

eagle foundation





M.E.A.K - Report for Fondation Eagle: Interim report 2023 – January to June 2023 Project: MEAK / Milgis Water Projects, Milgis Conservancy, Samburu County, Kenya

Donor:

Fondation Eagle, Switzerland

Donor's reference:

FF 0645

Charity:

Medical & Educational Aid to Kenya (UK), together with the Milgis Trust (Kenya) Date of acceptance: December 13th 2022 Date donation received: December 23rd 2022

Amount of Donation:

A one-off grant of \$25,222

Duration of project:

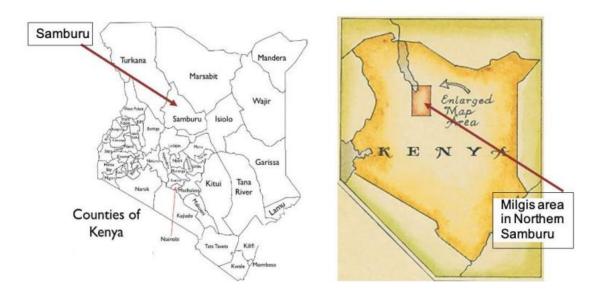
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Livestock & a grateful zebra both benefitting from fresh drinking water, supplied by the Milgis water projects

It is estimated that the grant will fund the operation & maintenance of the water projects for a one-year period, but if maintenance costs are low, then the funding will be carried forward to 2024.

Estimated number of beneficiaries:

Since the instigation of these projects approximately 26,000 people have been provided with clean water within the Milgis area of the northern Samburu (see map below). The water projects also provide much needed employment for 28 members of the local community.



Report from the Milgis Trust – Project summary:

Thanks to your incredible support during the dry times of 2022/3. Although water was still difficult and in short supply, the people living in the Milgis ecosystem could at least have enough for their families and some of their livestock. This was not the case for thousands of pastoral peoples in northern Kenya – many of whom had no water for their homesteads, let alone their livestock. Many other families, already on the brink of starvation, had to take turns walking up to twenty kilometres every couple of days to bring home enough water to survive off.

At the end of 2022 we had already exhausted your funds, however, it's important to note that this does not mean people were not benefitting. Our projects continued producing clean water throughout this period. We were extremely happy that you approved the maintenance funds for this 2023 period! Thank You!

We jumped into the new year with our fingers crossed for clouds - performing every rain dance possible. Sadly, to no avail, with most of the first quarter being very depressing: no rain. Water levels in aquifers and sand rivers were largely depleted which placed pressure on our team to carefully monitor how much water we pumped so as to not exhaust the resource. Inevitably, some of the projects did dry up. This resulted in extra maintenance work needing to be done.



Even the camels struggling in such hot & dry conditions. Hot winds carrying the dust across a once lush landscape

With so many animals relying on our projects for water, there has not been enough for wildlife. Desperately thirsty animals often end up digging up pipelines, breaking tanks and drinking all of the water. This lead to human-wildlife conflict in some situations. However, most of these pastoral people are incredibly generous, even towards wild animals. For example, the photograph below shows Communities allowing a critically endangered Grevy's zebra to come and have a drink. There are only 2,800 left in the world, and our water projects are critical for the survival of this species.

Fortunately, we do have good news!!! The rain came early in march and we have had fantastic rains throughout Kenya. The Milgis ecosystem has had more rain during this period than it has had in three years accumulated. This will be a great boost for aquifers and sand rivers that feed the water projects. A lot of this water being collected in rock catchments, pans and flood plains – meaning that that livestock and wild animals will not need as much water from the water projects.



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.



Maintenance overview:-

Report from Keleswa water project:

Keleswa is located in Northern Ndoto mountains, this area is inhabited by Samburu people. Like most of our projects, it's the only source of water for people, livestock and wildlife for nearly 30 kilometres in every direction. It is a fairly old project, and has been running consistently since 2014. This project is also important for wildlife moving through the area, especially the elephants. This project helps connect the Ndoto Mountains and Mount Nyiro ecosystems – without the project, the distance without water between the mountains is too great for populations to migrate easily.

As you know, last year your funds helped us get the new borehole done as well some of the equipment for pumping and piping. After reviewing the system in January, we decided install a new tank and some new standpipes for the school & dispensary. Their old tank had been broken multiple times since the intense dry period.



Muko installing the new tank

New galvanized pipes and gate valve

Report from Urra water project:

Urra is also located in the Northern sector of the Ndoto's. The water project was initially established in 2012. Urra is one of our smaller projects because the area has a seasonal river that provides them with water for much of the year. However, the river had not flowed for the past two years meaning the community had relied heavily on the water project. Unfortunately, due to the drop in aquifer levels, the well begun yielding very little water, forcing us to stop pumping. The very small amounts of water trickling into the solar well had become extremely concentrated with sodium, meaning that the galvanised steel well casing had started to rust. This has also corroded the pump end, which we have removed and sent for servicing. Luckily Urra is fortunate to have some 'nearby' wells that they can also use in case of a water project breakdown. The well is now full since the rains and the new pump ready to be installed. We have also since brought a heavy-duty PVC lining system that we are now changing all of the well linings to – these should last a lot longer.



