



GENDER Impact  
Platform

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

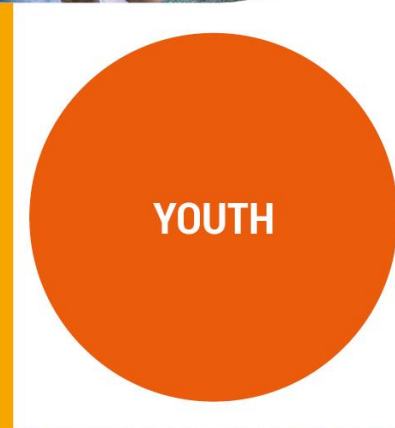
## Foundations of Impact Assessments

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GENDER  
EQUALITY



YOUTH



SOCIAL  
INCLUSION



## About the course

- This is an **introductory course** on causal impact assessments with a focus on integrating gender considerations.
  - It provides an **overview** of key **quantitative methodologies**, including experimental and quasi-experimental approaches.
  - The goal of this course isn't to turn you into an expert on impact assessments or make you ready to design and implement a full causal impact study right away. **Instead, it will equip you with the foundational knowledge to better understand and approach these assessments.**
- I understand that sometimes unexpected things come up, and you might miss a session. Since this is a short course, **I encourage you to attend all sessions to get the most out of it. If you do miss one, be sure to review the slides to catch up.**



## About the course

- During the sessions, you'll be assigned to **group activities**, where you'll work in breakout rooms with **approximately 10 people**.
  - For each group exercise the **group composition may be different** depending on the participants attending each session.
- I recommend taking notes during the group exercises and keeping them for future sessions, some group exercises build upon previous group assignments.
- **If you have a questions**, kindly type it in the **Chat Box**
- Slides will be uploaded to the landing page of the course after each session
- Certificates will be given to those that attend at least 10 sessions



# What is an impact assessment?

## Impact:

A durable or long-term change in the condition of people and their environment brought about by a chain of events to which research, innovations, and related activities have contributed. It reflects the ultimate goal of development efforts. It may be positive or negative, direct or indirect, intended or unintended

## IMPACT ASSESSMENT:

Objective assessment of a program's outcomes and durable or long-term changes resulting from research for development interventions. It is designed to study causes of and/or contributions to change by an initiative or intervention. It can employ quantitative, qualitative, and mixed methods to measure changes in key outcomes and impacts over time.

## CAUSAL IMPACT ASSESSMENT:

It focuses on identifying the CAUSAL RELATIONSHIP between the intervention and the observed changes. It is designed to attribute the changes observed to the innovation or intervention studied



# Impact Assessments: Contribution vs Attribution

- Walking 10 minutes per day reduces the risks of a heart attack
- Drinking a glass of wine everyday improves heart condition
- Drinking green tea regularly improves digestion
- Consuming fish twice a week decreases the risks of a heart health
- Eating a diet rich in vegetables lowers the risk of chronic diseases
- Practicing mindfulness for 10 minutes reduces stress and anxiety



# Impact Assessments: Contribution vs Attribution

Join at [menti.com](https://menti.com) | use code 4400 4957

Mentimeter

What are the main words that come to your mind when you think about an impact assessment?

97 responses



DM

Menti

Slide6\_S1S2\_WordCloud

Choose a slide to present



# Impact Assessments: Contribution vs Attribution

- Suppose you are studying an intervention in which **women farmers**, who belong to a self-help group, are encouraged to save in small installments to address liquidity constraints to purchase seeds of a new maize variety that is being introduced in the market.
- The intervention is planned to reach all self-help groups in 5 counties in country A.
- You want to design an impact assessment to study the impact of the intervention on:
  - The likelihood women save to purchase the introduced seeds
  - The amount women save
  - The input women have in crop farming





# Group exercise

Photo credit: Hamish John Appleby / IWMI





# Impact Assessments: Contribution vs Attribution

- You and your team are exploring the following options:
  - Option 1: comparing women who belong to a self-help group (they will be targeted by the intervention) to women who do not belong to a self-help group (they won't be targeted) in all 5 counties after the intervention takes place.
  - Option 2: comparing women in self-help groups across the 5 counties where activities will take place with women in self-help groups from counties where the innovation won't take place, after the intervention takes place.
  - Option 3: comparing women in self-help groups across the five counties where activities will occur, before and after the intervention.



