



Project Final Report July - December 2023

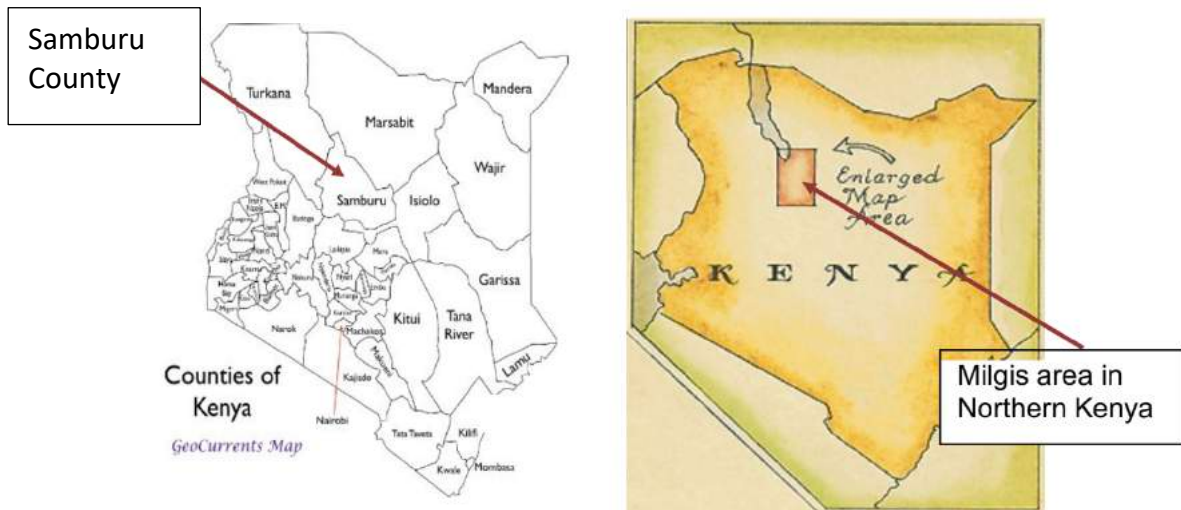
Donor: *Fondation Eagle*
Charity & project name: Milgis Trust – Water Projects Maintenance
File no: FF 0645
Date: 25th January 2024
Name of File: Medical and Educational Aid to Kenya (MEAK)
Amount requested: USD 25,222
Date of application: December 2022
Date of grant Accepted: December 2022

Type of Project: Funding for maintenance of 15 solar powered water projects, providing clean water for communities and their livestock.

Period of project: One year

Amount granted: USD 25,222 (Ksh's 3,127,528). Rate - (1USD = 124Kshs)

Location: The Milgis Ecosystem. This is an 6000 square kilometre area within the northern rangelands of the Matthews & Ndotto mountains – mainly within Samburu county but also extending into Marsabit County (Population circa 26,000)



Date : 19.02.2024

Signed:

Project Summary

July through to December last year was a time of huge contrasts! We had our usual dry period reaching its height in September/October. The water projects had to be very carefully managed, as aquifers were still a little low in some area's. However there was less desperation among people since the April/May rains had been adequate to improve pastures and strengthen the few remaining livestock.

With the El Nino conditions expected to heighten in November, we focused on ensuring that our water projects were ready to withstand the floods. This included Re-enforcing wells, digging some pipelines a little bit deeper, and rethatching some of the water project buildings.

The rains did come in full force, and continued for a much longer period than they should have. Many parts of northern Kenya experienced unprecedented flooding, most roads were damaged and became unusable, and all of the dry riverbeds full to the brim! Whilst we did experience flooding in our area, we in fact had very good rain compared to other places. The rain we experienced was moderately heavy but continued for much longer periods of time. Meaning less surface runoff and less damage compared to neighbouring areas. The majority of soils in our area are very well drained , so the water infiltrates back to the water table – replenishing the aquifers.

Ironically, despite fantastic rains, clean water can actually be very difficult to access. During dry times people living near the "luggas can dig wells and collect clean water that's been filtered by the sand. However, after heavy rain, these wells are flooded by a muddy torrent (see below). The floodwater is filled with debris, silt and contaminates such as faeces. So even during times of good rain, the water projects play a crucial role.

