



GAAP² phase

Gender, Agriculture & Assets Project

Led by IFPRI

Women's Empowerment in Agriculture Index (WEAI): Incorporating gender and mixed methods into nutrition research

Hazel Malapit and Elena Martinez

CGIAR Collaborative Platform for Gender Research

Annual Scientific Conference and Capacity Development Workshop

Amsterdam, The Netherlands

December 8, 2017 - 9:15 to 11:00 AM

Today's Agenda

- ▶ Agriculture-nutrition pathways and gendered pathways
- ▶ Introduction to the project-level WEAI
- ▶ Integrating quantitative and qualitative research
- ▶ Pro-WEAI nutrition and health module

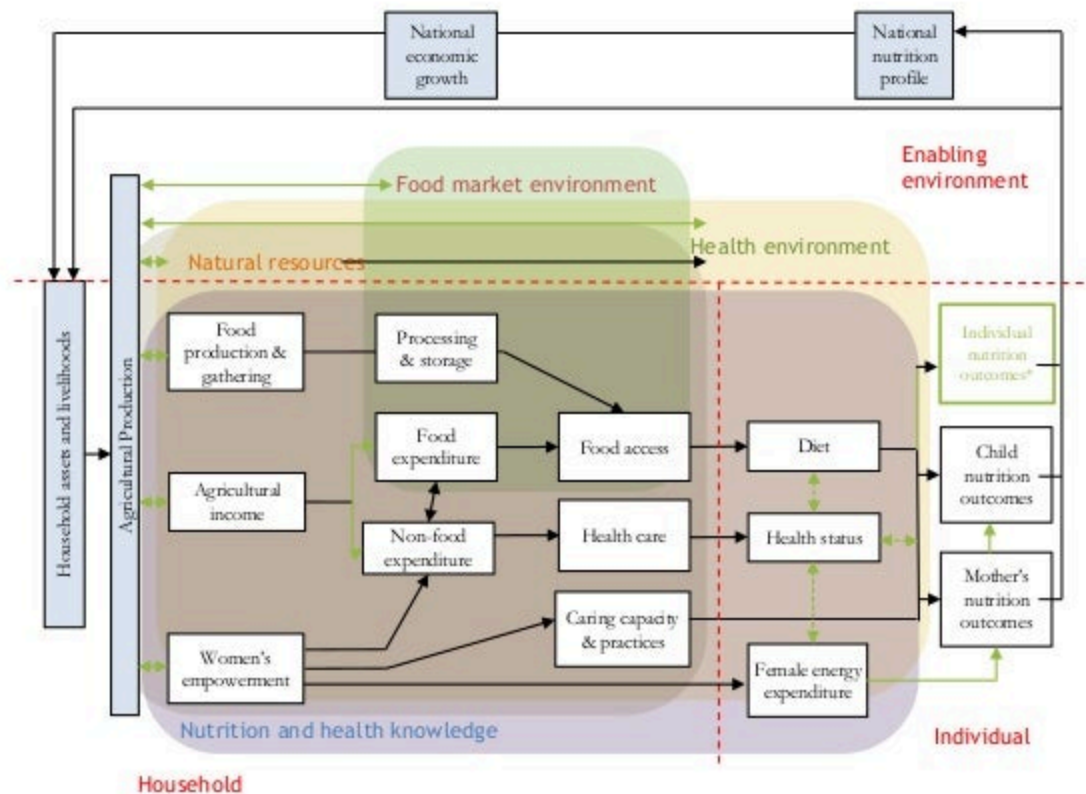


<https://pixabay.com/en/leader-tomato-food-vegetable-green-1969801/>



Photo credit: Flickr/Farha Khan, IFPRI

Conceptual pathways between agriculture and nutrition



*Individual nutrition outcomes refer to the general population, including women, men, and adolescents (not just mothers and children)

Source: Herforth and Harris 2013



Photo credit: Flickr/ Ollivier Girard, CIFOR

Gender along ag-nutrition pathways

1. Agriculture as a source of food for own consumption
2. Agriculture as a source of income
3. Agricultural policies affect prices of food and non-food crops
4. Women's participation in agriculture and the effect on her social status and empowerment & in particular her access to and control over resources
5. The impact of women's participation in agriculture on their time allocation
6. The impact of women's participation in agriculture on their own health and nutritional status (and also child nutrition)

(Ruel and Alderman 2013)



IFPRI Images

All pathways are gendered, some focus on women

1. Agriculture as a **source of food for own consumption**
2. Agriculture as a **source of income**
3. Agricultural policies **affect prices** of food and non-food crops
4. Women's participation in agriculture and the effect on her social status and **empowerment** & in particular her **access to and control over resources**
5. The impact of women's participation in agriculture on their **time allocation**
6. The impact of women's participation in agriculture on their **own health and nutritional status (and also child nutrition)**

Men and Women

Special focus on
Women

(Ruel and Alderman 2013)



IFPRI Images



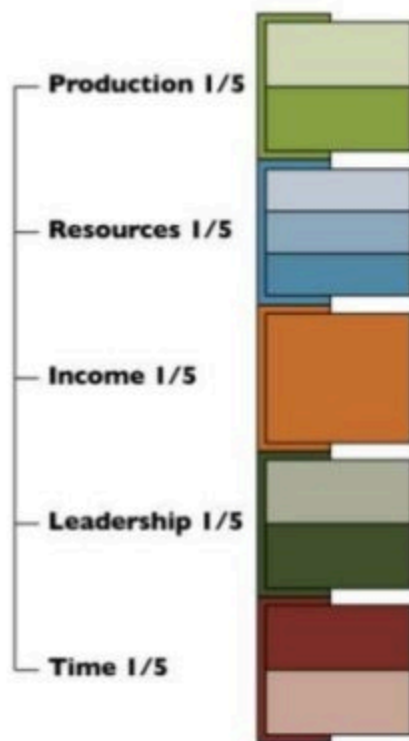
What is the WEAI?



