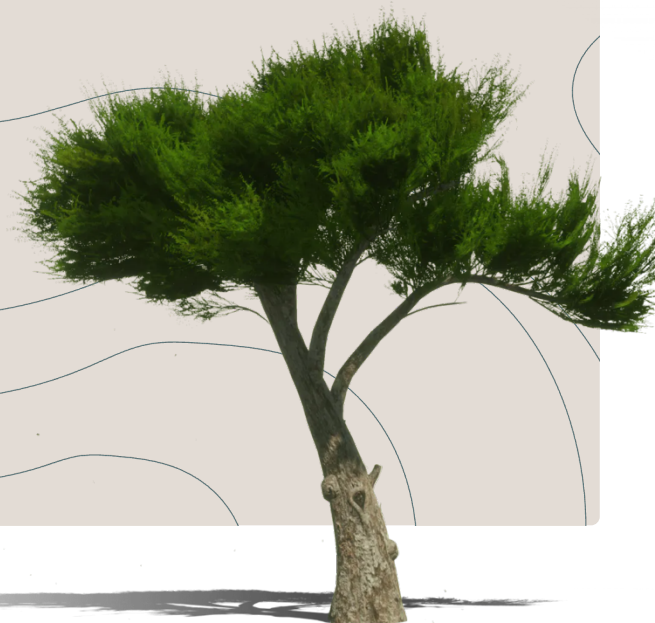


March 2024

Treebytree

Transparency statement

Hi, we are TreebyTree. We are on a mission to turn 'corporate gifting' into 'gifting back' and become the new norm within the industry. We enable companies to restore degraded land and cool down the planet by helping them to gift trees. In this document we provide all necessary information to provide transparency in our way of working, technology used, and official processes we use to establish and substantiate our impact calculations and project updates.



Executive summary

Hi, we are TreebyTree. We are on a mission to turn 'corporate gifting' into 'gifting back' and become the new norm within the industry. We enable companies to restore degraded land and cool down the planet by helping them to gift trees.

In order to bring our ambitions to reality, we have built a company structure, follow a specific route to market, work with high quality suppliers and developed processes for tree capturing, gifting, impact measuring and quality control. This document describes these subjects in more detail, providing potential partners full transparency on our way of working, quality management and auditing processes. If any questions remain after analyzing the provided information, do not hesitate to contact us.

Treebytree manifest

**Two things we don't need. Disposable gifts. And global warming.
Time to re-think corporate gifting.**

We are a social enterprise on a mission to turn 'corporate gifting' into 'gifting back'. We want to become the new norm within the industry. We enable companies to gift trees, thereby providing 100% sustainable gifts, help restore degraded land, and cool down the planet.

By empowering thousands of businesses and their employees, customers and other stakeholders, we use the power of many to bring back trees. These trees are brought back in the heart of Africa by Justdiggitt and thousands of farmers.

Together we can bring back 1 billion trees before 2050, help restore nature and build a movement for greening.

So gift a tree. Grow a forest. Make an impact.

Our values

- We are dedicated... to fight climate change, restoring ecosystems is the way forward. So we will not stop until every employee has a tree.
- We are collaborative... by unlocking the potential of thousands of companies and join forces, every single one of us can make a difference.
- We are solution driven... our business is a force for good. By gifting trees, we help people to become part of a solution and help restore nature.

Our vision

Our vision is to help restore ecosystems by turning 'corporate gifting' into 'gifting back' and become the new norm within the industry.

Our mission

Our mission is to enable companies to gift trees to their stakeholders, unlock the potential of thousands of businesses and build a movement for greening - together!

Our purpose

Our purpose is to facilitate the corporate gifting of trees so we can restore degraded land, fight global warming and cool down the planet. Tree by tree.

Our promise

We are here to help companies make a difference. Together with NGO Justdiggitt and our other ecosystem restoration partners, we aim to bring back 1 billion trees before 2050.

