

12TREE SUSTAINABILITY REPORT 2019/2020





Richard Focken CEO

#### "Dear reader of the 12Tree Sustainability Report,

Lately, you have been beset with news of accelerating climate change, glacier melting, and extensive deforestation of the Amazon Rainforest, the largest forest ecosystem in the world. Many are calling for more urgent climate action - especially the young. You, the partners of 12Tree, are actively committed to building a more sustainable future.

For over a decade the founding members of 12Tree have been working in reforestation and sustainable agriculture as these are the best solutions to address these issues. Together we will succeed in creating sustainable long-term value and proving that social, environmental responsibility and profitability are complementary and not a contradiction.

#### CHANGE

We have set out to help transform the financial investment industry. Over the last 3 years, we have developed large-scale land-use projects in 7 countries. On our investors behalf, we have injected triple-digit million euros into well balanced, profit-oriented projects. Our work has enabled us not only to foster employment, but to analyze the requirements of local populations to determine what constitutes a fair income for a family in a given set of circumstances all the while promoting education and personal development. Sharing our modern, high-performance farm infrastructures and methods with local smallholders wherever possible is helping them improve their livelihoods. You can learn all about the different measures we have undertaken in this report. How we walk the talk!

#### FAIR PROFITABILITY

Profit is a vital part of the sustainability equation. We are wholeheartedly committed to the belief that every project needs to be profitable in itself – Profitable to our investors, but also to local stakeholders, to our partners, and to the ecosystems our children and their children will inherit from us. Large corporations and large investors, have a responsibility to no longer accept the status quo. We must open our eyes and do everything in our power to fight climate change, protect the planet's biodiversity and end global poverty. This can be done. By leveraging three core skills in our company – asset management, a strong operational capacity, sales and marketing of ecological products – we can effect real change. The following examples illustrate just how much we can achieve with a fully committed, long-term approach to sustainability.

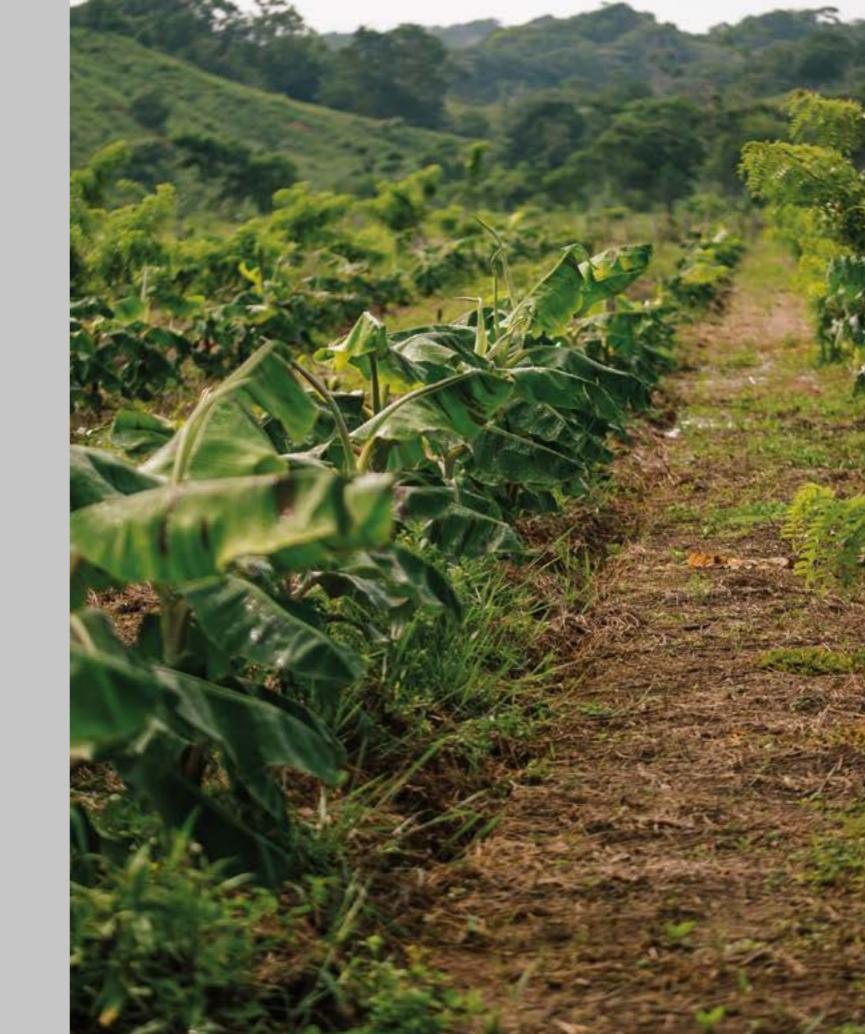
I appreciate any feedback you may have."

Richard Focken, CEO



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#### **12TREE LATEST NEWS**

#### **MARCH**

#### Limón and Guantupí

Transition to organic farming.



12Tree's team in the Dominican Republic organizes the first of what will become regular meetings for Farm Managers to share their experience and discuss best practice.



#### **BIODIVERSITY STUDY**

Aim: to make an inventory of all species present on the farm and measure the effect of the plantation on wildlife populations.



#### MAY

#### Award

#### 12TREE WINS THE INITIATIVE 20X20 PORTFOLIO AWARD

In recognition of extraordinary efforts in developing diversified land-restoration projects for institutional investors.

#### **SEPTEMBER**

#### 12Tree Cocoa Newsletter Issue 1 published.

#### Platanera Rio Sixaola

Achieves Global Gap certification.



#### **NOVEMBER**

#### Hacienda Maquencal

Work completed on building a water reservoir.

#### Sacha Award for agroforestry

Chimelb farm wins the Sacha Award (agroforestry category), a biennial prize awarded by the Ecuadorian government to promote best forestry practice and legal timber processing.



#### **FEBRUARY**

**JANUARY** 

Cuango

species.

**BIODIVERSITY STUDY** 

Aim: to study the positive impacts

agroforestry and landscape

connectivity have on local

#### Collection of performance data

Gathering our sustainability performance metrics from each farm.

#### SCOPE

Covers project operations, employment, health & safety, soil health, water & energy consumption, input & output volumes.

#### **APRIL**

#### Maquencal

Opens a new post-harvesting facility.

#### 12Tree office team

In April, 12Tree recruits its 31st corporate team member. The team is based in Berlin, Medellin and Panama City and now boasts 12 different nationalities.



#### JUNE

#### Origen Boyacá

Sets up a cooperation program involving 125 smallholders.
Signs a new long-term offtake agreement with Goodnow Farms Chocolate.

#### Rio Lindo

Achieves UTZ certification.

#### Planetary week

12Tree holds workshops with farm employees and local communities at the Limón, Guantupí, Rio Lindo and Maquencal farms aimed at raising awareness of environmental issues.

#### **AUGUST**

Hacienda Ambrosia

farm in the Americas.

Becomes USDA certified organic.

Now the largest organic coconut

**JULY** 

#### Limón and Guantupí LAUNCH OF SMALL

#### FARMERS PROJECT

51 smallholders commit to forming a cluster, with the aim of sharing best practice and selling beans at the best possible price.



#### **OCTOBER**

#### Platanera Rio Sixaola

Certified carbon neutral by Costa Rica's Ministry of Environment and Energy. The farm captures more emissions (456.7 t CO2 equivalent) than it emits (308.2 t CO2 equivalent).

#### Hacienda Limón

#### PARTNERSHIP WITH PUMP STREET

Long-term business partnership agreed with the bean-to-bar chocolate manufacturer to buy our cocoa.

#### **DECEMBER**

#### Partnership with the International Center for Tropical Agriculture

12Tree partners with the CIAT to study cadmium levels in cocoa beans from Colombia.

#### Finca La Paz

1,304 hectares planted in 2019, equivalent to nearly 2 million trees. The farm achieves FSC certification.

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#### **12TREE KEY CONCERNS**

Today, agriculture, forestry and other land uses stand for 24% of the world's total greenhouse gas emissions, due to unsustainable agricultural practices and deforestation.

The transition from conventional agriculture to agroforestry significantly increased soil organic carbon an average of 34%.





While well designed, managed forests and land have more than 30% of climate change mitigation potential globally, only around 5% of climate finance today goes to forestry and land-use projects.

Impact capital allocated toward agriculture or forestry projects in the world constituted only 7% and 4% respectively, of total assets under management. While impact capital is only a fraction of available private capital, the % highlight that relatively little private investment is allocated toward restoration projects.

If we increase by 4% a year the quantity of carbon contained in soils, we can halt the annual increase in CO2 in the atmosphere.

Almost 25% of the land area has been degraded over the past 50 years. This is the result of soil erosion, salinization, peatland and wetland drainage, and forest degradation.





Bacteria make up half of the biomass in some soils. A teaspoon of productive soil generally contains between 100 million and 1 billion bacteria.

Restauration can be a good investment. Studies estimate that every USD 1 invested in restoring degraded forests can yield between USD 7 and USD 30 in economic benefits to national and local economies. Although the economic case is clear, financing for restoration falls well short of the need.

If the bee decline continues, over 1/3 of our crop supply could be in danger of disappearing.

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## ROMAN VINEYARDS, ALLEY CROPPING, "TAUNGYA": A BRIEF HISTORY OF AGROFORESTRY

Growing trees and crops together is an ingenious way of farming as old as time itself. From antiquity to the present day, we look back on the events that led to its revival – and the emergence of agroforestry.

#### A ROMAN INNOVATION

It was the Romans who first came up with the idea of growing trees and grapevines together. The trees were used like stakes to support the vines as they grew, meaning the vines got more sunlight. Thanks to this clever technique, wine production increased. Evidence of agroforestry methods can be found as far back as the Neolithic period, but it was the Romans who left us the first written records about the practice. By using trees as stakes, and planting vines, olive trees and cereals together, they paved the way for an idea that is regaining traction today: what happens if we grow trees and crops together, rather than seeing them as mutually exclusive?

2,000 years on from the Romans, we know that trees can be used for much more than just supporting vines; by boosting soil quality, they can in fact nurture an infinite variety of crops.

