

Sightsavers, FHF and COECSA

**Building Health Systems:
Promoting Eye Health for
Children in East Africa**

End of Project Evaluation

Final Report



July, 2017

Acknowledgements

The consultants would like to thank the staff of Christoffel BlindenMission (CBM) and collaborating partners in the consortium viz.; Sightsavers (SS), College of Ophthalmology for Eastern, Central and Southern Africa (COECSA), Fred Hollows Foundation (FHF) and governmental and other entities in the three project countries – for their dedicated support of this evaluation exercise. We further would like to appreciate the important role played by all the contacted persons especially the patient and training beneficiaries, for their kind support in freely providing information and engaging with us in constructive discussions.

Disclaimer

We wish to state that the contents of this report reflect the opinion of the evaluation team, which does not necessarily correspond to the opinion of CBM, consortium partners or collaborating governmental or other entity.

PROJECT INFORMATION SHEET

– CBM CONSORTIUM

Project Title	Building Health Systems: Promoting Eye Health for Children in East Africa
Project donors	Standard Chartered Bank
Name of consortium	The CBM Consortium
Consortium members	CBM; COECSA; Fred Hollows Foundation; Sightsavers
Contact Person/ Contact information	Sam Ogolla Regional Program Manager +254-20-3751 798 / 3751 654 / 3742 709 sogolla@cbmi-nbo.org
Project Locations and areas of coverage (health regions)	Kenya: Targeted health regions in Central; Nairobi; Coast; Western; North Rift; Nyanza; Eastern; and North Eastern Provinces
	Tanzania: Targeted health regions in: Iringa; Kigoma; Manyara; Mbeya; Rukwa; Tabora; Morogoro; Dar el Salaam; Mwanza; and Kilimanjaro
	Uganda: Targeted health regions in: Jinja; Hoima; Soroti; Gulu; Tororo; Arua; Mbarara; Lira; Fort Portal; Entebbe; Masaka; and Kampala
Project start	1 st January 2013
Project end	31 th December 2016 (extended by 6 Months to June 30, 2017)
Total project cost	USD 4,000,000
Amount contributed by Standard Chartered Bank	USD 3,200,000
Amount contributed by other fundors	USD 800,000
Reporting period	End of Project Evaluation (EPE) – June 2017

ABBREVIATIONS AND ACRONYMS

BHVI	Brien Holden Vision Institute
CBM	Christoffel BlindenMission
CEH	Child Eye Health
CEH	Children’s Eye Health
CME	Continuous Medical Education
COECSA	College of Ophthalmology for Eastern, Central and Southern Africa
CPD	Continuous Professional Development
FHF	Fred Hollows Foundation
HMIS	Health Management Information System
IAPB	International Agency for Prevention of Blindness
IEC	Information, Education, Communication
KCMC	Kilimanjaro Christian Medical Centre
M&E	Monitoring and Evaluation
MCH	Maternal Child Health
MDG	Millennium Development Goals
MMUST	Masinde Muliro University of Science and Technology
MOH	Ministry of Health
MTE	Mid-Term Evaluation
NEHC	National Eye Health Programme Coordinator
NEHPO	National Eye Health Programme Officer
OCO	Ophthalmic Clinical Officer
PEC	Primary Eye Care
PO	Paediatric Ophthalmologist
REHC	Regional Eye Health Coordinator
SDG	Sustainable Development Goals
SiB	Seeing is Believing
TOR	Terms of Reference
TOT	Training of Trainers
USD	United States Dollar

TABLE OF CONTENTS

	<u>Page</u>
ABBREVIATIONS AND ACRONYMS	iv
EXECUTIVE SUMMARY	vii
1. INTRODUCTION	1
1.1 Background to the Project	1
1.2 Programme Objectives	1
1.3 CBM Consortium Commitments	2
1.3.1 Service Delivery and Strengthen Referral and Follow-Up Systems	2
1.3.2 Capacity Building	2
1.3.3 Infrastructure Development.....	2
1.4 Context of the End of term Evaluation	2
1.5 Project Goal.....	4
1.6 Purpose of the Evaluation	5
2. EVALUATION METHODOLOGY.....	5
3. SUMMARY PRESENTATION OF FINDINGS	6
3.1 Consortium Objectives.....	6
3.2 Leadership and Governance	6
3.3 Strengthening Human Resources.....	7
3.4 Secondary and Tertiary Level Service Delivery.....	8
3.4.1 Project Design.....	8
3.4.2 Provision of Equipment/Infrastructure.....	8
3.5 Sustainability, Scalability and Future Programming	9
3.5.1 Sustainability	9
3.5.2 Scalability.....	9
3.5.3 Future Programming	9
3.6 Contribution of the SiB Project towards National Health Plans	10
3.7 Contribution of the SiB Project towards Health Systems Strengthening.....	10
3.8 Contribution of the SiB Project towards Achievement of Vision 2020.....	11
3.9 Effectiveness of the Children’s Eye Health Referral System.....	12
3.9.1 Barriers against Children Reporting to the Health Facilities	12
3.9.2 Potential for Improvement of the Uptake of Referral Practice.....	12
3.10 Evidence of Local Ownership of the Project.....	13
3.11 Engagement of Stakeholders in Decision-Making	13
3.12 Challenges and Risks	14
3.13 Sustainability	17
4. EVALUATION IN ADHERENCE TO OECD/DAC CRITERIA.....	17
4.1 Relevance	17
4.1.1 Programme Objectives and Design.....	17
4.1.2 Policies and Priorities of the Beneficiaries	19
4.2 Efficiency	20
4.2.1 Roles and Comparative Advantages of the Implementing Partners	20
4.2.2 Application of Funds.....	22

4.3	Effectiveness.....	23
4.3.1	Process of Service Delivery	23
4.3.2	Levels of Output Obtained	24
4.4	Impact.....	32
4.4.1	Impacts at the Household and Individual Level	32
4.4.2	Impact on the Health System.....	36
4.5	Sustainability and Replication	36
4.6	Child Safeguarding	37
5.	CONCLUSION AND RECOMMENDATIONS	37
5.1	Conclusions	37
5.2	Recommendations.....	38
6.	ANNEXES	39
6.1	Sources	39
6.2	References	42
6.3	SiB Project End Term Evaluation Data Collection Instrument.....	43

LIST OF TABLES

Table 1:	Geographic Area Covered by SiB Project.....	3
Table 2:	SiB Referral Hospital Clusters for Kenya, Uganda and Tanzania	3
Table 3:	Lograme Assumptions and Risks Analysis	15
Table 4:	Estimated Prevalence and Needs of SiB Target Populations in East Africa	18
Table 5:	Estimated Children Cataract Cases for East Africa in 2015.....	19
Table 6:	Analysis of Cumulative Project Expenditure to 31.12.2017	22
Table 7-	The number of children screened in Q2 2016 by country	26
Table 8-	Cataract surgeries performed in Q2 Year 4 by country	27
Table 9:	SiB Project Performance for Objective 1 – Eye Health Service Delivery	28
Table 10:	SiB Project Performance in Objective 2 – Human Resource Development.....	29
Table 11:	SiB Project Performance in Objective 2 – Human Resource Development.....	30

LIST OF FIGURES

Figure 1:	Cataract surgeries carried out in Quarter 3 and 4, 2014.....	25
Figure 2:	Children’s cataract surgeries carried out in 2015	26

EXECUTIVE SUMMARY

ES1 Introduction

In Kenya, Uganda and Tanzania, the Seeing-is-Believing (SiB) Child Eye Health (CEH) Project was implemented by two consortia, one of which was led by Christoffel BlindenMission (CBM). This evaluation relates only to the activities implemented by the CBM-led consortium made up of CBM, Sightsavers (SS), College of Ophthalmology for Eastern, Central and Southern Africa (COECSA), and Fred Hollows Foundation (FHF). This consortium was charged with the responsibility of fulfilling of objectives at the national and regional levels.

The evaluation applied evaluation instruments for key informant interviews, focus group discussions and observation. The report adheres to the Terms of Reference (TOR – Annex 3) and is structured in accordance with the criteria for evaluating humanitarian response recommended by the Organisation for Economic Cooperation and Development (OECD) and the Development Assistance Committee (DAC) i.e. relevance, effectiveness, efficiency, impact and sustainability. Cross-cutting themes such as Human Immuno-Deficiency Virus (HIV) and Acquired Immuno-Deficiency Syndrome (AIDS), gender, governance and leadership, and environment have also been addressed.

ES2 Project Design and Quality

Challenges were faced with i) collection and analysis of data to obtain evidence about the apparent low uptake of referrals and follow-up, ii) assessing quality, productivity and accuracy of screening by non-specialists, iii) observance of referral criteria which were pegged on WHO guidelines, iv) training curricula which were found not to conform to national standards, v) supervision of the action due to the wide area coverage and shortage of resources for supervision, vi) worker motivation which was low because of lack of any form of compensation for personal exertion, vii) lack of financial and non-financial incentives which were not in the project budget, and viii) outcomes and impact of cataract surgery.

The planned baseline study and operational research were not undertaken as planned due to a delay in ethics clearance (in Tanzania) and lack of operational clarity between the implementing consortia. Operational research was replaced with five research grants on childhood blindness in East Africa which were provided through COECSA and duly utilised.

Recommendations

- a) Eye care programmes should review and adopt best practices in amateur eye screening by teachers and others outside of the health sector.
- b) Design of referral criteria should be carried out with guidance of WHO guidelines and moderated by national health sector specialists.
- c) Training curricula in eye health should be harmonised with existing official training programmes in the health institutions of the beneficiary country.
- d) Carefully map out project territory based on the time and other resources available for monitoring and evaluation.
- e) Recommend to governments that health personnel who have received specialized training in CEH be given recognition by way of promotion and salary increase.
- f) Identify more cases and conduct detailed case studies by following up on the changes in life resulting from cataract surgery. It should be recommended to the

service providers that cases be followed up as recommended in standard practice to avoid relapse.

ES3 Relevance

In all the three countries, the CEHP was found to have been of great relevance to the nation and the intended beneficiaries. Unlike developed countries where screening for eye diseases in preschool and school children is routinely carried out to identify children with amblyopia, strabismus, and refractive errors, in most African countries including the project area, no regular national preschool or school eye screening service exists. Eye screening is only performed sporadically by some local eye personnel. The great majority of children never have an eye examination. As an example, a study carried out in Mwanza to measure the prevalence of eye diseases in primary school children between 7 and 19 years of age revealed that 26.1% of all the pupils had eye defects such as bilateral poor eyesight, unilateral poor eyesight, refractive errors, strabismus, amblyopia, active trachoma, night blindness, Bitot's spots, and corneal scars¹. Further, literature confirms that this is the status quo in the target project countries. It would therefore be safe to assume that this situation prevails in most parts of East Africa, and hence the relevance of the CEHP.

Recommendations

- a) There is need for East African governments to adopt practices used by the CEHP to conduct regular screening and referral of identified child eye problem cases to the established service providers especially those who collaborated in the implementation of CEHP.
- b) The screening of children should include those in secondary schools.

ES4 Efficiency

Service provision achieved the set target of 1 million children screened in the three countries on the provided budget. Referral cases were attended to at the primary, secondary and tertiary levels where treatment, cataract and other major and minor surgeries were conducted, spectacles were issued and some follow up on cases was done. Beneficiaries were most appreciative of the services provided as children gained sight and some who had been confined to institutions for the blind resumed life in normal schools. Spectacles were issued but some instances of issuance of the wrongly rated spectacles were recorded.

The equipment provision component was planned to provide health facilities with the essential equipment that they lacked for CEH. The delivery of the planned equipment to the district facilities was largely accomplished but the project was less efficient in providing equipment and supplies at regional and national levels in the first half. This was rectified in the second phase/part of the project. Some equipment however, especially in Tanzania, ended up in hospitals where there were already some while those without failed to receive any. This was blamed on the influence of a senior civil servant from the favoured area.

The selection and training of the personnel to identify children with eye problems was efficiently carried out with the desired numbers of trained teachers largely achieved. Various cadre of hospital personnel were trained both in-country, within East Africa and outside of

¹ Susanne H Wedner, David A Ross, Rebecca Balira, Lucas Kaji, Allen Foster. Prevalence of eye diseases in primary school children in a rural area of Tanzania. *Br J Ophthalmol* 2000;**84**:1291–1297

the region. A few planned trainings were not carried out particularly in Tanzania. Low vision devices issued to personnel trained in low vision in Tanzania fell below standard and negotiations are still underway to have them changed. The training activity was generally well achieved.

Recommendations

- a) Bearing in mind that time has elapsed for the outstanding trainings, CBM should find ways of blending the deficit with new programmes that are in the pipeline.
- b) For the future, training of paediatric ophthalmologists (PO) should be streamlined by finding suitable courses that take shorter time and that are offered in Africa.

ES5 Effectiveness

Project implementation has been effective to varying degrees as follows:

1. Gender balance in service delivery was in some instances visible and in other it tended to be quite random. The outreach programme carried out through mass media and field visits announced that all children identified to have eye defects should be attended to at a health facility. There were many instances of treatment for trauma where boys dominated.
2. The project adhered to the child protection policy by providing appropriate staffing, ensuring accompaniment of children by parents, creating a safe child-friendly environment, having child attendants to identify the visual ability concerns of the children, and attending to child patients following clear laid down service procedures. The training of nurses carries content in child protection training, and counsellors were trained to counsel parents who often found it difficult to consent to their children to undergo surgery under general anaesthesia and wear spectacles.
3. Integration of the eye health into the national health management information systems has taken place in Tanzania which has given eye health the profile required to it to proceed to integration into the national budgetary system.
4. With support from the project, Uganda has published Guidelines for Eye Care, National Eye Health Plan, and Collaborative Advocacy Strategy for Eye Health 2016-2020. Tanzania has also published referral forms, guidelines for children's eye care, and a National Guidelines for Children's Eye Care for Eye Specialists at Regional and District Level². Kenya too has produced a national eye care policy.
5. Project activities that appeared to be less effective than envisaged included:
 - The uptake of referrals because not all referred cases reported to the recommended facility.
 - Tracking children patients because referral forms were not returned as required.
 - The level of intrinsic motivation translating into effective participation of frontline health workers and teachers in identifying children with eye problems was low, as workers were not facilitated with costs such as telephone airtime and transportation.
 - The training of trainers approach planned for training all class teachers as trained teachers failed to train their colleagues due to lack of motivation.