More information

To visit us, check:

www.treebytree.earth

For our video, check:

[this link](#)

Quality principles

Principles of successful ecosystem restoration

Ecosystem and landscape restoration are broad terms. For us at treebytree, the goal of ecosystem and landscape restoration is to stop land degradation and decreased vegetation, erosion, flooding and the loss of biodiversity. By using a diverse range of landscape restoration techniques, nature can be nurtured back to life, vegetation can be brought back, soil nutrients and water infiltration can be increased and erosion and degradation can be stopped. Techniques include recovery of trees, planting of trees in areas where this provides the necessary impact, rainwater harvesting and development of grass seed banks. It's important to note that greening is not a one-size-fits-all solution. There are many different sustainable land management interventions. Based on the specific circumstances in project areas, the correct techniques should be selected. These conditions can be physical such as land use, climate, soil conditions and slope. But social conditions such as socio-economic structures and social factors defining land use are equally important.

Successful ecosystem restoration takes into account all of the above which in turn can lead to several benefits and outcomes.

Vegetation cools

The shade and transpiration from vegetation help to cool down the soil and the air around it. The impact of vegetation on the micro-climate can be clearly seen in this picture. The soil with the vegetation is much cooler than the soil without vegetation!

Restoring the water cycle

Transpiration (plants releasing moisture into the air) cools down the soil and increases moisture into the air, which helps to create clouds. This increases the chance of rain, especially at the beginning and end of the rainy season, helping to restore the water cycle.

Increasing water availability in the soil

The root system of the vegetation makes the land more porous, enabling water to enter the ground more easily. The amount of water evaporating from the soil is reduced thanks to the shade provided by the vegetation of plants and trees. This increased infiltration and decreased evaporation increases the water availability in the soil.

Improving soil quality

Increased vegetation also means more organic matter and more nutrients in the soil. The roots of the vegetation help to retain nutrients in the soil. Improving soil quality like this is important for supporting tree and plant growth.

Preventing erosion

The roots of plants and trees also help to retain the upper layer of soil during intense rainfall. This prevents the erosion of fertile soil.

Carbon sequestration

Besides a cooling effect on the micro-climate, vegetation also has a cooling effect on the regional and even global climate. By removing CO₂ from the air, the amount of CO₂ in the atmosphere decreases, subsequently reducing the greenhouse effect. On a large scale, this has a positive impact on global warming.

Social benefits

For all the projects we are engaged in, we look for a clear socio-economic benefit for the community attached to each intervention. The interventions should be designed and implemented in partnership with communities and local NGOs, to benefit from their networks and knowledge and make sure the solutions provided are sustainable and long lasting.

Quality assessment

When it comes to ecosystem restoration it is sometimes difficult to distinguish between a good and a bad project. Commercial timber production, bringing back ecosystems and / or agroforestry to support local communities can lead to very different projects with many different outcomes. This can lead to accidental miscommunication and even greenwashing. To prevent these situations, treebytree assesses potential partners based on several key criteria.

1. Carbon sequestration impact.

Capturing carbon to fight climate change is one of the main drivers for restoration and large scale tree-planting initiatives. But the reality is that tree planting can have a large carbon footprint itself. Large scale reforestation projects can disturb ecosystems and release large amounts of carbon in the process. That's why we focus on partners that can prove that projects do not generate excessive short term emissions and have a positive impact on carbon sequestering on the medium and long term. Treebytree will analyze the carbon calculations and underlying assumptions in detail before engaging in active partnerships.

2. Quality in combination with quantity: the importance of biodiversity

Mature ecosystems are very complete and diverse in terms of flora, fauna, and the balance between these two building blocks. These ecosystems are home to a wide variety of species, plants and animals that depend on each other for survival. Large scale and not properly executed restoration and reforestation projects can skip many of these steps, thereby not giving the opportunity to many of the early colonizing plants, shrubs and perennials to establish themselves. Also, the trees that are brought back or planted might have a too high density or they can be monocultures, either causing wrong light regimes or too little support for the development of biodiversity. Treebytree is looking for partners that seek to develop rich ecosystems with a respect for local circumstances, local species and with a focus on both the importance of quality and quantity.

3. Prevention of monocultures

Event though in terms of quantity it might look positive to develop large scale reforestation projects with single fast growing species, we are very much against this way of working. This method leads to the risk of planting non-native species, and systems that support fewer or no local species. In turn, this can lead to local ecosystems becoming even less diverse and resilient then they were before the start of the specific restoration project.

