA	NA	NA	NA
Overall Median						62.42%	

Table 31: Cost reduction in procurement of raw materials

VC Location	% cost reduction required	Total spectacle fees raised for Y4H2 and Y5H1	Cost reduction in INR
Entally	0.22%	341020	751
Behala	17.65%	233705	41240
Kalighat (New)	12.73%	103600	13190
Khidderpore (New)	19.69%	91555	18031
Milon Sangha	5.66%	171061	9682
Dhapa	10.91%	87465	9543
Total Reduction in Raw Material Cost			92,436

Table 32: Assessment of the coherence between the programme objective, approach and design

Objective	Approach and Design	Complementary Assessment
<p>Increase awareness level of the community about eye care at the end of the project period.</p>	<ul style="list-style-type: none"> • 1.4 million people targeted to be reached through IEC activities • 336 awareness events targeted to be organized on annual basis 	<ol style="list-style-type: none"> 1. Baseline assessment indicated that community awareness was relatively high & there was a need to focus on improving knowledge related to eye condition. This clearly reiterated the need for IEC material distribution along with conducting awareness events that could help clear myths and questions related to eye conditions. 2. IEC targets set included patient education through distribution of material on one to one basis and the 336 community awareness events. The IEC targets should have been split for the two activities to improve accountability, create greater impact- not restrictive to IEC and improve spending rationale. 3. The methodology to compute IEC reach was not accurate and lacked sound logic. The methodology was unable to measure the change in health seeking behaviour, which is an essential output of creating awareness.
<p>Increase accessibility of eye care services for 1.49 million inhabitants of Kolkata during the project period, particularly for slum dwellers.</p>	<ul style="list-style-type: none"> • 14 VCs were operationalized in the slums of the community and equipped with basic refractive and primary eye care equipment. • The VCs were conceptualized to refract 0.17 million people and provide 37,000 people with primary eye care services. • Screening camps held in community to reach 100,000 persons annually and in schools to screen 20,000 students over the project duration across 200 schools. • Make advanced surgical and clinical services to include 20,000 adult cataract surgeries, 130 paediatric cataract surgeries, 720 glaucoma services and 150 LV/ DR services at base hospitals • 137,000 spectacles to be dispensed with 109,600 paid for through VCs and 27,400 through school screening programme 	<ol style="list-style-type: none"> 1. The targets set for PEC clinics and refractions at VCs were different. For VCs (manned by optometrists) the targets were set at ~25-30 per operational day, whereas for PEC clinics (manned by an ophthalmologist) the targets were set at ~50 per operational day. Since PEC clinics were held once a month and patients needing these services were pooled, the targets were logical, however from the perspective of ensuring quality time for the doctors to manage these patients, these targets seemed high. 2. Screening targets should have been set higher to ensure adequate referrals to the VCs for assessment. Given the prevalence of ~2% of RE in general population, outreach screening targets should have been at least twice the proposed targets. 3. Assuming that all patients requiring cataract surgery would be initially refracted and referred by the VCs, the congruence between Adult cataract surgery targets & VC targets was lacking (assuming that one in every five refracted at the VC would need cataract surgery). 4. There was a clear mismatch in targets set for refraction at VCs and spectacles to be dispensed. With a target of refracting 170,000 persons at the VCs the target for dispensing spectacles was very high at 109,600, assuming one in every 1.5 visits would require spectacles. Similarly for school screening, while the screening targets were set at 20,000, the spectacle dispensing targets were set higher at 27,400, which was inconsistent.

<p>Develop human resources to provide sustainable eye care services in the project area during the project period and beyond</p>	<ul style="list-style-type: none"> • 25 staff (optometrists) were to be trained through the five years. • 140 health workers and 300 government health workers were to be trained through the five years. • 200 school teacher trainings were planned through the five years 	<ol style="list-style-type: none"> 1. The set targets were adequate as per the programme requirements to build human resources. 2. The targets set included refresher trainings and new trainings and hence the final output of actual number of human resources trained was much lower. Separate targets for refresher training (for already trained candidates) and new candidate trainings should have been designed.
<p>Establish and develop strong referral networks for both eye care and LV/ VI patients through which the community continue accessing services beyond the project period.</p>	<ul style="list-style-type: none"> • Patient referral networks established and referral cards distributed to the patients and partner hospitals • Five state level stakeholder meetings to be conducted over the project duration. • Three special events were to be organized to promote greater and focused awareness. • Three sensitization workshops for corporate personnel and 8 Advocacy meetings for employability over the project period were planned. 	<ol style="list-style-type: none"> 1. The proposed approach to build referral networks and ensure access beyond the project duration was appropriate. 2. The targets for engagement with stakeholders were aimed at ensuring advocacy and continuity. While given the scale of operations, the targets appear low, operational hindrance and ability to get stakeholders on a common platform were some of the challenges, which justified the set targets.

