

Thoughts become things

September 2023

The Symbol: 非洲 - Afrika.

Pronunciation: *Fei zhou*.

Teacher Ruolan ... interpreted the separate words for Ayaana:

Fei: nothing, wrong, missing, ugly, non. *Zhou*: be, being, land.

Together: Africa, non-being.

from: Yvonne Adhiambo Owuor – The Dragonfly Sea

How do we look at Africa?

What kind of image do we have of Africa?

How do we write about Africa?

Also see: Binyavanga Wainaina - [How to Write About Africa](#)

Thursday 12/10/23

It's World Sight Day, a global initiative to raise awareness of preventable and treatable visual impairment and blindness.

Our project manager Ryner and Neema Moshi, an eye specialist from Dar es Salaam, give an interview to Deutsche Welle. There are two patients from our project regions. The focus is on eye diseases in children, in particular retinoblastoma, as an eye tumor that can be fatal if left untreated.

The first team members make their way to Kasulu in Western Tanzania in the Kigoma region. It is the third region in which we are building the infrastructure for comprehensive basic eye care.

The Tanzanian eye surgeon Eric, his two operating theatre nurses Grace and Upendo, our project manager Ryner and the Tanzanian ophthalmologist Nancy form the vanguard of a large team that will hold an eye camp for a week at the Kabanga Referral Hospital near the city of Kasulu.

In our project we follow simple principles: there is no basic eye care, so we offer "first aid" through so-called eye camps. At the same time, specialists are trained in the country who, after their training, return to the region in question and into permanent employment: ophthalmic assistants (OAS, "eye nurses"), optometrists,

cataract surgeons (Assistant medical officer, AMO), specialists in ophthalmology (Medical doctor - ophthalmology).

The OAS are distributed across the individual regions, are equipped and are provided with an ophthalmic workstation. The region will receive an ophthalmology center with surgical care. Regular training takes place: on the job, face to face, hybrid and as e-learning.

As part of a private-public-partnership model, agreements are made that define responsibilities and set “endpoints”, written in a memorandum of understanding.

Common perspectives are developed, development cooperation in a fair, supportive and mutually demanding cooperation.

Friday 13/10/23

The European participants embark on their long journey. Flying has become more unpredictable. Feeder flights and trains are increasingly unpunctual. This threatens the travelers connecting flights or risks their luggage not travelling with them. This may still be manageable for individual travelers, but for our team it is yet another challenge amongst many. Airlines treat travelers with a calm, almost indifferent harshness: The entity causing the damage is not recompensating the traveler who bears the injury.

Saturday 14/10/23

Stopover in Doha at 3:00 a.m. and continue to Dar es Salaam at 7:45 a.m. Entering Tanzania is very easy. That was different. The country is opening up with President Samia Suluhu Hassan.

Sunday 15/10/23

Check-in at 4:00 for the one-and-a-half-hour domestic flight to Kigoma. In Kigoma you can still see part of German colonial history. The [Liemba](#) lies in the city's harbor and has been eking out its sad existence for 5 years. The passenger and cargo ship operated on Lake Tanganyika until 2018. It was built in Germany in 1913 as a steamship and took part in the First World War as a warship. Until 1927 it was called Goetzen, named after Gustav Adolf Graf von Goetzen.

Before we go to Kasulu with 3 Land Cruisers, we stop at the Dr David Livingstone Memorial Museum in Ujiji. David Livingstone, missionary, theologian and physician has a good reputation in East Africa. His work is seen as the beginning of the end of the slave trade. In 1865, he began his last research trip, this time to Tanganyika. From 1869, he was considered missing. Henry Morgan Stanley was sent to find the missing traveler in 1871 and then met

Livingston near Ujiji. Stanley greeted him with the famous words “Dr Livingstone, I presume”.