#### A HISTORY OF HUMAN INGENUITY

In all parts of the world, in every conceivable climate, humans have looked for ways of getting the most out of the land where they grow food. Our understanding of how trees and crops interact has enabled us to develop a range of clever techniques in all four corners of the world, from alley cropping to silvopasture, forest farming and windbreaks. For many communities living in tropical regions, such systems have long been common practice in food production. Brazil nuts and cocoa trees were grown in the Amazon long before the arrival of European colonizers. Bananas have been cultivated in Africa's rainforests for at least 3,000 years.

Some agroforestry methods have even proved successful outside the areas in which they originated. For example, the taungya system first used in Sri Lanka in 1870 was exported to South America, where it became widely used by smallholders. The true innovation of taungya was the conscious decision to intercrop specific trees, rather than leaving the land fallow to be colonized by nearby tree species, as was done in other agricultural models. By planting the selected trees and food crops together, taungya systems proved highly effective in restoring degraded land, while also generating reliable, diversified income. Taungya-type farms can today be found around the world.



#### THE "GREEN REVOLUTION": HOW TREES GOT LEFT BEHIND

Then along came chemical fertilizers. The rapid development of farm machinery. The drive to achieve higher yields at any price. The second half of the 20th century saw a paradigm shift: the "green revolution". And it was trees that paid the price, eradicated from the fields by intensive monoculture. Commercial farming ensured enough food was produced for a growing global population. But it was also a key contributor to worldwide deforestation, biodiversity loss, water contamination and soil degradation.

Fortunately, in recent decades, deforestation has been shown to be one of the causes of global warming, once again putting trees front and center of the debate. As well as their vital role as carbon sinks, there is now universal recognition that trees are also the best way to maintain soil quality. And therefore the quality of the crops we grow. And the food we eat...

#### AGROFORESTRY: THE SOLUTION FOR THE FUTURE

The notion of "agroforestry" was given a name and developed as a theory in the 1970s and has since garnered increasing interest from the international community. The foundation of the International Centre for Research in Agroforestry or ICRAF (also known as World Agroforestry Centre) in 1978 marked the beginning of a renewed interest in traditional farming methods.

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The World Bank and the United Nations Food and Agriculture Organization (FAO) have both pointed to agroforestry as a model for sustainable land management. A single statistic says it all: a 100-hectare agroforest plot produces as much biomass (wood and crops) as a 133-hectare plot where trees and crops are separated. Trees have returned to their rightful place.

## WHY LARGE-SCALE AGROFORESTRY CAN BE A SOLUTION TO CLIMATE CHANGE

Large-scale agroforestry is increasingly being recognized as a solution for tackling climate disruption. From reducing the use of chemical products to making ecosystems more resilient, here we take a look at its 4 most striking impacts on the environment.

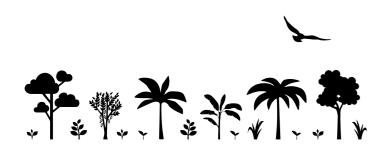
#### LARGE-SCALE AGROFORESTRY CAN REDUCE THE USE OF AGROCHEMICALS

Fertilizers. Pesticides. Herbicides. The growth of monoculture has made the use of synthetic inputs commonplace around the world – a practice that damages the soil and disrupts the climate. With large-scale agroforestry, the use of such products can be significantly reduced

When properly selected and combined, trees and crops fix nitrogen in the soil and naturally enrich it with vital elements needed by plants. This symbiosis reduces the need for chemical fertilizers, the production and evaporation of which contribute significantly to global warming.

#### LARGE-SCALE AGROFORESTRY CAN CREATE HUGE CARBON SINKS

When it comes to carbon sequestration, nothing beats trees. Soil also sequesters carbon. And its biological properties are never better than when it benefits from healthy tree cover. It is estimated that the soil, vegetation and biomass of a 1-hectare agroforest plot can capture 3.3 tons of carbon each year – much more than that captured by a hectare of land with no trees. When deployed on a large scale, agroforestry holds real promise for the fight against global warming.





#### MORE RESILIENT TO CLIMATE SHOCKS

Resilience is a key concept in agroforestry. At a time when we find ourselves faced with rapid climate change, with droughts and flooding, making agroecosystems more resilient has become a priority. Trees are nature's ancient ally in achieving greater resilience. They combat soil erosion. Act as a barrier against floods and storms. Improve groundwater recharge. Make plants less susceptible to disease. Provide vital shade for crops. Lower air temperature in tropical regions. We could go on... As well as having a positive impact on the climate, agroforestry therefore also reduces negative climate impacts on farmland. This improves farmers' yields and the quality of their crops. And benefits all the communities bound up in the ecosystem.

LARGE-SCALE AGROFORESTRY CAN MAKE NATURE

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Agroforestry practices must be tailored to the specific conditions of each individual location. When adapted in this way, agroforestry can be a powerful solution for nature, people and business.

#### LARGE-SCALE AGROFORESTRY CAN PROTECT AND BOOST BIODIVERSITY

The decline in fauna and flora is something that worries us all. Thanks to agroforestry, entire ecosystems are coming back to life, both above and below the soil. When we reinstate agroforests, we reinstate habitats for many species. Give pollinators plants to forage from. Trees provide food and shelter where animals can reproduce and travel around safely. They contribute to their survival. Many animals need "green corridors" to travel across the countryside. Agroforestry provides these vital links.

## O U R P R O J E C T S

# FROM A BALANCED PORTFOLIO TO BLOOMING FIELDS

#### **FARM NETWORKS**

Our projects interact. Our farm managers meet one another. Share their knowledge, in workshops organized by us or through a dedicated digital platform. As part of our aim to create virtuous cycles, we connect all the farms in our portfolio so they can grow and become stronger together.

Restoring the balance of an ecosystem is easier when you can draw on the experience of other 12Tree farmers. This network culture also makes us more innovative and proactive in finding lasting solutions to the problems our projects may encounter.

#### **KNOWLEDGE SHARING**

All our forestry and agroforestry projects are undergoing a positive transformation from polluting farming methods towards virtuous ones. To ensure that best practice takes root throughout our network, we train all our farmers in responsible farming techniques. We are working with them to improve harvesting and post-harvesting methods, reduce chemical products and waste. We recycle with the aim of promoting a circular economy. The constant interactions between our farms help the sustainability of all farms.

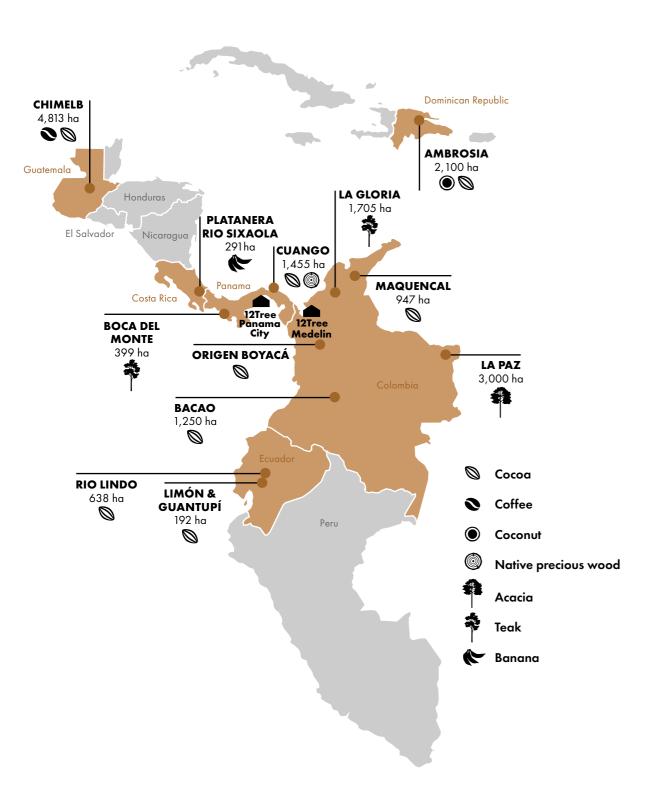


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#### **DIVERSIFICATION**

Diversifying the areas in which we operate. Diversifying the crops grown within a plantation. Diversifying the production options and ways of marketing a particular product, such as cocoa, which we sell in several different product lines. Diversification allows us to adapt to change – whether in the climate or in the market. It means we can anticipate or tackle any problem as soon as it arises, for the long term. And in doing so, we ensure our productivity and profitability remain stable.

#### **12TREE PORTFOLIO MAP**



## 12TREE, A SERVICE PLATFORM TO THE FARMS

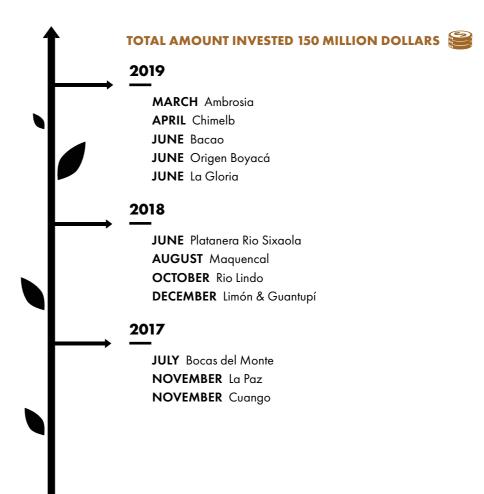




S ASSET MANAGER / INVESTMENT ADVISOR IN GERMANY

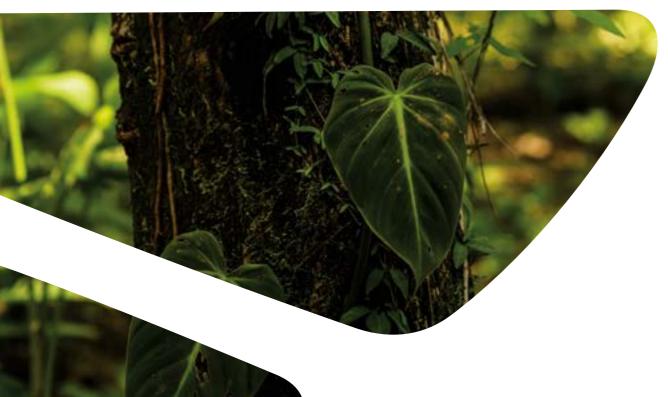
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#### **12TREE INVESTMENT TIMELINE**









## INTRODUCING OUR FORESTRY PROJECTS

#### LA PAZ

#### Preparing the land for a new native tree plantation

FARM TYPE Acacia mangium and native trees **REGION** Vichada, Colombia **SIZE** 3,000 Ha **CONSERVATION** 61 Ha **WORKERS** 35 **ONBOARDED** in November 2017

#### THE LAY OF THE LAND

Hidden away in eastern Colombia, the remote Vichada department is home to vast tropical grasslands. In the heart of these plains lies La Paz farm, some 90km south-west of the main city of Puerto Carreño. Further north, the majestic Meta river creates a natural frontier with Venezuela. In this region, burning was the method traditionally used to prepare land for farming. By burning a plot of land, farmers would boost their short-term yields, leaving the remaining plots as fallow land. It worked for a while, but a vicious circle would ensue. The soil gradually became depleted. Regeneration cycles grew shorter. New farmland was needed. Ultimately, local communities resorted to importing most of their food. Agricultural jobs became scarce.

