



The Symphony 2020-2030

Biodiversal S.A.S BIC., Transparency Report 2020

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www.biodiversal.com

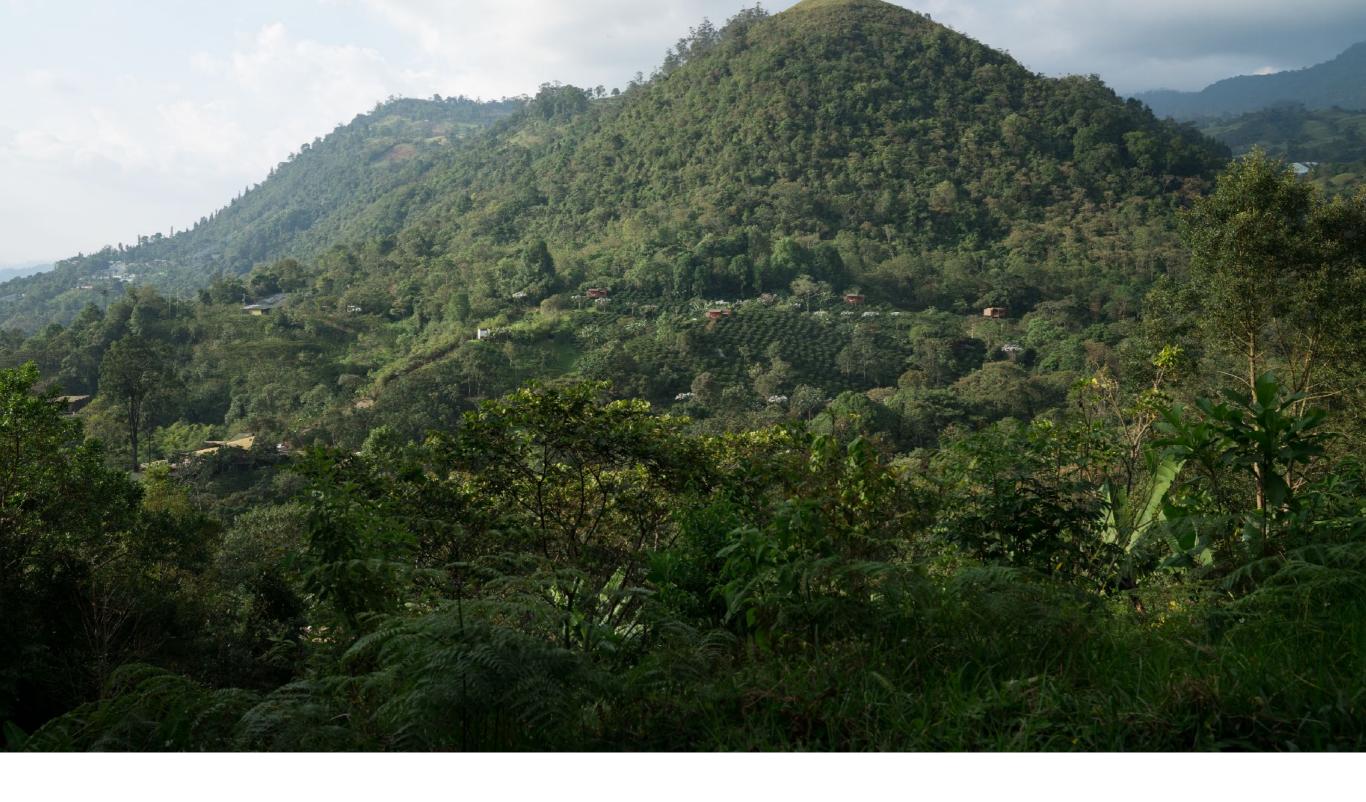
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# Letter from the Founder



### To all of our stakeholders,

We are about to celebrate the third anniversary of Biodiversal and we want to thank those who have been part of our history and share our progress and long-term vision with those who might want to join us on this path.

In 2017, as specialty coffee producers, at La Palma & El Tucán we started our agroecological journey. This allowed us to understand that only with a holistic approach will come the solutions to the long list of sustainability challenges that the sector is facing.

Biodiversal was established in 2018 with that same spirit. Past experience had already told us that we could create value and benefit smallholders, just if we dare to challenge the status quo by enhancing biodiversity and adopting a radical transparency approach. Although Biodiversal was born within La Palma & El Tucan, it is a separate company, expected to grow beyond Cundinamarca's borders and beyond coffee production by enabling small-scale coffee farmers to adopt diversified production systems.

During the first two years of this new business we have been setting the foundations. Although the arrival of COVID-19 made of 2020 a complex and costly year -both in the human and economic dimensions-, we managed to keep on track. While adopting all of the new biosafety protocols, we continue to build key capabilities with a team that is growing stronger.

In 2021 we will be entering a new stage in which we want to open up the conversation with potential investors, clients and partners that might be willing to support our regenerative mission.

To all of them we dedicate this first transparency report, hoping that this first piece of information allows them to understand who we are and how we operate, so that we can be considered in their investment, consumption or engagement decisions.

As the financial states suggest, 2020 can still be defined in Biodiversal as a year of investment on capacity building.

48% of the investment was destined to develop the organic fertilizers value chain; 32% to consolidate the team that is in charge of the business' strategic architecture; and 17% to adapt and prepare our *Learning Hub*, the prototype-farm where projects are being tested, refined and showcased. The agricultural production projects that will be presented to the sustainable finance ecosystem in 2021 are being incubated in this Hub.

Regarding the organic fertilizers value chain, in 2020 our production facility - The Mixing Center - was officially certified by the Colombian Agricultural Institute (ICA); we developed a product portfolio under Biogrowth's branding; we started the business development efforts for this category; and we initiated a vermicompost pilot-project with the first group of coffee-growing families, connecting them to Biodiversal's supply chain through investment, technical assistance and long-term purchase agreements.

We also deepened our commitment to the "4per1000" initiative joining the regional investment group (Group B1). Our aim is to motivate more investors and agricultural producers to adopt nature based solutions leading to increase organic matter content of soils at least in 0.4% annually to make a significant contribution to climate. In this regard Biodiversal is leading by example; in the supply chain, by inducing this target within coffee growing families; and through the contribution of Biogrowth products in other agricultural lands.

In relation to the Learning Hub, in 2020 we generated two new employment opportunities through a business internship agreement with the National University of Colombia. In this way, we consolidated the team required to prepare the farm with a new agroforestry design; conduct project research; and shape the future of the digital architecture of Biodiversal.

In order to share and communicate our long-term vision, we consolidated under the concept "Join The Symphony 2020-2030" the set of definitions that make up our impact intentionality and the pathway to it. As its name suggests it, the strategy is a call to action, a call to create a symphony of collective efforts around coffee resilience.

In 2020 Biodiversal became a general interest company (BIC in the Spanish acronym); we made public our mission of Elevating coffee culture to a resilient model of regenerative agriculture; we updated our Theory of Change (ToC) to highlight the role of impact investors; and we also set our vision for 2030 with the challenging goal of achieving the productive transformation of 50,000 coffee growing families by 2030.

In order to define the depth of our impact per family, we defined 10 targets that will help us measure family and farm resilience in economic, social and environmental terms. This vision and targets will guide the agricultural production projects that Biodiversal will implement hand in hand with coffee growers, impact-driven investors and consumers.

This report summarizes the first two years of operation in which a great team has turned what was once a business plan into the first regenerative agriculture project management company focused on coffee lands resilience.

Felipe Sardi, Founder and CEO, Biodiversal.



# **About this report**

Intended to explain the journey of transformation and open meaningful conversations

### Our first transparency report

As a general interest company, we present our first transparency report. The report is dedicated to all the people and institutions that have participated in the development of Biodiversal in its first years; and to those that will be part of the production systems change that we propose for coffee growing families in the next decade.

With the mission of elevating coffee culture to a resilient model of regenerative agriculture, Biodiversal is challenging current sustainability approaches within the coffee sector that insist in monoculture and productivity. With a Nature-based solutions (NbS) approach, Biodiversal designs and proposes agricultural productive projects that can be associated with coffee growing; projects funded by impact-driven investors that enable smallholders to adopt a biodiverse production system; projects intended to reduce their economic, social and environmental vulnerabilities, while contributing to climate action, biodiversity and food sovereignty, at their own scale.

Therefore, the purpose of this document and future transparency reports will be to explain the transformation journey, the rationale behind each investment project and the progress made while we develop each new value chain.

In this context, Biodiversal maintains an open attitude to employ the most adequate reporting tools and communication resources. We understand that in order to build trust among impact investors, it is relevant, but not enough, to identify the Sustainable Development Goals (SDGs) to which the proposed projects could contribute.

To generate the outcomes we are committed to and for investors to evaluate alignment with their investment thesis, it is of greater value for all of us, to open up and discuss the design criteria of each new agricultural production project, its theory of change and the material indicators that should be monitored to deliver intentional, positive and measurable outcomes.

Given that Biodiversal is currently designing and implementing small scale projects, this report delves into the description of the planning criteria, the target goals and the pathway to achieve them.

- For the project definition phase Biodiversal applies principles of Agroecology in coffee ecosystems in order to be regenerative by design.
- Through its project finance approach, Biodiversal induces the generation of shared value by design.
- In order to articulate project proposals and expected outcomes, Biodiversal communicates in terms of Theory of Change (ToC) from the perspective of coffee growing families.

Finally, to define the content of this report, Biodiversal has taken into consideration the Global Reporting Initiative (GRI) Core indicators. Having started doing so has allowed the company to shape its management approaches towards each stakeholder group and to present an information base to open meaningful conversations. May this steps lead establish long term relationships with stakeholders.