After an hour we reach the Mwiramvya pastoral center in Kasulu, our accommodation. With 234,452 inhabitants (2017), Kasulu is the second largest city in the Kigoma region (2,470,917 inhabitants [\(2022\)](#)) and is located at an altitude of 1,316 m.

The region lives from small-scale subsistence farming and is one of the poorest regions in Tanzania. It has a high volume of refugees from the neighboring countries Democratic Republic of Congo (DRC) and Burundi. The two main camps, Nduta and Nyarugusu, are home to more than 100,000 people, mostly economic refugees, whose lives may be more bearable in the camp than in their home country. There is an increasing number of political refugees from the DRC.

In the afternoon we drive to Kabanga Mission Referral Hospital St. Joseph, 7 km away, site of the first eye camp in the Kigoma region.

It was founded in 1954 by missionary sisters in a central location in the region and has 160 beds. The building and equipment are very old. There has been a new outpatient department (OPD) since 2021. The new building was built with the support of the German organisation [Von Herz zu Herz](#). To date there is no eye department. External experts (national or international) come to provide specialist medical care as part of „specialist weeks“. Dr Peter Kiteny, the clinical director, is trying to develop the status of a referral hospital.

The welcome is very warm, the preparations are impressive: everything is ready for the camp. We are setting up a temporary eye clinic in the old OPD building: waiting area, areas for preliminary examinations, a small glasses workshop and two rooms with two slit lamps. We brought these slit lamps as a donation from Heidelberg Engineering in Germany.

There are 50 patients waiting to be examined, most of whom are being prepared for the surgery taking place the following day. Due to the screening carried out by the ophthalmic assistants (OAS) before the camp, almost exclusively patients in need of treatment are here. A 12-person European team and a Tanzanian team of over 40 are starting a busy week together: we will examine 586 patients, operate on 144 eyes, 45 eyes will receive laser surgery, 175 glasses will be determined, 58 glasses will be adjusted. We will also refer 8 children to a clinic that specializes in pediatric ophthalmology.

The Tanzanian participants will receive intensive “on-the-job training”.

Monday 16/10/23

We all have breakfast together in the hospital, then there is a meeting with all participants. Ryner explains our program. He emphasizes how important it is to involve everyone, from administration to cleaners to the medical profession.

Many patients are waiting in the reception to be registered. Barbara, Andrea, Felix and the local administration team register the patients. Beate, Arno and Martin sit at the slit lamps, examine patients, and have the OAS collect findings - learning at work.

Surgeries start at 10:30. The surgeons are Eric and Angelina. Eric is a very experienced surgeon from Ilembula. He has a big heart and has supported the project from the beginning (2017). The assistant medical officer (AMO) Angelina has been an eye surgeon for two years. A German ophthalmologist covers part of her salary, thereby keeping her in the program and, above all, enabling her to live a more worry-free life.

“There is a talented nurse at the operating table...” is what I recently read in an online report. How arrogantly we look at Africa. Correct is:

Assistant medical officers/[clinical officer](#) are trained in a type of bachelor’s degree program (“non physician”). You can acquire additional qualifications, i.e. as a cataract surgeon. This further training to become an eye surgeon for the anterior segment of the eye (especially cataracts) takes 2-3 years. The qualifications are only recognized in the respective country. In contrast, there are qualified specialists. They can leave their countries to work worldwide, and they often do so. They are then no longer available for medical care in their (home) countries (“brain drain”). Praise goes to the “non physician” cataract surgeons. They provide basic eye surgery care in many remote regions. Respect!

Dirk is there as an experienced eye surgeon and will, among other things, accompany Angelina during the operations. She needs support, especially in more complicated cases.

With our support, several ophthalmic assistants (OAS) have already been trained for the Kigoma region.

Some of these OAS examined patients two weeks ago at the nearby Mtabila Refugee Camp, a UNHCR refugee camp. A group of refugees comes to see us during the week. Some are operated on; and we send 4 children with advanced lens opacity to a special clinic in Moshi, Kilimanjaro region.