To reverse this trend, in 2006, the Colombian government earmarked the Vichada department for a vast afforestation program. Since then, a number of local operators have begun planting trees. At La Paz farm, 12Tree has partnered with the local landowner and operator to transform this land into a thriving and productive ecosystem over the long term.

#### FROM ACTION TO IMPACT

Our primary goal is to regenerate the soil. We are growing acacia mangium trees to fix nitrogen and enrich the land with nutrients. Known for their fast growth, these trees can reach heights of 20 meters in roughly 10 years. When felled, the timber can be used for construction or charcoal. We are also conducting research on native tree combinations. Once the soil is replenished, the second or third phase will see the planting of a mixed forest of native timbers.

A 35-strong team works and lives on the farm. The local farm operator is developing a strong partnership with field workers. Providing training and opportunities for career progression. Wages are twice the local minimum. Our teams also benefit from free healthy food and on-site accommodation. Making it a working environment where everyone can thrive.

The farm is an important biodiversity corridor connecting the surrounding natural habitats. A study conducted by WWF in 2014 recorded 645 different animal species, including jaguars – a great indicator of a thriving fauna. Conservation efforts are also under way to protect local springs and streams.

#### WHAT'S NEXT?

12Tree may soon supply biomass to a new energy plant. The nearby city of Puerto Carreño will benefit from this new power source, building greater synergies with communities beyond the farm. As Vichada sources most of its power from neighboring Venezuela, the biomass value chain will play a key role in making the region more self-sufficient. As the plantation's operations expand, more jobs will be created.

#### BOCA DEL MONTE



#### Turning a conventional tree plantation into a mixed forestry system

FARM TYPE Teak and acacia mangium **REGION** Chiriqui, Panama **SIZE** 399 Ha **CONSERVATION** 60 Ha **WORKERS** 13 **ONBOARDED** in July 2017

Applying best silvicultural practices. Advancing research in innovative forest management. Answering the growing worldwide demand for sustainably grown and certified teak. This established forestry project is improving the health and balance of teak and acacia plantations. An experimental plot is set up to test combinations of native species with old grown teak. Boca del Monte farmers are also maintaining bio corridors. This plantation is FSC and Gold Standard certified.

#### LA GLORIA

#### Precious woods production and local transformation

**FARM TYPE** Teak **REGION** Magdalena, Colombia **SIZE** 1.068 Ha **WORKERS** 90 **ONBOARDED** in June 2019

Previously used for cotton farming and cattle grazing, La Gloria's fields, and especially its trees, were poorly maintained. 12Tree is applying best practices to produce high quality plantation teak. And investing in infrastructure. All the while we are testing the introduction of native species and enhancing biodiversity. FSC certified, the plantation is sequestering 20,000 tons of CO2 annually. We aim to increase this capacity further. And are developing local educational programs.





## OUR VISION

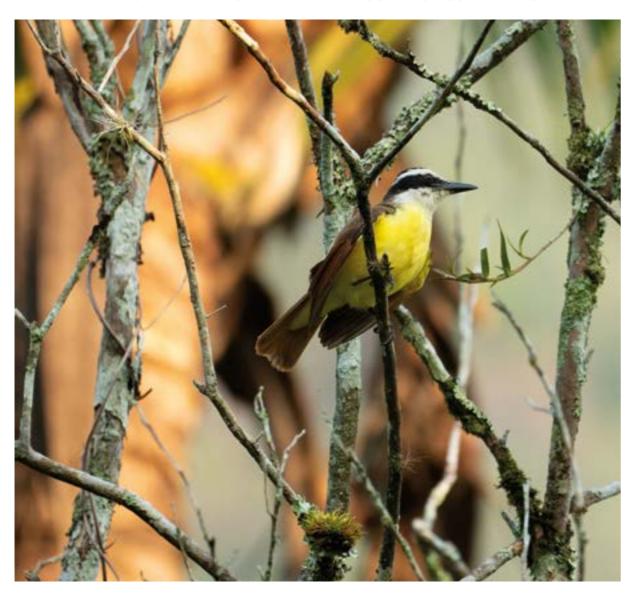
# FROM OUR LOVE FOR FORESTS TO A NEW VISION OF BUSINESS

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## CAN A BUSINESS MODEL EMULATE THE VIRTUOUS CIRCLE OF NATURE?

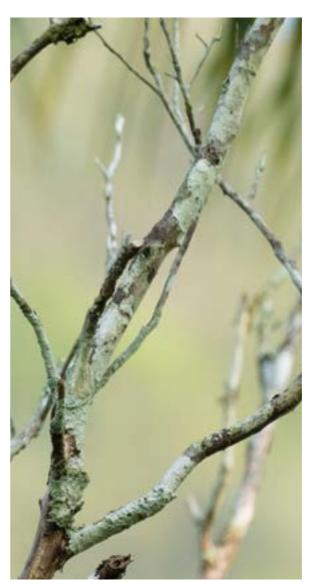
To answer this question, we have to think circular. And adopt a sustainable approach to every aspect of a project. Welcome to a business model inspired directly by nature. Welcome to the holistic world of 12Tree.

We are all familiar with the water cycle. How oceans create water vapour. Which forms clouds. Which then shed water as rain. And so on... When we observe the ways in which nature works, we see this kind of virtuous circle everywhere. Pollination is a circular process. The seasons form cycles. Dead leaves enrich the soil. In our own small way, we are trying to be part of these processes. Because the very point of agroforestry is to create a positive synergy between human activity and ecosystems. And because this holistic approach improves performance in the long term. From our farmers to those working in the food industry and consumers, who enjoy better quality products, everyone's a winner.





At the heart of our business model lie trees. Everything starts with them. Everything emanates from them. As well as being incredibly efficient at storing carbon, they also serve as a natural driving force for life. The word "tree" is part of our company name because, in agroforestry, trees are central to everything. Planting trees in and around plots of land triggers a series of amazing positive effects. Trees vastly improve the infiltration and retention of rainwater. They stabilize and enrich the soil. Regulate temperature. Crops become more resilient to climate change.



Biodiversity returns. Animals' habitats are restored. Fauna and flora interact once more. Thanks to trees, nature can draw on its own resources to produce a variety of foods. And we can reduce our reliance on fertilizers and pesticides. At the same time, another virtuous circle is being created, this time for farmers. The quality of produce improves, as do yields.

There is a common misconception that chemical inputs are the only way to improve farms' performance. However, a growing number of studies and renowned experts have shown that, when used properly, agroforestry can generate larger harvests than intensive monoculture. Farm produce is diversified. Expertise and agricultural heritage grow and can be passed on to the next generation, and the next, and the next...

Trees take root. And in our business model, each agroforestry farm takes roots too. We see our farms as hubs, around which clusters of farming communities become established and connected. They therefore become spaces where ideas and best practice can be shared. Spaces for professional and social development. Ensuring that farmers are paid a fair living wage, for example, in regions where they are often underpaid, has a direct impact on their families. Strengthening local job markets. Supporting education and gender equality. The trees we plant trigger a series of chain reactions that cultivate education. Knowledge. Resilience. And contribute to the well-being of entire communities. This engagement in turn engenders reliability and has a direct impact on yields, product quality and overall farm success.

There are many other virtuous circles we could tell you about. The one that involves introducing bees on our farms to foster biodiversity, improve crop pollination and produce honey. Or spreading plant cuttings and cocoa pods on the soil to naturally increase biomass. We could tell you about the virtuous circle of bringing together the worlds of science and agroforestry, with the aim of promoting more natural approaches, quality and farming and food safety. The circle that connects our investors, farmers and business partners, creating value for all involved. Or the virtuous circle that, as we see it, reconciles finance and nature, through investment in projects that are both profitable for you or your business and positive for the climate. This is one of the many accomplishments made possible by large-scale agroforestry. We believe this is the beginning of a positive societal transformation.

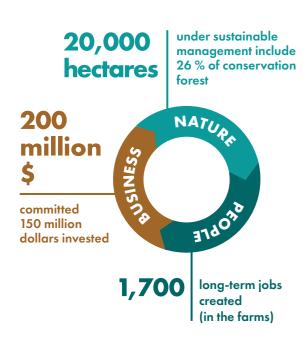
## FROM VISION TO VALUES TO COMMITMENTS

#### TREE CENTRIC

12Tree was born out of the observation that when forests suffer, the consequences are felt around the world. Forests are vital carbon sinks and help slow global warming. Deforestation alone accounts for around 10% of the world's emissions. Behind 12Tree are entrepreneurs, investment-experts and nature lovers. We believe this is the beginning of a positive societal transformation.

#### **VIRTUOUS LAND-USE**

Cost optimization. A drive to get returns at any price. With intensive farming and forestry, humans have grown accustomed to putting economic interests before those of balanced ecosystems. As a result, local populations are suffering and biodiversity is in decline. Sustainable agroforestry takes the opposite approach, putting people's interests and sustainable farming first. In doing so, it is developing virtuous farming methods that benefit everyone, from the 12Tree Farms to local communities and consumers.



#### FAIR PROFITABILITY

Nature and finance can be reconciled: we are at the heart of this convergence. We believe in the virtues of sustainable investment and fair profitability. Since 2017, our investors have committed more than 200 million dollars into 12Tree projects and programs. Their investments help stabilize the carbon footprint of agriculture, protect forests, restore degraded landscapes and improve the quality of life and income of local workers. We see every day the stunning effects positive investments can create.

