

# Finance for Forest Friendly Coffee Landscapes

Prepared by Saurin Nanavati on behalf of ANEI for the "Financial Mechanisms for Landscape Investment: Synergies to Increase Returns, Reduce Risks and Enhance Impacts," virtual event convened by the 1000 Landscapes for 1 Billion People initiative, Laudes Foundation and IKEA Foundation on April 26, 2023.





# Global Coffee Crisis

Based on current estimations, doubling or even tripling coffee production is required to meet demand in 2050 - this could mean 10–20 millions of hectares would be needed compared to the current land under production.

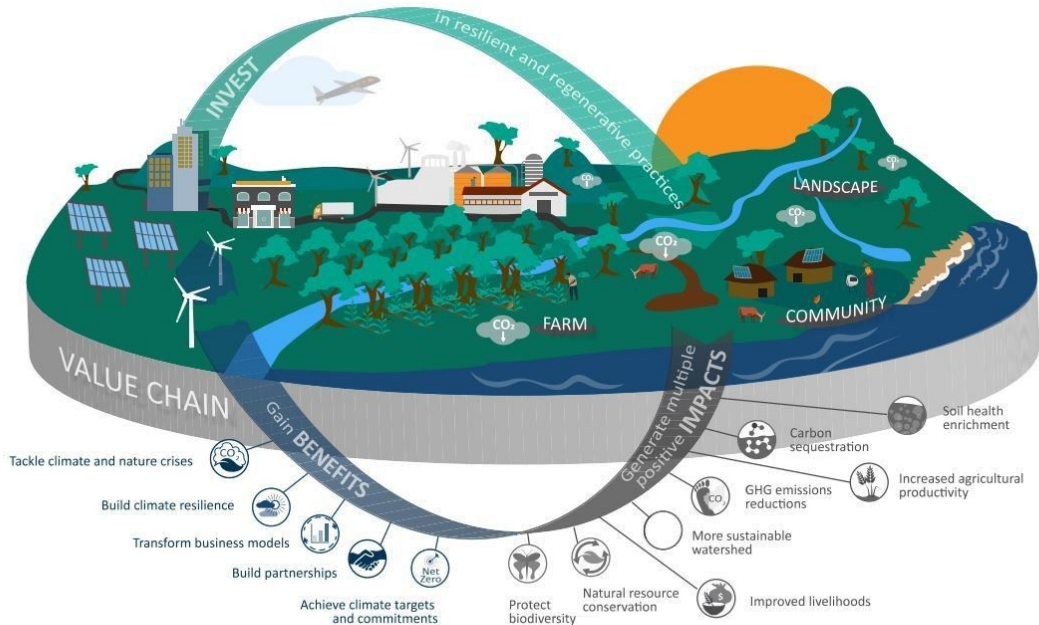
Climate models and field evidence show that global warming will gradually drive coffee production into new areas that will become suitable in the coming years and decades, impacting forests, micro-climates, biodiversity, and water sources.

# Insetting Carbon through Organic Coffee

Globally, forest issues are emerging high on the coffee agenda and becoming a material issue for many public brands, especially in the EU, but also in the UK and the US.

Coffee suppliers will need to position themselves as partners in a new carbon-zero economy. In some cases, this may fetch a market premium; in other cases, this might exclude them from market opportunities.

Supply chains are now designing “carbon insetting” programs to transparently measure and monitor the impact of coffee production on forested areas.





# ANEI: A Model for Cooperative-based Landscape Management

ANEI was the first Colombian coffee cooperative to be certified organic and is currently Colombia's largest organic coffee exporter. ANEI aims to expand its sustainability approach beyond the farm level by combining bio-cultural knowledge, landscape management, and regenerative organic principles to protect forests, biodiversity, and freshwater sources.

ANEI is well positioned to leverage member support, trade partnerships, technology, nurseries, and traceability systems to create a carbon 'insetting' program. This plan seeks to increase local employment opportunities and increase farming families' incomes through sequestering carbon via agroforestry, reforestation, and conservation.

ANEI currently has 502 members, 30 full-time staff, and 12 extension officers. In 2021-2022 ANEI exported 1,561,000 kilos of organic coffee.

