# FOUNDATION EAGLE FINAL REPORT

## FUNDING FOR PROVIDING SOLAR POWER AND EQUIPMENT FOR CHILOMONI HEALTH CENTRE MATERNITY UNIT, BLANTYRE, MALAWI.

**Foundation Eagle reference:** **FF 0716**

**Name of charity:** **The AMECA Trust**

**Charity No:** **1121240**

**Introduction:**

Funding was granted by Foundation Eagle for the purposes of equipping and providing solar power for a maternity unit which AMECA is currently renovating at Chilomoni Health Centre, Blantyre.

**Grant Contract date:** **5th June 2024**

**Total Grant:** **£18,000**

**Conversion Rate, Date and Amount:**

The National Bank of Malawi rate for Sterling in June was £1 = to K2,255. As can be seen from the Expenditure section, some items were purchased in the UK. Funds transferred to Malawi are held in a Sterling Forex account, but we only tend to hold a maximum of £10,00 in Malawi for security and transfer funds when they are required.

**Report Period:** **14/06/24 – 01/05/25**

**Total Expenditure:** **£18,237.20**

**Project details:** **Chilomoni Health Centre Maternity Unit**

Chilomoni Health Centre is located only approximately 4Km from the centre of Blantyre, but the dirt access road to the health centre is quite challenging. Blantyre is a smallish town in southern Malawi and the health centre is funded Blantyre District Health Office.

**Project Period:**
Renovations to the old maternity unit commenced in September 2024 and the newly refurbished unit received its first patients on the 7th March 2025. Although there will be ongoing mentorship for the year, this is a very minor cost to the charity, simply involving travel costs for the visiting Matron from the AMECA Clinic at Chilaweni.

**Project Beneficiaries:**

Chilomoni Health Centre currently serves a catchment population of approximately 63,300 people and is a very busy facility located in the heart of Chilomoni. Records from 2023 indicate that the health centre received 1,475 maternity patients over the year, which equates to almost 123 mothers in labour each of month. 24.6% or 363 mothers required referral to a tertiary facility, with an average of almost 93 deliveries at the facility each month. These figures have not altered since the application to the Foundation was made.

Since normal services resumed on the 7th March, until 30th April, a total of 192 mothers were admitted, with 108 normal deliveries and 84 referrals. (referral rate = 43%). As word of the newly re-opened maternity unit spreads in the community, we expect these figures to increase significantly.

**Project Details:**

The project objectives were to renovate and re-equip the very run down and dysfunctional Maternity Unit at the Health Centre. The challenges that prevailed, are summarised as follows:

- Postnatal and Antenatal mothers were sharing one over-crowded poorly maintained ward.
- Lack of available space and beds; patients often sleeping on the floor or sharing 2 to a bed.
- The delivery room had only three very old beds that were unfit for purpose.
- There was virtually no privacy, (save for some torn curtains), for mothers in active labour.
- Ceilings were in a state of disrepair due to leaks.
- There were no functioning oxygen concentrators or suction machines and poor equipment.
- There was no functioning autoclave for sterilising instruments.
- The sluice area was not functioning, was poorly equipped and was not fit for purpose.
- Male partners were excluded from the delivery room due to lack of privacy.
- Maternity Staff members had no area in which to sit down and take a break.
- The stores room was dysfunctional and not fit for purpose.
- There was no office space, no computer, no office equipment or shelving for files. Patient referrals were not audited, as there was no way of copying forms.
- The unit had intermittent power issues, and the solar power was not functioning.
- There was no washing machine area, or a washing machine.

Above, the poor state of the delivery room and lack of equipment is evident.


Ward ceilings damaged by roof leakages


Mothers sharing a bed in the old ward.

**Project Achievements:**

The first milestone was the approval of the architect plans by the Blantyre Department of Health Management Team and by Blantyre District Council.

Construction work commenced in September 2024, with the arrival of BM Contractors on site:


Mr Mbewe of B M Contractors & Build Team


Demolition of old sluice area.