Based on this document, Biodiversal proposes to formally open a dialogue during 2021 with its internal stakeholders and with other organizations:

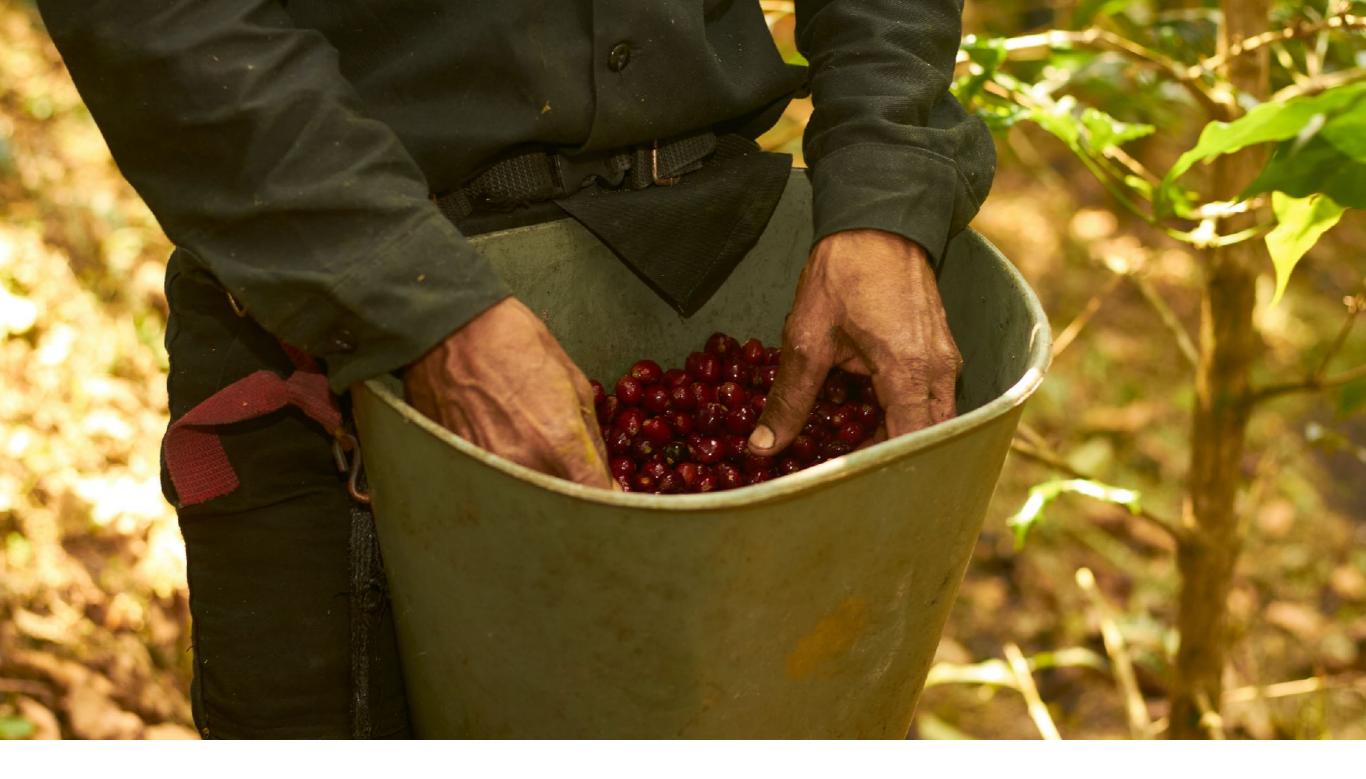
- In the impact investment ecosystem, with potential stakeholders interested in financing agriculture nature-based solutions to enhance food production within small scale coffee growing families.
- With Universities and research partners, and those interested in the sustainability of small-scale coffee growing: regarding research opportunities and the possibility of conducting impact measurement processes alongside Biodiversal's projects.
- Companies in the agroindustrial value chain with the potential to connect traceable agroecological products with consumers.
- National and local authorities, chambers of commerce and other potential stakeholders interested in the evolution of the coffee sector and/or in general interest companies in Colombia, also known as companies from *The Fourth Sector* in Ibero-America.

Anticipating that the reading of the report may generate interest in deepening in some matter and/or sharing feedback on its content, Biodiversal has set up the communication channel transparencia@biodiversal.com and encourages potential interested parties to get in touch.

María Margarita Rodríguez Reyes., Board Member, Biodiversal.

#### About the structure of this Report

- It begins by presenting the "Sustainability Context" to which Biodiversal responds with its business model and to which it proposes its vision of change.
- The chapter "Biodiversal SAS BIC" presents general information about the company, its founder, founding principles, governing bodies, investments and the summary as a BIC company.
- In "Join The Symphony 2020-2030" are consolidated: the mission; the theory of change; the vision 2030; the research, innovation and development model; Biodiversal's coffee resilience goals; information about the team, our employment generation capacity as well as current and future capabilities; Biodiversal's approach to impact investors; the project finance approach; relations with Academia; and the alignment to the Sustainable Development Goals (SDGs).
- In the chapter "Organic Fertilizers", Biogrowth's value chain is explored in depth as it is the first to be developed with a product portfolio and a group of coffee-growing families connected to the production of vermicompost.
- Finally, the chapter "Research and Development" describes the operation of the Learning Hub and summarizes the portfolio of agricultural production projects that will be presented to the impact investment ecosystem in 2021.



# **Sustainability context**

The myriad of challenges that coffee farming and traditional agriculture face, invite us to transform the food production system with a holistic vision that covers biodiversity preservation, soil health and human health.

### About climate risk exposure in coffee production

"A study of the global impact of climate change predicted that the area suitable for arabica coffee will be reduced by 50% by 2050, mostly caused by higher temperatures".

This was clearly alerted since 2014 in the international study on the global impact of climate change on coffee "A bitter cup: climate change profile of global production of Arabica and Robusta coffee".

Given that Coffea Arabica is the predominant variety produced in Colombia and that this crop is the main source of income for more than 550,000 families in the country, it is an imperative for all participants in the development of this value chain to understand the effects of climate change on the sector and to respond with mitigation and adaptation strategies for coffee production practices.

Climate change and related events, such as La Niña and El Niño, expose coffee growers to a negative spiral of vulnerability.

Due to excess or lack of water, coffee production is negatively affected; and in environments with higher temperatures and humidity, pests and diseases are more likely to appear. This exposure to climate risk leads coffee growers to experience increasing costs for production, both in labor and in the use of pesticides and herbicides. With those practices, although they can partially protect the crop, they end up aggravating the problems by increasing greenhouse gas emissions and threatening soil fertility and its ability to sequester and store carbon.

"Rising and unpredictable costs make it increasingly risky for farmers to rely solely on coffee production for income, which may lead to a decline in arabica coffee supply worldwide."

Bunn, C., et.al. Multiclass Classification of Agro-Ecological Zones for Arabica Coffee: An Improved Understanding of the Impacts of Climate Change. Published: October 27, 2015 http://dx.doi.org/10.1371/journal.pone.0140490

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### Overview of sustainability challenges faced by small coffee growers

A large part of the risks of the coffee value chain fall on the shoulders of coffee growers. In the research paper "The powerful role of intangibles in the coffee value chain", are presented the main economic, social and environmental challenges faced by small coffee growers.

"There is a growing concern of the questionable sustainability of coffee farming and the industry's inability to provide longer term solutions to challenges that also include high transactions costs and an ageing farmer population. Like in many other agricultural commodities, one of the big challenges of the coffee industry is to provide market based solutions to these difficulties".

# Overview of the Economic, Social and Environmental Challenges faced by small coffee growers

Social Issues	Food Insecurity		
	Malnutrition		
	Poor Access to Education and Healthcare		
	Lack of Retirment - pension		
	Gender inequality		
	Ageing farmer communities		
	Migration & young people leaving coffee farming		
	Lack of institutions and appropriate governance		
	Green Bean price volatility		
	Exchange rate volatility		
	Long term decreasing real coffee prices		
ñ	Lack of market information		
88	lack of product information		
Economic issues	Rising living costs		
	Ageing coffee trees		
	Land tenure uncertainty		
_	Limited access to insurance and hedging instruments		
	Poor services through local or farmer organisations		
	No living income		
	Deforestation		
_	loss of biodiversity		
nta	soil erosion and degradation		
Environmental	inapproprate use of agrochemicals		
	degratation of water quality and supply		
Ž	limited waste water management		
ш	evolving coffee pests and diseases		
	climate change and volatility		

The powerful role of intangibles in the coffee value chain Luis F. Samper,1 Daniele Giovannucci, Luciana Marques Vieira

## Agriculture, biodiversity and food security

52% of global agricultural lands are now moderately to severly degraded, stated the most recent publication *Nature-based solutions in agriculture: the case and pathway for adoption,* by FAO and The Nature Conservancy.

"The loss of productive land, coupled with increased food demand, pushes agriculture to be the primary driver in 80% of native habitat loss". "In addition, land conversion and fossil-fuel dependent agriculture practices are responsible for around a quarter of global emissions (IPCC, 2019; FAO, 2020b)", reminds the quoted paper.

This generates a vicious cycle of environmental degradation that compromises food security. Unsurprisingly, the Sustainable Development Goal (SDG) 2.4 claims for ensuring sustainable food production systems and implementing resilient agricultural practices that increase productivity and production, that help maintain ecosystems, that strengthen capacity for adaptation to climate change, extreme weather, drought, flooding and other disasters, and that progressively improve land and soil quality.

Iseman, T. And Miralles-Willhelm, F. 2021. Nature-based solutions in agriculture: the case and pathway for adoption. Virginia. FAO and The nature Conservancy. https://doi.org/10.4060/cb3141en

#### « 4 per 1000 initiative: soils for food security and climate »

"Every year, 30% of this carbon dioxide (CO2) is absorbed by plants thanks to the photosynthesis process. Then, when those plants die and decompose, the living organisms of the soil, such as bacteria, fungi or earthworms, transform them into organic matter. This carbon-rich organic material is essential for human nutrition because it retains water, nitrogen and phosphorus, essential for growing plants.

Primarily composed of carbon, the organic matter in soils plays a role in four important ecosystem services: resistance to soil erosion, soil water retention, soil fertility for plants and soil biodiversity.

Global soils contain 2 to 3 times more carbon than the atmosphere.

Even small changes in the soil carbon pool have large-scale effects both on agricultural productivity and on greenhouse gas balance

If this carbon level increased by 0.4% per year, in the first 30-40 cm of soil, the annual increase of carbon dioxide (CO2) in the atmosphere would be significantly reduced

Maintaining organic carbon-rich soils, restoring and improving degraded agricultural lands and, more generally, increasing soil carbon, play an important role in addressing the three-fold challenge of food security, adaptation of food systems and people to climate change, and mitigation of anthropogenic emissions."

https://www.4p1000.org/es

According to the FAO, since the 1900s, some 75 percent of plant genetic diversity has been lost and 75 percent of the world's food is generated from only 12 plants and five animal species.

The next ten years are being declared by The United Nations as the Decade for Ecosystem Restoration as a means of highlighting the need for greatly increased global cooperation to restore degraded and destroyed ecosystems.

In conclusion, the myriad of challenges that coffee farming and traditional agriculture face, invite us to transform the food production system with a holistic vision that covers biodiversity preservation, soil health and human health.

At Biodiversal, we are adopting Nature-Based Solutions in coffee lands to contribute to climate action, biodiversity restoration and food sovereignty at farm level.



Welcome to the future of food, Today



# **Biodiversal SAS-BIC**

Elevating coffee production to a resilient model of regenerative agriculture.



#### Biodiversal SAS - BIC

Biodiversal is the first regenerative agriculture startup focused on coffee lands and small scale producers' resilience. It was established in 2018 in Bogotá and adopted the condition of "general interest company" (BIC Company, in Colombia).

Biodiversal's business model is grounded on four enablers of change in the coffee sector:

- Early stage investment in research and development of agricultural production projects based on nature-based solutions;
- Engagement with impact-driven investors to fund projects scalability;
- Technical, digital and commercial assistance on agroforestry redesign of coffee lands and project implementation;
- Transformation, branding and business development of value-added products.
   Connection to local and international markets, with a radical transparency approach along the value chain.