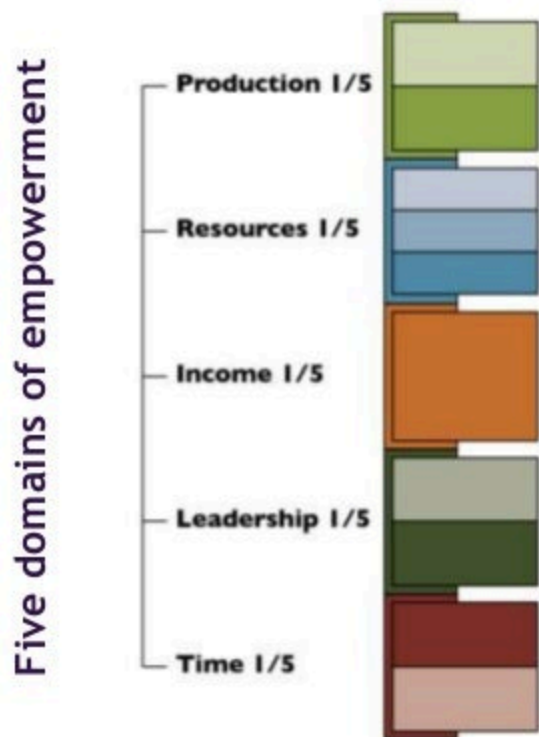
- ▶ Developed by IFPRI, USAID, and OPHI
- ▶ Designed to measure inclusion of women in the agricultural sector for Feed the Future (FTF) Initiative
- ▶ Similar to multi-dimensional poverty indices (Alkire and Foster 2011, *J of Public Econ*) and the Foster-Greere-Thorbeck (FGT) indices
- ▶ Details on index construction in Alkire et al. (2013), *World Development*

How is the Index constructed?

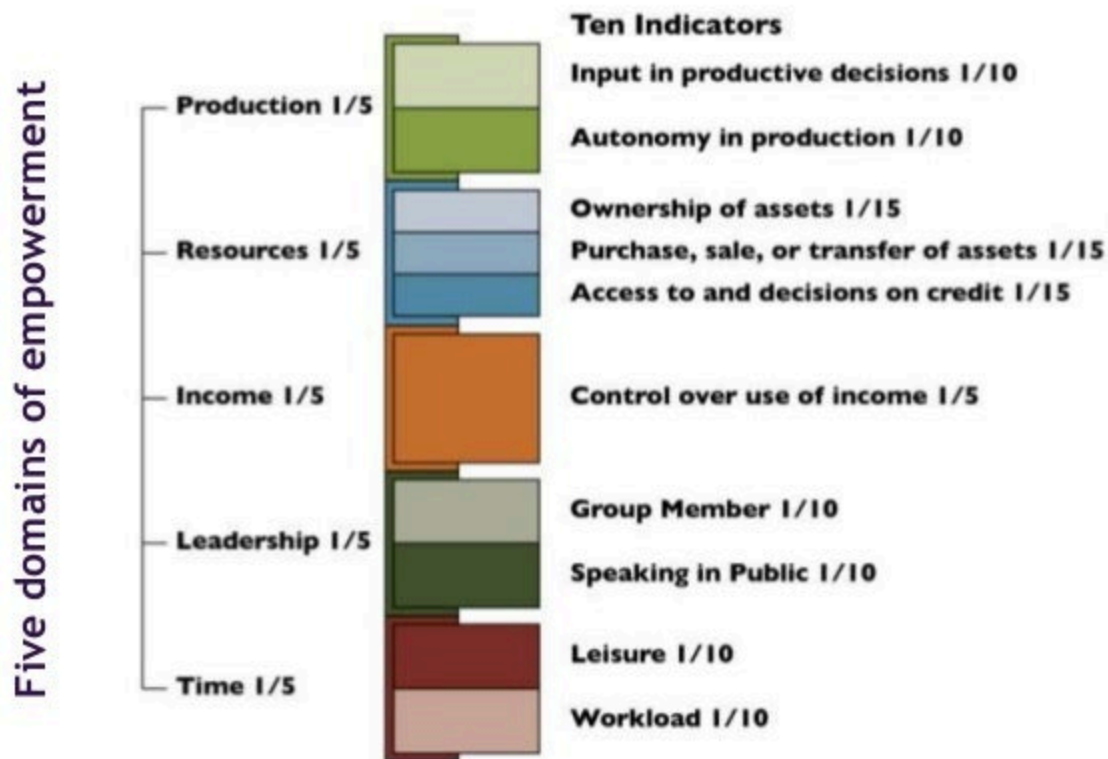
- ▶ WEAI is an aggregate index in two parts:
 - ▶ Five Domains of Empowerment (5DE)
 - ▶ Gender Parity Index (GPI)
- ▶ Constructed using interviews of the **primary male** and **primary female** adults in the same household



