



William Davidson Institute

AT THE UNIVERSITY OF MICHIGAN

## Webinar #3: Enhancing Poverty Alleviation Performance: Quantifying Changes Experienced by Local Stakeholders

Presenters:

- Heather Esper, Program Manager for Impact Assessment- William Davidson Institute
- Yaquta Kanchwala Fatehi, Research Associate- Impact Assessment- William Davidson Institute
- Jean-Christophe Laugee, Director Ecosystem Fund-Danone

This webinar is part of a larger series “**Assessing Multidimensional Poverty Impacts: Techniques that are Easy-to-Implement and Customizable**”.

Schedule of events:

- Impact Assessment Hands-on Workshop: OCTOBER 22-24, 2014, Ann Arbor, MI

Register at:

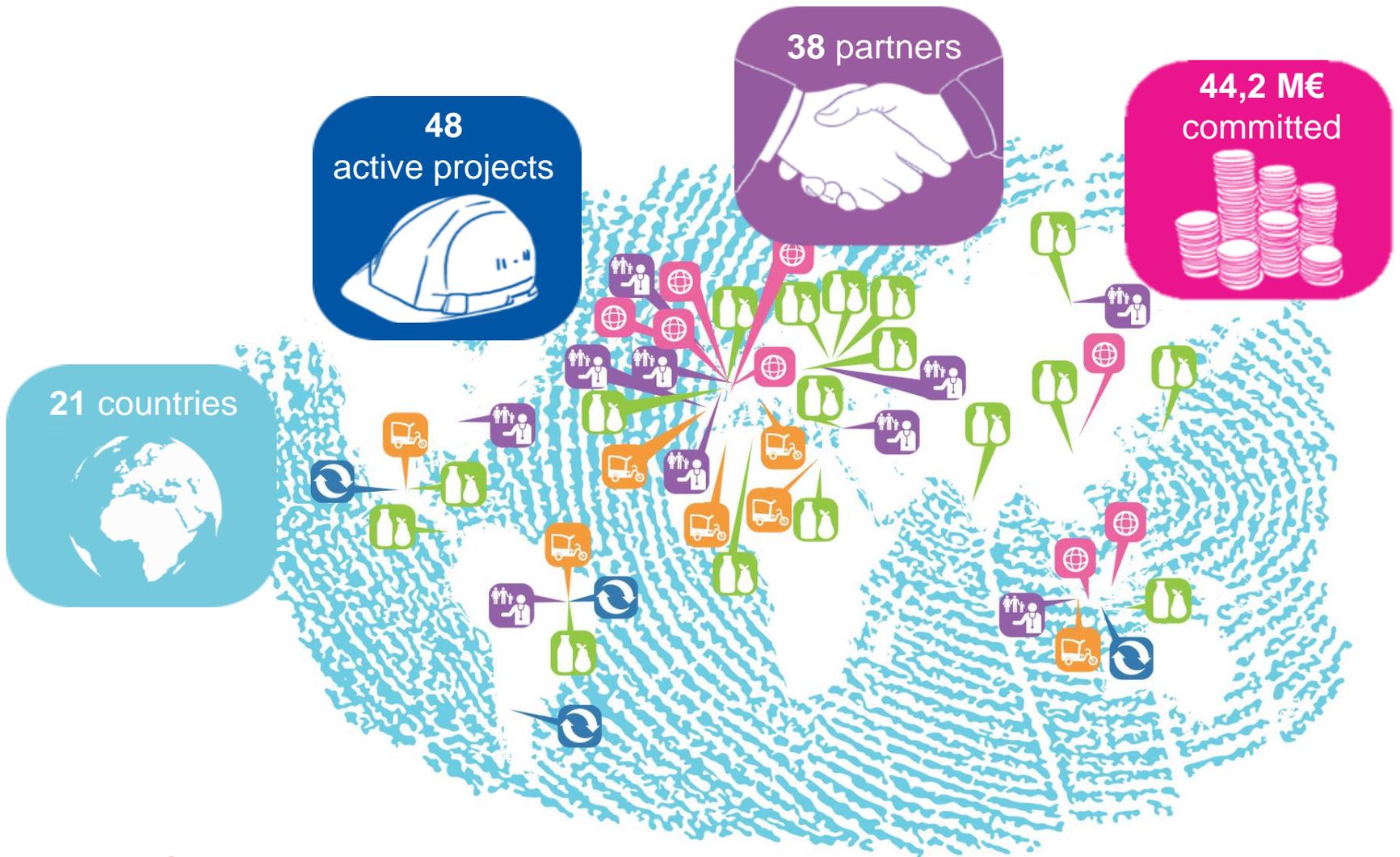
<http://wdi.umich.edu/research/bop/webinar2014>



1. Guest speaker – What is the Danone Ecosystem Fund
2. WDI's Overview of quantitative methodologies
3. Guest speaker – Other Danone Ecosystem Fund studies
4. Questions and answers
5. References
6. Annex

# A STRONGER ECOSYSTEM FOR A STRONGER BUSINESS





**Co-create innovative business solutions with inclusive value for Danone and its Ecosystem Partners**

An 100 M€ endowment fund aiming  
 at strengthening Danone's ecosystem  
 by creating both social and economic value for Danone & its Partners

**WHAT FOR ?** Jobs creation / Competencies development / Set of Organizational capabilities for the partners

**HOW ?** Through inclusive partnerships (with non for profit)



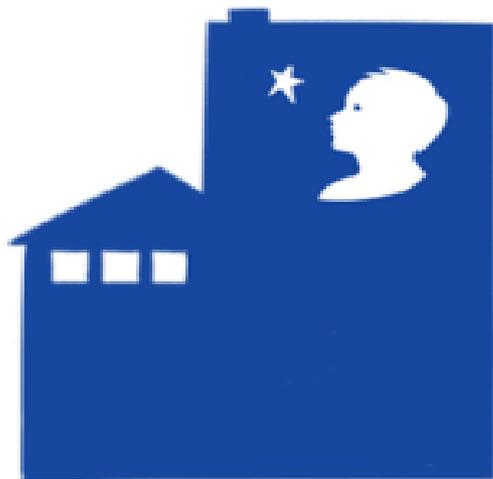
- ✓ Farmers' collective organization
- ✓ Demo farm
- ✓ Family farm

- ✓ Sustainable watershed management

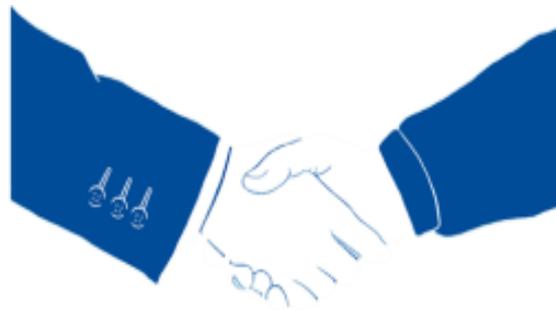
- ✓ Sales force Institute
- ✓ Micro-entrepreneur sales schools

- ✓ 'Registered' caregiver Institute

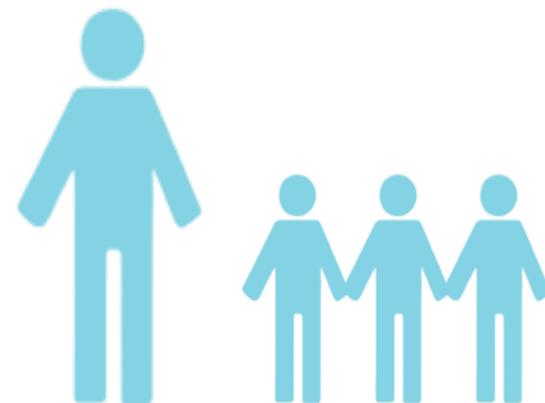
- ✓ rBU



Business as  
part of the  
solution.