² Mwongozo kuhusu afya ya macho kwa watoto kwa wataalamu wa macho wa ngazi ya mkoa na wilaya.

Recommendations

- a) Future projects should assess the models used for the identification and referral of children for eye and other conditions, and implement improvements in its model as necessary so that cases are easier to track.
- b) Future programmes should train and facilitate more of community health workers based in the villages to be more involved to ensure sustainability of the intervention.
- c) Facilitation by way of meeting basic expenses for activities such as follow up of patients should be considered.

ES6 Impact

Immediate and short-term impacts of the project can be reported include:

1. Children gain ability to see as a result of cataract surgery and issuance of spectacles and low vision devices. Such children have reported that their lives have changed as they can now play, study, sit at any point in the classroom, have performed better in school, and are able to integrate with their peers without being looked down upon. They have gained confidence!
2. Some children who were confined to schools for the blind and were learning to read in Braille have resumed life in regular schools. This has removed a great burden from their parents and their lives have changed for the better.
3. Parents of children with low vision which has been corrected and those whose children have been operated upon and spectacles issued have released a lot of time which was previously used in caring for the blind child. Such parents are full of praise for the project – many likened it to the coming of Jesus as “the blind can now see...”.
4. Teachers have gained eye screening skills which they pass on to their peers and which they can use in different schools to identify children’s eye problems.
5. Greater awareness has been created among communities about the presence of child eye problems which can adversely affect children’s education and life in general.
6. The project has proved that harmonious relationships can be created between private, governmental and faith-based service providers, NGO project management entities, funding agencies, government ministries and the general public in the implementation of complex projects and programmes. Sufficient ground work on the roles and resources available to each entity should form a good foundation in the creation of such relationships.

Recommendations

- a) Partners should find ways to intensify advocacy to amplify the value of continuation and scaling up of CEH services, and the need to sustain the service through appropriate government budgetary allocation.
- b) Players in the CEH arena should find ways for and encourage future collaborative efforts.

ES7 Sustainability

The project applied the participatory approach, used existing health systems and infrastructure at the local and national levels, created collaboration between the ministries of health and education, and a wide range of stakeholders were involved in its planning and implementation. It strengthened health systems by supporting on-the-job specialized training of health personnel and teachers. It also provided additional and new equipment to health institutions and supported supply of consumables for eye surgery. The project had an

advocacy component intended to raise awareness and support for CEH among the general population and raise the profile of CEH in the national planning system. This approach contributes to sustainability and the continuation and scaling up of child eye health activities. As a result of the project's proper planning, capacity to address a vital need in children's lives, the proven economic value of its life-changing results when children gain eyesight, the project has inspired several new projects in the region. This power of scalability in a project should be lauded. The project however, did not have a clear exit strategy embedded in its implementation plan.

Recommendation

It is always advisable for a project to commission an exit strategy design study which would produce a detailed implementation plan stating exit criteria for each activity, so as to provide the stakeholders with greater clarification on activities, responsibilities during implementation and during post-project phase (i.e. operational phase). Such an exit strategy would produce a results and resources framework for post-project activities and a budget which project inheritors could apply to sustain the flow of benefits.

ES8 Poverty and HIV/AIDS

Many of the child eye cases came from very poor backgrounds and showed signs of malnutrition. Parents complained that food, transport costs, meeting the small dues for opening a file in the hospital and meeting daily needs during a hospital visit presented big challenges. Children who had contracted HIV/AIDS were found to be particularly vulnerable when they had to be treated for eye defects. For example, at Tenwek Hospital, it was reported that "children that had low vision impairment and were HIV-positive posed a great challenge as their treatment was very complex. These children had to be given special care by trained staff. These included children who were HIV/AIDS orphans admitted at Korara School for the Visually Impaired." Cases with HIV/AIDS characteristically suffered lesions under the eyelids which complicated their surgery. They had to be treated with Anti-Retro-Viral drugs and given nutritional support. These children were also stigmatised and often felt dejected. Their guardians had to be given training on an infection prevention policy and issued with protective gear, hand sanitizers and spirit.

Coming mostly from these backgrounds of poverty, such weak children would be underweight and had to be put on a recommended food regime for them to gain weight to be eligible for surgery. The project reimbursed some bus fare but this was generally insufficient for parents who had travelled long distances and often had to spend a night close to the referral facility. The support from the project was reported as having been generally insufficient to meet all the costs associated with a hospital visit.

Recommendations

- a) It would be necessary to create a food support and transport component in designing projects that require that beneficiaries travel long distances to access project services.
- b) A child nutrition component should be embedded into such programmes to enable parents feed the child patient to the desired weight in preparation for surgery.

ES9 Gender

The gender rule required that the project beneficiaries should have been 55% girls and 45% boys. This provision proved frivolous as all children in and out of school were screened and those with eye defects were referred and their complaints addressed. The ensuing ratio from those treated was a natural occurrence.

Recommendation

Except where it is possible to control the entry of beneficiaries into an intervention and select them by gender, the gender breakdown of beneficiaries should be reported as observed.

ES10 Environment

The project presented no adverse environmental effects outside of those normally addressed by the existing health systems in the beneficiary countries.

1. INTRODUCTION

1.1 Background to the Project

Implementation of the East Africa Child Eye Health Project commenced in January 2013 with funding from International Agency for Prevention of Blindness (IAPB) through “Seeing is Believing” (SIB), which is an initiative of Standard Chartered Bank. This programme set out to contribute to improved child health and the reduction of avoidable blindness in children in East Africa. The programme intended to indirectly benefit over 45 million children (total estimated population of children in East Africa) through appropriate changes in national policies and strengthening of national coordination, promoting child eye health. The provision of quality, child friendly and child centred eye health services in the catchment areas of the programme, anticipated serving over 1 million children directly.

The project was implemented in Uganda, Tanzania, and Kenya, by the CBM Consortium comprising of 4 partners namely the Fred Hollows Foundation (FHF), Sightsavers, the College of Ophthalmology in Eastern, Central and Southern Africa (COECSA) and is led by Christoffel Blinden Mission (CBM). The project was implemented in partnership with the Ministries of Health and Education and collaborated with other relevant ministries in the three countries. The total budget of the project was USD 4 million over a period of four and a half years (Jan 2013 to June 2017) (see Fact Sheet).

1.2 Programme Objectives

The overarching objectives of the project are as follows:

1. To improve child eye health service delivery and strengthen referral and follow-up systems from primary to tertiary level, in order to enhance access to quality, child-centred and child friendly eye-care services for over 1 million children in the target regions through a cluster approach (10 clusters).
2. To strengthen human resources for child eye health in line with V2020 targets in technical as well as in managerial aspects, from primary to tertiary, as well as on national and regional coordination level.
3. To provide 13 Tertiary and 49 Regional/ Secondary centres in the project area with the clinical and non-clinical equipment needed to deliver child eye-care services.
4. To set up and implement a regional advocacy agenda, ensure regional sharing and improve the evidence base for child eye health at national and global level.
5. To strengthen leadership and governance as well as coordination and multi- sectorial collaboration for child eye health at all levels

The programme was implemented by two consortia of international Non-governmental Organizations (NGO) and the CBM-led Consortium was responsible for i) secondary and tertiary level service delivery, ii) strengthening of human resources, and iii) strengthening of leadership and governance. This will be focus of this end of project evaluation.

1.3 CBM Consortium Commitments

The CBM consortium had a budget of USD 4 million for this intervention, and worked at secondary and tertiary health levels in all the three countries to deliver the following outputs:

1.3.1 Service Delivery and Strengthen Referral and Follow-Up Systems

1. One million children screened.
2. 5,600 operations performed on children; out of which 4,800 congenital Cataract, and 800 others e.g. glaucoma, retinoblastoma, lid surgery, squint surgeries etc.
3. 15,000 children with refractive error receiving spectacles at secondary and tertiary level.
4. 4,500 children with low vision receiving a low vision device at tertiary level and/or specialised refraction at secondary and tertiary level.

1.3.2 Capacity Building

1. 245 health centres/ hospitals with 700 Maternal child Health (MCH) personnel trained in CEH
2. 100 eye health personnel trained/ re- oriented on tertiary and secondary level in 61 health facilities.

1.3.3 Infrastructure Development

3. 61 health facilities equipped and functional.
4. 3 optical workshops established and functional.


1.4 Context of the End of term Evaluation

The geographical area coverage of the project is as presented in Table 1 where the places visited during the MTE fieldwork are also indicated.

Table 1: Geographic Area Covered by SiB Project

Kenya - all 8 regions	Uganda - 12 health regions	Tanzania - 10 Regions
1. Central Region	1. Jinja	1. Iringa
2. Nairobi Region	2. Hoima	2. Kigoma
3. Coast Region	3. Soroti	3. Manyara
4. Western Region	4. Gulu	4. Mbeya
5. North Rift Region	5. Tororo.	5. Rukwa
6. Nyanza Region	6. Arua	6. Tabora
7. Eastern Region	7. Mbarara	7. Morogoro
8. North Eastern Region	8. Lira	8. Dar el Salaam
	9. Fort Portal	9. Mwanza
	10. Entebbe	10. Kilimanjaro
	11. Masaka	
	12. Kampala	
	13. Wakiso	

Notes:

 Included in field survey sample

Regional clusters were created and headed by an eye health referral facility in the region. These clusters are shown in Table 2.

Table 2: SiB Referral Hospital Clusters for Kenya, Uganda and Tanzania**Kenya**

Cluster	Cluster Lead/ Tertiary Referral	Region	Affiliated Hospitals
1	Kikuyu Hospital	Eastern	1. Embu Provincial Hospital
		Eastern	2. Meru General Hospital
		Central	3. Nyeri Provincial Hospital
		Central	4. Muranga District Hospital
		Central Rift Valley	5. Nakuru Provincial Hospital
2	Sabatia Eye Hospital	Nyanza	6. Migori District Hospital
		Nyanza	7. Kisii District Hospital
		Nyanza	8. Homabay District Hospital
		Nyanza	9. Kisumu Provincial Hospital
		Western	10. Bungoma District Hospital
		Western	11. Kakamega District Hospital
3	Tenwek Hospital	South Rift Valley	12. Litein District Hospital
		South rift Valley	13. Bomet District Hospital
		North Rift Valley	14. Moi Teaching and Referral Hospital
		Central Rift Valley	15. Nakuru Provincial Hospital
		Western	16. Kitale District Hospital
4	Lighthouse for Christ	Coast	17. Coast General Hospital
		Coast	18. Malindi District Hospital
		Coast	19. Kwale District Hospital
		North Eastern	20. Garissa Provincial Hospital
		Eastern	21. Mwingi District Hospital

Uganda

Cluster	Cluster Lead/ Tertiary Referral	Area served/Hospital
1	Mulago Hospital	22. Kampala 23. Njinja
2	Ruharo Eye Hospital	24. Mbarara 25. Fort Portal
3	Benedictine Eye Hospital	26. Soroti 27. Mbale
4	Gulu General Hospital	28. Lira 29. Arua

Tanzania

Cluster	Cluster Lead/ Tertiary Referral	Area served/Hospital
1	Kilimanjaro Christian Medical Centre	30. Moshi 31. Arusha 32. Manyara 33. Tanga 34. Mwanza 35. Kagera 36. Shinyanga 37. Mara 38. Kigoma 39. Tabora
2	Muhimbili Teaching and Referral Hospital	40. Dar es salaam 41. Pwani 42. Mbeya 43. Songea 44. Rukwa 45. Iringa 46. Morogoro

1.5 Project Goal

It is anticipated that at the individual beneficiary level, this project will contribute to improved child health and reduction of avoidable blindness in children in East Africa. The project will directly and indirectly benefit the over 45 million total population of children in East Africa through changes in national policies and strengthening of national coordination to promote child eye health (CEH). The provision of quality, child friendly and child-centred eye health services in the catchment areas of the programme anticipates serving over one million children directly.

At the national and regional levels, the project will contribute to the attainment of Millennium Development Goal (MDG) four on “reducing child mortality”; and Sustainable Development Goal (SDG) three to “Ensure healthy lives and promote well-being for all at all ages”.

Many of the conditions associated with childhood blindness are also causes of child mortality (e.g. premature birth, measles, congenital rubella syndrome, vitamin A deficiency, and meningitis). Very poor children are four times more likely to be blind than those born in high

income countries. This project will contribute to lowering the risk of child mortality through childhood blindness control interventions and promotion of child eye health care.

In view of the above, the overall goal of the project was stated as: *“To contribute to improved child health and the reduction of avoidable blindness in children in East Africa”*. This resembles the objective of the Kenya Society for the Blind which has been active in the eye health sector in East Africa since 1956.

1.6 Purpose of the Evaluation

The main purpose of this end-of-project evaluation was to assess the extent to which the project performed against the set project objectives. This entailed an assessment of the extent to which the planned project activities, outputs/ results and outcomes were achieved over the implementation period between January 2013 and June 2017, as seen in the eyes of an external evaluator. It also identified any challenges and lessons learned, and made appropriate recommendations that may inform any future implementation of a project of similar nature.

2. EVALUATION METHODOLOGY

The evaluation was carried out in conformity with the ethical principles, standards and practices of any independent external evaluation. At the proposal stage the consultant identified and proposed comprehensive participatory methodologies for undertaking this evaluation, and discussed the methodology with the client. Being a child-oriented programme, emphasis was placed on child friendly participative approaches.

The evaluation team consisted of four consultants. First, there was literature review for the team to familiarise itself with child eye health in general and the project in particular. Among the documents reviewed were Project proposals, log frame and work plans; Bi-annual project reports to the donor; Minutes of joint consortia meetings and SiB Letters of variations, reflecting the revised target outputs. Study instruments (Annex 6.3) were then prepared to respond to the evaluation questions and OECD/DAC evaluation criteria. The research instruments were then tested at Kikuyu hospital, finalised, shared with the client and finally produced.

Team members travelled one each to locations in Kenya and Uganda and two travelled to locations in Tanzania. Ten days were spent collecting data in the field. The samples of hospitals, stakeholders, beneficiaries, project partners, and other interested parties were mostly selected by the project country teams and represented all the clusters in each country. Site visits were made on an itinerary developed by the country teams and agreed with the consultant.