# Impact Assessments: Contribution vs Attribution

- Let's break up into groups (approx. 10 people per group) and discuss the pros and cons of each option.
- To guide the discussion, think about these question:
  - Which comparison could better allow to attribute any changes observed in the indicators of interest to the intervention being studied?
  - What factors could bias each comparison in establishing the attribution or contribution of the intervention to changes observed in the indicators of interest?
  - Which comparison would best estimate the contribution of the intervention to the observed changes in the indicators of interest?
- 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



# Causal and non-causal impact assessments

## IMPACT ASSESSMENT:

**Objective assessment** of a program's **outcomes and durable or long-term changes** resulting from research for development interventions. It is designed to study **causes of and/or contributions to change** by an initiative or intervention. It **can employ quantitative, qualitative, and mixed methods** to measure changes in key outcomes and impacts over time.

## CAUSAL IMPACT ASSESSMENT:

It focuses on identifying the **CAUSAL RELATIONSHIP** between the intervention and the observed changes. It is designed to **attribute the changes** observed to the innovation or intervention studied

## NON-CAUSAL IMPACT ASSESSMENT:

It assesses the **contribution of the program/innovation/intervention to the observed changes**. It does **not establish a direct causal link** between the program and the changes. The **observed changes cannot be definitively attributed** to the intervention itself.



## Study 1: Can a gender-sensitive integrated poultry value chain and nutrition intervention increase women's empowerment among the rural poor in Burkina Faso?

- **Motivation/Problem:** Understanding which food systems interventions empower women and which women benefit most is crucial for development policy.
- **Intervention:**  
SELEVER, a gender- and nutrition-sensitive poultry program in western Burkina Faso (2017–2020), aimed to empower women. Unlike typical agriculture programs prioritizing surplus sales, SELEVER focused on large-scale poultry marketing and broader demand. A WASH component on poultry health and hygiene was included for some participants (SELEVER + WASH).
- **Methods:**  
SELEVER was evaluated using a cluster-randomized controlled trial in which 30 villages were assigned to each of two treatment arm (SELEVER and SELEVER + WASH) and 60 villages were assigned to the control arm.  
The SELEVER study also conducted in-depth qualitative gender research near the midpoint of the intervention.
- **Results:**  
The program had no impact on empowerment or gender parity, despite its gender-sensitive design. Mid-project qualitative research revealed greater community awareness of women's time burdens and economic roles, but this did not translate into increased empowerment.





## Study 2: Empowering women farmers through collective action: a case study of Khanizpur Hamlet, Odisha.

- **Motivation/Problem:**

Landless women farmers face dual challenges: limited farm size and illegal land tenancy. They lack bargaining power in markets, making technology adoption economically unviable.

**Intervention:**

The "Small Farmers Large Field" (SFLF) model was piloted with 35 landless tenant women farmers in Khanizpur village, Odisha. Adapted from Vietnam's Large Field Model, it encourages farmers to group together for input purchases, machine services, synchronized operations, and group nurseries. This approach transforms small plots into larger, more efficient fields, enabling coordinated transplanting and harvesting.

- **Methods:**

This study employs an embedded mixed methods (EMM) design, combining qualitative and quantitative approaches. Quantitative data was collected from all participating farmers, while qualitative data was gathered through purposive sampling and various techniques such as unstructured interviews, focus groups, and participant observation.

- **Results:**

The per-acre net income improved from a loss of INR 2,831 to a profit of INR 15,065, largely due to a 60% yield increase. Factors like better seed quality and improved practices contributed to this. Beyond monetary gains, collective action among farmers led to non-monetary benefits, including enhanced knowledge, stronger social networks, better civic engagement, and more efficient water use.



# Research Questions & Impact Assessments

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What do you think is needed to state: "Walking 10 minutes per day reduces the risks of a heart attack?"