Co-creation with  
non-for-profit for  
common good.



Leadership  
for large  
scale.

## COMMON INTEREST

### Professional empowerment



**47 000** including 4 000 jobs created

### Women empowerment



**14 300**

### Local capabilities creation



**13 M€** turnover generated

## COMPETITIVE ADVANTAGE

### Secure sourcing



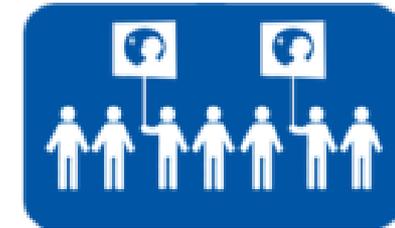
### Topline growth



### Company reputation & brand equity



### Employees pride



## PROFESSIONAL EMPOWERMENT

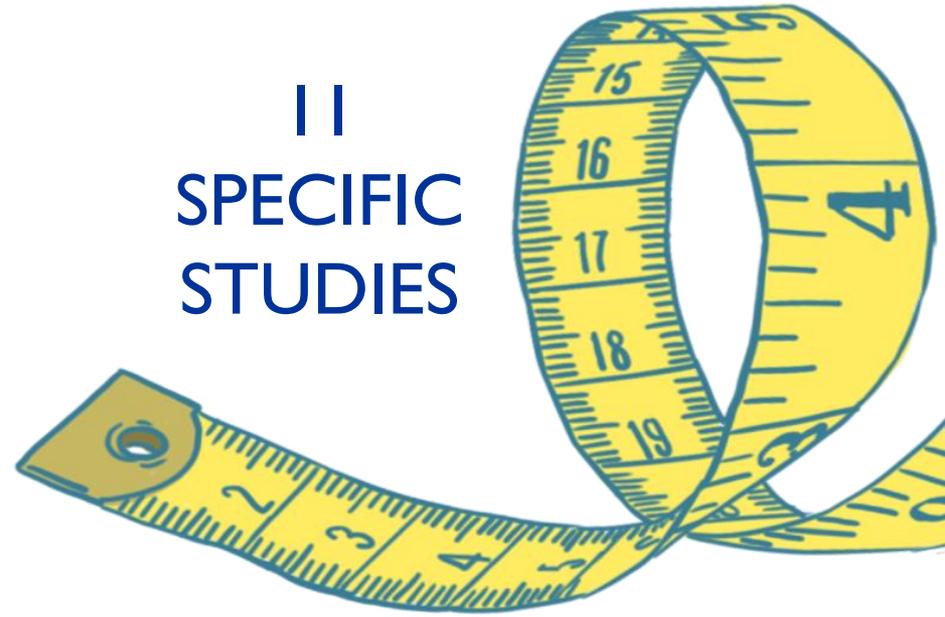
Empowerment is a process to enable people to develop and strengthen their employability and their social & economic inclusion.

**CERTIFIED  
PROCESS**

2. PEOPLE  
PROFESSIONALLY  
EMPOWERED

1. JOBS  
CREATED

## II SPECIFIC STUDIES



**QUALI**

**QUANTI**

**ESADE**

**ESSEC**

**cirad**  
LA RECHERCHE AGRICOLE  
POUR LE DEVELOPPEMENT

**L'ECOLE  
DES HAUTES  
ETUDES  
SCIENTES  
SOCIALES**

**W D I**  
William Davidson Institute  
AT THE UNIVERSITY OF MICHIGAN

**The SROI Network**

**cnrs**

**ipp** Institut des  
Politiques Publiques

**cirad**  
LA RECHERCHE AGRICOLE  
POUR LE DEVELOPPEMENT



Understand our impact on our value chain

to **anchorage sustainably our inclusive partnerships** in our business models

&

Contribute to Danone **credibility & robustness**

through our **social & economic footprint**

### PROVING

- Leverage our credibility valorizing our approach, intention & mean
- Accountability & report to shareholders (preliminary to final results)
- Foster our reputation through final results publication by most credible researchers

### IMPROVING

- Professionalize social innovation management & governance
- Enable projects success
- Understand in a in depth way how Ecosystem projects contribute to Danone robustness

### SHARING

- Enlarge overall awareness, knowledge
- Network around social impact
- Maximize results publication visibility

T0 → Year 3

# Project in focus: Semilla



Semilla provides formal sector employment with social benefits such as healthcare to women (and some men) from low-income segments in Mexico City. In addition, Semilla provides sales as well as 'Skills for Life' trainings to their salespersons

# The impact methodology

## Multidimensional view of poverty reduction includes

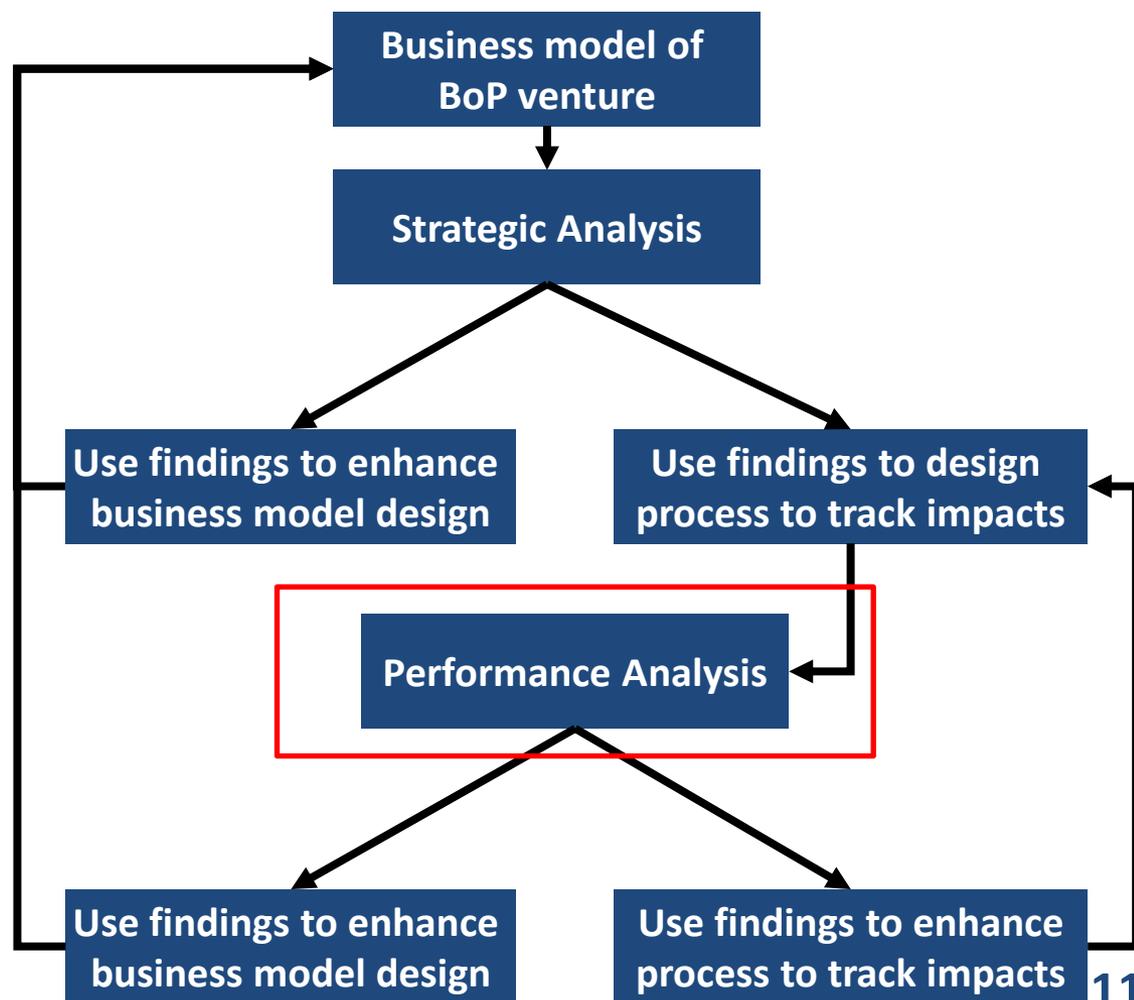
1. Voice of all local stakeholders
2. Outcome indicators on multiple dimensions of well-being
3. Positive and negative impacts

