

SPIA Country Studies

Integration of gender related questions

CGIAR GENDER Accelerator
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May 21, 2025

Why is it important to collect information on women's economic empowerment

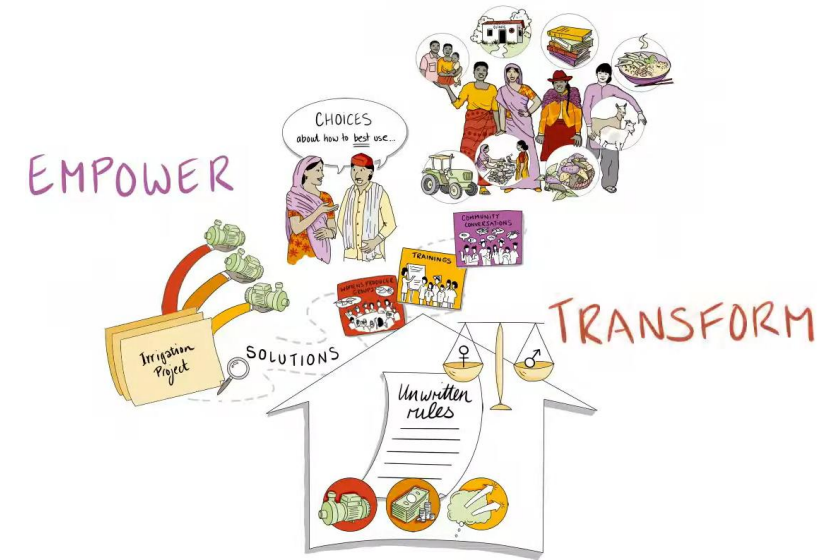
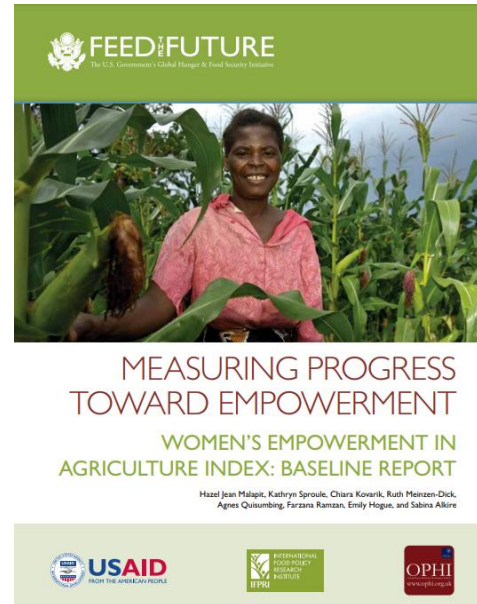
- Persistent gender gaps in agricultural productivity:
 - Studies across Sub-Saharan Africa have consistently shown that women-managed plots produce significantly lower yields than those managed by men—ranging from 8% in Tanzania to 28% in Nigeria—largely due to disparities in access to resources, technology, and extension services
 - The gender gap in productivity is influenced both by differences in access to inputs (endowment effect) and differences in returns to those inputs due to structural barriers (structural effect), such as gender norms and market failures.
- Empowerment as a development outcome:
 - Women's empowerment is increasingly recognized as a goal in its own right—not just a means to improve agricultural productivity, health, or nutrition—making it essential to measure in development studies.
- Multidimensional and contextual nature of empowerment:
 - Collecting data on women's economic empowerment allows for a deeper understanding of their access to resources, decision-making power, and participation in agricultural value chains.

Why is it important to collect information on women's economic empowerment

- Capturing agency and relational dynamics:
 - Including empowerment measures helps assess women's ability to make choices and act on them, while also reflecting how household dynamics influence their economic roles.
- Technology adoption is not always an individual decision
 - Women's lower bargaining power may limit their influence over what technologies are adopted and how benefits are shared.

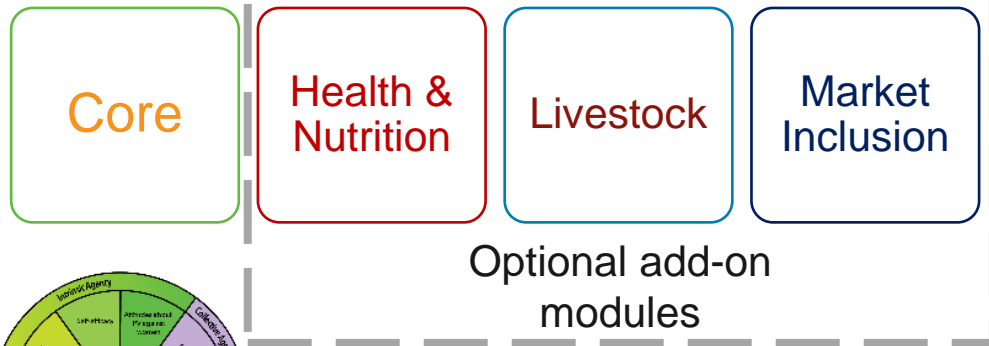
The Women's Empowerment in Agriculture Index (WEAI)

- **Internationally-validated** measure of women's empowerment
- Data collected from women and men in the same household
- Developed using **qualitative and quantitative methods**, with appropriate adaptations
- Monitors progress toward women's empowerment and gender equality in **different country contexts** and different types of **agricultural development projects**
- Used by **280 orgs** in **69 countries**



Graphics credit and full video available from the CGIAR GENDER Impact Platform: <https://www.youtube.com/watch?v=fLGeZBLpaBY>

