Fair Trade for All on Smallholder Farmers and Farmworkers

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BACKGROUND

- Fairtrade coffee certification had been limited to small producer organizations.

- In 2011, Fair Trade USA announced its new certification scheme.

- Our study is taking place since 2014 until 2017, 4 Fair Trade Certified pilots located in Brazil and Nicaragua (farm workers), and Peru and Honduras (independent smallholders). We do not present Peru (on going)

- Coffee represents one of the most important crops in each of the three countries both in terms of level of exports and of number of people employed in the sector.

- Intervention programs in the agricultural sector are focusing not only on improving the level of productivity, but also on finding tools to reduce extreme poverty. Food standards represent a good example of how SDG could be attained

MOTIVATION

Consumers have more willingness to pay for foods with sustainability labels like cacao or coffee because they have the perception to contribute to improved livelihoods of smallholder farmers. (Chiputwa, et al.,2015).

Maertens & Swinnen, (2009) found that this kind of certifications has a positive impact on poverty reduction

The high costs to comply with security standards to obtain the certification might further marginalize the poorest producers.(Reardon et al.,2009).

Our contribution: first impact assessment of FT coffee certification on estates' farmworkers and independent smallholder producers, using PPI and ELCSA indices.

OBJECTIVE

Evaluating if Fair Trade coffee certification schemes can be used as an instrument to contribute to the accomplishment of two of the sustainable development goals: *No Poverty and Zero hunger.*

RESEARCH SITES
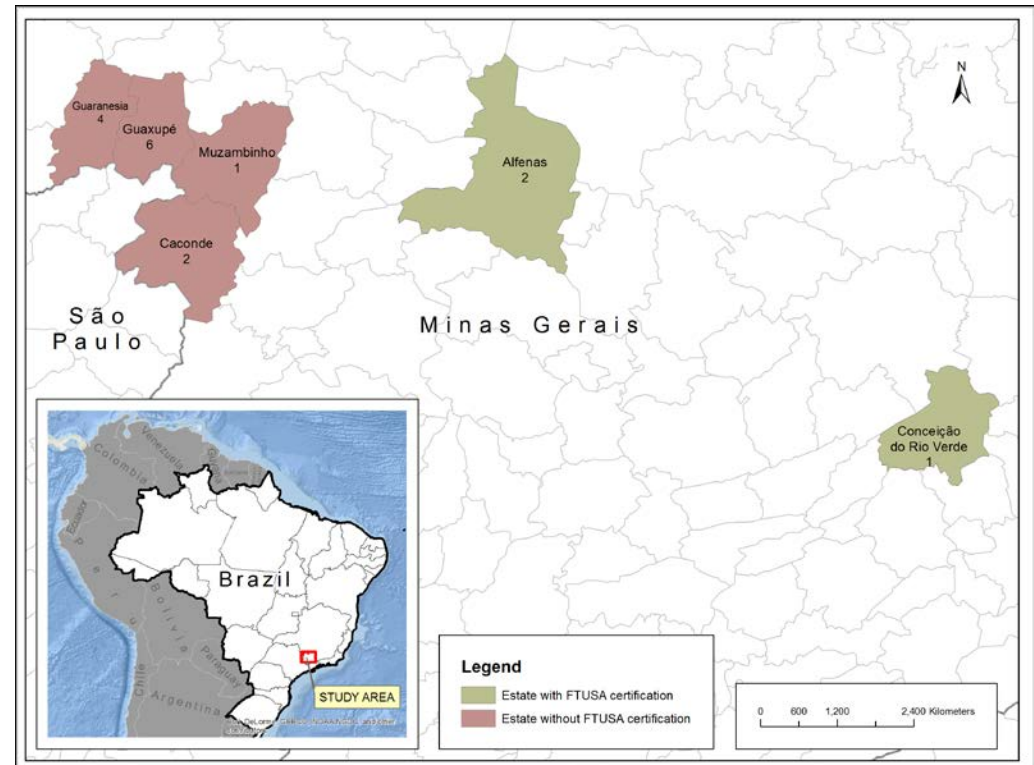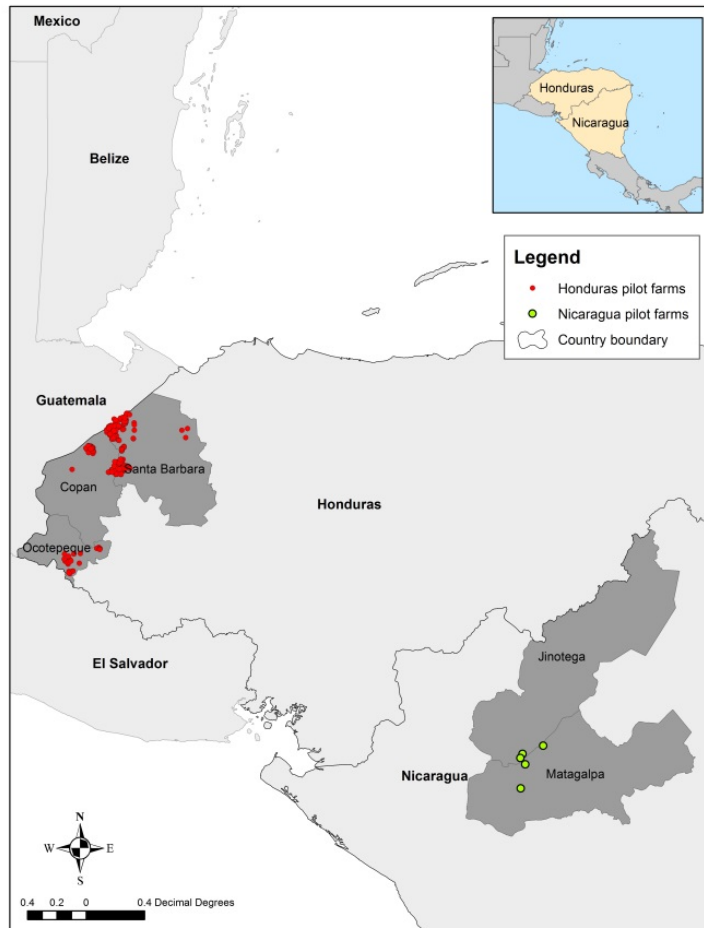
DATA COLLECTION