## Strategic Analysis- Qualitative

- Magnitude/likelihood

## Performance Analysis – Quantitative

- Research Design
  - Sample Selection
  - Sample Size
- Survey Development
- Data Collection
- Data Analysis
- Reporting and Continued Enhancement



# Key activities during the Strategic Analysis Phase



# Qualitative interviews: Mexico City

Interviewee/ Key Stakeholder	Number of Interviews
Semilla Senior Management	11
Semilla Partners and Experts	8
Semilla Salespersons	10
Semilla Supervisors	3
Semilla Zone Chief	1
Semilla Social Facilitators/Trainers	2
Semilla Customers	11
Ex-Semilla Salespersons	3

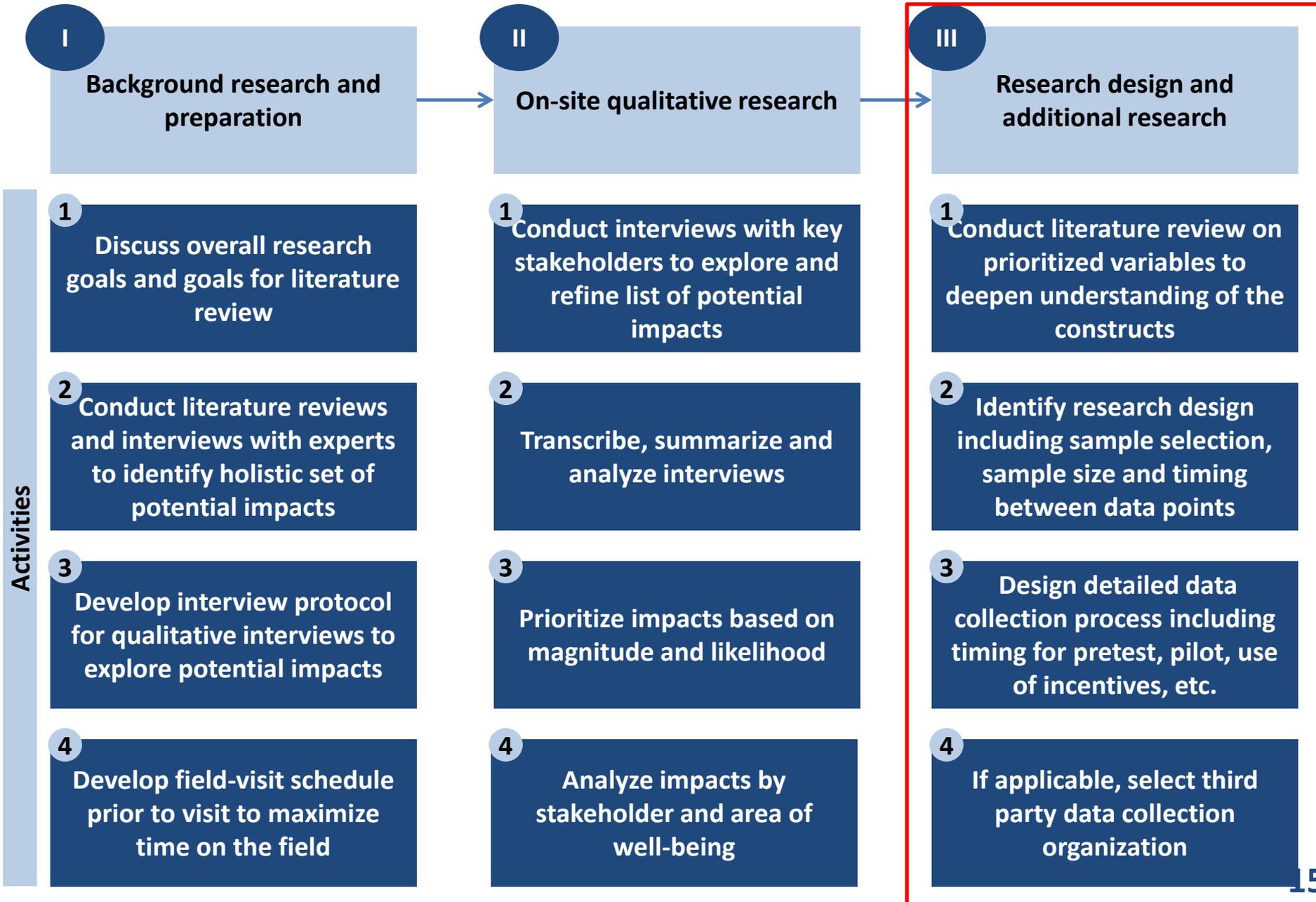


# Key impact variables

Area of well-being	Salesperson
Economic Well-Being	Change in income
	Change in perception of income stability
	Change in economic independence
	Change in savings
Capability Well-Being	Change in physical health
	Change in job skills
	Change in self-esteem (sense of worth and value)
	Change in self-efficacy (power to change their life)
	Change in empowerment
Relationship Well-Being	Change in parenting behavior
	Change in psychological violence
	Change in access to formal sector
	Change in status in community
	Change in status at home

Key impacts of high magnitude and likelihood selected based on analysis of qualitative interview data

# Beyond Strategic Analysis



# Research design: The Semilla effect

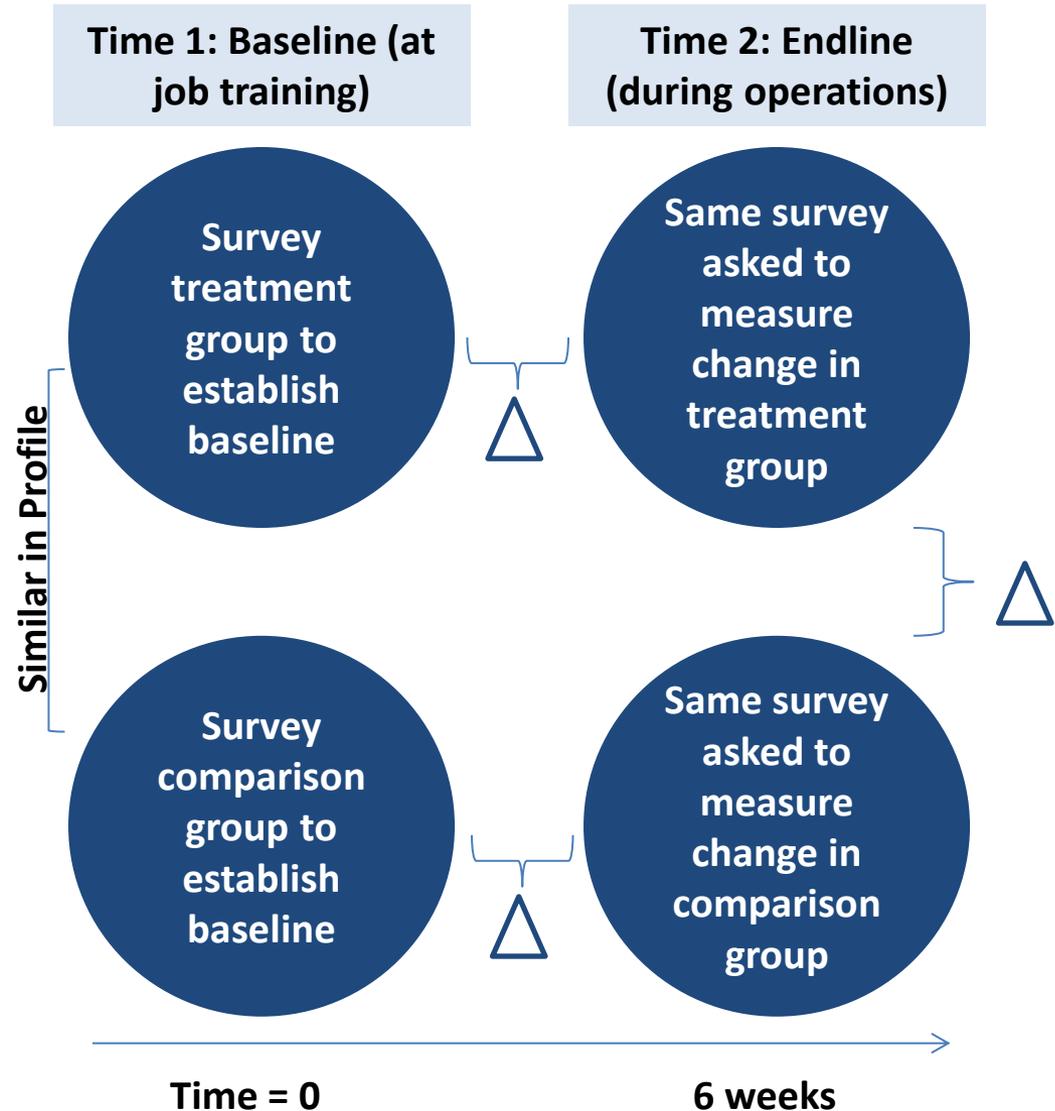
**Research Question: What is the effect of employment under Semilla i.e. what is the “Semilla Effect”?**

