

Kilimanjaro Centre for Community Ophthalmology



ANNUAL REPORT

2015



About KCCO

The Kilimanjaro Centre for Community Ophthalmology (KCCO) was established in 2001 in response to the VISION 2020 initiative, a global campaign aimed at eliminating avoidable blindness by the year 2020, the product of a series of consultations between the WHO and NGOs working toward blindness prevention.

Our **vision** for eye care in Africa is a continent where all Africans can access high quality, patient-centered eye care, provided by Africans in well-functioning systems.

Our **mission** is to strengthen African health systems and partnerships through the provision of eye health training, the conduct of research, the facilitation of planning, and change implementation to achieve the goals of VISION 2020 and GET

Our key areas of **impact** are:

- Capacity Building
- Research Planning and Facilitation
- Change Implementation

Message from the Directors

KCCO had an eventful year in 2015, capped with the the Antonio Champalimaud Vision Award to KCCO and partners Seva Canada and Seva Foundation for our work in capacity building throughout Africa.

A number of activities were undertaken to strengthen the three legal entities: KCCO US (the global entity), KCCO Tanzania, and KCCO International (at the University of Cape Town). The KCCO US Board is now fully operational and responsive to the needs of the organization. The KCCO Tanzania board has been expanded and, with the assistance of a South African based financial consultancy, CMDs, the KCCO Tanzania and KCCO Cape Town offices have improved financial systems.

We are especially pleased to announce that Dr. Robert Geneau will be taking the position as Executive Director of KCCO US early in 2016. Robert lived and worked with KCCO in Moshi from 2003- 2005. He and his wife, Dr Annie Bronsard are warmly welcomed and we are excited to see how this dynamic pair will take KCCO forward into the next phase. Drs. Courtright and Lewallen will offer support from their new home in San Diego as members of the Board of KCCO US and KCCO South Africa.

Edson Eliah

Paul Courtright



Director, KCCO Tanzania

Director, KCCO International

Strengthening Health Systems and Building Capacity in Africa

From its inception, KCCO has focused on and been firmly committed to working with African staff so that the continent has ample human resources for providing high quality eye care. KCCO helps develop critical skills in planning and management through a number of short workshops and one-on-one sessions. In 2015, with partners as noted, here is a sample of the work:

- A workshop for three programmes in Madagascar aimed at planning for improved cost recovery and better marketing. (Seva Foundation and Seva Canada)
- The annual “Bridging Strategies” course, this year in Kampala, Uganda. (Seva Foundation, Spice of Life, and Ministry of Health Uganda)
- The annual two-week management course, also in Kampala with participants from Egypt, Uganda, Tanzania, Ethiopia and Cape Verde. External facilitators Drs. Gerald Msukwa and Benedicto Watmon from Malawi and Uganda respectively helped make the course a success. (Seva Foundation)
- A training of trainers for RAAB surveys using a new phone app in Blantyre Malawi. New materials for training survey teams with the app were developed and are available from KCCO. (Sightsavers and Blantyre Institute of Community Ophthalmology)
- Supervision to certify new RAAB trainers for Africa including Caleb Mpyet, Theo Kadima, Khumbo Kalua, Emma Jolley and Deon Minnies. (Sightsavers, CBM)
- The 2nd “Epidemiology and Evidence for Eye Care Delivery” course in Cape Town with Drs. Ciku Mathenge and Colin Cook.
- A 3-day leadership training for national and regional eye and NTD coordinators from Egypt, Pakistan, Sudan, South Sudan, Zimbabwe, Zambia, Uganda and Ethiopia, held in Cape Town with assistance from Chad MacArthur and Dr. Amir Bedri. (ITI)
- Training for supervisors who are responsible for mass drug administration (MDA) for trachoma elimination and other NTDs in Tanzania and Uganda facilitated by Dr. Amir Bedri and Edson Eliah. (ITI)

Right: KCCO provided many hours of support to the International Centre for Eye Health (ICEH) in London as they developed an app for collecting RAAB data. Dr Lewallen piloted the use of the app in training a team in Narayani Nepal. (Seva Canada and Seva Foundation)



Morbidity Management & Disability Project (MMDP)

Together with partners RTI and HKI, KCCO provided a number of training sessions specifically aimed at building capacity for planning and delivering trichiasis surgery for trachoma in Ethiopia, Cameroon, and Burkina Faso.