4. Choosing the right method for the right place

Based on local circumstances, specific techniques can be chosen for restoration of ecosystems. We believe that there are several alternatives to tree planting that should always be considered before deciding to plant. Some examples include Assisted Natural Regeneration (where an initial intervention is made to remove barriers to regeneration, e.g. fencing or rainwater harvesting) and Farmer Managed Natural Regeneration (an agroforestry approach to regrow trees and support new, naturally emerging sprouts to grow big). Planting trees can be valuable and effective in situations where there are no seed banks left and the native forests are locally extinct or in places where there is serious erosion and natural regeneration is too slow. We assess if our potential partners can support their choice for restoration techniques with proper analysis.

The treebytree validation process, when it comes to quality assessment, therefore mainly revolves around five central questions that we ask our suppliers:

- A. For what purpose(s) are your restoration projects being developed?
- B. How do you ensure to support a balanced ecosystem with your projects, what trees are being brought back or planted and where?
- C. Can you provide us transparency on the exact geolocation of the trees that are being brought back or planted, the location of the various projects and a clear project description and why it is important to restore in that particular location(s).
- D. Can you prove that the trees that are being uploaded to the database are unique, and that you have a technical process to ensure these trees cannot be registered or gifted twice?
- E. Can you provide us transparency on the way of working, processes and details of partner organizations (if any)?

Transparency

Intro

We appreciate the importance of transparency as the ultimate key to a traceable and therefore credible product and associated (positive) impacts. We are (unfortunately) aware of the many examples of projects that claim sustainable results but cannot back these claims with solid data or – even worse – projects that were assessed and showed no or even negative results. Especially in the field of sustainability, positive impact enterprises and NGOs, trust is the main pillar on which the businessmodel is built. Without trust, no client base, and without client base, no positive impact.

Therefore, transparency is one of our main focus areas. Fortunately we have the technological capabilities to provide very precise insight into our way of working, main technologies, and all instruments we have in place to account for all claims that are being made. Below, please find more information on all the disclosure our partner organization Justdiggitt provides. Also, please find all the insight we can provide you on our own way of working, technology used and efforts in place to ensure no double counting of impact, trees gifted or other impacts.

Partner information

All the trees we offer through our platform are brought back by Dutch NGO Justdiggitt. They were founded in 2009 by Peter Westerveld and Dennis Karpes. Their goal is to restore and regreen degraded landscapes, increase biodiversity, and have a positive impact on the climate.

We work with Justdiggitt because we believe they are the best greening organization working in the place where it is needed most, with scientifically backed programs, a long track record and support from local communities. Started in 2009 they have helped restore more than 380,000 hectares of land, brought back over 13 million trees, and built a grassroots movement that keeps growing every day.

Justdiggitt applies multiple techniques to bring back vegetation within degraded areas. In Tanzania farmers use a technique called Farmer Managed Natural Regeneration (FMNR), also known as Kisiki Hai in Swahili. It helps the farmers to regrow felled trees. Justdiggitt made two educative documentaries so you can learn how this exactly works: [Kisiki Hai I](#) & [Kisiki Hai II](#).

Visit www.justdiggit.org for more information. Also, please check out the impact page on their website <https://justdiggit.org/what-we-do/impact/>, or read [their latest impact report](#). Here you can find all detailed data on impact measurement, progress updates and way of working.