A woman's empowerment score reflects her achievements in the five domains

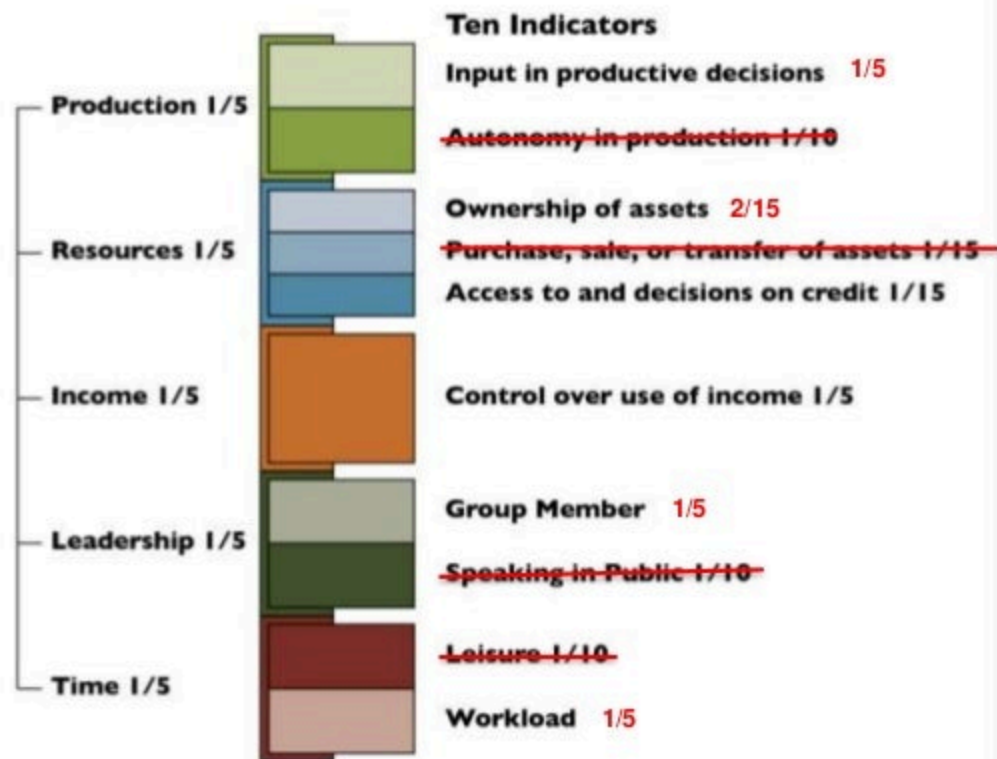


A woman's empowerment score reflects her achievements in the five domains



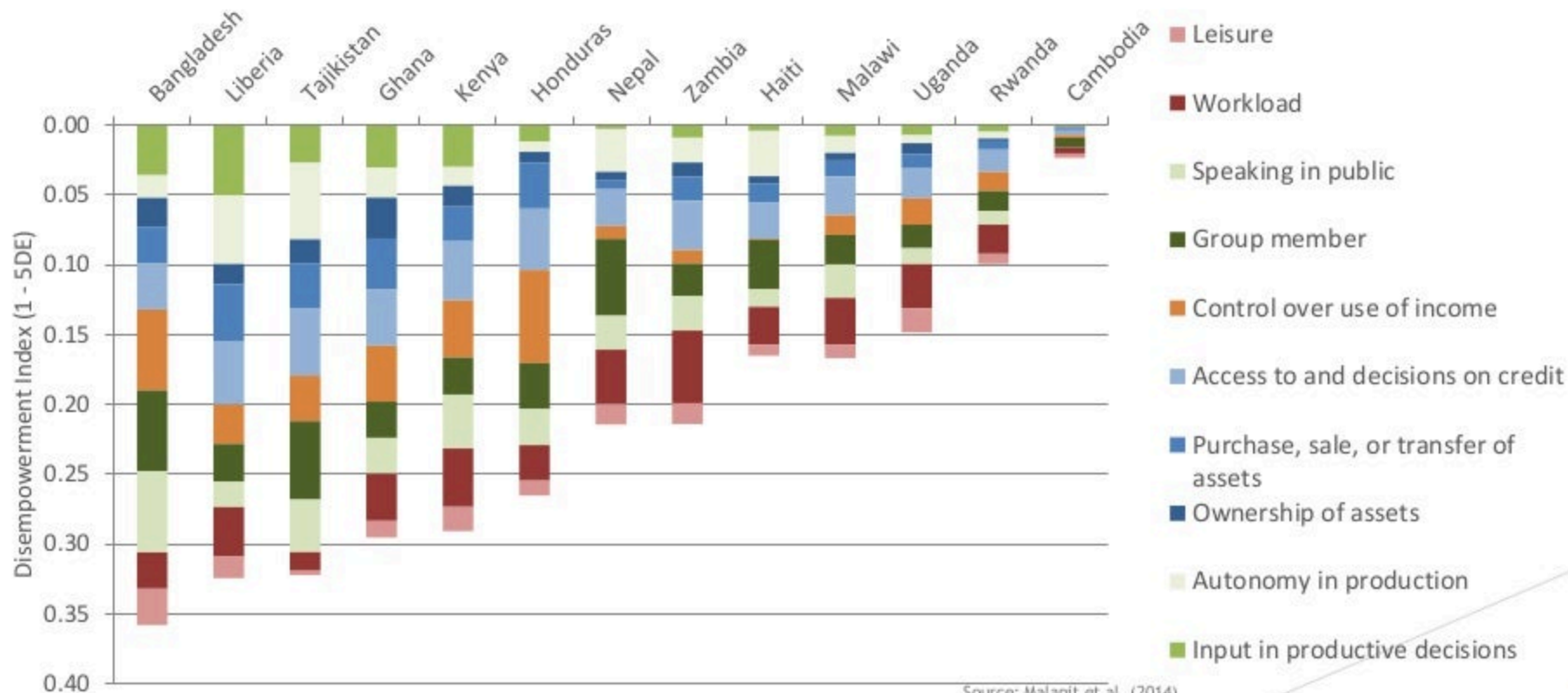
Abbreviated WEAI (A-WEAI)

Five domains of empowerment



Cross-country baseline findings:

Credit, workload, and group membership are most important constraints across countries



Source: Malapit et al. (2014)



Photo credit: Flickr/Neil Palmer, CIAT

What is GAAP2?

A learning and capacity-development initiative working with a portfolio of 13 development projects in the Gender, Agriculture, and Assets Project Phase 2 (GAAP2)

Monitoring and Evaluation

Why GAAP2?