Removal of rotten timbers and old ceiling in postnatal ward


Architect Jan in discussion with site foreman.

Once the new internal walls were constructed and plastered, the individual components of the Maternity Unit took shape.

Entrance to the new Labour Ward


Detail of one of the four new Delivery Bays with equipment.


Hospital beds being fitted in the new Antenatal Ward


Mothers and Patient Guardians in the new Postnatal Ward

AMECA was able to obtain full VAT exemption on the building materials from MRA, (Malawi Revenue Authority), saving 17.5% on the cost of procurement.


Staff Nurse Station showing solar control panels at back.


New staff room with computer & Printer.

The Antenatal Ward has 9 beds, the Post Natal ward has 5 beds, and the Admissions ward has 3 beds. The Nurse Station allows for a work area, new fridge, water filter and bookcase for files. The staff room was equipped with a table and chairs and houses the new printer, computer and a large, shelved storeroom for clinical equipment. The four individual delivery bays each are equipped with adjustable delivery beds, drip stands, vital signs monitors and a clinical bedside table. The Labour Ward also is equipped with 2 Oxygen concentrators, 2 suction machines, trolleys and a scanner.

Detail of new Nurse Station in the Delivery Room.

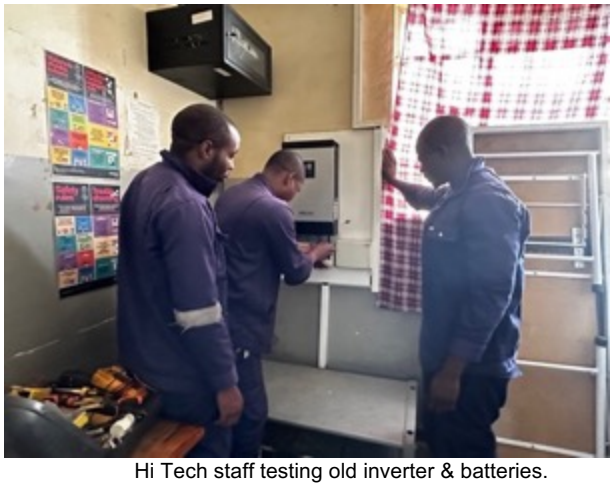
Maternity nurse and patient guardian weighing a newborn.

Sluice room with new sluice

Solar water heater sited on maternity unit roof

Due to the challenges of mains electricity outages, it is essential that the maternity unit should have solar backup, to ensure that vital equipment, such as oxygen concentrators and suction machines, can be used when required.

The existing solar system was at least 12 years old and comprised four 12-volt acid batteries and 12 solar panels on the roof. These solar panels were working and were in good condition, but the batteries and inverter required replacement. A hybrid inverter and a 10.24KWH Lithium Phosphate battery was purchased and installed by Hi Tech. Lithium batteries, although more expensive than lead/acid batteries, have a far longer life span. Hi Tech provided training for key staff at the maternity unit to ensure understanding, security and use of the system.



Hi Tech staff testing old inverter & batteries.


New battery and inverter installed in maternity.

**General Maternity Equipment:**

Consultation was undertaken at the start of the project with the Blantyre District Nursing Officer and Head of Safe Motherhood, to ensure that maternity equipment requirements are being addressed.

Due to the steep rise in container shipment costs, larger items of equipment such as delivery beds, were purchased in Malawi at Sakaramenta, (https://www.sakaramenta.com/care-collection.html).

Smaller items of clinical equipment were purchased from Medic Foundation in Holland, which is run by volunteers, who are mostly retired engineers, Medic supplies very reasonable renovated second-hand equipment to low-income countries. A list of the purchases from Medic can be viewed in the financial expenditure section. AMECA obtained Import Free Duty clearance from the Malawi Revenue Authority on this equipment, saving 17.5% on costs.

During the initial stages of the project, AMECA realised that much of the existing equipment, although broken and rather dilapidated, could be repaired and be made perfectly usable. So, rather than purchase new items, a decision was taken to repair this equipment at Sakaramenta, resulting in huge savings over purchasing new equipment.