**Why a treatment and a comparison group?**

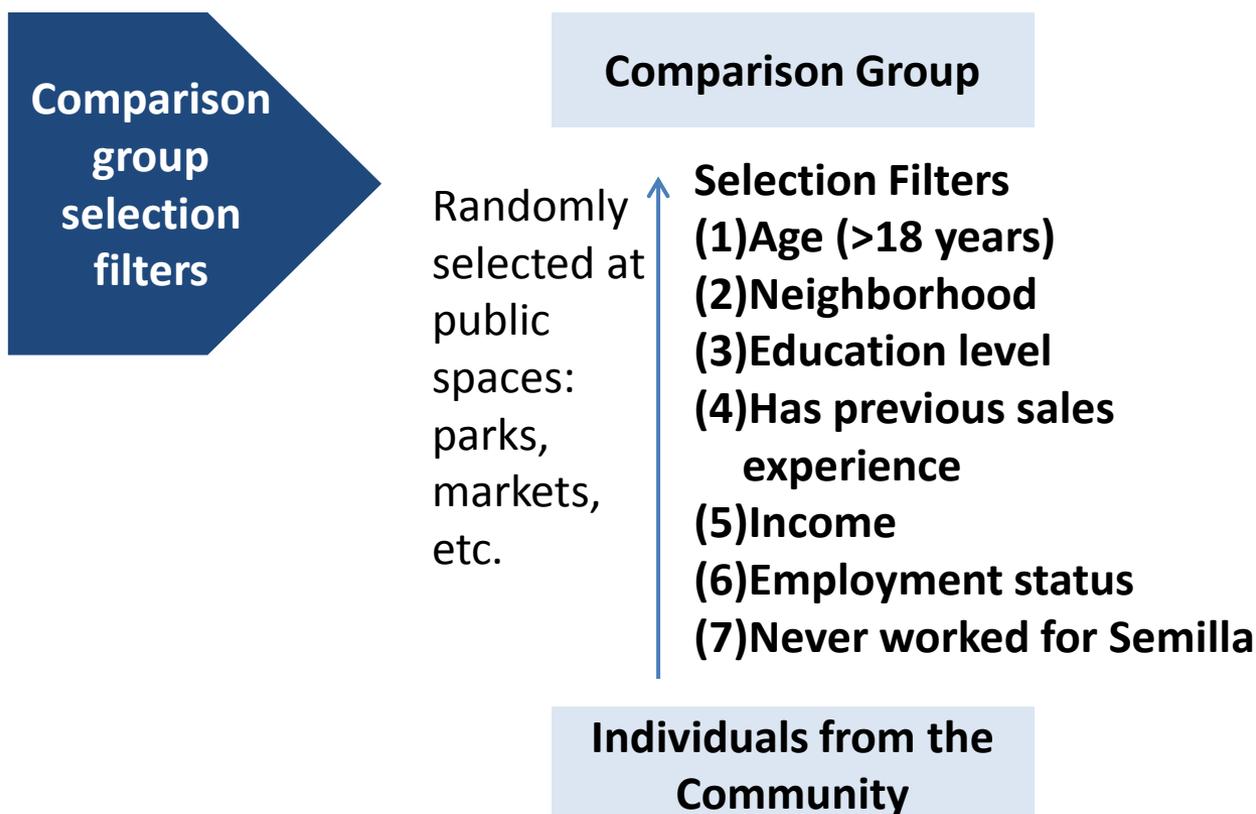
1. Rule-out natural improvements or external events

**Why baseline and endline data collection points?**

1. Baseline allows to compare the two groups prior to intervention to ensure they are similar
2. Endline assesses the mid-term results of the intervention and compares the data to the baseline with sufficient number of respondents to make strong conclusions



# Comparison group selection and sample size



## What to keep in mind when developing your comparison group?

1. Identify filters to be used to select comparison group participants such that they are as similar to the treatment group participants as possible
2. Calculate the size of the sample that is required at end of study using power calculation. Next take into account the expected attrition and back calculate the size of the sample at the start of the study

# Treatment group selection and sample size

Semilla identifies persons that meet the required profile



Three Interviews conducted by Semilla



A week of class room training followed by a week of field training. On successful completion, a contract to join Semilla