#### **HOLISTIC APPROACH**

In nature, everything is linked. Connected. Interdependent. Roots form networks. Species communicate. And when the right balance is struck, this all creates a virtuous ecosystem. What better model is there than nature? 12Tree applies this holistic approach to all its work. For us, an agroforestry project must not only revitalize a plot of land or forest, but also improve local employment, healthcare, education and social welfare for its communities. And build bridges between communities of investors, farmers and international buyers that have much to offer to one another.



#### **12TREE CORE COMMITMENTS**



100% social insurance and access to healthcare for all field workers



Access to education and training to all our workers



No salary gap between men and women for each employee category



100% of the production certified

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Increase carbon sequestration by boosting biomass production and organic carbon in the soil



Increase the conservation value of all our investments by restoring soil and creating biodiverse agroecosystems



Water will be used sustainably, harvested and recycled wherever possible

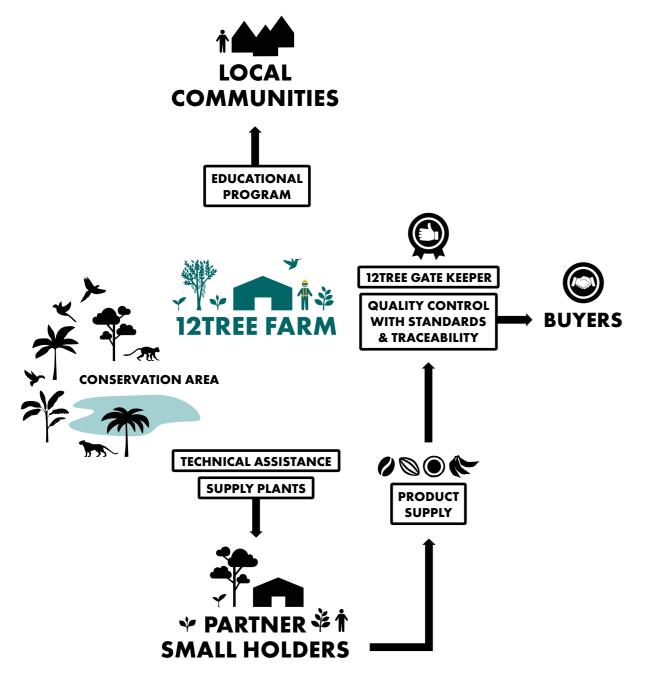


Pay wages that allow decent living conditions for all our workers

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#### **12TREE NUCLEUS PLASMA MODEL**

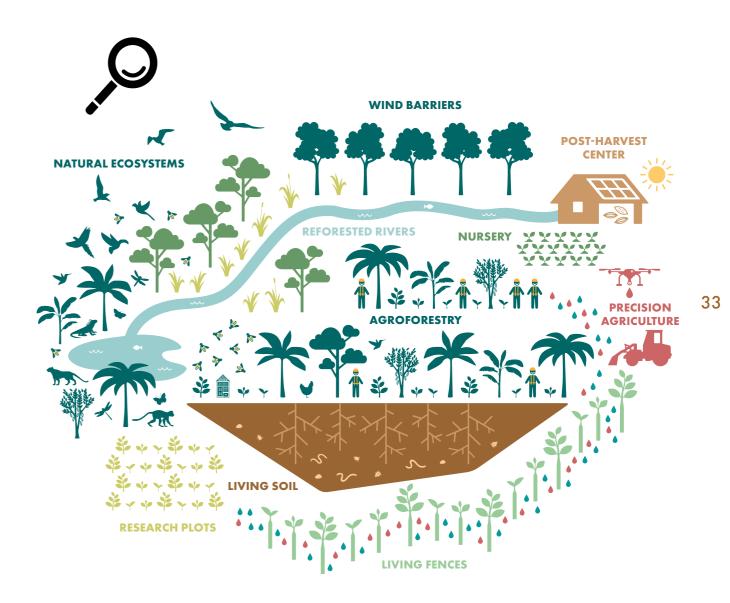
Our approach pursues the vision to build thriving, commercially successful agriculture clusters that benefit the local people, economy and nature. The nucleus farm is used as a platform to engage the surrounding small producers (the plasma) and to provide them with appropriate planting material and inputs, training, quality management and to act as fair buyers of their production.



#### **12TREE REGENERATIVE FARM**

A regenerative farm practices sustainable agriculture, which means it must do three things well:

- A regenerative farm produces food in abundance.
- A regenerative farm is a thriving business that provides a good living and fair working conditions to those who work on it and contributes to a robust local and regional economy.
- A regenerative farm maintains the fertility of the soil, fosters biodiversity both within and beyond the farm's boundaries, and is an integral part of the landscape that surrounds it.









# INTRODUCING OUR MATURE COCOA PROJECTS

### COCOA FARMING: A MULTI-IMPACT OPPORTUNITY

The cocoa industry is marred by social injustices. By working to make this industry sustainable, we can have a huge positive impact, socially and environmentally. On climate, the living standards of local communities and product quality.

#### **COCOA FOR GOOD**

12Tree has made a name for itself among professionals working in the chocolate industry by focusing on sustainable, high-quality cocoa beans produced on large-scale farms. And by applying our guiding principles: social and environmental due diligence, planning and tailored agroforestry practices. Becoming the world's leading sustainable cocoa bean producer has happened almost by accident. And set us on a path that has resulted in us now farming 15,000 hectares of cocoa plantations. In 5 countries.

As our investments grew, our focus remained unchanged. To have a positive impact on the climate, the living conditions of local communities and the quality of our products. We continue to work every day to raise standards in these three areas.

#### **GOOD FOR LOCAL COMMUNITIES**

Our vision of agroforestry aims to improve the income and living standards of local communities. Cocoa farming offers real opportunities to have a positive social impact. Those working in the industry often face dire conditions. Meagre wages. Systemic poverty.

When we take over a cocoa farm, we start by completely overhauling old but often detrimental practices. We analyze the cost of living in the regions where our farms are located. We then set wages that allow farm workers to support both themselves and their families. We want to put the cocoa producers back at the center of the value chain. We want to make sure that 12Tree farmers don't have to worry about being able to pay for food, housing, healthcare or their children's school fees. For us, a farm is a long-term commitment. As is continually striving to raise living standards for all.



#### So, how does 12

It has been a challenge. Growing crops and making them resilient with fewer chemical inputs is tricky. But when we founded 12Tree, we identified this industry as one that has the most urgent need for change.

**GOOD FOR FORESTS** 

Farming cocoa in agroforests can impact the climate. This is why it is a core part of our portfolio. For many countries, the sharp rise in the use of land to grow cocoa trees has resulted in the destruction and, in some cases, the total eradication of forests. We have put trees back at the center of this industry. By introducing fruit and forest trees into our cocoa farms, we have completely transformed the approach to production. This has also helped make cocoa crops more adaptable and resilient.

Our third aim is to improve the quality of our product. So, how does 12Tree define "good" cocoa beans? For us, "good" means sustainable beans, produced in a way that doesn't deplete the land or resources. Beans that meet the most exacting standards. Here at 12Tree, we have an Integral Quality System that ensures we are rigorous about not only our farming practices, but also our production methods. By controlling the entire farming and production process, we can ensure that we meet the highest quality and hygiene standards at every stage of the chain. And sell cocoa beans whose sensory properties are tailored to our clients' needs.

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The fact that we control every aspect of the chain means we can be entirely transparent; a 12Tree cocoa bean has nothing to hide. We can tell its story right down to the smallest detail. Our ability to guarantee that the products we sell to our clients are fully traceable is just one of the things that makes 12Tree unique.

#### MAQUENCAL ®

#### Unlocking a cocoa farm's enormous potential

FARM TYPE Cocoa trees
REGION Cesar, Colombia
SIZE 947 Ha
CONSERVATION 54 Ha
WORKERS 78
ONBOARDED in August 2019

#### THE LAY OF THE LAND

Maguencal means "fountain of life" in Yukpa, an ancient language spoken by local tribes in this remote Caribbean region of Colombia. Named after the creek that runs through the farm, this large and fertile land provides a vital sanctuary for wild animals and native trees. When 12Tree first visited the farm, we were humbled by its quiet charm. Its potential for rehabilitation soon became clear. The land was mostly given over to large degraded cocoa fields interspersed with 200 hectares of natural and old-growth secondary forest, providing ideal pockets of biodiversity. With jobs in the region scarce, reviving these fields could provide a much-needed boost to the local economy.

#### FROM ACTION TO IMPACT

Transformation can take many forms. When teams communicate and collaborate, they can trigger a positive ripple effect. To encourage this, we aimed to create a positive working environment from the outset. One that ensures fair wages for all staff. Provides social security and training. Earlier this year, two new members joined our Human Resources team. Both trained psychologists, they are tasked with creating an inclusive environment. By organizing team meetings and providing dedicated support to each worker and their family, the partnership between the farm's management team and field workers is growing stronger. We are also partnering with local communities, supporting local schools, retirement homes and a women's association. This is all happening in a region previously hit hard by years of paramilitary

and guerrilla fighting. And the harsh working conditions of open-pit coal mining. The farm provides dignified employment. Creates a strong bond between business, nature and people. This alliance empowers all. Creates generational value, by restoring the land as an asset for this and future generations. We see the smiles and share the pride of creating this lasting impact.

On the ground, 12Tree teams are hard at work introducing precision agriculture techniques. The large cocoa fields had suffered severe droughts and poor maintenance in recent years. Our teams tackled the challenge head on, starting with extensive pruning. Next, they studied, designed and built a water reservoir to ensure the farm would weather any new extreme dry season. We added a drip fertigation system. Installed electronic tensiometers to measure soil moisture. Connected them to analyze their data and develop optimal nutrition plans. We compost cocoa pods to create organic soil cover and fertilizers.

#### WHAT'S NEXT?

Maquencal's future is full of promise. Postharvesting facilities are in the pipeline. Bean quality will become more consistent as we standardize how they are fermented and dried. Our marketing teams are also developing longterm partnerships with international buyers to give this farm the best value for its products.

#### LIMÓN AND GUANTUPÍ

#### Award-winning aromatic cocoa

FARM TYPE Cocoa trees and value trees
REGION Cotopaxi and Los Rios, Ecuador
SIZE 260 Ha
CONSERVATION 28,5 Ha
WORKERS 24
ONBOARDED in December 2018

Located at the foot of the mystical Andes. With volcanic soils. Enriched with minerals and nutrients. These two farms benefit from ideal conditions to grow fine flavor cocoa. The Savoru cocoa variety is grown here exclusively. And has won multiple awards worldwide. 12Tree is implementing organic agriculture to optimize soil nutrition and improve performance.