Old & damaged equipment ready for transport to Sakaramenta


Mended and newly painted beds and other items returned

**Maternity Mentorship:**

As detailed in the original File Form**,** AMECA planned to implement an exchange program between midwives at the AMECA Health Centre at Chilaweni and midwives at Chilomoni to provide maternity mentorship. In conjunction with the Head of Maternity and Safe Motherhood, we arranged for key staff from Chilomoni to visit Chilaweni over a 2-week period, just prior to the re-opening of the maternity unit:

Eliida: Safe Motherhood Tamanda: Nursing Officer Hawa: Nursing Officer
Agreed allowance for Travel/Lunch K15,000/pp/day.

| Date | No of people | Cost K | Notes |
|---|---|---|---|
| **Week 1** | | | |
| 10/02 | 5 | K75,000 | Tamanda/Trinity/Mentees |
| 11/02 | 5 | K75,000 | Tamanda/Trinity/Mentees |
| 12/02 | 5 | K75,000 | Tamanda/Trinity/Mentees |
| 13/02 | 5 | K75,000 | Ellida/Hospital Assistant/Mentees |
| 14/02 | 5 | K75,000 | Ellida/Hospital Assistant/Mentees |
| **Week 2** | | | |
| **17/02** | 4 | K60,000 | Ellida/Mentees |
| **18/02** | 5 | K75,000 | Hawa/Hospital Assistant/Mentees |
| **19/02** | 5 | K75,000 | Hawa/Hospital Assistant/Mentees |
| **20/02** | 4 | K75,000 | Hawa/ /Mentees |
| **21/02** | 6 | K90,000 | Hawa/Tamanda/Ellida/Mentees |

After the two-week period at Chilaweni, a reflective meeting was held at Chilomoni with Maternity in Charge, Priscilla, from Chilaweni, and Nursing Officer Tamanda. Each of the 6 nurse midwives were then assigned a group of 4 or 5 more junior nurses to work with/mentor over the weeks, with input from Chilaweni Mentors once or twice a week. A timetable of didactic and practical sessions will be developed to address gaps in clinical skills. These teaching sessions will also contribute to staff Continuous Professional Development.


Midwives from Chilomoni at AMECA Maternity Unit, Chilaweni


Matron Priscilla, front left with midwifery staff at Chilomoni.

The mentorship supervision will be ongoing for the time being and consultation will take place from time to time with senior staff at Chilomoni to review progress.

**Impact of Mentorship Supervision:**

The following report was written by Matron In Charge, Tamanda Maluwa:

**"IMPACT OF AMEACA MENTORSHIP TO NURSES**
**1: Improved admission process**
**We have a full admission package which consist of admission form, monitoring chart and partograph which is helping us in monitoring patients.**
**It helps us save patients health passport book since we are using the monitoring chart, hence patients being monitored frequently thereby saving lives if any abnormality is detected early.**

**2:PROPER DOCUMENTATION**
**Now we are reporting using SBAR**
**Correct documentation in the registers e.g. maternity and antenatal registers and in clients health book**
**We have learnt how to arrange files this helps us easy handover of patients etc**
**3: CALCULATION OF EED**
**Now we are able to calculation EDD using gestation wheel and proper documentation**
**4: MANAGEMENT OF EMERGENCIES.**
**We have also improved in managing Maternal and neonatal emergencies eg Eclampsia**

**Challenges of the project to date:**

In terms of the actual construction work, there were no real challenges, and the build team completed the renovations on time and with minimum disruption. Prior to the start of the project, ongoing discussions between the Blantyre District Health Office and the community hierarchy ensued as to where expectant mothers would be placed, as the maternity unit clearly had to close to patients for the duration of the renovations. Eventually, a solution was found, and the mothers were able to attend Mitsidi Mission hospital nearby. All equipment not requiring repairs was transferred to Mitsidi and staff were relocated for the duration.