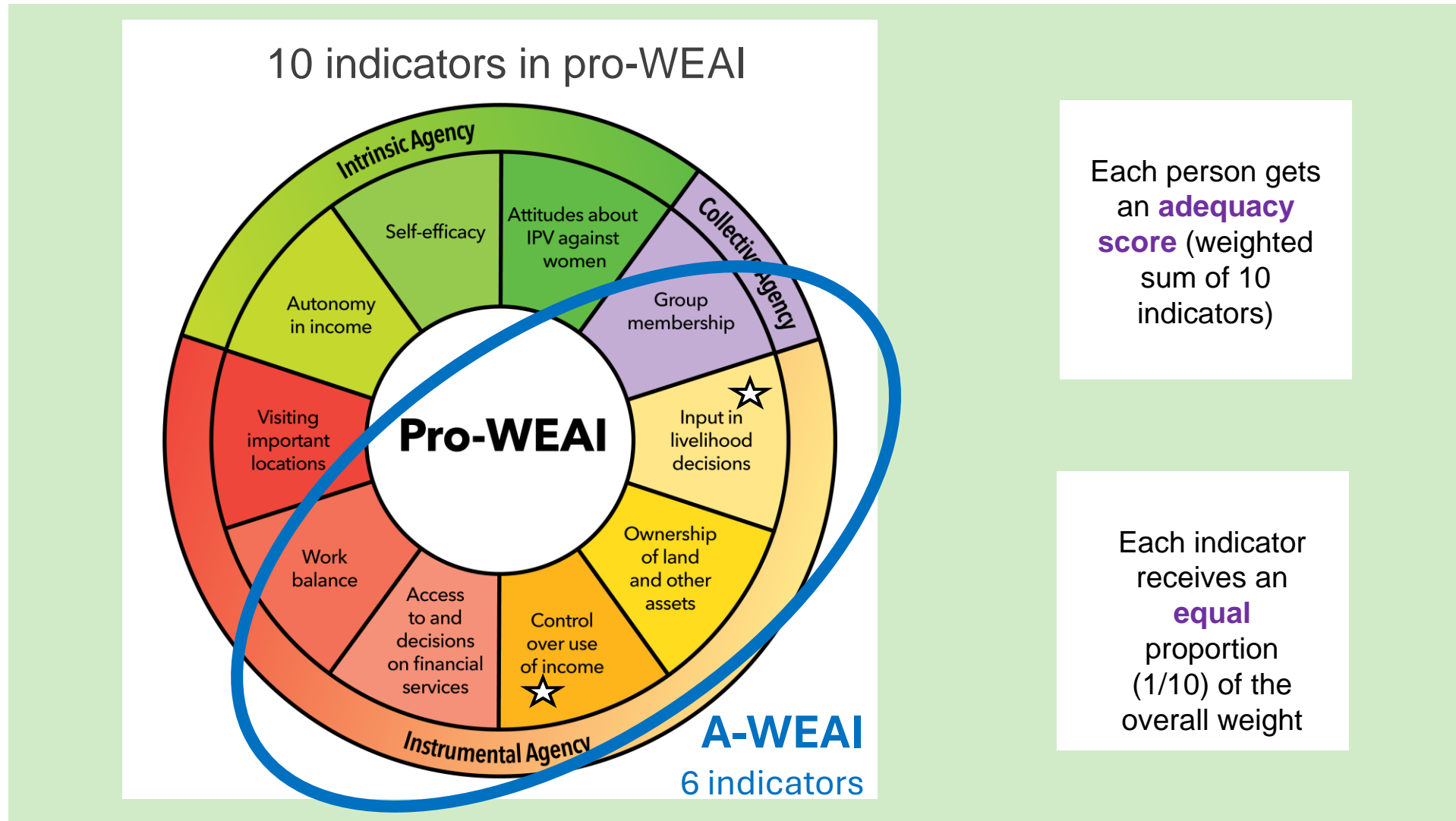
WEAI Family Tree



Integrated WEAI



The project-level Women's Empowerment in Agriculture Index



An individual is considered empowered if she or he is adequate in 8 out of the 10 indicators.

Sample size: Descriptive analyses



WEAI Pilot Case Studies: Uganda

For descriptive analyses, we recommend a **minimum** of 400 HHs for each subgroup of analysis

As with all samples, be careful about sampling frame and methods

Choice of respondents

- Depends on the goal of the study: whose empowerment does it make sense to track?
 - 2 respondents per household: male and female main decisionmakers
 - Match gender of enumerator with gender of respondent
- Impact evaluations
 - The **primary respondent** is the man or woman in the household who is **targeted by the program**
 - for the control group, the primary respondent would be a man or woman with similar characteristics as those targeted by the program
 - The **secondary respondent** is typically the **spouse** of the targeted beneficiary
 - if the spouse is not available, another adult household member of the opposite sex who is primarily responsible for making both social and economic decisions related to agriculture

Household roster

When decisions are made regarding [ACTIVITY], who is it that normally takes the decision?