#### RIO LINDO 🕲

#### Optimization of a well-established production system

FARM TYPE Cocoa tree and teak
REGION Los Rios, Ecuador
SIZE 638 Ha
CONSERVATION 119 Ha
WORKERS 118
ONBOARDED in October 2018

Located in the "cocoa cluster" region of Ecuador, known for its high yields. The three Rio Lindo farms apply efficient soil management. Thanks to precise nutrition and mechanized pruning and harvesting, trees are being revitalized. 12Tree is building post harvesting facilities. The UTZ certification was received in 2019.





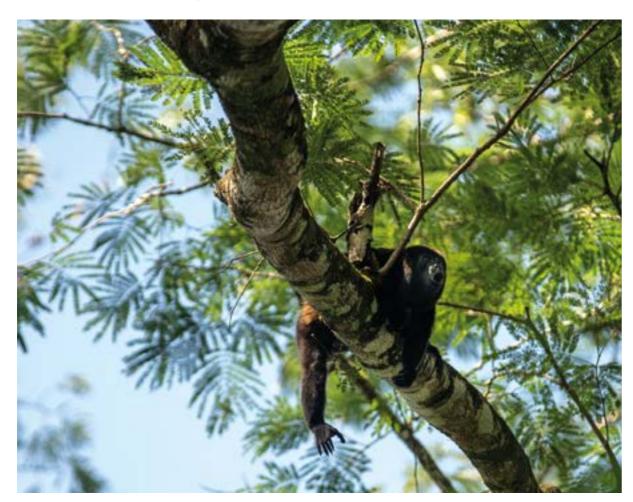
# OUR METHOD FROM SOWING SEEDS TO CLOSING DEALS

## HOW OUR HOLISTIC APPROACH HELPS US REACH EQUILIBRIUM

Environmentally sustainable. Socially sustainable. We set about transforming each farm that we add to our portfolio to ensure it ticks these two boxes. To achieve this, we have developed our own "Holistic Approach".

Those who work the healthy soil know that where there is balance, nature takes care of things itself. And can work wonders. It is these fascinating natural mechanics that we want to restore. Some human activities fail to respect nature's balance, throwing it off kilter. We help it regain its health and re-establish the connections between its component parts. To achieve this, we have developed our own 12Tree approach. An approach that draws on what we have learned from traditional farmers, coupled with innovative technological tools.

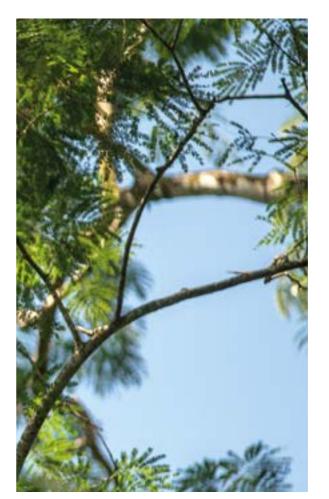
The aim of 12Tree's Holistic Approach is to turn a neglected plot of forest land or poorly run farm into a healthy, flourishing plantation that is balanced on all fronts. From land management to the way we operate. From the nutrients in the soil to how it's grown as a business. Achieving so much balance is no easy task, and it can take decades to complete. It means we have to juggle myriad demands. While always being guided by the interests of nature and local communities. It means we have to think holistically, all the time.







You may be used to seeing us in our suits. But our work starts on the ground. Donning our boots in remote regions. This is the scouting phase. We have to identify a region, then a degraded plot of land with the potential to grow sustainable crops. Once we have found this land, we have to assess the risks involved in setting up or taking over a farm. Social risks. Environmental risks. Climate risks. We have to get to know the local community. Their farming customs. Guided by the recommendations of international standards, such as the International Finance Corporation's (IFC) Performance Standards, and a consultancy (Kinomé) that analyses the social impact of our projects, we do everything possible to understand the places we scout. Because this has consequences for our business partners and investors further down the line.



A soil survey is the deciding factor. To bring benefits, agroforestry must master a plot's underground "language" - how plants communicate with one another. Some pairings can be harmful. The vitality and sustainability of an agroforestry farm lies in how skillfully species are combined. Understanding the dialogue between fauna and flora is also critical. All inputs are combined in a comprehensive development plan for the farm. For the first six months, we focus on stopping destructive farming practices. And those that ravage farmers' health and safety. In the regions we work in, it is not unusual for farmers to be paid little. Forced to work under relentless pressure, at times with dangerous tools, they regularly suffer accidents. We prioritize putting this right. By starting the transition towards a fair living wage and good working conditions. Science and technology then come into play.

This is another component of our Holistic Approach. The way we manage our agroforests is based on the latest - and most reliable - scientific data. Data produced by renowned experts. This means we can develop precision agriculture. Such farming is made possible through the use of cutting-edge technology. Almost all our cocoa farms are fitted with modern fertigation systems, which allow us to distribute water and nutrients in exact quantities, using a plant nutrition plan that is adjusted on the basis of soil test results. We also give our farmers the best tools, facilities and infrastructure. This helps them to prepare for whatever the weather may send their way. To optimize how they use resources. To reduce the use of inputs. And to produce high-quality farm products in large quantities. Finally, once a farm has stabilized and a sustainable management plan has been put in place, we aim to get it certified.

All 12Tree farms have either UTZ or FSC certification, or are certified organic. We also want them all to become carbon-neutral in the longer term and to achieve Gold Standard certification, which is today the most demanding standard in the world for voluntary carbon certification.



#### FROM METHOD TO PEOPLE

#### **PROJECT SCOUTING**

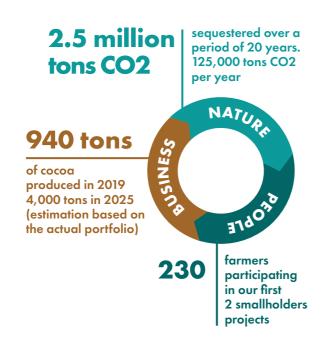
Assessing soil quality. The availability of water to feed it. Understanding local production methods. Taking into account an area's environmental, social and political climate. Carrying out a tree inventory. When we embark on an agroforestry project, we have to understand every element. It is this in-depth knowledge that guides our investments and allows 12Tree's teams to implement a social and environmental development plan. Nature leaves nothing to chance. It inspires us in our pursuit of excellence.

#### **PLANTATION DESIGN**

Helping nature regain its strength, flourish and give the very best of itself. Putting an end to damaging farming methods. We apply our plantation design method to every project we take on. Managing resources efficiently. Upgrading management processes. Training our teams. Precision agriculture draws on our range of technologies, from humidity sensors to drones and data analysis. Together, the actions we take, improve soil health. Crop quality. Farm yields. Gently restore biodiversity. And help our farms achieve the highest certifications.

#### **POSITIVE CONNECTIONS**

A 12Tree agroforestry project is a virtuous cycle. A community of farmers is established around a "core farm". This core farm supplies them with the best equipment for their plantation. And connects them, creating synergies that work to everyone's benefit. Sharing knowledge. Training. Support. This network-based approach brings about a series of positive effects. Improvements in soil quality. In crops. Yields. Revenue. In the quality of life of smallholders and their families.





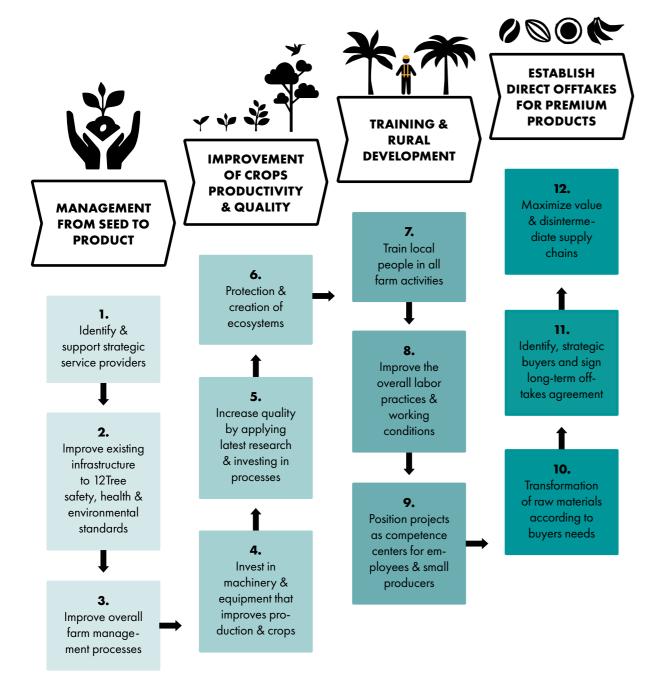
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#### **BRING TO MARKET**

Whether it's cocoa beans, bananas, coffee, coconut oil or timber, from northern Guatemala to southern Ecuador, 12Tree's farming community produces the highest-quality goods. The aim of our projects is to sell these products directly to international buyers, who are willing to commit to buying them for the long term. By removing intermediaries, we can monitor quality throughout the supply chain, from production to packaging and distribution. And we guarantee the fairest price for these crops.

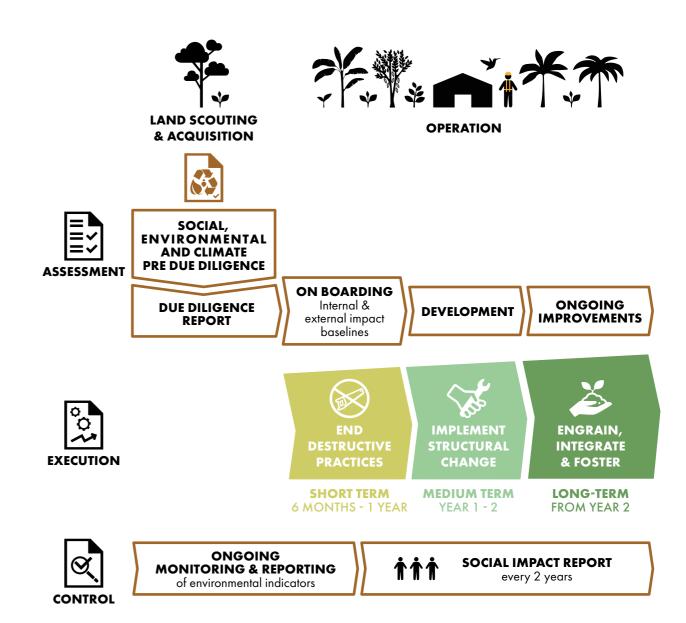
#### **12TREE MEASURES AND ACTIVITIES**

12Tree has developed a detailed policy on infrastructure standards with implementation guidelines for all 12Tree controlled project operations and practices. This will help us foster more inclusive economic development and improve livelihoods, while, at the same time, protect natural resources and the environment of the region.