Due to its impact on the coffee ecosystem, the development of the organic fertilizer value chain has been the 2018-2020 priority for Biodiversal.

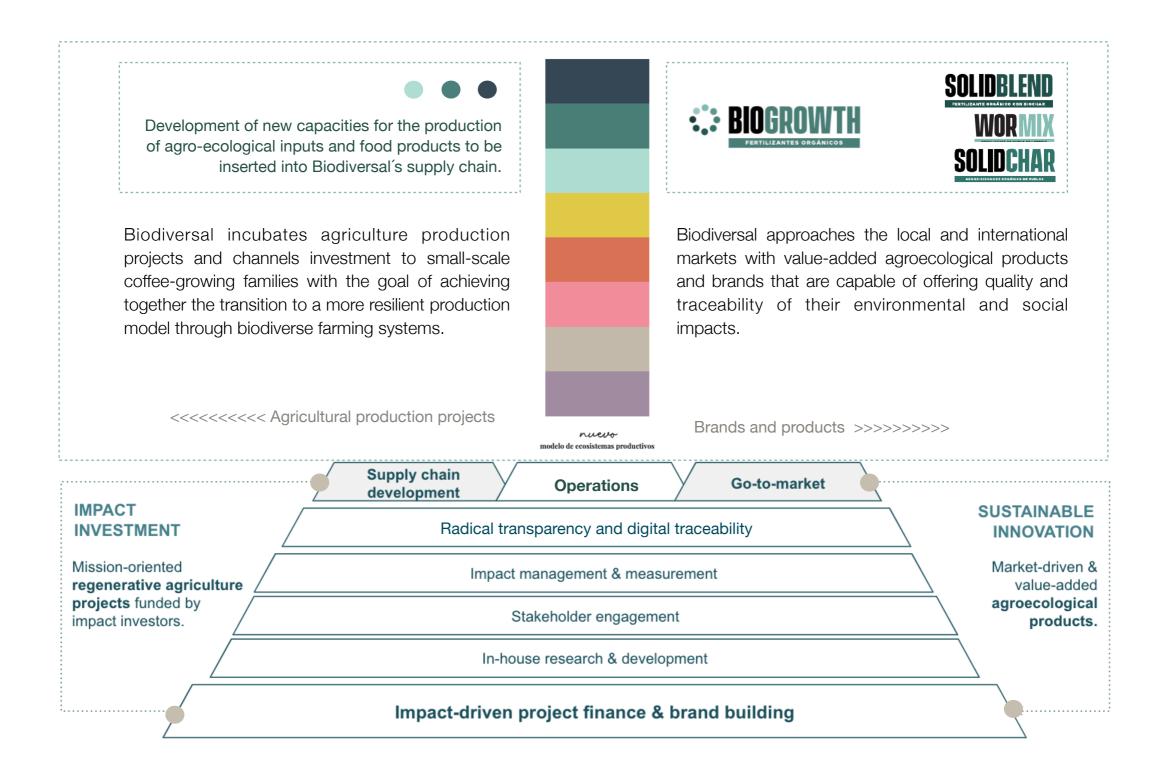


The organic fertilizers portfolio - SolidChar,
SolidBlend and Wormix- are produced at the
certified mixing center in Cundinamarca and are
branded under the umbrella of Biogrowth.
Linked to this value chain Biodiversal launched
the first pilot-project for vermicomposting
production with coffee growers in 2020.

By creating a symphony of collective efforts around agricultural production projects, Biodiversal promotes the restoration of biodiversity, soil health and the resilience of coffee-growing families and their production systems.



#### Value creation diagram



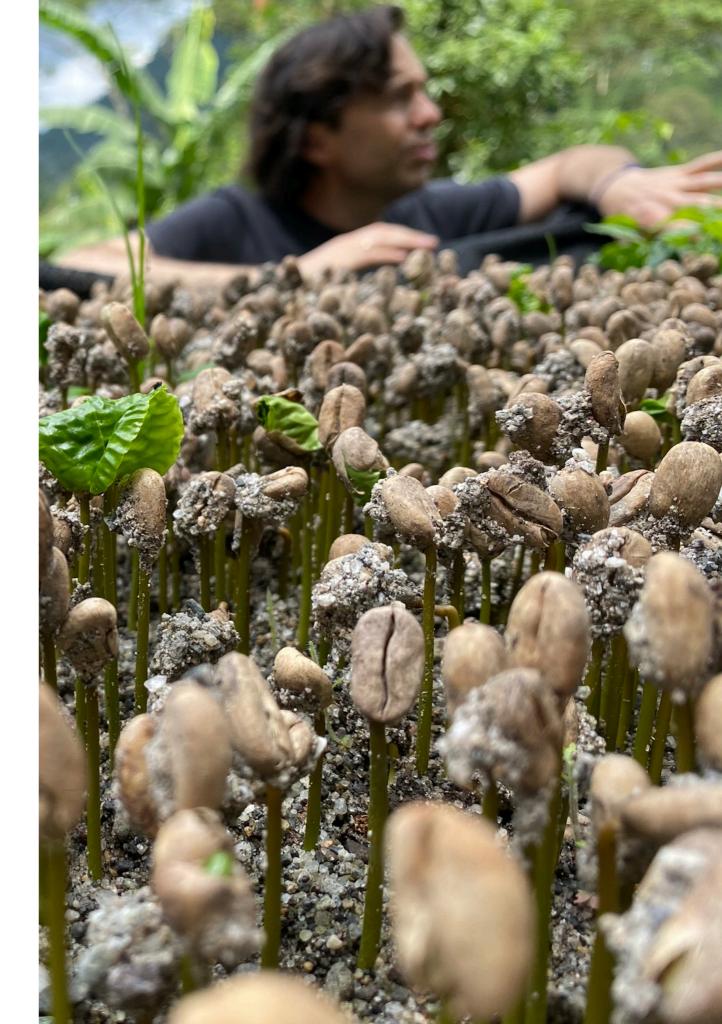


#### Founder & CEO

Biodiversal has been managed from the beginning by its sole founder, Felipe Sardi Aristizábal, a Colombian businessman with 20 years of professional experience in the financial and coffee sectors.

During the last 10 years, in addition to specializing in Agricultural Sciences and Permaculture, Felipe has founded several companies related to the Specialty Coffee industry. He currently develops and manages impact investment initiatives in the agricultural sector.

Felipe Sardi is also co-founder of La Palma & El Tucán; and co-founder of Libertario Coffee Roasters, Delagua Coffee, The Coffee Hub and Equation Coffee, in Colombia. He is also co-founder of Creativa Coffee District and Finca Los Pozos, in Panama.



# The story behind Biodiversal

"At La Palma and El Tucan, after 5 years of producing specialty coffees under the conventional monoculture model based on chemical applications, in 2017, we made the shift to an organic polyculture model using our own organic fertilizers and biological controls.

Our need was clear: to protect the crop and nourish it with all the necessary inputs to obtain a coffee cherry of excellent quality. For this reason we adopted a regenerative agriculture model where coffee would grow in association with other crops, in harmony with nature while improving soil health. Our permanent challenge had been, precisely, the soils degradation, due to the fact that most of our crops are located on hillsides.

With continuous applications of chemical fertilizers, we were actually encouraging nutrient leaching and erosion, leading to low

fertility levels in the crop. So to increase the percentage of organic matter, we planted more than 120 shade trees per hectare (of 24 different species), and designed and produced our own organic fertilizers.

The results have been very satisfactory. In addition to increasing the resilience of La Palma & El Tucan to climate change, we managed to improve the texture and porosity of the soils, their cationic exchange capacity and their moisture retention.

This has contributed to improving the crop and has also restored soil health and the farm's entire ecosystem. Plants have become more resilient to drought stress, and nutrients are now easily assimilated by crops. Over time, fertilizations with our own products have become more efficient and have improved productivity per tree by more than 50% in just three years.

The best part about this new model of coffee farming is that we became an example for our neighboring coffee growers, with whom we now dream of transforming more and more farms."

Experience reported by Felipe Sardi to the Spanish online portal Forum del Café in 2020.



## Founding principles

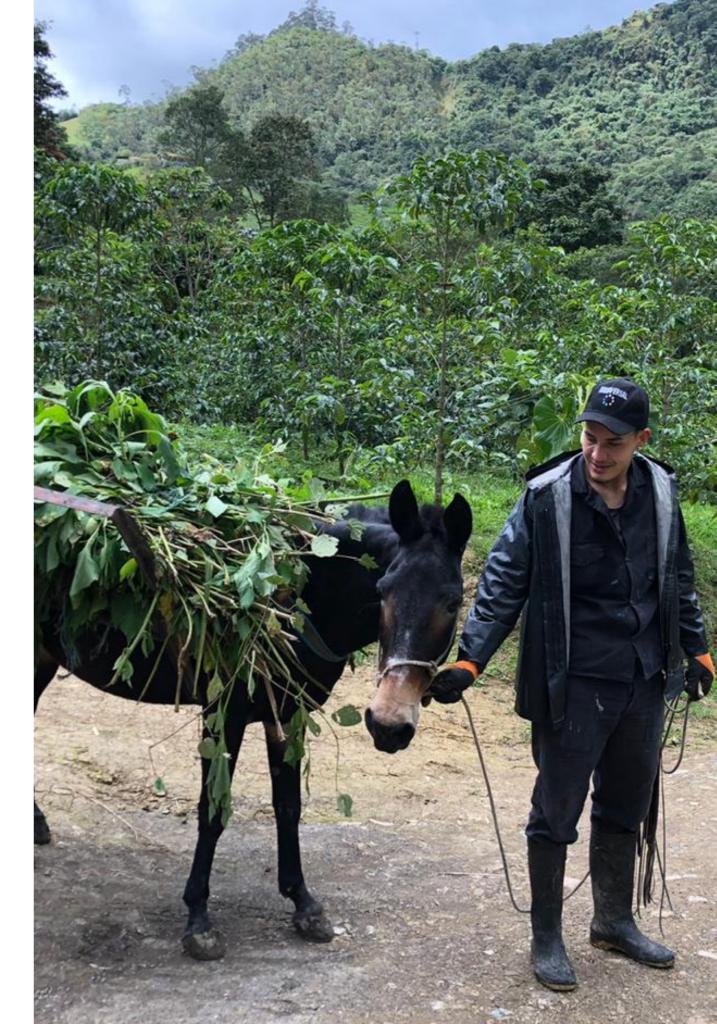
Biodiversal has been given a set of fundamentals that are explicitly promoted since its creation:

- 1. Respect for all people.
- The decision to create and deliver shared value around coffee production.
- 3. The certainty that biodiversity is the technology to mitigate climate change.
- 4. The intention to challenge the status quo through life-long learning and radical transparency.
- 5. The willingness to create a symphony of collective efforts among human and natural ecosystems.

