



Copperbelt

Forests on Farms: Engaging smallholder farmers in reversing deforestation

Annual Progress Report 2022



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Summary

Our Copperbelt: Forests on Farms project is protecting and regenerating degraded forest in partnership with farmers, and creating incentives through forest-friendly livelihoods like beekeeping.

The project began in 2015 in the district of Luanshya, expanding into neighbouring Mpongwe and Ndola in 2021. Luanshya is now in a five-year monitoring phase, and our experience has supported the design of the scale-up of the project.

A major focus will be the new community forest restoration component in Imanda which, together with the Forests on Farms being tailored to sustainable agriculture and agroforestry, will see it become a larger landscape-scale approach.

The enthusiasm and commitment of the three Farmers’ Associations – first Luanshya Forest Commodities Association (LFCA), and later Mpongwe District Farmers’ Association (DFA), and Chinchi Wababili Women Farmers’ Association – has been a key success factor and we see the same commitment in the Community Forest Management Group (CFMG) to whom WeForest is providing support that will enable them to take over their own income generation programmes.

This report shares an update of our progress during 2022. Thank you for all your support!

2022 in numbers

592 ha of new areas of regeneration (Assisted Natural Regeneration plots) established with **116** farmers, representing over **710 556** trees

903 beehives were distributed to the 116 farmers in Mpongwe and Ndola

595 households harvested honey across all three areas

30 870 kg of honey was harvested

Around **2000 ha** was mapped for the Imanda Community Conservation Area

Abbreviations

Assisted Natural Regeneration	ANR
Farmers’ Association(s)	FA(s)
Luanshya Forest Commodities Association	LFCA
Mpongwe District Farmers’ Association	DFA
Chinchi Wababili Women Farmers’ Association	Chinchi FA
Community Forest Rangers	CFRs
Forestry Department	FD
Community Forest Management Group	CFMG



Restoration

Over 4.3 million trees regenerating on 3607 ha of smallholder farms

In return for agreeing to restore and protect native miombo woodland and harvest sustainably, farmers in three of the ten districts that make up the Copperbelt province are provided with the training and tools they need to diversify into forest-friendly income-generating activities such as fruit and honey production.

While 2021 had been spent setting up in the two new districts, implementation started in earnest in October 2022. 592 ha of land on 116 farms was allocated in 2022 to regenerate approximately 710 000 trees through Assisted Natural Regeneration (ANR). ANR plots range from 0.57 ha to 8 ha, and the average is 3.2 ha per farm, representing over 3800 trees per farmer.

The cumulative total for the project is now 3607 ha under restoration (including 3000 ha in Luanshya), with an average of 3.2 ha of forest regeneration per farm.

The restoration plots cover 3000 ha in 625 households in Luanshya – the district where we worked between 2015 and 2020 – and the livelihoods there are now in a five-year monitoring phase. Luanshya’s farmers’ association, the Luanshya Forest Commodities Association (LFCA), has already taken on beekeeping and vegetable garden irrigation schemes (see Livelihoods section).

While Community Forest Rangers carry out patrols under the supervision of the Forestry Department to provide regular advice to participating farmers and monitor their forest regeneration status, some farmers have converted their ANR plots to agriculture. In Luanshya, farmer participation rates are over 70% and we’re investing in new livelihood programmes to provide further support. Commitment is very high in Mpongwe, at over 95%.

Creating a new Community Forest Area at Imanda

In regions like the Copperbelt, where the landscape is dominated by small-scale farmers, farmer-managed regeneration is often the only route to reducing deforestation and regenerating forests. However, the proximity of our project to Imanda, one of the largest examples of moist evergreen forest in the country, offers a wonderful opportunity to incorporate a community forest restoration phase.

These new restoration activities, carried out in partnership with BirdWatch Zambia, the Forestry Department and the surrounding communities, will aim to strengthen community ownership and biodiversity conservation in the Imanda Community Conservation Area, which is 25 km west of Mpongwe and encompasses Lake Kashiba, a



National Monument.