## SUSTAINABILITY IN INVESTMENT PROCESS AND OPERATION

During the investment process and operation, 12Tree sets out robust procedures and mandatory requirements to better integrate environmental, social & climate change risks and considerations into the project cycle. Procedures include environmental, social and climate change assessments, E&S monitoring and evaluation programs, internal & external audits, and regular reports.



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# INTRODUCING OUR MIXED COCOA & TIMBER PROJECTS

#### CUANGO 00



#### Preparing the land for a new native tree plantation

FARM TYPE Cocoa and native trees **REGION** Colon, Panama **SIZE** 1,455 Ha **CONSERVATION** 663 Ha WORKERS 210 **ONBOARDED** in November 2017

#### THE LAY OF THE LAND

Eastern Panama. Nestled between Caribbean beaches and the Sierra Llorona mountains lies Cuango farm. A vast and enchanted land of hills and fields, some planted with exotic trees, but mostly used for cattle grazing. Here, 12Tree saw an opportunity for positive transformation. We set out to restore the soil. Plant cocoa. Improve forest plots with native species. And combine sustainable production with thriving biodiversity.

#### FROM ACTION TO IMPACT

First things first. Our goal is to produce fine flavor cocoa, plantain for the local markets and native hardwoods, as well as protecting existing primary forests. But sustainability begins in the soil, so this is where we must focus our efforts. Once soil has been loosened, improving water and nutrient absorption, 12Tree moves on to intercropping timber trees, cocoa varieties and companion crops. Plantains, pigeon peas and madre de cocoa (Gliricidia sepium) fix nitrogen and improve soil biomass. Measurements are taken regularly to track this process of regeneration. Fertigation systems are being installed to supply organic supplements. Slowly, steadily, each field is coming back to life. Timber trees grown in the fields provide essential services to our cocoa crops. Shade is one. Protection against wind and heavy rain another. Then there's food and shelter for pollinators. Less reliance on chemical fertilizers. The list goes on...

Between and around the fields, fertile slopes are being planted with mixed forests of native trees. Timber takes a long time to produce. As they grow, our agroforests connect large

conservation areas. They form a network of biological corridors, teeming with ocelots, margays, pumas, peccaries, agoutis, coatis, tayras, anteaters and many different birds and bats. These bustling areas are the best indicators of a farm in recovery.

#### A BRIGHT FUTURE

At 12Tree, these trends spur us on to redouble our efforts. Cuango farm can and must become a model for restoration and ecological intensification. A smart, large-scale cocoa agroforest is its best hope of achieving this outcome. Of increasing resilience and expanding our product range. We will plant six different varieties of fine flavor cocoa. As with many projects, we aim to optimize our post-harvesting processes and facilities. And last, but certainly not least, 12Tree will continue to hire and train numerous field workers in this region, where jobs are hard to find. Most of our employees were born in the neighboring village, where fishing is the main skill and source of income. We provide those who join our team with important training in efficient field work and post-harvesting methods. Something we are extremely proud of.

#### BACAO

#### Conversion of cattle land to an innovative cocoa farm

FARM TYPE Cocoa and gliricidia trees **REGION** Meta, Colombia **SIZE** 1.250 Ha **CONSERVATION** 53 Ha **WORKERS** 103 **ONBOARDED** in June 2019

Bacao is a shining example of an efficient plantation design. Historically used for cattle-grazing, this project is being transformed into a productive cocoa farm that can cover 3,000 hectares. Incorporating state-of-the-art technology is boosting productivity and ensuring efficient use of resources. Providing stable jobs, decent wages and improved working conditions, is helping families envision a positive future in this region.

#### ORIGEN BOYACÁ

#### Improving the income and living conditions of small cocoa producers

FARM TYPE Cocoa smallholders **REGION** Boyacá, Colombia **SIZE** 103 producers **WORKERS** 7 **ONBOARDED** in June 2019

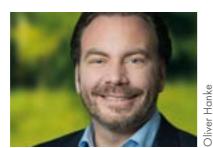
In Origen Boyacá, 12Tree has entered into a joint venture with local farmers. Our common aim is to produce high quality cocoa for export. Managed by women and men, hired locally. Knowledge sharing is increasing productivity. Strengthening the farming community. 12Tree is centralizing post-harvesting activities. And creating lasting commercial partnerships with international chocolate makers. On average, farmer's purchasing power has increased 40%.





## OUR IMPACT METHODOLOGY

# FROM NATURE REBIRTH TO PEOPLE BENEFITS





**INTERVIEW** 

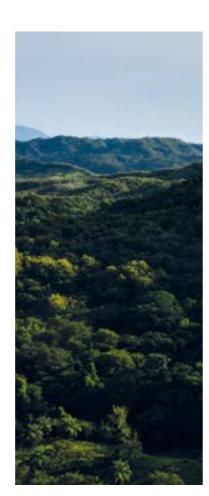
#### "CLIMATE CHANGE IS REAL, BUT WE CAN ALSO SEE THAT TIMES ARE CHANGING IN A POSITIVE WAY. MANY PEOPLE ARE NOT **DOING BUSINESS AS USUAL ANYMORE** "

In conversation with 12tree's Oliver Hanke (Chief Project Officer) & Lenny Martinez (Sustainability Manager) about the key questions facing agroforestry.

What are the biggest challenges 12Tree faces today in transforming its farms and achieving a sustainable balance for nature, people and business?

Oliver Hanke: I would say the biggest challenge is expectation management. Managing our own expectations. Those of our investors. And those of our workers, when it comes to how quickly turnaround management can happen. What we see on the ground is that cultural change takes time. And also that change in agriculture in particular takes time. When we take over a farm and begin to transform it, we have a fairly detailed plan of all the structural changes we want to implement. There are of course many daily operational issues we need to resolve, but improving roads, renovating a farm's infrastructure or pruning trees are all relatively straight

forward in comparison with changing people's minds. Trees, on the other hand, are living organisms and there is a delayed reaction with everything you do to them. You cannot change the fertilization program one day and expect more cocoa pods on the tree the next. You will only see the results with the next harvest or even later. And it is the same with people: you cannot expect them to change their behavior immediately just because you start paying better wages and handing out safety gear. It takes a lot of training and explaining to change someone's attitude towards waste management, to get them to actually wear the protective gear or to change the way they communicate with each other and with us. And you need to be able to prioritize because you cannot address everything at the same time.



Lenny Martinez: That is why we decided to prioritize our social and environmental activities, focusing first on improving farm management. Now that several farms are well established and processes are running smoothly, one key challenge is to better integrate the farms into the local communities by increasing partnerships with local producers based close by. We want to encourage knowledge exchange between large-scale farms and traditional smallholdings.

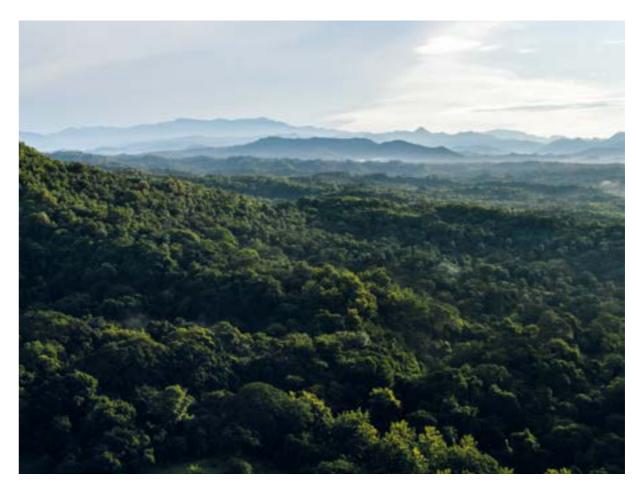
#### What are the main research topics 12Tree is actively addressing to have a stronger impact?

O.H.: We are currently conducting detailed studies on what is known as the fair living wage. We are trying to find out what wage is needed in a particular region to meet a worker's basic needs and define a path to close the gap between what our workers currently earn and what they need to make a decent living. It's not just a case of topping up their wages as the cost of accessing certain services may vary hugely between different projects. The best way to close the gap is sometimes to invest in lowering costs for everyone, for example, reducing the cost of transport, rather than paying everyone a bit more to cover the cost of expensive transport.

L.M.: We combine the day-today management of our farms with research work. Research will help us with aspects such as developing a good understanding of soils, choosing appropriate cover crops and woody

species associated with cocoa trees in a stratified ecosystem and testing native trees in forestry plantations. For instance, in summer 2020, we will be hosting Yale students on our plantations with the aim of coming up with tailored solutions for reducing the use of synthetic inputs.

O.H.: To give another example: we have just entered into a new research partnership with CIAT (the International Center for Tropical Agriculture) to work together on ways to reduce the cadmium content of cocoa produced in certain regions. This work will not only improve our own production, but also benefit the small producers in our smallholder programs and allow them to export their product to markets they can't access right now.





Deforestation in the Amazon is in the news. Primary forests and their native species are being destroyed at an unprecedented rate. Does agroforestry take these targeted species into account? What measures can be taken to combat the sale of illegally felled trees?

O.H.: It is obviously heartbreaking to see the rate at which primary rainforest continues to be cleared. So many bushfires are intentional, man-made and are even promoted by some governments. The reality is that a commercial plantation tree will never be able to achieve the same wood quality as an illegally felled rainforest giant that has been growing undisturbed for 100 years or more. We actively plant desirable tropical hardwoods in our projects to provide FSC-certified alternatives.