These principles are embedded in the business model and captured in its sustainable growth business framework, so called "Join The Symphony 2020-2030".

Business transparency communication channel:

transparencia@biodiversal.com



#### Governance

Biodiversal is still a small company in which the interests of its shareholder are fully represented in the management and administration of the business. Hence, the business growth will depend on the trust that the organization inspires among stakeholders; and on the Founder's ability to ensure strategic alignment once projects are ready to scale up.

With this clarity, Biodiversal values the instruments of corporate governance as a means to translate the criteria with which decisions are made into management tools for business alignment and stakeholder engagement around the founding principles and company mission.



#### General shareholders' meeting

Biodiversal's main governing body performed two ordinary meetings during 2020.

- During the fist meeting the Shareholder
  made the decision to update the
  company's bylaws in order to reflect his
  intention to create shared value from the
  business model. Accordingly, Biodiversal
  voluntarily adopted the status of a general
  interest company (BIC company) in 2020
  and will become a B Company in the
  future.
- During the second session while presenting 2020 financial closing and 2021 outlook, a special mention was made about the sustainable growth strategy and communication framework "Join The Symphony 2020-2030" as a relevant milestone for a BIC company.

#### **Board of Directors**

Biodiversal will have a Board of Directors as of 2021. With the constitution of the new governing body, Biodiversal will integrate complementary perspectives in its decision making processes. The Board composition will seek to strengthen business capabilities on digital domains, partnerships development, engagement with impact investors and to bring a gender-lens approach to the business.



# **Funding to start the business**

Biodiversal has been fully funded by its founder.

Around 350.000 USD have been invested to set up the business foundations.

#### Funding breakdown in Colombian Pesos (COP)

		2018 -2020	2020	2020 %
ORGANIC FERTILIZERS	CAPEX	\$ 432.413.846	\$ 274.829.618	30 %
	VERMICOMPOST PTOJECT	\$ 116.557.131	\$ 116.557.131	13 %
	COMPOST EXPENSES	\$ 31.653.230	\$ 27.854.842	3 %
	OTHER SUPPLIERS	\$ 35.727.871	\$ 23.330.300	3 %
	Subtotal	\$ 616.352.078	\$ 442.571.891	48 %
PEOPLE	PAYROLL BIOGROWTH -ASSETS	\$ 135.173.425	\$ 135.173.425	15 %
	PAYROLL- OPERATIONS & BUSINESS DEV	\$ 163.453.670	\$ 51.858.401	6 %
	PAYROLL - R&D	\$ 102.956.850	\$ 53.731.453	6 %
	STAFF- SHARED SERVICES	\$ 114.284.522	\$ 54.909.150	6 %
	Subtotal	\$ 515.868.467	\$ 295.672.429	32 %
RESEARCH & DEVELOPMENT	LEARNING HUB	\$ 142.465.093	\$ 142.465.093	15 %
	TECHNOLOGY	\$ 28.745.748	\$ 14.372.874	2 %
	Subtotal	\$ 171.210.841	\$ 156.837.967	17 %
TAXES	TAXES	\$ 43.840.630	\$ 30.188.573	3 %
	TOTAL FUNDING	\$ 1.347.272.015	\$ 925.270.860	100 %

48% of the funds supported the **organic fertilizers value chain** development in 2020.

View pages 39-54

32% represented in **payroll expenses**.

View pages 30-31

17% of the funds were employed in **research and development.** 

View page 55

# Join The Symphony 2020-2030

Our sustainable growth framework and our call for impact investors to help us elevate coffee farming to a resilient model of regenerative agriculture.











# Impact ABC: defining intentionality

Inspired in the Impact Management Project (IMP), Biodiversal started by defining its impact ABC

# Avoid repeating the patterns of conventional coffee production.

We seek to offer agricultural production alternatives that, in the context of small coffee growing families, can:

- Amend cash flows instability and low profitability of single commodity product
- Revert soil degradation
- Reduce dependence on external inputs
- Address the low participation of women and new generations.
- Resolve lack of data for improving production processes.

# Benefit soil health and all stakeholders along the value chain.

Through regenerative agriculture practices and shared value oriented project finance, Biodiversal intends to trigger positive and measurable effects on soil health and for all stakeholders.

- 1. Employees
- 2. Small-scale coffee-growing families
- 3. Impact investors
- 4. Clients and business partners
- 5. Consumers
- 6. Local and national authorities
- 7. Scientific community / Academia

# Contribute with nature-based solutions, through regenerative agriculture practices in coffee lands.

Biodiversal's Mission and the Theory of Change were updated to clarify the operating model and to highlight the relevance of impact investors as catalysts of a systemic change.

Looking forward 2030 Biodiversal set its vision and impact goals in terms of smallholders' resilience.

Around the strategy Join The Symphony 2020-2030, Biodiversal invites stakeholders to create a symphony of collective efforts.



# Theory of change: a chain of research, investment and transformation of agricultural practices to create a sustainable food systems and smallholders resilience.

#### Mission:

Elevate coffee culture to a resilient model of regenerative agriculture.



#### Agroecological Redesign

# Design of biodiverse farming systems

Based on science, technology support and market vision, new agroecological lines of business are designed with the objective of facilitating the productive transformation of 50,000 families from coffee monoculture to a biodiverse farming system.

At the Learning Hub, the business plans come to life. Biodiversal invests in the research and pre-feasibility phase before presenting the projects to impact investors.



#### Impact Co-investment

# Co-financing for model scalability

When the projects pass the pre-feasibility phase in the Learning Hub, Biodiversal opens up to the impact investment ecosystem.

The set of projects for which Biodiversal attracts investment aim to enable the productive transformation of coffee growing families and generate an increase in their net income by at least 20% with each new agricultural production project, and connects them to value-added markets.



#### Productive Transformation

# Accompaniment to agroecological production

Once investment commitments are in place, Biodiversal invites groups of coffee growing families willing to undertake their productive transformation. The investment is channeled towards them, in kind, ensuring the development of physical and digital infrastructure; transferring knowledge through technical assistance and generating purchase agreements with the coffee growing families linking them to the supply chain of Biodiversal products.



#### Conscious Consumption

# Market connection with conscious consumers

By obtaining quality raw materials and full traceability, Biodiversal transforms, positions and connects a portfolio of new agroecological products to the local and/ or international markets.

Supported on brands that symbolize quality and radical transparency, we strive to win the preference of customers and consumers while catalyzing systemic changes.



2030 VISLOW:

Achieve the productive transformation of 50,000 coffee growing families while meeting 10 resilience goals and their insertion into new agro-ecological value chains.



### 10 resilience goals for coffee growing families

Our definition of success in terms of social, economical and environmental resilience

#### Socio-economic resilience

# Digital inclusion

#### **Environmental resilience**

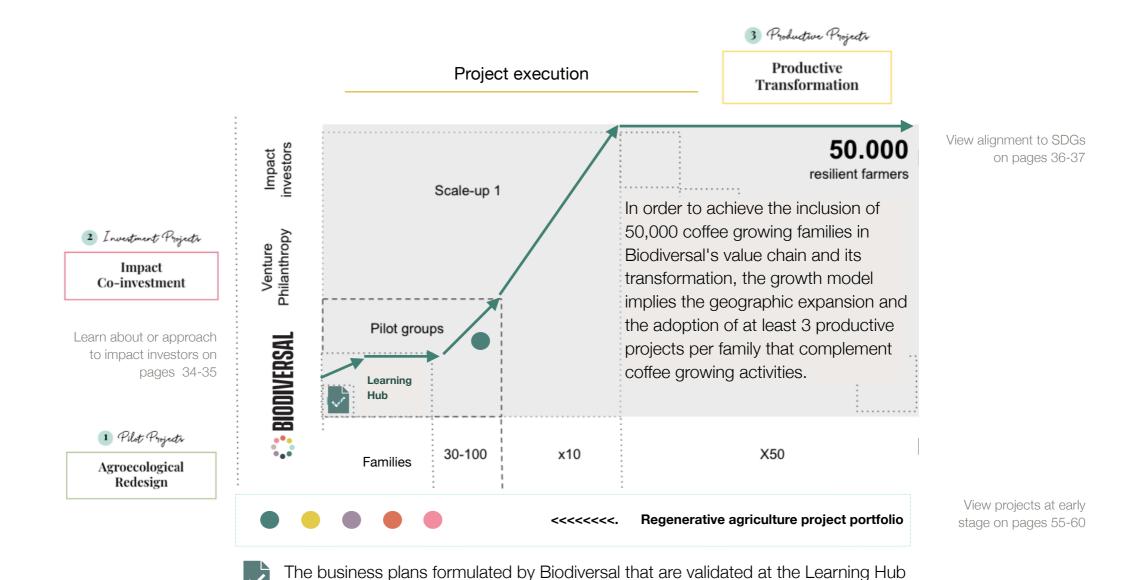
- 1. Net income increase by at least 20% annually with each new project.
- 2. Diversification with at least 4 agroecological production lines per farm (including coffee).
- 3. At least one new production line led by women (if applicable) per farm.
- 4. At least one new production line with active participation of new generations (if applicable) per farm.
- Connection of the farm, the family and its products to the digital ecosystem:
  - access to new funds and markets
  - Generation of information and knowledge sharing.

- 6. Agroforestry design with a minimum of 8 species associated with coffee per hectare.
- 7. Minimum 50% of the nutritional requirement of the crops provided by organic fertilizers.
- 8. Annual improvements of at least 0.4% of organic matter content in the soil per farm.
- 9. Carbon-neutral farms within 5 years of starting their transformation.
- 10. Projects able to measure and manage water use efficiently.



Expected changes in 50,000 small-scale coffee-growing families by 2030.