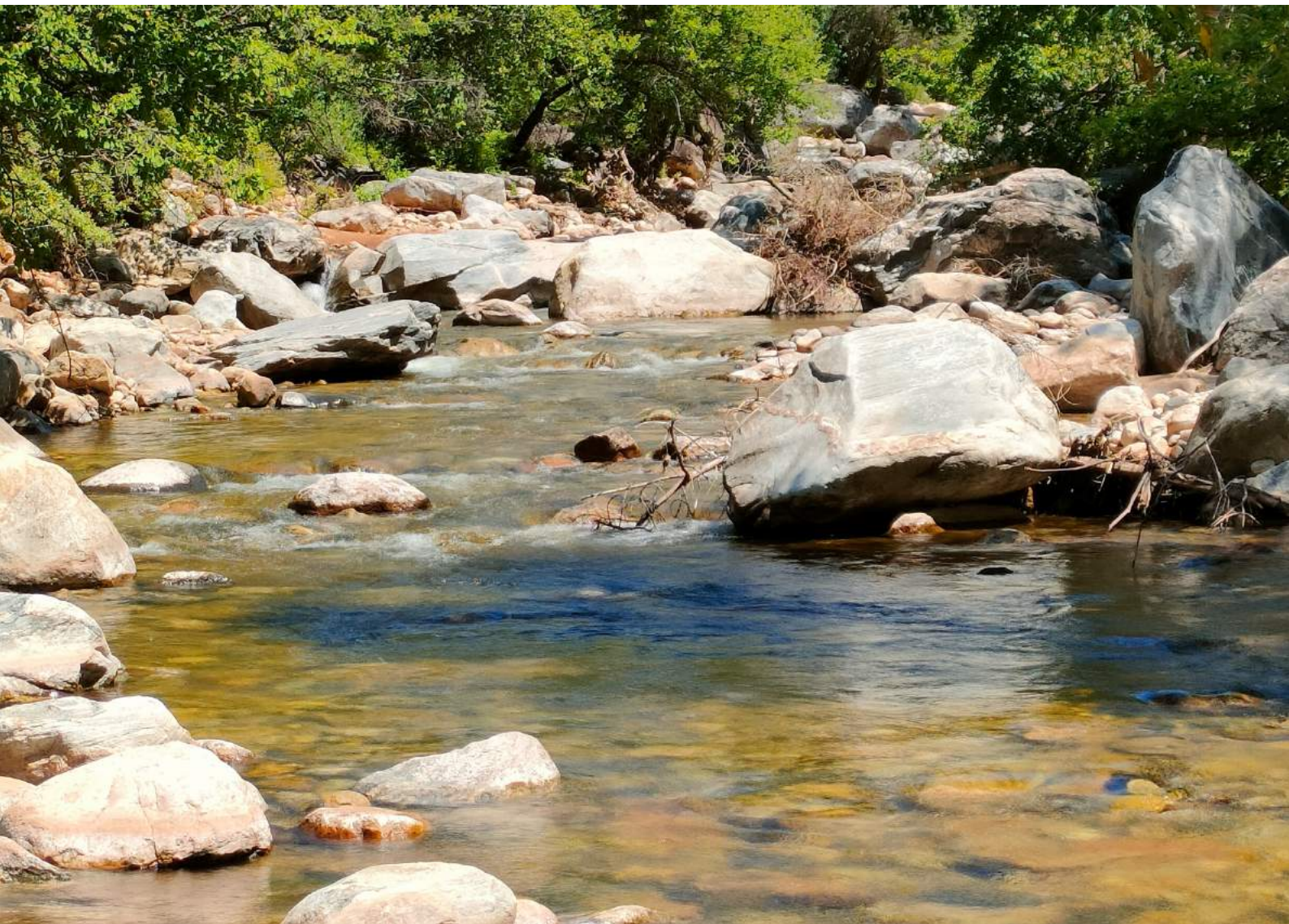
The Southern Ndotos, November 2023





The Milgis lugga with plenty of water flowing after recent rains

Aquifers replenished with lovely rainwater



Maintenance Overview

Kasipo Water Project

Kasipo is located on the North – Eastern Ndoto's, and has been a very successful water project since we re-drilled the borehole in 2022. This was of course during a very dry time so water was deep – nearly 200m.

During the second half of last year Muko did some renovations on the troughs as well as trying to prepare the water project and community well that we lined for the rainy season. Unfortunately, there was an immense flood in this valley that carried away half the piping to the community standpipe. We were able to salvage some of it however we have decided that it will be easier to just have one watering point as opposed to two in order to avoid pipes crossing the lugga.