L.M.: We aim to protect the endangered species in our conservation forests (around 30% of the area managed by 12Tree is conservation forest) and biological corridors. We seek to diversify forest species and promote the planting of mixed forests of native species. We are pursuing this aim despite the fact that there is still insufficient research on native species that would improve their productivity and resilience. Native species are not necessarily well-known on the international market and do not have a price history. There is a need for coordinated action by private- and

public-sector stakeholders to build regional-scale processing facilities that provide a market for timber and non-timber forest products (NTFPs) grown in diverse agroforests and mixed-species plantations. I believe that these localized eco-industries could help get around the problem of "low timber" prices triggered by the abundant supply of illegal wood from natural forests." Payments for Environmental Services" (PES) could also be a solution to deforestation. PES is the name given to a set of incentive practices aimed at paying rural users for engaging in environmentally friendly practices. These might include stopping the use of pesticides, planting trees or hedges, or halting logging in tropical areas. In Europe, we have seen this type of instrument in the agri-environmental measures of the Common Agricultural Policy (CAP). Ultimately, it boils down to how much we are willing to pay to preserve biodiversity...

O.H.: Smallholder agriculture and cattle ranching remain the main reasons why the Amazon is being cleared. As long as we do not change our attitude towards meat consumption, this will continue. Smallholders continue to engage in slash-and-burn practices as they lack alternatives and it is here that we can contribute most. We can teach smallholders alternative practices and show them how to farm sustainably and more productively on the land they have, as well as developing projects that bring degraded land back into production.





## "Land grabbing" is an ongoing controversy in agricultural investment. Where does 12Tree stand on this?

O.H.: Firstly, we do not need to own the land we farm - if possible, we encourage local ownership and lease the land for the long-term only. But often you cannot lease and the only way to achieve impact is to buy the land. We see ourselves as stewards of the land we own or operate for our investors, trying to improve the soil and overall quality during the time we are holding this stewardship. Our focus is on bringing degraded land



back into production and introducing better, more sustainable land-use models into established traditional farms. We do not force people off their land and start producing biomass for biofuels instead of corn for tortillas. We produce regular food products such as plantain, dates and coconut oil, but are mostly focussed on cocoa and coffee, nuts and spices, which are not staple foods and can be considered luxury products. This is exactly where sustainable agroforests offer a solution, because the very concept allows for the production of staple foods, such as plantain or peas and corn for local markets, on the same land as high-value export products, such as cocoa and coffee. This is precisely what needs to be promoted: generating more value from land, ideally bringing degraded land back into productive use, and farming in a way that not only benefits local communities, but is also financially attractive as an investment. So, when we talk about land grabbing, it does matter what and how you farm on the land, who used to own the land and what they used it for. At 12Tree, we have a strict policy on the whole issue and place particular emphasis on the ownership history of a plot of land when carrying out due diligence as part of our project development process.

L.M.: I would add another key question when talking about land grabbing: what are the terms under which smallholders and indigenous communities are incorporated into large-scale agricultural and forestry farms? We pay particular attention to this question. 12Tree has commissioned an independent expert company, Kinomé, to not only make recommendations on improving our farms' social approach, but also understand the local social context and dynamics. One of the criticisms of land grabbing is the use of vital resources, such as water, by foreign investors. We compile an exact inventory of energy and water sources on each 12Tree farm and try to use renewable energies generated on our farms as much as possible. Our goal is to create synergies between crop management, renewable energies, efficient water use and recycling.

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12Tree is based in Germany, Colombia and Panama, but its farms are located across Central and South America. What action are you taking to minimize 12Tree's carbon footprint, while still growing your business?

O.H.: This question has been on our minds a lot recently. Flights are the single biggest contributor to our company's carbon emissions and we are constantly looking for ways to reduce our footprint, while at the same time fulfilling our supervisory responsibilities as a project manager and investment advisor. Emission reduction is more important than emission compensation, but we cannot avoid frequent trips to visit our projects, investors and other partners.

L.M.: We do our best to minimize travel. And when we fly across the Atlantic, we try to stay on the farms for a few weeks with the local team. We also try to do most meetings via videoconferencing.

O.H.: As a next step, this year we will start developing a carbon forestry project to offset the carbon emissions we cannot reduce.

Does working on agroforestry development ultimately make you more optimistic about the climate challenge?

O.H.: Yes, I think it does make you more optimistic, because, rather than seeing only doom and gloom about the climate in the news, you meet many people on the ground and around the globe who are actively trying to change the world we are living in. Working at 12Tree, we can see that climate change is real. But we can also see that times are changing in a positive way. Many people are not doing business as usual anymore.

L.M.: Personally, I am happy to see that the 12Tree team is seeking to practice agriculture and forestry in a way that is more respectful of people, soil and nature. What also makes me optimistic is seeing the coming together of different worlds, from investment and forestry experts to agronomists, entrepreneurs and many more. The interdisciplinarity of our work is particularly enriching. And positive for the future.

O.H.: Generally, I think being fortunate enough to be able to actively do something and contribute makes you happier. Everyone can do their own little bit in their private lives and at 12Tree we are lucky enough to be in a position to do quite a bit more than that – a feeling that is shared by our many partners.









## FROM ENVIRONMENTAL TO SOCIAL IMPACTS

#### **AMBITIOUS COMMITMENTS**

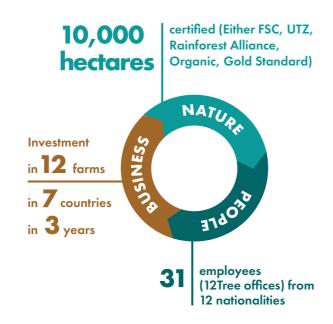
From Colombia to Costa Rica, Guatemala, Panama, the Dominican Republic and Ecuador, our farms connect us with many different countries and communities. We want our work to have an entirely positive impact on these regions. To set ourselves the most ambitious roadmap, our approach covers 8 of the 17 sustainable development objectives set by the United Nations for its members.

#### **BACK TO LIFE**

The impact of a 12Tree project is measured using a natural phenomenon that is familiar to us all: the return of plants and wildlife. It is the best indicator of an ecosystem that is regaining its balance and health. To encourage such revival, we do a lot of work around landscape connectivity. Trees encourage species to move around, so we use them to create biodiversity corridors. Biomass increases. Plantations become carbon sinks again. Life can flow once more and produce flourishing crops.

#### **MEASURING TOOLS**

We use our own Project Score Card, as well as the services of Kinomé, an independent consultancy, to continually improve the social and environmental impact of all our agroforestry projects. Our Project Score Card helps us monitor the environmental, economic and social improvements brought about by a plantation. Every two years, Kinomé carries out a field study on the social impact of each project. Thanks to this, we can be sure that our work helps improve communities' living and employee's working conditions.





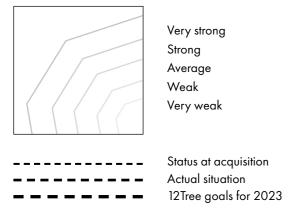
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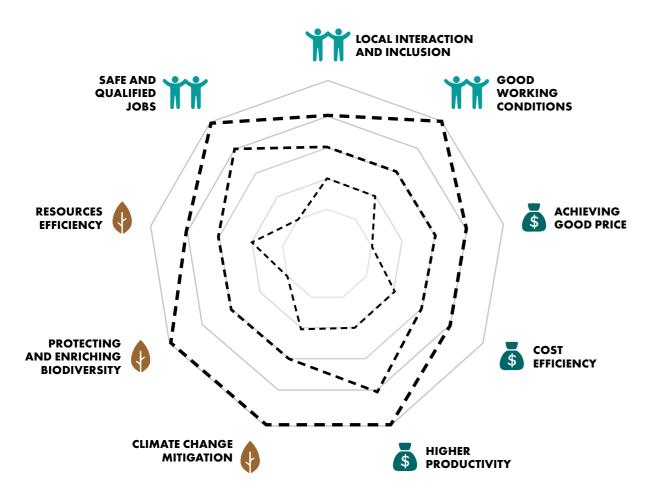
#### **SOCIAL BENEFITS**

Guaranteeing a fair income for farm workers. Providing them with high-quality farming equipment. Enhancing the quality of products sold and, consequently, their value returned to employees. Offering them health insurance. A key dimension of our projects is improving the living and working conditions of our farmers, their families and those in the surrounding communities. We are committed to creating long-term projects that provide decent employment and livelihoods for as many people as possible. For this and future generations.

#### 12TREE SUSTAINABILITY SCORE CARD

We have created a scoring system, which gives a transparent and solid overview of the individual performance of our project portfolio. Performance indicators of the portfolio are «graded» and summarized in an overall performance score. With this, we can compare the social, ecological and economic performance of our entire project portfolio over time.





#### **12TREE KEY SUSTAINABILITY PERFORMANCE METRICS**



#### **SAFE AND QUALIFIED JOBS**

- % of workers with social insurance and access to
- % of workers with access to continuing education in their area of expertise

#### **LOCAL INTERACTION AND INCLUSION**

- % of local people employed
- % of overall social budget allocated to local impact program

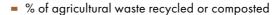
#### **GOOD WORKING CONDITIONS**

- % of workers with access to subsidized nutritious meals and safe drinking water
- % of field workers receiving an income with an incentive component



#### **RESOURCES EFFICIENCY**





• % of productive area with integrated pest, nutrition and water management plans

#### **CLIMATE CHANGE MITIGATION**

- Total tons of carbon sequestrated per year
- % of total farm budget invested in climate mitigation activities

#### **PROTECTING AND ENRICHING BIODIVERSITY**

- % of land under conservation with an active enrichment plan
- % of active farmland with more than one crop species



#### ECONOMIC METRICS $\wp$



#### HIGHER PRODUCTIVITY

- % of harvest increase since the acquisition of
- % of compliance with the productivity mentioned in the 12Tree financial models

#### **ACHIEVING GOOD PRICES**

- % of increase in product price per ton since the acquisition of 12Tree
- Average premium price obtained, which is above the cocoa New York Stock Exchange

#### **COST EFFICIENCY**

- Yearly operations costs (apart from capital costs) per ton of cocoa produced
- % of labor costs per tons of cocoa produced

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# INTRODUCING OUR DIVERSIFIED CROP PROJECTS

#### AMBROSIA

#### An organic cocoa farm growing in the shade of coconut palms

FARM TYPE Cocoa trees and coconut palms
REGION Nagua, Dominican Republic
SIZE 2,132 Ha
CONSERVATION 1,017 Ha
WORKERS 500
ONBOARDED in March 2019

#### THE LAY OF THE LAND

Fertile soils. Natural springs flowing from nearby forests. This magnificent plot in the north east of the Dominican Republic is ripe for restoration. Ambrosia farm will be the Americas' largest organic coconut and cocoa farm, taking in coconut fields, protected natural forests and mature fallow lands. In this peaceful setting, 12Tree farm managers and field workers have begun their work to restore the land to its full potential. The farm is already USDA certified organic.

