

# The Real Impact of Fair Trade Practices in Farms' Efficiencies in Colombia

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## Introduction

- Coffee Consumption is expected to increase by 25% in the next 5 years.
- Coffee producers are being affected by low prices paid so they are:
  - Growing other crops
  - Deforesting
- The Fair Trade Organization aims to help producers by giving them a premium if they follow specific environmental standards.
  - Pay a fair price to coffee producers / Helping the community
  - Take care of the environment
- The transitioning process from conventional to FT coffee requires investment and effort.
  - Organic fertilizers and pesticides.
  - Energy and water consumption
  - Forestation
  - Labor force – More women, no child exploitation.



## Research Question

- Farm efficiency has been for a long time considered from a capital approach where all resources (economic, environmental and social) are needed to create value.
- It requires a re-definition of farm efficiency from a sustainable-value approach where resources are evaluated from an opportunity cost perspective.
- Reduction of technical inefficiencies can potentially generate financial benefits.
- This research aims to compare the technical, allocative and economic efficiencies of conventional and FT farmers.



## Methodology and Model

- **Participants**
  - Sample: Around 500 Colombian farmers in the coffee region in the Colombian mountains. Conventional and FT certified.
  - Criteria: Smallholder farmers (>=2 hectares) that have already sold some conventional or FT coffee.
- **Variables**
  - The survey is facilitated by people of the region previously trained by the project coordinator.
  - **Economic data:** All data related to their source of income, costs and expenses and accessibility to credit, coffee certifications
  - **Socio-Economic data:** Information directly related to the household such as age, sex, children at home and ownership of the land
  - **Farm information:** Number of trees, use of pesticides and fertilizers
  - **Variables on-site:** Characteristics of the soil, amount of species observed in the farm, erosion.
  - **Secondary data:** Accessibility to public services, crime and exposure to violent events.
- Two-stage analysis: A stochastic production function measuring technical efficiency (polluting inputs), allocative efficiency and economic efficiency followed by a trans-log production function that will include all the variables collected.

## Background



- Certifications in coffee production has been studied from different perspectives but not from efficiency as a mean to contribute to an increase in allocative and economic efficiency
  - Coffee certifications and its contribution to health, education and income.<sup>1</sup>
  - Coffee cooperatives and its role as benefits distributors of FT premiums.<sup>2</sup>
  - The role of certifications in the goal of poverty alleviation.<sup>3</sup>
  - Rainforest Alliance and FT and their effect on yields and cash returns.<sup>4</sup>
  - Linkage between agroforestry systems and certification schemes.<sup>5</sup>



## Expected Results

- If farmers improve their technical efficiency of their use of polluting inputs (as the ones proposed by the FT Organization), farmers will most likely achieve their economic and allocative efficiency.
- Sustainability practices used not only as a production increase of efficiency but as a market strategy (added value to the market).
- An increase in the sustainable measures will increase their participation specialty markets that consider more aspects such as the trees and bird presence.
- Some farmers might be ready to certified their coffees with other certified labels.



## References

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