- ▶ Learning what works
- ▶ Learning what doesn't work
 - ▶ Particular gender strategies
 - ▶ Gender-blind approaches?
- ▶ “What’s measured, matters”



Developing a “Project-level” WEAI (pro-WEAI)

Comparable metrics for empowerment:

Core set of pro-WEAI
empowerment modules

- ▶ Quantitative survey
- ▶ Qualitative protocols

+

Standardized add-ons
depending on project needs:

- ▶ Nutrition and health
- ▶ Livestock-enhanced

GAAP2 Project Portfolio by Cluster

Project Objective → Intervention area ↓	Nutrition	Income and Nutrition
Crops	<u>ANGeL (Bangladesh)</u> <u>TRAIN (Bangladesh)</u>	<u>WorldVeg (Mali)</u> <u>AVC (Bangladesh)</u> <u>iDE (Ghana)</u>
Livestock		<u>Heifer (Nepal)</u> <u>Trias (Tanzania)</u> <u>MoreMilk (Kenya)</u> <u>SE LEVER (Burkina Faso)</u>
Crops and Livestock	<u>FAARM (Bangladesh)</u> <u>WINGS (India)</u>	<u>JP-RWEE (Ethiopia)</u> <u>Grameen Foundation (Burkina Faso)</u>

All projects have experimental or quasi-experimental designs

Project Objective → Intervention area ↓	Nutrition	Income and Nutrition
Crops	<ul style="list-style-type: none"> ✓ ANGeL (Bangladesh) ✓ TRAIN (Bangladesh) 	<ul style="list-style-type: none"> ✓ WorldVeg (Mali) ✓ AVC (Bangladesh) ✓ iDE (Ghana)
Livestock		<ul style="list-style-type: none"> ✓ Heifer (Nepal) ✓ Trias (Tanzania) ✓ MoreMilk (Kenya) ✓ SE LEVER (Burkina Faso)
Crops and Livestock	<ul style="list-style-type: none"> ✓ FAARM (Bangladesh) ✓ WINGS (India) 	<ul style="list-style-type: none"> ✓ JP-RWEE (Ethiopia) ✓ Grameen Foundation (Burkina Faso)

✓ Panel, RCT ✓ Panel, PSM ✓ Panel, DID ✓ Random encouragement design

Choosing respondents

Original WEAI

1. Population-based indicator
2. Self-identified primary male and primary female decision-makers in the household
 - Not necessarily husband and wife

Project WEAI

1. Project-level indicator (not nationally or regionally representative)
2. Who is your project trying to empower?
 - E.g., farmers growing/raising specific crops/animals; mothers with young children; members of specific types of groups, etc.
 - Pro-WEAI respondent can be target beneficiary and spouse or other decision-maker in household

Sampling design and **respondent choice** are key differences between original WEAI and project WEAI
Does this compromise comparability across different projects?

- Maybe, but not as problematic within clusters
- BUT: projects have to be able to define their respondents based on project objectives

A-WEAI

5 Domains

6 Indicators

Production (1/5)

Input in productive decisions (1/5)

Resources (1/5)

Ownership of assets (2/15)

Access to and decision making on credit (1/15)

Income (1/5)

Control over use of income (1/5)

Leadership (1/5)

Group membership (1/5)

Time (1/5)

Workload (1/5)

DRAFT!

Pro-WEAI

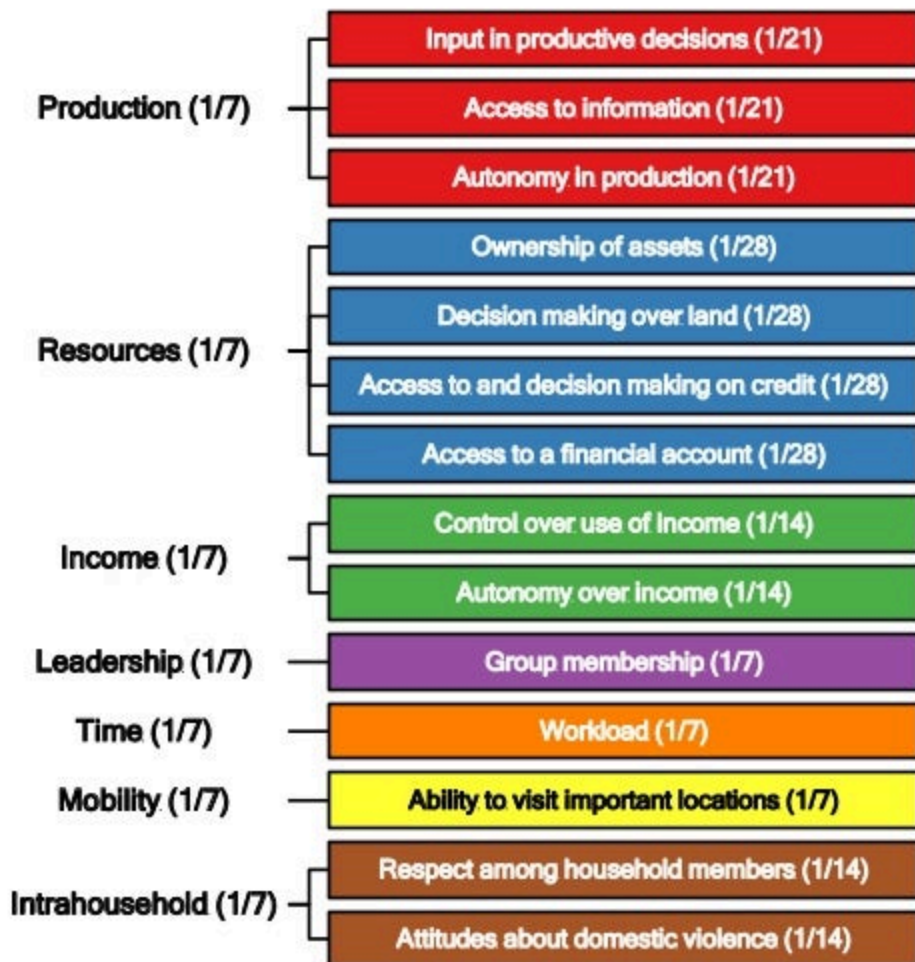
7 Domains

14 Indicators

2 Add-ons

Nutrition and health

Enhanced livestock





A-WEAI



Pro-WEAI



Testing and
validation
over time

Mini-WEAI

Pro-WEAI

Pro-WEAI

We are
here

Use qualitative
data and
implementation
lessons for testing
and validation

Pro-WEAI

Testing and
validation
across sites
and project
types

Questions?



