



Fazenda Três Meninas - Minas Gerais, Brazil

Development Stage



The Fazenda Três Meninas is a coffee-producing farm located in the Cerrado Mineiro region, a traditional coffee area in Brazil. They strongly believe that a nature-balanced production farm tends to be a transforming agent in the region, improving the livelihood of rural producers and employees, beyond transforming the landscape of the region. For this reason, the project consists of the implementation of a new and succeed tested model farm/school of regenerative agriculture. To further improve the system, it is necessary to reinvest the amount already used for the conversion of conventional to regenerative agriculture, the implementation of agroforestry and infrastructure, and renovation of the coffee plantation with more resistant varieties. Once this system shows that a profitable balance between nature and production can be established it will become a replicable showcase of the region.

Finance & Planing



944.060

Investment



Marcelo Urtado

Initiator



LOCATION:

Monte Carmelo, Minas Gerais, Brazil

SIZE OF PLANTED PLOT:

40 ha

SIZE OF POTENTIAL AREA:

234.000 ha

CLIENT:

Fazenda Três Meninas

KEY CROP:

Coffee

INDUSTRY:

Agribusiness, Food & Beverage

GOAL:

Convince and support coffee farmers to transition to regenerative agroforestry and transform the landscape of the Cerrado Mineiro.

MAIN FOCUS:

Scale regenerative coffee production.

PARTNERS:

Nespresso, NKG Stockler



Assignment & Impact

Expected Beneficiaries

Being a model farm and school, it can influence the 4500 coffee producers in the Cerrado Mineiro region and transform the landscape of this region in Brazil.

Development Challenge

Challenges in the development of the Cerrado Mineiro are mainly affected by conventional techniques on soils management such as monocultures with the abuse of pesticides and chemical fertilizers. High temperatures during coffee flowering lead to fires that are also related to climate change and cultural issues. To change towards a more sustainable coffee production qualified labor on harvest and fields as well as specialized technical assistance for instance in regenerative agriculture is lacking.

Intervention

Fazenda Três Meninas has been practicing regenerative agriculture on 100% of its productive area for 5 years. In other words, this is not a pilot project. Together with reNature, it will be possible to implement the Model Farm/ Model School, agroforestry, and coffee renovation, transforming the farm's landscape and facilitating, training, and serving as an example of high-quality profitable regenerative coffee growing.

Financial Details

Conversion to regenerative agriculture:	€ 180k
Implementation of agroforestry:	€ 26k
Revenue reduction (due agroforestry):	€ 280k
Area expansion (compost area and dam):	€ 51k
Dam implantation:	€ 60k
Renovation of the coffee trees:	€ 353k

Objective

Practicing regenerative, clean, carbon-negative, profitable agriculture in partnership with nature. As well as becoming an attractive showcase for the 4500 coffee producers in the Cerrado Mineiro region and ultimately transforming the landscape of this region.

Inspirational Impact

Fazenda Três Meninas is a family business, and its mission is to have Nature as its partner in every decision that is made. Building a balanced, resilient, and fair production environment results in lower production and maintenance costs as a systematically healthier crop is less vulnerable to pests and diseases, in addition to contributing to the improvement of the planet through significant carbon sequestration. Management based on biological fertilizers, green manure, and reforestation is some of the actions implemented since 2016 when the farm was acquired. In 2019, Fazenda Três Meninas sequestered more carbon than was emitted, in a positive balance of more than 5 tons of carbon per hectare.



4.500

Community
Members



61% More

Biodiversity



45% More

Improved Water
Cycles



23% More

Soil Carbon Stock

According to Imaflora (2020), the farm is part of 5% of the most sustainable coffee farms in the world. This is an important fact-based indicator, no longer a hypothesis. Today (2021) this number has grown due to the greater intensity of the farm's daily cultural practices. A very relevant fact for this carbon result is that Fazenda Três Meninas has adopted regenerative agriculture in 100% of the area, the regenerative practices are already established and operating for several years.

Environmental Impact

Três Meninas Farm has already planted more than 3,000 trees and in this new phase of the project will increase this planting in addition to the massive use of different cover crops. According to the latest research, these actions result in milder temperatures (better microclimate), cycling of nutrients, shelter for micro and macrofauna. In addition, it provides a barrier against the wind, reducing the need for irrigation, so that water can be saved in the system. Completing the circle of regenerative practices and increasing carbon sequestration leads to a more resilient environment and positively impacts the region's landscape. For the production, they hope to achieve better-maturing uniformity, which is reflected in the quality of the final coffee drink.

Social Impact

The example of regenerative agriculture will inspire thousands of farmers over time. The farm will function as a model farm in the region that can be studied and multiplied. The model school will educate university students, teachers, and farmers through workshops. In addition, workshops will be held in schools and or on the farm itself, with a theoretical and practical focus to raise awareness among the younger generation. This project contributes to the quality of life, as it provides food security, more nutritious food, and improved income for

the farmers involved. To scale this impact, the project will work closely with strong regional organizations and local partners.

Economic Impact

Having nature as a partner is the guiding principle that governs all decisions at the farm aimed at achieving sustainable land in terms of environmental health, productivity, profitability, and quality human relationships with those they work with. A living soil in an environment with greater biodiversity makes it possible to reduce production costs, healthier food, increase carbon sequestration. In short, a virtuous cycle in which farms become healthier in environmental and economic terms. As the farm is located in the Cerrado Mineiro region, the traditional coffee producer region, it may lend itself to the inspiration of 4500 coffee producers in that region.

Impact Metrics

Outcome Metrics

- 1) Improve environmental resilience & mitigate climate change/global warming.
- 2) Reduce CO2 emissions & improve ecosystem services.
- 3) Support farmers with technical assistance about regenerative agriculture – capacity building.

Evaluation Method

- 1) Annual monitoring and evaluation of ESG.
- 2) Measure carbon sequestration per year.
- 3) Number of farmers taking part of workshops and transitioning to regenerative agriculture.