Figure 10: Gender distribution of the respondents

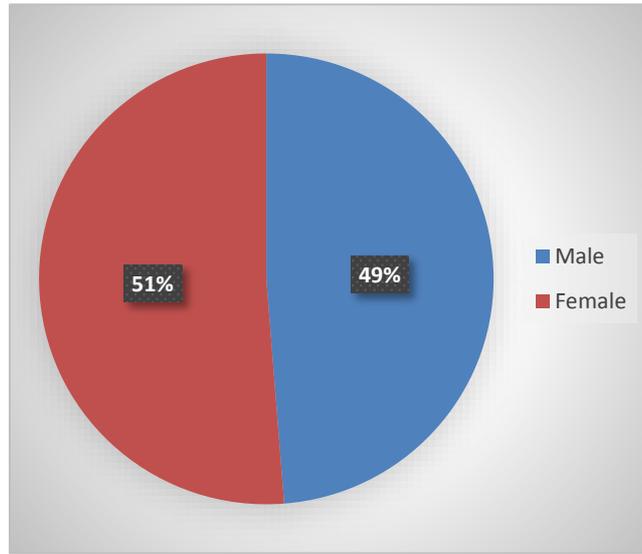


Figure 11: Employment type of the respondents

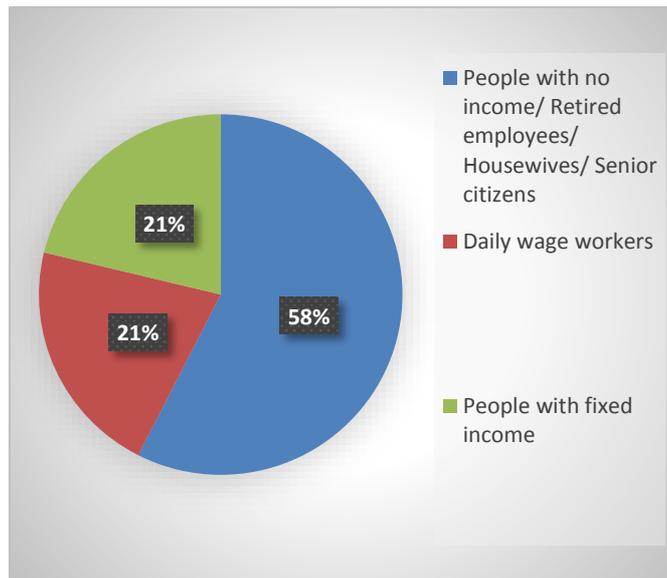


Figure 12: Age distribution of the respondents

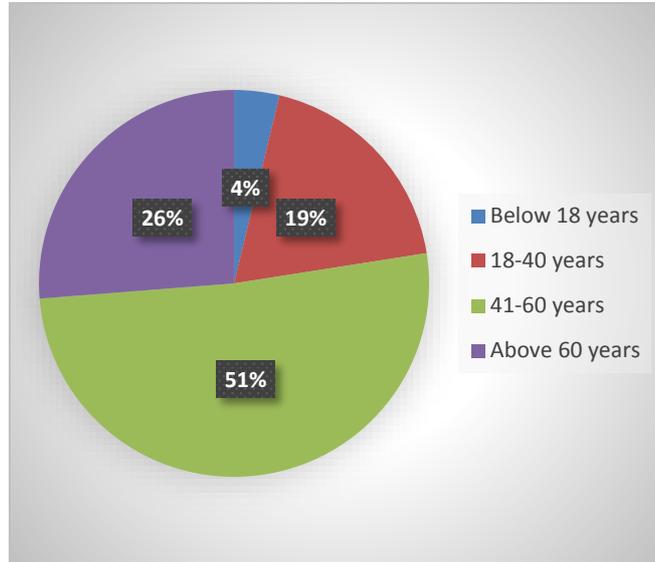


Figure 13: Structure and role of different stakeholder groups in the programme concept

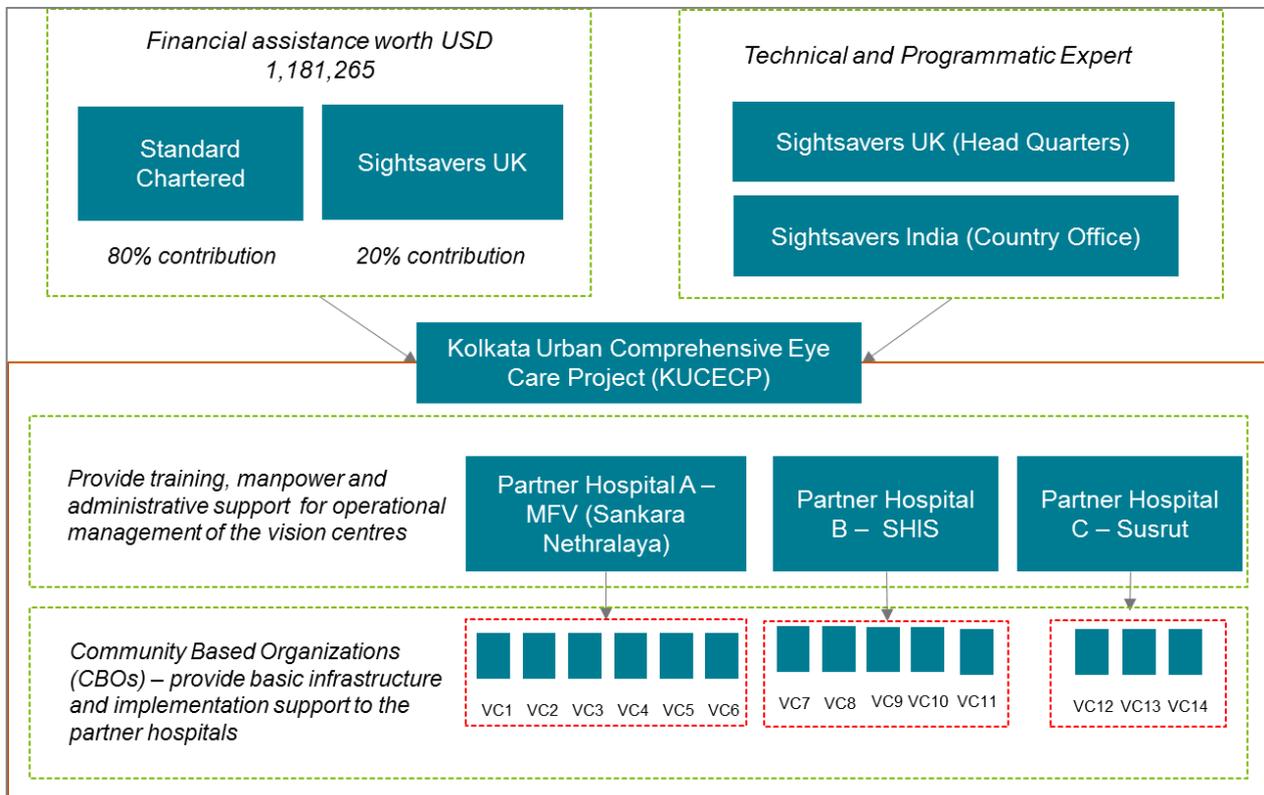


Table 33: Rationale for evaluation criteria rating

	Highly Satisfactory	There is strong evidence that the evaluated initiative fully meets all or almost all aspects of the evaluation criterion under consideration. The findings indicate a highly satisfactory, largely above average achievement/progress/attainment and potentially a reference for effective practice.
	Satisfactory	There is strong evidence that the evaluated initiative mostly meets the aspects of the evaluation criterion under consideration. The situation is considered satisfactory, but there is room for improvements. Achievement/progress/attainment under this criterion is potentially a reference for effective practice. There is need for a management response to address the issues which are not met.
	Caution	There is strong evidence that the evaluated initiative partially meets some aspects of the evaluation criterion under consideration. There are issues which need to be addressed and improvements are necessary under this criterion. There is need for a strong and clear management response to address these issues. Evaluation findings are potentially a reference for learning from failure.
	Problematic	There is strong evidence that the evaluated initiative is borderline in terms of meeting the aspects of the evaluation criterion under review. There are several issues which need to be addressed. Evaluation findings are potentially a reference for learning from failure. There is need for a strong and clear management response to address these issues.
	Serious Deficiencies	There is strong evidence that the evaluated initiative does not meet key aspects of the evaluation criterion under consideration and is performing poorly. There are serious deficiencies in the evaluated initiative. There is need for a strong and clear management response to address these issues. Evaluation findings are potentially a reference for learning from failure.
	Not Sufficient Evidence	There is not sufficient evidence to rate the evaluated initiative against the criterion under review. The programme needs to seriously address lack of evidence in their initiative.