Photo credit: IFPRI Images / Milo Mitchell, IFPRI



<https://pixabay.com/en/question-mark-question-response-1019935/>

Why add qualitative to good quantitative?



<https://www.flickr.com/photos/hiklingart/3554539705>

- ▶ Not just to illustrate quantitative findings, but illuminates different aspects of topics and themes
- ▶ Research questions framed differently
 - ▶ Identify **how** and **why** a behavior occurs (mechanisms)
 - ▶ Differences rooted in different philosophies of how knowledge is produced
- ▶ Useful for reframing existing research questions
- ▶ May help better identify target populations
 - ▶ For intervention and research questions

Research questions related to dairy production

1. Increasing production among rural dairy-producing households
2. Improving nutritional status and quality of life

Quantitative

Question 1?

Question 2?

Question 3?

Qualitative

Question 1?

Question 2?

Question 3?

Linking quantitative and qualitative

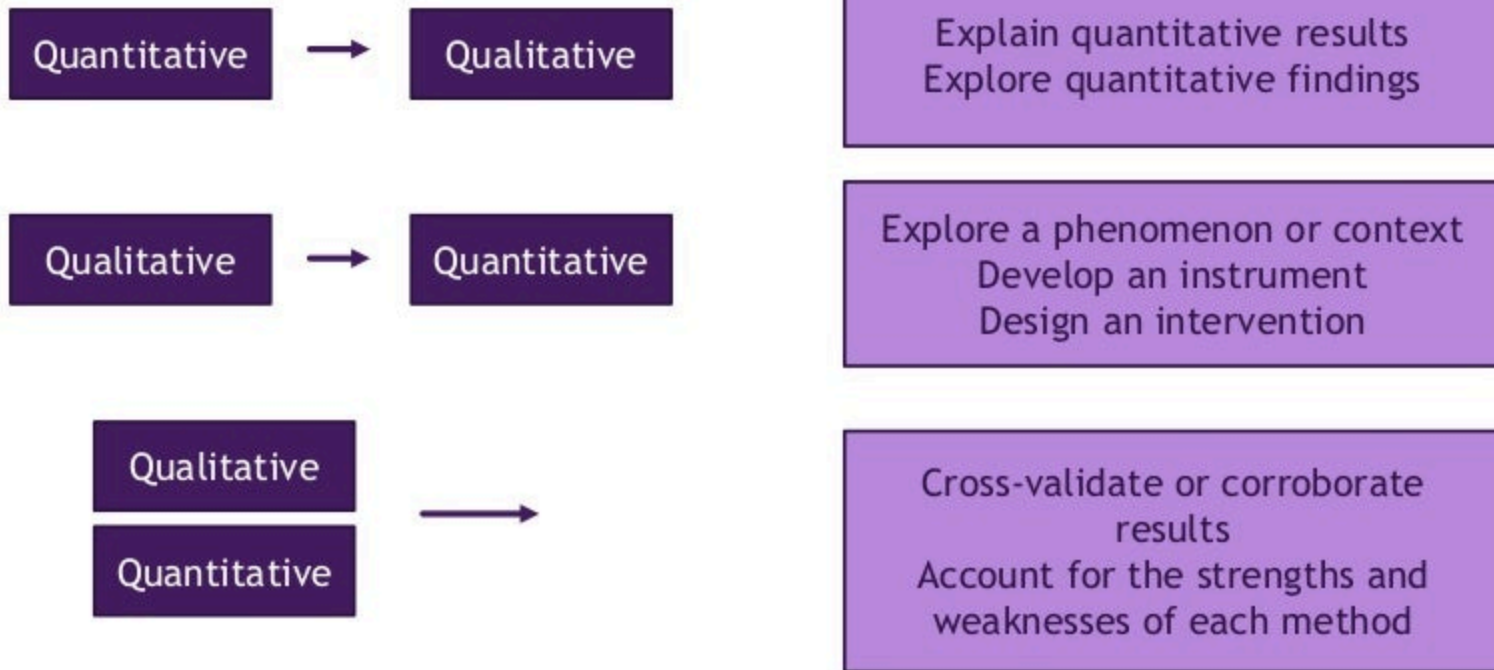




Photo credit: Nesbitt/UNICEF Ethiopia

Draft pro-WEAI quantitative modules

- ▶ Module G1: Individual identification
- ▶ Module G2: Role in household decision-making around production and income
- ▶ Module G3(a): Access to productive capital
- ▶ Module G3(b): Access to financial services
- ▶ Module G4: Time allocation
- ▶ Module G5: Group membership
- ▶ Module G6: Physical mobility
- ▶ Module G7: Intrahousehold relationships
- ▶ Module G8(a): Autonomy in decision-making
- ▶ Module G8(b): New general self-efficacy scale
- ▶ Module G8(c): Life satisfaction
- ▶ MODULE G9: Attitudes about domestic violence

**some elements
are optional**

optional

Draft Qualitative Protocols for GAAP2

1. Review of project documents

- Relevant materials and background on the project area

2. Community profile

- Social, economic, and agricultural background

3. Seasonality patterns

- Production calendar with responsibilities by gender

4. Focus groups

- Local understandings of empowerment

5. Semi-structured interviews

- Life histories of women of different empowerment statuses

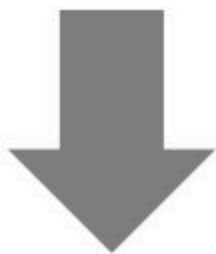
6. Key informant interviews

- Market traders (gender barriers in the value chain)
Project staff (factors affecting whether the project influences empowerment)

QUANTITATIVE



QUALITATIVE



Pro-WEAI Nutrition and Health Module

- ▶ Types of nutrition targeting in the GAAP2 portfolio
 - ▶ Women's health and nutrition (e.g., dietary diversity or quality)
 - ▶ Children aged 2 years and younger, including intervention during pregnancy
 - ▶ General household nutrition and expected spillover to children (broad age range)