During site visits, focus group discussions and key informant interviews were conducted. Observations were also made, photographs taken, and case studies recorded. Records were made of male and female participants in all cases.

3. SUMMARY PRESENTATION OF FINDINGS

3.1 Consortium Objectives

The programme was implemented by two consortia of international Non-governmental Organizations (NGO) one led by CBM. The CBM-led Consortium was responsible for i) strengthening of leadership and governance, ii) strengthening of human resources, and iii) secondary and tertiary level service delivery. This will be focus of this end of project evaluation.

3.2 Leadership and Governance

Leadership and governance were done generally well as partners adhered to their mandates and reported centrally to the cluster leader.

Collaboration between cluster partners went generally well as clustered hospitals learned to work together. There was an initial difficulty when more senior hospitals such as Moi Teaching and Referral Hospital which had not been accorded the role of cluster lead felt slighted and would not report to the cluster lead (i.e. Tenwek Hospital.) However, the selection of cluster leads was based on the modalities for running the project dictated by the fact that funds factored into the public treasury would become extremely difficult to access for project purposes.

Regarding positive changes in practices on child eye care, it is noted that the identification and treatment of Retinoblastoma has now been enshrined in the participating hospitals. This was a killer disease which was difficult to diagnose but can now be diagnosed in good time and treated.

The consortium approach to the management of the project using several implementing partners has been found to have the key advantage of each partner being conscious that the others are watching what they are doing. This tended to reduce laxity and ensured activities were implemented on time and reported upon as planned. The key challenges of this approach were that:

- a) In some of the partners project funds were lumped with other funds and placed in the same account. This made it difficult to access these funds especially when competing demands tended to command priority consideration to the detriment of the project. Some project activities were delayed in Tanzania due to this. This could have been mitigated by placing project funds in a separate account.
- b) Procurement of spectacles appeared disorganized at the beginning in Tanzania because there was insider jostling for the tender. The awarded supplier delivered substandard spectacles. This could have been mitigated by floating an international tender.
- c) It was reported in Tanzania that there was some confusion between CORCSA and CBM as to who should take charge of the training activity. This led to some training

for nurses being delayed to the end of the project despite availability of a budget for the same.

- d) Procurement of low vision kits for Tanzania from the Kenya Society for the Blind failed as the kits were found not to meet the standards and have not therefore been used. Efforts to recover the funds or have proper kits supplied appear not to have been well supported by the project management but the CBM office in Tanzania was still up the matter and was hopeful of a positive outcome.
- e) The consortium approach consolidated strengths of the partners and utilised their comparative advantages thus leading to better efficiency and effectiveness in the implementation of the project.

3.3 Strengthening Human Resources

Training for paediatric ophthalmologists did not achieve the desired numbers because:

- a) In Tanzania the persons nominated for the training were found to be unqualified by the admitting institution and were therefore rejected.
- b) In Kenya the candidates found the training too long because it would take a minimum of 18 months.
- c) The course was available mainly in India and many of the candidates felt that they would be away from their stations for far too long.

As a result of the above, only three paediatric ophthalmologists were trained. However, in addition, there was continuous professional development (CPD) for doctors through continuous medical education (CME) using activities such as the annual regional SiB conference the last of which was held in Arusha in 2015. Further, an exchange programme operated with doctors from Kenya and Uganda visiting at CBRT in Tanzania and some doctors from Muhimbili National Hospital in Tanzania coming to the University of Nairobi. Doctors were able to greatly improve their surgical skills through this exchange.

Training for other cadre such as nurses in identification and referral as well as paediatric theatre skills, low vision therapists, paediatric anaesthetists, and equipment technicians went as planned. Some trainees from Tanzania missed the training for low vision therapists which was conducted at Masinde Muliro University of Science and Technology (MMUST) because of government restrictions on movement. Also a planned training for some nurses in Tanzania which was intended to take place in Kenya failed to materialize.

Training was further improved through development of a low vision curriculum which awaits adoption by medical training institutions in the region.

In Uganda policy briefs were prepared and disseminated at the district level. All in all, in the eyes of the project management, each cluster reached its training and other targets.

3.4 Secondary and Tertiary Level Service Delivery

3.4.1 Project Design

Key challenges in the design of the project included:

- a) The ratio of girls and boys attended after screening could not be determined a priori since one cannot tell who would be likely to have an eye defect. Therefore to anchor the number of girls attended at 55% and boys at 45% was a design error.
- b) There were no medical practitioners such as paediatric ophthalmologists to guide the project planning process. Therefore important aspects such as estimates of prices of modern equipment and specifications thereof suffered inadequate determination.
- c) Planners of this project made the decision to implement the project through existing service providers. In Kenya, eye health is mainly to province of faith-based institutions. These evidently became the cluster leads in all the project areas and senior government facilities felt slighted having to report to them.
- d) Some facilities such as Kikuyu Eye Hospital which had had a long-standing funding relationship with the Standard Bank felt slighted when they were not engaged in the planning of the project. The main reason they couldn't be selected by the financier was because they could not raise the required co-funding of 20%. As a result a certain degree of friction existed between the SiB project and the hospital as they no longer had direct funding from the bank and had to go through SiB for support. This however, thawed with the arrival of a new regional manager of the project at CBM. The Regional Manager position changed occupants only once in the life of the project.
- e) The project accountant at CBM changed two times in the course of the project resulting in disruptions in the flow of funds, accountability and reporting.

3.4.2 Provision of Equipment/Infrastructure

For effective service delivery, the necessary infrastructure had to be created. Challenges were experienced with the implementation of low vision centres and optical shops because the allocated level of funding for this activity was much lower than what was eventually found to be realistic in the field. This could have been improved by making more accurate estimates of the requirements at project planning stage.

Initially funding for equipment procurement was in short supply. Equipment required by the various tertiary facilities was identified in collaboration with the responsible participating health facility, government ministry and the programme officer. The procured equipment either was added to what already existed or in some instances went to facilities where there had been none previously. Equipment repair and maintenance technicians were trained accordingly. It is recommended that countries buy their own equipment as what was provided by the project still leaves large gaps to meet the requirements of the supported institutions.

3.5 Sustainability, Scalability and Future Programming

3.5.1 Sustainability

The project was implemented using existing faith-based and government health institutions – hospitals, training colleges, universities etc. – where capacity was built and equipment supplied. This capacity and these equipment which fitted in existing operations of these institutions will ensure sustainability of project services.

Training also involved the training of teachers to screen children for eye problems. There was training of trainers (TOT) to ensure sustainability. Training of trainers was conducted on the contact persons of the project. As a result of the project eye health is now being reported in the Health Management Information System in Tanzania and has been added to the essential health package in both Kenya and Uganda.

3.5.2 Scalability

As a result of the project being anchored in existing health facilities and government institutions, the potential for scalability appears high. Further, the SiB plans and activities are based on the standards set by the International Agency for the Prevention of Blindness (IAPB). So far, it is considered that the tertiary health facilities available for eye care purposes are sufficient and all they require is additional equipment and more personnel.

Several follow-up projects are on the drawing board and include:

- a) Eye Health Promotion Project for Children in Kenya to be implemented by CBM for three years
- b) An SiB replica project in Tanzania by CBM-United Kingdom (UK) for two years
- c) An SiB replica project in Tanzania by Sightsavers for three years.
- d) An SiB replica project in Nigeria by CBM-UK and Brien Holden Vision Institute (BHVI)

It is understood that these sequel projects bear resemblance to the SiB CEH project in East Africa and have replicated its design and implantation procedures.

3.5.3 Future Programming

While the project appears to have been well-conceived, properly planned and executed using multiple implementing agencies with reasonable coordination, there are several key players who were left out in its design stage. These include:

- a) The Ministry of Public Health and Sanitation (MPHS) KOP and specifically the Division of Ophthalmic Services (DOS) headed by Dr. Gichangi which is implementing the Kenya Ophthalmic Project (KOP). The mandate of the DOS is to reduce the incidence of preventable blindness in Kenya by providing preventive and curative Eye Care Services (ECS) through integration of Primary Eye Care (PEC) into

the existing Primary Health Care (PHC) system in the country. In the KOP the DOS collaborates with the KSB and several and other development partners.

- b) Kenya Society for the Blind which is a body established by an Act of Parliament in 1956 in Kenya to “promote the welfare, education, training and employment of the blind and to assist in the prevention and alleviation of blindness; assist the government, societies, any institution, organizations or society or person in all matters related to blind; help in awakening public interest in the welfare of the blind and in all matters relating to blindness and to advise on all things necessary or required in any matter to or connected with the blind”. Their knowledge of the blind environment in Kenya and the region would have added value to the SiB Project design process.
- c) Government hospitals and universities which would have contributed in the choice of equipment given the technical levels in equipment repair and maintenance in the project countries. These may have been left out due to their financial management practices where funds are pooled together and are difficult to withdraw to fund on-going project activities.

3.6 Contribution of the SiB Project towards National Health Plans

The SiB Project was notable for introduction of child safe guarding policy. The policy, which has been adopted in all the three project countries, ensures that children are safeguarded through provision of preferential treatment at health facilities and provision of a child-friendly environment. Where child eye surgery schedules conflicted with those of adult surgeries, it was found that children were attended first. This occurs often due to the shortage of surgical facilities in all the three countries. The evaluation also established that both public and faith-based health facilities were at various stages of creating suitable infrastructure to allow child eye patients room to play while waiting to be attended.

The project also supported the development of eye care strategic plans which have created greater visibility of eye problems within the health planning set-up. This has led to the creation of eye health reporting systems which should eventually lead to inclusion of eye care into the national budgetary systems.

3.7 Contribution of the SiB Project towards Health Systems Strengthening

In its baseline survey, the project established the base situation which implementation was intended to alter positively. Through an outreach programme, the project was able to reach the target population and create awareness about the importance of children’s eye health. Outreach missions to screen children and attend to cases continued throughout the project implementation period, rendering noticeable support to the efforts of the government and faith-based eye care institutions in reaching needy cases. Through the established village level surveillance system where eye defect cases are reported to the village authorities as is the case now in Tanzania, health systems will continue to draw their strength to reach needy populations from the awareness created by this project.

The project raised the profile of a structured referral system where cases progress from identification in the field, through the primary, secondary and to tertiary health institutions depending on their complexity. A paper trail was introduced to ensure that cases could be followed from start until appropriate life-changing action is taken. The project created and introduced reporting tools such as referral forms that led to eye health facilities maintaining accurate records of cases attended and referred.

The referral system increased collaboration between private and public eye care and funding institutions which, as the project progressed, learned to work in relative harmony. Communication between these eye health players improved and accountability became visible.

With training and provision of equipment and consumables, the project was able to identify more accurately the real needs of the eye care facilities. Training of ophthalmologists, nurses, low vision technologists, equipment repair and maintenance technicians and related eye care staff strengthened human capacity in the system, thus improving children's eye care services in the target countries. Governments were able to close part of the resource gap that existed before the project.

Children's eye health research was funded and conducted. Findings were disseminated. The need to conduct research in children's eye health elevates this condition to national visibility. Where children's eye problems had received passive attention, now there is urgent and active attention to identify and deal with them before permanent damage is done to a child's ability to see.

3.8 Contribution of the SiB Project towards Achievement of Vision 2020

Vision 2020 is the right to sight, the global initiative for the elimination of avoidable blindness which was launched in 1999. It sought to promote a world in which nobody was needlessly visually impaired, and where those with unavoidable vision loss could achieve their full potential. The global initiative was set up to intensify and accelerate prevention of blindness activities so as to achieve the goal of eliminating avoidable blindness by 2020.

The health sector in Kenya is working alongside other countries in the world and non-governmental organizations to achieve vision 2020. The contribution of the project to achievement of Vision 2020 was significant as it helped children gain eye sight through treatment, surgery and issuance of visual enhancement gadgets such as spectacles and low vision devices. It also created awareness widely among target population on the importance of eye care and attention to any visual defects especially in children.

3.9 Effectiveness of the Children's Eye Health Referral System

3.9.1 Barriers against Children Reporting to the Health Facilities

One of the key barriers against children reporting to the health facilities was local cultural practices. In coastal Kenya, girl eye patients were few as compared to boys. Girls were disadvantaged among the Swahili community due to the belief that they would eventually be married off and therefore occupied a peripheral place in the household of their birth. Generally however, among other communities living in the coast region it didn't matter whether the patient was a boy or a girl, all were treated equally and brought for treatment as necessary. Other cultural practices for such as the use of traditional herbs which may be poisonous to the eyes and belief in witchcraft also prevented parents from taking their children to hospital. With greater awareness campaigning, this can be overcome.

A second constraint that forced some of the referral cases to report was the long distances they had to travel to the referred health facility. For example, despite being facilitated with bus fare, a family of five members from Baringo County in Kenya failed to report for the referral clinic. Moreover in this case and many other reported cases in Tanzania, the patients could not be traced because the contact telephone numbers they had given were no longer in service. The distance between Tenwek Hospital and Baringo is about 200 km. Another case was given of children from Meru who underwent eye surgery at Tenwek Hospital but did not go back for clinical follow up.

HIV and AIDS posed a great challenge as infected children required special and expensive care. Children with low vision impairment and are HIV positive were often weak and could not be easily transported to the referral clinics.

Lack of funds was also a major challenge. Patients who could not afford to pay for cataract surgeries, open a file with TShs 5000, provide transport, accommodation, food and care were in danger of not attending referral clinic.

These barriers were addressed in part by the project as follows:

- Cultural beliefs were addressed through an awareness campaign and outreach programme.
- Lack of funds for transport was addressed by refunding transport to and from the health facility for child and minder.
- Free eye surgery and free spectacles and low vision devices were provided as many were unable to afford.

3.9.2 Potential for Improvement of the Uptake of Referral Practice

Referral between different levels of health facilities ensures that medical cases access the required technical/medical expertise available. It has been pointed out that in Kenya, the eye care tertiary health facilities are now sufficient in number and infrastructure but are short of

equipment, personnel and supplies. The referral system created and supported as a core activity of the SiB project can be expanded and sustained through:

- Use of an improved reporting tool that ensures that cases are regularly tracked and reported on a regional and national basis.
- Strict use of the referral tool that ensures that cases are easy to trace and follow up.
- Maintaining contacts of referral cases and using village community health workers to report on them on a regular basis.
- Sustained awareness creation to educate the population on the need to promptly attend to children's eye problems and use the issued sight enhancement gadgets as directed, replacing them when necessary.