In July and August Drs Courtright and Lewallen conducted a 6 week course at the Yonsei University (Korea) School of Public Health for people interested in conducting operational research in African countries. KCCO worked with a number of Korean based organizations including Heart to Heart Foundation, Yonsei University's BOM project, and KOICA (the Korean equivalent of USAID) to strengthen their capacity to support eye care activities in Africa and elsewhere. KOICA and DFID and the Korean Global Public Health Association conducted an NTD Day in Seoul, Korea with support from KCCO; over 200 participants from within KOICA and the NGO community attended. It is hoped that this will lead to greater Korean contribution to trachoma elimination.



Above: KCCO trained a team led by Dr Hery Andriamanjato of the MoH in Madagascar to undertake a RAAB survey and a pediatric survey.

University of Cape Town

As in previous years, KCCO provided teaching assistance for the Community Eye Health Institute and for residents at the University of Cape Town (UCT).

KCCO is proud to announce that 5 new faculty have been appointed at UCT, joining KCCO/UCT to assist with various research and training activities throughout Africa.



Above: From left to right, (top row) Drs Robert Geneau, Wanjiku Mathenge, Amir Bedri (bottom row) Caleb Mpyet and Annie Bronsard.

Reducing Gender Inequity in Vision Loss



Above: In Africa, Seva Canada has been the primary partner with KCCO's Gender & Blindness programme.

Over the past 20 years KCCO has led the eye health community in first documenting and then addressing gender inequity in the field of eye health. This work has drawn attention and support from a number of partners.

KCCO continues to provide guidance on reducing gender inequity at the global level and this included support to IAPB Western Pacific.

This year, the Seva Canada team met with microfinance (MF) members in Ngorongoro and Mara Region of Tanzania to witness firsthand the work they do to encourage patients

(especially women) to take advantage of eye services. Mara MF groups are particularly active and referred 852 eye patients this year, many of whom received surgery and 60-70 percent of whom are women. In Ngorongoro, where trachoma is an important problem, the MF members have been especially good at identifying and encouraging women (several hundred of them) to have trichiasis surgery. Based on this success, KCCO's Fortunate Shija worked with colleagues in Debre Berhan, Ethiopia to train local MF leaders in North Shoa Zone.

Supporting and Expanding VISION 2020 Programmes in Africa

VISION 2020 programmes are programmes designed to provide comprehensive eye services to populations of around 1 million people. KCCO has helped develop and support such programmes from its inception. Over the years we've learned that a few key components are required for success: an outreach programme to "bridge the gap" between communities and surgical facilities with a focus on high quality services and gender equity; financial autonomy and accountability of the eye service; and finally, strong leadership in the eye department to make it all work.

KCCO has used the programmes as opportunities to try innovative approaches and build local capacity. The work has been supported by Seva Foundation's Global Sight Initiative, TOMS, and Seva Canada.

With concerted cost-recovery efforts by the VISION 2020 programmes in a number of countries, the amount of external funding has been reduced; this has been accomplished while continuing to provide high quality services and good coverage of the population.

In Madagascar two regions have benefited from support from Unifor (through Seva Canada) to obtain much-needed equipment. In Ethiopia KCCO initiated engagement with the regional hospital in Bahir Dar. Dr Alemayehu Bayou, from the hospital in Debre Berhan took the lead in working with the team in Bahir Dar, a great example of strengthening local capacity.

