



The construction of a water supply
for
world medical fund for children



at Nkhotakota, Malawi.

Background:

Life at our premises has been a challenge over the last few years; water – the precious commodity we take for granted has been in short supply. From 2013 it has deteriorated from an intermittent supply a couple of hours a day to a total lack of water in the taps for the last twelve months. The cause is the pumps that supply this region have broken down and “there is no money to repair them”.

A medical centre needs water, for clinicians and nurses to wash hands between patients, for the autoclave to sterilize equipment, to be able to flush toilets for staff and patients. Alongside this we need water for the medical students and volunteer doctors to be able to shower after a hard day in the field and to prepare food and wash dishes. But all we had was a few buckets collected every day from nearby villages and had to make do with that.

To have our own supply was our dream but, there were many challenges to overcome. The greatest was to gain permission for its construction; we enlisted support from every quarter and it was finally given by the District Commissioner and the Local Assembly.

The final piece in the jigsaw was to raise the necessary funds and we are deeply grateful to Mrs Bhavna Dziurzynski and the trustees of Fondation Eagle for taking the decision to support this project. It is hard to put into words how desperately important this was for this organization – it has transformed life for us.

The work:

We decided to change from the original contractor who quoted for us as when we approached them they could not give any date when they could commence work. Following research and recommendations we assessed a number of possible candidates before making a final choice.

The first stage was to test whether there was water available on our land; this was successful. Minor problems were met during the drilling when they hit hard rock but overall it went successfully without too many hitches. We formed a very good impression of the contractors – they worked diligently 7 days a week, the only delay was with the original pump supplied but this was remedied.

A change to the original design came at the suggestion of the contractors. Instead of a diesel powered pump to raise the water, the alternative of an electrical pump powered by solar panel (or mains electricity on the rare occasions there is insufficient sunlight) was chosen.

The Costs:

We were deeply grateful for the donation of £8,750; unusually for this organization there has been an overspend. The final bill came to 9,780,629Mk which at the relevant exchange rate of 960Mk = £1 converted to £10,188¹.

The overspend of £1,438 was accounted by the design change from diesel to solar power. The major plus is that this will be soon recovered by the savings made by not having to purchase diesel fuel.

¹ The challenges inherent in quoting costs in Malawi is illustrated by the volatility of the kwacha that has varied by 20% in the early part of 2016 between 860Mk to 1044Mk to the £UK.

The future:

The need for our work increases annually and is timeless. The situation in Malawi is far worse today than it was when we began there eighteen years ago. There are no drugs in the hospitals and in the 2015 report from the USA's Presidents Malaria Initiative in round figures for 2016 in Malawi it estimates there will be 13 million cases of malaria.

With the cessation of support from the Global Fund there will only be funding available for 2 million treatments. None are available in our region and we are having to buy the test kits and treatments.

Making a long term investment in this construction project is therefore in our view completely justified and we expect it to be working away for decades.

Michael Burt, CEO

The drilling machine.



The machine at work:



Installing the solar panels:



Success!





THE FINAL REPORT ON BOREHOLE DRILLING

By Matson Dezi, Executive Director

Background:

A day doesn't pass without hearing about the shortage of water in Malawi. Nkhotakota District where WMF is based is one of the worst suffers. Despite being located near millions of gallons of fresh water flowing through Lake Malawi, the organisation has had no water for 12 consecutive months.

The reason for the shortage of water in Nkhotakota is blamed on the water pumps which they claim developed a fault which requires spare parts from Republic of South Africa.

The majority of the communities who are supplied by the Water Board have now resorted to drinking water from boreholes, as a result the boreholes have long queues waiting to draw water.

My wife is one of the ladies who would get up at 3 am to walk to the nearest village with a well and would come back home with a 20 litres bucket full of water 3 or 4 hours later for me and my children to wash in readiness for going for work and School.

As I am writing this, the shortage of water is now consigned to history at WMF premises. We were so fortunate that the Fondation Eagle agreed to fund the drilling of a borehole, construction of a water tower and plumbing in the offices, nurses house, guest house and staff houses.

The process to gain permission to build the borehole was long and difficult. We had to get special permission from the District Commissioner for drilling the borehole because the Water Board fought to stop us, despite them failing to provide this vital service.

