



Fuenterra - Santander, Colombia

Development Stage



Fuenterra is a model cannabis school located in the region of Santander, Colombia. With large cigarette companies closing operations across the country, this traditionally tobacco-growing region has been forced to abandon its main cash crop. In search of alternatives, the Tobacco Federation partnered with Fuenterra to help in the conversion of its farmers to cannabis. Through knowledge transfer and production chain streamlining, the Fuenterra team—made up of cannabis pioneers and experts—aims to partner with the small farmer and reNature to help write the rules for a more equitable and sustainable industry.



Finance & Planing



340.000
Investment



Francis Gillis
Initiator



LOCATION:

San Gil, Santander, Colombia

SIZE OF PLANTED PLOT:

0 ha

SIZE OF POTENTIAL AREA:

1.000 ha

CLIENT:

Fuenterra

KEY CROP:

Medical cannabis and industrial hemp

INDUSTRY:

Agribusiness, medical

GOAL:

Facilitate the integration of smallholder farmers into the cannabis industry while implementing regenerative agriculture practices.

MAIN FOCUS:

Develop high-quality products while promoting rural economic development.

PARTNERS:

Federación Nacional de Productores de Tabaco, Sostanza



FEDETABACO-FONDO NACIONAL DE TABACO

Assignment & Impact

Expected Beneficiaries

100 farmers and their families over 5 years.

Development Challenge

Of the nearly 2,000 farmers affected nationwide by the closing of tobacco factories, 55% is located in Santander alone and concentrated in a region that also suffers from water scarcity and poor soil quality. Despite all the opportunities that the legalization of cannabis in Colombia has brought with it (medical, economic, as well as environmental), several barriers exist for smallholder farmers from participating. From licensing to selling and from planting to harvesting. Acquiring the knowledge and inputs to make a medical-quality product is often too costly for smallholders to afford, which has prevented it from being a viable alternative crop for Colombian tobacco farmers.

Intervention

The first phase of the project is underway, with the licensing, construction, and operation of the company's model farm. In addition to hosting commercial production and R&D activities, this facility will double as a school. Located centrally in the affected region, the facility will host learning workshops for farmers while also serving as a showroom of the very same low-cost yet robust infrastructure that Fuenterra has designed with the small

farmer in mind. Together with ReNature, Fuenterra would like to integrate regenerative agriculture practices into the model and promote it among the farmers to help reverse the desertification of the region and improve agricultural profitability, with cannabis and other crops.

Financial Details

Operating costs of model farm:	€ 170k
reNature Model School:	€ 170k

Objective

Fuenterra is out to prove that smallholder farmers can grow quality cannabis for patients around the world. In doing so, they aim to bring greater prosperity to rural communities and envision a future where technological and regenerative agriculture find their voice through the plant to create thriving local economies and ecosystems.

Inspirational Impact

The global move to legalize cannabis is paradigm-shifting, but its growth has been unequal with large agribusiness pushing smaller farmers out. Fuenterra's mission is to make small rural farms more profitable by leveling the cannabis playing field. They envision a future where smallholder farmers in developing countries form an integral part of the cannabis supply chain. Combining nimble smallholder networks with regenerative agriculture has the potential to revolutionize the entire global cannabis industry at a time when the rules are just being written and when the planet most needs inclusive and sustainable



100

Community
Members



61% More

Biodiversity



45% More

Improved Water
Cycles



23% More

Soil Carbon Stock

cultivation practices. With your help, the positive impact of this project in Santander can reverberate around the world.

Environmental Impact

With this project, we hope to reverse the desertification of the region through the combination of an innovative technological package together with regenerative agriculture. Healthier soil through regenerative agriculture would lead to greater water retention while the implementation of the closed-circuit system will encourage less water waste. In addition, an exhaustive agroclimatological research determined that the region is best for cannabis cultivation, reducing the need for energy-intensive technologies (heating, dehumidification) and limiting carbon footprint compared with other companies in the country (and much less than indoor grows abroad). Finally, the carbon sequestration possibilities of regenerative agriculture combined with those of cannabis (and its industrial cousin, hemp) could magnify the positive environmental impact.

Social Impact

Fuenterra's team of international practitioners and academics aims to share the knowledge of sustainable and profitable cannabis cultivation for the benefit of the smallholder, promoting the learning of the latest techniques in agriculture and encouraging the pursuit of further education. In addition, this democratization of best practices will reduce both the structural inequality inherent in the cannabis industry as well as the income inequality that persists in the country. Through this, Fuenterra hopes to provide countries with troubled histories related to the plant, a blueprint on which to base their own programs for smallholder inclusion into the industry, and further the efforts of peace and justice.

Economic Impact

Fuenterra's success hinges on the economic comeback of its partner farmers in Santander. By helping these traditionally tobacco-farming families access a higher-margin crop like cannabis, this will contribute to improved livelihoods at a time of vulnerability. In addition, with cannabis we anticipate higher profitability in a fraction of the area typically used for other crops, leaving cultivation space to diversify to other products and promoting economic resilience against shocks like the diminished tobacco trade. Furthermore, by encouraging the implementation of technology and the adoption of regenerative agricultural practices, there will be greater crop stability—cannabis or otherwise—and more sustained income levels.



Impact Metrics

Outcome Metrics

- 1) **Decreased water waste:** m3 consumed per m2
- 2) **Improved soil conditions:** % heavy metals in soil
- 3) **Increased farmer profitability:** net income per m2
- 4) **Inclusivity of smallholders:** kg dried flower produced
- 5) **Enhanced resilience through diversification:** # types of crops

Evaluation Method

- 1) **Total technological packages installed**
SDG 9 – Industry, innovation, and infrastructure
SDG 12 – Responsible consumption and production
- 2) **Area in the region being farmed through regenerative methods**
SDG 6 – Clean water and sanitation
SDG 13 – Climate action
- 3) **Number of farmers working with Fuenterra**
SDG 1 – No poverty
SDG 4 – Quality education
SDG 8 – Decent work and economic growth
- 4) **Supply partnerships signed with manufacturers**
SDG 10 – Reduced inequality
SDG 17 – Partnerships to achieve the Goal