VISION 2020 Programmes	Screened and Treated			Cataract Surgeries		
	Male	Female	Total	Male	Female	Total
Vakinankaratra, Madagascar	3,276	3,889	7,165	277	240	517
Atsinanana, Madagascar	1,071	1,323	2,394	407	516	923
Sava, Madagascar	3,056	3,234	6,290	342	346	688
Mara, Tanzania	1,476	2,273	3,749	637	634	1,271
Iringa, Tanzania	2,667	2,813	5,480	161	181	342
Singida, Tanzania	927	879	1,806	171	193	364
North Shoa, Ethiopia	-	-	661	-	-	-
Gulu Region, Uganda	-	-	2,262	-	-	-
Lira Region, Uganda	1,784	2,028	3,812	511	569	1,080
Zomba, Malawi	605	527	1,132	162	165	327
All sites combined	14,862	16,966	34,751	2,668	2,844	5,512

In Tanzania the KCCO team visited Singida Region for a situational analysis and planning session with the Ministry of Health & Social Welfare and all other stakeholders. Programme support started in mid-2015 and progress was good through the second half of 2015. The Tanzania teams from Iringa, Mara, and Singida Regions held a cross-learning workshop where plans for improvement and lessons for success were shared.

KCCO staff and partners visited a number of sites this year with the following positive results:

- Hospital management in Iringa agreed to lower the price of cataract surgery to a level more affordable for the people. The fact that all surgery was “free” for years in Iringa makes it difficult to introduce even small patient fees that are required for financial sustainability;
- Outreach services and management systems continue to be scrutinized to identify potential improvements;
- Expansion of programme and capacity building activities in new regions in Tanzania and Ethiopia.



Above: With special support from Seva Canada, the 3 programmes in Madagascar developed new financial reporting systems aimed at helping them monitor their progress towards fuller cost recovery.

Community Eye Centres

Community Eye Centers (CECs) are an entrepreneurial concept adopted by KCCO from the model used in Aravind Eye Hospitals in India. They provide eye care through dedicated mid-level eye personnel supported by an ophthalmologist.

The first KCCO-supported CECs were developed in Burundi in 2014 and showed great promise to both meet the needs of the community and generate sufficient funds for all running costs.

In 2015 KCCO, with support from Seva Canada, continued and expanded support to three CECs in Burundi. In Malawi, KCCO worked to establish CECs in Mwanza and Mangochi with Drs. Gerald Msukwa and Khumbo Kalua respectively. In Congo Brazzaville KCCO's Peter Kileo worked with Dr Freddy Geraud to start a CEC in Djiri, outside of Brazzaville. Finally KCCO supported Dr. Amadou Alpha Bio to travel to Aravind, to see what he could learn and adapt for his home country of Benin. Strong leadership and regular supervision by the ophthalmologist has been a critical factor in the success of these services.



Above: Burundi— The three CECs, alongside Dr Levi Kandeke (far right), have done well in spite of the challenges posed by the political crisis.



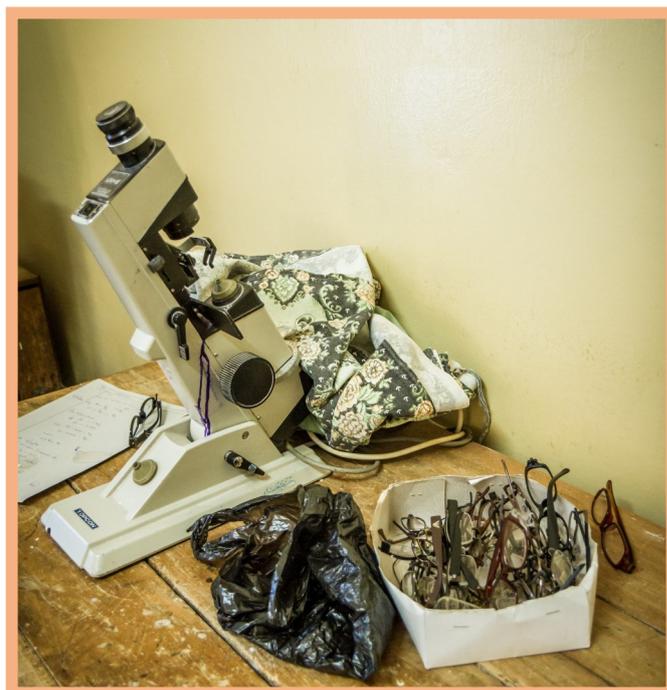
Above: Congo-Brazzaville— Dr Levi Kandeke has provided mentorship to Dr Freddy Geraud (centre) with KCCO support in a great example of Africa to Africa capacity building.

