

Integrating Gender into Causal Impact Assessments: understanding the scope of causal impact assessments and how to incorporate gender effectively

Integrating Gender into Causal Impact Assessment

March 2025

Diana Lopez-Avila davila@cgiar.org Senior Scientist Gender and Inclusion Accelerator-CGIAR





Why to integrate gender into impact assessments?

CONSTRAINTS FACED BY WOMEN IN AGRI-FOOD SYSTEMS

- Women face barriers in accessing land, agricultural extension services, credit, and insurance
- Women experience significantly lower land productivity and income from agricultural labor compared to men
- Women often have less control over the income generated from agricultural activities
- Women spend significantly more time on unpaid domestic and care work, which limits their ability to pursue income-generating activities and adapt to climate change
- Harmful gender norms and discriminatory social structures hinder women's access to resources, services, and opportunities

We need
evidence on
what works to
address these
constraints
and help
closing gender
gaps in agrifood systems





Why to integrate gender into impact assessments?

There are many knowledge gaps and research questions that can be better answered through an impact assessment

How can extension services target and reach women in a more effective way to enhance adoption among female farmers? Which strategies help women achieving higher levels of productivity? Or/and enhance the adaptive capacity of women in agriculture to mitigate the negative impacts of climate change?

Which strategies and innovations help women farmers achieve higher productivity?

What are effective ways to engage men in promoting gender equality and women's empowerment within agri-food systems?





Why to integrate gender into impact assessments?

The Gender Results Effectiveness Scale

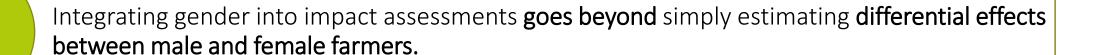


We need innovations and impact assessments that are gender targeted, gender responsive and/or gender transformative





Key Considerations for Integrating Gender into Impact Assessments



It involves identifying key gender-related research questions, which are not limited to assessments of gender-focused interventions.

When defining the **Theory of Change** (ToC), consider **how the intervention or innovation will impact women**, whether **the effects differ from men**, which outcomes will capture these effects, and what activities are in place to make the innovations gender targeted and gender responsive





Let's go back to some concepts already discussed





Type of research questions

Descriptive

• A descriptive research question systematically investigates the existence or characteristics of a phenomenon, detailing a situation, event, or population without exploring relationships or causality

Relational/Co rrelational

• Relational questions explore the relationships between two or more phenomena, seeking to understand how they interact or influence each other. They often examine correlations.

Causal

• Causal questions investigate whether one phenomenon directly influences or causes a change in another. They typically require a comparative approach, assessing outcomes with and without an intervention to establish causality.





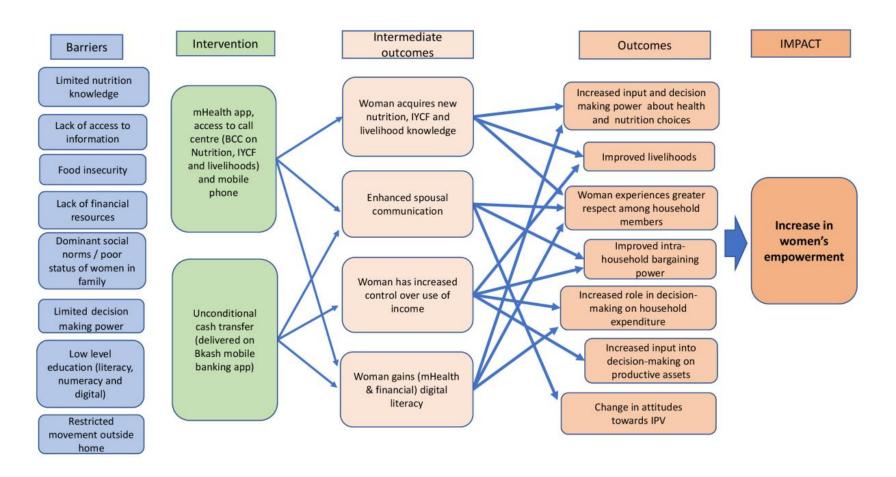
Theory of Change

- A conceptual framework that outlines a series of interconnected steps tracing the progression from inputs to outputs, outcomes, and ultimately, impact.
- A theory of change explains how the activities undertaken by an intervention (such as a project, program or policy) contribute to a chain of results that lead to the intended impacts.
- It illustrates the **factual and counter-factual links** between program components and their desired effects





Gender & ToC



On whom these indicators should be collected (only women, women and men, others)?

