

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

July – December 2020

Project: MEAK / Milgis Water Projects, Milgis Conservancy, Samburu County, Kenya

Donor:

Fondation Eagle, Switzerland

Donor's reference:

FF 0514-35

Charity:

Medical & Educational Aid to Kenya (UK),
together with the Milgis Trust (Kenya)

Date of acceptance:

26th November 2019

Date donation received:

1st December 2019

Amount of Donation:

A one-off grant of \$19,645* (*2,005,510.2 Ksh at the exchange rate of 1 Ksh to 0.0098 US dollars)

At the end of the grant term (December 2020) there was an underspend of \$1,381.32.

Duration of project:

We estimate the grant to fund the operation & maintenance of the water projects for one year, potentially longer, depending upon the amount of intervention each individual project needs.

Estimated number of beneficiaries:

Approximately 26,000 people have been provided with clean water in 14 different



communities within the conservancy. The water projects also provide employment for 28 members of the community.

Report from the Milgis Trust: Foreword

This year has been a good one thanks to some wonderful support. Our Logistics, maintenance and major breakdowns have been taken care of thanks to the eagle foundation grant. It's important to add that not all of the fabrication, infrastructure and implementation of the work in this report is covered by the budget. We have been fortunate to have on board the county government of Samburu and other stakeholders who have co-funded some of this work, including an entirely new pipeline in Mpagas and the new well at Matepes.

Since your grant covers wages, transport, general maintenance and repairs - it is essentially enabling the other works to happen and is therefore all relevant information. Please do refer to the budget lines for detailed information of the use of funds in these various projects.

Summary:



Francis Connecting Solar Panels



Calibrating new controller with mobile phone app

17198480 PS2-1800 C-SJ5-12	
Actual Data	
Input Power [kW]	0.20
Flow Rate [m³/h] (calculated)	2.0
Input Voltage [V]	125
Motor Speed [rpm]	2730
Input Current [A]	1.6
Controller Temp [°C]	30
Motor Current [A]	2.2
Irradiation [W/m²]	0
Cable Loss [%]	1.0
TDH [m] (fixed)	20.0
Pressure Sensor 1 [bar]	-
Pressure Sensor 2 [bar]	-
System status	
System ON	● ?
Pump ON	● ?

Our general water projects maintenance has been continuing well, with the team visiting most of the projects during Quarters 3 & 4. The majority of projects only needed small repairs carried out, and our focus has been on 2 major projects.

Date	Description	Project	Works Carried Out
07.07.20	Leaking Taps, General check	Loikumukum	Replaced Taps, training with watchman
08.07.20	Broken standpipe & Leak at tank	Urra	Re-cement standpipe, change fittings
12.07.20	Check UP	Sidai, loltepes	General maintenance
14.07.20	Check Up	Mpang	General Maintenance
17.07.20	Inspection & pipeline survey	Mpagas	Community meetings, Water delivery planning.
23.07.20	Planning for solar install upgrade	Matepes	Community meetings, planning
25.07.20	General check	Masikita	none
26.07.20	General check	Simiti	none
28.07.20	General check	Latakweny	none
08.08.20	Post installation checks	Ndonyo Nasipa	wiring
10.08.20	General check	Nkwe Ndome	fittings
11.08.20	Pipeline & Water delivery to community	Mpagas	10 days, standpipes, pipeline, tanks
28.08.20	Well & pipeline	Matepes	Digging, lining and delivery
30.08.20	Solar panel delivery & installation	Matepes	Added new solar panels and sensors to project
15.09.20	Pump Break Down	Urra	Remove pump , install spare
17.09.20	Community meeting	Sware	Community meet, remove pump
16.10.20	General check	Loikumukum	Deliver panel cleaner
23.10.20	General check	Urra	Check on repaired pump
29.10.20	General check	Sidai, loltepes	General maintenance
15.11.20	General check	Mpang	General Maintenance
16.11.20	General check	Keleswa	Community meetings, fittings
27.11.20	General check	Matepes	Community meetings, planning
12.12.20	Test Pumping	Matepes	Adjustment made to line
18.12.20	Improving line across rocks	Mpagas	Adding protection to vulnerable line
19.12.20	General check	Latakweny	none



Changing the motor on a helical pump



Warriors from Mpagas lending a helping hand



The beginnings of a Flood-proof well



Installing panel frames

Matepes Water Project

Matepes Water Project is a new project. The community here had been walking a seven kilometre round-trip to collect water. So we agreed to help them install a new system. Fortunately, there was no borehole required and through various supporters we were able to dig a properly lined well, we also found funding for a main pipeline and water delivery infrastructure. The main components of pump, controller and wiring were salvaged from another project that had been removed. After re-furbishing the system, we still needed to add another 6 panels, as the new site had a bigger power requirement. So through your funding we were able to fabricate the new solar stand, purchase and deliver panels to site and turn the pump on – now approximately 2000 people have access to clean water!!!!