Pipeline washed away



One of the standpipes to be mended, new taps and some leaks to fix

Urura Water Project

Urura is also located in the Northern sector of the Ndoto's. The water project was initially established in 2012. Urura is one of our smaller projects because the area has a seasonal river that provides them with water for much of the year. In the previous report the pump had broken down and we also discovered that the old galvanised steel lining had reached the end of its shelf life. This started to create rust contamination in the water as well and the danger of well collapse. We Decided to go ahead and do a proper job of replacing the linings in several of the projects.

This is a big job as these PVC linings are extremely heavy and had to be transported to site using a 6x6 all-terrain lorry. Them from the lorry to the site of the well is a very rocky pack that requires a big effort to carry these by hand. Needless to say, the hard work will pay off as these linings should keep the well intact for a lifetime.

The pump for Urura has also been replaced, as well as some sections of piping that had been washed away.



Heavy Duty PVC well linings delivered to site.

Ndare-Ntepes Water Project

This project had a lot of work done early last year, including a new trough built, and installation of the galvanized steel tank and also extra protection of large sections of pipeline that traverse across rocky areas. During the second half of the year our team refined the system that splits water equally between Mpagas and Marti Derop communities, ensuring that neither party can deplete the others water, which had been a problem in the past.

The new trough that was built also had significant issues with it. We found that sections of the foundations had been undermined by water, caused by elephants disturbing the pipes nearby. So to sort it once and for all we ended up carrying out a heavy duty, slightly excessive reinforcement which should stand the test of time even with all the pressure from elephants.



'Elephant Proofing' the pipelines over rocky sections



The tank prior to painting

Latakweny Water Project

Latakweny is a small town near our headquarters. Earlier in the year we had replaced the tank that had cracked due to long term sun damage. Fortunately, we had replaced this and the project was running smoothly. We did however need to carry out some smaller maintenance tasks on the standpipes, and replacement of fitting throughout the system.

The project is now running smoothly and is a very busy watering point

Latakweny community standpipes



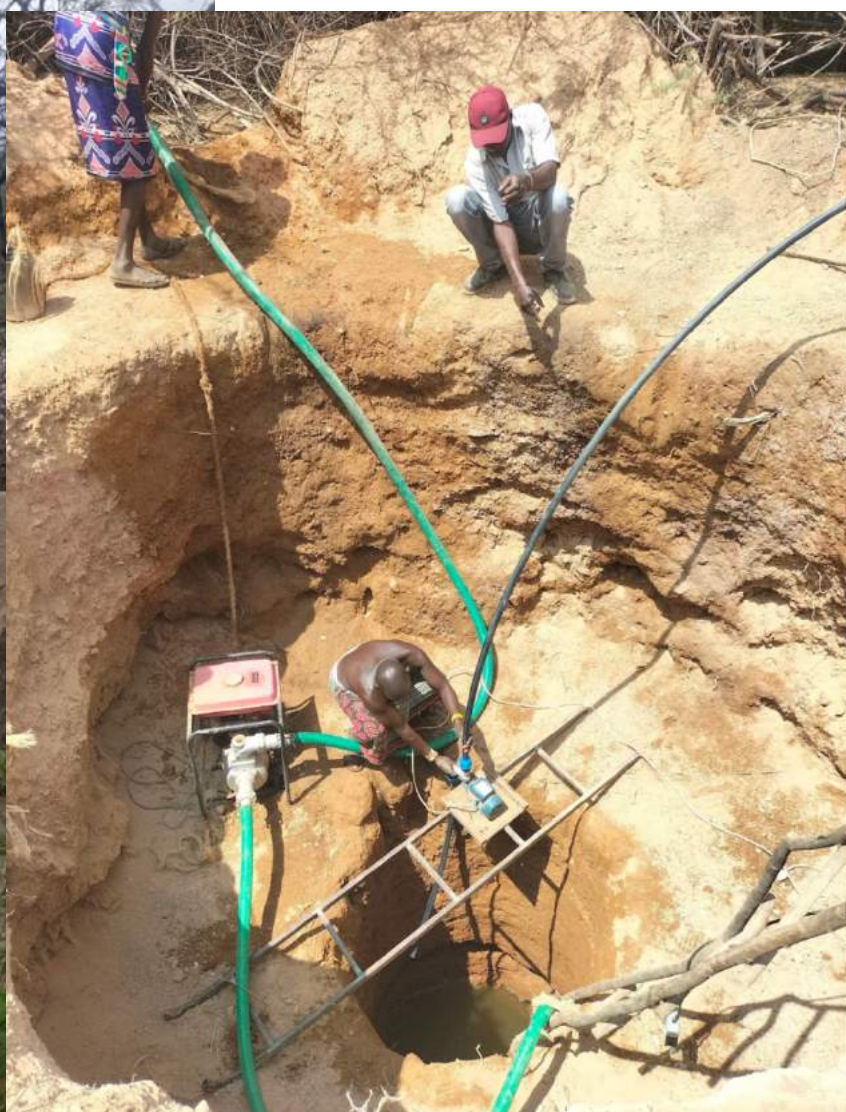
Nkwe- Eltome Water Project

This water project situation nearby our Milgis trust headquarters. The project is supplied by a hand-dug well next to the Seiya lugga. The water is pumped up a nearly 5-kilometre long pipeline to the community at the top of the hill. Again, this supplies water for several hundred people who otherwise would have to walk the distance to the lugga, and back up a steep hill.

