



**eagle
foundation**



M.E.A.K - Report for Fondation Eagle:

23rd February – 7th March, 2020

Project: MEAK Eye mission to Moyale & Marsabit, Kenya

Donor:

Fondation Eagle, Switzerland

Donor's reference:

FF 0502-23

Charity:

Medical & Educational Aid to Kenya (UK)

Date of acceptance:

17th September 2019

Date donation received:

4th December 2019

Amount of Donation:

A one-off donation of \$26,150.00, equivalent to 2,641,414.14 KSH (at 0.0099KSH to US\$)

Duration of project:

Pre-screen – 1 week in each location (Moyale & Marsabit)

Surgical mission – 7 days in Moyale & 6 days in Marsabit

Post-surgical review – 4 days in each location (Moyale & Marsabit)

Thus, the duration of the project was 2 months, taking into account the pre & post-screening.

Number of beneficiaries:

The number of people that benefitted from the mission was higher than expected and is summarised below:





Summary of achievements:

- Total number of eye patients screened & reviewed, including school children = 2266
- Total number of eye operations = 272
- Medication used, including pain relief and antibiotic eye drops dispensed = 8280 units
- Sunglasses & reading glasses were also dispensed. Every patient who had eye surgery received sunglasses to protect their eyes after the surgery.

Project overview & achievements:

This was another very successful MEAK eye mission, as evidenced from the outcomes above, the diary from MEAK Trustee Mike Fels & the individual case studies from MEAK logistician, Nargis Kasmani (all to follow). In brief, the project highlights were:

Excellent collaboration with the local Ministry of Health (MoH):

Logistics:

- The local MoH provided one vehicle with diesel & motorbikes, all to assist with patient mobilisation;
- The MoH arranged for radio announcements, posters to advertise the mission & motorbikes to travel around and announce the mission, aiming to increase patient recruitment;
- Access was given to the Moyale Sub-county Hospital & the Marsabit Referral Hospital for the team to use the dispensaries, operating theatres & ward areas for patient accommodation;
- The Marsabit Referral Hospital facilitated the loan of an ophthalmic microscope.

Personnel:

- Having previously worked in these locations, MEAK has an excellent working relationship with the local ophthalmic officers in the area. Mr Jarso Wako assisted with the pre-screen in both Moyale & Marsabit & the post screen in Moyale. His colleague, Mr Isacko Adano Sora assisted with the post-screen in Marsabit.

This level of collaboration is essential for a successful mission. It further cements the working relationship between the MEAK team & the local medical community, including the ophthalmic officers & it assists in the patient recruitment process. The local population are more trusting of the local medical team who speak their language. They are more likely to attend the camp to have their eyes operated if they are first approached by local people. Ophthalmic officer Wako has got to know the MEAK team so well he has volunteered to be part of the team on several other missions, including to Turkana, to further his experience in the field!

Challenges:



Equipment failure:

- Both of the MEAK ophthalmic microscopes broke down during the mission (one part broke due to wear & tear in the older microscope; the newer microscope had an issue with the lens & was unable to focus properly). Once the Covid lockdown is lifted, access to parts & servicing will be sought. There are currently no parts available in Kenya at the moment. Fortunately, the team were able to borrow another microscope from the Marsabit Referral Hospital. Together with the MoH they were able to liaise with the necessary personnel to get a permit for release of the microscope to the MEAK team. A MEAK vehicle was sent overnight to collect the microscope & bring it back to Moyale.

Mobile operating tent:

- The tent was tried for surgical procedures on the mission, but was almost impossible to work in due to the hot weather making the temperature in the tent too hot. Once the lockdown is lifted rectifications will be investigated. The tent was however, used for mobile screening (where the flaps could be left up, which cannot be done during operating due to the amount of dust potentially contaminating the sterile field).

Terrain:

- The terrain was quite rough in both Moyale and Marsabit outreach areas making mobilization in those areas quite a challenge.