ENTER HH MEMBER IDS

SELECT UP TO THREE (3) PERSONS

IF THE RESPONSE IS SELF ONLY GO TO
>> G2.06

NON-HOUSEHOLD MEMBER....97
NOT APPLICABLE / NO DECISION
MADE.....98 → NEXT ACTIVITY

G2.03

a

b

c

ID #1

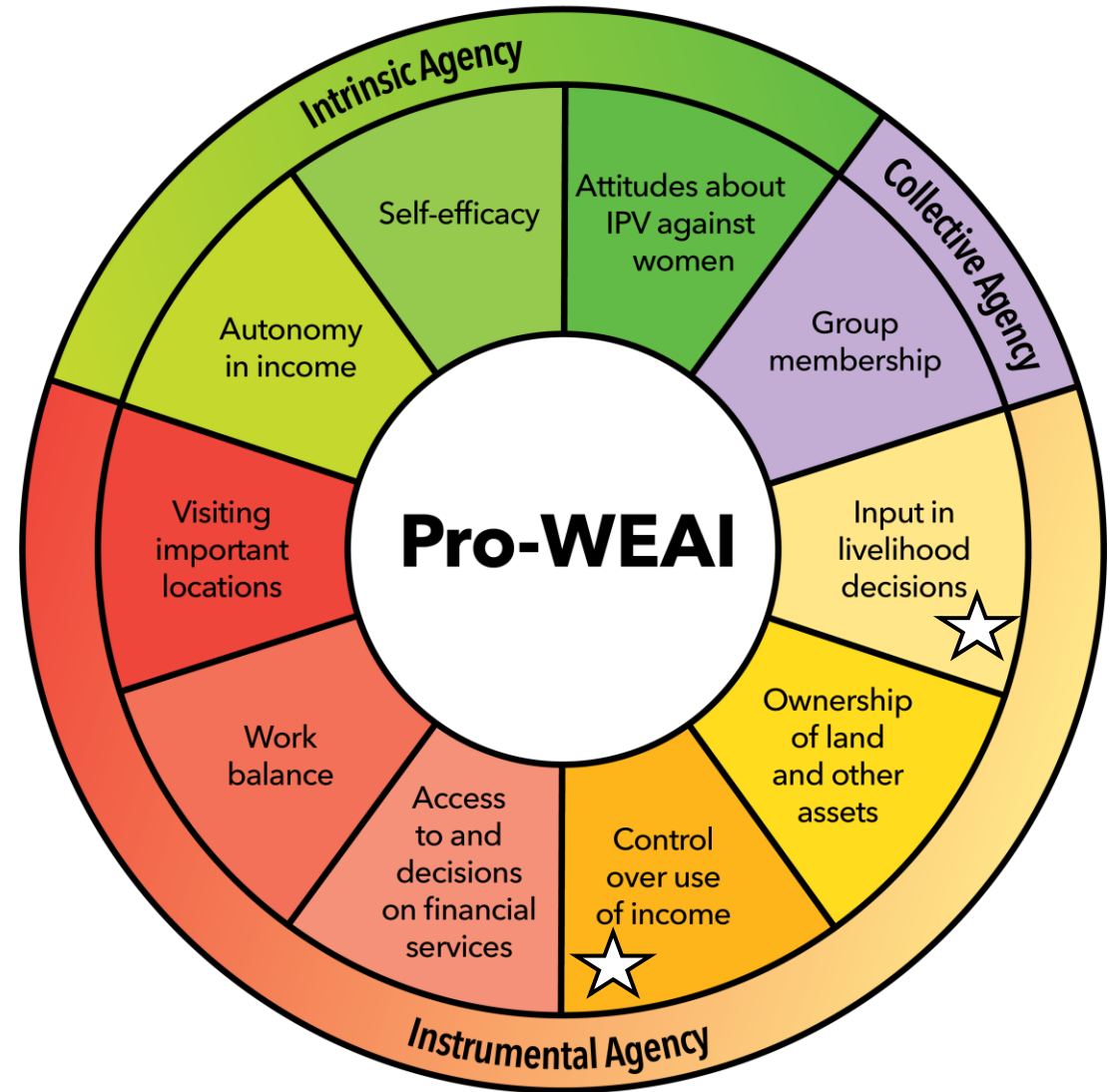
HH Member 1's name
HH Member 2's name
HH Member 3's name
HH Member 4's name
HH Member 5's name
HH Member 6's name
Non-HH Member
Not applicable

- A household roster needs to be filled in prior to administering the pro-WEAI
- Questions about decision-making require selecting from answers from the HH roster
 - Have pre-loaded information in CAPI to prevent errors
 - If using paper-based surveys, ensure the household roster is available for reference while administering the pro-WEAI modules

Module G2: Role in household decision-making around production and income

Input in livelihood decisions
Control over use of income

Implementation time: **5-10 mins**



Module G2: Activities

CODE G2	
LITTLE TO NO INPUT IN DECISIONS	1
INPUT INTO SOME DECISIONS	2
INPUT INTO MOST OR ALL DECISIONS	3
NOT APPLICABLE / NO DECISION MADE	98

<p>Now I'd like to ask you some questions about your participation in certain types of work activities and on making decisions on various aspects of household life.</p>	<p>Did you [NAME] participate in [ACTIVITY] in the past 12 months (that is, during the last [one/two] cropping seasons), from [PRESENT MONTH] last year to [PRESENT MONTH] this year?</p>	<p>When decisions are made regarding [ACTIVITY], who normally makes the decision?</p> <p>ENTER UP TO THREE (3) MEMBER IDs</p> <p>IF RESPONSE IS MEMBER ID (SELF) ONLY → G2.05</p> <p>OTHER CODES: NON-HH MEMBER.....94 NO DECISION MADE/NOT APPLICABLE.....98 → NEXT ACTIVITY</p>	<p>How much input did you have in making decisions about [ACTIVITY]?</p> <p>USE CODE G2↓</p>	<p>To what extent do you feel you can participate in decisions regarding [ACTIVITY] if you want(ed) to?</p> <p>CIRCLE ONE</p>	<p>To what extent are you able to access information that you feel is important for making informed decisions regarding [ACTIVITY]?</p> <p>CIRCLE ONE</p>	<p>How much input did you have in decisions about how much of the outputs of [ACTIVITY] to keep for consumption at home rather than selling?</p> <p>USE CODE G2↓</p>	<p>How much input did you have in decisions about how to use income generated from [ACTIVITY]?</p> <p>USE CODE G2↓</p>
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ACTIVITY	
A	Staple grain farming and processing of the harvest: grains that are grown primarily for food consumption (rice, maize, wheat, millet)
B	Horticultural (gardens) or high value crop farming and processing of the harvest
C	Large livestock raising (cattle, buffaloes) and processing of milk and/or meat
D	Small livestock raising (sheep, goats, pigs) and processing of milk and/or meat
E	Poultry and other small animals raising (chickens, ducks, turkeys) and processing of eggs and/or meat

Activities are in rows:

- A. Staple grain farming
- B. Horticultural or high value crop farming
- C. Large livestock raising
- D. Small livestock raising
- E. Poultry and other small animals raising
- F. Fishpond culture
- G. Non-farm economic activities
- H. Wage and salary employment
- I. Large, occasional household purchases
- J. Routine household purchases

Module G2: Questions

CODE G2	
LITTLE TO NO INPUT IN DECISIONS	1
INPUT INTO SOME DECISIONS	2
INPUT INTO MOST OR ALL DECISIONS	3
NOT APPLICABLE / NO DECISION MADE	98

Now I'd like to ask you some questions about your participation in certain types of work activities and on making decisions on various aspects of household life.