During the May rains, the well nearly got washed away due to the lugga changing its course, and with only a couple of metres to spare before the edge of the lugga we decided it would be best to re-locate the well before the El Nino season. The digging of a new well is not easy but after several weeks, we succeeded. The new setup included the new PVC well lining, a brand new re-enforced well cap shaped to withstand the floods. With an added few metres of height from the lugga we hope this will remain intact for many years to come. The project is working at maximum capacity again.



The old well , with lugga behind



The immense job of digging a new well

Masikita Simiti

Simiti is a small village to the west of the Ndoto mountains, it is a very dry area and solely relies on this project for water. It has been extremely successful over the years with few issues since implementation. Unfortunately, recently the county government was carrying out some work to put in a trough and in the process severely damaged our piping network. There was no consultation and we were not aware of this work.

We were forced to re-do large sections of piping and redo some cement work..... A typical example of people coming in to do 'one shot wonder' projects. The community have since had several meetings and insist they will not allow our projects to be interfered with again.



One of the damaged sections



Happy people with their water working again

Summary of expenditure 2023

Currency of below expenditure: USD

Annual Budget awarded by Fondation Eagle:

TRANSPORT: (Increases from 2022 due to hiked fuel cost and more mileage due to low water levels causing more breakdowns)				
Description	Unit cost (\$USD)	Unit type	Number of units:	TOTAL:
Motorbike	0.8	Km	4500	3600
Vehicle	2.9	Km	1500	4350
			Subtotal:	7950

WAGES: (Increases from 2022 due to higher cost of living)				
Description	Unit cost (\$USD)	Unit type	Number of units:	TOTAL:
Water projects coordinator*	3600	Personnel	1	3600
			Subtotal:	3600

(Higher steel prices have led to tank costs going up significantly)

EXPECTED ANNUAL REPLACEMENTS, FITTINGS, PIPES & ELECTRICAL COMPONENTS:				
Description	Unit cost (\$USD)	Unit type	Number of units:	TOTAL:
Galvanized Water Tank +2m Tower	5400	Tank	1	5400
PE C-SJ3-32, Rp 1 1/4"	821	Pump End	1	821
PS2-1800 Components	950	Pump/controller	1	950
Electrical wire	700	Lump sum	1	400
Piping	1700	Lump sum	1	1700
Materials	1200	Lump sum	1	1200
Fittings	701.6	Lump sum	1	701.6
Consumables	2500	Lump sum	1	2500
			Subtotal:	13672

TOTAL COST: \$25,222

Expenditure Periods Q 3 & Q4 2023

Equipment & Supplies					
Date	Description	Unit Cost	Unit Type	No. Units	Total
23.06.2023	Consumables	250	Lump Sum	1	250
29.06.2023	Galvanized pipes	90	Lump Sum	1	90
02.07.2023	8000L PE tank	610	Pc	2	1220
02.07.2023	Fittings	300	Lump Sum	1	300
29.08.2023	Food & Supplies	130	Lump Sum	1	130
30.08.2023	Pump End PS1800	558	Lump Sum	2	1116
30.08.2023	Pump End P4000	780	Lump Sum	2	1560
30.08.2023	ECD Drive Pump Motor	1200	pc	2	2400
22.11.2023	Individual project store renovations	120	pc	14	1680
Subtotal					8746
Wages					
Date	Description	Unit Cost	Unit Type	No. Units	Total
31.07.2023	Casual Labour	600	Lump Sum	1	600
31.12.2023	Water Projects Coordinator	300	monthly wage	6	1800
Subtotal					2400
Transport					
Date	Description	Unit Cost	Unit Type	No. Units	Total
31.12.2023	Motorbike	0.8	km	2100	1680
31.12.2023	Vehicle	2.9	km	604	1751.6
Subtotal					3431.6
Total					14577.6

THANK YOU FOR THE INCREDIBLE SUPPORT