ANNUAL REPORT 2022

KILIMANJARO CENTRE FOR COMMUNITY OPHTHALMOLOGY



ABOUT KCCO

Eliminating Avoidable Blindness in Africa

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.

VISION

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.

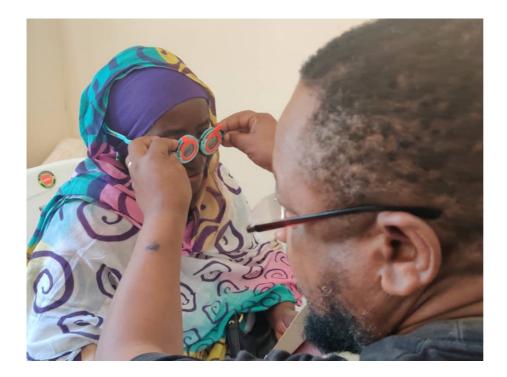
MISSION

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 2020.

IMPACT

KCCO contributes to develop, implement and evaluate evidence-based eye health programs to :

- Reduce the burden of visual impairment and avoidable blindness in sub-Saharan Africa
- Increase gender equity in eye care



LEFT

A woman in Mwanza, Tanzania has her visual acuity tested during an outreach.

MESSAGE FROM THE DIRECTORS

For KCCO, 2022 was a year marked by a reset but also by consolidation and growth. It was a reset for many community eye health activities as countries progressively scaled down their COVID-19 public health measures. The KCCO-mentored eye health partners resumed their regular activities, consolidated their gains, and continued to make incremental progress towards reducing the burden of visual impairment and avoidable blindness in the communities that they serve. It was also a year of growth, with the scale-up of a childhood blindness program across the entire Lake Zone of Tanzania, and the launch of four new regional programs in Tanzania thanks to new international partnerships.

We continue to be amazed by the resilience of our partners in the countries where we work. The COVID-19 pandemic was only one of many challenges faced in 2022, along with natural disasters, rising inflation and worsening economic conditions as well as other public health threats such as the plague.

We thank our partners for the incredible work accomplished and for their constant thirst for new knowledge and improvements. We know through our interactions with them that their energy and dedication come from knowing that our international partners and donors are fully behind them and are keenly following the progress made. Thank you to all KCCO supporters! We are, indeed, stronger together.

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ROBERT GENEAU KCCO Executive Director



KCCO Tanzania Director

our work in Numbers



Mentoring and supporting 18 local eye health programs in 7 countries in sub-Saharan Africa – in Benin, Burundi, Ethiopia, Madagascar, Malawi, Tanzania and Uganda



204 388 adult consultations (50% females)



15 329 adult cataract surgeries (50% females)



998 child cataract surgeries (48% females)



6677 other eye surgeries (50% females)



16 868 spectacles distributed (56% females)



16 eye department staff trained or in training and 960 community volunteers trained and mobilized

COMMUNITY-ORIENTED EYE HEALTH PROGRAMS

Key service delivery statistics in 2022 include (see Table 1 for details):

- 201 732 adults screened, of which 49% were women
- 15 329 adults received cataract surgery, of which 50% were women
- 46% increase in adults screened compared to previous year
- 35% increase in overall cataract surgeries performed compared to previous year
- 16 868 spectacles were provided, 56% were to women
- 6677 adults received other surgeries, of which 50% were women

| Community-oriented eye health program | Scre | ened and tr | eated | Cataract surgeries | | | |
|---------------------------------------|--------|-------------|---------|--------------------|-------|--------|--|
| | Female | Male | Total | Female | Male | Total | |
| Bourgou Region, Benin | 8 762 | 15 783 | 24 545 | 1 383 | 2 018 | 3 401 | |
| Amhara Region, Ethiopia | 15 020 | 19 487 | 34 507 | 1 356 | 981 | 2 337 | |
| Vakinankaratra Region, Madagascar | 9 254 | 5 905 | 15 159 | 333 | 266 | 599 | |
| Sava Region, Madagascar | 4 985 | 3 927 | 8 912 | 265 | 263 | 528 | |
| Atsinanana Region, Madagascar | 2 826 | 2 001 | 4 827 | 489 | 488 | 977 | |
| Mara Region, Tanzania | 5 197 | 4 811 | 10 008 | 791 | 781 | 1 572 | |
| Mwanza Region, Tanzania | 13 518 | 14 397 | 27 915 | 654 | 715 | 1 369 | |
| Mbeya Region, Tanzania | 12 654 | 12 090 | 24 744 | 539 | 564 | 1 103 | |
| Dodoma Region, Tanzania | 5 647 | 4 863 | 10 510 | 555 | 421 | 976 | |
| Singida Region, Tanzania | 4 812 | 4 094 | 8 906 | 314 | 301 | 615 | |
| Kagera Region, Tanzania | 3 703 | 3 320 | 7 023 | 174 | 159 | 333 | |
| Manyara Region, Tanzania | 5 117 | 4 170 | 9 287 | 266 | 225 | 491 | |
| Tanga Region, Tanzania | 3 897 | 3 281 | 7 178 | 212 | 140 | 352 | |
| Mtwara Region, Tanzania | 1 710 | 1 642 | 3 352 | 65 | 68 | 133 | |
| Lira Region, Uganda | 2 576 | 2 283 | 4 859 | 294 | 249 | 543 | |
| All sites combined | 99 678 | 102 054 | 201 732 | 7 690 | 7 639 | 15 329 | |