In the late afternoon we see 2 more penetrating eyeball injuries. The injuries are 1-2 weeks old, the eyes are infected and can no longer be saved. They must be removed. Early treatment could have saved the eyes.



Tuesday 17/10/23

John, an experienced OAS from Karema on the eastern shore of Lake Tanganyika, explains postoperative behavior to the operated patients and names the local contacts: the OAS who have been trained so far are spread across the region and provide basic ophthalmic care. Patients can contact them.

We see a wide variety of clinical pictures, including blindness caused by diseases of the optic nerves: Tanzanian endemic optic neuropathy (TEON) is a disease that affects 0.3 to 2.4% of 10- to 39-year-old in East Africa. TEON causes irreversible visual impairment in these young people. Although TEON is so common, the cause is unclear. You can find more information about TEON [here](#).

We see individual cases of malnutrition such as that of a 21-year-old young man, in whom poor nutritional status led to scarring of both corneas. A corn farmer tells the story of his now 13-year-old daughter Julieta: 4 years ago, the slowly progressive, bilateral vision began to deteriorate. At some point she sought medical help. She was prescribed eye drops and tablets. Because her vision was getting worse, the parents turned to a special clinic in Tanzania. Surgery was recommended, but the family could not afford the procedure. It's hard to say who failed and where. In any case, a lot of health education is still needed. We now got Julieta on her way. She is scheduled to have an operation to lower intraocular pressure. We hope that she retains some remaining visual acuity.

Wednesday 18/10/23

We see 3-year-old Salome with an enlarged eyeball on both sides (buphthalmos). The intraocular pressure is too high from birth. The still soft child's eye tissue gives way due to the high intraocular pressure and the eye becomes larger. The children will inevitably go blind if medical help is not given early enough. Any help seems too late for Salome. We ask about siblings. The following day the parents bring their sister Lilian, who is two years younger. She also already has advanced findings. Why didn't the parents react to the findings?

We refer both children to an eye specialist in Moshi – to save what can still be saved.

The Scottish ophthalmologist Andrew and the Tanzanian colleague Nancy support the work in the camp by repeatedly calling together small groups of OAS and demonstrating clinical pictures to patients: anamnesis, examination, diagnosis and a treatment suggestion.

Nancy is a young ophthalmologist who has some experience working in remote areas. She is very committed, provides great professional support and fits wonderfully into the team. And [Andrew](#): unbeatable when it comes to training ophthalmic professionals. With the Global health team at the University of St Andrews he has developed teaching programs for eye health care workers and community health care workers in so-called low income settings.

You can find further information [here](#).



In the afternoon, Barbara and I meet with the hospital management, the diocese health manager, and the bishop. The topic is the further development of the hospital. There is a master plan into which the eye clinic can be integrated very well. The planning, construction and management of the eye clinic remains in our hands - us: the stakeholders of the program and the Tanzanian team on site. The conversation is very friendly and open.

Thursday 19/10/23

A 71-year-old patient has multiple facial injuries. He was well cared for by the surgical colleagues. However, after the eyelid injury was treated, he was no longer able to close his left eye. We are revising the findings.

In the evening Ryner and I have a video meeting with the American organisation [Know the glow](#). In a cooperation between [TanZanEye](#), the dioceses of the 3 project regions and the [Arclight Project](#), an awareness campaign in the area of health education is currently running in Tanzania: to eliminate avoidable blindness in children through early detection and treatment of diseases. The aim is to raise awareness of “[The Glow](#)” among medical staff and

parents. (the glow, English: glowing, describes the whitish reflex of a pupil in some eye diseases; medically: leukocoria; we are thinking primarily of cataracts and retinoblastoma).

Participants in the meeting are eye specialists from Tanzania and also those affected. It's a networking event.

Friday 20/10/23

The last day of a very intensive camp: new surroundings, a relatively inexperienced but highly motivated local team, many patients. All of this is exhausting.