A further challenge was the intermittent and unreliable delivery of Blantyre water to the Health Centre. Investigations by the architect and build team revealed that sometimes this was due to non-payment of the water bill and sometimes due to a faulty meter, issued by Blantyre Water Board. The interruptions in water made it difficult to test the new solar water heater, but eventually the water board did sort out the issues. At the time of re-opening, the health centre had regular water supply, but two weeks ago, the main tower housing the water tank collapsed, due to lack of maintenance. AMECA will arrange for the tower to be re-welded and has found a disused water tank which can be installed. This is not an onerous undertaking and will be funded from the charity's reserves.

The uneven floor surface in the Delivery Room gave huge challenges for the individual delivery bays to be constructed by Sakaramenta, but eventually solutions were found. The extra welding that was necessitated delayed the final testing of the new solar power system, as the solar power supply could not cope with heavy duty power equipment if mains electricity was not present. Again, this challenge was eventually overcome.

The clearance of imported equipment from Holland posed no challenges, as forward duty-free exemption had been secured by AMECA. The only challenges in terms of equipment delivery came from the rather disorganised transportation from the Blantyre District Health Office. Several items of equipment were damaged in transit and careless handling damaged a small piece of plasterwork and the new doors in the process of taking in the equipment. Happily, the build team were still onsite and made good and damage to the newly decorated wards. These challenges were not serious but were rather frustrating.

Although VAT exemption was obtained on building materials, the process of application to the Malawi revenue is becoming ever more arduous and time consuming, with AMECA having to fight our corner to obtain this exemption.

## FINANCIAL INFORMATION:

The Malawi Kwatcha underwent several devaluations at the end of 2024, which resulted in severe price rises for equipment and materials. Initially, funding from the UK would have been held in our Sterling account in Malawi, which helps mitigate these devaluations. However, to obtain foreign currency, the Reserve Bank of Malawi brought in a ruling to force NGO's to change 70% of sterling on transfer to Malawi, which rather negated the point of having a Forex account.

A further challenge for the project was that all building materials and equipment purchases were based on the prevailing Black-Market rate, which is around K4,800 to £1. However, on official National Bank of Malawi rates, the charity only received approximately K2,250 to the £1. This had a huge effect on the cost of the whole project and on all equipment purchased in Malawi. By way of example, the price of the new sluice unit, as detailed below, was more than double the original quoted price.

However, AMECA was able to make savings on the quoted budget by asking the Blantyre District Health Office, to supply certain items, by asking friends and well-wishers to donate some furniture, and by repairing as opposed to purchasing some equipment. AMECA also obtained unused screens and a baby cot from the AMECA Health Centre at Chilaweni, giving further savings.

## Foundation Eagle Grant Final Project Expenditure:

| | | | | |
|---|---|---|---|---|
| 16/05/24 | Medic Foundation, Holland | Euro 1,021.85 | £856 | Refer to invoice. |
| 20/08/24 | Sakaramenta, Blantyre | K 3,714,025 | £1,633 | 60% of costs for hospital furniture. Refer to invoice. |
| 04/09/24 | Hi Tech Electronics, Blantyre | K 19,115,382 | £8,402 | Refer to invoice. |
| 16/06/24 | Anna Wiz Supplies UK | - | £99.91 | 2 Doppler Machines |
| 16/06/24 | Amazon UK | - | £35.80 | Curtain Rings for poles |
| 16/06/24 | Amazon UK | - | £20.36 | Office storage rack |
| 12/10/24 | Trans Maritime Ltd | K295,620 | £124.21 | Equipment clearance costs |
| 29/10/24 | Phalombe Hardware | K7,000,000 | £2,941.18 | Sluice Unit |
| 05/12/24 | Lambats, Blantyre | 402,000 | £178.66 | Curtain material + tailoring |
| 18/12/24 | Sakaramenta, Blantyre | 1,708,205 | £776.46 | 60% of repair of maternity furniture. Refer to invoice. |
| 29/01/25 | Limbe Electronics | K695,000 | £315.90 | Fridge/freezer for Maternity |
| 29/01/25 | Limbe Electronics | K25,000 | £11.36 | Kettle for Maternity |
| 06/02/25 | Ellida Bvutula DHO office | K735,000 | £326.67 | Maternity Mentorship costs |
| 17/02/25 | Sakaramenta, Blantyre | K2,476,017 | £1,100.52 | Final invoice for maternity furniture. |
| 21/02/25 | Neat Ideas, Blantyre | K1,287,000 | £572 | Printer, inks, stationery |
| 05/03/25 | Sakaramenta, Blantyre | K1,378,803 | £612.80 | Wheelchair, baby heater & furniture repairs. |
| 07/03/25 | Computer Aid International | | £132.60 | Reconditioned laptop |
| 10/04/25 | Local carpenter | K100,000 | £44.44 | Wall unit; Maternity staff room. |
| April 25 | Staff Mentorship Travel | K120,000 | **£53.33** | Chilaweni Matron visits |
| | | **TOTAL** | **£18,237.20** | |