Childhood Blindness and Low Vision

At the CEHTFs in Tororo, Uganda (Benedictine Eye Hospital) and Blantyre, Malawi (Lions SightFirst Eye Hospital) KCCO has been supporting the training of KIs each quarter using methods described in the manual for Africa designed a few years ago by KCCO. (Find it at www.kcco.net/manuals—reports)

The result of working with the KIs is that 11,853 children have been referred to the facilities in 2015 and 1,168 of these have undergone eye surgery. Novartis and Seva Canada partner with KCCO to support this sight restoring work in Uganda and Malawi respectively. KCCO, in partnership with Heart to Heart, has supported child eye health activities in Burundi.

Children with low vision in 8 Regions in northern Tanzania have been the beneficiaries of a unique programme aimed at building the capacity of district special needs education officers (DSNEOs) to train teachers in how to support these children. The programme, supported by PGRD, is integrated with low vision services provided by optometrists whom KCCO has trained with Dr. Karin van Dijk. Twenty-four DSNEOs trained 113 teachers who work with children with low vision.



Above: As part of a special project in northern Tanzania, over 1,640 children were screened and 249 were prescribed and provided with spectacles, low vision devices, and reading stands.



Above: With funding from Seva Canada, KCCO worked with teams at 4 hospitals in Madagascar on case identification, referral, optical correction, medical treatment and surgery. Through this support 4,935 children were managed.

Summary of Work from Child Eye Health Tertiary Facilities

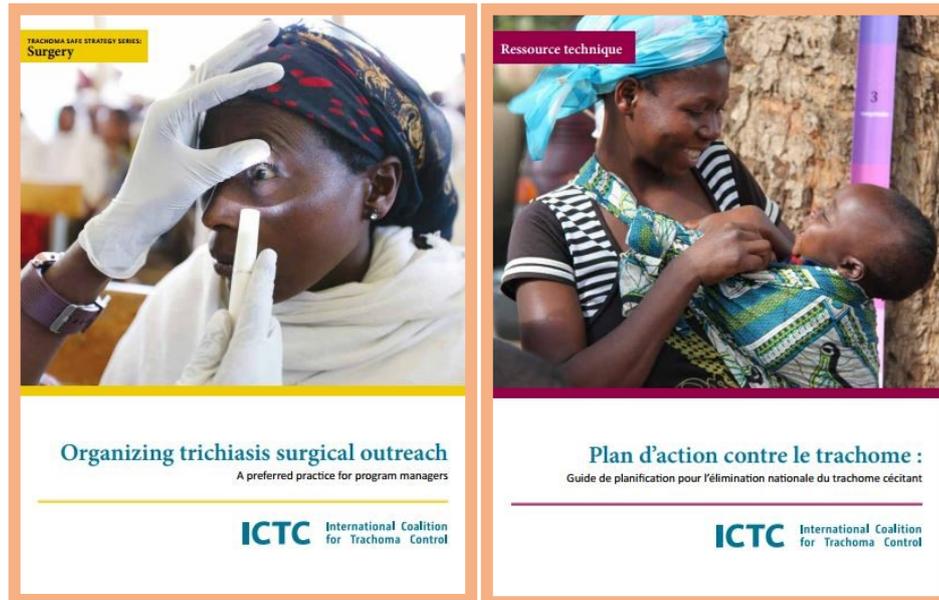
Site	Total Screened		Total Surgeries	
	Boys	Girls	Boys	Girls
Tororo, Uganda	2,973	2,590	352	287
Blantyre, Malawi	3,406	2,813	321	208
Madagascar	2,018	2,917	71	37
CEHTF combined	8,397	8,320	744	532

