

ZAMBIA

ENGAGING SMALLHOLDER FARMERS IN REVERSING DEFORESTATION

May 2017 Report



HECTARES FINANCED

696



TREES FINANCED¹

835,431



TONS CO₂ SEQUESTERED²

100,948



BENEFICIARIES

711

A total of 835,431 trees have been financed thanks to the support of donors and sponsors

THE PROJECT

In Zambia, an estimated 250,000 to 300,000 ha of forest are disappearing on a yearly basis. WeForest is helping combat this by empowering small-scale farmers to become forest stewards. Since May 2015, WeForest has been collaborating with Zambian enterprises to restore Miombo woodland and reduce deforestation for charcoal, construction and land clearance for farming. Farmers are trained to restore Miombo woodlots (plots of woodland on farmland) through a restoration technique known as assisted natural regeneration, which involves protecting and nurturing wild tree saplings. The project empowers farmers to engage in alternative and sustainable economic activities, such as bioenergy, fruit and honey production, by creating market linkages between farmers and local private sector companies. The project also empowers farmers and villagers to use fuel-efficient cooking stoves as an alternative to charcoal.



KEY DETAILS:

Location: Luanshya district, Copperbelt province

GPS: 13 05.405S/28 24.032E

Restoration approach: Assisted natural regeneration

Partners: Rainlands Timber, Home-Energy, BeeSweet, Edinburgh University

¹Based on an estimated density of 1200 trees per hectare

²In the Copperbelt province, the above-ground biomass in Miombo woodlands can store an average of 145.4 tons of CO₂ per hectare per year after a period of 20 years. Kalaba et al. 2013

PLANTING UPDATE

KEY PLANTING FACTS

- 696 ha of Miombo woodland under restoration
- 63 native species across intervention site
- Main tree species: *Albizia* spp., *Brachystegia* spp., *Julbernardia* spp., *Isoberlinia* spp.

This reporting period, an additional 279 ha of wet Miombo woodland were set aside for restoration through assisted natural regeneration (ANR). Farmers have the option to expand their original ANR plot and more farmers continue to show interest in joining the project. The areas continue to be recorded with GPS points as polygons using a GIS³ application on tablets and smartphones. 35 fixed monitoring plots were established throughout the project area to collect data that will allow us to monitor the growing forest, the accumulation of biomass and thus carbon, and therefore measure the progress of the project. These monitoring plots will be assessed throughout the project. More diameter breast height measurements were taken, which refers to the diameter of the tree trunk at a certain height, defined as the breast height. This allows us to monitor the growth of the trees. The mean diameter is currently 27.4 cm. A forest management plan that defines a plan for sustainable harvest of the woodlots provides a legal framework for farmers and ensures that the restored areas will be protected into the future and that proper control measures will take place.

NOVEMBER - APRIL 2017:

- 279 ha of Miombo woodland set aside for restoration
- 35 fixed monitoring plots established
- 27.4 cm mean circumference at breast height
- Forest management plan drafted



Figure 4. Assisted natural regeneration plot identified for monitoring



Figure 4. The team setting up one of the monitoring plots

³Geographic information systems (GIS) are computer software and hardware systems that enable users to capture, store, analyze and manage spatially referenced data

SOCIO-ECONOMIC UPDATE

KEY SOCIO-ECONOMIC FACTS:

- 711 people directly engaged in project activities
- 665 participating farmers
- 46 women trained in home-based nursery scheme
- 244 subsidized fuel-efficient stoves sold to farmers

During this reporting period, an additional 195 farmers joined the project. The technical team visited their farms to assess the regeneration potential of their woodlots and provided a two day training course in ANR establishment and management, plant nursery management and woodlot establishment. A further 87 fuel-efficient cooking stoves (known as *peko pe*) were sold to farmers at subsidized prices. The stoves are healthier for the users compared to a traditional charcoal stove and are more fuel-efficient (thermal efficiency of 36% compared to 10% for the traditional stoves). In February, a stove sales agent received training and support to set up a shop in Kitwe, near our project area. There is the potential to expand this scheme and train another group of sales agents. 1,000 beehives have been delivered to the project area waiting to be distributed to the participating farmers. This will provide them with an additional sustainable income stream from the forest.

NOVEMBER - APRIL 2017:

- 195 farmers joined the project
- 87 stoves sold
- 1,000 beehives delivered to the project



Figure 3. Benson Ngulube, one of the participating farmers, tells us that "I didn't know much [...] how trees could change my life and become a source of income to feed my family"



Figure 4. Helen, a stove sales agent, with one of the *peko pe* cooking stoves



Figure 5. A mother with young twins (foreground right) attends a training class



Figure 6. Farmers attending the two day training course

SIGNING CEREMONY OF A CO-FUNDING GRANT FROM FINLAND

Rainlands Timber and WeForest received a grant from the Finnish ministry of foreign affairs, as part of the Civil Society Environmental Fund (CSEF), to continue to consolidate and expand our forest restoration activities in Luanshya. On the 17th of January, the project team attended the CSEF ceremony in Lusaka, the capital of Zambia. Our project will continue to receive support from the CSEF until the end of 2018.

WEFOREST'S 15 MILLIONTH TREE

On the 21st of March, declared International Day of Forests, we held a tree planting event to celebrate the planting of WeForest's 15 Millionth tree. This tree, an *Entandophragma deveoyi*, was planted on the Mofu tree memorial site near Luanshya. Many stakeholders were present and school children supported the event with poems and traditional dances. The district commissioner of Ndola, together with the district commissioner of Luanshya and the project manager, planted the 15 millionth tree.



Figure 7. Local school children standing behind WeForest's 15 millionth tree



Figure 8. School children celebrating nature and forests with a traditional dance

PRESENTING THE WEFORREST MAPS

With WeForest's growing planting portfolio, managing and processing planting site polygons from different projects had become a complex task. The data collected by the respective project teams have to be processed in multiple steps using GIS software (QGIS) that involves a high level of manual work. Hence, there was a need to standardize these processes and centralize the management and assessment of planting sites data. With our partner, Open Forests we have been establishing a Forest Information System (FIS) that is bringing efficient project management for the WeForest project portfolio. Our aim is to bring our sponsors and donors as close as possible to our project sites and communicate transparently on the progress. As of May 2017, sponsors and donors of WeForest will receive up to date project information on their respective page. These will be populated with fresh stories directly linked with a GPS coordinate. With background satellite images, sponsors remain updated about the impact and development of the project.



Figure 9. The WeForest map of Zambia with location and story markers



THANK YOU