



As chair of the COP, I invite all citizens to submit innovative solutions for the climate challenge. Winning projects will receive support to facilitate their change of scale.

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*Ségolène Royal*



100 PROJECTS FOR THE CLIMATE

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## Project page i Give Trees



### Activities :

Since 2009 we've been able to raise funds for 6,000 trees, grown by small Brazilian nurseries, that were given to subsistence farm families, through small local NGOs. All seeds used were from native species trees, collected by local residents who were fairly compensated. All of the trees were grown organically in local nurseries, and maintained in the field without the use of agro-chemicals.

### Impact and key figures :

### Launch year :

2009

### Progress status :







Project

## Reforestation of a Pasture

By iGiveTrees

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3 months ago by [alana](#) [Cunha 2010 Reforestation Area #1](#)

### The Springs Returned



9 years ago by [alana](#) [Cunha 2010 Reforestation Area #1](#)

### First Plantings in 2010

This was among our first plantings in Cunha, São Paulo.

[Read more](#)



**34.91 hectares of pasture were restored to forest over the last 9 years, using organic, regenerative practices.**





# ← Reforestation of a Pasture

By iGiveTrees



📍 Site

## Cunha 2010 Reforestation Area #1

Reforestation

34,91 ha





**November, 2010**  
**iGiveTrees sponsored the first 1,000 trees that were**  
**given to smallholders in Cunha, São Paulo.**





**This cow pasture had been fenced in to restore pioneer plants before trees were planted.**





100 trees of 40 native species were planted amidst the wild flora.

2010





9 years later the pasture had returned to forest.

2019





The springs were flowing abundantly once more.







**October - December 2019**  
**iGiveTrees sponsored a 16,000 tree planting to regenerate**  
**32 hectares of pasture with approx 500 trees per hectare,**  
**benefitting 50 smallholders + 5 local entrepreneurs in SP state.**






Figure 7. Example of *Albizia hassleri* next to a scale (1,0m) showing positive height development.



Figure 10. Example of *Lonchocarpus cultratus* next to a scale (1,0m) showing positive height development.

**2 year growth reports for trees planted in a different area using grass as biomass to retain moisture and build soil.**





Fazenda da

TO

CA

orgânicos

**Organic farms were aware  
that the brachiaria was an ally  
rather than an enemy.**





**Eucalyptus and grass were planted to produce biomass**



**RESULT: sand was transformed to soil, while retaining moisture, nourishing plants and sequestering carbon.**

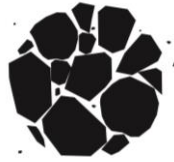
**Methods were adapted to enable more farmers to replicate.**

## AGROFORESTRY SYSTEMS

- Based on nature's intelligence
- Able to produce food and regenerate degraded soil
- Nutrient cycling, soil protection against erosion, water retention
- Reduced needs of external fertilizers







# CARBON SINK ESTIMATION

## PHASE #1 – ATLANTICA RAINFOREST

Agroforestry Designs	Trees / ha	Implemented area in ha (phase #1)	Potencial carbon sequestration Ton CO2 (eq) / ha	Potencial carbon sequestration
#1 <b>Riparian zones</b>	1,666 - 2,000	4,000	1,166	4,664,000
#2 <b>Long-term silviculture</b>	1,300-1,500	2,000	1,161	2,322,000
#3 <b>Perennial plantations</b>	2,200 - 3,800	2,500	1,426	3,565,000
#4 <b>Pasture lands</b>	500-700	1,500	706	1,059,000

**Total CO<sub>2</sub> (eq) sequestered**  
 11,610,000 ton  
 11.61 megaton  
 (consolidated within 25 years)







PRETATERRA

# Soil regeneration for coffee agroforestry



Alana Lea (iGiveTrees) | Paula Ponteli Costa & Valter Ziantoni (PRETATERRA)

## Climate change and desertification challenges to coffee production

The Mantiqueira region, in southern Brazil, is suffering the effects of droughts and soil degradation, the state of Minas Gerais is considered to be under desertification process accelerated by climate change. New regenerative production models, which consider soil micro-life restoration, nutrient cycle reestablishment and moisture conservation are needed so that coffee production can thrive under these harsh conditions while eliminating chemical fertilizers and agregating value.