<p>Did you [NAME] participate in [ACTIVITY] in the past 12 months (that is, during the last [one/two] cropping seasons), from [PRESENT MONTH] last year to [PRESENT MONTH] this year?</p>	<p>When decisions are made regarding [ACTIVITY], who normally makes the decision?</p> <p>ENTER UP TO THREE (3) MEMBER IDs</p> <p>IF RESPONSE IS MEMBER ID (SELF) ONLY → G2.05</p> <p>OTHER CODES: NON-HH MEMBER.....94 NO DECISION MADE/NOT APPLICABLE.....98 → NEXT ACTIVITY</p>	<p>How much input did you have in making decisions about [ACTIVITY]?</p> <p>USE CODE G2↓</p>	<p>To what extent do you feel you can participate in decisions regarding [ACTIVITY] if you want(ed) to?</p> <p>CIRCLE ONE</p>	<p>To what extent are you able to access information that you feel is important for making informed decisions regarding [ACTIVITY]?</p> <p>CIRCLE ONE</p>	<p>How much input did you have in decisions about how much of the outputs of [ACTIVITY] to keep for consumption at home rather than selling?</p> <p>USE CODE G2↓</p>	<p>How much input did you have in decisions about how to use income generated from [ACTIVITY]?</p> <p>USE CODE G2↓</p>
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ACTIVITY	
A	Staple grain farming and processing of the harvest: grains that are grown primarily for food consumption (rice, maize, wheat, millet)
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D	Small livestock raising (sheep, goats, pigs) and processing of milk and/or meat
E	Poultry and other small animals raising (chickens, ducks, turkeys) and processing of eggs and/or meat

Questions for each activity are in columns

Module G2: Sequence

CODE G2	
LITTLE TO NO INPUT IN DECISIONS	1
INPUT INTO SOME DECISIONS	2
INPUT INTO MOST OR ALL DECISIONS	3
NOT APPLICABLE / NO DECISION MADE	98

ACTIVITY		G2.01	G2.02			G2.03	G2.04	G2.05	G2.06	G2.07
			ID #1	ID #2	ID #3					
<p>Now I'd like to ask you some questions about your participation in certain types of work activities and on making decisions on various aspects of household life.</p>		<p>Did you [NAME] participate in [ACTIVITY] in the past 12 months (that is, during the last [one/two] cropping seasons), from [PRESENT MONTH] last year to [PRESENT MONTH] this year?</p>	<p>When decisions are made regarding [ACTIVITY], who normally makes the decision?</p> <p>ENTER UP TO THREE (3) MEMBER IDs</p> <p>IF RESPONSE IS MEMBER ID (SELF) ONLY → G2.05</p> <p>OTHER CODES: NON-HH MEMBER.....94 NO DECISION MADE/NOT APPLICABLE.....98 → NEXT ACTIVITY</p>			<p>How much input did you have in making decisions about [ACTIVITY]?</p> <p>USE CODE G2↓</p>	<p>To what extent do you feel you can participate in decisions regarding [ACTIVITY] if you want(ed) to?</p> <p>CIRCLE ONE</p>	<p>To what extent are you able to access information that you feel is important for making informed decisions regarding [ACTIVITY]?</p> <p>CIRCLE ONE</p>	<p>How much input did you have in decisions about how much of the outputs of [ACTIVITY] to keep for consumption at home rather than selling?</p> <p>USE CODE G2↓</p>	<p>How much input did you have in decisions about how to use income generated from [ACTIVITY]?</p> <p>USE CODE G2↓</p>
A	Staple grain farming and processing of the harvest: grains that are grown primarily for food consumption (rice, maize, wheat, millet)	YES.....1 NO.....2 → ACTIVITY B					NOT AT ALL.....1 SMALL EXTENT.....2 MEDIUM EXTENT.....3 TO A HIGH EXTENT...4	NOT AT ALL.....1 SMALL EXTENT.....2 MEDIUM EXTENT.....3 TO A HIGH EXTENT...4		
B	Horticultural (gardens) or high value crop farming and processing of the harvest	YES.....1 NO.....2 → ACTIVITY C					NOT AT ALL.....1 SMALL EXTENT.....2 MEDIUM EXTENT.....3 TO A HIGH EXTENT...4	NOT AT ALL.....1 SMALL EXTENT.....2 MEDIUM EXTENT.....3 TO A HIGH EXTENT...4		
C	Large livestock raising (cattle, buffaloes) and processing of milk and/or meat	YES.....1 NO.....2 → ACTIVITY D					NOT AT ALL.....1 SMALL EXTENT.....2 MEDIUM EXTENT.....3 TO A HIGH EXTENT...4	NOT AT ALL.....1 SMALL EXTENT.....2 MEDIUM EXTENT.....3 TO A HIGH EXTENT...4		
D	Small livestock raising (sheep, goats, pigs) and processing of milk and/or meat	YES.....1 NO.....2 → ACTIVITY E					NOT AT ALL.....1 SMALL EXTENT.....2 MEDIUM EXTENT.....3 TO A HIGH EXTENT...4	NOT AT ALL.....1 SMALL EXTENT.....2 MEDIUM EXTENT.....3 TO A HIGH EXTENT...4		
E	Poultry and other small animals raising (chickens, ducks, turkeys) and processing of eggs and/or meat	YES.....1 NO.....2 → ACTIVITY F					NOT AT ALL.....1 SMALL EXTENT.....2 MEDIUM EXTENT.....3 TO A HIGH EXTENT...4	NOT AT ALL.....1 SMALL EXTENT.....2 MEDIUM EXTENT.....3 TO A HIGH EXTENT...4		

G2.01

Did you [NAME] participate in [ACTIVITY] in the past 12 months (that is, during the last [one/two] cropping seasons), from [PRESENT MONTH] last year to [PRESENT MONTH] this year?

- Yes
- No → next activity

Example:

Did you, Leela, participate in small livestock raising in the past 12 months, from June last year to June this year?