5.2. Appendix B: Questionnaires for Primary Interviews

5.2.1. Consent to Participate in Research

End-Term Evaluation of Kolkata Urban Eye Care Project (KUCECP)

You are invited to participate in a research study conducted by KPMG India Private Limited, who is contracted by Sightsavers for evaluation of KUCECP.

Your participation in this study is entirely voluntary. You should read the information below and ask questions about anything you do not understand, before deciding whether or not to participate. You are being asked to participate in this study because you are one of the stakeholders of the KUCECP.

PURPOSE OF THE STUDY: The purpose of this study is to understand the effectiveness of KUCECP and its approach in reducing avoidable blindness in Kolkata in the programme catchment area, specifically as a result of uncorrected refractive error. The implementers hope to use what they learn from the study to determine the impact and make changes to the programme so that it can benefit more people.

PROCEDURES: You will be asked to complete a questionnaire yourself or assisted by someone to complete a questionnaire. Questions will include details about the impact of the campaign, its effectiveness in reducing blindness and possible impediments.

POTENTIAL RISKS AND DISCOMFORTS: We expect that any risks, discomforts, or inconveniences will be minor and we believe that they are not likely to happen. If discomforts become a problem, you may discontinue your participation.

POTENTIAL BENEFITS TO SUBJECTS AND/OR TO SOCIETY: It is not likely that you will benefit directly from participation in this study, but the research should help the implementers learn how to improve services for people with eye diseases. This study does not include procedures that will improve your physical disability or general health.

PAYMENT FOR PARTICIPATION: You will not receive any payment or other compensation for participation in this study. There is also no cost to you for participation.

CONFIDENTIALITY: Any information that is obtained in connection with this study and that can be identified with you will remain confidential and will be disclosed only with your permission or as required by law. Confidentiality will be maintained at all times and we will not use your name in any of the information we get from this study or in any of the research reports. When the study is finished, we will destroy all the information collected from you. Information that can identify you individually will not be released to anyone outside the study. All data, including questionnaires will be kept in a secure location and only those directly involved with the research will have access to them. We may use any information that we get from this study in any way we think is best for publication or education. Any information we use for publication will not identify you individually.

PARTICIPATION AND WITHDRAWAL: You can choose whether or not to be a part of this study. If you volunteer to participate in this study, you may withdraw at any time without consequences of any kind. You may also refuse to answer any questions you do not want to answer. There is no penalty if you withdraw from the study and you will not lose any benefits to which you are otherwise entitled. The investigator may withdraw you from this research if your participation is found to be redundant.

IDENTIFICATION OF INVESTIGATORS: If you have any questions or concerns about the research, please feel free to contact:

Dr. Sushant Patel
KPMG India
022-3090 2089
sushantpatel@kpmg.com

Ms. Sampa Paul
Sightsavers India
033-4008 6225
spaul@sightsavers.org

I understand the procedures described above. My questions have been answered to my satisfaction, and I agree to participate in this study. I have been given a copy of this form.

Name of Respondent

Signature of Respondent

Date

5.2.2. Interview Schedule for the Community

Age:	Gender:	Nature of Employment:
BPL Card Holder / Antoday Card Holder / Other Card Holder	Local worker / Migrant worker	Point of interaction: Community/ Vision Centre
<i>A,B,C,D,E,F,I set of questions only for Vision Centre</i>	<i>A,B,C,D,G,H,I set of questions for Outside the Vision Centre</i>	Services sought for: Self / Children / Family

A. General Awareness about the CBO/NGO

1. Are you aware of the activities of the CBO in your area? If yes, what are the activities you are aware about?

Activity A	Activity B	Activity C	Activity D
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2. Have you or a family member used any of the services provided? If yes, which services were used?

Service A	Service B	Service C	Service D
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3. Do you think that the needs of the community could have been better served if the CBO focused on other aspects, like water, sanitation, livelihood, other health areas etc.? Why do you think so?
4. Are you aware of any other NGO/CBO working in your area for development of the community? What is the work that they do?

B. General Awareness about Eye Care Services

1. Are you aware of any eye care services provided by the CBO? (Yes / No)
- b. If yes, which services are you aware of?

Eye health education/ awareness	1
Eye screening	2
Refractive error treatment / Glasses provision	3
Cataract treatment	4
Eye surgeries	5
Any other:	6

- c. How did you come to know about these services?

IEC Material (Mention which IEC material)	1
Community Health Worker	2
Referred by someone else	3
CBO referred	4
Any other:	5

- d. If no, do you think you or your community need eye care services?
- i. If no, where would you go or who would you approach for your eye care needs?
(CBO/ CHW/ Hospital/ Clinic – name the hospital/ clinic)

C. General Awareness about Eye Care

1. Are you aware of the common symptoms of eye trouble (Yes / No)? If yes, please mention.
- | | |
|------------------|-----------------|
| a. Watery eye | d. Itching eyes |
| b. Blurry vision | e. Headache |
| c. Burning eyes | f. Any other: |

How did you come to know about these symptoms?

2. Have you or your family member suffered from any of these symptoms in the past one year (Yes / No)
3. If yes, what did you do when you experienced these symptoms? (Can select more than one option) Please provide a reason for your action/s?

Visited an allopathic doctor	1
Visited an alternative medicine/traditional doctor (homeopathic, ayurvedic, unani, quacks, others)	2
Take home remedy	3
Visited an eye specialist (Private)	4
Visited an eye specialist (Public)	5
Visited a chemist shop	6
I took some general medicines myself	7
Did nothing	8
Don't know/Can't Say	9
Others	10

4. If the answer to Q9 is 1, 3, 4, how much did you pay to avail the services? Rs. _____
5. If the answer to Q9 is 1, 3, 4, what was your expenditure on medicines, diagnostics and other medical equipment? Rs. _____
6. Do you think it is important to get an eye examination done once in two year? (Yes / No)
Why do you think so?

D. Awareness about the Programme and Vision Centres

1. Are you aware about the Kolkata Urban Comprehensive Eye Care Project or Sightsavers? (Y/N)
2. (If yes for 1), How did you first hear about KUCECP or the Vision Centre?