Table 1. Screening and surgical interventions for adults at 10 KCCO-supported sites

The different partner hospitals and programs continued to operate successfully with support from KCCO in the form of mentoring visits and cross-learning meetings, capacity building (effective management, service delivery, and use of data for quality improvement) and equipment acquisition, replacement or repairs where necessary. KCCO does not only work with hospitals, but also with Community Eye Centres (CeC). In 2022, a Community Eye Centre was set up in Ambilobe, Madagascar, staffed by rotating teams from the base hospital in Sambava. This new CeC increases access to eye care services (including eye surgeries) for local populations since it takes approximately 6 hours on a bad road to travel from Ambilobe to Sambava.

This was a year of expansion in Tanzania for partnerships with KCCO. New programs were launched in four new regions: Mtwara, Tanga, Manyara and Kagera. In addition, an optical workshop was inagurated at the Kagera Regional Referral Hospital.







ABOVE AND LEFT

Screening and treatment during a surgical outreach in Mara, Tanzania.

CHILDHOOD BLINDNESS AND LOW VISION

Key service delivery statistics in 2022 include (see Table 2 for details):

- 30423 children screened at CEHTF, of which 50% were girls
- 752 children received cataract surgery, of which 48% were girls
- **8920** people benefitted from USAID-supported activities, including children and adult trainees
- 246 children received cataract surgery from USAID-supported activities, of which 48% were girls

Table 2. Screening and surgical interventions for children at 5 Child Eye Health Tertiary Facilities (CEHTF).

| Summary of scree | ening and | d surgical | interver | ntions re | alized | during 2 | 022 fo | r the 5 C | EHTF | sites. | |
|----------------------------|-----------------|------------|--|-----------|--------|----------|--------|-----------|-----------------|--------|--|
| | Total surgeries | | | | | | | | | | |
| Sites | Total S | Screened | Cataract Glaucoma Surgeries Surgeries Other Surgeries | | | | | Surgeries | Total Surgeries | | |
| | Male | Female | Male | Female | Male | Female | Male | Female | Male | Female | |
| BEH/Tororo, Uganda | 2438 | 1928 | 95 | 59 | 17 | 12 | 205 | 158 | 312 | 226 | |
| LSFEH/ Blantyre, Malawi | 2440 | 2647 | 50 | 51 | 9 | 4 | 146 | 104 | 205 | 159 | |
| Burundi | 2974 | 2931 | 59 | 65 | 6 | 9 | 112 | 98 | 177 | 162 | |
| Madagascar | 4135 | 4963 | 28 | 26 | 2 | 2 | 48 | 45 | 78 | 73 | |
| Mwanza, Tanzania | 3160 | 2807 | 159 | 160 | 0 | 0 | 115 | 149 | 274 | 309 | |
| Total | 15147 | 15276 | 391 | 361 | 34 | 27 | 626 | 554 | 1046 | 929 | |

KCCO continued to mentor and assist 4 CEHTFs (Malawi, Tanzania, Burundi and Uganda) to expand the scope and reach of their childhood blindness programs in their respective catchment areas. In Madagascar, pediatric activities at four sites aim to serve children who otherwise do not receive any specialized eye care services given the geographical and transportation barriers preventing families to reach a CEHTF in the capital city. The majority of the outreach and surgical acitivities for the USAID-funded Childhood Blindness Program project "Reducing the burden of childhood blindness in the Lake Zone of Tanzania" was done this year. The project aims to expand the availability and accessibility of high-quality pediatric eye health services along the full continuum of care in the following four of six regions of the Lake Zone – Kagera, Mara, Mwanza, and Simiyu regions.

We aimed to screen, over 20 months, 17950 children through outreach screenings from the base hospital at Bugando Medical Centre in Mwanza, as well as screenings in schools and schools for the blind. This project is strengthening the whole eye health system in the Lake Zone of Tanzania, and as such the activities are conducted collaboratively in partnership with a wide range of providers and partners. KCCO has managed to navigate these partnerships and reach the majority of targets, with the grant officially set to close in 2023.



LEFT

The USAID grant included a school screening component, where teachers were trained how to identify eye problems in their students.