### The innovation & growth journey towards the 2030 vision.



are presented to impact investors to fund their implementation with groups of at

previous stages have been completed.

least 30 families in the pilot phase and in groups of more than 100 families once the

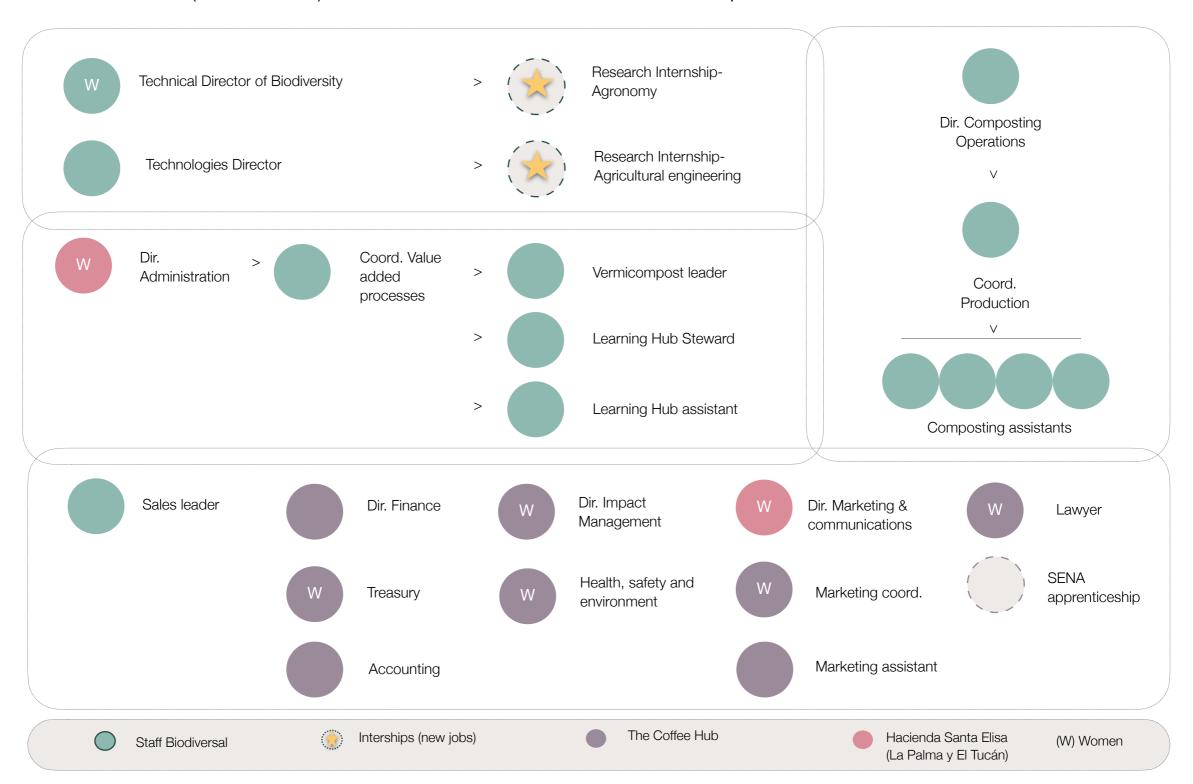
Read about the first pilot project on pages 46-53





## The team composition

Biodiversal has generated 15 new direct jobs since its creation and two new jobs in 2020. The extended team of collaborators includes staff from the shared services center (The Coffee Hub) and from La Palma & El Tucan's team who dedicate part of their time to Biodiversal.





### **Employment and development opportunities**

Biodiversal's capacity to create new jobs depends fundamentally on the innovation process and, in particular, on the number of projects and on their stage of development.

#### Stage 1: formulation of business plans

In this first phase, business plans and pre-feasibility studies are carried out. At this stage Biodiversal's core team has the challenge of proposing new productive projects with agroecological criteria and evaluating their capacity to generate value. In other words, job opportunities are scarce and limited to rotation events at this point.

#### Stage 2: Research at The Learning Hub

When the business plans move on to The Learning Hub, opportunities for incorporating new talent emerge in the form of internships in partnership with universities.

Initial learning is generated at this stage where financial, operational, commercial and environmental assumptions are tested before presenting the projects to potential investors.

#### Stages 3-4: project launching

Biodiversal's capacity to generate employment will grow from the third stage on. Once funding for project scale up is attracted, job and growth opportunities emerge, associated with the development of new value chains.

As a BIC company, Biodiversal has committed to have a gender balance on project management: 50% projects led by women.

In 2021, Biodiversal will formalize its labor practices policy.

During 2020 Biodiversal generated two new jobs for students from Colombia's National University who are conducting research projects at the Learning Hub.

### Capacity building 2018-2020

As a result of the synergy generated from the shared services center and the close relationship with La Palma and El Tucan, Biodiversal has formed a multidisciplinary team able to perform:

- Project finance and brand building to support agroecological products business development.
- Research and agroforestry redesign for the transition from coffee monocultures to biodiverse farming systems.
- 3. Measurement and communication of economic, social and environmental impact in the coffee sector.
- 4. Integration of technologies, information systems and digital communication to projects.
- 5. Technical assistance services to small-scale coffee growing families.

### Capacity building 2021-2030

In order to achieve projects' scale up and to enable a sustained growth for the business, Biodiversal will need to strengthen its capabilities and/or create strategic partnerships in the following fields:

- 1. Adoption of disruptive technologies (AgTech).
- 2. End to end data management: collection, storage, processing, analysis, integration and visualization.
- 3. Partnerships for the geographic growth of the model.
- 4. Development of food distribution networks.
- 5. Financial innovation within the impact investment ecosystem.





### Approach to academia and think tanks

In close collaboration with academia, Biodiversal is interested in sharing knowledge on the potential of the coffee sector to go beyond the traditional conceptions of sustainability and fair trade. We think it's possible through business models that are both regenerative and distributive by design.

- By "distributive by design" we mean shared value business models. Profitable businesses capable of breaking the cycle of poverty by focusing on significant net income growth for smallholders through diversified production systems; models that reduce dependence on external inputs; and that contribute to food sovereignty and economic resilience of producers including women and next generations.
- By "regenerative by design", we mean developing business models
  that act hand in hand with nature and within planetary boundaries;
  models that privilege biodiversity and introduce soil health
  considerations from the design phase; models that are committed
  to enhancing nature-based solutions in agriculture.

Biodiversal is open to collaboration with universities interested in accompanying impact measurement processes and/or proposing new evaluation scopes to generate learning and shared knowledge.

# Our approach to investors

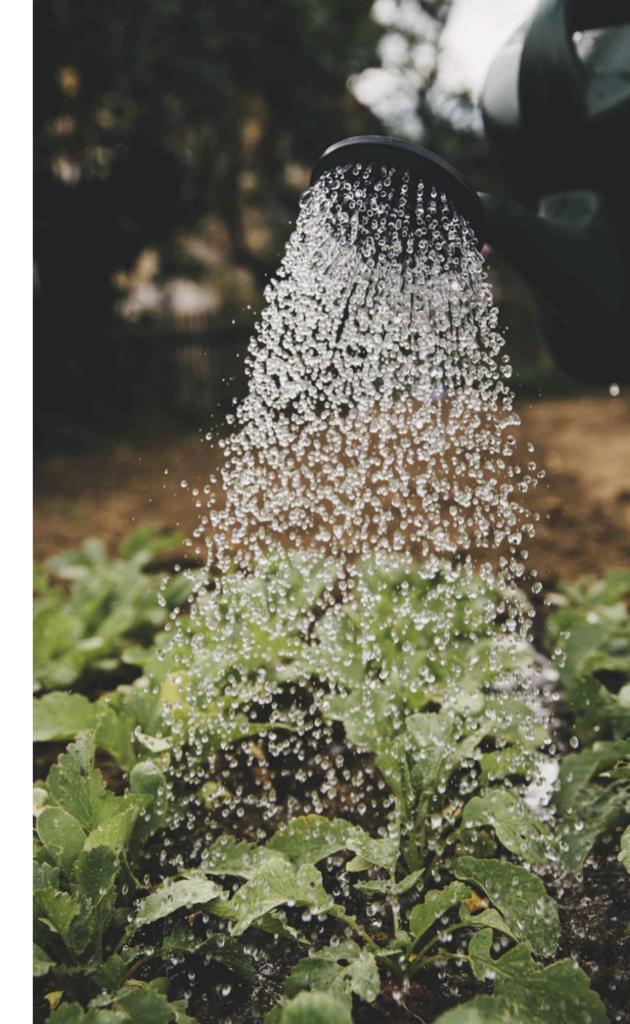
Within the impact investment and sustainable finance ecosystem, Biodiversal seeks to engage with institutions interested in financing regenerative agriculture projects through private debt instruments.

Biodiversal approaches impact investors with mission-driven agricultural projects that have been incubated on the Learning Hub; after having tested initial financial, operational, commercial and environmental assumptions.

Even though the achievement of Biodiversal's vision and goals to 2030 highly depend on project funding, the company is not currently calling for equity partners.

#### Investors relations policy

In 2020 Biodiversal formulated its Investor Relations Policy as an internal guide for engagement with project funders. The document will be submitted for feedback to the Board of Directors, before being approved at the Assembly and published in 2021.





## Project finance: planning a shared value business model

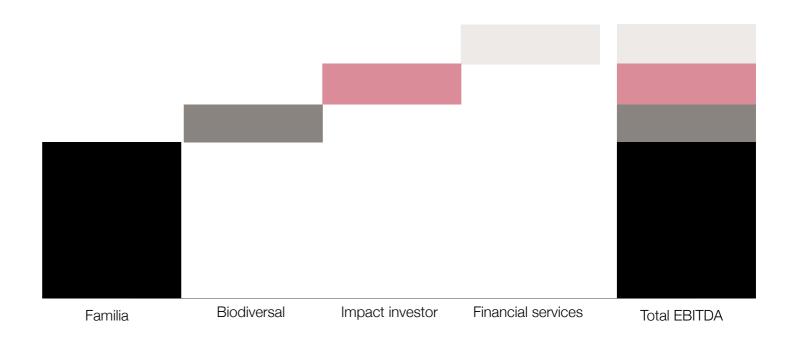
The projects proposed by Biodiversal are designed to offer investors an estimated annual return of 20% before taxes.

Using EBITDA as an indicator of value distribution, the project intends to offer:

Around 60% of earnings for the coffee growing families.

Around 40% of earnings distributed among Biodiversal (as project manager), impact investors and financial intermediaries.

#### Proposed Value distribution for Biodiversal projects - based on EBITDA



Projects are designed to deliver shared value while contributing to the 2030 vision and the set of resilience goals.

Through project finance Biodiversal proposes a win-win business model for all stakeholders.



