Partnership for Economic Inclusion IE Collaborative

Technical Workshop

October 11-12, 2022





Impact evaluation for "Producción para el Bienestar"

Country: Mexico

- **Name of Project:** Hacia una Evaluación de Impacto de "Producción para el Bienestar".
- Towards an impact evaluation for "Producción para el Bienestar"
- **Research Team:**, Isidro Soloaga, Agustín Escobar, John Scott, Graciela Teruel, Emilio López and Victor Pérez

Operational Team:

• Tomas Ricardo Rosada, Joanne Gaskell

Government agencies involved:

 Ministry of Agriculture and Rural Development (SADER)



Background and context

"Producción para el Bienestar" (PpB, formerly known as PROCAMPO and PROAGRO) is the main program of the Ministry of Agriculture and Rural Development to promote the productivity of agricultural producers, and the second in terms of its budget among the all the federal programs oriented to support rural communities

Despite its relevance, no rigorous evaluation exercise has been developed for PpB or its antecedents to measure their impacts on agricultural productivity or other social indicators

The introduction of PpB included a new promising component of technical assistance, so it is good time to attempt to implement an valuation exercise to identify its impacts, as well as potential problems on its underlying assumptions, operation and implementation

SADER is one of the few ministries currently open to conduct rigorous evaluations, as shown by their willingness to work alongside the research team to develop this proposal



Background and context

As in many developing countries, most agricultural units in Mexico are small- and medium-scale family-owned plots dedicated to the cultivation of grains (corn, beans, wheat, rice) or other traditional crops, typically under 5 hectares

PpB replaced previous strategies (such as PROCAMPO and PROAGRO), with the intention of solving some of the main problems of these interventions (such as their concentration in large-scale producers) by focusing on small and medium-scale producers, and the inclusion of a technical assistance component based on sustainability and the implementation of agroecological techniques



Project innovations and scale

The main objective of PpB is to increase the productivity small- and medium-scale agricultural units, particularly among producers of grains and other strategic crops

Direct Productive Support (DPA)

- Provides an annual cash transfer per producer, providing liquidity before the sowing, depending on the plot size (no beneficiary receive less than \$300 and none more than \$1,200 USD)
- The objective is that at least 30% of its beneficiaries are female, mainly located in municipalities with high concentration of indigenous population

Technical Assistance Strategy (EAT)

- Provides optative training, technical and organizational support to promote the adoption of agroecological and sustainable practices to increase the yields obtained by producers
- Currently covers less than 4% of all beneficiaries, and needs results before it can be scaled up
- SADER is requesting an evaluation, but they have no funding to conduct it
- The EAT will not be scaled up without evidence



Motivation for the impact evaluation

SADER request evidence to show that EAT works, so that it can be scaled-up

Potential benefits for most agricultural units in Mexico, but little evidence available about the effects of this kind of interventions or its magnitude

Knowledge gaps: whether EAT works; whether it can be a way to increase income and help agricultural producers alleviate poverty; whether it can at the same time improve health condition and promote environmental benefits

Does EAT have greater impact that only the monetary transfer?

How does impacts vary over time? First two years productivity might decrease, but long run is promising

Does size of impact differ by size of the plot? Does small farmers need a different design? For how long should EAT last?

How does EAT benefit the environment?

How can EAT help be prepared for shocks (increase in the prize of fertilizers?)



Main Policy Research Questions

Mixed methods approach to understand not only the magnitude of the effects, but also the process behind them

Qualitative approach:

- What are the characteristics of successful producers? What motivates agricultural producers to join EAT?
- What processes are behind the possible effects of EAT on productivity

Quantitative approach:

- How much does productivity change on average due to the DPA alone on both small and medium-sized producers? How much does productivity change on average if we add EAT?
- How much does productivity change on average or small an medium-sized producers in the short and medium term with EAT alone?
- Are there positive side-effects of EAT in terms of soil quality, quality of production, health status or labor participation of household members?