RIGHT

A child being screened during an outreach in the Lake Zone of Tanzania. This USAID grant enabled KCCO to reach almost nearly 10 000 more children than it would have in 2022.



REDUCING GENDER INEQUALITY

In the four Tanzanian regions where programs partnered with microfinance (MF) groups this year, 44% of the total community members referred for treatment were done so by members of MF groups. Moreover, the MF members have helped in bridging the gender gap as in all areas the number of women receiving the service has increased. KCCO set incentives for well-performing MF members through receiving entrepreneurship training as a motivation for their continuous engagement with the outreach activities and for referring cases to the base hospitals.

| Table 3. Screening and surgical interventions in Tanzania in areas with women |
|---|
| microfinance members trained as case finders. |

| Total patients | | mem | mmunity Ibers d by MF | Total c | ataract | Nb of cataract patients operated | | |
|----------------|------|--------|-----------------------------|---------|---------|----------------------------------|------|--------|
| | Male | Female | Male | Female | Male | Female | Male | Female |
| Mwanza | 2383 | 2089 | 732 | 858 | 420 | 318 | 160 | 151 |
| Mara | 2521 | 2854 | 1376 | 1427 | 820 | 792 | 492 | 497 |
| Kagera | 61 | 96 | 61 | 96 | 11 | 15 | 5 | 8 |
| Manyara | 202 | 267 | 41 | 49 | 30 | 46 | 9 | 12 |
| Total | 5167 | 5306 | 2210 | 2430 | 1281 | 1171 | 666 | 668 |

RESEARCH AND EVIDENCE

List of KCCO publications for 2022:

- Aboe A, Joof BM, Kanyi SK, Hydara A, Downs P, Bush S, Courtright P. The Gambia has eliminated trachoma as a public health problem: Challenges and successes. PLoS Negl Trop Dis. 2022 Mar 28;16(3):e0010282.
- Flueckiger RM, Stelmach R, Burgert-Brucker CR, Courtright P, Kabona G, Mosher AW, Mwingira UJ, Harding JC, Simon A, Ngondi J. Evaluating Precision of a Trachomatous Trichiasis (TT) Super Survey with Modulating Sample Sizes in Tanzania. Ophthalmic Epidemiol. 2022 Aug;29(4):394–400.
- 3. Hall CE, Hall AB, Mallya J, Courtright P, Kok G. Developing comic strips promoting diabetic retinopathy screening in Kilimanjaro, Tanzania, using Intervention Mapping. Eye (Lond). 2022 May;36(Suppl 1):25–32.
- 4. Hall CE, Hall AB, Mallya J, Courtright P, Kok G. Establishing a screening programme for diabetic retinopathy in Kilimanjaro Region, Tanzania using intervention mapping. Eye (Lond). 2022 May;36(Suppl 1):17–24.
- 5. MacCormick IJC, Lewallen S, Beare N, Harding SP. Measuring the Impact of Malaria on the Living Human Retina. Methods Mol Biol. 2022;2470:731-748.
- 6. May E, Arach P, Kishiki E, Geneau R, Maehara G, Sukhai M, Hamm LM. Learning to see after early and extended blindness: A scoping review. Front Psychol. 2022 Oct 27;13:954328.
- 7. Shrestha R, Merbs SL, Bayissasse B, Sisay A, Beckwith C, Courtright P, Gower EW. Characteristics and perspectives of patients with postoperative trichiasis in Hadiya Zone, Ethiopia. Int Health. 2022 Apr 6;14(Suppl 1):i49-i56.
- 8. Ul Hassan E, Kelly M, Waititu T, Olobio N, Kabona G, Mkocha H, Kivumbi P, Mwale C, Mubangizi A, Mugume F, Baayenda G, Mayeku R, Massangaie M, Mbofana MA, Cumaio M, Sisay A, Mersha T, Courtright P. Productivity, efficiency and gender equity of community mobilisation approaches in trichiasis campaigns: analysis of programmatic data from seven sub-Saharan African countries. Int Health. 2022 Apr 6;14(Suppl 1):i24-i28.

KCCO conducted **two operational research projects**, for which the manuscripts will be submitted to international peer-reviewed scientific journals in 2023.

- 1. Explaining the continuing high prevalence of trachomatous trichiasis unknown to the health system in Evaluation units: a mixed methods explanatory study in four trachoma-endemic countries.
- 2. Understanding the role of gender in trichiasis case finding in Tanzania.

As part of a research grant from Lions SightFirst to KCCO, Dr. Frank Sandi (University of Dodoma Medical School) and KCCO's project coordinator Mrs. Frida Matawa, have led a phase of qualitative data collection in different districts of Dodoma Region as part of the project "The Dodoma Community Cataract Acceptance Trial (DoCCAT)". The study aims to identify effective community-based interventions to increase the acceptance rate of cataract surgery in the central part of Tanzania. The first phase began with identification of four districts, namely Kondoa, Chemba, Mpwapwa and Bahi, in which the randomised trial of community-based interventions method will be implemented. Community meetings were conducted in those districts to introduce the study and identify members to participate in a co-development process of the interventions. Qualitative data collection (interviews and focus group discussions) was also conducted.