Tree ownership

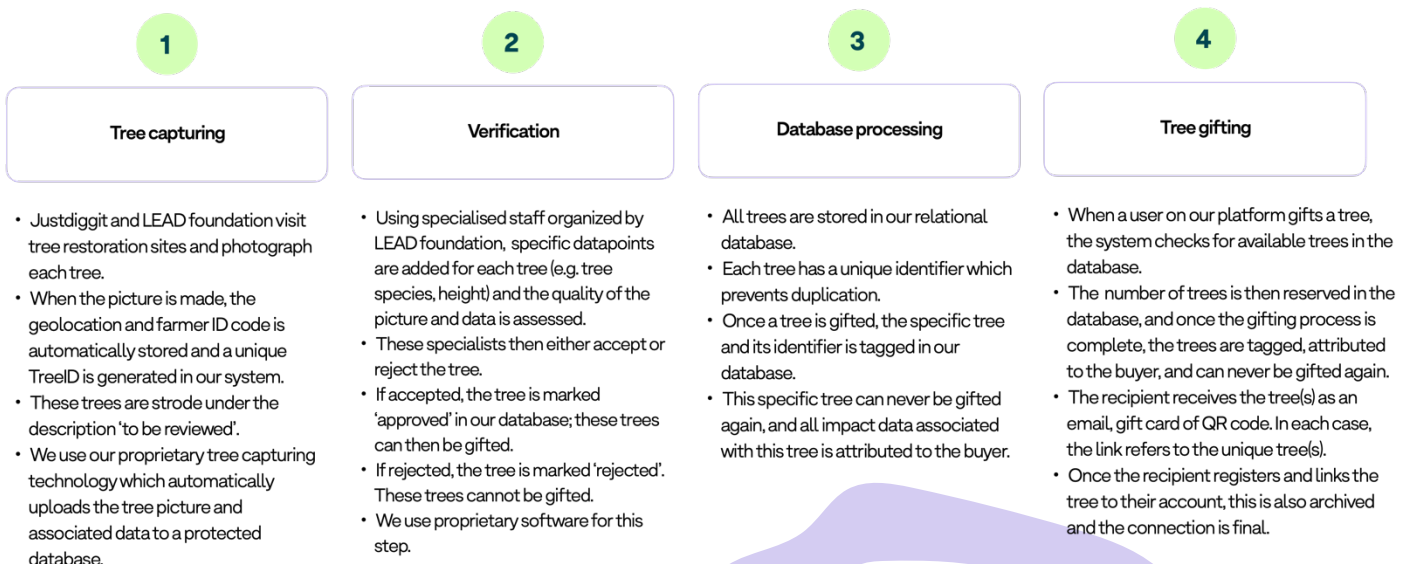
When a tree is gifted, legal ownership does not change. The farmer, person that has planted the tree or the owner of the land will remain owner of the tree for its whole lifetime. The funding is used to train and motivate the farmers to maintain the trees and to inspire more farmers to recover their trees. It's the start of a long initiative to make people aware of the positive impacts and benefits of trees which has already led to the restoration of many trees.

All gifted trees are trees that are brought back to life in the heart of Africa, where re-greening is needed the most. The projects that the gifted trees are part of, are developed and monitored for the next 20 years, by our partner Justdiggit together with hundreds of local communities and thousands of farmers. Of course, we're talking nature here, so we can't promise 100% of the trees will survive for the full 20 years. In general, for the technique of Farmer Managed Natural Regeneration (or FMNR, the technique that is used by Justdiggit), we see a survival rate of 80%.

Disclosure on way of working

Tree capturing process & accountability

In order to capture trees, upload the trees to our database, add necessary datapoints and enable them to be gifted we follow a strict technical process supported by specific technology and technology partners. The process is designed for efficient capturing and processing of trees, but also to provide state of the art traceability of trees and all associated data. One of the main functions of this process is to ensure that there will never be any possibility to double-count impact metrics, or gift specific individual trees twice. Below, please find a flow chart describing the process, including detailed descriptions of each step.



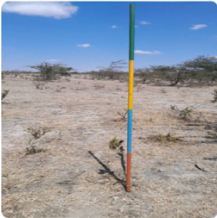
Example A: pictures of capturing process in Tanzania by LEAD foundation



Example B: screenshot of tree capturing database

Dashboard

tree: 6029244



Date and time brought back
22/07/2023, 10:44

Location
Lat: -5.961708937771618° N
Lon: 36.80161911807954° E

Comments
MLA-Lobilo-3
Mfesandogowe

Farmer *
mla-lobilo-3

Tree height *
 0-50 cm
 51-100 cm
 101-150 cm

Tree species *

<input type="radio"/> Acacia mellifera	<input type="radio"/> Acacia nilotica
<input type="radio"/> Acacia senegal	<input type="radio"/> Acacia tortillis
<input type="radio"/> Bauhinia petersiana	<input type="radio"/> Boscia angustifolia
<input type="radio"/> Dichrostachys cinerea	<input type="radio"/> Euphorbia candelabrum
<input type="radio"/> Grewia hexamita	<input type="radio"/> Vitex doniana

Other

Tree photo *

There is a tree in the photo
 The photo is not blurry

✕ Reject tree
✓ Approve tree & next

Example C: screenshot of database with tree category 'approved'.