The next step was to find a reliable contractor to drill this special borehole. It is special in the sense that instead of having the hand pump, the borehole has a pump which is operated by either Solar power or mains Electricity, essential because the electricity supply at Nkhotakota often fails for days on end.

Construction:



The First Phase of the project was the construction of the water Tank. This phase didn't encounter any problems and it all went on well according to plan and budget.

The second Phase was the drilling of the Borehole. It took longer than anticipated but was completed within the budget. The drilling faced a lot of challenges. The first problem they encountered was finding hard rock which took time to drill through and then just after going through the hard rock, one of their drilling rods broke which affected the drilling which had to stop for a week in order to find a replacement. When the contractor confirmed having completed drilling the borehole, the District water development staff came to assess the quality of work. They did this by testing of the quality of borehole and work by pumping out water nonstop using a generator for 3 hours. The pressure of water was always high so that water coming

out didn't change during testing. If the pressure had dropped, it would mean the borehole will be dry during the dry season.

The Third Phase of the project was the installation of the water pump. This was also affected because the supplier of the pump delivered a fake water pump which the contractor immediately spotted and naturally refused to install. He went to Lilongwe to look for a genuine pump but none were available anywhere in the capital city so he had to order one from South Africa. It took 2 weeks to arrive but worked perfectly. The contractor and I agreed on day one that for this project to be successful, speed was not the prime consideration it was quality.

When the contractor was handing over the project, he told me he had carried out all the major work himself to ensure the construction was of the highest quality. The life expectancy of the pump is 15 years; it fills the 5,000 litre tank in just 2 hours.

The impact of the borehole:

It has transformed our lives; we now have water 24 hours a day. It means we can wash, have water for cooking and use the toilets.

I felt for the medical students who come to Malawi to spend their medical elective placements with us. I am sure they have never experienced having no water in the taps before, having to wash from a small bucket of cold water after a day working in the swelteringly hot dusty villages.

I am very much proud that my requested was responded favorably. This is the first solar/Electrical water pump project of this kind in the district.

I and all the members of staff promise to take good care of the whole water system. We are all now so happy that finally we have water. Water is life!!!!

BREAK DOWN OF THE COST FOR THE WHOLE PROJECT

The final cost of the whole project is MK9,780,629.00

Thank you to everyone at Fondation Eagle for answering our prayers with this very large donation and for giving us flowing water again.

It gives me great pleasure to see the children who attend our Thandizo Clinic going to the tap to wash their hands before they sit down for their porridge. I feel relieved as well that their guardians can help themselves to a fresh cup of water when they arrive at our premises and before they set off for the long walk home.

I assure you that we will look after the equipment to the very best of our abilities.

Zikomo kwambiri!

	ACTIVITY	COST (MK)
1	Drilling of borehole and installation of solar/electrical pump.	7,556,717
2	Withholding tax for Malawi Revenue Authority for above.	233,712
3	Purchase of water tank	495,125
4	Construction of water tower and plumbing	1,495,075
		9,780,629

Report by
Matson Dezi
(Chief Clinical Officer)

Receipts:

MRA
MALAWI REVENUE AUTHORITY
DOMESTIC TAX DIVISION

W.T.F/I

A No. **Nº 061353**

WITHHOLDING TAX CERTIFICATE

Gross amount due	K 7,790,430.00
Less withholding tax at 3%	K 233,712.90
Net Payable	K 7,556,717.10

Withholding tax as shown above has been deducted from a payment for:
Drilling of Borehole and Installation of water pump.

Period Covered: 25/06/16

due to the recipient named below.

Full Particulars of Recipient

Name (in full): SPEEDFIX SOLAR & ELECTRICAL SERVICES

Postal address: P.O. Box 495
KASUNDA

Tax Ref. No. of Recipient (TPIN): 31039060

Paid by: MATSON DEZI *(Signature)*

On behalf of: World Medical Fund
P.O. Box 1
Nkhosfakota

Date: 25/06/16

NOTES: The amount of tax withheld must be paid to the Commissioner General, Private Bag 247, Blantyre, or Private Bag 26, Lilongwe or Private Bag 15, Mzuzu within fourteen days from the end of the month in which such withholding tax was deducted.

This certificate is to be distributed as follows:-

- Copy A - To accompany remittance to the Commissioner General, Private Bag 247, Blantyre
- Copy B - To be handed to recipient
- Copy C - To be retained by payer


The tax withheld is not final but will be credited against total tax liability of the recipient upon submission of his Tax Return for the year in question.