Language:

- There was a significant language barrier & translators were needed in all our areas. The main challenge (other than the language), was that the patients waiting to be seen were very difficult to manage (see crowd control in Mike Fels Trip Diary, below)

MEAK Trustee Mike Fels Trip Diary: Moyale & Marsabit

I arrived in Nairobi around 9pm the night before the mission. Due to the wait to get a visa on arrival, I did not get to my hotel until 11.30pm. As a result, I hardly got any sleep as I was being picked up the next day at 5.00am to make our way to Marsabit.

Day 1: Screened – 154; Surgery - 15

I managed to doze in the car as driver Sammy did the majority of the drive to Marsabit. I drove the last 300km to Moyale. It took 12 hours to get there, with only 1 stop for breakfast.

The eye team had left Nairobi on Friday in the big truck and arrived in Moyale mid-afternoon on Saturday, enabling them to set up and be ready



to start on Sunday morning. While, Nargis, Sammy & I were making the journey the team screened 154 patients & did 15 surgical procedures.



The campsite was more than acceptable (a bit thorny) but fairly clean. I was both surprised and delighted that Nargis had managed to obtain a proper, comfortable bed for me to sleep in. This made me happy as sleeping on the ground was becoming very difficult.

Day 2: Screened – 267; Surgery - 25

Crazy, crazy busy as we were managing a huge amount of people today. It was a massive achievement by everyone, having to deal with so many impatient and unruly people. It was a 12-hour day, screening 267 patients and performing 25 surgeries.

I also met with the father of Amina Ali, who passed away a few weeks ago. We met Amina 2 years ago when we discovered she had a massive brain tumour. We had hoped the surgery that we arranged for her would save her life, but sadly our intervention bought her only a few months extra. Very sad.

Day 3: Screened – 220; Surgery – 21

We went out with the big truck and the land cruiser to trial our mobile hospital tent. We drove some 33km to a small hamlet of Manyattas, called Waititi, where we screened 90 patients with 6 needing surgery. Unfortunately, after trying for quite a time it was not possible to complete the first surgery in the tent, so we had to take the 6 patients back on the truck to the hospital.

In the interim we received a call from Nargis as us to get back to base ASAP as the hospital was chaotic. We had left them 7 personnel short. It took some time deconstructing the mobile hospital unit but as soon as we had cleared up, we jumped into the land cruiser & headed back to the hospital to help see the remaining people who were waiting to be screened.

Day 4: Screened – 222; Surgery - 32

Got to the hospital early and it was crazy busy again. There were post-ops, pre-ops & loads of early registrations along with the people that had grown tired of waiting the previous day & had come back again today. Within an hour chaos ensued with everyone insisting they were first! I must admit that tempers were beginning to get frayed on all fronts!

To make matters worse, both the ophthalmic microscopes were experiencing faults (a disaster on a trip like this). Driver Nyakundi drove back to Marsabit to borrow one from there.

Day 5: Screened – 227; Surgery - 32

The word has definitely got around that we are in town! I got to the hospital early and there were already 30 people registered waiting for vision checks. It carried on non-stop until 3.30pm and the team took another couple of hours to finish diagnostics.



Another day of temperatures in the high 30's is making the work that bit harder. The team was invited to Wako's house for supper. Wako is the local MoH ophthalmic officer, who works with the MEAK team when there are eye missions in the region. He has a lovely large property just outside the main town and we were treated most graciously and fed very well.

Day 6: Screened – 250; Surgery - 39

We arrived at the hospital at 8.00am to find over 30 patients for screening again today. This worked well as it allowed Nargis and I to organise them whilst the post-ops were done, which meant the oncoming surge were controlled much better than the chaos of Tuesday. We are learning!

Temperature of 34 degrees today, but not a breath of air and it seemed so much hotter.

Day 7: Screened – 70; Surgery - 25

We were supposed to be leaving today but we have delayed our departure until the Sunday post ops are completed. This was due to another 70 people arriving for eye checks. After the earlier days, this was an easy number for us to handle. We were finished at 1.00pm with the post op checks and vision testing. The theatre team were through by 3pm.