Panel Stand Fabrication



Site delivery



Unpacking the panels



Completed panels

Ndare-Ntepes Water Project

Ndare-Ntepes, serving more than 3000 people, is our largest project. It has the longest pipelines, and most delivery points. The Main pipeline splits, serving two communities – Mpagas and Marti Derop. Because of the distances being pumped, there is a lot more to go wrong!

Already we had replaced the pump and controller in February and June respectively. We received a request from the county and community to extend the pipeline so that it reached the school, dispensary and northern side of the community. They also requested that we refurbished some sections of a pipeline that had been installed by a sub-standard contractor. The majority of the cost of these works were funded by the county. We allocated some of the transport costs from your maintenance budget.

Our JCB team also came to help out with the digging of new pipeline sections – sinking the pipe a meter deep out of reach of thirsty elephants. The elephants smell the water through the pipe and try to break in and have a drink – especially in the dry season. We also installed troughs for the wildlife so as to prevent them damaging the pipeline. We also had support from the MEAK vehicle to bring in stones that we use to cover the areas where the pipeline has to run over rocky plateaus.



Water projects impact:

The long term impacts are mainly positive. These impacts include:

- Improved child health
- Higher attendance to school
- Improved maternal healthcare
- More hygienic conditions at the dispensary
- Healthier livestock
- More time for productive activities

However, the negative impact could be that there are more people settling around the water project, meaning more pressure on nearby natural resources, particularly grazing since the Samburu are pastoralists.

Budget details: Expenditure update – July - December 2020

Q3 Expenditure					
Equipment					
Date	Description	Actual Unit Cost	Unit Type	No. Units	Total
22.07.2020	Well Probe Sensors	130.68	Lump Sum	1	130.68
26.08.2020	Dayliff 125W chrystaline solar panel	68.75	Panel	8	550
26.08.2020	MC4 Multibranch connector set	15	lump Sum	1	15
26.08.2020	single M/F connector set	3.5	lump Sum	1	3.5
			Subtotal		699.18
Wages					
31.09.2020	Water Projects Coordinator	250	monthly wage	3	750
			Subtotal		750
Transport					
31.09.2020	Motorbike	0.7	km	365	255.5
31.09.2021	Vehicle	2.6	km	122	317.2
			Subtotal		572.7
			Total		2021.88
Q4 Expenditure					
Equipment					
Date	Description	Actual Unit Cost	Unit Type	No. Units	Total
26.10.2020	MC4 Multibranch connector set	35	lump Sum	6	210
26.12.2020	Mixed water project fittings	175	lump Sum	1	175
26.12.2020	welding machine repairs	125	lump Sum	1	125
28.12.2020	workshop repairs	185	lump Sum	1	185
28.12.2020	Davis & Shirtliff PH minus	12	lump Sum	1	12
			Subtotal		707
Wages					
31.12.2020	Water Projects Coordinator	250	monthly wage	3	750
31.11.2020			Subtotal		750
Transport					
31.12.2020	Motorbike	0.7	km	205	635
31.12.2020	Vehicle	2.6	km	76	252.6
			Subtotal		887.6
			Total		2344.6
2020 Cumulative Grand Total					18263.68

Budget summary:

The grant total was \$19,645. The amount spent on the water projects for the year to December 2020 was \$18,263.68. This amount, subtracted from the grant total leaves a \$1,381.32 underspend.

This amount was slightly less than the estimated underspend (\$1798.32) that was calculated in November 2020, when an additional grant was applied for to cover the maintenance costs of the water projects for 2021. This application was successful and the Milgis Trust was awarded an additional \$17,864.60 for this year's maintenance of the water projects.

Thank you:

Once again, the Milgis Trust & MEAK send a huge thank you to Fondation Eagle. Through your support the Milgis Trust are one step closer to achieving their goal of meeting the basic needs of the people in the Milgis ecosystem. This grant has enabled the maintenance & upkeep of the water projects, which continue to be a necessity to the health & livelihoods of the Milgis community.

Fondation Eagle can feel justifiably proud that they have made such a difference to so many people's lives & we thank you for supporting the water projects again in 2021.

A few pictures from the Mpagas water delivery point construction



'Lockable' Gate valves on the tanks so as to control water usage



Thirsty Work



T Junction separating school, dispensary and



A busy, functioning standpipe in the community