Menti

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- Compare people who walk 10 minutes daily with those who are inactive
- Compare individuals who walk 10 minutes daily in a sea-level city to those who are inactive and live in a city at 2,000 meters altitude.
- Compare adults walking 10 minutes daily to inactive youth
- Other comparison





# Research Questions & Impact Assessments

Join at [menti.com](https://menti.com) | use code 2319 9014

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DM

Do you think the following questions would be better addressed through a causal or non-causal impact assessment?

What is the impact on a newly introduced maize variety on women's labor productivity?

Does participation in women's groups enhance women's agency?

Is using female extension agents more effective at increasing adoption among female farmers compared to relying solely on male extension agents?

Are interventions that engage both spouses more effective at empowering women compared to those that target only women?

Non-causal

Causal



Menti

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Choose a slide to present





# 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/Correlational

- 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.

IMPACT ASSESSMENTS





# Group exercise

Members of the women's group preparing food. Photo by C. de Bode/CGIAR



# Research Questions

- Let's think about the possible research topics:
  1. The role of gender norms in shaping women's participation in livestock rearing and strategies to enhance vaccination uptake among farmers
  2. 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



# Research Questions

- Let's break up into groups
  - Choose one of the research topics
  - Discuss research of questions of interest (think about descriptive, relational/correlational and causal questions)
- To guide the discussion, think about:
  - What problem, constraint, or need you aim to address?
  - What factors related to the problem do you also want to explore in your research? In which relations and correlations, you are interested in?
  - Are you interested in stablishing a causal relationship? What is the causal relationship you are interested in?
- 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
- *Keep your notes as they will be useful for the next session*



# Quantitative & Qualitative Causal Impact Assessments

## Quantitative

Effects-of-causes approach

**Statistical inference**

All observations are a priori equally important (average effect)

**Measurement and indicators are at the center of attention**



What is the effect of employing female extension agents on technology adoption and agricultural knowledge among female farmers?

## Qualitative

Causes-of-effect approach

**Mathematical logic**

Theory evaluation sensitive to individual observations

**Concepts are at the center of attention**



Is employing female extension agents enough to enhance technology adoption and agricultural knowledge among female farmers?





# Quantitative & Qualitative Causal Impact Assessments

- **Qualitative researchers** think about causation in terms of **necessary or sufficient causes**
- The **goal** is to **identify the causal path(s)** that are sufficient for the outcome of interest
- Qualitative researchers usually **start their research** by selecting **cases where the outcome of interest occur**
  - Is employing female extension agents enough to enhance technology adoption and agricultural knowledge among female farmers?
- **Small/medium sample**

- **Quantitative methods** use **statistical inference**
- The **goal** is to estimate **the average effect on the population**, without necessarily focus on the causal paths
- Quantitative researchers do not select their sample based on the outcome (e.g., **random selection**)
  - What is the effect of employing female extension agents on technology adoption and agricultural knowledge among female farmers?
- **Large sample**



## References

- Baruah, S.; Mohanty, S.; Rola, A. C. 2022. Empowering women farmers through collective action: a case study of Khanizpur Hamlet, Odisha. *Gender, Technology and Development*. ISSN 0973-0656. 26(1), 58-73.
- Heckert, Jessica; Martinez, Elena M.; Sanou, Armande; Pedehombga, Abdoulaye; Ganaba, Rasmané; and Gelli, Aulo. 2023. Can a gender-sensitive integrated poultry value chain and nutrition intervention increase women's empowerment among the rural poor in Burkina Faso? *Journal of Rural Studies* 100(May 2023): 103026.
- Mahoney, J., and Goertz, G., 2—6, A Tale of two cultures: contrasting quantitative and qualitative research. *Political Analysis*, 14:227-249
- Tully MP. Research: articulating questions, generating hypotheses, and choosing study designs. *Can J Hosp Pharm*. 2014 Jan;67(1):31-4. doi: 10.4212/cjhp.v67i1.1320. PMID: 24634524; PMCID: PMC3952905.