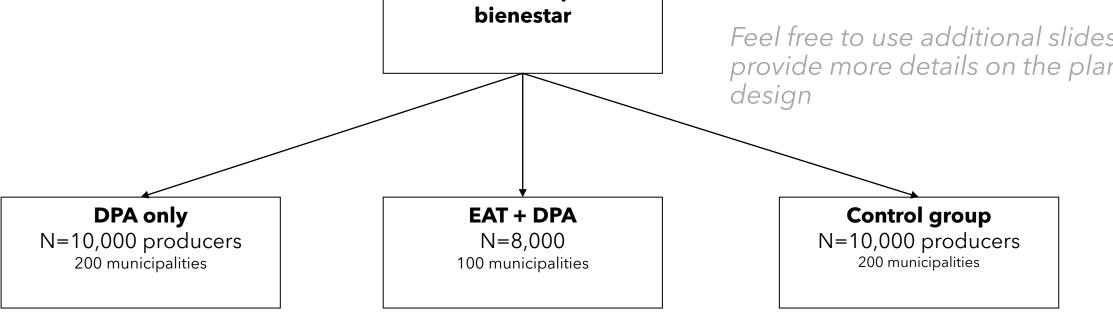


Methodology

What is the study impact evaluation design?

Develop a diagram with treatment and control arms, intervention, clusters, and expected/rough sample size (feel free to adjust/use the diagram as you deem appropriate).

Feel free to use additional slides to provide more details on the planned design



All agricultural workers in Producción para el



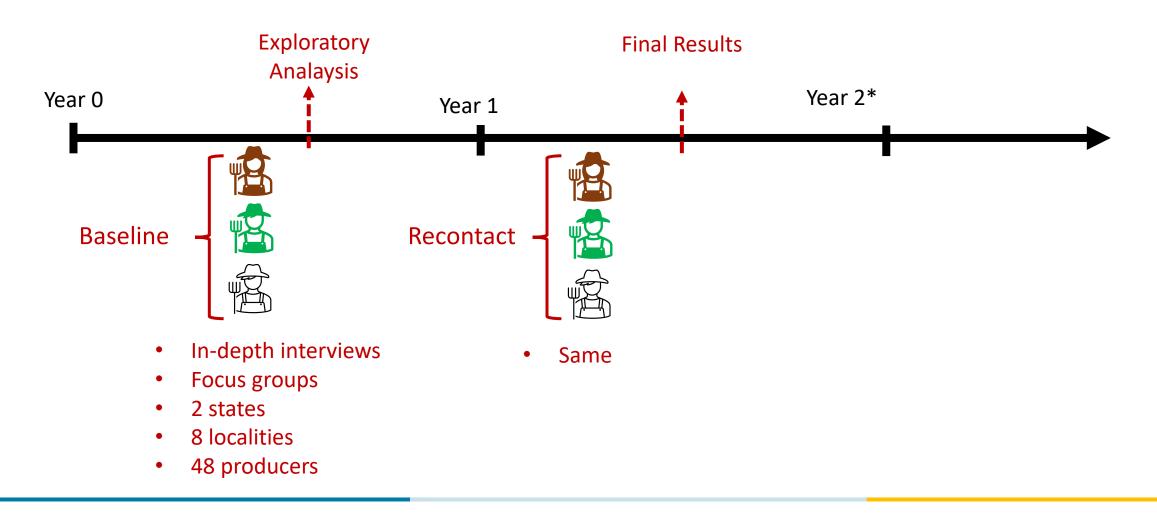


- 4 types of producers:
 - Producers with DPA
 - Producers with DPA & EAT
 - Producers without PpB
 - Producers with only EAT





Qualitative (corn and multicrop)





Qualitative component

- Emphasis on EAT (corn producers and multi crops)
- Two stages
 - 1. Base line and exploratory analysis (2022): Timely results and inputs
 - 2. Re-contact (2023): Measure changes
- Immersive visits to 48 producers in 2 states (tentatively Chiapas and Oaxaca):
 - Communitites with and without EAT, producers with and without PpB



Quantitative

- Corn producers
- Need pilot testing to adjust control selection methods and two rounds of data collection
 - Pilot test: Instrument and controls
 - Baseline 2022 with preliminary results
 - Re-contact 2023 (ideally 2024): Impact of program
 - Evaluation of APD: distinguishing between plots less than 3 has and larger than 3 has
- Evaluation of EAT: considering ECA producers with and without PpB, producers no PpB in communities without ECA