Through word of mouth	Through the community health worker	Through an awareness campaign or IEC material	Other:
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3. (If yes for 1), what do you think are the key activities under the programme? (can select multiple options)

Eye screening / Eye check up	1
Treatment of refractive error / Provide eye glasses	2
Eye surgeries	3
Treatment of cataract	4
Treatment of glaucoma & diabetic retinopathy	5
Anything else:	6

E. Utilization, Access, Availability, Affordability of Vision Centre Services

1. What was the reason/problem for visiting the vision centre?

Decreased vision	Red eyes/ eye discharge	Eye pain	CHW suggested	Other:
------------------	----------------------------	----------	---------------	--------

2. Why did you not visit the vision centre before?

- | | |
|---|---|
| a. Unaware of the vision centre | d. Did not suffer from any eye problems |
| b. Could not afford the services/spectacles | e. Visited before, now visiting again |
| c. Did not find time | f. Other: |

3. How many times have you visited the vision centre in the past two months? _____

4. What services (set of services) were provided to you when you visited the vision centre? Or what did your visit to the vision centre lead to?

Eye Examination done only	Medications prescribed	Spectacles prescribed	Medications prescribed and referred to higher facility for medical treatment	Referred to higher facility for surgical treatment	Other:
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5. How much did you pay for the services (set of services) you were provided at the vision centre?

Eye Examination Only (Rs. _____)	Spectacles Prescribed (Rs. _____)	Others: (Rs. _____)
-------------------------------------	--------------------------------------	------------------------

6. Do you think the amount you paid for the services was appropriate/ justified? (Yes / No)
If no, what would have been an appropriate fees?

Eye Examination Only (Rs. _____)	Spectacles Prescribed (Rs. _____)	Others: (Rs. _____)
--------------------------------------	---------------------------------------	-------------------------

7. Why would you be willing to pay the prices as mentioned in 6 above?

That's what other NGOs/ Government provide for	That's what the market rate is	We can't afford	Don't know / Others:
--	-----------------------------------	-----------------	----------------------

8. If you were prescribed spectacles, how long did you have to wait for your pair? _____
9. If you were referred to another facility/ referral hospital, what was the purpose of referral?
What were the fees charged?
Did you find these fees too high? Why? (Check and Note – if there is any other facility in the locality which provides services at lower costs, other than government)

F. Post-treatment Impact and Satisfaction (Infrastructure and Resources)

1. Have you been provided relief from your existing problem for which you visited the vision centre?

Yes	No	Partially	Can't Say
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2. What were the problems/hindrances faced while availing eye care services at the vision centre?
3. How will you rate the quality of services at the vision centre on a scale of five (1- Very poor, 2- Poor, 3- Average, 4- Good and 5- Very good)? Please provide reasons for your rating.
4. How will you rate the time taken in availing the services, at the vision centre, on a scale of five (1- Very poor, 2- Poor, 3- Average, 4- Good and 5- Very good)? Please provide reasons for your rating.
5. How will you rate the behaviour (including efficiency and training) of the staff/service providers on a scale of five (1- Very poor, 2- Poor, 3- Average, 4- Good and 5- Very good)? Please provide reasons for your rating.
6. How will you rate the infrastructure (equipment) availability at the vision centre on a scale of five (1- Very poor, 2- Poor, 3- Average, 4- Good and 5- Very good)? Please provide reasons for your rating.
7. How can the current services/processes be improved?
8. What additional services would you want to be added to the existing ones?

G. Benefits from the Programme to the Beneficiary

1. What according to you have been the benefits of the programme to the community?

It has increased awareness about eye health	It has made low cost care available	It has improved access to eye care services	Others:
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2. If you were provided with spectacles/cataract surgery/ DM treatment etc.,

a. Did it help reduce your dependency on your family members? (e.g. able to do tasks on your own)

Very Significantly	Significantly	Not very significantly	Nothing Changed
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b. Did it improve your social position/ respect? (e.g. change in attitude of others towards you)

Very Significantly	Significantly	Not very significantly	Nothing Changed
--------------------	---------------	------------------------	-----------------

c. Did it improve your employment capability/ working capacity? (e.g. got a better paying job, able to perform daily chores better etc.)

Very Significantly	Significantly	Not very significantly	Nothing Changed
--------------------	---------------	------------------------	-----------------

d. Would you recommend these services to others (friends/ relatives)? (Yes / No)
Why? _____

H. Concerns of the Beneficiary related to the Programme/ Vision Centre Staff

1. Do you think the services provided under the programme are comprehensive and as per the needs of the community?

2. If no, is there a need to add more services? Please specify.

3. Do you have any concerns related to the quality of services provided by the intervention/ programme? What are the specific concerns?

4. Did you face any challenges – operational, financial or otherwise, while availing the services? Please specify.

5. Did the community health workers follow up with you on a regular basis after availing the services to track your progress? If yes, do you think it was required?

6. Do you have any suggestions on improving the programme in terms of its reach, coverage or other aspects?

I. Miscellaneous

1. What is your yearly household expenditure on healthcare? Rs. _____
What is it mostly spent on?
 - a. Medicines
 - b. Consultations
 - c. Hospitalization
 - d. Other:
2. When do you seek healthcare services?
 - a. When critically ill
 - b. When you feel uneasy
 - c. As a preventive measure
 - d. Other:
3. Which facility do you prefer for seeking consultation services? And Why?
 - a. Government
 - b. Private
 - c. CBOs / NGOs
 - d. Others:
4. Which facility do you prefer for seeking hospitalization services? And Why?
 - a. Government
 - b. Private
 - c. CBOs / NGOs
 - d. Others:
5. What is your yearly household expenditure on eye care? Rs. _____
6. Are you aware of any other social developmental initiatives/interventions in your community by other agencies/ government, like schemes related to employment, health, infrastructure etc.?
If yes, please elaborate on these initiatives.

5.2.3. Interview Schedule for CBOs, Project Staff (Optometrists & CHWs) and Schools (Teachers)

Participants Name(s):	Association / Operational since:
CBO/School Name:	Location:

A. Eye Care Services – Relevance

1. What according to you is the prevalence of refractive error/ eye problems in these three age groups?

Children (0-18 years)	Adults (19-60 years)	Senior Citizen (60 years+)

2. What is the level of awareness for eye care in the community/school? (High/ Medium/ Low)

3. Has there been a change in the awareness level after the intervention?
If yes, what are the indicators of this change that you see in the community?
Can you suggest the reasons for this change?

4. What do you know about the National Programme for Control of Blindness? Was any information regarding the NPCB shared with you/your organization?

5. In your opinion, how do you think the KUCECP is most relevant to the community needs?

It has increased awareness	It has improved affordability to eye care services	It has improved accessibility and availability of services	Others:
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6. What do you think of the affordability of services/ spectacles in the community?