Printed by Times Print Pack

This is the tax bill of 233,712Mk for the drilling and installation covered by receipts numbers 1, 2 and 3.

Receipt 1

CASH RECEIPT No. **229**



SPEEDFIX SOLAR & ELECTRICAL SERVICES
Specialists in: Solar Lighting, Solar water Pumps, solar Fridges, solar water Heaters,
Power Backup Systems, Electrical Installations & Repairing.

P. O. Box 542
Kasungu

Tel: + (265) 1905 488
(265) 999 284 371/ 882 415 456
E-mail : bsalala@gmail.com

Date: 11 / 05 / 2016

Received from WORLD MEDICAL FUND

the sum of TWO MILLION FIVE HUNDRED THOUSAND
KWACHA ONLY Kwacha

K 2,500.000 :-

With thanks [Signature]
P. O. BOX 542 KASUNGU
CELL: +265 999 284 371


For speedfix solar & electrical Services

being payment for UPFRONT PAYMENT FOR BOREHOLE
DRILLING

Cash/Cheque No. 2298

Receipt 2.

CASH RECEIPT No. **230**



SPEEDFIX SOLAR & ELECTRICAL SERVICES
Specialists in: Solar Lighting, Solar water Pumps, solar Fridges, solar water Heaters,
Power Backup Systems, Electrical Installations & Repairing.

P. O. Box 542
Kasungu

Tel: + (265) 1905 488
(265) 999 284 371/ 882 415 456
E-mail : bsalala@gmail.com

Date: 01 / 06 / 2016

Received from WORLD MEDICAL FUND

the sum of FOUR MILLION KWACHA Kwacha

K 4,000.000 :00

With thanks [Signature]
P. O. BOX 542 KASUNGU
CELL: +265 999 284 371

For speedfix solar & electrical Services

being payment for LESS PAYMENT FOR SOLAR WATER PUMP
INSTALLATION & SUPPLY

Cash/Cheque No.

Receipt 3.

CASH RECEIPT No. **232**

SPEEDFIX SOLAR & ELECTRICAL SERVICES
Specialists in: Solar Lighting, Solar water Pumps, solar Fridges, solar water Heaters,
Power Backup Systems, Electrical Installations & Repairing.

P. O. Box 542
Kasungu

Tel: + (265) 1905 488
(265) 999 284 371/ 882 415 456
E-mail: bsalala@gmail.com

25 JUN 2016 Date: 25, 06, 2016

Received from WORLD MEDICAL FUND

the sum of ONE MILLION FIFTY SIX THOUSAND SEVEN
HUNDRED SEVENTEEN Kwacha
TEN Tambala

K1,056,717.10 With thanks [Signature]
For speedfix solar & electrical Services

being payment for BOREHOLE DRILLING & SOLAR PUMP INSTALLATION

Cash/Cheque No. 002316

We are pleased to submit our Quotation as

Receipt 4.

Receipt No. **12725**

MD PLASTOIDS
Manufacturers of: World class uPVC, HDPE, PPR pipes, Plastic packaging
and Plastic tank and other associated products of superior quality

Lagikuch Complex
Paul Kagame Road
P.O. Box 406
Lilongwe 3

TPIN 63789256


Tel: 01 750443
Fax: 01751691

M/s World Medical fund Date: 17/5/16

Qty	DESCRIPTION	@	K	t		
1	Plastic water Tank (BRG) <5000 litres>	425000	425,000	00		
K1 95,125.00			PAID			
Sub Total					425,000	00
16.5% Surtax					70,125.00	00
Grand Total					495,125.00	00

Goods once purchased cannot be returned

Receipt 5.

 CASH RECEIPT No. 00792

PATOWE BUILDING CONTRACTORS
Has been in construction industry since 2006

P.O. Box 29
Nkhotakota

Cell: 0884 059 027
0994 657 727

REGISTERED MEMBER OF NCIC

Received from World Medical fund Date: 22/05/16
the sum of One million four hundred ninety-five thousand and seventy five only Kwacha
tambala

K 1,495,075 : 00 BM Phiri
for PATOWE building Contractor

ing payment for Construction of water pillar tank

Cash/ Cheque No.