G2.02

- When decisions are made regarding [ACTIVITY], who normally takes the decision?
 - Enter up to **THREE (3) HH Members**
 - Based on HH roster
 - Other codes:
 - 94. Non-HH member
 - 98. No decision made/not applicable → skip to *next activity*
- Code CAPI so that once a person's name is selected in ID#1, it does not show up in ID#2 or ID#3 to prevent duplication errors

ID #1
<input type="text"/>
HH Member 1's name
HH Member 2's name
HH Member 3's name
HH Member 4's name
HH Member 5's name
HH Member 6's name
Non-HH Member
Not applicable

ID #1	ID #2	ID #3
HH Member 1's name	Select member name	Select member name
	HH Member 2's name	
	HH Member 3's name	
	HH Member 4's name	

G2.02

- If the respondent reports his/herself as the **only** decisionmaker for a particular activity, skip to **G2.05** for the same activity

- Why?

- G2.03 and G2.04 retrieve information on input in joint decision-making

- Remember, the respondent may not list his/herself as a decision-maker but can still have input or participate in a decision

When decisions are made regarding [ACTIVITY], who is it that normally takes the decision? ENTER UP TO THREE (3) MEMBER IDs IF RESPONSE IS <u>MEMBER ID (SELF) ONLY</u> → G2.05 OTHER CODES: NON-HH MEMBER.....94 NO DECISION MADE/NOT APPLICABLE.....98 → NEXT ACTIVITY			How much input did you have in making decisions about [ACTIVITY]? USE CODE G2↓	To what extent do you feel you can participate in decisions regarding [ACTIVITY] if you want(ed) to? CIRCLE ONE	To what extent are you able to access information that you feel is important for making informed decisions regarding [ACTIVITY]? CIRCLE ONE
G2.02			G2.03	G2.04	G2.05
ID #1	ID #2	ID #3			

G2.03

- How much input did you have in making decisions about [ACTIVITY]?
 - **Use Code G2**
 1. Little to no input in decisions
 2. Input into some decisions
 3. Input into most or all decisions
 98. Not applicable/No decisions made

CODE G2	
LITTLE TO NO INPUT IN DECISIONS.....	1
INPUT INTO SOME DECISIONS	2
INPUT INTO MOST OR ALL DECISIONS.....	3
NOT APPLICABLE / NO DECISION MADE	98

G2.04

- G2.04 To what extent do you feel you can participate in decisions regarding [ACTIVITY] if you want(ed) to?
 1. Not at all
 2. Small extent
 3. Medium extent
 4. To a high extent

G2.06 & G2.07

- G2.06 How much input did you have in decisions about how much of the outputs of [ACTIVITY] to keep for consumption at home rather than selling?
- G2.07 How much input did you have in decisions about how to use income generated from [ACTIVITY]?
- Use Code G2
 1. Little to no input in decisions
 2. Input into some decisions
 3. Input into most or all decisions98. Not applicable/No decisions made

CODE G2	
LITTLE TO NO INPUT IN DECISIONS.....	1
INPUT INTO SOME DECISIONS	2
INPUT INTO MOST OR ALL DECISIONS.....	3
NOT APPLICABLE / NO DECISION MADE	98

Other patterns

		Did you [NAME] participate in [ACTIVITY] in the past 12 months (that is, during the last [one/two] cropping seasons), from [PRESENT MONTH] last year to [PRESENT MONTH] this year?	When decisions are made regarding [ACTIVITY], who is it that normally takes the decision? ENTER UP TO THREE (3) MEMBER IDs IF RESPONSE IS <u>MEMBER ID (SELF) ONLY</u> → G2.05 OTHER CODES: NON-HH MEMBER.....94 NOT APPLICABLE.....98 → <i>NEXT ACTIVITY</i>			How much input did you have in making decisions about [ACTIVITY]? USE CODE G2↓	To what extent do you feel you can participate in decisions regarding [ACTIVITY] if you want(ed) to? CIRCLE <u>ONE</u>	To what extent are you able to access information that you feel is important for making informed decisions regarding [ACTIVITY]? CIRCLE <u>ONE</u>	How much input did you have in decisions about how much of the outputs of [ACTIVITY] to keep for consumption at home rather than selling? USE CODE G2↓	How much input did you have in decisions about how to use income generated from [ACTIVITY]? USE CODE G2↓
ACTIVITY		G2.01	G2.02			G2.03	G2.04	G2.05	G2.06	G2.07
			ID #1	ID #2	ID #3					
F	Fishpond culture	YES.....1 NO.....2 → <i>ACTIVITY G</i>					NOT AT ALL.....1 SMALL EXTENT.....2 MEDIUM EXTENT.....3 TO A HIGH EXTENT...4	NOT AT ALL.....1 SMALL EXTENT.....2 MEDIUM EXTENT.....3 TO A HIGH EXTENT...4		
G	Non-farm economic activities (running a small business, self-employment, buy-and-sell)	YES.....1 NO.....2 → <i>ACTIVITY H</i>					NOT AT ALL.....1 SMALL EXTENT.....2 MEDIUM EXTENT.....3 TO A HIGH EXTENT...4	NOT AT ALL.....1 SMALL EXTENT.....2 MEDIUM EXTENT.....3 TO A HIGH EXTENT...4	X	
H	Wage and salary employment (work that is paid for in cash or in-kind, including both agriculture and other wage work)	YES.....1 NO.....2 → <i>ACTIVITY I</i>					NOT AT ALL.....1 SMALL EXTENT.....2 MEDIUM EXTENT.....3 TO A HIGH EXTENT...4	NOT AT ALL.....1 SMALL EXTENT.....2 MEDIUM EXTENT.....3 TO A HIGH EXTENT...4	X	
I	Large, occasional household purchases (bicycles, land, transport vehicles)	X					NOT AT ALL.....1 SMALL EXTENT.....2 MEDIUM EXTENT.....3 TO A HIGH EXTENT...4	NOT AT ALL.....1 SMALL EXTENT.....2 MEDIUM EXTENT.....3 TO A HIGH EXTENT...4	X	X
J	Routine household purchases (food for daily consumption or other household needs)	X					NOT AT ALL.....1 SMALL EXTENT.....2 MEDIUM EXTENT.....3 TO A HIGH EXTENT...4	NOT AT ALL.....1 SMALL EXTENT.....2 MEDIUM EXTENT.....3 TO A HIGH EXTENT...4	X	X