THE FIRST INDIGENOUS  
COFFEE ORGANIZATION



**SINCE  
1995**



**27 YEARS  
OF EXPERIENCE**



**COFFEE AREA**  
2.176 HECTARES

**GREEN COFFEE BAGS**  
22.500  
BAGS



**70Kg  
SUBLIME**

**COCOA AREA**  
145 HECTARES



**AREA  
8.331**



**PRESENT IN  
61 VILLAGES**  
FROM 5 MUNICIPALITIES



**CERTIFICATIONS**  
ORGANIC, FAIR TRADE,  
AND SPP

**inei**

**40 TONS  
COCOA**



**4  
OPERATION CENTERS**



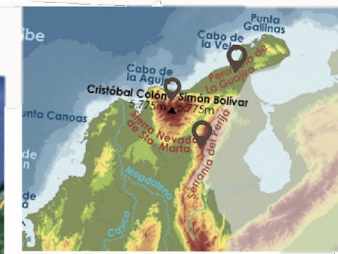
**5.000 BAGS  
FERTILIZER PRODUCTION PLANT**



**502 FAMILIES  
LINKED**



**ENVIRONMENTAL  
COMMITMENT**



**30 DIRECT  
EMPLOYEES**



**12 FIELD  
PROMOTERS**



**4 INDIGENOUS VILLAGES  
& REGIONAL  
FARMERS**  
ARAHUACOS, WIIWAS,  
KOGUIS, KANKUAMOS

**SUSTAINABILITY OBJECTIVES**





# The Sierra Nevada de Santa Marta

ANEI is located in the landscape of the Sierra Nevada de Santa Marta y Serranía de Perijá in the Northeast of Colombia. This landscape is home to four indigenous communities, direct descendants of the ancient Tayrona culture.

Reaching an altitude of 5,700 m just 42 km from the Caribbean coast, the Sierra Nevada of Santa Marta is the highest coastal mountain range in the world and home to 36 rivers providing fresh water to 1.5 million people.

The region is a recognized biodiversity hotspot and is considered one of the world's most irreplaceable protected areas for the conservation of threatened species (Science, 2013).



# The Heart of the World

To the indigenous communities of the Sierra Nevada de Santa Marta, this landscape is the literal, **beating heart of the world - El Corazón del Mundo.**

Despite its protected status the Sierra is under constant pressure, experiencing high rates of deforestation and environmental degradation due to cattle grazing, mining, mass tourism and the construction of dams. The increasing impact of climate change is further jeopardizing the livelihoods of the communities and biodiversity.





# Build a Financial Partnership

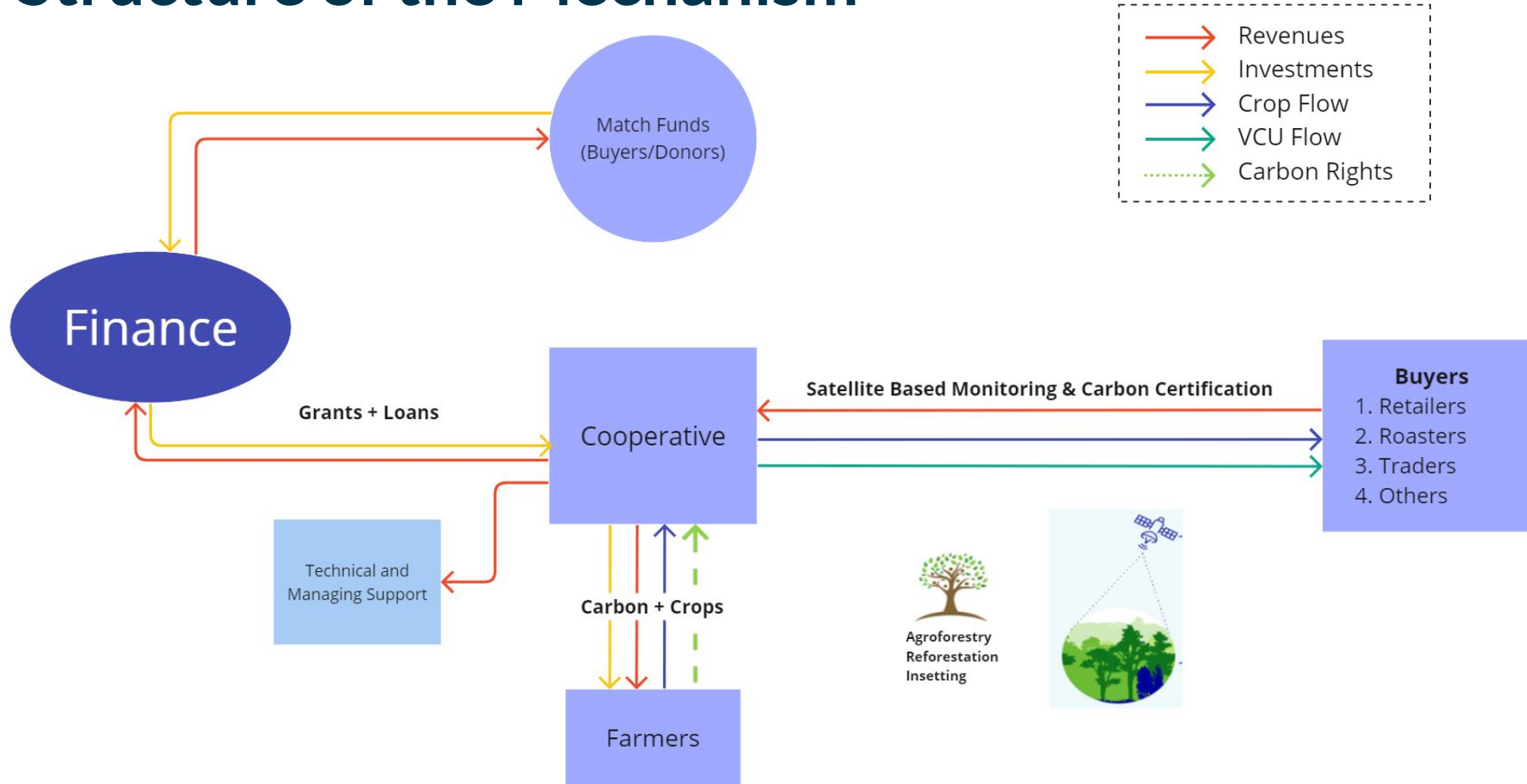
A group of indigenous women, likely from the Andean region, are shown in traditional white clothing and colorful headscarves. They are working together outdoors, possibly in a field or near a thatched-roof structure. One woman in the foreground is focused on a task, while others are visible in the background, some looking towards the camera. The scene is set against a backdrop of a clear sky and natural elements.