Salespersons begins daily route

Endline is at the end of 6 weeks

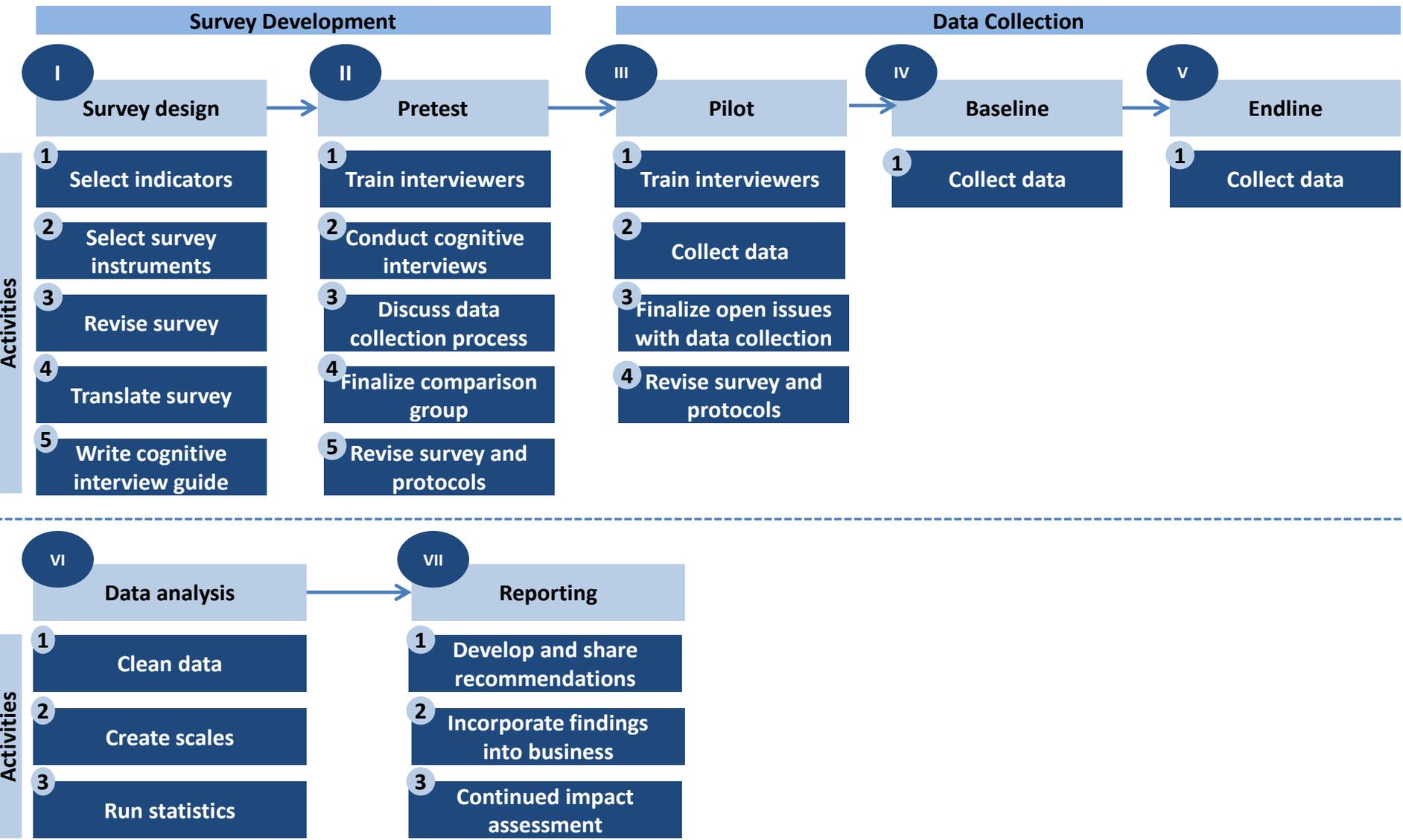
Keep in mind retention rate and sample size required at end of study

Administer baseline survey right after the Semilla interviews (on first day before training begins)

What to keep in mind when developing your treatment group?

1. Consider the timing of the baseline interview
2. Calculate the size of the sample that is required at end of study using power calculation. Next take into account the expected retention rate and likelihood of finding people again six weeks later and back calculate the size of the sample at the start of the study

# Performance Analysis: Next steps



# Survey development

En la semana pasada, ¿qué tan frecuente realizó las siguientes actividades con las personas menores de 18 años que viven en su casa? Por favor, escoja una de estas cuatro opciones: Nunca, Algunas veces, A menudo, Muy a menudo. Recuerde que puede saltarse cualquier pregunta que se sienta incómodo.

MUESTRE AL ENTREVISTADO LA TARJETA D. LEA LAS OPCIONES DE RESPUESTA FUERTE.

(CIRCULE UN NÚMERO POR LÍNEA)

	Nunca	Algunas veces	A menudo	Muy a menudo	NO SABE
a. ¿Le ha hecho saber que realmente se preocupa por él/ella?	1	2	3	4	99
b. ¿Escucha cuidadosamente su punto de vista?	1	2	3	4	99
c. ¿Le ha gritado porque está enojado?	1	2	3	4	99
d. ¿Le ha mostrado su afecto y amor?	1	2	3	4	99
e. ¿Le ha dicho que lo(a) ama?	1	2	3	4	99
f. ¿Comprende la forma en cómo el/ella siente las cosas?	1	2	3	4	99

## What to keep in mind when developing the survey?

1. Find an existing instrument when possible
2. Create a new instrument if you cannot find one that has been used to measure your variable
3. Develop strong 'Informed Consent' form and introductions to set the tone
4. Order sections logically and keep sensitive questions towards to end
5. Collect feedback from experts prior to pretest
6. Translate to the local language and back translate to English to ensure correct translations

# Variables collected (number of questions)

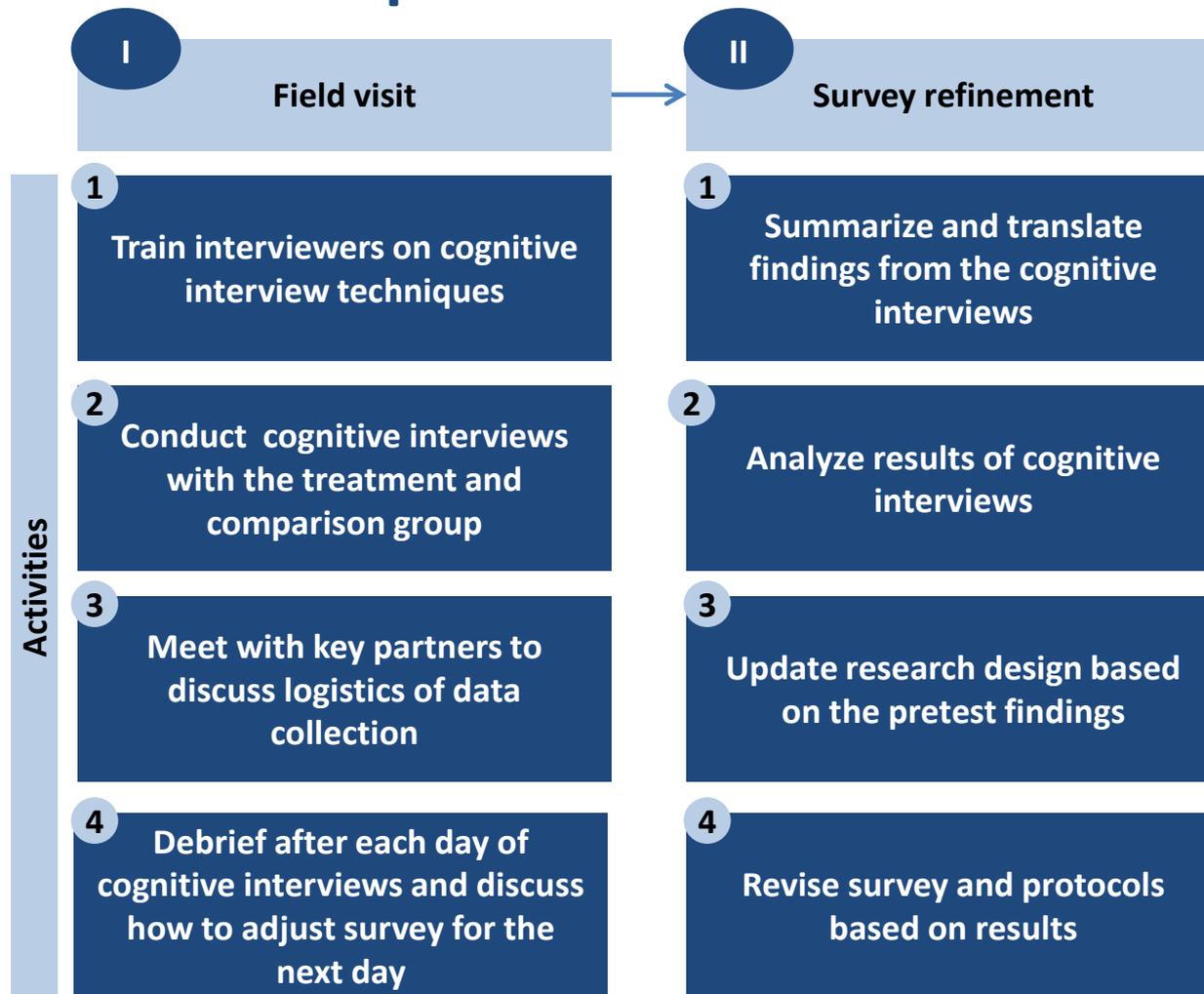
Economic Well-being	Capability Well-being	Relationship Well-being	Other Variables
Individual income (7)	Self-esteem (10)	Parenting skills (6)	Formal institutional environment • Environmental quality of life (13)
Debt (1)	Life empowerment • Family (7)	Violence at home (5)	Household income (3)
Income stability (3)	Work empowerment (11)	Violence in the community (5)	Number of household earners (3)
Savings (1)	Self-efficacy (10)	Community status (1)	Quality of route (6)
Economic shock/instability (3)	Skills and knowledge • Communication (5) • Sales skills (5)	Help from external organizations (1)	Sex (1), Age (1), Education (1), Marital status (1), Number of people in the household (3)
			Contact information (16)
TOTAL: 15	TOTAL: 48	TOTAL: 18	TOTAL: 48