Input in livelihood decisions - Adequacy

- Meets at least ONE of the following conditions for ALL of the agricultural activities they participate in:
 1. Makes related decision solely (only one member ID listed)
 2. Makes the decision jointly (more than one member ID listed) and has at least some input into the decisions
 3. Feels could make decision if wanted to (to at least a MEDIUM extent)

Control over use of income - Adequacy

- Has input in decisions related to:
 - how to use BOTH income and output from ALL of the agricultural activities they participate in AND
 - has input in decisions related to income from ALL non-agricultural activities they participate in, unless no decision was made

Examples of how this module has been used, and data analyzed

Can women's self-help groups improve access to information, decision-making, and agricultural practices? The Indian case (Raghunathan, et. al., 2019)

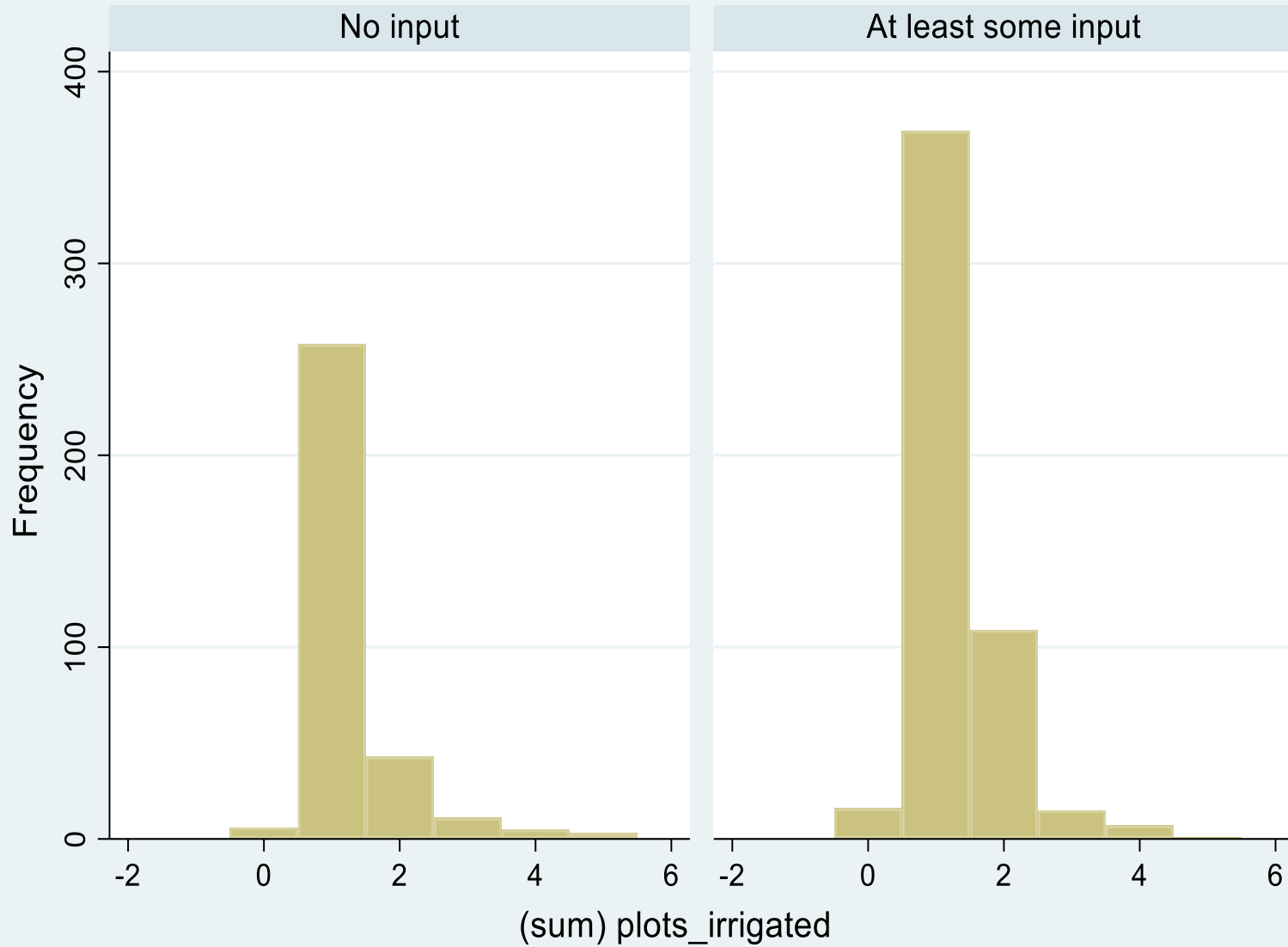
- While initially designed as saving/credit groups, SHGs now also function as platforms for women to access information on improved practices or inputs.
 - SHGs provide information on best practices, agricultural planning sessions, and access to input providers, government schemes, and markets.
 - Ex. Outcomes: use of improved seeds, pest management, irrigation, livestock rearing, production diversity, and the share of marketed crops, among others.
 - SHG also allow women to build social capital through collective action:
 - Ex. Outcomes: whether the woman has input into agricultural decisions (food and cash crop farming, livestock, and poultry raising); whether she feels she can participate to a medium or high degree in decisions on inputs for agricultural production, types of crops to grow, taking crops to the market, and inputs on livestock raising; whether she takes the decision alone or jointly

Results

- Women's Self-Help Group (SHG) membership enhances access to agricultural information and improves women's decision-making power regarding agriculture.
- Despite increased information access, there is limited impact on actual agricultural practices, diversification, or market orientation.
- Barriers such as financial constraints, social norms, and women's domestic responsibilities hinder the translation of agricultural knowledge into practice, indicating that SHGs need to do more than just provide information to achieve tangible improvements.