3.10 Evidence of Local Ownership of the Project

Enthusiastic local ownership of the project idea was witnessed in the three project countries as for example, the paediatric ophthalmologists cluster heads held meetings with the implementing partners and as a result the referral strategy was improved which resulted in greater uptake of children with low vision. In Tanzania, Muhimbili hospital was engaged in the initial drafting of the project proposal. In all the three countries the ministries responsible for eye health were active participants in the selection of training cohorts, their absorption after training, selection of the equipment to be procured, distribution of the provided equipment, production of suitable reporting stationery, production of national eye health plans and so on. The project has left behind an animated eye health sector that has now assessed and found the true extent of the eye problem in their countries. Local ownership is visible in the plans that have been made to expand eye health in general and children's eye health in particular. As a result of its well-crafted objectives and potential benefits, the project has attracted further funding through new but similar initiatives.

3.11 Engagement of Stakeholders in Decision-Making

Stakeholders in this project included inter alia the consortium partners, government, direct and indirect beneficiaries, participating health facilities that were both governmental and faith-based and the general public. These were variously engaged in decision making, and this fed back into project implementation. For example, the consortium of implementing partners was created at the proposal preparation stage. In assigning roles, the consortium considered the strengths of each partner and allocated each a role that utilized best their comparative advantage. In this regard, COECSA, which supports training of ophthalmologists and thus influences the policy development and implementation and the capacity building agenda was allocated the role of coordinating training, CBM took overall consortium coordination, Sightsavers whose presence in Uganda was strong implemented the project fully in that country, and Fred Hollows Foundation was to oversee the project activities in the clusters especially on issues related to human resources (HR) development (training) and equipment procurement and maintenance. All the partners participated in joint consortium meetings.

As stated earlier the government was mainly responsible of rendering services in the referral facilities, decisions on the equipment to be purchased and decisions on their distribution. The government provided guidance on policy matters and participated fully in the development of the national eye health plans. While it government felt that in Kenya government hospitals were not selected as referral hospitals, it nevertheless appreciated the role of the project in highlighting the importance of early detection and treatment of eye defects on children. The idea of using faith-based and NGO facilities and management of project was the fact that these organizations were already partners with CBM. That is the main reason they were picked cluster leads.

3.12 Challenges and Risks

The main challenges of the project were that

- The project did not cover the entire country and so left out some very needy areas. However, it is important that project resources are often limited and time is also limited. A project of this kind should be treated as a precursor that should trigger action from government and the target population.
- Government hospitals were not selected as referrals perhaps because of the bureaucracy that envelopes the accessibility of funds in the government system.
- The project could have been implemented in phases so as to spread the benefits and streamline processes after overcoming the teething problems that it suffered at the beginning.
-

The major risks of the project were that:

- Equity and universal health is still an uphill task in the participating beneficiary communities. Therefore, the project found a situation where needs were much higher than what was planned.
- The health dynamics of the three east African countries are different. The project did not take into account how the three health ministry's functioned so as to harmonise systems and activities.

A comprehensive assumptions and risks analysis is presented in Table 3.

Table 3: Lograme Assumptions and Risks Analysis

Assumptions / Risks	Occurrence and Measures taken
Prolonged insecurity and political violence around general elections in Kenya in 2013, Tanzania 2015 and on-going operations in Northern Uganda may adversely affect the project	This did not occur. Elections in Kenya were peaceful.
Increased awareness on child hood blindness leads to more parents and children seeking services.	True. Facilities and personnel at the eye care facilities were over-stretched because of the large increase in the number of cases that sought services.
Harmful traditional practices are done away with and fear of surgery is reduced	This was realised to a small extent among the participating communities. However, some parents still applied harmful chemicals to their children's eyes in efforts to cure eye defects and some believed that their children were bewitched. The outreach programme addressed this through visits and mass media.
A large enough pool of medical personnel from whom to train as specialists in child eye health	The pool of medical personnel to train as specialists in child eye health was small as there had not been much interest in this area. The 18 months required for specialised training proved too long for personnel to be away from their stations. Some of the training was abandoned.
Existing eye care cadres willing to work where there is greatest need.	There was a general shortage in all cadres of eye health personnel. The project engaged in training of the different cadres. However, they expressed frustration when their enhanced knowledge and skills were not rewarded through promotion or increases in remuneration.
Support from this project is complemented by government and private sector in equipping all the tertiary and secondary units.	The project worked within the infrastructure created and supported by the government and non-governmental hospitals received medical personnel on secondment. Government equipment was used and complemented with project equipment. Equipment housing, operation and maintenance were left in the hands of the government.
Receptive policy regime at the MOH level	The policy regime at the MOH was adequately receptive to the intervention.
Lack of good will due to competing and changing political interest.	Some lopsided allocation of equipment in Tanzania due to personal interests, and insider jostling for spectacles contracts had adverse effects on project implementation delaying supply and reducing issuance of suitable spectacles.
Rumours and fears about surgery especially in children do not negatively affect the target populations.	Rumours and fears of eye surgery on children persisted. However, counsellors trained by the project were on hand to counsel parents and reduce their fears. Spouses often consulted each other before the decision to allow surgery on their child was made. A few went home to consult and never returned.
Children referred actually show up and take up the services.	The majority of referred cases showed up. The outreach programme urged parents and teachers to ensure that referral cases actually reported.
Receptive policy regime at the MOH level	MOH was receptive in its policies.
Increased knowledge will lead to early identification and referrals.	This took place with the school and outreach screening exercises playing a key role.
Trained teams are motivated to remain in their work	Motivation was minimal.

stations.	
Professional development leads to actual understanding of the issues at hand	Correct. In many instances stories of appreciation were told with relish and confidence. In a few cases, personnel complained that they did not have appropriate equipment to work with after the training.
Most of the secondary and tertiary eye units with the exception of a few will not need major equipment.	Negative. Equipment in most participating tertiary and secondary facilities was old and required replacement. There was also need to expand the service by focussing on supplying specialised equipment for children's surgery. Housing facilities for children's eye theatres were a major challenge.
Hospitals continue to cater for consumables and the project will only complement for the additional children being seen.	This was the case.
Optical shops will only need the low vision devices to be functional. Where this is not the case, the project will catalyse other external support.	Both low vision devices and spectacles were needed by most of the optical shops.
Willingness of the National Eye coordination offices to process and use CEH information and data.	The national eye coordination offices were willing to integrate CEH information into their management information systems.
Tertiary and secondary centres identify a system and individuals responsible for submission of data.	Persons responsible for data generation and archiving were interviewed. They were the custodians of the data collection templates developed and printed with support from the project.
Identified individuals have the skills, capacity and time.	The one interviewed at KCMC in Tanzania was a fulltime worker.
Units have the time to participate in research and approvals are done on time by hospital and other national actors.	Individuals were funded to conduct research and findings were presented in project-supported annual forums.
Support and buy in from MOH, professional bodies and hospitals' management on the guidelines and manuals.	This took place.
Buy in from the hospital management, professional bodies and the MOH	This took place.
Mutual understanding and appreciation of quality standards from all the partners involved in the project.	Through meetings this was discussed and standards harmonised.
Willingness of the district teams to pick CEH as a priority.	CEH was integrated into health activities.
The new skills and knowledge gained will lead to a change in practice.	Knowledge, attitudes and practices have changed among the hospital cadre who have been in close contact with the project; and among the direct beneficiaries and their parents and teachers regarding the importance of child eye care.

3.13 Sustainability

Sustainability of results is expected because:

- There will be continued support from the government for the services created and supported by the project. The government will continue to second a trained workforce to the Faith-based Organizations such as Sabatia Eye Hospital where the current head paediatric ophthalmologist is seconded by the government. Since the most expensive aspect in the health sector is the workforce, government intervention will ensure sustainability.
- The government will continue to provide both trained manpower and equipment for children's eye health in facilities such as Garissa Eye Centre which missed out on project equipment though a paediatric ophthalmologist was trained.

4. EVALUATION IN ADHERENCE TO OECD/DAC CRITERIA

4.1 Relevance

4.1.1 Programme Objectives and Design

4.1.1.1 Global perspectives in eye health. In May 2013, the 66th World Health Assembly endorsed the World Health Organization's (WHO) 2014-2019 Global Action Plan (GAP) for the prevention of avoidable blindness and visual impairment. Building upon and replacing Vision 2020, GAP 2014-2019 is now the most important strategic document in eye health. It sets up a clear target to reduce the prevalence of avoidable blindness and visual impairment by 25% by 2019 from baseline data collected in 2010, representing a significant step forward toward "universal eye health."³

Universal eye health is defined as "ensuring that all people have access to needed promotive, preventive, curative and rehabilitative eye health services, of sufficient quality to be effective, while also ensuring that people do not suffer financial hardship when paying for these services."

Facts about global eye health⁴ reveal that:

- In 2013 when this project was conceived and designed, worldwide, according to the World Health Organization (WHO)⁵, an estimated 285 million people are visually impaired worldwide, with 39 million people who are blind and 246

³ <https://www.healio.com/ophthalmology/practice-management/news/print/ocular-surgery-news-apao-edition/%7Bb1e8d82a-acc5-4382-9a1e-6938e87ea67d%7D/from-vision-2020-to-universal-eye-health> accessed on 6.7.2017

⁴ Jennifer Gersbeck and Sophie Plumridge (2013). Global Eye Health, Australia's vision for the future in our region. Policy and funding proposal 2013.

⁵ Universal eye health: a global action plan 2014-2019. World Health Organization website. www.who.int/blindness/AP2014_19_English.pdf?ua=1. Published 2013. From <https://www.healio.com/ophthalmology/practice-management/news/print/ocular-surgery-news-apao-edition/%7Bb1e8d82a-acc5-4382-9a1e-6938e87ea67d%7D/from-vision-2020-to-universal-eye-health?page=2> accessed on 6.7.2017.

million people who have low vision. About 80% of all visual impairment can be avoided or cured.

- Women account for approximately 64 per cent of all blind people globally, and in some countries, women and girls are only half as likely as men to be able to access eye care services.
- One in five of the world’s poorest people live with a disability and are often excluded from communities, public health services and development programs. This exclusion increases their vulnerability to poverty and creates a vicious cycle of poverty and disability.
- Some 90 per cent of people who are blind or vision-impaired live in developing countries, one third of which live in Africa – approximately 95 million people.

These facts are a stark reminder that the global eye health situation requires resources to reduce blindness, low vision and improve people’s lives. These facts are the bedrock upon which this project is built.

4.1.1.2 Regional perspectives in eye health. Facts about eye health in the developing world reveal that the challenges and needs are that:

- For many people in the developing world, blindness or vision impairment means decreased life expectancy and a life of poverty.
- It was estimated that in 2013 in the developing world 80 per cent of all blindness and vision impairment was avoidable or treatable, meaning 186 million people were needlessly blind or vision impaired.
- Research showed that interventions to improve eye health in developing countries were among the most cost effective public health programmes available, and returned \$4 for every \$1 invested.

In the project proposal, the eye health needs of the target population were estimated as shown in Table 4.

Table 4: Estimated Prevalence and Needs of SiB Target Populations in East Africa

1	2	3	4	5	6
Country	Children <15 years in target regions	Children in need of eye health services	Children with Refractive errors	Specialised refraction and Low vision care	Surgery congenital cataract and others
Kenya	3,500,000	700,000	10,500	2,100	1,167
Uganda	5,600,000	1,120,000	16,800	3,360	1,867
Tanzania	5,200,000	1,040,000	15,600	3,120	1,734
Total	14,300,000	2,860,000	42,900	8,580	3,601

The estimated numbers of children in need of eye health services (ophthalmic needs) in East Africa (Col. 3) indicate the magnitude of the problem and are a good justification for the project.

Ophthalmic needs and capacity to provide quality eye care services differ from country to country. They also differ from area to area within countries with large territory and diverse

economic and socio-cultural settings such as those found in East Africa. The first objective of GAP is to generate evidence through population-based surveys to assess the prevalence of visual impairment and its causes and the capacity of a country to provide eye care services. The evidence generated would be used to procure a higher level of commitment from the local governments that will develop plans and policies suitable for reducing the prevalence of visual impairment in the nation.

Resources are required to conduct large surveys to gauge the magnitude of ophthalmic needs especially among children. As a result every opportunity should be used to try and arrive at realistic estimates that can be used for planning purposes. Towards this end, using the records obtained from implementation of the project in the first two years, the Mind-Term Evaluation (MTE) estimated the magnitude of the problem as shown in Table 4. These estimates were drawn on the basis that in November 2015 the combined population of Kenya, Uganda and Tanzania was a total of 140,493,385 persons. The proportion of this population that fell in the 0-14 years which is targeted under the SiB project was 45.7% or a total of 63,893,074 children (Table 5).

Table 5: Estimated Children Cataract Cases for East Africa in 2015

Country	Population on 21.11.2015	Per cent of population 0-14 years ⁶	Population 0-14 years	Eye care referrals of all screened children = 17% ⁷	Surgical cases of all treated children = 16.84%	Cataract cases of all surgical cases = 25.87%
Kenya	47,389,991	41.90	19,856,406	3,375,589	568,449	147,058
Uganda	41,541,923	50.40	20,937,129	3,559,312	599,388	155,062
Tanzania	51,561,471	44.80	23,099,539	3,926,922	661,294	171,077
Total	140,493,385	45.70	63,893,074	10,861,823	1,829,131	473,196

It was observed during the MTE that of the number of children screened for eye medical defects, about 17% were referred for further examination. Of those who were examined at Kikuyu Hospital (tertiary) from 2012 to 2014, 16.84% required surgery. These surgical cases included 25.87% of cataract surgery. This showed that there were about 473,196 potential cataract surgical cases of children between the ages of 0 and 14 years in East Africa.

Given the prevailing situation, it is clear that the SiB CEH Project is as relevant today as it was at its design and planning stage.

4.1.2 Policies and Priorities of the Beneficiaries

Eye care policies and priorities in the project countries have been developed for the following purposes:

⁶ The age cutoff used in the project is 15 years. Therefore, estimates presented are lower than would be expected with inclusion of 15-year olds. This table is based on the UN population pyramid format.

⁷ Estimate is based on reports in the field, for example, Table 5, Namuseraya Umeya School, Uganda.