- We analysed the economic and social situation of independent smallholder producers in Honduras and of estates' farm workers in Nicaragua and Brazil.

- In particular, we explored how coffee certification schemes can be used as an instrument to contribute to the accomplishment of two of the sustainable development goals: *No Poverty and Zero hunger*

Farm worker in Coffee Estates			

Nicaragua

	n_{t1}	n_{t2}	Farm size(ha)
Estate with FT4All	199	185	188
Estate 1 without FT4All	88	84	221
Estate 2 without FT4All	88	65	101
Estate 3 without FT4All	87	86	157
Estate 4 without FT4All	88	88	101

Brazil

	n	Farm size(ha)
Estate with FT4All	425	6101
Estate without FT4All	200	2600

Small-Scale Independent Coffee Producers		

Honduras

|	n	Average farm size (ha)
Treatment group	111	3.6
Control group	395	3.1

OUTCOMES

To find an answer, we conducted two different *quasi experimental methods* to calculate the *average treatment effect* of the FT4ALL on two outcome variables:

1. The probability of being under the poverty line, by using an indicator created by the Grameen Foundation, the *Progress out of Poverty Index (PPI).*
2. *Latin American and Caribbean Food Security Scale* (Escala Latinoamericana y Caribeña de Seguridad Alimentaria, ELCSA), which is an indicator used to diagnose and monitor hunger and food insecurity inside the region.

We needed to compare the level of these outcome variables for smallholder farmers and farm workers with and without Fairtrade certification. For this reason we collected data in both certified and noncertified farms.

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METHODS (1)