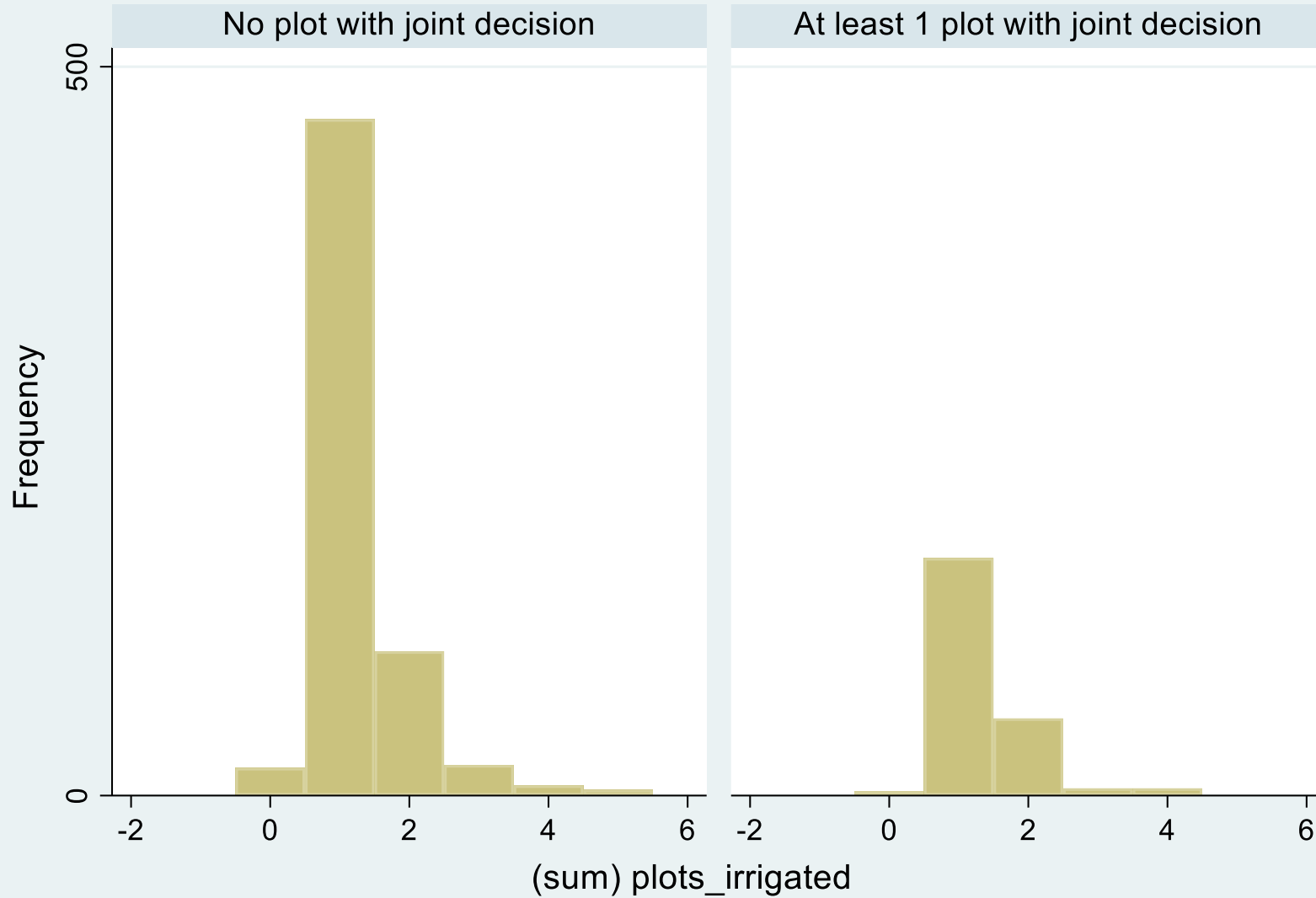
Ghana Feed the Future Innovation Lab for Small-Scale Irrigation (ILSSI) Baseline Survey, 2015

- Data set collected for the impact evaluation of a motor pump intervention in Northern Ghana
 - Community Questionnaire
 - Household Questionnaire
 - WEAI questionnaire



Number of plots irrigated by women's input into decisions on irrigated food crop farming

Households where women have at least some input in decision-making are more likely to irrigate one or two plots.

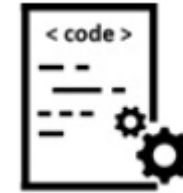


Graphs by At least 1 plot with joint decision

A different pattern is observed when we analyzed the variable regarding joint decision making at the plot level

Questions

Pro-WEAI Guides, Instruments, Tools



	Guides and manuals	Quantitative instruments & CAPI codes	Stata code for calculating WEAI (do-files)	Qualitative instruments
Pro-WEAI	<ul style="list-style-type: none"> ▪ Pro-WEAI enumerator manual ▪ Pro-WEAI glossary ▪ Pro-WEAI user guide 	<ul style="list-style-type: none"> ▪ Pro-WEAI questionnaire ▪ Pro-WEAI questionnaire (core only) ▪ Pro-WEAI SurveyCTO 	<ul style="list-style-type: none"> ▪ Dataprep do file ▪ Dataprep do file (core only) ▪ WEAI ado files ▪ *ADVANCED users* (pro-WEAI calculation, tables + charts do files with survey weights and std errors) 	<ul style="list-style-type: none"> ▪ GAAP2 qualitative protocols
Pro-WEAI for Market Inclusion (pro-WEAI+MI)		<ul style="list-style-type: none"> ▪ Pro-WEAI+MI questionnaire 		<ul style="list-style-type: none"> ▪ Qualitative protocols (English & Chichewa) ▪ Qualitative protocols (French)
Pro-WEAI for Health and Nutrition (pro-WEAI+HN)	<ul style="list-style-type: none"> ▪ Guide to +HN indicator construction and cutoffs 	<ul style="list-style-type: none"> ▪ +HN questionnaire 		

WEAI Resource Center

weai.ifpri.info

Tool for “Choosing the right WEAI”