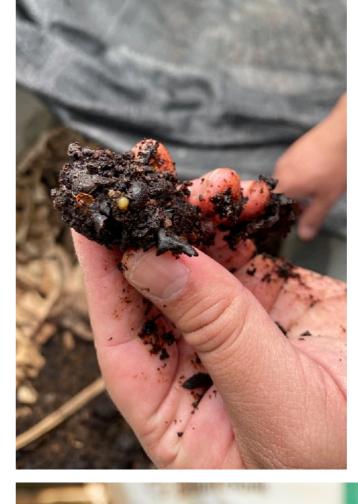
# Biodiversal's approach to the Sustainable Development Goals (SDGs)

SDGs	Biodiversal: Join the Symphony 2020-2030	
1.5 By 2030, build the resilience of the poor and those in vulnerable situations and reduce their exposure and vulnerability to climate-related extreme events and	Target population: small-scale coffee farmers (average 1.6 hectares).	
other economic, social and environmental shocks and disasters	Objective: achieve the 10 resilience goals with 50,000 coffee growing families by 2030, equivalent to near the 10% of Colombian coffee growing families with less than 3 hectares	
2.3 By 2030, double the agricultural productivity and incomes of small-scale food producers, in particular women, indigenous peoples, family farmers, pastoralists	By moving from coffee monoculture, to a biodiverse farming system with at least 3	
and fishers, including through secure and equal access to land, other productive resources and inputs, knowledge, financial services, markets and opportunities for	new lines of business, productivity will be measured in terms of food production per hectare.	
value addition and non-farm employment.	Access to resources: in-kind credits for infrastructure installation, capacity building through technical assistance and productive linkage to Biodiversal to connect to value-added markets	
2.4 By 2030, ensure sustainable food production systems and implement resilient agricultural practices that increase productivity and production, that help maintain ecosystems, that strengthen capacity for adaptation to climate change, extreme weather, drought, flooding and other disasters and that progressively improve land and soil quality.	Regenerative agriculture model applied to coffee farming with goals related to biodiversity, carbon footprint and soil health.	
4.4 By 2030, substantially increase the number of youth and adults who have relevant skills, including technical and vocational skills, for employment, decent jobs and entrepreneurship.	50,000 coffee growing families with technical assistance for the development of agro-ecological production capacities and the use of AgTech	
5.5 Ensure women's full and effective participation and equal opportunities for leadership at all levels of decision-making in political, economic and public life.	Focusing on women's economic participation, Biodiversal seeks to generate access to financial resources and technical assistance for the development of new agroecological businesses. Biodiversal has developed a measurement tool to understand women's participation and be able to promote it. One of the commitments related to the Learning Hub is to ensure that at least one of the three new projects adopted by families is led by a women.	

#### **BIODIVERSAL**

SDGs	Biodiversal: Join the Symphony 2020-2030
8.2 Achieve higher levels of economic productivity through diversification, technological upgrading and innovation, including through a focus on high-value added and labour-intensive sectors	Backed on its experience in the specialty coffee market, Biodiversal's business model proposes a paradigm shift in sustainable coffee growing. We disagree on the vision those who maintain the focus on monoculture and productivity levels. We propose a transition towards productivity measured in terms of food harvested per hectare. Through productive projects associated with coffee and the use of technologies, Biodiversal connects coffee growing families in value added chains where traceability and access to information about origin and processes generates value through intangibles.
8.7 Take immediate and effective measures to eradicate forced labour, end modern slavery and human trafficking and secure the prohibition and elimination of the worst forms of child labour, including recruitment and use of child soldiers, and by 2025 end child labour in all its forms	As child labor is a clear risk within the agricultural sector and foreseeing that a family that is successful in the model proposed by Biodiversal could be tempted to encourage the participation of children, Biodiversal commits to adopt measures to prevent the materialization of the risk of child labor in its value chain.
12.4 By 2020, achieve the environmentally sound management of chemicals and all wastes throughout their life cycle, in accordance with agreed international frameworks, and significantly reduce their release to air, water and soil in order to minimize their adverse impacts on human health and the environment.	As part of the 10 resilience goals, Biodiversal is committed to ensure that at least 50% nutritional requirements of crops are provided by organic fertilizers.  Biodiversal has also committed to reach carbon neutrality at farm level through nature based-solutions: agroforestry and soil health.
13.1 Strengthen resilience and adaptive capacity to climate-related hazards and natural disasters in all countries.	Help 50.000 coffee farms reach carbon neutrality through nature based-solutions: agroforestry and soil health.
15.a Mobilize and significantly increase financial resources from all sources to conserve and sustainably use biodiversity and ecosystems	Biodiversal seeks to attract impact investment in order to help 50,000 coffee growing families elevate its production model to a resilient system of regenerative agriculture.
16.6 Develop effective, accountable and transparent institutions at all levels	Through the principle of radical transparency and the active exercise of accountability. Transparency channel: <a href="mailto:transparencia@biodiversal.com">transparencia@biodiversal.com</a>
17.3 Mobilize additional financial resources for developing countries from multiple sources	Foreign investment attracted.
17.7 Promote the development, transfer, dissemination and diffusion of environmentally sound technologies to developing countries on favourable terms, including on concessional and preferential terms, as mutually agreed.	Biodiversal incorporates digital technologies to offer radical transparency and access to funds and markets for coffee growing families. But above all, Biodiversal believes in biodiversity as the most efficient technology to tackle climate change.

Caring for the living organisms below our feet inspired Biodiversal's first Regenerative Agriculture Project...





## **Organic Fertilizers**

Innovating to restore the quality of the soils where coffee and other agricultural products are harvested.









#### Our approach to soil health

Soil health is a key determinant of sustainability in agriculture; and organic fertilizers are fundamental inputs in any agro-ecological value chain.

At Biodiversal, we believe that providing transparency on the type of inputs used on crops and soil quality measurements are two key data points that will allow investors and consumers to identify regenerative agriculture projects.

The production of organic fertilizers represents an additional source income for coffee growing families and a reasonable strategy to reduce their dependence on external inputs.

#### Biodiversal's organic fertilizers facility

In 2020 Biodiversal obtained certification from the Colombian Agricultural Institute (ICA) for the production of organic fertilizers at the facility located in La Mesa, Cundinamarca.



#### Biogrowth product portfolio

Based on formulation, composting, vermicomposting and mixing capabilities, Biodiversal consolidated the first organic fertilizer portfolio under the Biogrowth brand.

SolidChar, SolidBlend and Wormix are the first three products with which Biodiversal approaches the market to contribute to the regeneration of agricultural soils.

## **COP \$599 MM**

Payed to local suppliers in 2020

96.9%

Recycled material content in final products

32

Coffee growing families connected to the first vermicomposting project.

125 mt

Of organic fertilizers sold in 2020.

Estimate based on total 2020 investments, less payroll and taxes.

136,258 Kg of recycled material over 140,600 Kg of total material used.

Connected through investment agreements, technical assistance and purchase of humus production. Production to be started in 2021.

Representing Biodiversal's total revenues in 2020, this portfolio generated COP \$72 million.

#### **Products**

#### Sources

#### Composition



Biochar resulting from the pyrolysis process of carbon-rich materials that stabilizes the carbon fraction, making it more resistant to chemical and biological decomposition. Agricultural residues with high levels of lignin and cellulose.

pH	8-10
CE	>6 dS/m
Humedad	10%
Carbono orgánico	>19%
Retención de humedad	>160%
Relación C/N	>80
Capacidad de intercambio catiónico	>30meq/100mg
Potasio (K2O)	>2,5%
Calcio (CaO)	>8%



Balanced mixture of compost, vermicompost, beneficial microorganisms and biochar, enriched with rock flour that supplements the mineral fraction to favor crop nutrition.

A blend of organic fertilizers, biochar and microorganisms.

PH	7,5 - 8,5	Calcio (CaO)	>1 - 3%
CE	>=10 dS/m	Magnesio (MgO)	>0,5 - 1,5%
Carbón Orgánico	>=15%	Azufre total	>0,1 - 0,5%
Relación C/N	>=10	Hierro total	>0,88ppm
Capacidad de Intecambio Catiónico	>=30 meq/100g	Manganeso total	>26ppm
Cenizas	>29,5%	Cobre total	>10ppm
Nitrógeno Orgánico	>1,5 - 2%	Zinc total	>18ppm
Fósforo total (P2O5)	>1 - 2,5%	Boro total	>l5ppm
Potasio total (K2O)	>1 - 2%	Sodio total	>=0,006%



Vermicompost enhanced with beneficial microorganisms that help to easily absorb nutrients in the crop, contributing to a more efficient fertilization.

Harvest residues, wood, green waste, manures (equine, bovine and ovine) and microorganisms.

PH	7 - 8,5	Calcio (CaO)	>3%
CE	>6 dS/m	Magnesio (MgO)	>0,5%
Carbón Orgánico	>15%	Azufre total	>0,2%
Relación C/N	>10	Hierro total	>0,9%
Capacidad de Intecambio Catiónico	>=35 meq/100g	Manganeso total	>50ppm
Nitrógeno Orgánico	>1,5 - 2,5%	Cobre total	>10ppm
Fósforo total (P2O5)	>1,5 - 2,5%	Zinc total	>20ppm
Potasio (K2O)	>1,5 - 2,5%	Boro total	>l5ppm

#### Suggested uses per crop under the supervision of an agronomist



CULTIVO	APLICACIÓN	DOSIS	RECOMENDACIONES
Sustrato y semillero	-	30% de la mezcla final	
Pastos	Incorporado al suelo o al voleo	l ton/ha	2 a 3 veces al año
Café y cacao	Zona de plateo	l Kg/árbol	3 a 4 veces al año



CULTIVO	DOSIS	APLICACIÓN	OBSERVACIONES
Hortalizas	100-150g /sitio	Área de cultivo	Incorporarlo al suelo pre-siembra
Frutales	l-2 kg / árbol	Zona de plateo	3 a 4 veces al año
Café y Cacao	l-2 kg / árbol	Zona de plateo	3 a 4 veces al año
Papa	1,5 ton/ ha	Área de cultivo	Incorporar pre-siembra, al segundo mes y al cuarto mes
Flores	l-l,5 kg/ planta	Sitio de siembra	



CULTIVO	DOSIS	APLICACIÓN	OBSERVACIONES
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Flores	1-1,5 kg/ planta	Sitio de siembra	

### Foreseeable outcomes in soil health and crop performance:

Significant increase in soil organic matter content.

Improved soil physicochemical properties.

- Improved cation exchange capacity.
- Soil moisture retention
- Improvements in soil porosity and texture.
- pH neutralization of acid soils.

Increased crop productivity.

In observance of the precautionary principle, product communications include recommendations for responsible use.

Biodiversal invites its customers to share the effects observed after the use of Biogrowth products on their crops through the channel <a href="mailto:transparencia@biodiversal.com">transparencia@biodiversal.com</a>

#### Organic fertilizer's value chain

We transform organic waste from local communities into value added products that revitalize agricultural soils.

Supply chain development Business development Operations Soil health & carbon farming driven Organic waste recycling **Procurement of agricultural residues** products for regenerative agriculture Logistics Packaging Logistics Main impact project: Mixing Bioreaction processes for processes for Development of vermicomposting nutrition carbon capacities within coffee-growing families enhancement sequestration to link them to Biogrowth's supply chain. **IMPACT SUSTAINABLE** INVESTMENT Source traceability, outcomes on producers, estimations on soil health and crop performance INNOVATION Mission-oriented Market-driven & Data points: sources, nutritional content, uses regenerative agriculture value-added projects funded by agroecological Engagement with impact investors, coffee growing families and other agroproducers impact investors. products. R& D: composting, vermicomposting and nutritional enhancement Development of the organic fertilizer portfolio under the Biogrowth brand.





#### Relationship with small-scale coffee growing families

Biodiversal approaches groups of coffee growing families In a zone by zone basis. The engagement process begins when projects secure funds for their implementation. In order to present each new pilot project to the coffee growing families, Biodiversal carries out a group socialization process in which the opportunity is presented to the community and families interested in the project are identified.