$$\propto = (Y|T=1) - (Y|T=0)$$
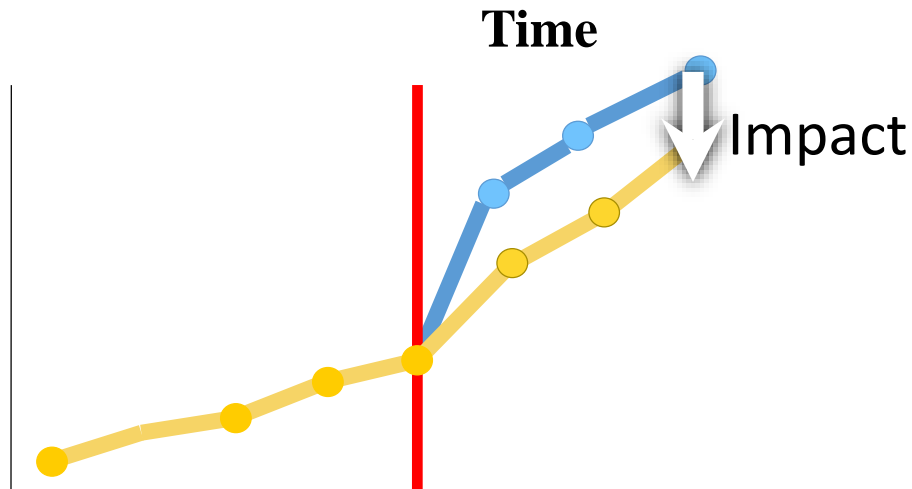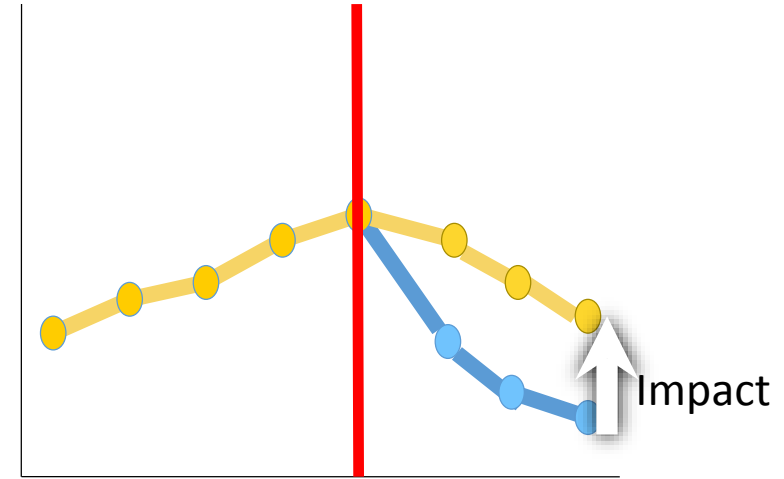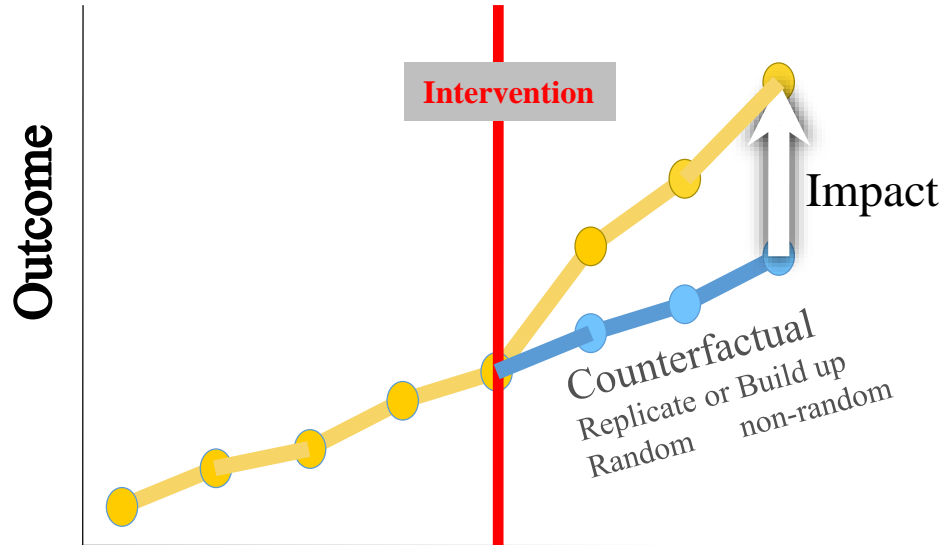
To capture the difference in mean outcomes that is caused uniquely by the certification, one has to *clean out* all those exogenous aspects, which might influence our outcome and are not related to the certification.

METHODS (2)

1. *Propensity Score Matching:* Pairing treatment and comparison units that are similar in terms of their observable characteristics (Khandker et al., 2010)

$$First\ stage:\ \widehat{Pr}(T=1) = \alpha + \beta_0 + \beta_1 x_1 + \cdots + b_k x_k$$

$$Second\ Stage:\ TOT_{PSM} = E_{P(X)|T=1}\{E[Y^T|T=1, P(X)] - E[Y^C|T=0, P(X)\alpha]\}$$

2. *Double - Difference*: Comparison of participants and nonparticipants before and after the intervention. Requires panel data.

$$\Delta Y_{it} = \emptyset \Delta T_{it} t + \delta \Delta X_{it} + \Delta \varepsilon_{it},$$

DESCRIPTIVE OUTCOMES

- Progress out of Poverty Index. In Brazil, the Probability of living below the $1.25/day/PPP in the treatment group and the control group was 3.6% vs. 2.4%. In Nicaragua was 3.1 and 3.4, respectively. In Honduras was 10.4% and 13.3, respectively.

- Latin American and Caribbean Food Security Scale (ELCSA).In Brazil 72.71 % of households had food security in the treatment group, while 77.5 % in the control group. In Nicaragua, 21.1% of households Vs 33.8% of households reported food security. In Honduras, 46.9% of households Vs 26.3% of households reported food security.

RESULTS PSM

Variable	Treatment	Control	ATT	S.E.
PPI Brazil	2.3	3.0	-0.7**	0.6
ELCSA Brazil	0.73	0.80	-0.071**	0.041
PPI Nicaragua	3.1	2.8	0.4	0.7
ELCSA Nicaragua	0.21	0.35	-0.14**	0.046

**statistically significant at 5%

RESULTS DD

Variable	Diff (Baseline)	Diff (endline)	DD	S.E.
PPI Nicaragua	0.25	-0.08	-0.3	0.67
ELCSA Nicaragua	-0.12	-0.14	-0.02	0.05

DISCUSSION

- Promoting sustainable livelihoods in coffee estates and independent smallholder producers remains challenging.

- Are coffee certification schemes a valid tool to overcome poverty and hunger?

- How can the certification schemes help to overcome poverty and hunger when there is high volatility in the coffee market and every year the sales of FT change.

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