Currently seeking subsidized loans accompanied by grants to cover the significant upfront costs associated with nurseries, tree planting, technology, monitoring and capacity building. There are waiting periods up to two years before a carbon program begins to generate revenue associated with the sale of credits. Based on terms and rates ANEI can repay loans based on cash-flow from sale of coffee and cocoa.

Based on current estimations, 2000 hectares managed through a combination of agroforestry and reforestation will generate an additional \$180,000/year (at a price of \$20 per ton of carbon sequestered). Once the carbon-management system is put in place, ANEI believes there is a scaling potential for up to 20,000 hectares.



# Structure of the Mechanism



# Carbon Management Plan



ANEI manages nurseries and provides technical assistance with inputs to its members to plant trees (food crops, timber, coffee and cocoa).

ANEI utilizes traceability tech and extension staff to measure carbon generated by each farmer.

Ethos supports ANEI in the design, management, monitoring, certification, and sale of carbon certificates.



# ANEI as a Landscape Manager

**Objective:** 2000 hectares under collective management

Potential carbon goals and results

## Agroforestry

- 400 has: Coffee planted in agroforestry
- 400 has: Cocoa planted in agroforestry

## Reforestation

- 400 has: Silvopasture
- 800 has: Tree planting in Macizos

3,734,000

Trees Planted

8,960

Tons of Carbon  
captured per year

## Carbon Related Revenue

@ 20 US\$ x Ton CO<sub>2</sub>

179,200/3,584,000

US\$ annually/US\$ total 20 years



# Risk Management

Agroforestry-based carbon credit programs can generate a win-win situation for growers, and buyers benefit from more stable production, increased incomes to farmers, and collective progress towards their commitments to protecting landscapes.

Carbon projects that are associated with insetting will have a better chance of buy-in and resources from supply chain partners via match funding and in-kind investments.

Transparency is rewarded through an increased carbon-credit price. The system will include the location of the cultivation areas and description of types of crops/trees; images and description of the techniques for each type of crop; a calculator to measure carbon emissions and sequestration from production/ reforestation/ conservation; calculation of carbon price and distribution of financial benefits (based on farmer land size, activities and number and types of trees).



# Scalability

A photograph of three people, likely of indigenous descent, wearing traditional hats and clothing, sorting coffee beans on a large woven mat. A large woven basket is visible on the left. The background shows lush green foliage, possibly banana leaves. The image is used as a background for a presentation slide about scalability.

**Depth:** Once the systems are implemented, enrolling new participants and their associated land use into a carbon management system becomes easier.

**Breadth:** This is a model for all organic coffee and cocoa cooperatives. Ethos has relationships with hundreds of cooperatives globally and will promote this model through supply chains, NGOs, and impact investors.



# Key Lessons from our Experience

1. Collaborate with organic cooperatives that are clear about their values and priorities for their landscape and members
2. Explore different landscape management and carbon models to develop a clear operational and financial plan
3. Carbon programs are typically 20 years minimum and require a long-term commitment of participants.
4. Landscape and the associated carbon management should build on systems already in place - data and technology management, extension operations and nurseries
5. A minimum of 1000 hectares is a good starting point for cooperatives to begin a landscape/carbon management program



# For More Information

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