Identifier	Latitude	Longitude	TreeCode	FarmerCode	Name	Description	Status	ImageUrl
6256215	-4.97354433...	35.9162372...	combretum_molle	mon-mondo-1	Combretum molle	Combretum molle, also known as t...	Approved	https://blob.
6256214	-4.97359535...	35.91622609	combretum_molle	mon-mondo-1	Combretum molle	Combretum molle, also known as t...	Approved	https://blob.
6256213	-4.97357505...	35.9162095...	combretum_molle	mon-mondo-1	Combretum molle	Combretum molle, also known as t...	Approved	https://blob.
6256212	-4.97356952...	35.9161755...	combretum_molle	mon-mondo-1	Combretum molle	Combretum molle, also known as t...	Approved	https://blob.
6256211	-4.97357846...	35.91613519	combretum_molle	mon-mondo-1	Combretum molle	Combretum molle, also known as t...	Approved	https://blob.
6256210	-4.97356472...	35.91612385	combretum_molle	mon-mondo-1	Combretum molle	Combretum molle, also known as t...	Approved	https://blob.
6256209	-4.97354985...	35.9160897...	combretum_molle	mon-mondo-1	Combretum molle	Combretum molle, also known as t...	Approved	https://blob.
6256208	-4.97358221...	35.9161081...	combretum_molle	mon-mondo-1	Combretum molle	Combretum molle, also known as t...	Approved	https://blob.
6256207	-4.973625716	35.9160823...	combretum_molle	mon-mondo-1	Combretum molle	Combretum molle, also known as t...	Approved	https://blob.
6256206	-4.973620176	35.9160958...	combretum_molle	mon-mondo-1	Combretum molle	Combretum molle, also known as t...	Approved	https://blob.
6256205	-4.973607844	35.9161050...	combretum_molle	mon-mondo-1	Combretum molle	Combretum molle, also known as t...	Approved	https://blob.
6256204	-4.973617702	35.9160961...	combretum_molle	mon-mondo-1	Combretum molle	Combretum molle, also known as t...	Approved	https://blob.
6256203	-4.973597968	35.9161060...	combretum_molle	mon-mondo-1	Combretum molle	Combretum molle, also known as t...	Approved	https://blob.
6256202	-4.973619142	35.9161256...	combretum_molle	mon-mondo-1	Combretum molle	Combretum molle, also known as t...	Approved	https://blob.
6256201	-4.973632072	35.9161256...	combretum_molle	mon-mondo-1	Combretum molle	Combretum molle, also known as t...	Approved	https://blob.
6256200	-4.973621256	35.9161562...	combretum_molle	mon-mondo-1	Combretum molle	Combretum molle, also known as t...	Approved	https://blob.
6256199	-4.97361764...	35.91614626	combretum_molle	mon-mondo-1	Combretum molle	Combretum molle, also known as t...	Approved	https://blob.
6256198	-4.97364967	35.91614416	combretum_molle	mon-mondo-1	Combretum molle	Combretum molle, also known as t...	Approved	https://blob.
6256197	-4.973681474	35.91612624	combretum_molle	mon-mondo-1	Combretum molle	Combretum molle, also known as t...	Approved	https://blob.
6256196	-4.97363853	35.9160899...	combretum_molle	mon-mondo-1	Combretum molle	Combretum molle, also known as t...	Approved	https://blob.
6256195	-4.973641368	35.9160861...	combretum_molle	mon-mondo-1	Combretum molle	Combretum molle, also known as t...	Approved	https://blob.
6256194	-4.973643182	35.91605736	combretum_molle	mon-mondo-1	Combretum molle	Combretum molle, also known as t...	Approved	https://blob.

Example D: screenshot of database with tree category 'rejected'.

In the screenshot below, it is clearly visible certain data fields are missing. The trees are therefore rejected and cannot be gifted.