#### FROM ACTION TO IMPACT

12Tree has been restoring the existing coconut palm fields since taking over the farm in March 2019. In previous years, harvests were minimal. By planting new and more productive coconut crops, yields are steadily improving. On the nearby fallow lands, field workers are planting fine cocoa and coconut palms together. The palms provide nuts and shade. Young cocoa trees are grown beneath them. Plantain provides interim shade for the cocoa until the palms grow up, as well as staple food for local markets. Shielded from excess sunlight and heat, soil and crops retain water, meaning less irrigation is needed.

In and around the farm lie natural forests that we are responsible for protecting. Beautiful havens of biodiversity. They provide essential services to the area. Pest control. Wind protection. Regulating the flow of water through the soil. And providing shelter and corridors for wildlife. Ambrosia is an integral part of the local economy. Providing much-needed jobs in this rural area. Training a young and multicultural workforce.

We play our part in helping workers from Haiti integrate into the local community. Coconuts produced here are processed by our partner firm SoloCoco, which employs single mothers who make handcrafted coconut oil and other products for the international market.

#### LOOKING TO THE FUTURE

As crop health and productivity improve, 12Tree is investing in mechanizing the harvesting process. And building a state-of-the-art post-harvesting facility. Coconuts will soon be processed on site. We will export organic coconut oil, water, sugar and premium flavor-cocoa. These efficient processes will guarantee long-term quality for our clients. In return, partnering with them will bring long-term value for all involved. Ambrosia will also be home to an ambitious beehive program, with a target population of 60 million bees. They will become our allies, pollinating crops and producing 40 tons of organic honey per year.

#### CHIMELB 30

#### Building a multifunctional and biodiverse cocoa and coffee agroforest

FARM TYPE Diversified
REGION Alta Verapaz, Guatemala
SIZE 4,751 Ha
CONSERVATION 2,300 Ha
WORKERS 400
ONBOARDED in April 2019

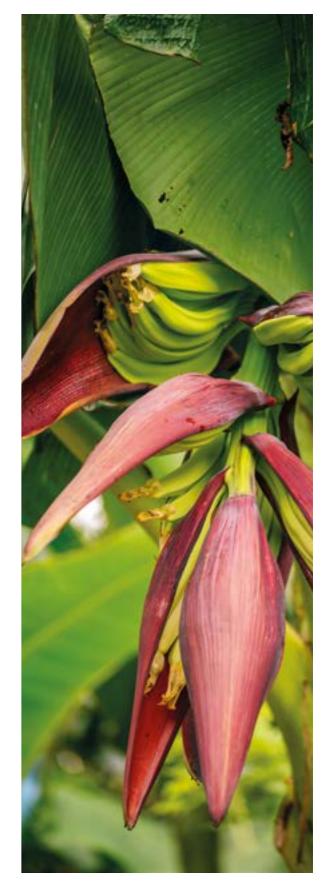
Finca Chimelb is a multi-crop farm with extensive areas of natural forest. It produces cocoa, coffee, cardamom, lemons, and rubber. Diversifying revenue streams. Increasing landscape connectivity throughout. Ensuring economic stability. And fostering biodiversity. Quality and productivity improvements are our main focus. Among other actions, 12Tree is building a new post-harvesting center to deliver quality products to our buyers. We are also furthering the development of a smallholder program.

#### PLATANERA RIO SIXAOLA

#### Enhancing productivity of a pioneer biodiverse banana farm

FARM TYPE Banana and timber trees
REGION Limón, Costa Rica
SIZE 291 Ha
CONSERVATION 90 Ha
WORKERS 140
ONBOARDED in June 2019

Platanera Rio Sixaola is a model of a sustainable banana plantation. Using solar panels, the farm produces 80% of its energy consumption. Recycles water. Transforms its waste into compost. All its operations are part of a circular economy. Extensive bio corridors connect together nearby natural forests to help the movement of animals. The objective is a healthy level of productivity without depleting the soils. 12Tree is currently developing new plantations on fallow lands.





## WHAT'S NEXT

## CONTINUOUSLY GROWING VALUES



#### FURTHER DEVELOPING PARTNERSHIPS

Alone we go faster. Together we go further. You may be familiar with this African proverb. It sums up neatly our way of moving forward. Since 12Tree's foundation, we have embarked on a journey to forge lasting partnerships. Because we need influential stakeholders on board with us. To make large-scale sustainable production the norm worldwide. And to radically transform farming and business models.

Our key partners are consumer goods manufacturers, investors, social enterprises, small producers, universities and local governments who, like us, want to transform these models. Because they are conscious of the challenges posed by climate change. Or because their consumers want sustainable products. As cocoa beans are central to our story, chocolate manufacturers were the first to use us as suppliers. Our vision of agroforestry complements their expectations on sustainability and transparency. Meticulous. No middlemen. Respectful of the natural balance. Ethical when it comes to both nature and people.

The trust of financial partners and public-sector stakeholders is also vital. Major asset managers are already putting their faith in our work. We are proving that large-scale agroforestry can be done profitably for all stakeholders, even if it takes time to get there. This allows us to grow. To expand our portfolio of farms. To create more jobs and more virtuous circles between nature and business.

#### SO, WHAT'S NEXT?

We want to continue developing these win-win partnerships. With those in the world of science, in particular. Our work with nature brings with it responsibilities. To understand and protect nature better. We are carrying out research into forest engineering with students from the University of Yale in the United States. And, together with the International Center for Tropical Agriculture (CIAT), we are supporting a research program aimed at reducing cadmium levels in cocoa beans from Colombia, Ecuador and Peru.

We are interested in anything that helps us respond to the challenges of climate change and large-scale sustainable food supply. We are passionate about anything that creates changes for the better.





## TURNING OUR FARMS INTO ORGANIC BRANDS

Tracing a product back to its origins. Telling its story. We recognize the growing demand for food products with a strong identity. Labels and certifications are no longer enough. Manufacturers must be able to account for a product's origin and quality, as well as guarantee that it has been produced and traded fairly. To create a bridge between communities of producers and consumers. To cement partnerships and loyalty.

Our approach to cocoa farming, as with everything produced by 12Tree farms, is to have total control of the supply chain. Cut out the middlemen. Improve transparency. Our distribution channel is always short. 12Tree grows. Processes. Trades. Thanks to this approach, we have been able to develop what we call "Direct Trade". It's a cornerstone of our philosophy. Why? Because we know that international companies and premium chocolate manufacturers stake their reputations on how their raw materials are sourced. On transparency and traceability. Because the products we sell conform to rigorous food hygiene and quality standards. From a 12Tree farmer to our clients, the "chain of trust" is never broken.

Our challenge is to deliver not only quality, but also quantity. More and more international manufacturing companies are now choosing 12Tree as their supplier. To fulfill these big orders, we are investing in the latest farm equipment and processing facilities. This helps us achieve one of our most heartfelt aims: using large-scale agroforestry

to grow a high-quality food industry. Each 12Tree farm has a distinct identity. Its own unique soil, crops and trees. These become part of a product's story. To tell it better, we have started developing our farm products as unique and independent brands. We will set up an online direct trading platform to bring our clients to them. Creating stronger connections that benefit all those involved.

For farm workers, it offers a further opportunity to tap into the international market. And to have their expertise recognized by consumers and big-name companies. For our buyers, it guarantees total traceability. This "Direct Trade" brings our farms out of the shadows, making our clients' products a byword for sustainability.

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#### **JOIN THE JOURNEY**

New journeys are always exciting. For us, agroforestry is full of promise. It combines human, environmental and technological challenges that open up a wealth of new horizons. Of unifying goals.

We are grateful to our investors and other stakeholders for their patience and perseverance. We are conscious that we are pioneers. The ones cutting a path. And that the virtuous farming models we are creating will continue to evolve. But we already have enough hindsight to know that combining the interests of nature, communities and investors is always a wise choice. The improvements in our indicators and results, as well as the international certifications we are achieving, are a testament to this.

There is still a lot of room for improvement in many areas. This gives us an inspiring roadmap for the future. We want to enter into many more partnerships with like minded organizations, investors, interest groups, and research bodies. Make the tools we use to assess sustainability and productivity even smarter. Use new technologies to support innovation. Make a more far-reaching positive impact. And continue to help improve the living and working conditions of the individuals and communities our work connects us with, and with whom we share a lasting bond.

By allowing farmers to sell their own products and connecting them with international buyers, we are also helping to build the 12Tree brand and make it a byword for quality. This is a path open to us. But it is not the only one. The geographic area we cover will likely also expand, with new operations outside of South America.

Whatever part you have to play, you can join us on this journey. Because nature can never have too many allies.



#### **CONTACT**

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"Having worked in Latin America for the past 20 years, I have seen huge change and development, but only in urban areas. I am delighted to be part of a solution that brings in the money and knowledge needed to boost economic growth in rural areas and prevent further rural exodus."

#### Petra Kollmannsberger, Chief Sales Officer

"At 12Tree, we believe that values and value can and must coexist. We want to show that it is possible to reconcile sustainability, social responsibility and reasonable profits for investors through modern, large-scale, scientifically managed agroforestry projects. I want to be part of the solution to some of the greatest challenges of our time. Fighting climate change. Tackling biodiversity loss. Achieving human development goals. Everyone at 12Tree is working towards these shared goals – one hectare at a time."

#### Aurélien Petitot, Chief Investment Officer

"We are responding to the challenges currently facing Latin America's agricultural plantations by researching and developing new approaches to cocoa farming and sharing this information with small farmers. This helps them produce larger volumes of better-quality cocoa, improving their quality of life and that of their families."

#### Andres Cadavid, Chief Operations Officer

"I want to be able to say to myself and my loved ones that I helped build a better future for them. That my generation did not ignore the wholesale destruction of nature – even though there was enough money and knowledge around to stop it. I see 12Tree as one of the 'changemakers' that nature needs right now."

#### Oliver Hanke, Chief Project Officer











#### COPYWRITING

LE SECRETERRE www.instagram.com/le.secreterre

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