Sub-indicators of empowerment in nutrition and health

- ▶ Participation and input in decisions about **women's health**
- ▶ Participating and input in decisions about **child's health**

Some questions are only for women who have been pregnant recently or have young children

- ▶ Participation in decisions about purchasing **food and medicine**
- ▶ Ability to acquire **food and medicine**

Respondents are women only





Photo credit: Cassie Chandler/Freedom from Hunger

Pro-WEAI Nutrition and Health: Preliminary Data

Project	Abbreviation	Country	N
Food and Agricultural Approaches to Reducing Malnutrition	FAARM	Bangladesh	287
Building resilience of vulnerable communities	Grameen	Burkina Faso	380
Targeting and Realigning Agriculture to Improve Nutrition	TRAIN	Bangladesh	5,040
Impact evaluation of an integrated poultry value chain and nutrition intervention	SE LEVER	Burkina Faso	1,777
Deploying improved vegetable technologies to overcome malnutrition and poverty	WorldVeg	Mali	714
TOTAL			8,198

Pro-WEAI Nutrition and Health: Preliminary Data

Sub-indicator	TOTAL	TRAIN	SE LEVER	World Veg	Grameen	FAARM
Participates in decision about how much to work during breastfeeding	0.85	0.93	0.67	0.78	0.73	0.98
Participates in decision about whether to eat eggs during breastfeeding	0.83	0.94	0.57	0.78	0.84	-
Sole decision-maker or medium/high participating in decisions about how much to work during breastfeeding	0.80	0.88	0.62	0.69	0.68	0.96
Sole decision-maker or medium/high participation in decisions about whether to eat eggs during breastfeeding	0.77	0.89	0.51	0.69	0.80	-

Pro-WEAI Nutrition and Health: Preliminary Data

Sub-indicator	TOTAL	TRAIN	SE LEVER	World Veg	Grameen	FAARM
Participates in decision to purchase eggs	0.65	0.72	0.29	0.77	0.56	0.93
Participates in decision to purchase milk/milk products	0.65	0.71	0.35	0.76	0.73	-
Participates in decision to purchase meat/poultry/fish	0.61	0.69	0.27	0.73	0.59	0.84
Able to acquire eggs by some means	0.88	0.90	0.82	0.88	0.85	0.95
Able to acquire milk/milk products by some means	0.87	0.89	0.82	0.86	0.88	-
Able to acquire meat/poultry/fish by some means	0.84	0.85	0.80	0.83	0.91	0.79

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Keep in touch!

Gender, Agriculture, and Assets Project, Phase II (GAAP2)

Website: gaap.ifpri.info

WEAI Resource Center: ifpri.org/topic/weai-resource-center

Gender-Nutrition Idea Exchange (GNIE) Blog:

a4nh.cgiar.org/category/gender-2/gender-nutrition-idea-exchange/

Pro-WEAI Resource Center: Stay tuned...!

For more information, contact **Hazel Malapit:**

h.malapit@cgiar.org

The logo for GAAP2 (Gender, Agriculture & Assets Project) is displayed in large white letters. The word 'phase' is written in a smaller font above the '2'. The background of the top banner features three images: a man standing with two oxen in a field, a woman in a red headscarf and yellow jacket, and a woman holding a child with another child nearby.

GAAP² phase

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Pro-WEAI 1.0: A Deeper Look at the Index

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Developing a “Project-level” WEAI



A-WEAI

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6 Indicators

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Workload (1/5)

DRAFT

Pro-WEAI

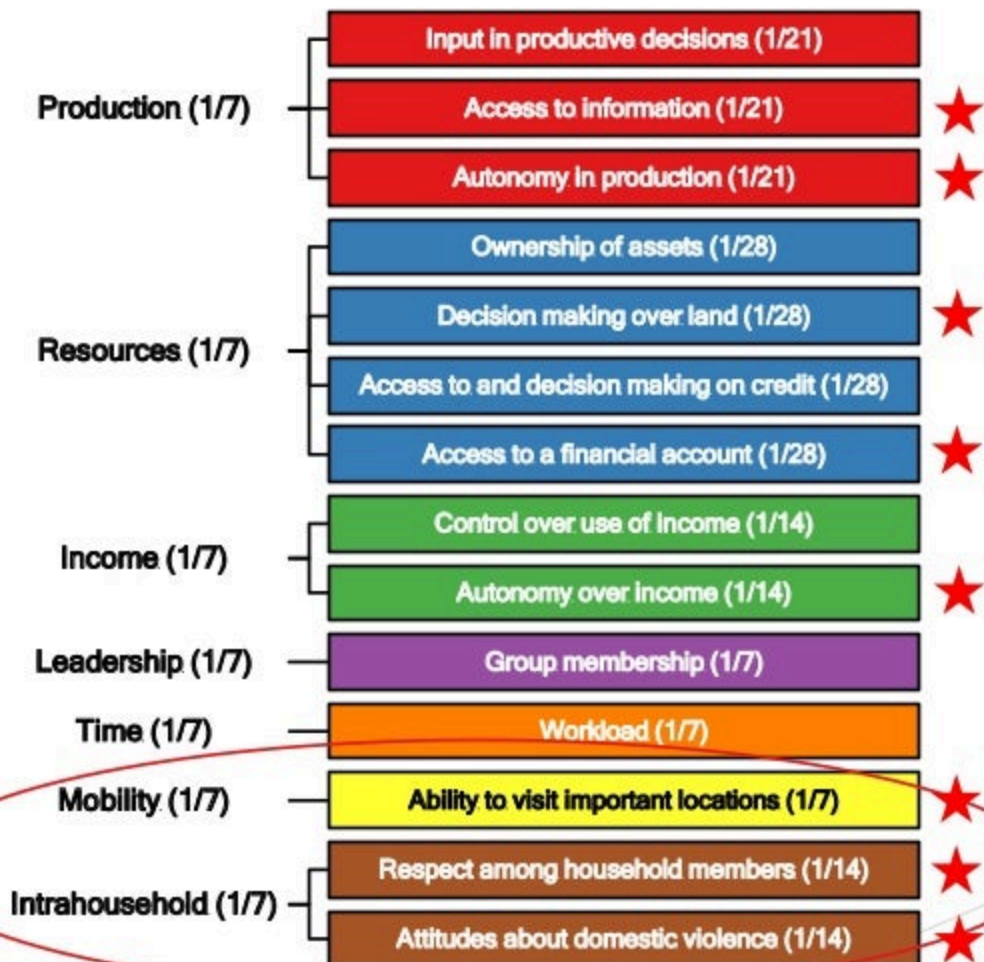
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A-WEAI