- a) To strengthen eye care services at primary, secondary and tertiary levels for effective control of visual impairments and for delivery of comprehensive and equitable services.
- b) To promote equitably distributed, motivated and skilled human resources for eye health that is fully integrated in the mainstream health care workforce.
- c) To improve availability of infrastructure, equipment, essential medicines, diagnostics, assistive devices and health technologies at all levels.
- d) To promote use of Management Information Systems and research for evidence-based planning, resource mobilization and advocacy for improved quality and efficiency of eye care services and increased political and financial commitment.
- e) To strengthen coordination, effective partnership and leadership for eye services at all levels.

4.2 Efficiency

Efficiency indicates the extent to which the project converted its resources and inputs, such as funds, expertise and time, economically into results in order to achieve the maximum possible outputs, outcomes, and impacts with the minimum possible inputs.

4.2.1 Roles and Comparative Advantages of the Implementing Partners

The main advantages drawn from collaborating in the implementation of projects and programmes are that donors look favourably upon such projects, partners countercheck each other's performance which improves performance and accountability, and more can be covered using the capacity of all the partners. A SWOT analysis illustrates this better.

Strengths

- i. Different partners in the collaboration brought on board diverse strengths and technical expertise in various areas of child eye health.
- ii. Mutual rapport, exchange and transfer of expertise, information, skills and mutual support amongst partners in CEH in particular and programming in general has contributed towards organization development.
- iii. As is evident in this project, and confirmed by the donor, partnerships are a resource mobilization tool. Collaborating with other partners has made it possible to access financial resources that might have otherwise been out of reach for an individual organization; therefore achieving the desired objectives that they might have not been able to meet individually.
- iv. The project covers the entire East Africa which is a wide area with a total population of more than 140 million people. Partners in these consortia have limited geographical presence but are able to benefit from the wider geographical reach of other partners in the collaboration.
- v. More integrated, coordinated and centrally monitored approach to meeting beneficiary needs was possible through collaboration.

- vi. Collaborating organizations presented a stronger, united voice that was able to push forward the course of CEH among the partner governments.

Weaknesses

- i. Stronger and more influential partners are likely to control the other not so influential partners in the collaboration thus limiting the operational scope of the weaker partner.
- ii. It was reported in Uganda that lack of mutual respect and cooperation amongst partners due to mistrust or perceived mistrust weakened collaboration. This occurred because some partners considered some technical or geographical areas their turf.
- iii. Lack of an effective chain of command between collaborating partners within the consortia to support project governance, implementation and monitoring, tended to lead to poor project implementation. For instance, it was reported in Tanzania that planned training for nurses from Tanzania was delayed due to insufficient communication between COECSA and CBM.
- iv. Different organizational policies e.g. financial and operational policies may hinder the smooth implementation of project activities.
- v. Potential for unhealthy competition if there are no clearly agreed mutual benefits and collaborative advantages. Towards the end this appears to have been ironed out.
- vi. Poor personal relationships, especially among the leadership of the individual organizations, can result in poor working relations among organizations in collaboration. It is important that mutual decisions by consortium leads be taken as guiding policy.
- vii. Resistance to change as some organizations portray inertia towards adjusting their organizational work practices. This may hinder smooth collaboration.

Opportunities

- i. The opportunity to share lessons and best practices amongst organizations contributing towards organization growth has been well-exploited by the partners.
- ii. Building of strong governance structures with clear mandates of each of the parties to the collaboration enhances collaboration strength.
- iii. The opportunity to address emerging development concerns that an organization may not address individually.
- iv. Opportunity to replicate success of past projects.

Threats

- i. Turn-over of key project human resources during design and implementation may have affected the smooth running of the project. Cases were cited of managerial, accounting and finance staff departing and leaving the project in a state of disarray leading to loss of time as some activities were delayed. This was eventually resolved.
- ii. Complexity in decision-making and loss of autonomy by individual organizations. If there is no careful planning and written agreements on the roles and responsibilities of each organization confusion may ensue. Some of this occurred but was ironed out with the current regional project manager in the office of the cluster lead.

- iii. Need for regular and deliberate contact and communication through meetings and other forums in order to track project performance and nip challenges in the bud.

In summary, it can be concluded that the collaborators utilised their experience in the geographical and technical areas where they were strongest. Their contributions to the project married well with those of their partners. All the four partners were long-term practitioners in the eye health business and had accumulated skills in managing the various aspects of such projects.

4.2.2 Application of Funds

Table 6 presents an analysis of budget and expenditure to end of December 2016.

Table 6: Analysis of Cumulative Project Expenditure to 31.12.2017

	Description	Log frame ref.	Budget	Actual	Variance	
			\$	\$	\$	%
1	Applicant Organization Costs					
1.1	Salaries		198,439	205,360	-6,921	-3%
1.2	Travel		53,442	57,578	-4,136	-8%
1.3	Equipment costs		4,661	4,637	23	0%
1.4	Communication and Office costs		19,051	22,097	-3,046	-16%
	Subtotal		275,593	289,672	(14,079)	
2	Support to Local Implementing Partners					
2.1	Salaries		297,549	326,388	-28,839	-10%
	Subtotal		297,549	326,388	(28,839)	
3	Service Delivery Costs					
3.1	Capital Equipment	3.1, 4.1, 5.3	345,762	401,639	-55,877	-16%
3.2	Drugs and consumables (tertiary level) - 5'600 surgeries	1.1	779,144	776,514	2,630	0%
3.3	Low Vision devices and spectacles	1.1, 3.3	62,918	52,197	10,721	17%
3.4	Patient care and support - referral and follow up	1.1, 1.2	338,991	334,955	4,036	1%
3.5	District/ Community Based Costs	1.1, 3.1, 3.3	45,605	44,261	1,344	3%
	Subtotal		1,572,421	1,609,567	(37,145)	
4	Training					
4.1	Paediatric Ophthalmologists	2.1	96,913	75,984	20,928	22%
4.2	EACO	2.1	44,937	48,804	-3,867	-9%
4.3	Medical/ technical mid-level personnel training and orientation	2.1	216,721	275,820	-59,099	-27%
4.4	CME/ CPD and follow- up/ supervision after training - all cadres	5.3	92,473	92,112	361	0%
4.5	District/Primary Health workers	2.2	121,484	136,822	-15,337	-13%
4.6	Community	2.2	106,816	87,416	19,400	18%
4.7	Partner training /capacity building workshops	2.1, 2.2	83,498	74,310	9,188	11%
	Subtotal		762,842	791,267	-28,425	
5	Communication – Advocacy and Community Awareness					
5.1	Regional / EACO	4.1 4.2	49,263	63,622	-14,359	-29%
5.2	Country specific health education	1.3, 4.1, 4.2	84,899	85,788	-890	-1%
	Subtotal		134,161	149,410	(15,249)	
6	Monitoring and Evaluation					
6.1	Research and Reviews	4.3	91,630	119,173	-27,543	-30%

6.2	Monitoring	4.1, 5.3	188,321	191,031	-2,711	-1%
6.3	Baseline studies	5.4	73,101	67,858	5,244	7%
6.4	Evaluations	5.4	57,660	43,203	14,457	25%
6.5	Dissemination and Learning					
	Subtotal		410,712	421,264	(10,553)	
	TOTAL		3,453,278	3,587,568	(134,290)	-4%

As at the end of December 2016, the total budget for all the project activities was 86% of the total initial budget of \$ 4 million. Results showed that an over-expenditure of 4% of this budget had occurred. The analysis of variance between the budgeted and actual amounts indicates that funds allocated for low vision devices and spectacles (var. 17%), training of paediatric ophthalmologists (var. 22%), community training (var. 18%), and partner training /capacity building workshops (var. 11%) were not sufficiently applied implying low performance of these activities.

After a lull of activities in Tanzania, the increased activity levels towards the end of 2016 led to a spike in expenditure resulting in a Communication and Office Costs expenditure variance of -16% due to increased international communication costs. At the same time, a variance of -27% was reported for training and orientation of medical/technical mid-level personnel, -29% for Advocacy and Community Awareness at the regional/EACO level, and -30% for research and reviews for M&E, and -16% for capital equipment. Plausible explanations were given for these variances.

By and large therefore, the budgeted and actual expenditure for most of the budget lines had low variance and this implies that activities were performed to the desired levels and funds were applied with a view to obtaining value for money. The summarized schedule of cumulative expenditure is presented in Table 6.

The cumulative expenditure to 31.12.2017 reflects a more actual budget situation, with a variance of only 3.9%, and with only one budget line (Communication, advocacy, and community awareness) exceeding 10% variance. The above expenditure analysis, leads one to conclude that this project has been implemented to an acceptable level of efficiency.

4.3 Effectiveness

This section explains the extent to which the project achieved its outputs and outcomes; the extent to which unplanned outputs and outcomes were achieved; and the factors that influenced achievement or non achievement of the planned and unplanned outputs and outcomes.

4.3.1 Process of Service Delivery

Service delivery at the secondary and tertiary health facilities was a core activity for the consortium. Services included identifying eye problem cases, treating them, conducting surgeries, counselling etc. They were preceded by:

- a) creating awareness among the public using mass media and Information, Education and Communication (IEC) materials,
- b) identifying schools to participate in the programme,
- c) identifying and training teachers to screen pupils,
- d) issuing of screening equipment and referral forms,
- e) referring identified CEH cases to the primary health facility,
- f) referring the more difficult CEH cases to the secondary health facility, and
- g) referring the most difficult cases to the tertiary health facility.

At the secondary and tertiary health facility, service delivery was addressed through the following steps:

- a) treatment of CEH conditions at primary, secondary and tertiary health facilities,
- b) conducting cataract and other surgeries,
- c) issuance of spectacles and low vision devices, and
- d) follow-up on CEH cases to monitor progress and provide post-surgical care.

Data was obtained from Monitoring and Evaluation (M&E) reports, discussions and observations both in the field and at the headquarters of the implementing partners.

4.3.2 Levels of Output Obtained

Objective 1: Improving child eye health service delivery

The first objective of the programme was to improve child eye health service delivery and strengthen referral and follow-up systems from primary to tertiary level, in order to enhance access to quality, child-centred and child friendly eye-care services for over one million children in the target regions through a cluster approach. Under this objective, the programme was expected to establish or improve systems that could identify children with eye problems at the earliest possible point, determine the nature of the problem and recommend the nearest point where qualified assistance could be accessed by the identified child in the period before, during and after the assistance.

Data was recorded for children treated at primary, secondary and tertiary level facilities with a planned breakdown of 300,000 for primary level and a combined total of 700,000 for secondary and tertiary level facilities; children operated for cataracts and other major and minor surgical interventions; spectacles and low vision devices supplied to children who have undergone refraction; number of clusters fully functional and with capacity for identification, referral, follow-up and paediatric eye care service provision; and people reached with outreach messages through IEC materials and through radio and other media.

Targets were set per quarter and performance was reported biannually. The performance of the project in this objective is presented in Table 7. Comparison of the cumulative planned and actual outputs from beginning of the project to 31.12.2016 indicates the overall

performance of the project. Variance is indicated for the achievement against the planned target.

It is clear from Table 7 that except for children treated, spectacles and low vision devices issued, and people reached through IEC materials where achievement fell short by 36%, 9% and 19%, respectively, the project attained or exceeded all its targets in the other activities. Other minor paediatric surgical operations exceeded targets by 111%, people reached through radio and other media programming by 57%, and other major surgical interventions by 43%.

A total of 13,946 eye surgeries, with cataract surgeries representing 41% of these and 51% of all major surgeries, were performed over the life of the project. In addition, 4,465 spectacles and low vision devices were issued covering 40% of all major surgical cases. There were 13,608,622 people reached with eye health messages through IEC materials and mass media. Most activities exceeded targets, an indication that the project performed very well indeed.

The level of project performance was slow at the beginning in 2013 as most of the systems were not in place. Monitoring reports indicate that there were no cataract surgeries in 2013 and the first half of 2014. Cataract surgeries are captured in the second half of 2014 as presented in Figure 1.

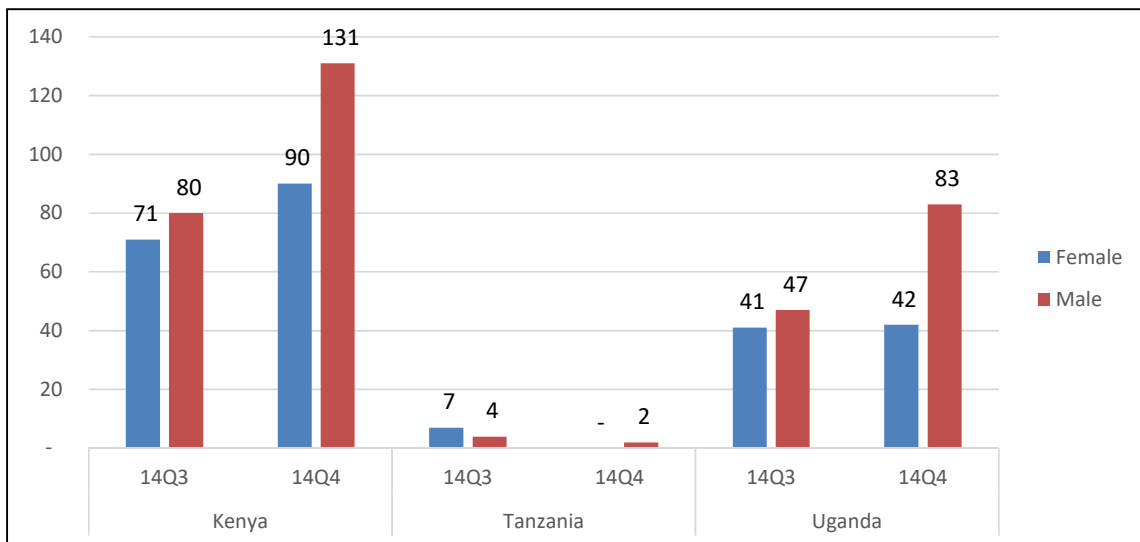


Figure 1: Cataract surgeries carried out in Quarter 3 and 4, 2014

Figure 1 indicates that in Kenya and Uganda cataract surgery attained appreciable levels in Q3 and continued to increase in Q4. In Tanzania, the activity had not taken off even by the end of 2014. This was as a result of slow establishment of the systems in the CBM project management office. The effects of this slow start of the project activities in Tanzania continued to affect the project in later years.