## The project implemented

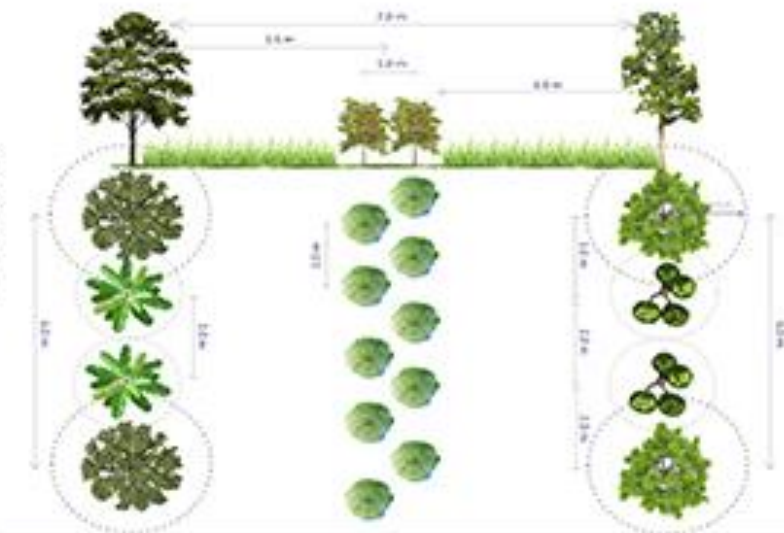
A regenerative and elastic agroforestry system was designed, considering conservative soil management techniques, aiming to maximizing biological nutrient cycling and water retention, improving coffee resilience on drought slope zones in Monte Sião, MG, Brazil. Final model with explained arrangements and units is shown in illustration 1.

## The ancestral method

For soil life regeneration, and water and nutrients retention, an ancestral method based on Anthropogenic Dark Earth formation was employed, mainly based on charcoal and sawdust deposition. High nitrogen fixer species were selected for alley green manure. Selection and



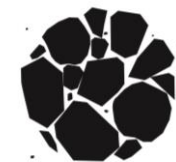
Illustration 2. No-tillage conservative soil management during plantation, only subsoiling



- Macadamia integrifolia
- Toona ciliata
- Musa paradisiaca
- Green manure
- Coffea arabica
- Inga vera

Main System		Green manure	
Species	Plant / ha	Species (seeds)	kg/ha
Coffea arabica (Catuai 23)	2857	Cajanus cajan	30
Toona ciliata	119	Helianthus annuus	20
Macadamia integrifolia	119	Pennisetum glaucum	10
Musa sp.	238	Crotalaria spectabilis	10



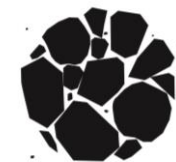


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# Soil regeneration for coffee agroforestry

**No-tillage conservative soil management during plantation,  
only subsoiling along planting lines.**



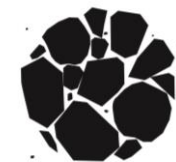


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**Lime, ashes and charcoal added along subsoiled planting lines.**





**PRETATERRA**



**Coffee Agroforestry implemented after 10 months.**



# AGROFORESTRY FOR THE BRAZILIAN ATLANTIC RAINFOREST

Livelihood transformation  
through landscape  
productive restoration



in partnership with

PRETATERRA





# CONSERVATION

60% of the **AMAZON RAINFOREST**  
is in

# BRAZIL

home to 33% of  
Earth's remaining rainforests

# REFORESTATION

is needed to  
restore aquifers

93% of the  
**ATLANTIC RAINFOREST**  
was slashed & burned

