

Forest Ecosystem Restoration Verification Assessment Report for: WeForest Zambia in Luanshya, Zambia

Report Finalized: Audit Dates: Audit Team:

7 July 2021 09 - 16 May 2021 Ivan Muir Richard Zell Donovan

Certificate issue/expiry: Organisation Contact:

Contact details:

28 July 2021 - 27 July 2022

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INTRODUCTION

This report presents the findings of an independent verification audit conducted by a team of specialist representing Preferred by Nature. The purpose of the audit was to evaluate the ecological, economic and social performance of WeForest Zambia restoration initiative in Luanshya as defined by the established Forest Ecosystem Restoration Standard by Preferred by Nature.

Dispute resolution: If Preferred by Nature clients encounter organisations or individuals having concerns or comments about Preferred by Nature and our services, these parties are strongly encouraged to contact relevant Preferred by Nature regional office. Formal complaints and concerns should be sent in writing.

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Note: Data presented in the reports shall be in metric system units.

1 AUDIT CONCLUSIONS

1.1 Audit Recommendation and verification decision

Based on Organisation's conformance with verification requirements, the following recommendation is made:

| Verification approved: |
|--|
| Upon acceptance of NCR(s) issued below |
| Verification not approved: |

Additional comments, including issues identified as controversial or hard to evaluate and explanation of the conclusion reached: NA

1.2 Non-conformity Reports (NCRs)

□ Check if no NCR(s) have been issued

| NCR: 01/21 | NC Classification: minor | |
|--|--|--|
| Standard & Requirement: | Forest Ecosystem Restoration Field Verification Standard | |
| | 1.0 | |
| Report Section: | Annex I, 1.7 | |
| Description of Non-conformance and Related Evidence: | | |
| While WeFerest has a document for the restoration techniques to be used, the farmers | | |

While WeForest has a document for the restoration techniques to be used, the farmers do not always follow these guidelines.

- 1. Farmers 362, 345, 347, 528 and 530 had charcoal kilns in the ANR which his contrary to the Rule #6 in the Training Manual.
- 2. None of the 18 farmers visited had started any firebreaks at the time of the audit from 10-15 May 2021. In addition, there was no evidence that the firebreaks had been maintained the previous year.
- 3. At numerous farmers (752, 566, 345), trees had been cut down in the past and the requirement for those cases is requiring coppice management, but this had not been done.
- 4. Farmer 441 has an agricultural crop (millet field) in the ANR

Three aspects were identified to be connected with the above, namely re-training, supervision and communication.

- 1. The interviews carried out showed limited understanding of the "Do's and Don'ts" for the project, which reveal or may be the result of insufficient follow-up training
- 2. There are 6 Community Forest Rangers who carry out patrols over the vast area. These CFRs are only employed for 11 days of the month, which as per the observations from the auditor above appears to be insufficient.
- 3. When an infraction is detected, this is reported to the LFCA. However as with the case of farmer 528, the case was reported a month prior to the audit, and no

| action had been taken. The reaction time from LFCA was observed to be inefficient in that case. | | | |
|---|--|--|--|
| Corrective action request: | Organisation shall implement corrective actions to demonstrate conformance with the requirement(s) referenced above. Note: Effective corrective actions focus on addressing the specific occurrence described in evidence above, as well as the root cause to eliminate and prevent recurrence of the non-conformance. | | |
| Timeline for Conformance: | By the next annual surveillance audit | | |
| Evidence Provided by Organisation: | PENDING | | |
| Findings for Evaluation of Evidence: | PENDING | | |
| NCR Status: | OPEN | | |
| Comments (optional): | | | |

1.3 Observations

Note: Observations are issued for the early stages of a problem which does not of itself constitute a non-conformance, but which the auditor considers may lead to a future non-conformance if not addressed by the organization; observations may lead to direct non-conformances if not addressed.