Now it is time to pack up and move on to Marsabit, which I am quite happy about as I am told it will be a lot cooler! It has been very hot but with a light breeze blowing (most of the time). There has been plenty of shade and water throughout and the work has been achieved in a slick professional manner, with everyone doing their jobs with a smile! A good week!

Total for the first week: 1410 people screened, 187 surgical procedures

Day 8: Breaking camp & moving to Marsabit

We are all up very early to break up the campsite, load the vehicles and do post ops from yesterday. This involves removing the bandages, checking the eyes for vision, giving the patients the antibiotic eye drops and telling them how to care for their eyes post-surgery. All this was achieved by 11.00am. As we had an interpreter the eye care session is given in one large group, which helps to quicken things up.

We arrived in Marsabit by 2.30pm which included stopping for Choma (goat). Not for me! Unfortunately, having arrived we are having difficulty finding our campsite! Luckily the big overland truck with all our stuff is still a bit behind us, so we have some time to find it.

We all meet up and find the campsite and it is great! It is owned by the Kenyan Wildlife Services and it has proper toilets and showers (unfortunately, not working yet) but we have electricity!

After the heat of Moyale, the hustle and bustle and the and the proximity of the camp being very close to the mosque, I found it hard to get sleep here because the silence (!) but during the night we did hear hyena & baboons.



of

Day 9: Screened – 109; Surgery - 14

An early start to the day for a welcome meeting from the hospital chief. After that finished, we unloaded the truck with theatre equipment and got the theatre area set up. Only 30 patients waiting by the time we were ready to go, which rose to 71 people by 1.00pm. Despite the small number, this did yield 11 surgeries. We were hoping for a busier afternoon, but it was not to be. We screened an additional 38 people afterwards only.

We must be getting very slick in our work because we handled everything with ease! Registration stopped at 4pm & there were only two more operations to go by this time. Marsabit is not as populated as Moyale, so perhaps we will get lower numbers. I sincerely hope not. Devastating news: Nyankundi lost his father during the night so the atmosphere was rather sombre in camp this morning. He is leaving tomorrow to join his family back in Nairobi for the funeral.

Day 10: Screened – 165; Surgery - 46

Already acclimatised to the cooler climate. We got to hospital this morning and we were very disappointed with only the handful of people there for screening.

Several of us (myself, 2 local nurses and surgeon Torotich) decided to do some outreach screening. We went to a small clinic in Hula Hula, only 7km away. They were totally unaware of the MEAK mission. After a long discussion the team told me that as no one knows of our mission we should let the word go out tonight & come back tomorrow. We continued a further 10km to the next decent-sized village, which was called Pakishoni. They also had no idea of our coming. Apart from a radio mention the mobilisation seems not to have been carried out. The low turnout of patients pays testimony to this. We found 2 double cataracts and 3 other cataracts and screened 46 people. A novel way to spend one's birthday!

Day 11: Screened – 127; Surgery - 18

Woke up as usual at 6.15am expecting early sunshine, but it was overcast with dense mist and it still felt like night.

Yesterday we agreed to go & pick up around 40 children from an orphanage & school for the blind. Due to the large numbers we told them we would bring our big vehicle. We got there & there were only 14! It turns out that there was a communication error & 14 children was in fact the correct number. There was one child called Oliver who was totally blind & needed constant attention. His teacher, Ibrahim Godana was trying to pacify him, but in the end, it was only MEAK's Theresa who could calm him. I met Ibrahim yesterday when he came to the hospital for another reason. Despite his home being for partially sighted children, he was unaware of our visit. We were very grateful for the meeting

and at least we were able to review these 14 children, one of which needed surgery to correct a congenital cataract.



Back at the hospital, only 60 people had been registered by 11.30am. As a result, an outreach team has gone out so we are expecting a few more to come later. It's still enough to keep us busy but we are capable of so much more.

We found a child needing surgery, but we can't bring her to camp with us as the parents were not present to give consent.