In the afternoon there is some time for a short visit to Kasulu.

At 6:00 p.m. we start dismantling the operating room. We brought two new, portable surgical microscopes from [Prechtl-Techsolutions](#). They are very compact, the built-in battery makes them independent of the mains power supply - both are ideal for working in these regions. Jakob is the designer of these devices and accompanies us during the two weeks. With his expertise, he is a great help in all technical areas. He also instructs the employees on site how to use technical equipment.

As we now leave the Kabanga referral hospital, a team from OAS will maintain primary medical care, supported by colleagues in the area. Twelve more OAS will be trained in the spring. We are very grateful to the [Else Kröner Fresenius Foundation](#) for financing the training.

An ophthalmologist is in the second of three years of training and will then become head of the eye clinic at Kabanga Hospital. Until then, eye surgeon Angelina from Mpanda will travel to the region once a month to operate on eyes. A makeshift operating room is available to her.

The patients who underwent surgery in the past few days will come to the Kabanga Referral Hospital for a check-up in 2 weeks. The OAS Jenifa and Vicki will examine the eyes. Patients are informed about behavioral measures after the operation and are urged to present themselves if they have pain in their eyes.

Saturday 21/10/23

Eric and his op-sister Grace fly back to Ilembula, Eric's hometown, very early. Upendo will accompany us for another week.

Incredible amounts of rain have made the roads and paths difficult to pass. We take a detour to the hospital to see the last patients.

At 11:00 a.m. we take a bus to Mpanda, Katavi Region. After 1 ½ hours, civilization ends behind Uvinza: bush, rough road, no man's land, no network reception, great heat. Not a friendly area.

Before Bulangalo, a semi-trailer truck comes towards us on our side in a tight bend. Our bus driver is able to dodge into the ditch in time - miraculously everyone remains uninjured. Everything seems to be under a good star.

When the initial shock has subsided, Africans and Europeans (separately) consider how to get the bus back on the road. The African procedure is placing stones under the free-floating rear wheel and then supporting the rear wheel by rocking the bus while simultaneously removing the jack placed under the bus and thus bringing the car back onto the road. And in [Statler-und-Waldorf](#) style us Europeans don't give this any chances.

Well – clear victory for Africa. After almost 40 minutes we can continue the journey.

Shortly after 6 p.m., we arrive in Mpanda and move into “our” Capricon guesthouse. Mpanda is the capital of the Katavi region, which has existed for 10 years. The region was previously part of the southern Rukwa region (capital: Sumbawanga), separated by the 4,471 km² Katavi National Park, the third largest national park in Tanzania, but geographically separated from the rest of Rukwa. Despite its independence, Katavi is a “left behind region”, a no first-choice area. There are no paved roads north to the Kigoma region and south to the Rukwa region. The asphalt road to the east to the Tabora region is new.

Sunday 22/10/23

A lie in and then breakfast in the eye clinic, the St Aloyce eye center, which opened in April. The catering is handled by Ralia, whose kitchen has already spoiled us in Kigoma and who is now staying overnight with her cousin in Mpanda so that she can continue to serve first-class food in the coming week.

In the morning we take a tour of the almost empty rooms of the eye clinic. It quickly becomes clear that the building needs to be equipped. In addition to storage options, tables and chairs are needed for the treatment rooms and the staff areas/administration. You also need devices and equipment for the operating room.



Martin and Jakob drive to Sumbawanga to check on everything going on at the eye clinic there. The new purchases will also be inspected: operating chairs, an operating table, a sterilizer, and a washing machine were purchased with the support of the [Stiftung Lichtblicke in der Welt](#). This foundation has been very involved in our project.

The rest of the team is preparing for the coming week.