 $\hfill\square$ No observations

| OBS: 01/21 | Standard & Requirement: | Forest Ecosystem Restoration Field Verification Standard 1.0, 3.12 | |
|--|--|---|--|
| | Report Section | Annex I, 3.12 | |
| Description of findings leading to observation: | The most dangerous situati honey, in which case mentor but none of the farmers obser is stated in the training pro situations were observed, the during the training. | on seen is the harvesting of s do wear the appropriate PPE, rved was wearing any, while this ocedures. While no dangerous his could be emphasized, e.g. | |
| Observation: | The RM should place more emphasis on PPE use by farmers. | | |

| OBS: 02/21 | Standard & Requirement: | Forest Ecosystem Restoration Field Verification Standard 1.0, 1.5 |
|------------|-------------------------|---|
| | Report Section | Annex I, 1.5 |

| Description of findings leading to observation: | While no major issues have been observed, and no further evidence to the comments below was found, some comments were received during the audit that showed the importance for continuous improvement of the communication and engagement process. |
|--|--|
| Observation: | The RM should maintain the focus to ensure that affected stakeholders or rights holders are included during planning or implementation. |

| OBS: 03/21 | Standard & Requirement: | Forest Ecosystem Restoration Field Verification Standard 1.0, 2.1 | | |
|--|--|---|--|--|
| | Report Section Annex I, 2.1 | | | |
| Description of findings leading to observation: | Though there are clear expectations for meeting the 5-year time horizon expectations, it is not clear what will happen in terms of 20 years. | | | |
| Observation: | The RM should ensure what are the project expectations for a 20-year horizon. | | | |

1.4 Stakeholder consultation

Prior to the audit, the stakeholder list was provided by WeForest. This list also provided a basis for the assessment team to select people for interviews (in person). With the limited time available, it was decided to sample a range of stakeholders from government, NGO's, private individual and the workers.

The aim of this stakeholder consultation was to assist the field assessor in identifying any potential issues. The process of stakeholder interaction does not stop after the field visits, or for that matter, after even a verification decision is made. Preferred by Nature welcomes, at any time, comments on certified operations and such comments often provide a basis for field assessment.

The table below summarizes the issues identified by the assessment team with a brief discussion of each based upon specific interview and/or public meeting comments.

| Principle/Subject Area | Stakeholder comment | Preferred by Nature response |
|---------------------------|--|--|
| 1: Planning | Confidence and membership in the LFCA is dwindling due to the farmers not earning sufficient income. Treadle pumps are a "flop" as they are reward for farmers doing well but | While no major issues have been observed, as WeForest is aware and dealing the issues mentioned, the received during the audit showed the importance for continuos improvement of the communication and engagement process so an observation is raised in this sense |

| | they are shared between various groups. Woman worker unsure of "Mothers Day" allocation ie a day given to women in Zambia who are in pain on their menstrual cycle. Community Forest Rangers would like to be all be Honorary rangers. WeForest has not provided any feedback on the growth and recovery rates in the PMP's. | See OBS 02/21. |
|----------------------|---|----------------|
| 2: Tenure & Security | NA | |
| 3: | NA | |
| Implementation | | |
| 4: Monitoring | | |
| and Reporting | NA | |

1.5 Actions taken by Organisation Prior to Report Finalization

NA

2 AUDIT PROCESS

2.2 Verification Standard Used

| Standards Used (including version): | Forest Standa | Ecosystem rd 1.0 | Restoration | Field | Verification |
|--|------------------|---------------------|-------------|-------|--------------|
|--|------------------|---------------------|-------------|-------|--------------|

2.3 Audit Team and accompanying persons

| Name | | Role and qualifications |
|----------------------|------|---|
| Ivan Muir | | The Lead Auditor is a Forester (B: Tech Forestry) with a Master's in Environmental Management (UFS) who was a FSC FM Lead Auditor for 10 years and a FSC COC Lead Auditor Trainer. He has audited and worked in more than 21 African countries over the last 25 years in various forests such a miombo, tropical and also plantations. He has participated in ISO14001 and OHSAS 18001 Lead Auditor Training. |
| Richard 2 Donovan | Zell | Senior forestry specialist with a Master's in Natural Resources Management & Administration, with an emphasis on forest hydrology and community forestry. He provided technical support prior to, during and after the field work, and reviewed the draft report. |

| Mateo Cariño Frasse | Mateo is Land Use Program Manager at Preferred by Nature. As Forest Engineer with a Master's degree in Rural and Tropical Forestry, Mateo has gained extensive experience in forestry and carbon auditing (FSC, PEFC, CCB, VCS, Gold Standard, Plan Vivo, Carbon Footprint Management, etc.) and projects over 20 years globally. He has been training in forestry auditing, and is currently leading the PbN FER Initiative. Mateo speaks Spanish, French, English, and Portuguese. Mateo reviewed the draft report and will approve any verification statement that is released for this restoration project. He did not conduct field work. |
|------------------------|---|
| | |