Exchange rate based of £1 = K2,250 as an average over the project period.

Not included in the above are petrol costs and bank charges for transfer of funds from the UK. Receipts for the larger items are attached at the end of this report.

### Summary of Estimated Budget submitted to Foundation Eagle:

**Foundation Eagle Grant: £18,000**

**Total Expenditure: £18,237.20**

## Impact:

The impact of the new Maternity Unit cannot be quantified as such, but it can be qualified in terms of access to good clinical equipment, satisfactory power supply, office facilities, space, respect and privacy for patients, staff welfare and patient satisfaction levels. Statements of appreciation are given at the end of the report. Over time, a comparison of the percentage of maternal referrals before and post project could be made, but the unit would need to function for at least a year to obtain any meaningful calculations.

One point noticed was the high patient referral rate to a Tertiary facility compared with original statistics prior to renovation. The referral rate remains at an acceptable level, but it could be that, with better equipment, scanning and recording procedures, staff are more able to pick up on possible obstetric complications. It could also be that many of these mothers did not attend enough antenatal visits with the facility closed for renovations, and therefore early obstetric signs were not picked up prior to admission. Over time, it will be interesting to check if referral rates decrease.

The overall objective of the maternity renovations was to provide a safe, well-equipped, well-resourced and respectful maternity unit for the Chilomoni community. A cheerful and well-equipped working environment engenders patient confidence and contented staff. Ongoing staff mentorship should increase the level of staff clinical skills and lead to a decrease in unnecessary obstetric referrals and an increase in the ability to refer appropriately, where necessary.

AMECA feels that it has been able to achieve its objectives, as stated on the application File Form.

**Continuity and Sustainability of the Project:**

Chilomoni Health Centre is staffed and maintained by the Blantyre District Health Office and AMECA has no further financial obligations. This having been said, AMECA may choose, where appropriate and affordable to assist the Maternity Unit over time with small donations of office equipment such as photocopy paper, pens and printer inks. It is accepted that the Blantyre District Health Office budget for health centres does not allow for these items; clearly, maternity staff can only adequately implement correct recording procedures if they are supplied with office stationery.

AMECA has implemented as much security of equipment and training as was possible. A key box was made by the contractor for valuable items to be securely placed in a locked storeroom. Training was provided by Hi Tech staff on the correct use of the solar system. The autoclave and washing machine are housed in a secure room in the new laundry area and are only used by trained staff.

Chilomoni Health Centre has an active and motivated Hospital Committee, headed by an enthusiastic and conscientious Chairman. The committee members are involved in the maintenance of the new gardens and in generally keeping an overview of the health centre renovations. Although a small thing, we have already noticed a greater awareness of the appearance of the health centre by patients and their guardians and a decreased in litter on the site. This is encouraging.

The Project has long-term sustainability to the extent that it will be run and hopefully be better maintained by the Blantyre District Health Office. We hope that this maternity unit will be an exemplar for other health centres and that staff will value and nurture the facility. AMECA will continue to make routine visits and reinforce the core values which underpinned the maternity renovations.