Cataract operations recorded in 2014 indicate that there were more operations conducted on boys than on girls. This situation was sustained in Kenya through 2015 but not in Tanzania and Uganda as shown in Figure 2. No explanation was offered for this gender ratio except that it occurred naturally. In Quarter 1 in Tanzania and Quarter 4 in Uganda, there were more operations carried out on girls than on boys.

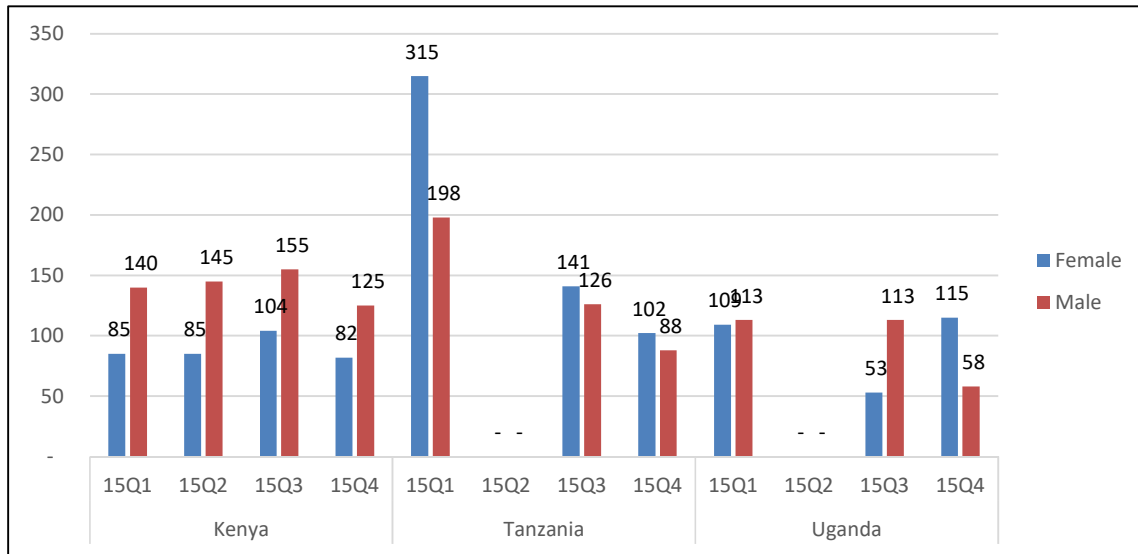


Figure 2: Children's cataract surgeries carried out in 2015

At the activity level, the first of the four main output areas under this objective is the screening of children. The target for the second half of Year 4 was 53,924. Table 7 captures the regional performance on this activity.

Table 7- The number of children screened in Q2 2016 by country

	Planned for Q2/Y4				Total	Actual for Q2/Y4				Total
	Male		Female			Male		Female		
	No.	%	No.	%		No.	%	No.	%	
Kenya	1975	48.3	2115	51.7	4090	2128	62.6	1273	37.4	3401
Tanzania	11,416	40.6	16,668	59.4	28084	54357	79.5	14047	20.5	68404
Uganda	10875	50	10875	50.0	21750	17288	49.2	17851	50.8	35139
Total	24266	45	29658	55.0	53924	73773	69.0	33171	31.0	106944

Though late in the project, the enhanced activity for this period for Tanzania was evident when they screened 68,404 children against a target of 28,084 for an attainment rate of 243.6%. This was a marked improvement from previous periods. However, the programme experienced challenges in Tanzania where most of the data received did not reflect a realistic gender distribution, giving room for the conclusion that data collection points were not very keen on disaggregation by gender. The overall achievement against the targets for this period was 198.3%, which was contributed largely by the intensified activities in Tanzania, as well

as a consistent posting by Uganda. Kenya had exhausted its activities hence made a minimum contribution towards the overall achievement in this period.

Out of the children screened, a total of 2,750 (975 males and 890 females) were referred for further attention owing to various eye problems.

The next activity under this objective was surgeries performed on children who were screened and identified to be having problems requiring surgeries as presented in Table 8.

During this period, Tanzania maintained its increased activity levels, with 682 cataract surgeries performed, while Kenya posted its last outputs under this activity of only 29 cataract surgeries, thus exhausting its surgery budget. Uganda remained consistent in posting high outputs on cataract surgeries even for this period. It is worth noting that Uganda and Tanzania did not use the unit costing for their surgeries, hence their funds for this activity were likely to yield much higher outputs than Kenya.

Table 8 - Cataract surgeries performed in Q2 Year 4 by country

	Planned for Q2/Y4					Actual for Q2/Y4				
	Male		Female		Total	Male		Female		Total
	No.	%	No.	%		No.	%	No.	%	
Kenya	13	57	10	43.5	23	16	55.2	13	44.8	29
Tanzania	25	36	44	63.8	69	391	57.3	291	42.7	682
Uganda	20	54	17	45.9	37	240	53.1	212	46.9	452
Total	58	45	71	55.0	129	647	55.6	516	44.4	1163

The challenge of having fewer girls than boys attended to prevailed even during this period. However, the programme engaged with service providers in a number of ways to address this gender bias against female children. CBM organised training for all her partners to enhance the targeting of female children in programme activities. It was expected that with the skills and knowledge acquired from the training, there would be an improvement in gender-mainstreaming in all their activities. In Tanzania, CBM explored the possibility of replicating the gender training and engaged service providers to go beyond the cultural barriers that discriminated against the girl child. Performance of service delivery activities is presented in Table 9.

Table 9: SiB Project Performance for Objective 1 – Eye Health Service Delivery

Output type	Log-frame ref.	Cumulative planned Outputs (Project to 31.12.2016)			Cumulative actual outputs (Project to 31.12.2016)			Variance %
		Male (45%)	Female (55%)	Total	Male	Female	Total	
Objective 1: To improve child eye health service delivery and strengthen referral and follow-up systems from primary to tertiary level in order to enhance access to quality, child centred and child friendly eye care services								
Children treated (300,000 at primary- and 700'000 at secondary and tertiary level)		410,023	439,977	850,000	297,263	243,252	540,515	-36%
Children operated at tertiary level*;(4,800 cataracts, 800 others e.g. glaucoma, retinoblastoma, squint, lid surgeries, small interventions like foreign body removal etc.)								
• Cataracts		2,540	2,365	4,905	3,170	2,544	5,714	16%
• Others major surgical interventions		1,908	1,959	3,867	2,922	2,621	5,543	43%
• Other minor surgical interventions (paediatric)		713	559	1,272	1,475	1,214	2,689	111%
Refraction								
• Spectacles and low vision devices supplied to children who have undergone refraction.		2,442	2,467	4,909	2,364	2,101	4,465	-9%
• No of Clusters fully functional (for identification, referral, follow- up and service provision)				9			9	0%
Greater public awareness of prevention of childhood blindness, importance of early identification and referrals, availability and access to services in all districts (Target 6,000,000 broken down as per row 18 & 19 below)								
• People reached through IEC materials		457,219	480,781	938,000	381,417	374,058	755,475	-19%
• People reached through radio and other media programming		4,068,250	4,109,250	8,177,500	6,406,073	6,447,074	12,853,147	57%

Objective 2: Strengthening human resources for eye health (Human Resource Development)

The overall position of HRD for the entire region is captured in Table 10.

Table 10: SiB Project Performance in Objective 2 – Human Resource Development

Objective 2: To strengthen human resources for child eye health in line with V2020 targets in technical as well as in managerial aspects from primary to tertiary, as well as on national and regional coordination level								
Output type	Logframe reference	Cumulative planned Outputs to 31.12.2016			Cumulative actual outputs to 31.12.2016			Variance %
		Male (45%)	Female (55%)	Total	Male	Female	Total	
Number of health facilities with requisite number of staff to deliver child eye health in line with V2020				56			56	0%
Training								
• Paediatric ophthalmologists		0	2	2	2	2	4	0%
• Orientation of paediatric ophthalmologists		11	11	22	12	12	24	9%
• Orientation of students in CEH		73	52	125	94	76	170	36%
• Elective term rotation for resident students		7	17	24	6	20	26	8%
• Exchange visits for staff		4	2	6	7	2	9	50%
• Orientation of paediatric Ophthalmology of AMOs/ Optometrists		46	67	113	78	126	204	81%
• Low vision/ refraction (tertiary and secondary)		12	15	27	8	7	15	-44%
• Ophthalmic / theatre nurses		4	25	29	1	24	25	-14%
• Orientation of ophthalmic Nurses		32	34	66	0	0	0	-100%
• Orthopist		0	2	2	1	1	2	0%
• Optometrists		2	0	2	0	0	0	-100%
• Paediatric Anaesthetists		12	6	18	9	3	12	-33%
• Counsellors		0	1	1	4	4	8	700%
• Equipment technicians		22	0	22	24	0	24	9%
• Primary eye care workers orientation		178	160	338	722	661	1,383	309%
• CME/CMD all cadres incl. management		90	155	245	389	487	876	258%
• MCH centres trained		190	192	382	318	65	383	0%
• Community level training (Village Health Teams) - women's groups, village health workers, teachers etc.		780	855	1,635	733	763	1,496	-9%
• Leadership, Management and V2020 planning workshops on different levels for 62 institutions and 3 national coordination offices		105	93	198	58	49	107	-46%
		1,568	1,689	3,257	2,466	2,302	4,768	
Total		48%	52%	100%	52%	48%	100%	

Table 9 shows that while the training planning gender ratio intended was 45% male and 55% female, the plans attained an average trainee inclusion ratio of 48% male and 52% female. However, the actual participant ratio attained 52% male and 48% female.

In this objective, except for orientation of ophthalmic nurses and training of optometrists which failed to take off, the variance of most of the other trainings is positive and high. While it has been observed elsewhere that some of the trainings were a little delayed for various reasons, the majority took place which include an over 300% achievement in the orientation of primary eye care workers.

Objective 3: Expanding infrastructure/equipment for the delivery of CEH

The project achieved fully the infrastructure development objective as indicated in Table 11.

Table 11: SiB Project Performance in Objective 2 – Human Resource Development

Objective 3: To provide tertiary and regional/secondary centres in the project area with the clinical and non-clinical equipment needed to deliver child eye care services					
		Male	Female	Total	Variance
Number of health facilities in the target areas equipped and functional to deliver child eye health, in line with V2020 targets (62 facilities broken down as per row 44 and 45 below)					
• Tertiary (e.g. paediatric eye care units) with equipment's meeting international standards			10	10	0%
• Secondary (e.g. district eye units, low vision units) with equipment meeting international standards			46	46	0%
• Country specific procurement system for surgical, medical and optical supplies and consumables for CEH established			3	3	0%
• Number of Optical shops established and functional			1	1	0%

Objective 4: Improving the evidence base and engaging in advocacy for CEH

Objective 4 of the programme was to set up and implement a regional advocacy agenda, ensure regional sharing of information and improve the evidence base for child eye health at national and global level. The key output areas were regional advocacy activities for promoting child-eye health; sharing information on child-eye health across the region; and enabling the respective country NEC offices to process child eye health information to aid decision-making. Part of the last component entailed integrating and disaggregating CEH

data into national Health Management Information Systems (HMIS); conducting the baseline survey; and conducting research and disseminating results.

At the activity level, the main outputs for this period included the continued support to advocacy teams that have been established across the consortium to push the advocacy agenda in each country. This was reported to have in previous periods resulted in the inclusion of new indicators into the national HMIS, as well as the collection of CEH data and information at primary and secondary facilities where this never used to happen before. The project has achieved the following:

i) Processing child eye health information for decision-making. Activities for this objective were intended to continue to the end of the project at the end of June 2017. They included:

- Advocacy working group meetings held within and across the consortia.
- In Tanzania, the programme worked closely with the Standard Chartered Bank in the country advocacy efforts aimed at mainstreaming CEH within the MoH programmes.
- In Kenya, a consultant commenced the development of the post-project advocacy implementation plan, to be used after project closure. The country coordination team in all the three countries continued holding their periodic meeting to discuss progress in the inclusion of elements of child eye health into policies
- In Uganda, the project team engaged and actively participated in the national task force on lobbying and advocacy for eye health in Uganda. Their efforts were meant to lead to inclusion of child-eye health issues in the final document. A review of the curriculum for the training of midwives provided an opportunity to lobby for inclusion of a module on eye health.

ii) HMIS and EMIS in Uganda, Kenya and Tanzania. In all the three countries, the national HMIS already exists and belongs to the MoH. This output expected the programme to support and strengthen the operations of the respective HMIS in the three countries. The programme collaborated regularly with the MoH to support the operations of the HMIS, including the integration of eye-health indicators that were not there before; and printing and distributing data booklets for the collection of CEH information from primary and secondary facilities. In Tanzania the MoH trained 12 people on data collection for HMIS. Further, the programme continued its activities in supporting engagements with the respective National Eye-health Coordination (NEC) Offices to keep CEH issues at the forefront of the planned as well as on-going review processes.

iii) Baseline survey on child eye health. The baseline survey was conducted and findings disseminated in various forums including the IAPB Conference in Durban. Recommendations of the baseline study were also factored into the implementation plans for the remaining period.

iv) **Mid-term Evaluation.** The Mid-term Evaluation was carried out and findings adopted for inclusion in the periodic plans.

v) **Research on CEH.** Five (5) research studies were carried out – two in Kenya, two in Tanzania and one in Uganda – to replace the initially planned operational research, and funded with grants from the project. Findings from these studies were disseminated in various technical fora.

Objective 5: Strengthening leadership and governance and promoting collaboration

Objective 5 of the programme was to strengthen leadership and governance as well as coordination and multi- sectorial collaboration for child eye health at all levels. The main outputs of this objective included programme leaders in the health and education sector working together to put measures in place for promoting child eye health.

To fulfill this objective, the SiB Joint Governance Meeting for 2016 was held in Nairobi in November. It brought together all the key stakeholders involved in the implementation of the SiB programme to discuss:

- An exit strategy after the no-cost extension period to June 2017.
- The need to continuously work towards strengthening the referral pathways for greater effectiveness during and after project closure.
- Possibilities for future partnerships in new projects.

4.4 Impact

4.4.1 Impacts at the Household and Individual Level

Positive impacts of the project at the household and the individual level have been captured in the five voluntary case studies presented below.

