Do Gender Inequities in Agriculture Affect Food Security and Nutrition Outcomes?

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2019
The Gender Gap in Agriculture

FAO (2011):

• Women are 43 percent of the agricultural labour force
• Women own between 10 and 20 percent of agricultural land
• If women had the same access to agricultural resources, yields could be 20-30 percent higher
“Does increasing gender equity in agriculture improve household food security and nutrition for women and children?”
Pathways

Gender inequity

- Reduced inequity in work burden
  - Gendered tasks & duties
  - Strenuous labour & time allocation
- Reduced inequity in labour markets
  - Wage gap & opportunities
  - Earned income & workforce participation
- Reduced inequity in assets in agriculture
  - Inheritance & ownership rights
  - Land & livestock ownership & control

Nutrition

- Women's command over resources
  - Assuming that inequitable practices are inefficient
  - Assuming that women have a stronger preference for their/their household's health or increased efficiency
- Total household income
  - Assumes that additional income is invested in nutrition
- Household poverty & economic inequity

Nutrition of women

Nutrition of children

Household food security
What We were Looking for

• Quantitative and qualitative
• Correlation and causation
• Low and middle income countries
• No publication date/type or language restrictions
How We Found Evidence

32 studies from other sources

19,788 potentially eligible studies from database search
  10,786 from EBSCO
  1056 from Medline
  602 from Scopus
  1197 from Web of Science
  4 from Proline
  1600 from CAB
  1343 from Elnis
  155 from OpenTrial
  216 from Bridge Data
  2814 from AGRIS

5802 duplicates removed

14,018 identified for screening

13,747 studies excluded
  631 not low- or middle-income country
  345 not agricultural context
  580 not eligible participants
  1781 not original empirical evidence
  3611 not eligible exposure
  7096 not eligible outcome

271 reviewed in-depth

239 studies excluded
  12 not agricultural context
  2 not eligible participants
  85 not empirical evidence linking exposure to outcome
  95 not eligible exposure
  45 not eligible outcome

34 eligible studies
  25 quantitative studies
  9 qualitative studies
## Distribution of Estimates

<table>
<thead>
<tr>
<th></th>
<th>Women Nutrition</th>
<th>Child Nutrition</th>
<th>Food Security</th>
</tr>
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</table>

**Legend:**
- **Quant**
- **Qual**
Not All Evidence is Created Equal

- Assessed risk of bias for quantitative, quality for qualitative
  - ROBINS I and Lockwood, Munn and Poritt
- Generally high risk of bias/low study quality
- Authors did brilliant work, but inherently hard to research
## Results

<table>
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<tr>
<th>No Evidence</th>
<th>Inconclusive Evidence</th>
<th>Very limited positive evidence</th>
<th>Limited positive evidence</th>
<th>Positive evidence</th>
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</table>

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<th>Qual</th>
<th>Quant</th>
<th>Qual</th>
<th>Quant</th>
<th>Qual</th>
</tr>
</thead>
</table>

- **Women Nutrition**
  - Limited positive evidence
  - Positive evidence

- **Child Nutrition**
  - Very limited positive evidence

- **Food Security**
  - Positive evidence

**Note:**
- Inconclusive evidence is indicated by a lack of clear evidence.
- Limited positive evidence suggests a small, but positive impact.
- Positive evidence indicates a clear, positive impact.

**Quantitative (Quant)** and **Qualitative (Qual)** data are used to assess the evidence.
Results

But...

• Higher quality evidence tends to support the hypothesis
  – Attanasio and Lechene (2002)
Conclusion

• General and strong conclusions not supported by this systematic review

• More research needed...

• Causal identification
  – Some research on the way
  – Scope for creative (natural) experiments

• Non-comparable evidence
References