BASELINE SURVEY TOTAL: 121 + 4 qualitative questions = 125

ENDLINE SURVEY TOTAL: 108 + 6 qualitative questions = 114

- Face-to-face paper based surveys requiring less than one hour of the respondent's time
- Strong qualitative section included to learn about their experience at Semilla
- Targeted questions towards persons who left Semilla as well as for those who have been with Semilla for more than one year

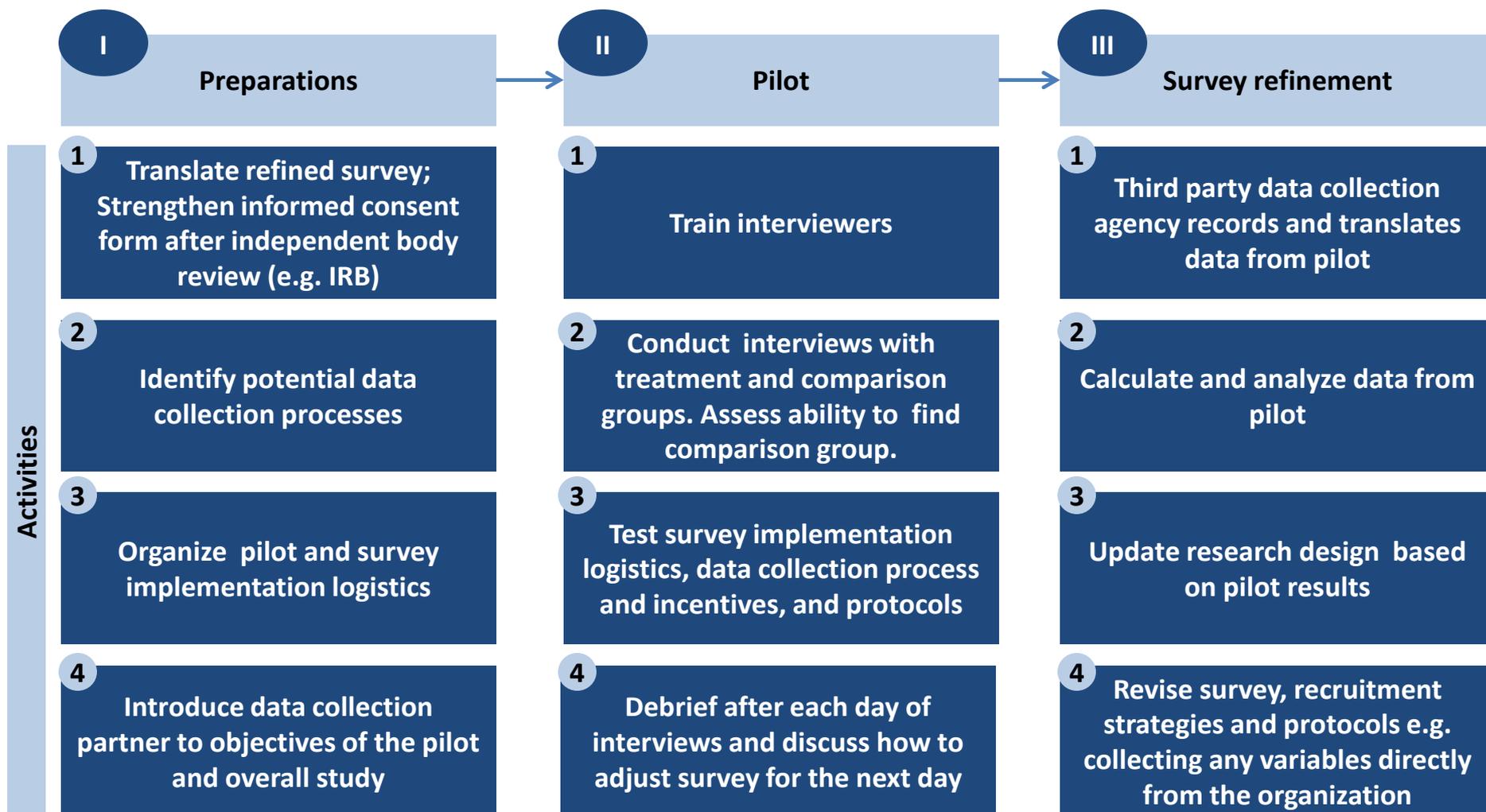
# Key activities: Pretest phase



## Why conduct a pretest?

1. Test whether both the treatment and comparison groups understand and can respond to questions
2. Adapt the survey question text to ensure the target population interprets the questions as they were intended
3. Test order of survey sections