Case Study 1: Kenya - Abigail Chepkoech, Tenwek Hospital

The Story

Abigail is a 12-year old girl in Class Five who lives near Tenwek Hospital in Kenya. She developed cataracts in both eyes when she was very young. Her parents did not know what was ailing the child. The child used to see with difficulty but she eventually became blind early in her school life. Since she was unable to read, she stopped going to school. She could not see people nor identify colours. Her parents sent her away to live with her grandmother because they suspected her blindness was a result of witchcraft from the immediate neighbours. When at first Abigail's parents brought the little girl to her she was living alone. The grandmother had accepted to live with the girl so that she could accompany her to prayers because she too believed that Abigail's blindness was due to witchcraft and could be healed through fervent prayer. The grand mother took her for many prayer sessions by

different self-styled ‘prophets’ but nothing improved. Local herbs were used on her but the situation worsened.

One day Abigail was taken to Tenwek mission church for prayers and by chance they met Nurse Leah Mutai who advised them to go to the hospital chapel. Then they were taken to the counselling room and later they were taken to the hospital where the child was examined by the ophthalmologist. Abigail was operated on and given spectacles and a schedule for clinics. Unfortunately she was hit by a window and Leah learnt of this during home visits. Abigail underwent a second eye surgery. All the treatment was free of charge.

Abigail has now recovered from the depression she was in before the surgery and is now warm and jolly. When we reached their home she came to welcome us and hugged all of us. She is able to read with the aid of the spectacles. She is also able to do house chores like washing clothes and utensils, fetching firewood and fetching water from the river. However, she has not gone back to school due to lack of funds. She lacks basic needs such as clothes and sanitary towels. The grandmother works as a house cleaner at St Mary’s Secondary School and earns two hundred Kenya shillings per day which is barely enough for meals for two. She got a National Hospital insurance Fund (NHIF) card for Abigail through her savings which defrays some of her hospital expenses.

Insecurity is a major problem for Abigail who does not attend to school and is locked in the house as the grandmother goes to work. This is because her grandmother fears that someone may molest her if she is allowed to wander outside alone.

Her grandmother expressed gratitude for what Tenwek hospital had done and all people who made the operation possible.

Lessons Learnt

This case study is a reminder that children’s eye problems are often blamed on witchcraft, tend to be unfamiliar to parents, due to lack of knowledge parents revert to the children’s grandparents for assistance, it takes too long before the eye problem is acted on, religion misleads people by persuading them to accept faith healing and ignore modern medicine, and parents lack the economic means to take necessary action on their children’s eye problems. It is important to educate the public on early detection of children’s eye problems and appropriate actions to take.

Case Study 2: Uganda - Agnes Kyompaire and her Four Children, Mbarara

The Story

Agnes Kyompaire is a blind widow and mother of four children who lives in Ibanda, about 80 km from Mbarara town in Mbarara District, Uganda. Her blindness resulted from a late surgery on cataracts. Soon after she became blind, her husband died. She was dispossessed of her late husband’s land and she and her children had to leave to go and live with her mother.

Her first child was born sighted and he still is. Her other three children were all born blind but have had successful surgeries conducted free courtesy of SiB Project. They are Abel Mugisha who is 14, Isack Mugume who is 12 and Arnold Tumulabazi who is 10. The children underwent surgery to remove cataracts and can now see and are in school. I followed the children in school where I found them in class. Before surgery, they could not do anything for themselves as they were born blind. Since their mother is blind, they relied on their older brother and their grandmother for everything.

Through the intervention of the local authority, she was able to get her late husband's land back. She says she feels safe now as her 'boys who can now see can protect me'. They also help in household chores and she no longer has to live with her mother.

Lessons Learnt

In some African societies women are deprived of their dead husband's estate by their in-laws and especially when they are looked down upon due to what the in-laws consider her inadequacies such as bearing blind children. Society also denies disadvantaged children the right to inherit their father's estate. Under such circumstances the poor family retreats to the care of their grandparents which perpetuates the cycle of poverty. A blind widow dispossessed of her estate would not have had the resources to have her blind children treated without external assistance such as what was availed by the SiB project. The economic benefits of the surgery and treatment given free to this family would be very high.

Prevention of infringement on the rights of widows and disadvantaged children is the responsibility of a country's legal system. In order to break the vicious cycle of poverty local authorities must ensure that cases of poor vision and blindness are detected and attended to and the rights of widows and their children are not infringed upon by their spouse's relatives.

Case Study 3: Tanzania - Gladness Goodluck Ngowo, KCMC

Gladness Goodluck Ngowo is a 10-month old baby girl who was born with eye difficulties which her mother noticed when she was three months old. Her mother, Josephine Ngowo, reported that she had fallen seriously ill when she was expecting the child. At three months the child could not see. The child would shake her head to the right and left until the 'sports' would go to the side exposing only the white of the eye for the child to see. The mother would use a torch to check the eyes but the child would not see.

When the child was taken to KCMC she was operated on at four months free of charge. After the operation the child was discharged and given spectacles two months after the operation. She does not like to wear the spectacles but she has to wear them to be able to see. Sometimes she removes them and throws them away. At such times she cannot see at all.

The mother is very grateful to the programme to have sorted out this permanent problem on her child. She confessed that the costs involved in the operation and bringing the child to the

clinic ever so often would have been impossible to bear without assistance from the CBM project.

Case Study 4: Tanzania – Fausta Laswale, KCMC

Fausta Laswale was the mother of Susan Laswale who was seven years old and Violet Laswale who was nine years old. She reported that both Violet and Susan were born with “flesh in the eye” and had vision difficulties.

Violet was taken to Huruma hospital but they said she had no problem. At nursery school she would shield her eyes in an effort to focus but she could not see. She was taken again to Huruma hospital and she was referred to KCMC where the two eyes were operated on. Both children were operated on and given glasses but they were not wearing these glasses during the interview. For one of them the glasses were said to have been broken and for the other the glasses had lost one lens.

In class they have to sit next to the writing board whenever they don't wear their spectacles. In strong sunlight, they have to shield their eyes. One is in Class 3 and performs very well in class and the other one is in Class 2 but was performing fairly badly.

Case Study 5: Yusuf Musa, KCMC

Two-and-half-year old Yusuf Musa is the son of Beatrice Lazaro from Tarakea near the Kenya-Tanzania border. Musa was born with cataracts and at six months he could not see. He was taken to Tarakea hospital and they said that the child would be able to see later. The mother was told to just give him time to grow. After several visits to the hospital the mother argued that the child must be able to see from birth. That is when Tarakea hospital referred the child to KCMC where “doctors assured me that the child would be operated on for free and he would be able to see again”.

The child was operated on and was able to see. “Indeed, seeing is believing, you can see for yourselves that my baby has regained his vision”, said Beatrice. However, contact lenses had not been fitted. The child had low vision devices but sometimes he removed them and would throw them away. “I am very grateful that the boy can now see. Other children used to ridicule him because he could not focus on an item. Only the white part of the eye of my child was visible before the operation. Now the eyes appear normal. Thank you.”

Lessons learnt

From the foregoing case studies from Tanzania, it can be observed that:

- a) Both girls and boys can have eye conditions from birth.
- b) In a wide range of societies, eye conditions are not detected in good time to enable parents have their children treated as early as possible.
- c) There is general belief that eye problems are associated with witchcraft and are not a genuine illness.

- d) Some parents believe that eye problems should be treated using traditional remedies and prayer instead of taking the child to hospital at the earliest opportunity.
- e) Children with eye defects are derided by their peers and often their complaints are ignored by their parents until the problem gets worse and sometimes too advanced to correct.
- f) Some hospital personnel are uninformed about eye care and can make the wrong diagnosis and worsen the condition of the child.
- g) The population is generally poor and unable to raise funds to meet costs of treatment, transport costs and general upkeep when visiting hospital.

A sustained campaign to inform the population about detection of eye conditions and advice on actions to take is vital. The profile of eye conditions within the health systems in East Africa has been low. The project has played a major role in raising this profile.

4.4.2 Impact on the Health System

Health facilities have been supplied with equipment and their personnel have been trained in various aspects of eye health. This means that services have improved and these services will continue into the future.

4.5 Sustainability and Replication

This is addressed in Section 3.5. The project addressed a crucial need in society, was designed to touch the various parts of the child eye care value chain including detection of eye problems, diagnosis, treatment including surgical intervention, improvement of human resources and supply of vital equipment and supplies. This design endears the project to replication and has already inspired replica projects in Kenya, Uganda, Tanzania and Nigeria.

The project was politically and socially acceptable as it operated within the framework of the existing health systems and the communities that consume their services; environmentally tolerable as it had no unique adverse effects on the environment beyond those occasioned by the normal health system; and economically viable as it has been shown in literature that eye care projects have high economic rates of return as “research has shown that interventions to improve eye health in developing countries are among the most cost effective public health programs available, and return \$4 for every \$1 invested”⁸. The project was also technically feasible because the technology, equipment, personnel, materials and infrastructure required for its implementation were available and could be accessed in the implementing countries and around the world.

The project therefore bore all the hallmarks of an essential intervention whose replication and scalability were only a matter of planning and providing necessary resources. Upward

⁸ Abou-Gareeb I, Lewallen S, Bassett K, Courtright P, *Gender and blindness: A meta-analysis of population-based prevalence surveys*, *Ophthalmic Epidemiology* 2001; 8:39-56.

scalability in the target countries and replication in new territories would bear positive impacts.

4.6 Child Safeguarding

The consultants adhered to child safeguarding ethics during the entire evaluation process. Children who participated in the evaluation were accompanied by their parents and/or guardians for the entire period of their interaction with the consultants. For those who volunteered to have their photographs taken the parents/guardians were asked to sign a form that stated the use of the photographs and confirmed that the photographs would not be released for any other than the stated purpose. Children were handled gently and allowed to express themselves freely which many did and tended to enjoy. There were many happy faces who were eternally grateful to the SiB project for giving them back their sight.

5. CONCLUSION AND RECOMMENDATIONS

5.1 Conclusions

The SiB children eye care project was implemented for four and a half years which included the initially planned four years and a no-cost extension of six months occasioned by a loss of time due to a slow start of activities. This evaluation has established that:

- a) The project addressed children's eye health which is an important need experienced by all populations in the East African countries of Kenya, Uganda and Tanzania.
- b) The project was implemented by two consortia with the CBM-led consortium carrying four partners with long experience in eye care in the project area.
- c) The project was implemented in collaboration with government ministries of health and education as well as the local administration as it targeted children in primary school and infants of 0-5 years while utilising the existing health system.
- d) The consortium approach introduced a complex system of activity sharing and territorial allocation which resulted in delays in activity commencement.
- e) The project logframe identified clearly the activities that addressed the entire children's eye health value chain including community awareness creation, eye screening, referral to a health facility, training of personnel in schools and health facilities, equipping of health facilities, examining referred cases, treatment, surgery, issuance of spectacles and low vision devices, follow up of cases and mainstreaming of eye health in national planning and budgetary systems.
- f) The project was implemented within the set budget and by end of 2016 the budget still showed a reasonable balance.
- g) The project recorded high levels of success by attaining all its objectives except in training and supply of spectacles in Tanzania, the former of which may be undertaken in a future project and the latter of which has been resolved through a late delivery of a consignment of appropriate spectacles from South Africa through BHVI.
- h) The project has had noticeable immediate and short-term impacts such as children regaining good eye health and sight as well as improving their performance in school

and being able to lead normal lives. Community awareness has grown and governments are more aware about the eye care deficit in East Africa.

5.2 Recommendations

It is recommended as follows:

- a) As part of the project exit strategy, the project should compile and package all project documentation for future reference and make it accessible to partners, beneficiary governments and interested persons from the academic fraternity and general public.
- b) The project should hold meetings with beneficiary government and other entities to share successes and challenges experienced during project implementation, and chart and obtain commitment from the collaborating agencies on how project results will be continued after project closure.
- c) Conduct an inventory survey of all equipment supplied, document its status and formally hand it over to the beneficiary health facilities.

6. ANNEXES

6.1 Sources

6.1.1 Persons Seen in Kenya

a) Kenya Ministry of Health and Standard Chartered Bank

Name	Position	Contact
1. Regina Mukiri	Head, Sustainability and Community Engagement, Standard Chartered Bank	+254 792 363 511 email: reginamweru.mukiri@sc.com
2. Dr. Michael Gichangi	Chief Government Ophthalmologist and Head of Ophthalmic Services Unit, Ministry of Health	+254 733 343 012. email: gichangi58@yahoo.com

b) Headquarters Project Staff

Name	Position	Contact
1. Samuel Ogollah	Regional Project Manager, CBM	0788597233
2. Herbert Dola	Project Manager, Fred Hollows Foundation	0733802020
3. Josiah Onyango	COECSA, Project Manager	0735312678

c) Tenwek Hospital

Name	Position	Contact
1. George Odhiambo	Eye Unit Coordinator	0716019040
2. Leah Mutai	Low Vision Therapist	0724 863351
3. Elijah Terer	Accountant	0726 703481

d) Sabatia Eye Hospital

Name	Position	Contact
1. Dr. S. Sitati (beneficiary of research)	Ophthalmologist	
2. Linet Kan'galika	Low Vision Assistant	0721767167
3. Savala Indiazi	Finance and administration manager	0728220309 & Savala.indiazi@sabatiaeyehospital.org

e) Moi Teaching and Referral Hospital

Name	Position	Contact
1. Dr. James Bett	HoD Eye Unit	0722309659
2. Tabitha Nyamayi	Outgoing Project Officer	0722238806
3. Paul Onalo	Incoming Project Officer	0721517320
4. Sarah Chepngetich	Health Record & Information Officer	0720710584

f) Lighthouse for Christ Eye Hospital

Name	Position	Contact
1. Dr. Ibrahim Matende	Medical director/paediatric ophthalmologist	0722958541 ibrahim.matende@lighteyecentre.org
2. Beatrice Atieno	Administrator/ Finance Controller	0726015315 finance.controller@lighteyecentre.org
3. Peninah Nzioka	Outreach Coordinator	+2540142226179/ 2220018

g) Kwale Eye Centre

Name	Position	Contact
1. Verena Ndunda	Administrator	0733785916
2. Fransisca Shali	Assistant Admin./HR	
3. Albert Masua (beneficiary of training)	Ophthalmic Clinical Officer/ Surgeon	0725990455 albertmasua68@gmail.com
4. George Munywoki	Nursing officer in Charge	munywokiemanuel@yahoo.com 0726125364
5. Lilian Kwamboka Nyaboga	Ophthalmic Clinical Officer	nyabogal@yahoo.com 0728869356