Which indicators to use to measure these outcomes?

ToC of an innovation particularly aimed at addressing a gender constraint





Gender & ToC

Final impacts ↑ HH resilience, income/wealth & food & nutritional security ↑ Crop & Milk ↑ & more diverse \$ Time savings & ↓ Intermediary Prod. &/or ↓ costs & food sources drudgery development impacts ↑ Income AF 个 Fuel wood 个 Soil Health product income access ↑ AF practices & ↑ tree density & ↑ promoted tree Uptake of products AF product sales species promoted AF practices & tree germplasm Significant adoption of AF practices & germplasm **Programme** Substantive & appropriate smallholder exposure to Vi's programme participation Research Strong Vi programme & ICRAF research linkages (AF Practices & Tree Germplasm) connection

Women spend more time and effort collecting fuel a time



a reduction in collecting fuel will particularly benefit women.

On which outcomes do we expect a differential impact?

On which outcomes do we expect an impact only among women?

ToC of an innovation aimed at improving agro-forestry practices with some heterogenous impacts or specific impacts among women





Let's think about the following two research topics

- The role of gender norms in shaping women's participation in livestock rearing and strategies to enhance vaccination uptake among small-holder farmers
- The introduction of an improved rice variety in the market and a seed systems innovation to promote the adoption of the improved variety among small-holder farmers





The role of gender norms in shaping women's participation in livestock rearing and strategies to enhance vaccination uptake among small-holder farmers





Research Questions

- > Let's think about possible research questions of interest
 - Does an intervention that engages men through sessions on women's roles in agriculture help shift existing beliefs and norms while enhancing women's participation in livestock rearing and their economic empowerment?
 - Does an intervention with a gender-transformative component shifts in men's and women's beliefs and norms about women's participation in livestock?
 - ➤ Does an intervention with a gender-transformative component improves women's economic empowerment?
 - Does an intervention that engages men through sessions on women's roles in agriculture foster vaccination rates?





Theory of Change

Activities

- Information campaigns are put in place to promote vaccination
- Vaccines are available
- Vaccines are distributed through vaccination centers
- Gender sensitization sessions are conducted

Outputs

- Farmers participate in information campaigns.
- Farmers bring their animals to vaccination centers.
- Men participate and engage in gender sensitization sessions.

Outcomes

Vaccination rates increased

Men and women have more progressive beliefs about women's role in livestock rearing

Women are more likely to participate in decision about income use in the household

Women are more likely to participate in decision about livestock raising

Impacts

HH increase their livestock assets

HH increase their income derived from livestock raising



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The introduction of an improved rice variety in the market and a seed systems innovation to promote the adoption of the improved variety among small-holder farmers





Research Questions

- > Let's think about possible research questions of interest
 - ➤ Is a seed systems innovation that engages both spouses when promoting and disseminating a new variety more effective than one that targets only the household head?
 - Does engaging both spouses in promoting and disseminating a new variety increase adoption more than targeting only the household head?"
 - Does involving both spouses in promoting and disseminating a new variety enhance women's economic empowerment?





Theory of Change

Activities

A new variety is introduced to the market through the usual channels

A seed systems innovation that engages both spouses when promoting and disseminating a new variety is put in place

Outputs

The new variety is available in the market for farmers to buy it

Farmers are aware and well informed about the traits of the new variety

Both spouses are present during the promotion of the new variety and attend dissemination session

Outcomes

Farmers adopt the new variety

Female farmers adopt the new variety

Women participate in decision processes about which variety to grow and other productive decisions

Impacts

Yield increases

Yield increases in plots managed by women

Income increases

Women are more likely to participate in decision about income use in the household

Assumption: farmers have the financial means to buy the new variety





- Let's think about the last research topic
 - ➤ Is a seed systems innovation that engages both spouses when promoting and disseminating a new variety more effective than one that targets only the household head?
 - ➤ Does engaging both spouses in promoting and disseminating a new variety increase adoption more than targeting only the household head?
 - ➤ Does involving both spouses in promoting and disseminating a new variety enhance women's economic empowerment?
 - ➤ Does the adoption of the new variety increase household yield and income?