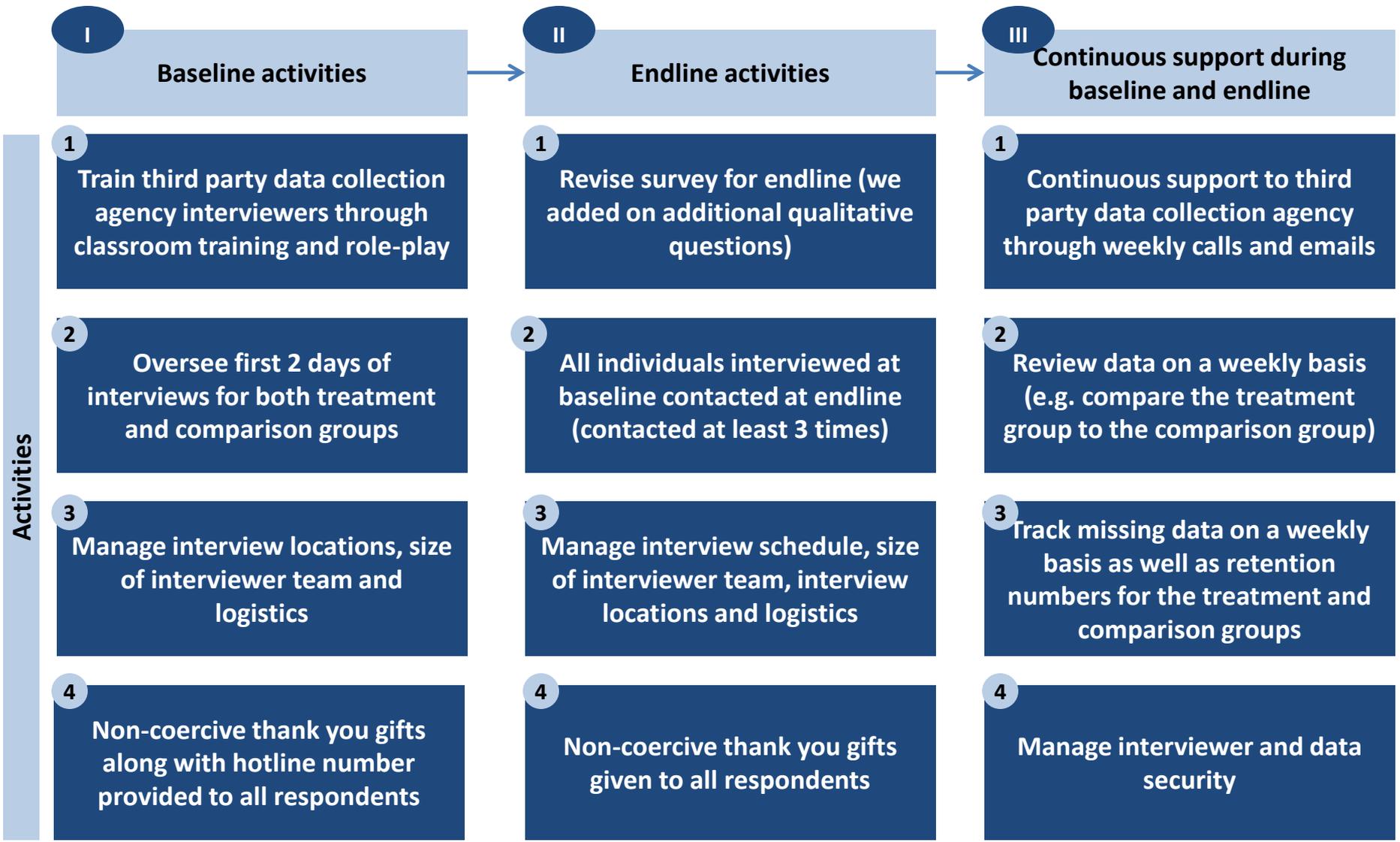
# Key activities: Pilot phase



## Why conduct a pilot?

1. Test updated survey in its entirety with the treatment and comparison groups while also testing the process
2. Dry run for all parties involved (i.e. interviewers, third party, and organization being assessed) before actual baseline begins

# Baseline, endline and support activities



- Sample size is too small
- Program is not evaluation ready
- Lack of comparability between treatment and comparison groups
- Ethical problems
- Interviewer quality
- Time constraints
- Budget constraints
- Working in the local context
- Inaccurate data (misclassification bias)
- Mismatch between the research question and the data you actually collect

**The key takeaway from the Impact Assessment Workshop will be to develop a customized Strategy Analysis and Performance Analysis action plan for your organization that tackles these challenges**



## Milk Collecting Communities (Egypt)

## Ciater & Merapi (Indonesia)

### Objectives

- Assessment of the socioeconomic impacts of the MCC model at 3 level:
  - farmers/individuals
  - household/farm level
  - community and village level
- Identify and characterize MCC models to improve the project and its roll out

### Objectives

- Studies will be based on Egypt study protocol (Cirad). Assessment of the socioeconomic impacts of the MCC model at 3 level:
  - farmers/individuals
  - household/farm level
  - community and village level
- Following a common protocol for Egypt, Ciater and Merapi will give a calliberated comparison.

## Bien vieillir (France)

## Pepenadores (Mexico)

### Objectives

- Measure the action and impacts of physical activities on ageing people autonomy in elderly homes.
- Connect ecosystem project France and Spain to a broader study done at European level named "HAPPIER"

### Objectives

- Multidimensional outcomes:
  - Relational capabilities
  - Material poverty index
- One-dimensional outcomes:
  - Pepenadores life satisfaction - health status - addictions
  - Vulnerability at work
  - Formalization of employment, including social security , bank accounts and access to social programs
  - Financial empowerment

**FINALIZED**



**Pemulung**

**Indonesia**



**MCC Phase 1**

**Ukraine**



**LAUNCHED**



**MCC Phase 2**

**Ukraine**



**Women Social School Empowerment**

**Spain**



**Stand by Mums**

**Romania**



**Mandacaru**

**Brazil**





- Involve community as much as possible in the definition of the impact criteria.
- Start your project design with impact expectation.
- Fix the limit of the impact perimeter.
- Challenge impact results regarding real systemic change.
- Dare to communicate on the failure:
  - Learnings are as important as the impact



***STAY HUMBLE***

**Questions?**

## WDI Contact Information

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Sandra Draheim: [draheims@umich.edu](mailto:draheims@umich.edu) or 734-615-7319

Link to Webinar Series:

<http://wdi.umich.edu/research/bop/webinar2014>

Link to Workshop Registration – Space is Limited

<http://bopworkshop.com/registration/>

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# Selecting the physical location for interviews

Type	Pros	Cons	Comments
Public	<ul style="list-style-type: none"> <li>• Lower cost as surveys can be conducted in open air</li> </ul>	<ul style="list-style-type: none"> <li>• Other community members can possibly hear sensitive information about respondent such as income, or domestic abuse</li> </ul>	<ul style="list-style-type: none"> <li>• May need to work with local community to determine appropriate location</li> </ul>
Secluded public place	<ul style="list-style-type: none"> <li>• Fewer onlookers (e.g. community and family)</li> </ul>	<ul style="list-style-type: none"> <li>• Requires more resources including infrastructure or personnel to manage onlookers</li> </ul>	<ul style="list-style-type: none"> <li>• Could use a school or another building with multiple rooms</li> </ul>
Home	<ul style="list-style-type: none"> <li>• More controlled environment</li> </ul>	<ul style="list-style-type: none"> <li>• Other family members may listen in and influence responses</li> <li>• Security of the interviewer may be at stake</li> </ul>	<ul style="list-style-type: none"> <li>• Follow-up interviews could be more effective as it would be easier to find participants</li> </ul>

# Estimated timeframe for a quick study (less expensive)

Activity	Timeframe
Strategic assessment Research design, sample selection and sample size	Month 1
Survey development	Month 2
Baseline data collection	Months 3-4
Lull period between data collection	
Endline data collection	Months 9-10
Data analysis	Month 11
Reporting	Month 12

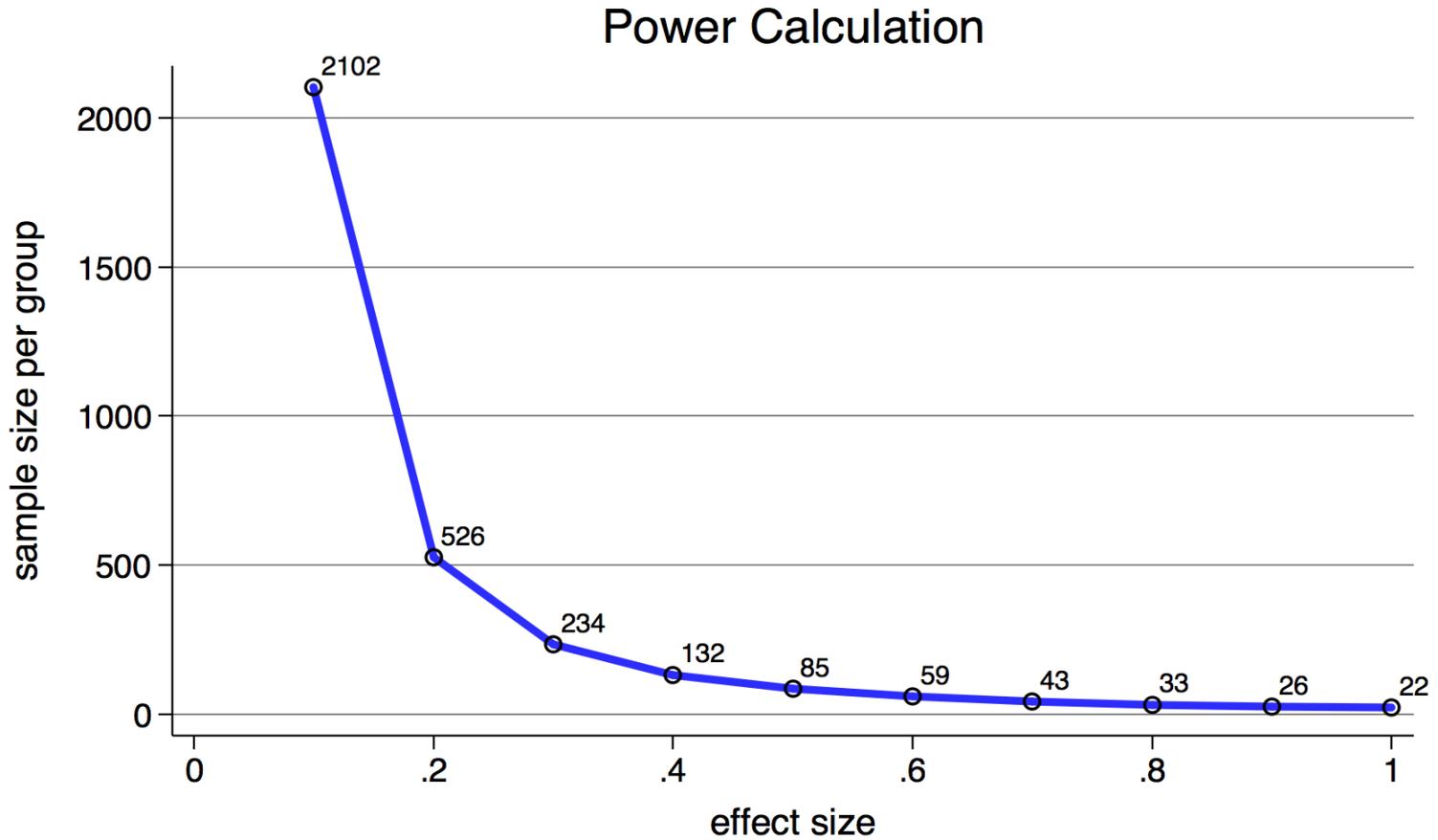
# Estimated timeframe for a longer study (more expensive)