Imanda is a large mushitu (swamp forest), which differs from miombo in that it is evergreen and more dense. Around two thirds is grassland with some tree cover. The 2201.93 ha area is partly surrounded by dambo (shallow wetland) as well as some villages and cultivated land, but otherwise it remains relatively undisturbed. It is home to a number of bird species, some of which are endemic to the Zambezian biome.

Our original goal was to bring 400 ha of Imanda under community forest management, but its potential is even bigger than we thought. The participatory process of demarcation on the ground has shown an entire forest area of 2245 ha, more than five times bigger.

The Imanda Community Forest Management Group has been formed and a committee is now in place, composed of leaders from the two sub-committees of the adjacent communities. Activities to conserve the Imanda forest, protecting the area from encroachment and fires, begin in 2023.



How beekeeping helps conserve miombo woodland

Intact miombo forest is found on most of the farms here – sparse, open deciduous woodland characterized by trees such as *Brachystegia boehmii*, *Entandrophragma devevayi*, *Isoberlinia angolensis* and *Julbernardia paniculata*. These dominant species are nitrogen-fixing, taking nitrogen from the air to be able to grow even in the poor soils here. WeForest supports the farmers to conserve their miombo and use it for honey production. The bees use the miombo tree flowers to make their honey, so the farmers know that leaving the trees intact and encouraging regeneration is essential for their incomes from honey.



Imanda Community Conservation Area

Vegetation classification

- riparian evergreen forest (mushitu)
- wet grassland with scattered trees (Dambo)
- dense evergreen swamp forest (Mushitu)





Livelihoods

Forest-friendly livelihood schemes increase incomes for participating households

Over 1170 households are directly benefiting from the project. Beekeeping and vegetable garden irrigation schemes are the two livelihood activities ongoing at the moment.

There was a good honey harvest this year for the established farmers. 25 000kg was the target, and the LFCA harvested 130% of that – 30 870 kg in total. At least 90% of this honey was sold, bringing an income of \$40 on average per farmer.

In 2022 we aimed to recruit 125 new farmers for beekeeping in the district of Mpongwe and Ndola and eventually managed to recruit 116 new farmers – not too far from our target. Even if the average income per farmer isn't what we would like (see below), the new areas with new beehives are seeing the honey (and therefore money) coming through, and are feeling incentivised and maintaining the areas.

When farmers join the project they receive seedlings of fruit species including orange, lemon or avocado as an incentive for completing the Assisted Natural Regeneration (ANR) and beekeeping training. They're not supposed to plant them on their ANR areas, and so they plant them by the house for their own consumption. Some of them go on to join the treadle pump vegetable garden scheme. 39 out of a target of 50 treadle pumps for vegetable garden irrigation

were distributed. The 39 farmers have started producing vegetables to eventually sell.

Lessons learned

Our experiences in Luanshya over the past six years are providing important knowledge about how to progress with the livelihoods activities in Mpongwe and Ndola. For example, the challenge is that the \$40 dollars a year per farmer that's currently coming from honey is not enough to incentivise the farmers

What kind of pressure is the forest under?

The baseline survey carried out when the project expanded into Mpongwe and Ndola found that 37% of respondents reported having experienced some food shortages, with 74% of households consuming forest products (fruits, wild vegetables and mushrooms). While most income comes from crop and livestock production, the second most dominant is income earned from forest products, with almost half of the surveyed households indicating that charcoal provided them with an easy income. Mushrooms (36%) and wild fruits (12%) were also being harvested from the forest for sale.