RCT-Seed System Innovation

The study will take place in 90 villages, with approximately 40 households per village (4,000 households)

In 30 villages, the new variety will not be introduced, and only existing varieties will remain available in the market (existing varieties are disseminated as usual (HH head))

(Control Group: C)

In 30 villages, the new variety will be introduced, and information and dissemination campaigns will only target the HH head

(Treatment 1: T1)

In 30 villages, the new variety will be introduced, and information and dissemination campaigns will target both spouses (or primary male and female) in the HH

Treatment 2: T2

C vs T1

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C vs T2

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Villages are randomly allocated into three groups, ideally using baseline data.





Randomized Controlled Trials (RCTs)

• Let's think about the following research questions and discuss which comparison allow researchers to answer each question:

Does engaging both spouses in promoting and disseminating a new variety increase adoption more than targeting only the household head?

T1 vs T2

Does involving both spouses in promoting and disseminating a new variety enhance women's economic empowerment?

T1 vs T2

C vs T2

Does the adoption of the new variety increase household yield and income?

C vs T1

C vs T2



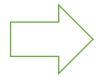


Based on our ToC and the research questions of interest, let's think what are the outcomes we are interested in estimating a causal effect on:

- Adoption
- Yield



Based on our ToC, we are interested in assessing if female farmers adopt the new variety and if yield increases in plot managed by women.



Hence, we are interested in assessing heterogenous impacts by male and female farmers on these two outcomes



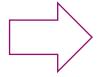


Based on our ToC and the research questions of interest, let's think what are the outcomes we are interested in estimating a causal effect on:

- Input in decision making
- Input in control over income/money



Based on our ToC, we are interested in assessing if women participate in decision processes about productive decisions and if women are more likely to participate in decision about income use in the household



Hence, we are interested in collecting this information among women. Ideally, we will collect from women and men to have a better understanding of intra-hh dynamics





- Key considerations regarding power size calculations:
 - Conduct power size calculations for different main outcomes and include those that are particularly expected among women or gender related.
 - Pick the sample size and design that is powered to detect the smallest MDE of the outcomes of interest.
 - Important to conduct separate power calculations for the different group of interest (e.g., men vs young, adult vs youth) to ensure that the study is sufficiently powered to detect the heterogeneous treatment effects of interest.
- Please note that if you conduct power size calculations for the entire sample using the outcome of interest where
 heterogeneous effects are expected, simply ensuring an equal split between males and females is not enough to
 detect differential impacts
- Or if you only conduct power size calculations for one outcome but not for the particularly outcome related to women's empowerment, then the sample size may not be enough to detect an effect on women's empowerment.
- Please remember, the smaller the effect you aim to detect, the largest the sample needed







Randomized Controlled Trials (RCTs)-Group Exercise

In the first sessions, we explore research questions and ToC for the following research topics:

- The role of gender norms in shaping women's participation in livestock rearing and strategies to enhance vaccination uptake among farmers
- Designing gender-inclusive extension services to promote the adoption of improved rice varieties among farmers
- 3. Enhancing women's financial literacy and inclusion to improve access to agricultural inputs and boost productivity

And last week, we explored how to design a RCT to test those questions





Randomized Controlled Trials (RCTs)-Group Exercise

Let's break up into groups

- Based on what we have discussed this week about integrating gender into causal impact assessments and the designs you
 have previously discussed, discuss how you will improve and revise your study to ensure gender is properly integrated
- To guide the discussion, think about:
 - When developing your Theory of Change (ToC), did you incorporate gender considerations? What revisions will you make to strengthen its integration?
 - How about the research questions—will you frame them differently?
 - What are the key outcomes of interest where you aim to measure an effect? For which outcomes do you plan to estimate differential effect? Which are the outcomes of interest particularly related to women's economic empowerment?
- Please nominate a facilitator and a rapporteur
- At the end of the group exercise, the rapporteur will present the key points discussed (~ 5 min per group)
- Time dedicate for discussion 15 minutes





References and Useful resources

- https://www.povertyactionlab.org/sector/gender
- Power size calculations-DIME-World Bank
- Power size calculations-JPAL