Activity	Timeframe
Strategic assessment	Month 1-3
Research design, sample selection and sample size	
Survey development	Month 4-6
Baseline data collection	Months 7-10
Lull period between data collection if endline does not overlap with baseline	
Endline data collection	Months 11-14
Data analysis	Month 15-16
Reporting	Month 17-18

# Summary of research design

Cost	Type of Research Design	Advantages	Disadvantages
Least expensive	Cross-sectional - one point in time	Easy to implement. Good for establishing baseline knowledge	Can't observe change over time
Least expensive	Retrospective (cross-sectional) - asking people about what they remember	"Time on the cheap". Good for establishing baseline knowledge and for getting a sense of how phenomena play out over time.	Participants may not accurately remember what occurred or how they were feeling at a specific time
More expensive	Prospective longitudinal – measurements at different time points.	Can observe changes over time	Time consuming
Most expensive	Randomized longitudinal – compares groups which are randomly assigned to "treatment" and "control"	Strongest inferences about causality. Minimizes bias.	May not be feasible or acceptable to stakeholders
Most expensive	Non-randomized longitudinal – compares groups (generally self-selected)	May be more acceptable to program or stakeholders.	Weaker inferences about causality. Need to think carefully about statistical and design controls

# Power calculation: an example



alpha = .05, power = .9

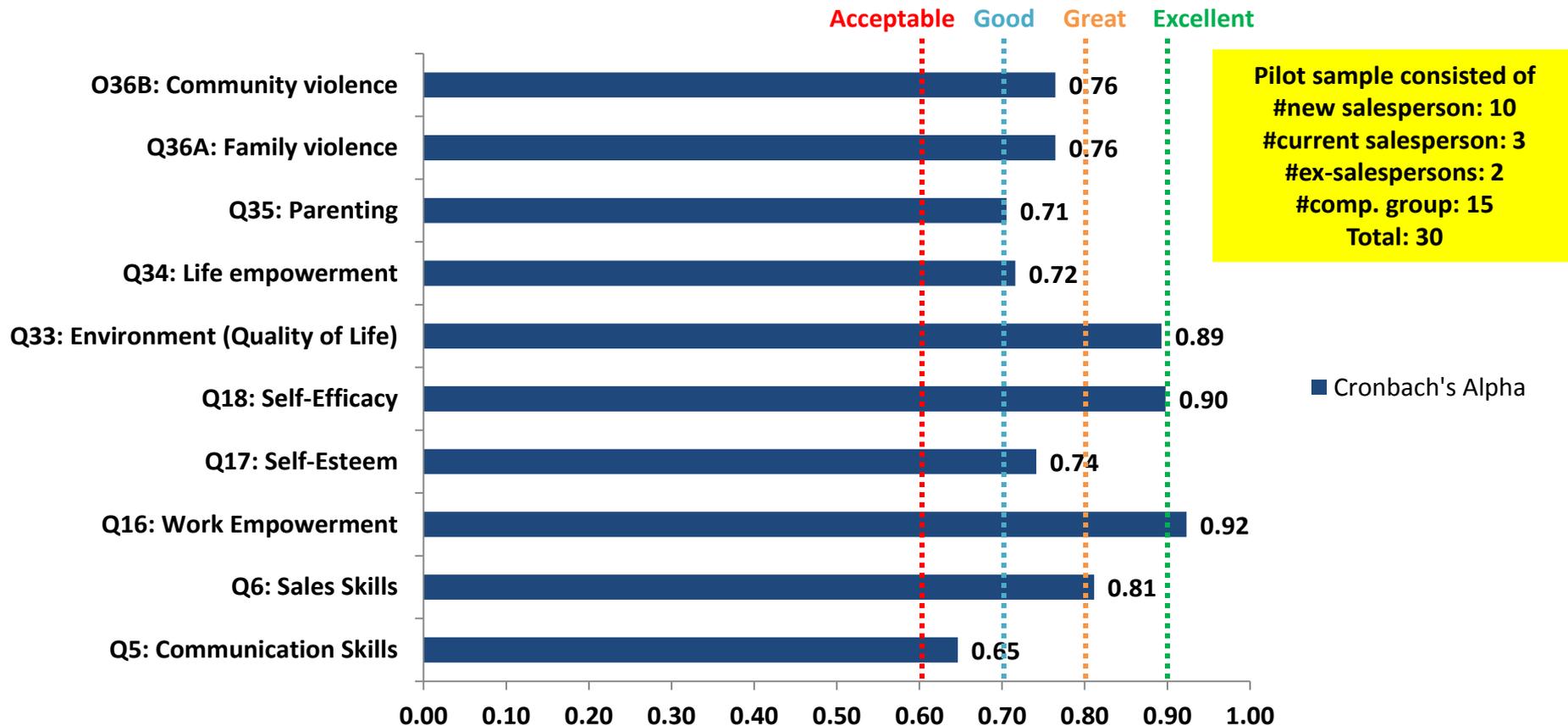
# Annex – slides applicable to Semilla

# Visual aid in our survey



1	2	3	4	5	6	7
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# Assessing survey reliability from the pilot phase



In our survey, 9 questions are made up of multiple items or sub-questions. Their Cronbach's alpha ranges from 0.65 (above acceptable) – 0.92 (excellent)

## Why test this measure in the pilot?

1. Cronbach's alpha is used to estimate the reliability of a psychometric measure and the intercorrelations between the measure's individual items. Here we ask the question: "Are these items measuring the same construct?"

# Assessing variation in responses from the pilot phase

We looked carefully at the measures and there seems to be a fair and reasonable amount of variation in respondent's answers to survey questions

**Sample consisted of**  
**#new salesperson: 10**  
**#current salesperson: 3**  
**#ex-salespersons: 2**  
**#comp. group: 15**  
**Total: 30**

## Why is variation in responses important?

1. If you keep getting the same answer or high responses from all respondents, this may indicate that respondents do not understand the question or are not actually listening to the questions that are being asked.

# Using natural experiments in your study

## Track ex-Salespersons

1. Tracking ex-salespersons (salespersons who leave Semilla) will help us better understand why they left Semilla

## Track new model

1. Interviewing salespersons in new model that Semilla is piloting allows us to compare different models

## Track long-term

1. Interviewing long-term salespersons (who have stayed with Semilla for >1 year) allows us to understand why they choose to stay with Semilla