Biodiversal engages with families with a clear disposition to:

- 1. Make an agroforestry redesign in order to transition from coffee monoculture to a biodiverse farming system;
- 2. Work hand in hand with nature and Biodiversal in the development of new agroecological value chains (organic fertilizers, intelligent vegetable gardens, crops associated with coffee, among others);
- 3. Discover the potential of new technologies and adopting them to measure their performance, improve their processes and offer radical transparency to investors and consumers.

During the project socialization phase, Biodiversal identifies and evaluates ideas, recommendations and suggestions from interested families. As a consequence Biodiversal can ensure inclusion and manage relevant issues from the beginning of the project.

Once the projects have started, Biodiversal provides technical, technological and commercial assistance services. In this way we build a direct and close relationship with the families and make sure that the new agroecological products achieve the volume, quality and traceability required to create value and build trust.

To develop new value chains and move towards a resilient model of regenerative agriculture, Biodiversal purchases the new products generated by the coffee growing families, under conditions that allow them to increase their annual net income by at least 20% with each new project.

Since its creation and until the end of 2020, Biodiversal has engaged with producers in Cundinamarca, leveraging on the pre-existing relationship among coffee growers and La Palma & El Tucan.

Biodiversal joined the 4 por 1000 initiative in 2019

This initiative was launched by France on December 1, 2015 during COP21 and seeks to show that agriculture, especially agricultural soils, can play a determining role for food security and climate change.

We also deepened our commitment to the "4per1000" initiative joining the regional investment group (Group B1) in 2020. Biodiversal strives to motivate more investors and agricultural producers to adopt nature based solutions leading to increase organic matter content of soils at least in 0.4% annually to make a significant contribution to national determined goals (NDCs).

#### Relations with impact investors 2020

Lutheran World Relief (LWR) reached a funding agreement estimated in USD\$ 50,000 to implement the vermicomposting production pilot project with the first group of 32 coffee farms in Cundinamarca, Colombia.

LWR is part of Corus International, an ensemble of faith-based organizations working in concert to deliver the holistic, lasting solutions needed to overcome interrelated challenges, such as poverty, health and rural development.

"Considering that the conventional coffee business, even with efforts for niche markets does not leave enough decent income for coffee families, we invested in the organic fertilizer process with the hope of boosting the second but not the last line of decent income source, to help improve the economic balance of families, while taking care of the other indicators (water, biodiversity, gender, carbon footprint)."

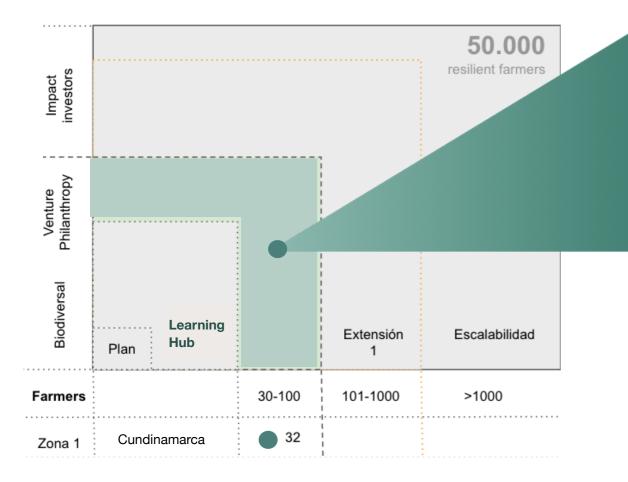
Emilio Huertas Arias

Country Manager - Colombia Lutheran World Relief / IMA World Health

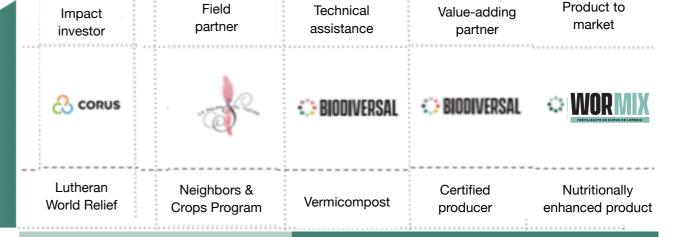


#### The symphony of collective efforts around vermicomposting

#### First Pilot Project - Vermicompost Units



#### Stakeholders & brands involved in value creation



With the investment commitment from Lutheran World Relief and the support of La Palma & El Tucan, the first vermicomposting pilot project of Biodiversal was launched in Cundinamarca.

Biodiversal started the capacity building process in 2020 with the first group of 31 coffee growing families that are being connected to Biogrowth's supply chain with Vermicompost production as an input of Wormix blend. Plus the family living at Biodiversal's Learning Hub.





#### Theory of change- pilot project No. 1

If a small-scale coffee farming family .... receives access to in-kind credit to develop vermicomposting production capacities (including the installation of infrastructure, technical assistance and ICT monitoring tools); and the family uses the organic waste from its own farm and works hand-in-hand with Biodiversal to achieve a high quality product; then we will be able to produce around 3 tons per year of vermicompost per bed (each bed is a 6m2 productive unit), of the quality required by Biodiversal to integrate it as an input for Wormix and SolidBlend production.

Biodiversal, playing the role of client, commits to purchasing the vermicompost production under the following assumptions: (i) Production quantity: 1.5 tons of Vermicompost per production unit per semester (12 tons per year for farms with four production units); (ii) Nutritional quality: minimum of 1% for at least one of the following Macro Nutrients (NO3, P2O5 or K2O5).

If the vermicompost meets the quality and quantity agreed at the beginning of the project, then Biodiversal will buy the product at the agreed prices (100 pesos/kilo equivalent to COP 1,200,000 per year in cash + 83 pesos/kilo equivalent to COP 1,000,000 per year in amortization of the investment); and as a consequence, the family will achieve:

- An additional annual gross income of COP 2,200,000.
- An increase in average annual net income of COP 1,930,000.

After 5 years of the production and commercial partnership the family will completely own the productive asset and will have the knowledge and skills to manage the new business on its own.

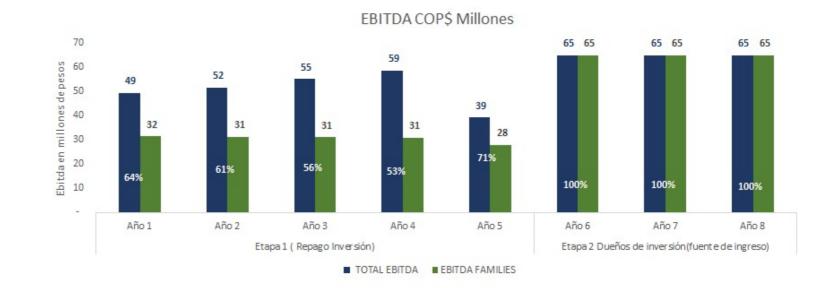


#### Financial estimates for the vermicompost project

Under the assumptions of the theory of change, the project is designed to generate positive effects on the net income and cash flow of coffee growing families in the following terms. The implementation process in 2021 will allow us to test the assumptions.

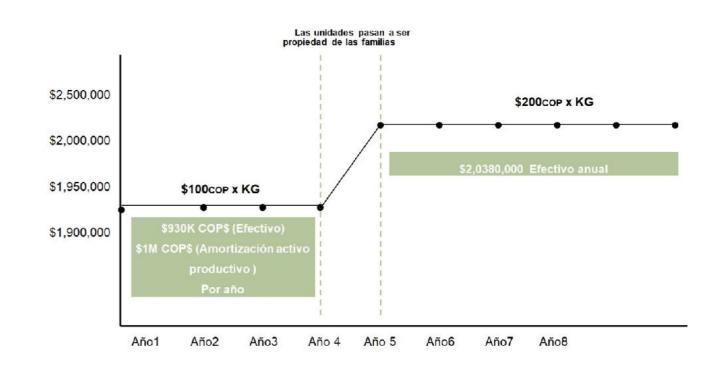
#### **Estimated EBITDA at start of project**

It is estimated that the families connected to the vermicompost project will receive an average of 60% of the earnings before taxes, interest, depreciation and amortization during the 5 years in which the investment is being paid.



#### Expected evolution of net household income

After the fifth year, it is estimated that the productive assets are redeemed and the family can earn 100% of the returns from the business.



#### Progress made on the pilot project by the end of 2020

#### The call to families

In 2020, Biodiversal presented the project to coffee-growing families connected to La Palma & El Tucan (LPET) through the Neighbors & Crops Program.

• 31 families manifested their interest on the project and willingness to participate, plus the family at Biodiversal's Learning Hub.

#### Community engagement

During the socialization phase, the conditions for participation were discussed. Ideas and suggestions were received from the community regarding the project design.

Concerning the infrastructure facility, some families manifested their interest in having mobile vermicomposting beds with which they could remain able to relocate the production area in the future.

Given the technical and financial feasibility of offering a mobile solution, and in response to suggestions received from the community, the project incorporated the possibility of choosing mobile beds as per request.

#### The start of the pre-operational phase

By the end of 2020 Biodiversal was able to complete the facilities' settlement in 26 farms and to initiate the process in the other five farms.

• In 7 out of 32 projects started being led by women.

For biosafety reasons, the technical assistance process began with a virtual training course on vermicomposting, given the context of the year.



**Investment in 32 farms** 



#### Use of proceeds

160

Million COP\* investment

+ production and commercial agreements with Biodiversal.

Digital kit: farms (1:10)

**Initial Worms** 

**Biodiversal team** 

DETALLE INVERSION	Ń
FACILITIES	56 %
TECHNOLOGY	8 %
LABOR WAGES	27 %
INPUTS	2 %
LOGISTICS	1 %
TECHNICAL ASSISTANCE	7 %
TOTAL (COP)	\$ 160.000.000

Four vermicomposting beds per farm

Local workers

**Transport** 

Expected intermediary outcomes per year	<b>Expected</b>	l intermediar	y outcomes	per yea
---	-----------------	---------------	------------	---------



Additional net income\*\*

**1 MM** 

930.000

COP represented in 1/5 of the productive asset owned COP additional net income in cash



#### **Expected results per semester**

Nutritional quality: minimum of 1% for at least one of the following Macro Nutrients (NO3, P2O5 or K2O5).

1,5

Tons of vermicompost per bed

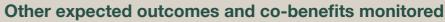
#### **Expected outcomes by the fifth year**



100%

Agricultural production line owned by the family

Profitability for the family



- Organic matter increase
- Carbon storage
- Participation of women and next generations
- Use of organic fertilizers in other crops

<sup>\*</sup>Total estimated value of the project for 32 farms (31 coffee growing families associated to LPET and the family at the Learning Hub). 124.7 million was disbursed in 2020 to start the installation of facilities.

<sup>\*\*</sup>It has been estimated that a family with 1.5 hectares planted with coffee received an annual net income of COP 4.7 million in 2020. If in addition, they receive COP 1,930,000 for vermicomposting, the project would report an increase of their net annual income by 41%.