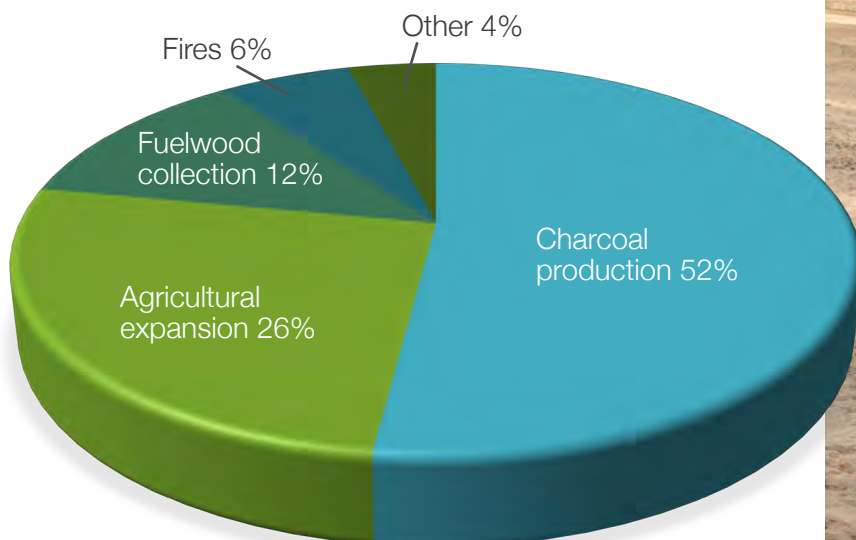
to carry on doing ANR – in other words, the income doesn't justify protection of the plots. If they can afford to protect the restoration plots they won't need to resort to using them for something else, such as crops, or cutting trees there or elsewhere to produce charcoal, which they might have to sell in order to put food on the table. This means that the rate of farmers leaving the programme in Luanshya has been higher than expected.

We're taking several steps to address this. First, investing more funding into the livelihoods activities to create greater income generating potential and expanding the scope of the activities. In addition to beekeeping, a new focus on sustainable agriculture will start to address one of the main drivers of deforestation in this area, as well as having the potential to bring in bigger incomes.

We'll do this with the help of the team from our sister project in Katanino – which with seven successful livelihood activities ongoing, two of which are agroforestry-based, is a successful example of income-generating activities that we can learn from.

In the coming years, the Copperbelt: Forests on Farms project will become a holistic landscape programme: it will be a mix of community forest restoration in the Imanda Forest (see previous section) and Forests on Farms tailored to sustainable agriculture and agroforestry.

The key drivers of deforestation here





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Governance

Farmers’ Associations can sustainably support and run income generation schemes

Our intention is that the three Farmers’ Associations – Luanshya Forest Commodities Association (LFCA), Mpongwe District Farmers’ Association (DFA), and Chinchu Wababili Women Farmers’ Association – with whom we’re working will eventually take over and run their own income generation programmes. Engagement with farmers associations has been great – the capacity building and leadership has been very good and they have shown they can take up a lot of the responsibility in restoration. All have cash flow and capital, and the Mpongwe and Ndola Farmers Associations (the DFA and the Chinchu FA) underwent training. We’re looking at the potential of scaling up their revenue.

The LFCA, which have already taken on the beekeeping and vegetable garden irrigation schemes, are able to source their own funding for example through the sale of honey from beekeeping.

The LCFA is in the process of marketing their own honey which will be on sale in stores, and are working with a dedicated Monitoring & Evaluation officer to scale up and stay on track in terms of financial management and planning.

What are Farmers’ Associations?

Strong and well-functioning local Farmers’ Associations can create significant value and income for farmers that result in resilient farming households. Resilient households can cope more easily with ‘shocks’ and are less dependent on overexploiting trees (charcoal and timber) to earn money. We work with three - the Luanshya Forest Commodities Association (LFCA), Mpongwe District Farmers’ Association (DFA), and Chinchu Wababili Women Farmers’ Association - to support them in taking over their own income generation programmes.