Pro-WEAI



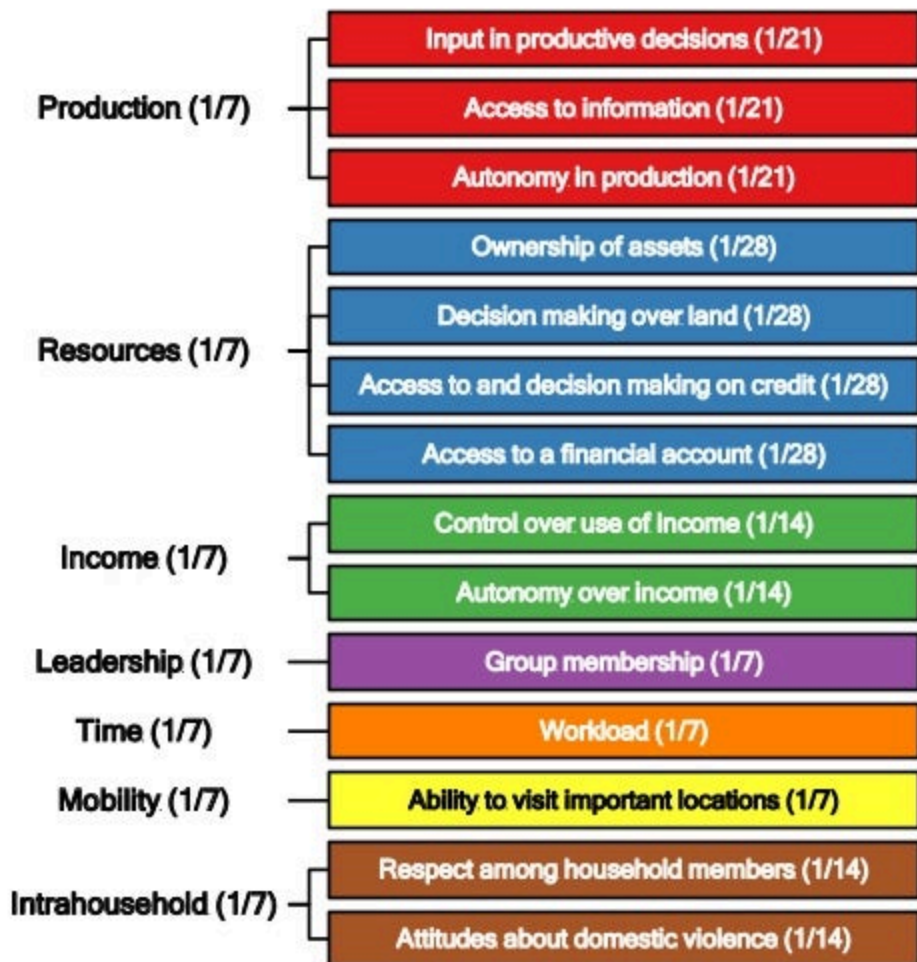
Pro-WEAI

7 Domains

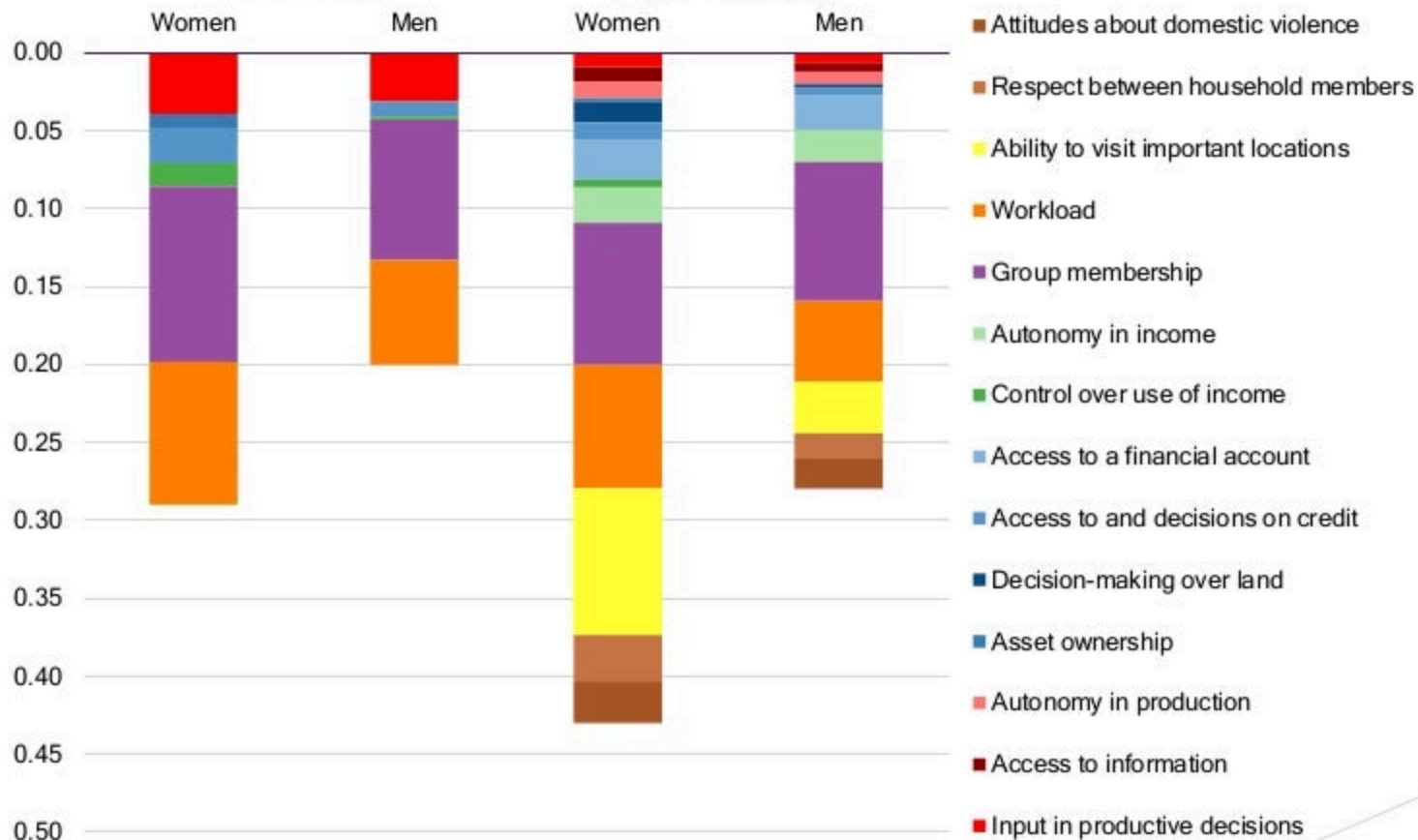
14 Indicators

Equal weights

80% empowerment cutoff



Contribution of each indicator to disempowerment



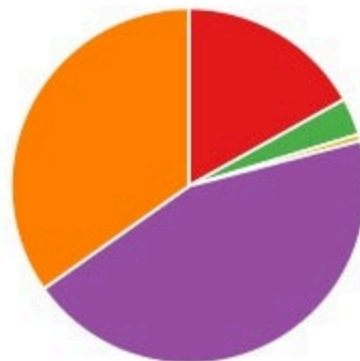
A-WEAI: Contribution of each domain to

disempowerment

South Asia: Women



South Asia: Men



- Production
- Resources
- Income
- Leadership
- Time

Africa: Women



Africa: Men



Pro-WEAI: Contribution of each domain to disempowerment

South Asia: Women



South Asia: Men



■ Production

■ Resources

■ Income

■ Leadership

■ Time

■ Mobility

■ Intrahousehold relationships

Africa: Women

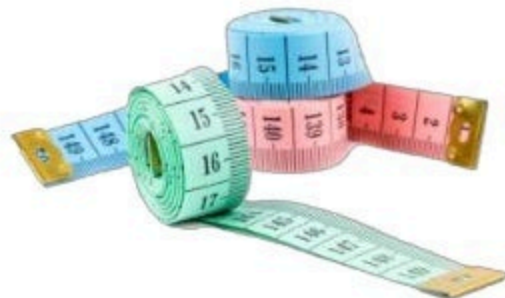


Africa: Men



Collaboration with Emory University

- ▶ **Psychometric assessment** of pro-WEAI
- ▶ Focus on **measurement invariance** across geographic setting, program type, and time
- ▶ Led by Dr. Kathryn Yount and team



Validation of the health and nutrition modules

▶ **Sub-indicators**

- ▶ Participation and input in decisions about women's and child's health
- ▶ Participation in decisions about purchasing health products
- ▶ Ability to acquire health products

▶ **Cognitive testing**

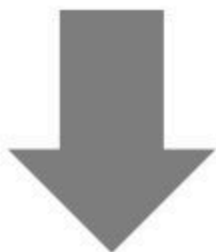
▶ **GOAL: Health and nutrition add-on**



QUANTITATIVE



QUALITATIVE



How many assets are needed to be “empowered”?

- ▶ **Ownership of assets:** Owns at least 2 small assets or 1 large asset

- ▶ 93.3% of women, 99.6% of men

- ▶ **Quantitative approach** →

- Use baseline data to test different thresholds for the indicator.*

- ▶ **Qualitative approach** →

- Investigate the context and local definitions of empowerment.*

- ▶ Is owning a chicken and a radio empowering?
 - ▶ Should a cell phone be considered a large asset?