Most can afford at current KUCECP rates	Most can't afford at current KUCECP rates	Most can afford at current market rates	Any other specific information:
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7. Please also provide the market rate for the following

Eye Examination: Rs.	A pair of spectacles: Rs.
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CBOs

- What is the current level of acceptability of the services in your community? (High/ Medium/ Low)
- What can be done to increase the relevance of the programme for the community (e.g. provide more services, focus on awareness building, reduce cost of services etc.)

Teachers

- a. Has the level of acceptance of eye glasses among students improved over the years? (Yes / No)
- b. How does the programme ensure participation from students, i.e. improving their ability to identify and seek eye health services?

Project Staff – Vision Centre

- a. Is the structure of the programme in tandem with the community needs, i.e. are the services being provided as required/ in demand?
- b. Is there anything that can be done to improve relevance of the programme for the communities or the national eye health objectives?

B. Eye Care Services – Efficiency/ Effectiveness

1. What are the major eye care related requirements in your community?

Refractive Error Correcting Glass	Cataract Treatment	Glaucoma Treatment	Others:
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2. Do you think the KUCECP programme has been able to influence better utilization of eye care services in the community?
3. Did you face any kind of constraints during the implementation of programme (Yes / No)? If yes, please elaborate _____
4. What would be your suggestion to make the programme more effective and efficient?

CBOs

- a. Were you or any of your staff provided any training/ orientation on eye health and its services?
- b. What was training/ orientation about? Can you provide some specifics?
- c. Do you think the training/ orientation was helpful to you? (Yes / No) Why? _____

Teachers

- a. Were you provided any training on eye health? (Yes / No)
- b. What was the training about? Please provide some specifics?
- c. How often have you been able to identify students with eye problems? What is the typical guidance you provide?

Project Staff – Vision Centre

- a. What is the average load of patients/ walk-ins into the vision centre on a daily/ weekly basis?
- b. Has this increased over the years? (Yes / No) Why?
- c. What can be done to improve your efficiency (if they have higher loads)? E.g. provide trainings, incentives, better equipment etc.

C. Eye Care Services – Impact

1. What is the size of the population catered to by your NGO/ CBO/ School? What is the percentage of total population who have benefited from this initiative?
2. What has improved for the affected individuals?
 - a. Social inclusion
 - b. Better employability
 - c. Enhanced income
 - d. Better performance in school
 - e. Others: _____

Explain as to how (cite examples or experience)

3. For CBOs, how did this initiative help other functions of your CBO?
 - a. Better acceptability of other services
 - b. More reach
 - c. Better appreciation by the community
 - d. Knowledge of staff improved
 - e. Enhanced/extra income
 - f. Others: _____

Explain as to how (cite examples or experience)

4. For school teacher, how did the initiative help you perform your activities better?
 - a. It has enhanced your general teaching/ counselling skills
 - b. It has improved your rapport with the students and their parents
 - c. It has helped you by increasing your knowledge
 - d. It has led to enhanced performance by your students
 - e. Others: _____

Explain as to how (cite examples or experience)

D. Eye Care – Sustainability/ Scalability/ Replicability

1. Can this initiative be easily scaled up? (Yes / No) Why do you think so?
2. If Yes, please suggest how the initiative can be scaled up.

3. Is the initiative sustainable without the funding? (Yes / No). Why do you think so?
 If No, can you suggest and elaborate on possible ways to make it sustainable, without the funding?

4. Rate the different components in terms of the requirements to scale up (High/ Medium/ Low) with corresponding reasons for your ratings.

Infrastructure	Resource Capabilities	Funding Requirements	Operation protocols complexity

E. Coherence/Coordination

1. How do you rate your partnership with Sightsavers? (Please rate on a scale of five, 1-Very poor, 2-Poor, 3-Average, 4-Good, 5-Very Good). Please provide reasons for your rating.
2. How do you rate your partnership with the Partner Hospitals and their staff? (Please rate on a scale of five, 1-Very poor, 2-Poor, 3-Average, 4-Good, 5-Very Good). Please provide reasons for your rating.
3. How do you rate your partnership with the local CBO (for schools/ project staff)? (Please rate on a scale of five, 1-Very poor, 2-Poor, 3-Average, 4-Good, 5-Very Good). Please provide reasons for your rating.
4. How do you rate your partnership with State Blindness Control Society or Government agency? (Please rate on a scale of five, 1-Very poor, 2-Poor, 3-Average, 4-Good, 5-Very Good). Please provide reasons for your rating.
5. Please mention the key advantages and disadvantages of your partnership for this programme.

5.2.4. Interview Schedule for Partner Hospitals (Programme Coordinators and Ophthalmologists)

A. Partner Hospital Overview

Number of vision centres	Number of staff deployed for vision centre	Glasses distributed (in last 5 years)	Screening done (in last 5 years)	Total patients referred

Number of referred patients with different complexities in last 4 years

Cataract	Glaucoma	Acute eye care	Others:	% of patients treated free	Funding source

B. Partner Hospital Perspective

- How would you rate the overall programme from the perspective of the following? (Please rate on a scale of five, 1-Very poor, 2-Poor, 3-Average, 4-Good, 5-Very Good). Please provide reasons for your rating.

Relevance	Effectiveness	Efficiency	Scalability	Sustainability

- What was the best/innovative aspect of the programme? (in reference to the national goals set)
 - Community outreach
 - Sustainability (Revenue model)
 - Local resource training (Capability development)
 - Other:

Please provide a reason for your response.

- Which aspect of the programme needs to be relooked at?
How would it create a better impact?

- Has the programme been able to achieve the level of impact it intended to in terms of, (Answer in Yes / No)
 - Awareness –
 - Accessibility –
 - Affordability –
 - Appropriateness –

Please provide reasons for your responses.

If No to any of these sub-categories, how many years more would be needed to create this impact? Why?

5. How would you rate the overall experience of the programme? (Please rate on a scale of five, 1-Very poor, 2-Poor, 3-Average, 4-Good, 5-Very Good). Please provide reasons for your rating.
6. Key suggestions/ constraints related to the programme

C. Post Withdrawal Impact

1. Do you believe that withdrawal of the programme will impact the community? What is the anticipated impact?
2. Do you believe that withdrawal of the programme will impact your organization? What is the anticipated impact?
3. Which of the VCs will continue to function going forward?
4. Do you have a strategy to continue to work under this programme? How do you plan to do it?