2.4 Audit Overview

Note: The table below provides an overview of the audit scope and auditors. See standard checklist annex for specific details on people interviewed and audit findings per site audited.

| Site(s) | Date(s) | Main activities | Auditor(s) | | |
|--|-----------|-----------------|------------|--|--|
| Kamfinsa HQ | 10 May 21 | Document Review | Ivan Muir | | |
| Mpatamatu Area | 11 May 21 | Field Visit | Ivan Muir | | |
| Maposa Area | 11 May 21 | Field Visit | Ivan Muir | | |
| Mikomfwa Area | 12 May 21 | Field Visit | Ivan Muir | | |
| Stakeholder | 12 May 21 | Field visit | Ivan Muir | | |
| Consultation | - | | | | |
| Total number of person days used in the field: 4 (not including days spent in preparation, | | | | | |
| travel or post-field work analysis, writing and review) | | | | | |

= numbers of auditors participating 1 X number of days spent in preparation, on site and post site visit follow-up including stakeholder consultation 4.

2.5 Description of Overall Audit Process

This audit was a "pilot test verification" of this restoration project. In addition to testing the restoration standard, Preferred by Nature will provide to WeForest a public statement verifying field performance.

There was no pre-assessment visit allocated for this audit as the project is small in scale as it is based on land smallholders and Community managed restoration.

The forestry type throughout the project area is Miombo woodland which is the dominant forest type in the area. Sizes of farms vary between 2 and 150 ha, size of ANR between 0.5 and 55 ha (1 lima = 0.25 ha).In addition, they are all privately owned.

In total there were 796 farmers that could be visited and 18 of the farmers were visited (2.26%). The constraint here was the vehicle was not suited to the terrain and the 2 x 4 van was slow over the bad roads. The vast area made travel slow.

A map was pulled up and a number of farmers were chosen at stratified random in what could be ascertained as higher risk areas. High risk in this context is farms near wetlands, major access roads, villages and towns.

On the first day the Head Office at Kamfinsa was visited and documents and the management system were reviewed. The next 2 days were spent in the field, observing restoration efforts and interviewing stakeholders.

2.5.1 List of FMUs selected for evaluation

| FMU Name | Rationale for Selection |
|-----------|---|
| Mpatamatu | There are 6 districts in the Luanshya project site and 3 sites were chosen, namely CFR 2 Mpatamatu, CFR3 Mokomfwa and CFR 6 Maposa. CFR 4 and CFR 5 had just received a new Community Forest Ranger so the auditor decided not to visit these sites as it might not give a fair representation of the project. |
| Mokomfwa | As above |
| Maposa | As above |

2.5.2 List of management aspects reviewed by assessment team

| Type of site | Sites visited | Type of site | Sites visited |
|-------------------|------------------|-------------------------|------------------|
| Road construction | | Illegal settlement | |
| Soil drainage | | Bridges/stream crossing | |

| Workshop | | Chemical storage | |
|---------------------------|---|-------------------------|----|
| Tree nursery | | Wetland | 1 |
| Planned Harvest site | | Steep slope/erosion | |
| Ongoing Harvest site | | Riparian zone | 1 |
| Completed logging | | Planting | |
| Soil scarification | | Direct seeding | |
| Planting site | | Weed control | 1 |
| Felling by harvester | | Natural regeneration | 18 |
| Felling by forest worker | | Endangered species | |
| Skidding/Forwarding | | Wildlife management | |
| Clearfelling/Clearcut | | Nature Reserve | |
| Shelterwood management | | Key Biotope | |
| Selective felling | | Special management area | |
| Sanitation cutting | | Historical site | |
| Pre-commercial thinning | | Recreational site | |
| Commercial thinning | | Buffer zone | 1 |
| Head Office | 1 | Local community | |
| Permanent Monitoring Plot | 1 | | |

3 Organization DETAILS

3.2 Organization specific background information

Ownership and land tenure description (legal and customary)

In Zambia there are 3 types of tenure. Either state land (owned and managed by the State, such as national forests), customary land where the land is owned by the local chief, however the land may be assigned for use to a particular family or farmer. A fee is sometimes paid for the use of this land. The third type of tenure is private ownership.