Day 11: Screened – 93 (outreach); 79 (hospital). Total = 172; Surgery - 14

Again, the hospital admissions were slower than we would like. We set out on outreach again, this time to Kamboi, where we screened 79 patients & brought back a young boy to have an optic cyst removed. It was very hot & the hospital tent modification on the truck came into its own when we used the awning for shade for screening. This made life a lot easier & screening much more pleasant.

Day 12: Screened – 43 (outreach); 105 hospital. Total = 148; Surgery - 13

After post-ops we took the one surgical case from the blind school back to the school. We were so taken with their poverty, we gave them some rice, uji, sugar, maize flour, white flour and beans. As we had already travelled 45km to return the patient I asked Ibrahim to see if we could visit any other nearby areas to screen.

Ibrahim called ahead to Logo Logo, deep into the bush, to let them know we were coming to screen & to mobilise as many of the villagers as they could so that we could do the eye checks. The temperature was only 37C but felt like 47C once we got there. Thank goodness there was lots of natural shade. We screened 43 people and brought back 2 patients for surgery

Day 13: Screened – 78; Surgery – 7

We broke camp & left the hospital after the last of the operations and the post op consultations. Wako will do the remainder of the post op reviews & bandage removals after we have gone. We left at 10.30am & arrived in Nairobi at 6.30pm. I drove the first leg, arriving in Isiolo in well under 3 hours. It was a fun drive seeing very few cars & I was only held up by the occasional herd of camels, cows or goats.

As I finish this diary, I am now on the plane home absolutely exhausted but very satisfied with our total of 272 surgeries and 2266 screened. Magnificent!



Child who received cataract surgery from the blind school

Case studies:



Halima Adano

Halima had bilateral Cataracts. After patiently waiting in the long queue to be treated under the scorching sun, she was finally admitted and operated upon. The following morning, after Zura removed her bandage Halima could not contain her joy since she could see again through the right eye.

She was overly excited and insisted that her second eye also be operated on the very same day, this of course we declined to do but we did operate on her second eye the following day.

She was like a young sixteen-year old girl, bubbly and smiling from ear to ear since she had restored vision to both eyes. She walked around unaided through the hospital and she couldn't wait to get home and tell her family.



Amina Abdi (4 years old)

This fearless young girl had Bilateral Congenital Cataracts. It took me two days to bring her down to Nairobi Lions Eye Hospital, where she spent another four days.

One eye was operated upon and she was meant to have the second surgery on her other eye after three months. However, due to the Covid 19 outbreak and the lockdown this still has not been done but will be arranged after things get back to normal.

This particular photo was taken after the bandage was removed and she couldn't hold back her excitement, she was all over the place walking around trying to touch and feel everything since this was the first time she could see.

She put a smile on everyone's face that day with her big and beautiful smile.

We hope to see her again soon.



Case studies, continued:



Abdi Khaled (13 years old)



This brave young man walked all the way from school to the hospital just to see us and get treated. We explained to him that we would try and have him brought to Nairobi for treatment but he was adamant that he wanted the surgery done right there and then, without a general anaesthetic. We all agreed to this since he had come a long way and the surgery was done.

He could not stop smiling the following day once the bandages were removed

Budget:



This mission was a replacement for the cancelled Vihiga mission. The actual cost of the mission was \$36,749.83, which represents an overspend of \$10,599.83. The overspend was due to a considerably higher spend on medication and medical supplies than is usual for these missions. The eye team reports that this was due to the purchase of expensive glaucoma medication to treat patients with glaucoma or with the potential to develop glaucoma, which has a high prevalence in the area.

Please see budget breakdown below for each part of the mission. We are in receipt of 84 pages of invoices and small receipts for each individual component that makes up the total for each category on the spreadsheet. We would be more than happy to supply these for auditing if the FE board desires.