USAID and PGRD grant: Generating evidence for improving child blindness activities in developing countries

KCCO's first grant from PGRD (Partners for Global Research and Development) came to a close this year with four major pieces of work completed. Full reports of the components can be obtained from Petra Adams (admin@kcco.net)

- 1) A global review of what is known about using key informants (KI) to find children with vision problems was completed. There are still gaps in what we know about this unique method but the analysis provides some useful indicators and benchmarks to evaluate the programmes, which will be helpful going forward.
- 2) The existing literature on follow up of children after cataract surgery in Africa and Asia proved to be slim and thus a survey of 106 Child Eye Health Tertiary Facilities (CEHTF) in Africa and South Asia was undertaken. We found that having a dedicated child eye health coordinator was the most important factor to having good follow up practices in place. Training this cadre is something that KCCO has led the way on.
- 3) In spite of the fact that many school vision screening programmes are undertaken, our rigorous search revealed only 3 published studies that actually compared screening methods -- too few and too varied to allow blanket recommendations. The report describes the methods used in the existing studies.
- 4) Finally, an app for use in case finding, registration, surgery, and follow up of children with cataract was developed by a team involving KCCO, Emory University and Georgia Tech. This will be tested in the field in 2016.

Addressing Trachoma Globally



Above: Preferred practice manuals for global trachoma elimination:

A number of trachoma preferred practice materials, in multiple languages, developed by KCCO and ICTC partners, are now available and can be downloaded at www.trachomacoalition.org or www.kcco.net.

Global Trachoma Mapping Project comes to a successful end

KCCO has been closely involved with the Global Trachoma Mapping Project (GTMP) since it began. This drew to a satisfying close this year and the GTMP infrastructure will evolve into the "Tropical Data" system and include other neglected tropical diseases in future. KCCO is assisting a number of countries to prepare manuscripts and reports from GTMP findings.

KCCO supports trichiasis elimination in Tanzania

KCCO is pleased to be working on several projects in Tanzania with the goal of increasing the numbers of high quality trachomatous trichiasis (TT) surgeries provided. These are in two Districts of Manyara Region (supported by DFID) and three in Arusha Region (supported by The Queen Elizabeth Diamond Jubilee Trust [the

Trust] and the End Fund). The projects focus on community mobilization and awareness creation, training case finders, building surgical skills, and organizing outreach – all areas in which KCCO staff are experienced and excel.

Elimination of blinding trachoma as a public health problem in 9 sub-Saharan African countries

As the Sightsavers Technical Lead, Dr. Courtright worked this year with 9 countries included in the DFID and Trust trachoma programmes to develop and review progress on their pathway to the elimination of trachoma as a public health problem. Amir Bedri, Caleb Mpyet, Michael Dejene and others are taking increasing responsibility for supporting this work.

Expanding academic activities and scientific knowledge for trachoma elimination

In addition to District and country level implementation work, KCCO has contributed to a number of academic projects this year aimed at increasing the scientific foundations behind trachoma elimination. These include:

1. Organizing and hosting, in partnership with the World Health Organization, the 2nd Global Trichiasis Scientific Meeting (GTSM), in Cape Town in November. The meeting, supported by Sightsavers and USAID (through HKI) brought together researchers, programme personnel, and national coordinators to review existing evidence related to trichiasis including issues around the epidemiology, clinical presentation, surgical management, training, and programme approaches.
2. Supporting the development of one of five proposed WHO collaborating centres for trachoma at KCCO (based at UCT in Cape Town) to further the trachoma research and capacity building agenda of WHO.
3. Working with colleagues at the LSHTM and WHO to develop a TT- only survey methodology to enable programmes to monitor their progress to elimination of TT.
4. Re-starting KCCO's popular Trachoma Information Service (TIS) at the request of WHO and the membership of the GET 2020. A small working group, including Amir Bedri, Caleb Mpyet, Anthony Solomon, and Paul Courtright will be leading this effort; supported by an ITI capacity building grant



Above: Improving the quality of trichiasis surgery

High quality surgery is essential to prevent blindness from trichiasis and it starts with knowing how to teach the surgeons. Working with Amir Bedri and using the HEADSTART model, KCCO has organized training programmes for TT surgery trainers in Kenya, Ethiopia, Uganda, Cameroon, and Chad.