ABOVE LEFT AND RIGHT

An open community meeting in Kondoa, Dodoma region, Tanzania addressed by the village leader during the DoCCAT data collection phase; focus group discussions at Kondoa with the study coordinator.

RIGHT

An open community meeting with villagers in Mpwapwa, Dodoma Region, Tanzania.



ADDRESSING TRACHOMA GLOBALLY

KCCO continued in 2022 to contribute to trachoma elimination efforts in Tanzania and globally. In Tanzania, KCCO is an implementing partner working with the Ministry of Health to identify and manage all trachomatous trichiasis (TT) cases in specific districts.

Trichiasis case finding activities continued with the aim of accomplishing full geographical coverage (FGC) in all the districts by June 3rd, 2023.

At the global level, KCCO, as a WHO Collaborating Centre for Trachoma, hosted the **Third Global Scientific Meeting on Trachomatous Trichiasis** which took place in Cape Town on December 7, 8 and 9. The GSM brought together WHO, partners of the International Coalition for Trachoma Control, academic experts, and representatives from national trachoma programs. The WHO meeting report is forthcoming. KCCO also completed this year a number of operational research projects (page 9).

Table 4. Screening and surgical interventions realized during 2022 for all trachoma programs in Tanzania.

| Sites | | reened at each | TT ca | ises | Number accepted surgery Operated eyes | | accepted Operated eves Number epilated refus | | accepted Operated Number epilated refusing a | | Number epilated | | ng any |
|---------|------|-------------------|-------|------|--|-----|--|---|--|----|-----------------|--|--------|
| | м | F | м | F | м | F | M&F | м | F | м | F | | |
| Kilindi | 444 | 579 | 19 | 72 | 7 | 46 | 85 | 1 | 3 | 9 | 23 | | |
| Monduli | 132 | 296 | 23 | 94 | 13 | 49 | 84 | 4 | 10 | 3 | 23 | | |
| Karatu | 271 | 383 | 6 | 39 | 6 | 38 | 76 | 0 | 1 | 0 | 0 | | |
| Longido | 179 | 372 | 26 | 114 | 14 | 70 | 109 | 0 | 1 | 9 | 25 | | |
| Total | 1026 | 1630 | 74 | 319 | 40 | 203 | 354 | 5 | 15 | 21 | 71 | | |

OTHER NEWS AND ACTIVITIES

KCCO (Robert Geneau and Edson Eliah) contributed to the end of the project independent evaluation of the program Future in Sight implemented by Light for the World in the Democratic Republic of Congo, Rwanda and Tanzania. Dr. Geneau was the team lead for the consultancy firm Tropical Health.

FINANCIAL OVERVIEW

| Sightsavers International | \$520,969.00 |
|---------------------------|--------------|
| Seva Canada | \$367,789.00 |
| Seva Foundation | \$328,950.00 |
| Fred Hollows Foundation | \$305,367.00 |
| USAID | \$90,468.60 |
| Moran Foundation | \$31,000.00 |
| WHO - ESPEN | \$6,500.00 |
| Individual donations | \$6,195.91 |

Total

\$1,657,239.51

Thank you to our donors and partners!



LEFT

As KCCO activities expanded into four more regions of Tanga, Manyara, Kagera and Mtwara the KCCO's Tanzania Director delivered remarks during the equipment handover to the Minister of Health at Tanga Regional Referral Hospital.

RIGHT

The Third Global Meeting on Trachomatous Trichiasis was held in Cape Town.



BELOW

KCCO's Microfinance & Eye Care Coordinator, Fortunate Shija, attended The END Fund's 10th Anniversary Learning Summit, in Nairobi, Kenya





LEFT

KCCO's Genes Mng'anya accepted the new plan for Neglected Tropical Diseases from the Tanzanian Ministry of Health at the official launch in Dodoma.

RIGHT

KCCO joined the World Sight Day celebrations at Bugando Medical Centre, where a new ophthalmology department was also opened.





LEFT

Long time partner, the Felege Hiwot Hospital in Bahir Dar, Ethiopia, presented a certificate of appreciate to KCCO program officer, Peter Kileo, for the partnership with our organisation.

KCCO TEAM

We are always happy to answer any questions and can be contacted as below:

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Fortunate Shija - Microfinance and Eye Care Coordinator - fshija@kcco.net

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KCCO publishes more detailed quarterly reports of our activities. Please email **adminekcco.net** if you would like to be added to the distribution list. For general enquiries, please also email **adminekcco.net**.

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