Moyale & Marsabit - 23rd February to March 7th, 2020				
	PROPOSED COST:		ACTUAL COST:	
	KSH	US\$	KSH	US\$
Pre - screening: All to be done by the County ophthalmic officers (Wako & Yusuf)				
4 - 6 day pre-screen & patient mobilisation	0.00	0.00		
TOTAL:	0.00	0.00	12,500.00	123.75
Main Mission: (Eyes)	KSH	US\$	KSH	US\$
14 days (2 days travelling each way, 10 day mission)				
Dinner, accommodation & breakfast for team half way to Moyale (Isiolo or Marsabit)	42,000.00	420.00	18,500.00	183.15
Medicines/medical consumables (eyes)	600,000.00	6,000.00	1,484,770.00	14,699.22
Fuel	80,000.00	800.00	125,560.00	1,243.04
Food for medical team and patients, including 1000 litres of water	217,000.00	2,170.00	294,823.00	2,918.75
Hire of fully equipped overland truck with tents, mattresses, showers, toilets, theatre tent, chairs, cutlery and cookery from Bunduz safari hire	490,000.00	4,900.00	601,010.10	5,950.00
Allowances (eye team)	532,000.00	5,320.00		
Allowances (drivers, cook, laundry)	70,000.00	700.00		
Security	10,000.00	100.00	824,900.00	8,166.51
Laundry	30,000.00	300.00	0.00	0.00
Allowances miscellaneous (tips for Bunduz helpers, drivers of hired vehicles, local interpreters)	50,000.00	500.00	30,000.00	297.00
Vehicle hire (2 landcruisers)	378,000.00	3,780.00	293,000.00	2,900.70
Miscellaneous (such as camping fees, park fees, posters, charcoal)	40,000.00	400.00	5,650.00	55.94
Allowance for paediatric cases to Nairobi and for surgery	50,000.00	500.00	0.00	0.00
Extra expenses	0.00	0.00	21,391.00	211.77



	2,589,000.00	25,890.00	3,712,104.10	36,749.83
TOTAL				
Post - screening: All to be done by the County ophthalmic officers (Wako & Yusuf)	KSH	US\$	KSH	US\$
4 – 6-day post screening visits	0.00	0.00	0.00	0.00
TOTAL:	0.00	0.00	0.00	0.00

TOTAL:	25,890.00 (excluding dental)	36,749.83
---------------	-------------------------------------	------------------

Trip review & learning points:

This was another very successful MEAK eye mission, despite the challenges documented above.

The team managed to operate upon 272 patients & screen over 2000 people, against the 100 – 150 that we had estimated. This is partly due to the increased prevalence of eye disease within these communities, but also due to the high level of engagement of the local MoH in assisting with logistics, publicity & community mobilization. The mobilisation was better in Moyale than Marsabit, which is evident in the number of patients screened & operations performed. This highlights the need for quality pre-screening and patient mobilisation.

The theatre tent will undergo revision to make it more suitable to operate in such hot conditions and once this is completed it is envisaged it will be an integral part of future missions. It was, however, very useful for screening out in the field. It provided shade from the bright Kenyan sun and a darkened environment to check eyes, which is useful for contrast when shining the pen-torch into the eyes to check for cataracts.

Another welcome has been extended from the Moyale and Marsabit MoH for future missions, which will allow us to work in collaboration with the local ophthalmic officers Wako & Isacko. Despite governmental promises to improve health care & missions such as these, there is still a continued need for eye education and surgical interventions in rural areas of Kenya,

Thank you:



Once again, MEAK wishes to thank Fondation Eagle for the generous grant that enabled the mission to Moyale & Marsabit to go ahead, after it was changed from Vihiga.

We would also like to take this opportunity to thank the team from Bunduz overland safari's (the drivers, turnboys who assisted the drivers, cooks & kitchen staff), the MEAK medical team, the hospital support staff, MEAK Trustee Mike Fels & last but not least, MEAK's logistican, Mrs Nargis Kasmani.

Fondation Eagle can feel justifiably proud that they have made such a difference to so many people's lives & wellbeing. We look forward to further similar collaborative efforts in the future.