6.1.2 Persons seen in Uganda

Name	Position	Contact
3. Mr. Joseph Magyezi	SiB Ruharo Cluster Coordinator Ruharo Mission Hospital	+256702568291 jmagyezi@gmail.com
4. Mr. Arinaitwe John	Vision Therapist/ Ophthorlist Ruharo Mission Hospital	
5. Dr. Kikira Susan	Head of Eye Unit/ Ophthalmologist Jinja Regional Referral Hospital	+256772536520 susankikira@gmail.com
6. Sister Scholastic Wanyama	Senior Nursing Officer Benedictine Eye Hospital	P.O. Box 923. Tororo +256783546836 scholadelide@gmail.com
7. Dr. Arach Prosonia	Pediatric Ophthalmologist/ Cluster Leader/ Medical Director Benedictine Eye Hospital	prosarach@yahoo.com , +256712920904
8. Aide Tony Micheal	Equipment Technician/Ophthalmic Assistant Benedictine Eye Hospital	+256782411061 Aidemicheal40@gmail.com
9. Namunyu Saul	Ophthalmic Theatre Nurse (OTN) / Equipment Technician Benedictine Eye Hospital	+256753878849
10. Sister Jacqueline Chikam	Ophthalmic Clinical Officer (OCO) Benedictine Eye Hospital	+256778215356 Maryjacqueline016@gmail.com
11. Dr Kasadhakawo Moses	Ag. Clinical head Mulago National Referral Hospital	+256772513500/ kasadhokawo@gmail.com
12. Dr Ssali Grace	Pediatric Ophthalmologist Mulago National Referral Hospital	+256776847268
13. Mr Chris Iga	Programme Manager, Sightsavers Uganda Country Office	ciga@sightsavers.org/ 0772521962

6.1.3 Persons seen in Tanzania

a) MOH Headquarters

Name	Location	Position
Dr. Bernadetha R. Shilio	Ministry of Health	Acting Program Manager

b) Mwanza Region

Name	Location	Position
1. Dr. Elias Seleli	Sengerema District Hospital	Ophthalmologist
2. Kulwa Gabriel	Bugando Medical Centre	Biomedical Officer
3. Rose Mtaita	Sekou Toure Regional Hospital	Ophthalmic Nurse
4. Elizabeth Makamba	Sekou Toure Regional Hospital	Ophthalmologist

5. Alex Daudi	Sekou Toure Regional Hospital	Optometrician
6. Dr. Evanist	Bukando Medical Centre	Ophthalmologist
7. Joseph	Bukando Medical Centre	Optometrist
8. Kurwa Gabriel	Bukando Medical Centre	Biomedical Engineering

c) **KCMC**

1. Dr. Aimbora	Ophthalmologist	
2. Pulkeria	Assistant in charge, Theatre	
3. Geneva Mchau	Nurse Counsellor	

d) **Bugando Medical Centre**

Name	Position	Contact
1. Dr. Evarista Mgaya	Head of Department/ Ophthalmologist	0755922728 mgaya-e@yahoo.com
1. Dr. Elizabeth S. Nakausa	Regional Eye Health Coordinator (REHC)	0754664905
2. Laines Nicholas	Assistant Ophthalmic Nurse	0762578842
3. Joseph Mosabi	Optometrist	0784 720 781
4. Justine Daffa	Optometrist	0754 285200

e) **Muhimbili National Hospital**

Name	Position	Contact
1. Dr. Mwendu Judith	Paediatric Ophthalmologist/ Senior Medical Specialist I)	0713 133142/0754465216
2. Dr. Nyaluke Paul,	Paediatric Ophthalmologist/ Medical Specialist II	0754243317/0715743317
3. Roger Aluli	Ophthalmic Nurse in charge, Eye Operating Theatre	0754954459

f) **Mbeya Regional Referral Hospital**

Name	Position	Contact
1. Dr. Nicholas B. Chaula	Medical Officer/ Ophthalmologist	0757491225
2. Agnes S. Njee	Registered Nurse	0762064979
3. Joyce H. Ntullo	Anaesthetist	0754874545 joycentullo7@gmail
4. Digna Khilcasu	Optometrist	076756049
5. Tulalemwa Njulumi	Assistant Nursing Officer, Mbarali District Hospital	0755511038
6. Dr. Fariji L. Killewa	Assistant Medical Officer & Cataract Surgeon	0754091255 mwampulafariji@yahoo.com
7. Dr. Barnabas Mshangila	Head of Department/ Ophthalmologist/ Mbeya Zonal Referral Hospital	+255767458503

6.2 References

- Various project reports and other documents
- Susanne H Wedner, David A Ross, Rebecca Balira, Lucas Kaji, Allen Foster. Prevalence of eye diseases in primary school children in a rural area of Tanzania. *Br J Ophthalmol* 2000;**84**:1291–1297
- Mwongozo kuhusu afya ya macho kwa watoto kwa wataalamu wa macho wa ngazi ya mkoa na wilaya.
- <https://www.healio.com/ophthalmology/practice-management/news/print/ocular-surgery-news-apao-edition/%7Bb1e8d82a-acc5-4382-9a1e-6938e87ea67d%7D/from-vision-2020-to-universal-eye-health> accessed on 6.7.2017
- Jennifer Gersbeck and Sophie Plumridge (2013). Global Eye Health, Australia's vision for the future in our region. Policy and funding proposal 2013.
- Universal eye health: a global action plan 2014-2019. World Health Organization website. www.who.int/blindness/AP2014_19_English.pdf?ua=1. Published 2013. From <https://www.healio.com/ophthalmology/practice-management/news/print/ocular-surgery-news-apao-edition/%7Bb1e8d82a-acc5-4382-9a1e-6938e87ea67d%7D/from-vision-2020-to-universal-eye-health?page=2> accessed on 6.7.2017.
- Abou-Gareeb I, Lewallen S, Bassett K, Courtright P, *Gender and blindness: A meta-analysis of population-based prevalence surveys*, *Ophthalmic Epidemiology* 2001; 8:39-56.

6.3 SiB Project End Term Evaluation Data Collection Instrument

Introduction

(to read out to the respondent)

The purpose of this end-term project evaluation (EPE) of the Child Eye Care Project in East Africa is to assess the extent to which the project performed against the set project objectives. This will entail an assessment of the extent to which the planned project activities, outputs/ results and outcomes have been achieved over the implementation period between January 2013 and June 2017, in the eyes of an external evaluator. It will also identify any challenges and lessons learned, and make any appropriate recommendations that may inform any future implementation of a project of similar nature. Use the evaluation questions presented below to construct questionnaires, interview schedules, and observation schedules to capture the required data.

A. Key Informant Interview Schedule for National Eye Care Coordinator; Head of the Hospital Eye Unit, Programme Manager – EA Level; Programme Manager - Country Level; and Head of the Hospital Eye Unit

Use the following discussion questions to guide the discussion with the National Eye Care Coordinator in each of the three countries.

Name of Respondent _____

Position of Respondent _____

Contact of the Respondent _____

Date of interview _____

Interviewer _____

Location _____

Other persons present in interview

Name _____ Position _____ Contact _____

Name _____ Position _____ Contact _____

Name _____ Position _____ Contact _____

Name _____ Position _____ Contact _____

1. This section deals with the progress made towards achieving the project objectives.

a) In what ways did the project improve child eye health service delivery?

b) How did it strengthen referral and follow-up systems from primary through secondary to tertiary level?

c) In what ways has the project strengthened human resources for child eye health?

d) How many Tertiary and Regional/Secondary centres in the project area with the clinical and non-clinical equipment needed to deliver child eye-care services has the project delivered? Please, give a breakdown.

e) How has the project contributed to the set up and implementation of a regional advocacy agenda for child eye health?

f) At the country level, what were the main challenges that were encountered

g) How were these challenges overcome in the course of the project?

h) In what ways has the project strengthened leadership and governance as well as coordination and multi-sectorial collaboration for child eye health at all levels of the national health system?

a) Leadership

b) Governance

c) Coordination

d) Multi-sectorial collaboration (Please, comment about health, education, administration, NGO, faith-based health services and any other relevant sector etc.)

i) How beneficial were the in-service up-skilling courses conducted for the eye health workers?

j) Is there evidence of improved quality of clinical care as a result of this intervention?

k) What evidence is there of improved child friendly services?

l) Are the eye units sufficiently resourced to deliver the necessary services especially for child patients?

2. This section deals with the contribution of the programme towards health-related plans.

a) Does your country have a National Eye Health Plan? Yes _____ No _____

b) When was this national eye health plan written?

c) Can I have a copy of this plan?

d) Broadly, what does the National Eye Health Programme Officer (NEHPO) say about eye care in general?

e) What specifically does the plan say about child eye health?

f) What activities of the NEHP have been funded by the government?

g) What level of funding is available?

h) How does eye health compare with other aspects of health in terms of fund allocation?

i) What plans have been put in place to strengthen health systems in this country?

j) What actions are now in place towards this effort?

k) What is the name of your country's long-term/medium-term vision blueprint?

l) How far have you gone towards achieving your Vision 2020/2030 etc. in matters of eye health?

m) How does your Vision on eye health compare with the UN Sustainable Development goals with regard to eye health?

B. KEY INFORMANT INTERVIEW SCHEDULE FOR HEAD OF THE EYE UNIT, PROJECT OFFICERS AT COUNTRY LEVEL

Name of Respondent _____

Position of Respondent _____

Contact of the Respondent _____

Date of interview _____

Interviewer _____

Location _____

Other persons present in interview

Name _____ Position _____ Contact _____

Name _____ Position _____ Contact _____

Name _____ Position _____ Contact _____

Name _____ Position _____ Contact _____

1. Gender

This section deals with the gender rule. The project set out to ensure gender mainstreaming in the intervention, with planned overall female to male ratio of 55% to 45%. Consequently, all data collected during this evaluation must clearly be disaggregated by gender. I believe all your reports have been written with this rule in mind.

a) What was the overall achievement of the gender targets?

b) What were some of the challenges encountered in ensuring the achievement of the planned gender targets?

c) How did the implementation team address these challenges?

d) What more could have been done to better ensure equitable gender provision?

2. Effectiveness of the Consortium

a) How effective was the consortium in implementing this programme?

- b) How effective was the consortium approach to implementing the programme?

- c) How effective were the governance structures and the implementation arrangements?

- d) What governance challenges were encountered and what was learnt from this approach?

- e) Did the collaboration work to the level that had been envisaged at the planning phase?

- f) What benefits came out of working in the consortium for this project?

- g) What has worked well and what could have worked better?

- h) Is there anything else that could have been done to improve this collaboration?

3. The Referral System

- a) What were the barriers against children reporting to the health facilities?

- b) How were these barriers addressed, and what positive change was realised as a result?

- c) How can uptake of referral from one level health facility to the next be improved, even after the project closure?

4. Local Ownership

- a) To what extent (breadth and depth) was local ownership evident?

- b) How were stakeholders engaged in decision making, and how was this fed back into project implementation?

c) What challenges were encountered, and how were they addressed?

C. KEY INFORMANT INTERVIEW SCHEDULE FOR REGIONAL PROGRAMME COORDINATOR AND HEADQUARTERS STAFF OF CONSORTIUM PARTNERS

Name of Respondent _____

Position of Respondent _____

Contact of the Respondent _____

Date of interview _____

Interviewer _____

Location _____

Other persons present in interview

Name _____ Position _____ Contact _____

Name _____ Position _____ Contact _____

Name _____ Position _____ Contact _____

Name _____ Position _____ Contact _____

1. Implementation Progress

a) Please, give a brief of the progress made by implementing partners in delivering the consortium's planned outputs?

b) How did the cluster partners work together?

c) What went well and what could have been improved?

d) What implementation challenges were encountered and were they resolved efficiently and effectively?

e) What could each cluster have done differently to reach its targets, if applicable?

f) How have practices changed since the start of the project and how has this helped to strengthen child eye health?

g) What else would you like to say about working as a consortium in the implementation of development interventions?

2. Potential Challenges and Risks

- a) From the risk matrix in the log-frame, were there any foreseen risks or challenges that may have affected the success of the project?

- b) How effectively were they resolved?

- c) How could they have been mitigated?

3. Sustainability

- a) Assess the sustainability potential of the project with regard to the ability of the relevant service providers (clusters) and ministries to continue offering the services with the same level of quality after the project period

- b) Assess the potential for replication or scaling up the CEH model by either the Ministries or any other stakeholders

- c) What areas of the project could be replicated in other settings and why?

- d) What areas of the project would you not replicate and why?

4. Future Programming

- a) Were there any other stakeholders that were left out who could have made meaningful contribution to the success of this project?

- b) What more could have been done to co-opt them and what was missed?

D. OBSERVATIONS

Make observations of equipment, facilities, environment, people, etc. and write a brief story about what you see.

E. CASE STUDY

Date of Case Study _____

Collect a case study of patients recording their

Name _____

Age _____

Gender _____

School level _____

Location _____

Country _____

Situation before the project/ operation/ treatment

situation after treatment showing how the project has changed their lives.

F. ORAL TESTIMONIES

Collect oral testimonies of patients, trainees, eye health workers, and other stakeholders detailing how the project has affected/benefitted them.

Name of person giving testimony: _____ Position _____
Location _____ Date _____

OECD/DAC EVALUATION CRITERIA

Obtain from respondents comments on the following DAC evaluation criteria:

RELEVANCE

“... extent to which project objectives correctly address the identified problems or real needs ... and relevance of the project design to the problems to be resolved at the point of project design and at the time of the evaluation.”

EFFICIENCY

“... how well the various activities transformed the available resources into intended results in terms of quantity, quality and timeliness ... and whether things were done right.”

EFFECTIVENESS

“... how far the project’s results were used .. and, whether they achieved the project purpose.”

IMPACT

“... the extent to which the benefits received by the target beneficiaries had a wider overall effect on larger numbers of people.”

SUSTAINABILITY

“... whether the positive outcomes of the project at purpose level are likely to continue after external funding ends, and whether the longer-term impact of the project on the wider development process can also be sustained at the level of the sector, region or country.”

CROSS-CUTTING THEMES

Security, HIV/AIDS, Cultural Practices etc.
