Project Update: July 2017

1. LAKE BARINGO SECONDARY SCHOOL.

Nature club was established and strengthened.



Assessing the suitable site for tree Nursery establishment. The principal Lake Baringo Secondary School, Mr Lekakimon together with the teaching staff, the project coordinator and the project team members.



Tree Nursery Establishment. Project team member, Mr D. Chesire (Right), project leader, Ms Kiplagat, together with Mr.Paul Tallam (local resident) during the preparation of tree nursery, Lake Baringo.



Nature Club students of Lake Baringo Secondary School during artificial propagation of medicinal plants.



Conservation Education. Nature Club Lake Baringo Secondary School listen to conservation lecture on the need for conservation of medicinal plants. Project coordinator (top) and team member during the education session.





Nature club members of Lake Baringo Secondary School receiving equipment for the tree nursery maintenance from the Project coordinator.



Nature club members take a photo beside their fully established tree nursery, Lake Baringo.



Environment teacher Lake Baringo Secondary School, Mr. Thomas Kanda supervise the nature club members during the first phase of restoration inside school compound.



Project team member together with nature club members watering the transplanted seedlings, Lake Baringo.



Nature club member, Lake Baringo Secondary School protecting the transplanted seedlings.



Project team members join hands with Nature club members Lake Baringo to help protect the transplanted seedlings from grazers.



Group photo; Principal, Mr. Lekakimon, environment teacher, Mr. T. Kanda, project team members together with nature club members, Lake Baringo Secondary School.

2. LAKE BOGORIA PRIMARY SCHOOL

Existing Nature Club was strengthened.



Introducing the project to the pupils of Lake Bogoria primary school. Project coordinator (seated), project team member Mr. D. Chesire addressing the pupils together with the Head Teacher Mr. Daniel Kamuren.



Assessing suitable site for tree nursery establishment, Lake Bogoria Primary School (right). Conservation lecture on conservation of medicinal plants to the Nature Club members.



The project received great support from the entire fraternity of Lake Bogoria Primary School. Here, the pupils assisting in securing their established tree nursery.



Project coordinator together with nature club members of Lake Bogoria primary school collecting soils for the artificial propagation of medicinal plants.



Nature club members, Lake Bogoria primary School working inside the tree nursery.



Environment teacher Lake Bogoria Primary school together with nature club chairman receiving a watering can for the tree nursery.



Nature club secretary Lake Bogoria receiving a shovel and a Jembe for the tree nursery maintenance.



Group photo, nature club members-Lake Bogoria with teachers and local environmentalist/naturalist Mr. Ezekiel Chebii.



Nature club members, Lake Bogoria Primary school demonstrating their commitment to conservation of medicinal plants.



Nature club members ready for first phase of transplanting seedlings in school compound. Beside is the fully established tree nursery, Lake Bogoria primary school.



Nature Club members, Lake Bogoria Primary School taking seedlings for transplanting inside the school compound.



The head teacher Lake Bogoria Primary School watering transplanted seedlings.

3. KIPKAECH PRIMARY SCHOOL, TUGEN HILLS

Nature club established and strengthened.



The chairman of Nature club, Kipkaech primary school introducing the club officials and the club members.



Nature club members listen to Conservation lecture, the significance of conserving medicinal plants from one of the project team member.



Project coordinator engaging with Nature Club members, encouraging them to be committed to conservation and requesting for their support and cooperation.



Project coordinator, Ms. Emily Kiplagat distributing T-Shirts to the Nature Club Members, Kipkaech Primary School.



Environment teacher Mrs Nancy Kitilit receiving a watering can. Looking on is the Head teacher Kipkaech Primary School Mr. Musa Kipturmet and the Nature Club members.



Nature Club Chairman receiving a shovel and a Jembe for the tree nursery care.



Nature Club members, Kipkaech Primary School receive some seeds for artificial propagation.



Nature club members, environment teacher and the project coordinator take a photo inside the established tree nursery.



Restoration inside school compound-medicinal plants.



Nature club members engage in the first phase of restoration exercise inside the school compound.

VEGETATION SAMPLING: Tugen Hills, Lake Baringo & Lake Bogoria

Below: Technician from the National Museums of Kenya Mr. Barnabas Bolo, project team member Mr. D. Chesire and project coordinator Ms. Emily Kiplagat during vegetation sampling.



Tugen Hills during the collection of medicinal plants samples



Medicinal plant species-Aloe species-Tugen Hills.

Below: Technician from the National Museums of Kenya Mr. Barnabas Bolo and project coordinator Ms. Emily Kiplagat during vegetation sampling, Lake Baringo.



Lake Baringo during the collection of medicinal plants samples.



The Desert rose, Medicinal plant species, Lake Baringo.



Above: Technician from National Museums of Kenya, Botany Department, Mr. Barnabas Bolo, project leader Ms. Kiplagat and project team member Mr. D. Chesire collecting medicinal plant samples, Lake Bogoria and environs.

VOUCHER SPECIMEN PREPARATION FOR DEPOSIT AS HERBARIUM VOUCHERS.



> The plant specimens were pressed immediately upon collection. The plant press consisted of a wooden frame, a blotter and a newspaper which contained the plant material. The plant press was then tightened using straps.

> At the National Museums of Kenya, the plants were dried at 45 degrees Celsius to kill pests that cannot survive in hot temperatures. Then, they were placed in a cooler at negative 20 degrees Celsius to kill pests that cannot survive in cold temperatures.



Above: Identification of Plant Specimens. Project leader, Ms. Emily Kiplagat and Botany Technician - National Museums of Kenya, Mr. Barnabas Bolo.

The identification of the collected plant specimens required considerable amount of time and effort.

- We conducted a thorough literature review and consulted with Mr. Thomas Mwandime Nyage (Taxonomist and Research Scientist Botany, NMK) during the identification process.
- On most cases, plant specimens were identified by comparison with properly identified herbarium specimens available at the Botany Department-Herbarium laboratory.
- In the cases of unknown plant material, we used dichotomous keys, published plant descriptions, illustrations and photographs.
- A microscope became very useful during the observations of many diagnostic features.