The 2015 António Champalimaud Vision Award



"The Kilimanjaro Project is a unique effort and a triumph for the power of collaboration.

The Kilimanjaro Centre for Community Ophthalmology (KCCO), the Seva Foundation and Seva Canada combined their individual areas of expertise in order to combat vision disorders, tackle poverty and create economic sustainability in communities in Sub-Saharan Africa.

By combining their resources and know-how they have been able to make a significant impact on the ground. With a focus on equality, the project makes use of clinical, scientific, social and microcredit tools to support sustainability health and finance solutions led by African teams."

- Champalimaud Foundation, September 2015



KCCO was honored in September with the 2015 Antonio Champalimaud Vision Award.

The 2015 award, the fifth provided by the Champalimaud Foundation, recognized KCCO's work to build capacity for sustainable eye care in Africa, generate the evidence to inform policies, programmes, and practices, and to seek equity in access to eye care services.



"We are thrilled and incredibly honoured to be receiving this recognition of our work by the Champalimaud Foundation.

We extend our deepest thanks to all our donors, supporters, partners, staff and colleagues for their contributions to our work."

- Paul Courtright and Susan Lewallen, KCCO Founders

KCCO Publications

1. Cleland CR, Burton MJ, Hall C, Hall A, Courtright P, Makupa WU, Philippin H. Diabetic retinopathy screening: experiences from northern Tanzania. *Lancet/diabetes-endocrinology* 2015 [http://dx.doi.org/10.1016/S2213-8587\(15\)00422-2](http://dx.doi.org/10.1016/S2213-8587(15)00422-2).
2. Courtright P & MacArthur C. Manuals, guidelines and toolkits to support the elimination of blinding trachoma. *Community Eye Health Journal*. 2015;28:58
3. Gichangi M, Kalua K, Barassa E, Eliah E, Lewallen S, Courtright P. Task Shifting for Eye Care in Eastern Africa: General Nurses as Trichiasis Surgeons in Kenya, Malawi, and Tanzania. *Ophthalmic Epidemiology* 2015; 22: 226–230.
4. He MG, Mathenge W, Lewallen S, Courtright P. Global efforts to generate evidence for Vision 2020. *Ophthalmic Epidemiology* 2015;22:237-238
5. Kalua K, Phiri M, Kumwenda I, Masika M, Pavluck AL, Willis R, Mpyet C, Lewallen S, Courtright P, Solomon AL. Baseline Trachoma Mapping in Malawi with the Global Trachoma Mapping Project (GTMP). *Ophthalmic Epidemiology* 2015; 22: 176–183.
6. Lenhart PD, Courtright P, Wilson ME, Lewallen S, Taylor D, Ventura MC, Bowman R, Woodward L, Ditta LC, Kruger S, Haddad D, Shankankiri N, Rai SK, Bailey T, Lambert SR. Global Challenges in the Management of Congenital Cataract: Proceedings of the International Congenital Cataract Symposium held on March 7, 2014 New York City, New York. *JAAPOS* 2015; 19(2):e1-8. doi: 10.1016/j.jaapos.2015.01.013
7. Lewallen S, Schmidt E, Jolley E, Lindfield R, Dean WH, Cook C, Mathenge W, Courtright P. Factors affecting cataract surgical coverage and outcomes: a retrospective cross-sectional study of eye health systems in sub-Saharan Africa. *BMC Ophthalmology*. 2015 Jun 30;15 (1):67. doi: 10.1186/s12886-015-0063-6.
8. MacCormick IJ, Maude RJ, Beare NA, Borooh S, Glover S, Parry D, Leach S, Molyneux ME, Dhillon B, Lewallen S, Harding SP. Grading fluorescein angiograms in malarial retinopathy. *Malar J*. 2015 24;14(1):367. doi: 10.1186/s12936-015-0897-7.
9. Mousa A, Courtright P, Kazanjian A, Bassett K. A community based eye care intervention in southern Egypt: Impact on trachomatous trichiasis surgical coverage. *Middle East & Africa Journal of Ophthalmology*. 2015; 22:478-483
10. Solomon AW, Pavluck AL, Courtright P, et al. The Global Trachoma Mapping Project: Methodology of a 34-Country Population-Based Study. *Ophthalmic Epidemiology* 2015; 22: 214–225.
11. West SK and Courtright P. Trachoma Control: 14 Years Later. *Ophthalmic Epidemiology*. 2015; 22: 145–147.