Land survey to begin the work



Construction of concrete slab for beds, drying patio and block walls



Preparation of land for assembly



Beds in cement already plastered and enameled



Construction of wooden frame



Material Application and Worm Planting



Installation of canvas beds and plastic covering.



Complete Installation of the Beds

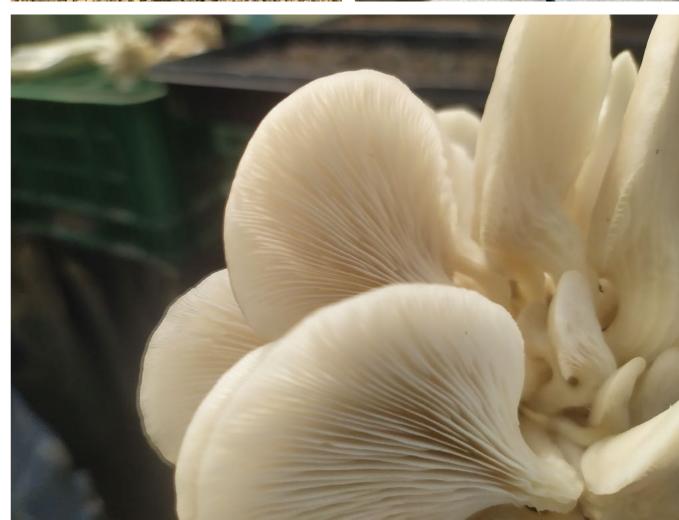
Vermicomposting is just the first of a series of agro-ecological projects that will contribute to the resilience of coffee-growing families....

# Research & Development

The project nursery where nature-based solutions theories are tested for coffee lands.









#### The Learning Hub: Investing in research and AgTech for mission-driven projects

Our Learning Hub is basically a Demo farm, located in the municipality of La Mesa, Cundinamarca. It is a space for agro-technological experimentation. It is the place where Biodiversal translates business plans into research projects. In this farm the projects run their prefeasibility phase and generate the learnings needed to validate or adjust the financial, operational, commercial and environmental assumptions, before presenting the projects to potential investors.

17% of Biodiversal's total investment in 2020 was focused on research and development processes.

#### Management approach to the Learning Hub

Biodiversal has defined 3 lines of commitment for the farm:

#### Agroecological redesign: the farm as a space for regenerative agriculture.

- Agroforestry design with a minimum of 8 species associated with coffee per hectare.
- At least 0.4% organic matter content increase in the soil.
- At least 50% of the nutritional requirements of the crops provided by organic fertilizers.
- Bring the farm to carbon-neutral levels by 2021 and become carbon negative by 2022.

#### Research projects: the farm as a project incubator

- 5 categories under documented research, per year.
- · At least 1 new pilot project per year.

#### Boosting inclusion: the farm as a node of connections (The Hub).

- Develop digital capabilities for the farm and for smart project management.
- Ensure that 50% of projects moving from the research stage to implementation are led by women.
- Organize at least 2 guided tours each year, in partnership with educational institutions or organizations that promote rural entrepreneurship.

In 2020, Biodiversal invested on the adaptation of the farm as a demo of a biodiverse farming system:

- The redistribution of the plots was carried out.
- A new layout was made, giving a contour line to the crops.
- Avocado, tahiti lime, banana, baby banana and chachafruit were planted as part of the agroforestry redesign.
- The coffee crop was renewed and the shade was regulated to match the conditions of other farms.
- Six associated species were planted: turmeric, yacon, pepper, cardamom, achira and sacha inchi.

#### Feasibility analysis

Biodiversal's business plans are designed by an interdisciplinary team oriented to the development of regenerative and distributive agribusinesses.

Mission-oriented projects

Tools and methods within Agroecology

As a first step, the technical team generates ideas for the inclusion of productive units that have technical feasibility and positive environmental and social impact. Diverse feasibility analyses are carried out for project screening. Ideal agro-climatic conditions for each of the proposed species; interaction of species in the field; productivity of each of the species; and the harvest cycles are taken into account at this phase.

The technology and operations team proposes innovative production models to maximize efficiency in the use of resources, reduce assembly costs and facilitate operation and follow-up. With this approach, proposals are developed based on agroecological criteria, materials available in the area and technologies available.

Subsequently, a feasibility analysis is carried out from a commercial perspective. Market studies and product segmentation are carried out according to existing demand, main competitors, market niches. Logistical feasibility and marketing channels are also analyzed.

Commercial viability to ensure shared value

Project design to meet the impact investment expectations.

Having technical, technological and commercial report, the financial team integrates the analyses, and estimates the project's cash flow, identifies possible financial risks, and determines the viability of the project to generate shared value at attractive levels for all parties.

The green-lighted projects are funded by Biodiversal and implemented at the Learning Hub.

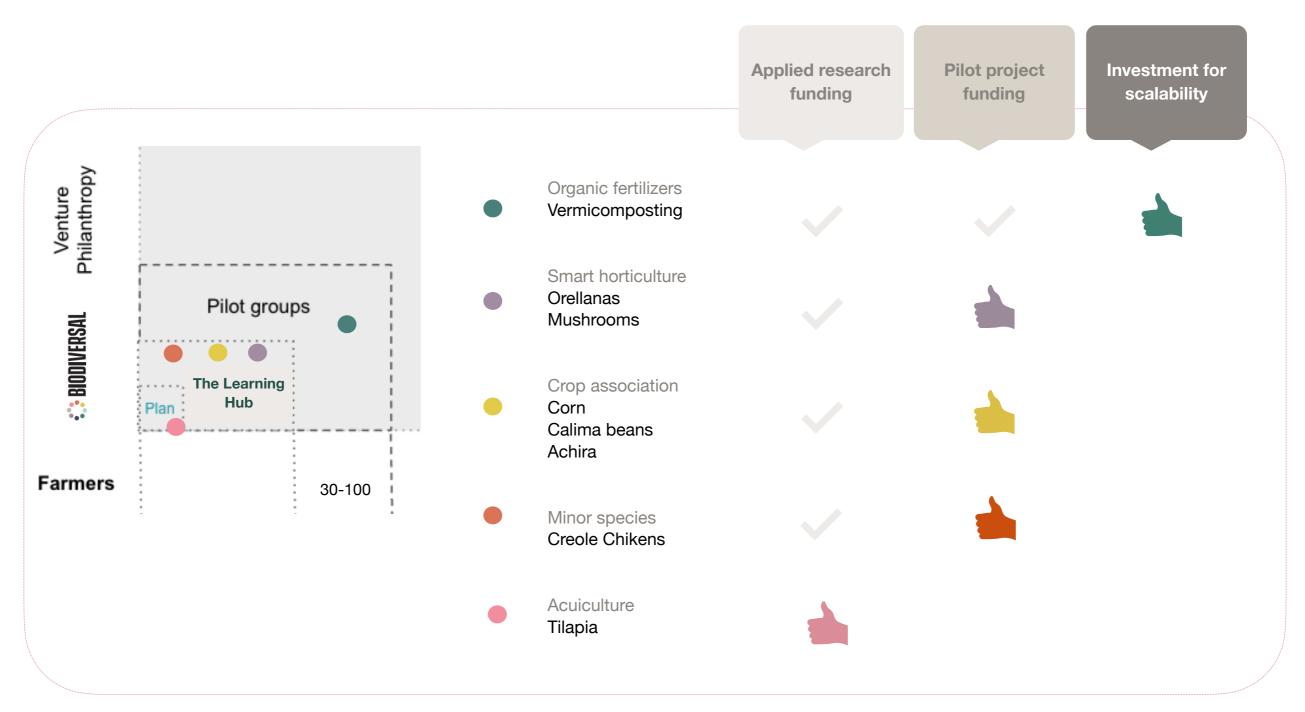
#### The project nursery

As a manager of agroecological projects, Biodiversal carries out applied research at the Learning Hub. Some of the projects are also incubated at La Palma & El Tucan.

#### Agricultural production projects at early stages in 2020



#### Early-stage project portfolio to be opened to the impact investment ecosystem in 2021



# Let's elevate coffee culture to a resilient model of regenerative agriculture!

Symphony

www.biodiversal.com

jointhesymphony@biodiversal.com

#### GRI index

GRI	Core indicators	View Page	Reasons for omission
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	102-4: Location of operations	17	
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	102-9: Supply chain	18, 41-47	
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	102-11: Precautionary Principle or approach	19, 25, 27, 43, 45	
	102-12: External initiatives	46	
	102-13: Membership of associations		Besides 4 per 1000 Initiative, Biodiversal was not subscribed to any other initiative by the end of 2020.
	102-14: Statement from senior decision-maker	5-6; 8-9; 19-21; 25-35; 40, 45	
	102-15: Key impacts, risks, and opportunities	10-14; 24-38	
	102-16: Values, principles, standards, and norms of behavior	5-6, 21, 25, 33, 40, 45	
	102-18: Governance structure	22	
	102-25: Conflicts of interest	19	
	102-26: Role of highest governance body in setting purpose, values, and strategy	21, 22	
	102-27: Collective knowledge of highest governance body	19, 22	
	102-40: List of stakeholder groups	25	
	102-41: Collective bargaining agreements	31	

GRI	Core indicators	View Page	Reasons for omission
	102-42: Identifying and selecting stakeholders	25, 26	
	102-43: Approach to stakeholder engagement	25-27; 31-35; 40, 45, 49.	
	102-44: Key topics and concerns raised	31, 34, 50	
	102-45: Entities included in the consolidated financial statements	Financial States reported to the Superintendencia de Sociedades.	
	102-46: Defining report content and topic Boundaries	9	
	102-47: List of material topics	11-13, 20, 25	
	102-48: Restatements of information		Non applicable. This is the first report
	102-49: Changes in reporting		Non applicable. This is the first report
	102-50: Reporting period	8-9	
	102-51: Date of most recent report		Non applicable. This is the first report
	102-52: Reporting cycle	Annual	
	102-53: Contact point for questions regarding the report	9	
	102-54: Claims of reporting in accordance with the GRI Standards	9	Information unavailable. This first report is progressing towards GRI's core option, but we cannot declare it yet as compliant, as systematization processes are still under construction and dialogue with stakeholders is not yet formalized.
	102-55: GRI content index	62,63	
	102-56: External assurance		This report has note been submitted to external assurance.
GRI 201: ECONOMIC PERFORMANCE	201-1: Direct economic value generated and distributed	23	
	201-2: Financial implications and other risks and opportunities due to climate change	11-14, 20, 27	
GRI 203: INDIRECT ECONOMIC IMPACTS	203-1: Infrastructure investments and services supported	51	
	203-2: Significant indirect economic impacts	41-51	
GRI 204: PROCUREMENT PRACTICES	204-1: Proportion of spending on local suppliers	41-51, 56	
GRI 301: MATERIALS	301-1: Materials used by weight or volume	41-43	
	301-2: Recycled input materials used	41-43	