The AMO cataract surgeon Liberator, Angelina and the specialist in ophthalmology (Medical doctor Ophthalmology) Keneth will operate on 56 eyes in the coming week. This week too, Dirk will stand next to the surgeons and provide valuable assistance. Markus will join us from Wednesday. He also has a lot of experience in the small incision cataract surgery SICS that is common here and will complement the team in the future.

Andrew and Nancy are preparing the teaching and training camp for the ophthalmic assistants OAS of the Katavi and Rukwa regions.

Henning arrived yesterday and will moderate the second part of the Future workshop on Tuesday and Wednesday. We will report on this separately.

Angelina is currently in charge of the local eye clinic. She introduces me to an 83-year-old man who went blind from cataracts years ago and was no longer able to cope with everyday life without outside help. His grandchildren had to look after him. They were the ones who heard about the new eye clinic in Mpanda. Angelina operated on him two weeks ago. He can see again. A beautiful image, seeing the two of them sitting happily next to each other. Everyone is happy in their own way. She also shows me a video of a patient. An OAS removes the bandage on the day after the eye operation. The woman finds that she can see and dances around the exam room with Angelina. Two beautiful stories out of many.

In the evening the team from the Katavi region is complete. We have dinner together. Here, different faiths sit at the same table, eat and drink and laugh together.

Monday 23/10/23

Breakfast isn't until 8:15 this morning instead of 7:30 as planned, which means the timetable is shifting. An unexpected number of patients are sitting in front of and in the eye clinic. We only had planned surgeries. A big meeting with the staff of the St. Aloyce health center is called at short notice. Such delays and spontaneous meetings make me nervous.

Arno and Felix set off with Juma and John to the area around Mpanda to provide health education for the local population in remote places. This is educational work and screening at the same time. Residents learn about eye diseases and preventable visual impairment. Potential patients are recommended treatment in the eye clinic.



Posters issued by various non-governmental organisations (NGOs) hang in the villages. Organisations keep rushing to African countries and offering treatment “for free”. And then they're gone again. Only the posters remain. Come, do, leave. How does this create sustainability?

For our local colleagues, “Treatment for free” is an unfair competition that they cannot compete with. How are they supposed to pay their running costs and staff when medical treatment is offered for free next door?

Angelina and Dirk retreat to the operating room for 14 operations. Hanna and Upendo, as very experienced operating room nurses, support the young operating team from Mpanda with cleaning and sterilizing instruments, preparing for the operation and working on the operating table.

The day in the outpatient department is terrible. A horror cabinet of ophthalmological final findings: final glaucoma (the optic nerve has irrevocably died due to years of high intraocular pressure, the eyes become blind), scarred corneas, often after treatment by so-called traditional healers and so much more.

The only consequence can be: ongoing training of medical staff and health education for the population. Health education of the population is crucial: it is not enough to build buildings, they also have to be filled with patients. This requires education, trust building, advertising for eye health, and the message: visual impairment and blindness are preventable.

Two patients presented with penetrating eyeball injuries. Both injuries are not very old and not superinfected. You will have surgery tomorrow. (a toddler and an 18 year old man).

A nine-year-old girl with corneal scars on both eyes. A cornea transplant was carried out on the right eye years ago. The transplant has clouded over again over time. Fenestration of the iris can help here to create an (expanded) optical gap.

The day is like a long cry for help.

Mpanda and Sumbawanga now have 2 optometrists each. They are responsible for optics, measuring visual defects and adjusting glasses. Uncorrected refractive error is the most

common cause of visual impairment, and cataracts are the most common cause of blindness.

At 6:30 p.m. more OAS from the Nkasi District of the Rukwa region arrive. This completes the OAS group. Before teaching begins tomorrow, all participants must complete a written entrance test. The evaluation of the test lasts until midnight. It gives us a good impression of the level of training at the OAS. Managers can be identified by the result of the test and the appearance of OAS. Because of the size of the group, this will be necessary soon.

Tomorrow the OAS will be divided into 2 groups and will take part in the one and a half day teaching program directed by Andrew and Nancy.