Comparisons

Complete version: APD y EAT

- **Effect of APD in small producers (< 3has):**
- Effect of APD in medium produceers (> 3has): lacksquare

EAT

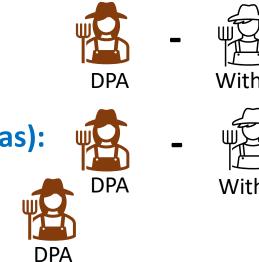




Average effect of EAT:

DPA & EAT EAT

DPA & EAT



DPA





Without PpB

Without PpB



Meixco: Producción para el Bienestar



Outcome Domain	Level	Source
Productivity (total volume of production in the main plot producing corn)	Plot	Data collection
Yearly Productivity Volume per hectare	Plot	Data collection
Yearly Value of productivity per hectare	Plot	Data collection



Mexico: Producción para el bienestar



Outcome Domain	Level	Source
Technology and costs of production Use of agrochemicals, seed acquisition, complementary crops, use of family and non family workers Use of agricultural machinery	Plot	Data collection
Quality of soil (PH, compaction, type of irrigation)	Plot	Data collection
Household welfare (Food security, savings, debts, food expenditure, other social programs)	Plot	Data collection



Open questions on impact evaluation design or implementation

<u>Not an RCT</u>, the Program has already started, so we will look for controls in situ and collect data to eliminate differences with statistical techniques

Will only focus on corn producers (80% of the beneficiaries)

Qualitative component must go first, so that the program have results before the current administration is over

Must carry out pilot test(s) to develop questionnaires and fine tune protocols to select controls

Evidence may be of great benefit for the region and elsewhere

No funding for large scale evaluations in Mexico, but the willingness to cooperate and disseminate the findings



Country: Title of IE study

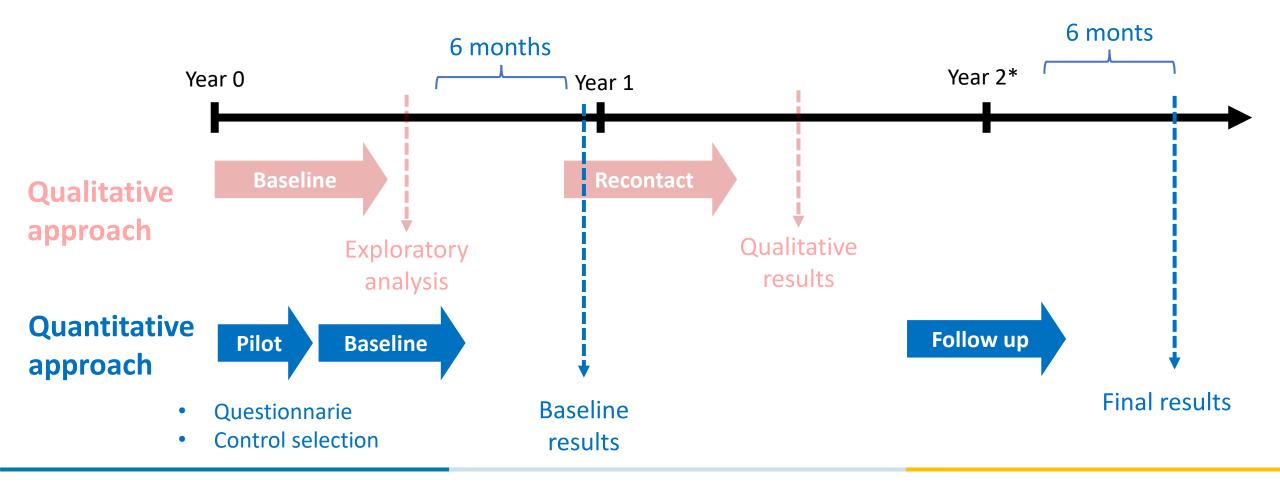
Implementation challenges

The study is being implemented by SADER Must keep controls without intervention.

The evaluation must be done in this administration



Timeline





Country: Title of IE study

Next steps and Timeline

We need to find funding to conduct the study Qualitative study needs to be done asap Piloting for the quantitative component this year / early next year



Thank you!

Graciela Teruel / Victor Perez chele.teruel@ibero.mx victor.perez@ibero.mx