Identifier	Latitude	Longitude	TreeCode	FarmerCode	Name	Description	Status	ImageUrl
6053422	-4.42697227...	36.0069450...		pah-chubi-2			Rejected	https://blob.t
6053396	-4.42832454...	36.0060315...		pah-chubi-2			Rejected	https://blob.t
6053395	-4.42833339...	36.0060283...		pah-chubi-2			Rejected	https://blob.t
6053383	-4.42909883...	36.0056434...		pah-chubi-2			Rejected	https://blob.t
6054748	-4.43028939...	35.9890543...		pah-chubi-2			Rejected	https://blob.t
6055138	-4.43030429...	35.9874808...		pah-chubi-2			Rejected	https://blob.t
6050721	-4.43060835...	36.0035517...					Rejected	https://blob.t
6053343	-4.43070373...	35.9994297...		pah-chubi-2			Rejected	https://blob.t
6053333	-4.43084400...	35.9984660...		pah-chubi-2			Rejected	https://blob.t
6054733	-4.43095736...	35.9878951...		pah-chubi-2			Rejected	https://blob.t
6054692	-4.43097727...	35.9891842...		pah-chubi-2			Rejected	https://blob.t
6054691	-4.43098235...	35.9891868...					Rejected	https://blob.t
6054698	-4.43107757...	35.9891647...		pah-chubi-2			Rejected	https://blob.t
6055122	-4.43160654...	35.9878326...		pah-chubi-2			Rejected	https://blob.t
6053323	-4.43315299...	35.9982484...		pah-chubi-2			Rejected	https://blob.t
6053321	-4.43315891...	35.9982951...		pah-chubi-2			Rejected	https://blob.t
6053307	-4.43367301...	35.9979002...		pah-chubi-2			Rejected	https://blob.t
6053303	-4.43424621...	35.9977802...		pah-chubi-2			Rejected	https://blob.t
6048288	-4.43593818...	36.0153966...					Rejected	https://blob.t
6051139	-4.44232961...	35.9887614...		pah-chubi-2			Rejected	https://blob.t

Impact metrics and background to calculations

CO₂ sequestering

Trees absorb carbon and emit clean, pure oxygen. They are the lungs of our planet. By restoring (and donating) trees, you directly contribute to increased CO₂ uptake. In collaboration with a specialized external party, our partner Justdiggitt has developed a calculation model that estimates the absorbed CO₂ based on a growth model. The model takes into account detailed local conditions and can thus determine a verified amount of CO₂ absorbed by the trees at the ecosystem level. This can then be converted into CO₂ uptake per tree.

The estimated total amount of CO₂ absorbed over a 20-year period by an average FMNR tree is 240 kg. The average survival rate of FMNR trees is 80%. It is assumed that CO₂ uptake occurs more or less linearly over the 20-year period and that the average FMNR tree, when rehabilitated, is 1 year old.

This allows us to estimate the CO₂ capture over the lifespan and to date of all FMNR trees. This method provides an accurate estimate of carbon sequestration across large groups of trees.

Under the quality assessment chapter, we have provided details on our general quality principles. When it comes to CO₂ accounting, one of our impact metrics, international criteria have been established that official 'carbon credits' must meet. Although Treebytree and Justdiggitt are not formally connected to the international market for carbon credits, they ensure that the same quality standards are adhered to. Below, we will address 7 important quality criteria:

- **Actual reduction:** It must be proven that CO₂ uptake or reduction and associated projects have actually taken place. By working with a high-quality partner with a proven track record like Justdiggitt, Treebytree can demonstrate that projects and reductions have occurred. Justdiggitt's impact reports provide evidence of this. Additionally, the exact geolocation of each tree is available and can be found in your personal Treebytree dashboard.
- **Measurable:** CO₂ uptake or reduction must be measurable using a credible and well-founded methodology. For this purpose, Treebytree and Justdiggitt collaborate with specialized external parties that have developed calculation models to determine CO₂ uptake in specific project areas.
- **Permanence:** The risk of reversibility of measures must be minimal. In the case of Treebytree and Justdiggitt, trees are restored using the FMNR method, which stands for Farmer Managed Natural Regeneration. This technique involves carefully rejuvenating damaged trees so that they can grow into mature and healthy trees in a short period. Since the trees already have a root structure, more than 80% of them survive. Furthermore, the trees provide crucial benefits to local farmers such as increased soil fertility, local cooling, more (controlled) rainfall, and in some cases, fruits that can be eaten, used as animal feed, or sold in the market. This greatly reduces the risk of farmers cutting down trees, for example, to use as firewood.
- **Additionality:** CO₂ uptake must be additional, meaning it would not have occurred if the project had not been implemented. In the case of Treebytree's projects, this is immediately apparent. Through the projects, millions of trees are restored that would otherwise never have had the chance to grow into mature trees. The CO₂ absorbed as a result is additional.
- **Verified by independent third parties:** The models used are developed by an independent third party. Although the projects are not part of the international voluntary CO₂ market, Treebytree and Justdiggitt work with specialized and independent third parties to ensure project quality. For more information, refer to Justdiggitt's annual impact reports.
- **Uniqueness and transparency:** It must be proven that the CO₂ uptake of the project can only be attributed to a single party once. Each tree restored by Treebytree is assigned a unique code linked to geolocation, farmer, and tree species. When trees are purchased and assigned by a party, they are removed from the database and cannot be reassigned. This ensures uniqueness.
- **Preventing overestimation of impact:** To prevent overly optimistic calculations, the calculation models make conservative assumptions. For example, only 80% of the maximum CO₂ uptake is included to account for the expected survival rate of FMNR trees.