Are sensitive modules administered effectively?

- ▶ **Some questions are hard to ask:** credit, respect/trust of partner, domestic violence

- ▶ **Quantitative approach** →

Were participants willing to answer? Are there any unexpected trends in the baseline data?

- ▶ **Qualitative approach** →

Do the qualitative findings reflect the quantitative results?

- ▶ **Enumerator training** →

Train enumerators carefully, pilot test, and request feedback.

- ▶ **Cognitive testing** →

What are the local connotations of the terms “trust” and “respect”?

Did the translations capture the intended meaning?

“A prepared and empathetic field team would take note and ‘soften’ the situation if participants feel uncomfortable answering questions.”

“It is a wife’s ‘duty’ to respect her husband, so it would be surprising for a person to say they do not respect their spouse.”

How should we define “overworked”?

- ▶ **Workload:** Worked < 10.5 hours in the last day

$$\text{Work} = (\text{total time spent on work}) + \frac{1}{2}(\text{time spent on childcare as a secondary activity})$$

- ▶ **Quantitative approach** →

Use baseline data to test different thresholds and ways to incorporate childcare in the indicator.

- ▶ **Qualitative approach** →

Investigate local perceptions of work and leisure.

- ▶ When do respondents feel overworked?
- ▶ Are certain work or childcare activities more taxing?

“In our qualitative data, women with too much work could not be empowered no matter what else happened in their lives. The empowered women were all older because younger women all had excessive workloads.”

How many assets are needed to be “empowered”?

Are sensitive modules administered effectively?

How should we define “overworked”?



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