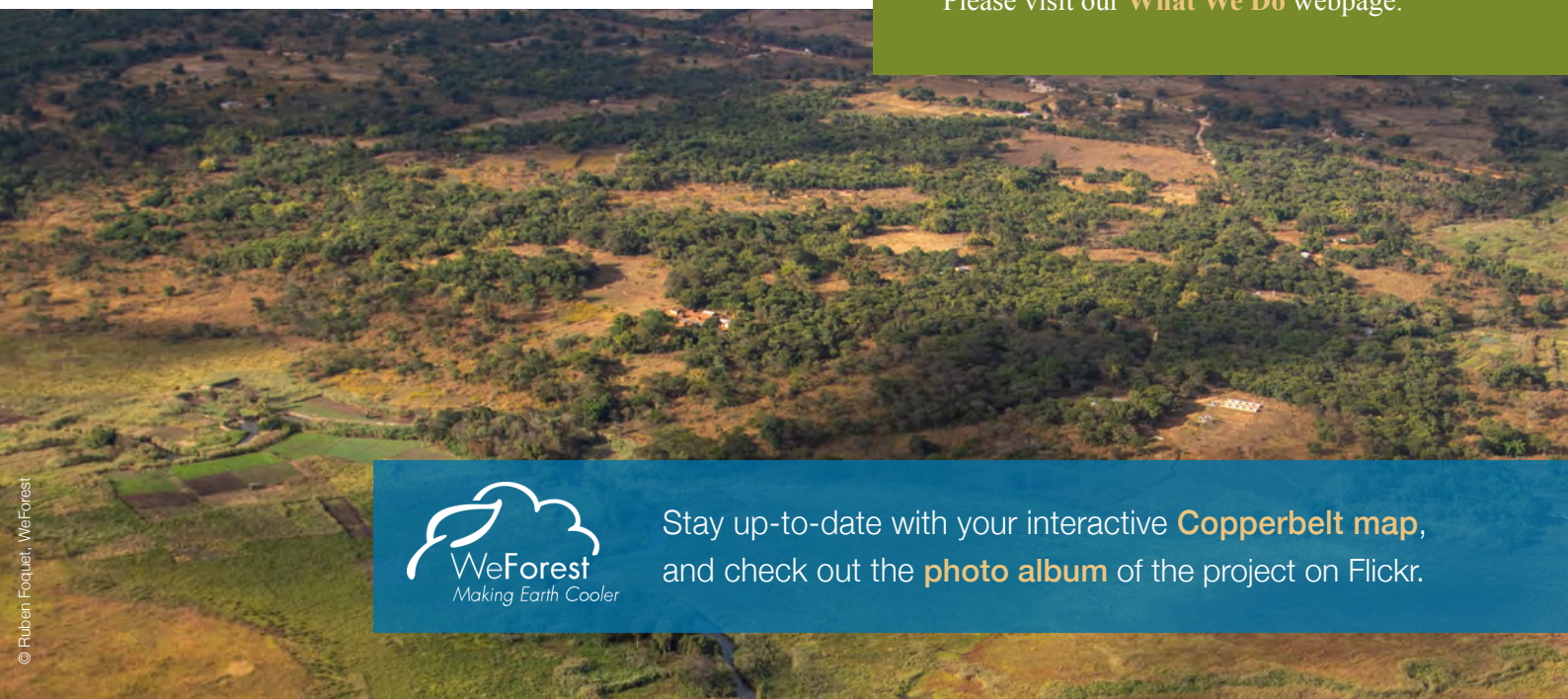
What's Next?

- Install 1250 beehives in approximately 625 hectares of Miombo conservation plots mapped on private farms for the newly recruited and trained farmers.
- Implement other livelihood activities with the help and advice of our colleagues from Katanino. We aim to roll out at least two more activities during 2023 to further increase the income of farmers participating in this project.
- Redesign the Forests on Farms component of the project to tailor it to sustainable agriculture and agroforestry.
- Register the Imanda Community Forest Management Group with the Forestry Department, and implement law enforcement in the Imanda Community Conservation Area.
- Set up the District Farmers' Association and Imanda Community Forest Management Group apiaries.

How do we know our restored forests are growing and making an impact?

Every hectare under restoration is mapped with GPS points to generate polygons (areas on a map) that are assigned to sponsors. Permanent monitoring plots are established in some of our sites, and our forestry and science teams conduct surveys to monitor progress of biomass growth, tree density and species diversity, among other indicators. We also measure socio-economic indicators such as the number of families benefiting, people trained, and income generated from forest-friendly livelihood activities.

Please visit our [What We Do](#) webpage.



Stay up-to-date with your interactive [Copperbelt map](#), and check out the [photo album](#) of the project on Flickr.

Thank you for supporting the Copperbelt: Forests on Farms project!