Visitors and volunteers

KCCO thanks the many visitors and volunteers from all around the world who spent time with us, in various capacities, both at our Cape Town and Moshi locations, and at our partner sites around Africa.

We hope you enjoyed your visit and we look forward to welcoming you again.

If you have any questions about possible visits to our offices or partner sites, please contact admin@kcco.net.

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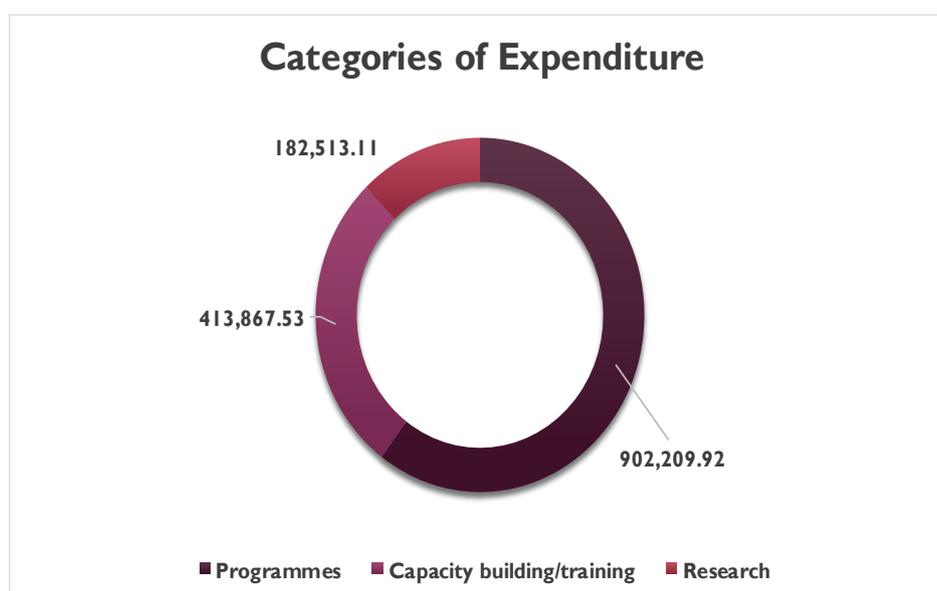
*Pictures on the cover page, as well as pages 4, 6 and 8 are credited to **Ellen Crystal Photography**. These were taken at site visits in Tanzania and Madagascar. Thank you Ellen and Seva Canada.*

*Pictures of the Champalimaud award ceremony were provided by the **Champalimaud Foundation**.*