Corroded well lining

Muko removing the pump for inspection

Report from Ndara-Ntepes water project: Maintenance overview

This large project is doing very well since the installation of the steel tank. The water supply has been consistent for both Mpagas and Marti Derop communities. There has however been a small issue with the overflow. The pipe for the original overflow had been damaged by elephants and water was being wasted. So Muko set out to build a better suited overflow.

Back down at the borehole there's a third community, Mpang, that comes across from the lugga in search of water. We have decided to put in a trough for them too as they were using and damaging a small tap that was by the solar panels. The new trough is now working nicely and is providing water for all kinds of wildlife as well. The project managers will need to ensure that there is not too much water being used at the bottom as it will not reach the main tank to feed Mpagas and Marti Derop communities.



Leveling being done for the new trough

Complete!

Report from Latakweny water project: Maintenance overview

Latakweny is a small town near our headquarters. This project had a major issue with their tank – a crack had suddenly become a huge irreparable hole. Without the tank, the whole of Latakweny had to revert to using the small spring near town which is incredibly salty and only good for washing. Muko was able to negotiate with the nearby school which had a spare tank. They agreed to allow us to install it at the project as a replacement tank



The 'exploded' tank

Fitting the new tank from the school

Report from Murran water project:

This incredible project has been the saviour for thousands of livestock this past drought for both Rendille and Samburu peoples living on the edge of the desert have lost most of their livestock. Deep in the desert lies large swathes of remaining grazing that have not been touched because there's no water for livestock. This Murran project has helped people access this grazing which has literally saved peoples entire livelihood during the past two years.

Of course, the immense traffic passing through Murran has meant that the system has had to work overtime to keep up. Incredibly, the sharp hooves of cows jostling for the water have chipped away the cement on the trough, also a crack had formed across it to the point of needing a complete overhaul. Our team had to shut off the water for a few days and rebuild the trough so as to prevent further damage. It is now back to full capacity.



The original trough, showing serious damage

The refurbished trough ready to be filled

Challenges in implementing & maintaining the water projects:

The broad challenges for the water projects remain largely unchanged from those described previously. However, the drought did create new challenges, many of which were thankfully alleviated by the rains.

The difficulties faced include:

- Damage to vital equipment, such as:
 - Elephants damaging pipework at Ndara-Ntepe
 - Hooves of cows jostling for water at the concrete water tanks created cracks, leading to leaks at Murra

• Drought:

- Persistent drought caused the water levels in the aquifers to deplete, which created problems varying from needing to monitor the water levels so that not too much water was pumped to the wells running completely dry in Urra.
- The increased salinity in the water in nearly-dry aquifers began to corrode the inside of the tanks. This has now been addressed by installing PVC linings to the interior of the tanks.
- Destruction of pipelines and the breaking of tanks occurred as very thirsty animals desperately
 tried
 to
 access
 water.

Impact of the water projects:

It is important to note that despite the problems with the water projects caused by the drought, the water projects literally saved people's lives. Areas outside the Milgis ecosystem really suffered, with people walking 20 kilometres in some cases to access water. Valuable livestock was lost as the prioritisation of a scarce resource like water was made to people over animals.

As always, the challenges vary, but we continue to learn from them and put new strategies in place to address them. Long-term solutions are the main goal, such as hard-wearing galvanised iron taps and PVC linings in water tanks.

As we have documented previously, the long-term impact of the water projects is mainly positive, these positive aspects include:

- Cleaner water improving child health
- Improved maternal healthcare
- Healthier livestock

However, on the negative side, there can be conflict between people and animals, especially during times of drought as we have described above.

Budget details: Expenditure update – Summary from Jan to June 2023

Currency of below expenditure: USD

Expenditure 01.01.2023 - 31.06.2023 Equipment & Supplies					
17.01.2023	Consumables	125.6	Lump Sum	1	125.6
27.01.2023	Galvanized pipes	120	Lump Sum	1	120
27.01.2023	8000L PE tank	600.84	Pc	1	600.84
27.01.2023	Fittings	160	Lump Sum	1	160
27.01.2023	Food & Supplies	54	Lump Sum	1	54
16.04.2023	Pump End PS1800	558	Lump Sum	1	558
16.04.2023	Pump End P4000	780	Lump Sum	1	780
06.05.2023	Well Lining 6m	992	pc	3	2976
			Subtotal		5374.4
		Wages			
Date	Description	Unit Cost	Unit Type	No. Units	Total
31.05.2023	Casual Labour	530	Lump Sum	1	530
31.06.2023	Water Projects Coordinator	250	monthly wage	6	1500
			Subtotal		2030
		Transport			
Date	Description	Unit Cost	Unit Type	No. Units	Total
31.06.2023	Motorbike	0.8	km	1866	1492.8
31.06.2023	Vehicle	2.9	km	604	1751.6
			Subtotal		3244.4
			Total		10648.8

Budget summary:

The expenditure between January to June 30th 2023 amounted to \$10,648.84

The grant total was \$25,222. The amount spent on the water projects to the end of June was \$10,648.84. This amounts to \$14,573.13 remaining.

Thank you:

The Milgis Trust & MEAK are incredibly thankful for the ongoing support of Fondation Eagle.

This support to maintain the water projects has a huge impact on the lives of the people in the Milgis community. Fondation Eagle can feel justifiably proud that they have made such a difference to the lives of so many people & animals.

Signed Mille Date 24-08-2023