Water retention

Global warming has several (severe) consequences. Especially in vulnerable areas, such as Sub-Saharan Africa, the consequences of climate change are felt on a daily basis. Extreme heat causes drought, leading to crops failure. When rain does arrive, it is often very intense, leaving no time for the water to infiltrate into the ground. It floods to lower areas, washing away the fertile top layer of the soil, a process called erosion. It leads to degradation of the land, making it hard to grow crops, causing a decline of vegetation and maintaining the land to be dry. Ultimately it can lead to poverty and famine in these areas.

Trees have been shown to reduce topsoil erosion by catching precipitation with their leaf canopies. This slows down the water runoff which in turn ensures that water is able to be percolate into the soil and replenish groundwater supplies.

To estimate water retention by FMNR trees, Justdiggitt uses calculations and data from field and scientific research, in combination with local real time data. The annual cumulative water retention is estimated based on science based averages for the specific region. Even though water retention is

somewhat lower in the first years after 'treecovery' and higher in the later years, the average can be set at 1.371 liters/tree/year. This number is based on a growth model for average FMNR trees. The numbers are estimated based on the age of the tree, average run-off and rainfall numbers. From this average, we are able to estimate the water retention of the FMNR tree to date, and over its 20 year lifetime.

Families positively impacted

Bringing back vegetation has a positive effect on local communities and their livelihoods. The projects lead to healthy pasture lands and increased crop yields, leading to increased income for the communities. Justdiggitt does not pay the farmers for recovering or maintaining the trees but teaches the farmers a simple and low-cost method of recovering the trees, explains why recovering the trees is important and inspires them to take action. Farmers benefit from the positive effects of recovering the trees on their farms, including healthier soils, better yield and less vulnerability to drought. This contributes to better food security and better income.

Promoting and implementing FMNR starts with the training of champion farmers and is ultimately done by the farmers implementing FMNR on their land. Each farmer has an average of 60 trees on his land. The average household size in the project regions is 5.6 persons. This means that for every 60 trees that are brought back, an average of 5 people is positively impacted (the number is rounded down).

Biodiversity

Event though we do not measure the exact effect on this metric, it's worth mentioning that greening projects also have a positive impact on the local biodiversity. By bringing back vegetation and restoring ecosystems, we improve the living environment for many different animal and plant species. With more water and food availability, we see an increase in biodiversity among plants, insects, birds and wildlife in the areas that have been regreened.

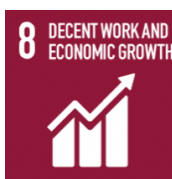
United Nations Sustainable Development goals

Through our efforts, we support the United Nations Sustainable Development Goals (SDGs). Please see the overview below of the SDGs we impact.



SDG 2

Bringing back trees impacts this SDG in two ways: by providing fruits, nuts and food for animals, and by increasing crop yield. The increase in crop yield and/or income promotes sustainable agriculture and has a positive effect on food security.



SDG 8

Ecosystem restoration is carried out in collaboration with local partners and farmers that support the projects for more than twenty years. The restoration itself increases soil quality and has a positive impact on crop yields.



SDG 13

By bringing back trees, treebytree in collaboration with JustDiggitt ensures CO₂ is sequestered. Furthermore, ecosystem restoration through FMNR has a positive impact on water retention, biodiversity and local microclimates (cooling it down, increasing precipitation and reducing heat stress of crops).



SDG 15

Bringing back trees combats desertification, reverses land degradation and has a positive effect on biodiversity.