D. Any other comments

5.2.5. Interview Guide for Government Officials

Name:	Designation:
Department:	Municipality/ State Government/ NPCB

1. Are you aware of the Sightsavers and Standard Chartered Bank's 'Seeing is Believing' initiative?
2. Are you aware of the interventions done under this flagship initiative?
3. How critical is eye care amidst the myriad of health priorities for the Municipality/ Government?
Can you share any estimates of typical spending dedicated for eye care per year?
4. Do you think the SiB initiative is relevant for the urban population of Kolkata?
If so why?
5. Does the programme complement the existing government interventions especially for the control of blindness?
Or is it a replication of the government's programme?
Are there any innovations that can be built into the existing programme?
6. Does the municipality/ Government see any potential for collaboration with likeminded NGOs focused on eye care to improve the eye health condition in the city?
If Yes, what would be the format of such a collaboration? E.g. Training partnerships, partnerships to deliver eye care services, Funding partnerships, Infrastructure partnerships etc.
7. Are there any specific areas of concern, as seen by the government/ municipality, with reference to eye care services?
If Yes, What are they?
How does the government/ municipality propose Sightsavers should contribute in addressing to these concerns?
8. Are the existing levels of coordination, collaboration and coherence adequate?
If not, what can be done to improve collaboration with the government/ municipalities?

5.3. Appendix C: Terms of Reference

Kolkata Urban Comprehensive Eye Care Project – End Term Evaluation

1.0 BACKGROUND

1.1 PROJECT NAME

Kolkata Urban Comprehensive Eye Care Project

1.2 PROJECT NUMBER

63405

1.3 PROJECT DURATION

April 2010 – March 2015

1.4 PROJECT BUDGET

USD 1,181,265

1.5 PROJECT PARTNERS

- Standard Chartered Bank (principal donor)
- Mission for Vision
- Susrut Eye Foundation
- Research Centre and Southern Health Improvement Samity
- Sankara Netralaya Medical Research Foundation

1.6 ABOUT SIGHTSAVERS

Sightsavers is an international development organization that works in more than 30 countries to eliminate avoidable blindness and support people with visual impairment to live independently. Sightsavers works to support and strengthen eye health systems by working with Government and NGO partners to improve the provision of eye care services, especially for the poorest and least served populations and communities. Sightsavers commenced working in India in 1966 and has supported the treatment of millions of people with eye disorders and brought eye services to some of the least served areas of the country. In addition many thousands of irreversibly blind people have received rehabilitation and educational support to enable them to lead lives of independence and dignity.

Sightsavers has been implementing the Standard Chartered Bank's, Seeing is Believing (SiB) projects in India since 2009 commencing with the Mumbai Eye Care Campaign (MECC) under SiB Phase IV. The Kolkata Urban Comprehensive Eye Care project (KUCECP) is part of SiB Phase IV. Within the region, SiB Phase IV has also been implemented in Bangladesh as the Dhaka Urban Comprehensive Eye Care Project (DUCECP). The evaluation of the Kolkata project will be closely linked with recent evaluations of both the Mumbai SiB Phase IV and the Bangladesh SiB Phase IV projects in order to provide cross-project learning and evaluation synergies.

The total cost of the project is USD 1,181,265. Standard Chartered Bank has contributed 80% of this amount, USD 945,012 and Sightsavers has contributed the remaining 20% USD 236,253.

1.6 ABOUT THE PROJECT

The KUCECP is in accordance with Sightsavers plans and policies that aim at reducing avoidable blindness among the indigent people, especially among vulnerable women and children living in the urban slum areas of Kolkata. The KUCECP has been implemented from 2010-2015, and was designed after the implementation of a pilot project in five slum areas of Kolkata from 2009 - 2010. The learnings for the pilot were used to design the present project. The project is a civil society initiative. Sightsavers has partnered with three local NGOs towards this end. The three local NGOs are: **Mission for Vision, Susrut Eye Foundation and Research Centre and Southern Health Improvement Samity**. Initially the project had four project partners, SHIS, Susrut, SPAR, MFV and Shankar Netralaya. MFV and Shankar Netralaya and Sightsavers has a tripartite agreement and the surgery grant goes to Shankar Netralaya. SPAR was dropped as a partner during the middle of the project because of non-performance. Financial support is received from Standard Chartered Bank. KUCECP seeks to eliminate avoidable blindness in the slum population of Kolkata Municipal Corporation. It is a five year initiative (April 2010 - March 2015). Currently, the project is in its fifth year. The project is large and multidimensional, attempting to provide primary eye care services to the slum population in Kolkata Municipal Corporation. It has a large community based component (including Vision Centres, community outreach) and seeks to make available quality and economical eye care related surgeries at three referral hospitals in the city.

1.7 OBJECTIVES OF THE PROJECT

- To increase awareness level of the community about eye care by the end of the project period.
- To increase accessibility of eye care services for **1.49 million** inhabitants of Kolkata during the project period, particularly for slum dwellers.
- To develop human resources to provide sustainable eye care services in the project area during the project period and beyond
- To establish and develop strong referral networks for both eye care and Low Vision (LV)/Visual Impairment (VI) patients through which the community can continue to access services beyond the project period.

2.0 PURPOSE OF EVALUATION

The overall purpose of the evaluation is firstly to understand the effectiveness of KUCECP and its approach in reducing avoidable blindness in Kolkata in the project catchment area, specifically as a result of **cataract and uncorrected refractive error**. Secondly to understand how the project was able to incorporate elements peculiar to urban health and specifically address the health challenges in an urban setting.

This evaluation will follow a methodology similar to the evaluations of MECC SiB Phase IV, and the Bangladesh DUCECP in order to provide key, joint lessons as well as assessing the Kolkata project directly. Sightsavers will work very closely with the selected applicant to determine the approach and methodology to be used.

2.1 EVALUATION CRITERIA

The following are the key questions that guide the evaluation encompassing Sightsavers seven evaluation criteria:

Relevance

- How relevant is the project to the identified needs of the target beneficiaries, with special emphasis on the underserved urban population?
- How well, and in what ways, does the project align with India eye health priorities (i.e. National Plan, State and City level eye health plans) and with Vision 2020 2009-2013 Action Plans?

Effectiveness

- How effective has the project been in meeting its intended objectives? specifically:
 - How effective have mechanisms been which sought to increase awareness and stimulate community demand for eye care services?
 - How effective are the referral mechanisms developed for eye care, low vision and visual impairment at different levels?
 - To what extent is the staff trained through the project competently performing their duties?
 - Have the cataract surgical volumes at the partner hospitals changed over the life of the project, based on available data?
 - To what extent have hospital partners been able to manage increased volume of cases as a result of this project?
- What have been the major factors affecting achievement and non-achievement of the project objectives.

Efficiency

- How efficiently have the project activities been implemented, in terms of management and governance arrangements?
- Were activities and objectives achieved on time?
- Was the programme or project implemented in the most efficient way compared to other types of approach which might have been taken?
- Has the infrastructure and equipment been sufficient and efficient in contributing to achieving the desired results?