For the WeForest project in Luanshya, all of the land that is under Assisted Natural Regeneration (ANR), WeForest's preferred restoration technique in this case, is privately owned. In most cases the farmer will have a title deed for the land, however in some cases where the title deed has yet to be issued by the Lands Department, the farmer has a receipt or letter for the land.

Legislative and government regulatory context

Zambia is a multiparty representative democracy whose head of state is the president. The constitution established in 1991 serves as the framework for the Zambian political system. Zambia gained independence in 1964 after which it became a republic under the 1964 constitution. Under the leadership of Kenneth Kaunda (1964-1991), Zambia became a one-party state after the introduction of the 1973 constitution. However, tensions and opposition to party monopoly of the United National Independence Party led to the reintroduction of multiparty politics in 1991 and marked the end of Kaunda's rule.

The legislature is comprised of the president and the National Assembly. Zambia has a unicameral national assembly of 158 members, eight of whom the president nominates, while the citizens elect 150 for five-year terms. Members of the national assembly elect the

speaker. The legislature drafts and passes national laws in the form of bills. For a bill to become law, the president has to approve and sign it.

(Source: What Type Of Government Does Zambia Have? - WorldAtlas)

While the land may be private land, the forests on the land are still under the management of the Forestry Department. Should a farmer want to cut down a number of trees to sell or to make charcoal, a permit is required from the Forestry Department.

Environmental Context

Zambia has an estimated deforestation rate of 250,000 to 300,000 hectares per year. This is the second highest per capita deforestation rate in Africa and the fifth highest in the world. Studies of drivers of deforestation and degradation have identified agricultural expansion, unsustainable wood fuel production, unmanaged timber extraction, bush fires, mining, land use and infrastructure development as the proximate drivers of deforestation and forest degradation. The underlying causes are underpinned by demographic, economic, technological, policy and institutional as well as cultural causes. Poverty and population increase are two principal underlying causes of deforestation and forest degradation in the country. This is due to the fact that rural populations rely heavily on the forest for their sustenance and informal economic activities such as charcoal production and sale. Forest products make a significant contribution to rural livelihoods in Zambia as they are a source of fuel, shelter, food, pasture and fodder, medicinal plants and household utility items. Therefore, the local people regard forests as a pharmacy, supermarket, a building supply store and a grazing resource⁷. In addition, forest provide employment and business opportunities such as pitsawing and trading in non - timber forest products such as fruits, mushrooms and honey. Forests are also used as a coping strategy and a safety net when rural households are faced with stresses and shocks.

The Copperbelt province is one of the highly deforested provinces in Zambia today as it faces serious challenges through encroachments, illegal exploitations of forest resources in both the open forests and protected forest areas as well as on agricultural land. The illegal exploitation of forest resources is mostly done without due regard for the existing laws governing sustainable management of forest resources in the province or the country at large (*Source: Katanino Project Document, 01 Dec 2020*).

Socioeconomic Context

The WeForest project is located in the Copperbelt region, where the collapse of the mining industry in the 1990s, and more recently 2016, forced large numbers of unemployed miners to turn to small-scale agriculture and charcoal production to make a living, placing additional pressure on the surrounding forests. According to Hansen and colleagues (2013), the Copperbelt was the region with the highest forest cover loss in Zambia between 2000 and 2012, and hence an area where urgent inclusive interventions are needed. Since farmers in the area are non-traditional farmers, it is becoming increasingly important to support and train farmers in becoming environmental stewards and switching to sustainable forest related income strategies. Currently, under-utilized woodlots located in smallholdings are often unsustainably deforested for charcoal production, after which another part of the farm is allowed to slowly recover into young forest with the same purpose. This project enables the development of livelihood activities (beekeeping, fruit and timber trees) at no additional cost to the farmers, while promoting green growth, by targeting under-utilized and degraded woodlots of small-scale farmers for natural regeneration and biomass harvesting.