**Operational Logistics:**

AMECA operates on the ground in Malawi and in the UK without offices as we work from home, neither does the charity have any staff, which minimises expenditure and maximises grant funding.

AMECA expresses its deepest gratitude to Foundation Eagle for their generous funding.

Ruth Markus.
CEO The AMECA Trust.
May 2025

**Statements of Appreciation:**

See pages to follow……

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**Director of Health Services**
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In reply please quote No. .....

DISTRICT HEALTH OFFICE
P/BAG 66
BLANTYRE
MALAWI

**15th April, 2025**

The Chief Executive Officer,
Ameca Trust

Dear Madam,

**EXPRESSION OF GRATITUDE FOR CHILOMONI HEALTH CENTRE REHABILITATION**

Blantyre District Health Office, expresses its profound gratitude for the support rendered by Ameca Trust towards the rehabilitation of Chilomoni Health Centre in the following departments:-

- Outpatient department
- Maternity Unit
- Physiotherapy department
- Dental Unit

The support will go a long way towards supporting the facility to provide quality Health Services to over 113, 000 people that it serves.

Blantyre District Health Office is looking forward for further collaboration with Ameca Trust.

Blantyre District Council
Director of Health & Social Services
15 APR 2025
Private Bag 66
Blantyre

Yours faithfully

pp

Dr. Gift Kawalazira
**DIRECTOR OF HEALTH SERVICES**

CHILOMONI COMMUNITY HOSPITAL

IMPACT OF NEW MARTENITY UNIT TO HEALTH CARE WORKERS

1:CONDUCIVE WORKING ENVIRONMENT

Now we have a smart, spacious clean unit to use in the delivery of Martenal and neonatal care

2: ENOUGH EQUIPMENT AND SUPPLIES

We have enough resources for work, which is helping in the monitoring of our patients and refer in time if any problem arise eg the BP monitors.

You have provided us with a printer which is cost saving as we used to photocopy some important documents eg duty roster forms outside the hospital and also the printer has saved our time to go to Blantyre DHO to get forms for our patients now we are printing and photocping by ourselves.

We are able to type work presentation on the computer etc.

We have access to clean drinking water with the water filter available

We have a beautiful coffee/resting room

3: DELIVERY OF CARE

Presence of the solar has helped us since we no longer use phone torches/candlelights when conducting a deliver during the night duties

We are helping patients without interruption

IMPACT OF NEW MARTENITY UNIT TO PATIENTS

1: PRIVACY FOR THE CLIENTS

Mothers are delivering in a single room, which makes them more comfortable as they are not being seen by anyone except the midwife helping them.

They are able to bring their spouses for delivery which was previously not allowed

No frequent entering of staff like before which is promoting respectful maternity care.

2:CLEAN ENVIRONMENT WITH NEW THINGS

Now they have new beds, beddings, toilets and bathrooms etc.

Enough room  and beds for everyone as they used to sleep on floors if they is congestion

We are not mixing antenatal mothers with those with babies

Babies are kept in a quite, clean and secure environment with less people coming inside

3: BEAUTIFUL PAINTINGS WITH EDUCATIVE MESSAGES

They are also learning alot with the drawings in the unit.

Clear messages in each drawing

Smart rooms.

Overall  beautiful and clean environment and patients are enjoying their stay.

Congratulations to The MalDent Project, AMECA, and everyone involved in the remarkable transformation of Chilomoni Health Centre!
The dedication and collaboration that went into refurbishing the maternity and outpatient departments, establishing a physiotherapy unit, and constructing a state-of-the-art dental clinic are truly commendable.
It is inspiring to see such impactful work improving healthcare access in Malawi, particularly with the addition of a much-needed dental facility.

This project sets a powerful example for future healthcare developments across the country.
Wishing continued success in your mission to enhance oral health and overall patient care!

Very best wishes,
Desiree Witte

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