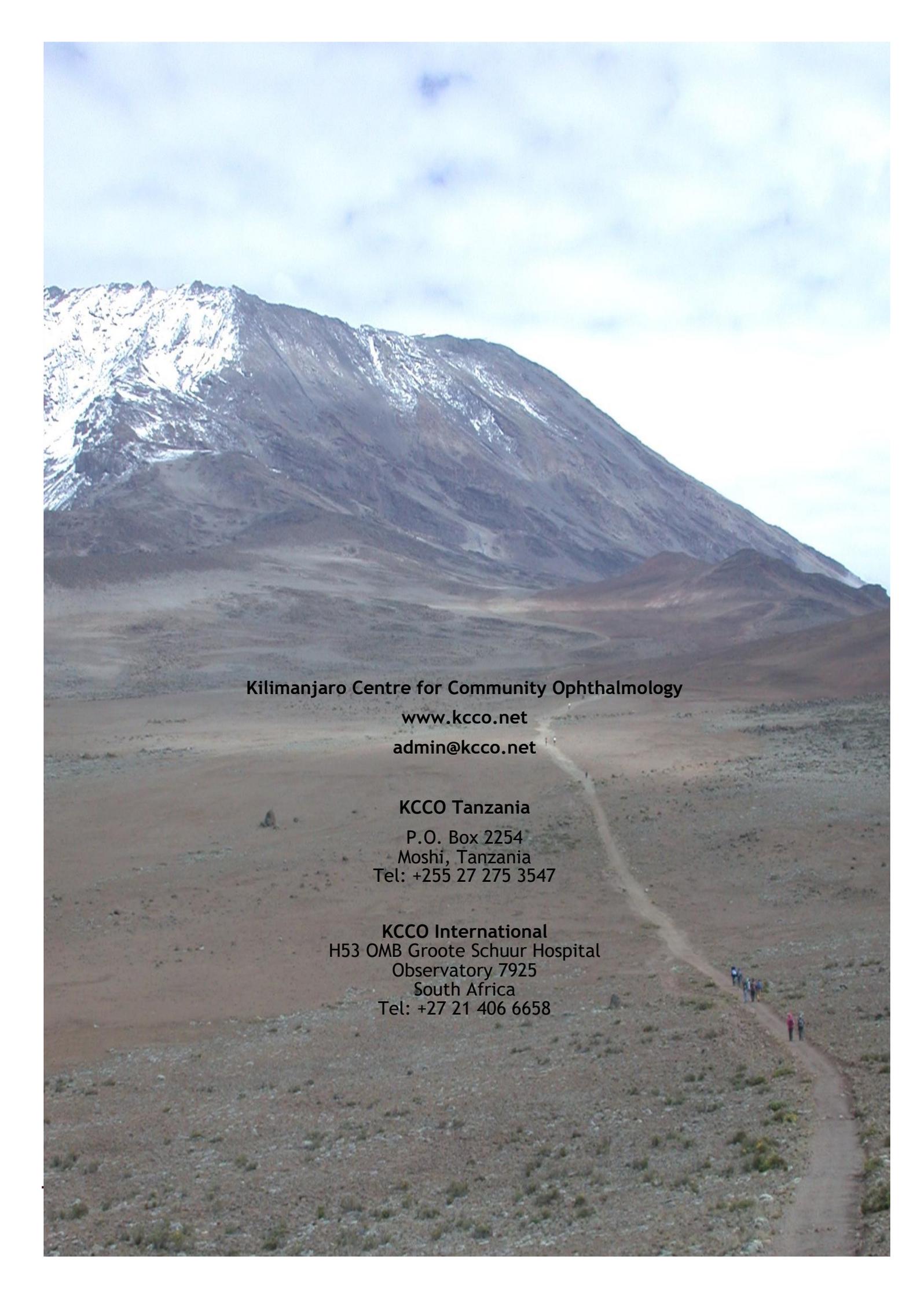
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Financial Overview

Donor	US\$
Seva Canada	393,066.95
Seva Foundation	289,134.79
Sight Savers International	266,717.39
International Trachoma Initiative	204,736.32
Partners for Global Research and Development	119,390.62
Helen Keller International	86,070.82
University of British Columbia	44,111.87
XOVA	37,709.67
Fred Hollows Foundation	17,076.86
End Fund	12,265.13
Vision Quest	10,657.35
FHI 360	9,815.83
RMR	5,730.34
Lions Madagascar	1,046.50
CBM	618.99
Heart to Heart Foundation	441.14
Total	1,498,590.56



We thank all our partners for their generous support.



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