Martin and Jakob return from Sumbawanga. The eye clinic there at Dr Atiman Hospital is now running very well.

350 people follow us on Instagram. Thanks, Martin, for the posts.

Tuesday 24/10/23

Breakfast today is at 7:25, ahead of schedule. It can be done!

We had a patient undergo laser surgery two years ago. Laser treatment is used to reduce intraocular pressure in order to prevent progressive vision deterioration and blindness in one eye. Without treatment, the eyes will inevitably go blind. We have been able to prevent this so far in this patient. Our own research results prove the success of the method and are in line with other studies. That is why [cyclophotocoagulation using micropulse technology](#) is now a standard procedure in our project.

We sign our third memorandum of understanding. There is now also a declaration of intent with the Kigoma region about the development of eye medical care structures.

The Future search workshop with Henning as moderator is entering its second round. After the first round in April, bishops, health managers of the dioceses and the financial and medical boards of the hospitals sat at the table again and developed strategies for the sustainability of the project. One day the structures will have to be self-sustaining, covering costs and independent of foreign donors.



Eye care in Tanzania is almost 100% donor funded. So “Eye care for free” is self-evident and also in people’s minds. “You made us lazy,” an African colleague told me. “People are adapted to treatment for free.”

Even the national Strategic eye health plan is financed by the large NGOs.

I ask myself: What remains of the [Education for Self Reliance](#) (ESR) propagated by the first President Nyerere? For him, self-reliance meant independence from foreign aid: independence cannot be realistic if a nation is dependent on gifts and loans from others for its development.

The image of the eternally helpless African, dependent on donations, has emerged. This stifles any personal initiative. This is not good. In general not and especially not for our project. We can never manage the necessary upheaval, this change in mindset, alone! Something of your own must arise and develop. Because what is development? When people are trained and qualified and services start to cost money.

Markus and his wife Claudia arrive, along with Mr. Nyembo from the School of Optometry at the Kilimanjaro Christian Medical Center (KCMC) in Moshi.

Wednesday 25/10/23



In the afternoon there will be a lecture by Mr Nyembo on “Low vision” for all team members. The low vision area begins where medical help is no longer adequate. It is about adapting magnifying visual aids and everyday aids for people with visual impairments and blindness. And it's about enabling visually impaired patients to live an almost normal life. Left alone, they end up on the fringes of society. Optometrist Nyembo gives patients a voice.

Thursday 26/10/23

The second group of OAS goes into teaching: anamnesis, examination of the anterior segment of the eye, pupil reaction, retinal reflex and posterior segment of the eye, especially the assessment of the optic nerve. All this with the Arclight.



Somewhere here we come full circle to [Know the glow](#): the OAS and community health care workers will be able to diagnose children with eye diseases in remote areas and provide them with medical treatment. And when it comes to retinoblastoma, they are saving lives.

Friday 27/10/23

Juma takes Markus with him on outreach: they examine 60 patients in a remote region. 10 had findings worthy of surgery, and an additional 4 were children. All patients will be summoned for the coming week. Unfortunately, only a third comes. The reasons cannot be clearly explained - or I don't understand them. Maybe this one: The beginning of the rainy season keeps the rural population at home and the fields have to be tilled. The distances are too long. There is a lack of money for transport and treatment.

Nancy gives the staff at the St Aloyse Health Center a crash course in eye medicine and shows them how to use the Arclight. The more people who know how to use the ophthalmoscope, the better.

Ryner and Father James, health manager of the Diocese of Katavi, summarize the results of the Future learn workshop in front of the entire team. A message for the joint project with a common perspective that connects Ryner with the thoughts of the first president Julius

Nyerere: the importance of education, education as the key to solving problems, education as a prerequisite for self-reliance.

Ryner: “We should not be professional complainers once we are challenging problems” and “Do not demand for more while producing less.” That's awe-inspiring.

