

# ZAMBIA

LUANSHYA DISTRICT

AUGUST 2019



WeForest

*Making Earth Cooler*



In the Copperbelt, hundreds of small-scale farmers sign-up for our program every year to learn to restore and protect the trees on their farms and develop alternative sources income so that trees do not need to be cut anymore. Some women are selected for their skills to run their own nurseries: they then sell fruit trees to other farmers for a steady income. Farmers are coordinated by a farmer association overlooking and supporting all farmers in the project. Over the past months alone, 957 farmers (328 women, 639 men) were trained on forest restoration and farmland management.

They receive forestry training, beehives, efficient fuel stoves, and subsidies for grafted fruit trees. They can also apply for specific permaculture or plant nursery training sessions to diversify their skills and farm livelihoods.



## SCIENCE-BASED MEASUREMENTS AND VERIFICATION

**Forestry survey:** January 2019

**Socio-economic survey:** A full survey was done end of 2018



## LANDSCAPE TRANSFORMATION

**Trees funded:** 2,395,830

**Hectares directly restored:** 1,997 ha

**Total area positively impacted:** 3,085 ha

### Methodologies used:

#### *Assisted natural regeneration (ANR):*

As trees can spontaneously sprout from fire, cattle and/or other types of disturbance, some sites show remnant trees and natural regeneration. Our team protects these sites using these ANR methods.

In the last 6 months, 740 ha, in 113 farms across three districts were mapped for ANR.

#### *Enrichment planting:*

Planting tree seedlings to increase the density of existing tree species or to introduce specific tree species which are missing in the ecosystem or at unusually low density.



## CARBON SINK

We are expecting to reach 289,496 ton CO<sub>2</sub> in 30 years with the hectares currently under restoration. This equals to 145 ton per hectare.



## BIODIVERSITY CONSERVATION

### Young forests reaching maturity in 20 years

The Permanent Monitoring Plot surveys (PMPs) indicate a high richness of different tree species with a total of 70 different ones and a growth rate in biomass of 3,5%.

And, as expected, the tree densities show a decrease in stems when the plots become more mature: 1,200 trees per ha remain on average.



## COMMUNITY ENGAGEMENT

The project currently employs 2 women working in the nursery, 2 trainers (1 female), 1 driver and 6 beehive mentors.

A total of 115 female farmers (of which 39% women) from the three districts of Luanshya, Ndola, and Mpongwe have been trained and equipped with plants and grafting material.

522 farmers indicate they have seen their income increase through the project and 505 farm families indicate they have seen their income diversified through the project.

It is expected that the longer farmers will be involved in the project, the more these numbers will increase; after all, as the forest grows, so do its benefits.



## SHORT STORIES FROM THE FIELD

### Honey brings the farmer money

Up to date, 580 farmers (68% of all farmers trained) are actively engaged in honey production. They have also received training for two consecutive days and the available beehive mentors received practical training and continue to receive extensionist services. Mentors were equipped with bicycles and suits to support beekeeping practices.

Though the initial objective was to distribute and install 500 beehives, thus far a total of 640 beehives for 115 farmers have been installed across the three districts (Ndola, Mpongwe, and Luanshya).

Through beekeeping, for the first 6 months of the year, 265 households reported an average increase in income of 600 ZMW per annum. This is, on average, a 16% increase in cash income for these farmers on a yearly basis. This income is even expected to increase as the project matures and the association becomes more active.



### Grafting fruit trees

For 2019, 500 fruit trees are planned to be distributed to the trained farmers. Out of these, 115 are already with farmers and the remaining 385 trees have been growing in our local nursery and will be distributed at the onset of the raining season (December 2019). 40% of the farmers trained in propagation are currently actively engaged in home-based nurseries. This is slightly lower than the goal of 50%. The 2-day nursery training for women on fruit tree grafting went as planned.



### What happens when?

The Luanshya project runs all year. In January vegetation surveys are conducted to assess the region. In the same month fruit trees are planted, and again in August and September. In December pine and fruit trees are planted.

In the same month, the process of Assisted Natural Regeneration (ANR) starts with a restoration.

There's a break in March – when farmer training takes place – and picks back up in April and May when ANR-mapping is done. Then it continues up until August as well as in October.

Training activities are an important aspect of this project and besides farmer training, women nursery training is done in September and extensionist services or farmer education in October.

In the first year of beekeeping, there is nothing to harvest yet and starting from the second year honey harvesting is done in June, July, and November.



## Planting the 20 millionth WeForest tree in Zambia!

In March of 2019, the 20 millionth WeForest tree was planted in the project region by the chairperson of the LFCA. 20 million trees equals 16.000 hectares restored across our project sites over the past 9 years, 2 million tons of CO2 absorbed as the trees grow (equal to the annual footprint of 200.000 Europeans).



## UPCOMING 6 MONTHS

During the next reporting period, the following activities will take place:

- Extensionist services (ongoing)
- Tree planting (between December and February)
- Nursery Trainings for women farmers (September)
- Capacity building of the local farmer association (October)
- Honey harvesting (December)
- Improvement of training expertise of staff and training manuals (October)



WeForest is an international non-profit that specializes in mobilizing companies to restore the World's forests and embark their stakeholders into a long-term journey towards environmental sustainability.

In order to achieve the objectives of the Paris Climate Agreement, we need to start decreasing our global emissions by 2020 and achieve carbon neutrality by the second half of this century. While reducing carbon emissions is critical, research suggests that even if carbon dioxide emissions came to a sudden halt, the carbon dioxide already in the Earth's atmosphere could continue to warm our planet for hundreds of years. The challenge is to reduce future carbon emissions and actively remove the excess carbon from our atmosphere.

Forests are known as the best technology for that: they are an amazing carbon sink.

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THANK YOU