Impact

- Has delivery of the project outputs and activities led to the anticipated and desired outcomes and impact?
- In the context of relevant World Health Organisation building blocks for Health Systems Strengthening (e.g. HR training, Infrastructure, Service Delivery), what are the main changes produced by the programme, positive or negative, and what are the key factors behind these changes?
- What is the perception of all the key stakeholders of the project and its impact? e.g. the beneficiaries, local authorities / government and staff (hospital, vision centre).
- Has the project intervention lead to any unintended outcomes or impact?

Sustainability

- To what extent are the project interventions likely to be technically, financially and programmatically sustainable after Sightsavers support comes to a close?
- Specifically, are the VC's financially viable? Do the CBO's and hospitals 'managing' the VC's want to continue supporting them?
- What have been the challenges in attaining sustainability?
- What specific modifications, if any, in approach and actions could have brought about greater sustainability of the vision centres?
- How effectively has the project involved the community, especially Community Based Organisations, to address issues of sustainability?

Coherence/Coordination

- Have there been any specific gaps in coordination which have impacted the smooth functioning of the project e.g. in partnership functioning, implementation or management?
- Specifically, how well has the project coordinated with the local health authorities in Kolkata, especially the State Blindness Control society, and how has this contributed to the achievements of the project?
- How have the project activities been coordinated in light of similar or other sectoral interventions/approaches in the region?
- Are the project objectives, approaches and design coherent and complimentary with each other?

Scalability / Replicability

- Which aspects of the programme are suitable to be scaled or replicated by participating partners, other agencies or government? How likely is this to occur or what conditions need to exist for this to happen? What factors or constraints might inhibit this process?
- What evidence and learnings have been generated by the project to support efforts to take the project to scale by interested parties?
- Would greater potential for scalability or replicability have been achieved if there had been specific actions and/or modifications in approach?

The key learning points and recommendations from the evaluation will contribute to Sightsavers programme design and future replication of such projects in other demographics in India and elsewhere.

3.0 EVALUATION TEAM

The review would be conducted by an external agency with sufficient experience in research and evaluations in the relevant field, **led by a person who has experience in the field of eye health, especially in urban conditions.** The Evaluation team would consist of experts from the following fields who would be able to assess the project on multi-dimensional aspects which has been mentioned in the evaluation criteria:

- The lead evaluator will have as a minimum the following core competencies;
 - Public health specialist experience,
 - Possess projects/programme analysis skills,
 - Comprehensive understanding of public health policy (national and global) and demonstrate sound knowledge in health systems strengthening and financing in developing countries.
 - S/he should have extensive experience in conducting medium scale evaluations.

- It would also be desirable for the team to include:
 - Team member with expertise in community participation

4.0 METHODOLOGY

For this evaluation, the methodology will be developed in close collaboration with Sightsavers, and will be based on the two previous evaluations of other SiB projects; Bangladesh Dhaka Urban Comprehensive Eye Care Project (DUCECP), and the Mumbai Eye Care Campaign (MECC). We anticipate having significant input to the development and shaping of the methodology to ensure that cross-programme learning is maximised.

The methodology is likely to include literature reviews, interviews and surveying conducted through field/project site visits. The appropriate sample size will be decided collectively by Sightsavers and the consultant, in a way that will avoid selection bias. The evaluation should meet the principles of participation involving both male and female beneficiaries.

The project had undertaken a baseline prior to the commencement of the project, the report of which is available.

Target groups and beneficiaries for evaluation

The following are the key target groups and beneficiaries who can be considered as participants for the evaluation:

- Community members in the slum including daily labourers, construction workers, domestic workers, and sex workers. The sample should include beneficiaries.
- Community Based Organisations engaged in the project
- Government health workers and staff working in/managing three vision centres in Municipal posts
- Project staff
- Partner hospitals
- Representatives from partner organisations
- Relevant government departments
- Other NGOs working in the catchment area
- Any other relevant stakeholder

The above stakeholder groups would be visited in their own locations in order to have first-hand information and interact with them for collecting the required data. The evaluation team will also be visiting a sample set of Vision Centres. There are 14 Vision Centres operational under the project. Three out of these 14 Vision Centres are being housed in Municipal health posts. All 14 vision centres are managed by the following partners:

1. Mission For Vision
2. Susrut Eye Hospital and Research Centre
3. Southern Health Improvement Samity

5.0 REFERENCE MATERIAL

The consultant shall be going through all the records that are been maintained by Sightsavers and partner hospitals including:

- The Project proposal

- Logframe
- Annual reports
- Half yearly reports
- Baseline report
- Midterm review
- Monthly financial reports
- Monthly Vision Centre reports
- Annual Key Performance Indicators (KPIs)

6.0 INDICATIVE TIMEFRAMES

The evaluation will require approximately 29 days inputs, and these days will include time for desk review, field activities, travel and report writing. The evaluation will be carried out over the months March – June 2015. The methodology development (done jointly with Sightsavers) and Inception Report will be done in March; field work is planned during first 3 weeks of April and report writing in April and May. **Submission of a draft Final Report will be due by 24th April 2015. The final report should be submitted to Sightsavers not later than 5th June 2015.** It is suggested the evaluation follows the following key phases:

Phase I - Desk Study: Review of Documentation and joint development of the Methodology and Tools [6 days]

The lead consultant/evaluation team will review relevant documentation from section 5 above (Reference material) and in discussion with Sightsavers' technical staff will jointly develop the methodology and sampling strategy of the data collection for evaluation study. Based on this review, the consultant will produce an *Inception Report* which will present the detailed methodology and tool set. The evaluation will only proceed to the next stage upon approval of this inception report. An appropriate inception report format will be made available to the team as part of this TOR.

Phase II: Data Collection [12 days]

This phase of the evaluation will seek to collect primary data on the key evaluation questions explained under evaluation criteria. The team will use the agreed plan, methodology and sampling strategy from phase 1 to conduct the field work.

Phase III – Data Analysis and Production of Evaluation report [11 days]

The team will draw out key issues in relation to evaluation questions and produce a comprehensive report.