Henning adds a quote from Antoine de Saint-Exupéry: „If you want to build a ship, do not start by gathering wood, cutting boards and distributing the work, but rather awaken in people's hearts the longing for the big and beautiful sea.“

With Ryner and Henning we have two great project managers.

After dinner the whole group heads to the Deluxe Bar. A big party. It's a nice end to the second, once again very intensive week with lots of consultations, teaching from the OAS and a substantive discussion of the sustainability of the project.

Another 120 eyes have been operated on. Thanks to the local surgeons and their educators.

Saturday 28/10/23

We fly to Dar es Salaam early in the morning and then back to Germany via Doha in the afternoon.

Marcus and Claudia stay in Mpanda for a few more days, Dirk and his son Willi go to Sumbawanga. All surgeons in the regions still have support in the operating room for a few days. Dirk will also operate on some children's eyes. This saves the children and their families the long journey to Dar es Salaam, Moshi or Bugando.



Andrew flies on to Zimbabwe for eye health care worker training there.

Arno listens to Heather Small: “What have you done today, to make you feel proud?” and writes to the group: “We can all answer this question well for the last 14 days.” Indeed!

Thanks to a great international team.
Thanks to our board of TanZanEye e.V..

Thanks to our ambassador Liz “for spreading the [message of avoidable blindness](#)”.

Thank you to the many supporters and donors for your investments in infrastructure, training, equipment, training and patient care.

The list of those I thank keeps getting longer – hugs everyone!



After camp is before camp. Two camps are scheduled for 2024, with the focus continuing to be on-site training. The clinic in Mpanda also needs to be equipped. We look forward to any financial support.

TanZanEye e.V.
Volksbank Köln Bonn

IBAN: DE52 3806 0186 4940 3630 18

BIC: GENODED1BRS

You can find further information on our homepage, the chronology of the project can be found in the Key facts (English and German).

P.S.

Monday 30/10/23

As part of Federal President Steinmeier's visit, a German-Tanzanian economic forum will take place in Dar es Salaam. Tanzania wants to become a new economic hub in East Africa. That's why looking forward to a common future is more important than looking back unto the colonial past. Historical reappraisal is important, but it does not provide the impetus that Tanzania would like.

Andrew Blaikie receives the **Global Citizenship Award**. Congratulations and thank you for your valuable work and that we can learn so much from your commitment.



Global Citizenship Award
- sponsored by Public
Health Scotland
Dr Andrew Blaikie, NHS Fife



An addition to the training of local eye surgeons

The training of surgeons is a crucial part of the project. Regardless of whether the surgeon is a specialist or a non-physician assistant medical officer or clinical officer: the number of people blinded by cataracts is too high and the rate of operations is far too low. The number of cataract operations per 1,000,000 inhabitants (cataract surgical rate CSR) is approximately 400 in Tanzania and 6,300 in the USA (2018).

The cataract surgical rate in Tanzania rose from 1999: 333 to 2018: 407 - certainly not a quantum leap. The causes have been known for a long time. A report in the British Journal Ophthalmology 2001, which is more than 20 years old, reads no differently than current publications.

2001: ...The cataract surgical rate (CSR) is defined as the number of cataract operations performed per year per million population. At present the CSR in Africa is estimated to be 200–400; this can be compared with 4000–6000 in industrialised countries. The target for the next 5–10 years is to increase the CSR in Africa to 2000. This increase in

*the cataract surgical rate will necessitate **more ophthalmologists** (or cataract surgeons) working more efficiently and, equally important, much greater efforts to get the cataract blind to come forward for surgery. **Specific programmes** must be developed to meet these goals. The long term goal in Vision 2020 is to have **one ophthalmologist per 250 000 population** and a **cataract surgical rate of 4000**.*

I ask myself: What is the definition of a long term goal in relation of time?

Best Wishes

Karsten Paust