

Project Update: November 2021

Workshop consultations with farmers

A workshop was conducted to educate farmers on the importance of investing in pollinator conservation. Farmers were taught different methods of conserving pollinators as well as threats to pollinators. Farmers were given the opportunity to ask questions they had on pollinators and their conservation. After that we discussed the types of tree species that can be grown in the village to enhance pollinators. Each farmer was given an opportunity to choose the species they are interested in as well as the number of trees they will want to plant so that the project provides them. Finally, we did an assessment of the major threats of tree planting so as to prepare accordingly.



Figure 1: Community engagement at Chivhere, Mashonaland West

Seed collection

After the workshop the project liaised with the community, school children and the agricultural extension officer to assist in collecting seeds of diverse indigenous tree species. Seeds for the following tree species were collected.

Nursery establishment

Nursery shade was established for species that cannot tolerate harsh weather conditions.



Figure: Engaging school children in seed collection



Figure: Seed collection



Figure 2: Nursery shade construction

Soil collection

Tree seedlings require special soils which are black loams which drain water and are fertile for seed growth. We had to scout first for suitable fertile soils after which they were identified at the Chinhoyi University farm close to a river stream. Three loads of 30 cubic trucks of loam black soils were transported to the nursery site for pot filling.



Figure: Soil collection at Chinhoyi University farm

Nursery management

Before germination, pots are watered by skipping one day. Weeding is being conducted frequently.

Research

To improve our processes and for the benefit of others in future, we collected data weekly on the growth of each species. The information collected included date of germination, height of seedling, number of leaves. Information is lacking on most of our indigenous tree species establishment, and we want to use it to publish a paper and make handbooks for indigenous tree planting.

Tree seedling establishment in schools

We have made contact with six schools and engaged them in tree nursery establishment. At each school we provided pots and seeds for planting and the schools provided land and soil for tree planting. We taught school children the processes of tree seedling establishment (pot filling, planting seed, watering and management of seedlings).



Figure: Delivery of soil at site

Plastic pots made of recycled plastic were purchased for tree planting. We also collected used plastic bottles from shopping areas and cut them for use as pots for tree planting.



Figure: Plastic bottles collected



Figure: Plastic bottles collected

Six thousand plastic pots were filled with soil and planted with various indigenous tree species.



Figure: Pot filling with soils



Figure: Arrangement of pots into the nursery shade



Figure: Arrangement of pots outside nursery shade



Figure: Watering of pots before germination



Figure: Pupils are coached in pot filling



Figure: Coaching pupils on seed planting



Figure: Pupils plant seeds



Figure: Coaching pupils watering of pots