The table below summarizes the key activities under the three phases outlined above envisaged for this assignment including *indicative* days for each activity. The number of days provides *indicative* levels of input. It is expected that consultants will work flexibly across these tasks:

6.1 EXPECTED NUMBER OF DAYS INPUT BY EVALUATOR/EVALUATION TEAM

Phase	Activity	No of Days
<i>Phase I – Desk study: Review of documentation and elaboration of field</i>	Desk research /literature Review and joint development of Methodology and Tools	3 days
	Inception Report	2 days

Phase	Activity	No of Days
Study	Revision of collection methods and tools based on inception report comments	1 days
Phase II: Field Data Collection	Field Visits & Data-collection	12 days
Phase III – Analysis and production of evaluation report	Debriefing (In-country)	1 days
	Data analysis and preparation of draft report	5 days
	Review of draft report from feedback.	5 days
	Submission of final report	
Total		29 days

7.0 OUTPUTS/ DELIVERABLES

7.1 INCEPTION REPORT:

The date for finalisation of the Inception Report will be agreed during the contracting phase but is likely to be required by mid-March. The evaluation team is expected to submit an inception report detailing their understanding and interpretation of the TOR within 6 working days of commencing this evaluation. The purpose of this report is to ensure that the evaluator covers the most crucial elements of the exercise including an appropriate and robust methodology to be employed. The inception report provides the organisation and the evaluators with an opportunity to verify that they share the same understanding about the evaluation and clarify any misunderstanding at the outset. The report should reflect the team's review of literature and the gaps that the field work will fill.

Field work will only commence once this report has been approved.

7.2 DRAFT REPORT

A draft report in the approved format from the evaluating team will be expected 5 days after the completion of field work and will be produced by the lead consultant. Sightsavers will provide the consultants with written feedback on the draft within **three weeks** of acknowledged receipt. Feedback should be included in the final report.

7.3 FINAL REPORT

The final report (**not more than 40 pages including executive summary and excluding annexes**) will be submitted to Sightsavers within 5 working days of receiving the feedback from Sightsavers on the draft report. Findings and recommendations from the Final Report will be used to assist Sightsavers and partners for future planning.

7.4 DATA SETS

The evaluation team will be expected to submit complete data sets (in Access/ Excel/Word) of all the quantitative data as well as the original transcribed qualitative data gathered during the exercise. These data sets should be provided at the time of submission of the final report.

7.5 SUMMARY FINDINGS

On submission of the final report, the team is expected to submit a PowerPoint presentation (**maximum 12 slides**), summarizing the methodology, challenges faced, key findings under each of the evaluation criteria and main recommendations.

8.0 REPORTING FORMAT

Detailed guidelines on how to structure the evaluation report will be provided to the evaluation team prior to commencement of the activity, and reporting templates will be provided which the team should use for the Inception Report and the Evaluation Report.

9.0 ADMINISTRATIVE / LOGISTICAL SUPPORT

9.1 BUDGET

The consultant should submit to Sightsavers an Expression of Interest indicating their daily rates for the assignment. Sightsavers will assess Expression of Interests submitted according to standardized quality assessment criteria, as well as on the basis of their competitiveness and value for money in line with the budget available for this evaluation. The daily fees proposed by the applicant should exclude expenses such as:

- Economy class airfares and visas (where applicable)
- In-country transportation
- Hotel accommodation (bed, breakfast and evening meals)
- Stationery and supplies
- Meeting venue hire and associated equipment e.g. projectors

Sightsavers usually cover the above costs, unless otherwise stated.

The consultant/team is expected to cover all other costs and materials not mentioned above related to this exercise as part of their daily fees or equipment (e.g. laptops).

9.2 SCHEDULE OF PAYMENT

The following payment schedule will be adhered to:

- On signing the contract: 20%
- On acceptance and approval of final inception report: 20%
- On submission of draft final report: 30%
- On acceptance and approval of final report: 30%

9.3 MODE OF PAYMENT

As agreed by Sightsavers and the consultant.

References / Bibliography

- ^I Universal eye health: a global action plan 2014-2019 (a WHO publication)
- ^{II} <http://sustainability.standardchartered.com/leading-the-way-in-communities/community-investment/seeing-is-believing.html>, Accessed on May 28, 2015
- ^{III} According to World Health Organization Reports
- ^{IV} <http://npcb.nic.in/>, Accessed on May 17, 2015
- ^V <http://www.indiaonlinepages.com/>, Accessed on May 17, 2015
- ^{VI} Dandona R et al. Population-based study of spectacles use in Southern India. Indian J Ophthalmol [serial online] 2002 [cited 2014 Nov 11];50:145-55
- ^{VII} Krishnaiah S et al. Prevalence and risk factors for refractive errors in the South Indian adult population: The Andhra Pradesh Eye disease study. Clinical Ophthalmology. 2009;3: 17-27
- ^{VIII} G. Venkata et al. Current estimates of blindness in India, Br J Ophthalmol 2005;89:257-260 doi:10.1136/bjo.2004.056937
- ^{IX} <http://www.jaypeedigital.com/Chapter/ChapterDetail/22150?AspxAutoDetectCookieSupport=1>, Accessed on May 26, 2015
- ^X According to *Prevalence of Glaucoma in India: A Review* by Ronnie George, Lingam Vijaya from Medical Research Foundation, Sankara Nethralaya, Chennai, India
- ^{XI} Shediak-Rizkallah 1998, Swerissen 2004
- ^{XII} Half Yearly Finance Report – Y4H2 and Y5H1
- ^{XIII} <http://www.livemint.com/Politics/zavbXY5w5oq6nB6vFcXarL/Kolkata-sees-dip-in-population-suburbs-register-an-increase.html>, Accessed on May 26, 2015
- ^{XIV} Dandona R et al. Population-based study of spectacles use in Southern India. Indian J Ophthalmol [serial online] 2002 [cited 2014 Nov 11];50:145-55
- ^{XV} National Programme for Control of Blindness, Vision 2020: The Right to Sight-Plan of Action, Ministry of Health and Family Welfare, Government of India, New Delhi. P.12- 35.
- ^{XVI} Krishnaiah S, Kovai V, Srinivas M, Shamanna BR, Rao GN, Thomas R. Awareness of glaucoma in the rural population of Southern India. Indian Journal of Ophthalmology. 2005;53(3):205.
- ^{XVII} Namperumalsamy P, Kim R, Vignesh TP, Nithya N, Royes J, Gijo T, et al. Prevalence and risk factors for diabetic retinopathy: a population-based assessment from Theni District, south India. Br J Ophthalmol. 2009 Apr;93(4):429-434.
- ^{XVIII} World's first smartphone diagnostic tool for the human eye which measures hyperopia, myopia, astigmatism, presbyopia and pupillary distance. Source: <http://eyenetra.com/product-netraq.html>, Accessed on May 29, 2015
- ^{XIX} Aravind Eye Care System, Retrieved from <http://www.aravind.org/aboutus/genesis.aspx>, Accessed on June 8, 2015
- ^{XX} Sankar Nethralaya, Retrieved from <http://www.sankaranethralaya.org/patient-care-eye-q.html>, Accessed on June 8, 2015

^{xxi} L V Prasad Eye Institute, Retrieved from <http://www.lvpei.org/aboutus.php>, Accessed on June 8, 2015

^{xxii} Regional VC Model Report, May 2013