Where farmers put aside a part of their land (minimum 0.5 ha) for ANR they will be allowed to extract a pre-agreed volume of wood yearly from the ANR, dependent on forest recovery status and ANR size. The pre-agreed volume of wood extracted can then increase over the

years, but should be kept under the threshold of yearly biomass accumulation per hectare of recovering forest. From the moment a certain tree has reached its biological rotation age, it can be harvested for timber purposes only, assuring that carbon is kept locked up in furniture or building (*Source: Concept Note, WeForest FFD 28/08/17*)

3.3 General overview of the organization and scope

The WeForest project is located in the Copperbelt region, where the collapse of the mining industry in the 1990s, and more recently 2016, forced large numbers of unemployed miners to turn to small-scale agriculture and charcoal production to make a living, placing additional pressure on the surrounding forests. According to Hansen and colleagues (2013), the Copperbelt was the region with the highest forest cover loss in Zambia between 2000 and 2012, and hence an area where urgent inclusive interventions are needed. Since farmers in the area are non-traditional farmers, it is becoming increasingly important to support and train farmers in becoming environmental stewards and switching to sustainable forest related income strategies. Currently, under-utilized woodlots located in smallholdings are often unsustainably deforested for charcoal production, after which another part of the farm is allowed to slowly recover into young forest with the same purpose. This project enables the development of livelihood activities (beekeeping, fruit and timber trees) at no additional cost to the farmers, while promoting green growth, by targeting under-utilized and degraded woodlots of small-scale farmers for natural regeneration and biomass harvesting (Concept Note WeForest FFD 2021/08/17).

Where farmers put aside a part of their land (minimum 0.5 ha) for assisted natural regeneration (ANR) they will be allowed to extract a pre-agreed volume of wood yearly from the ANR, dependent on forest recovery status and ANR size. The pre-agreed volume of wood extracted can then increase over the years, but should be kept under the threshold of yearly biomass accumulation per hectare of recovering forest. From the moment a certain tree has reached its biological rotation age, it can be harvested for timber purposes only, assuring that carbon is kept locked up in furniture or building. For short term income generation, WeForest was subsidizing and supporting the installation of beehives (2,000 up to now) and the planting of fruit trees (500), besides the distribution of timber tree seedlings (80,000) for the longer term.

Smaller wood such as multistems and branches can be sold as fuel wood. A market for fuel wood can be developed and eventually can replace charcoal under certain conditions: 1) Fuel wood can be sourced from nearby farms to keep transport costs low. 2) Consumers are stimulated (and preferably

subsidized) to buy a wood efficient stove (e.g. Peko Pe stove). This fuel wood can provide a large market as basically any charcoal burner can shift to production of fuel wood or woodchips, and charcoal is less efficient compared to wood fuel (Table 1, Fig. 1). Even more so, other sources of dry biomass (such as maize kobs or twigs) can be used as fuel in many stoves (incl. Peko Pe stove, fig 2).

WeForest is a non-profit organization that is based in Belgium and is enganged in restoration projects in a number of countries. The Luanshya project was the first of its kind in Zambia.

The land is owned by private farmers who have signed up to the Luanshya Forest Commodities Association (LFCA) are assisted by WeForest (WEF) in running and financing the project. There are currently 796 farmers who are members of the scheme and are located in 6 districts in the Luanshya area.

The following are partners and stakeholders of WeForest.

- Luanshya Forest Commodity Association (LFCA): Intense collaboration with 2-weekly catchup meetings, as well as indirect follow-up of their organisational strengthening progress through consultancy

- Rainlands Timber: One of the beehive and seedlings (Katanino) producers.
- Timcore: New beehive producer that WEF is working with.
- BeeSweet: Honey Purchaser
- Wildhives&Co: Honey Purchaser
- Nature's Nectar: Honey Purchaser

- Luanshya Forest Department: Strong relationship through implementing community forest rangers. Planning and partly evaluation of their patrols is done by the District Forest Officer Mr Hampungani. (Luanshya WF 2020 Annual Report, pg 6)

As at 31 December 2020, there were 951 farmers that had 3,189 ha under ANR. (Luanshya Annual Report 2021.01.13 pg 9) which are located in 6 areas of the Luanshya District within Copperbelt Province

The ANR areas are a minimum of 0.5ha in sizeand . are privately owned and where there are high trees, each farmer is provided with 5 beehives from LFCA/WEF. These hives are placed there by a bee mentor who is also the same person who will harvest the honey. From the sales proceeds, the farmer will receive 60% of the revenue, the bee mentor 20% and the LFCA 20%. This forms part of the Livelihoods programme.