<https://weai.ifpri.info/choosing-the-right-weai/>

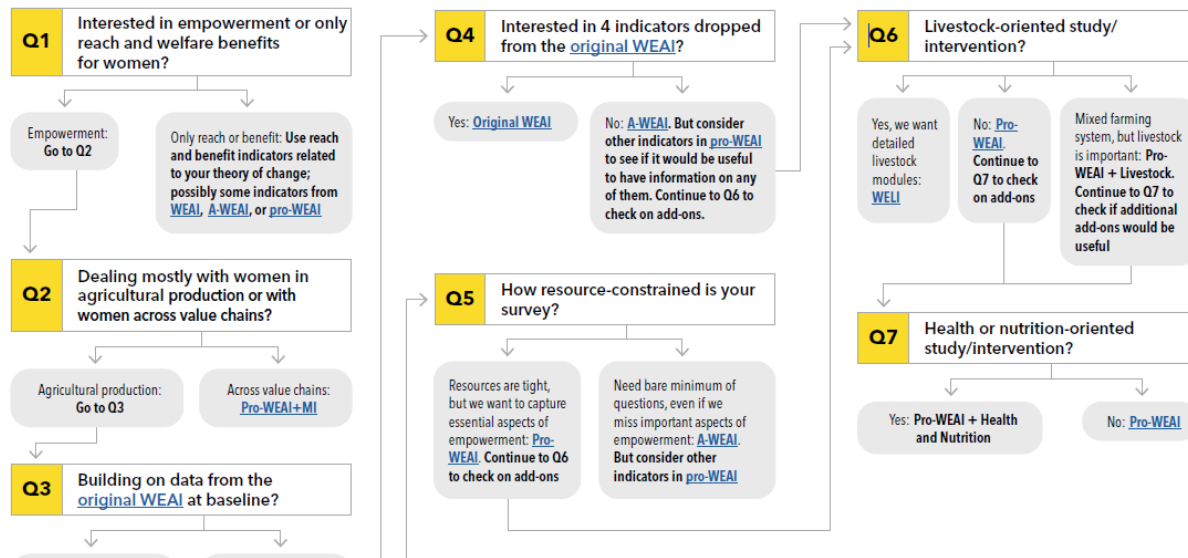
Choosing the Right WEAI

The Women's Empowerment in Agriculture Index (WEAI) measures women's empowerment based on interviews of women and men within the same household. It can be used to assess women's empowerment as well as compare it to men's, generating important data to track progress toward the United Nations' Sustainable Development Goal (SDG5) on women's empowerment and gender equity.

Different versions of WEAI exist for different uses, including the original WEAI, which is reported at the country or regional level, the Abbreviated WEAI (A-WEAI), and a version for project use, pro-WEAI. Pro-WEAI also has specialized modules related to health

and nutrition, livestock, and market inclusion. The WEAI data collection instruments include qualitative protocols for understanding local meanings of empowerment.

Which WEAI instrument is right for you? This interactive tool will guide you through a series of questions to help you identify the best version for your purpose. Once you have identified the right WEAI, check out the latest versions, guidelines, qualitative protocols, and publications on the WEAI Resource Center site and our mixed-methods online WEAI course. For additional information, contact IFPRI-WEAI@cgiar.org.



- Johnson, N., Balagamwala, M., Pinkstaff, C., Theis, S., Meinzen-Dick, R., & Quisumbing, A. (2017). *How do agricultural development projects aim to empower women?: Insights from an analysis of project strategies*. February, 36.
- Malapit, H., Quisumbing, A., Meinzen-Dick, R., Seymour, G., Martinez, E. M., Heckert, J., Rubin, D., Vaz, A., Yount, K. M., & GAAP 2 Study Team. (2019). Development of the project-level Women's Empowerment in Agriculture Index (pro-WEAI). *World Development*, 122, 675–692. <https://doi.org/10.1016/J.WORLDDEV.2019.06.018>



Pro-WEAI Distance Learning Module 2: Survey Fieldwork

Building on the pro-WEAI Foundations module, this module will equip participants with the knowledge and tools to understand every question and

[Click to enter this course](#)

Pro-WEAI Distance Learning Course
<http://elearning.foodsecurityportal.org/>

References

- Tufa, A., Alene, A., et. al., 2022, Gender differences in technology adoption and agricultural productivity: Evidence from Malawi, *World Development*, Volume 159.
- World Bank, FAO, & IFAD (2009). *Gender in Agriculture Sourcebook*. Washington, DC: World Bank.
- Quisumbing, A., Cole, A. et. al., 2023, Measuring Women's Empowerment in Agriculture: Innovations and evidence, *Global Food Security*, Volume 38.
- Raghunathan, K, et. al., 2019, Can women's self-help groups improve access to information, decision-making, and agricultural practices? The Indian case, *Agricultural Economics*, Vol. 50, Issue 5.
- Bryan, E., and Mekonnen, D., 2023, Does small-scale irrigation provide a pathway to women's empowerment? Lessons from Northern Ghana, *Journal of Rural Studies*, Volume 97

Table A.1: Definitions of the domains of empowerment, and their weights

Domain	Indicator	Definition	Weight
Production	Input into productive decisions	An individual with at least some input into decisions, makes the decisions or feels they could make the decisions if they wanted, in at least two agricultural domains	1/10
	Autonomy in production	An individual who does not strongly agree that her decisions related to at least one of agricultural production, taking crops to the market or livestock raising were externally motivated or coerced	1/10
Resources	Ownership of assets	An individual who solely or jointly owns at least one large or two small assets	1/15
	Right to purchase, sell or transfer agricultural assets	An individual who has at least one joint right to purchase, sell or transfer at least one large or two small household agricultural assets	1/15
	Access to and decisions on credit	An individual who has at least one source of formal or informal credit and makes at least one decision solely or jointly for at least one of these types of household credit	1/15
Income	Control over use of income	An individual with at least some input into decisions about income generated from household agricultural activities or feels she can make decisions in at least one major household income/expenditure domain	1/5
Leadership	Group membership	An individual who participates in at least one community group	1/10
	Speaking in public	An individual who has any degree of comfort when speaking in public in at least one of the three contexts asked about	1/10
Time	Workload	An individual who works no more than 10.5 h/d including work as an employee; self-employed; in agricultural labour; and domestic work	1/10
	Leisure	An individual who does not express any dissatisfaction with the amount of time she has available for leisure activities	1/10

Note: Table reproduced from Malapit et al. (2015) with minor additions.

Survey questions

The table below summarizes which survey questions are used in the calculation of each indicator.

Pro-WEAI indicators survey questions

Indicator	Survey Questions	Question Number	Page Number
<i>Intrinsic Agency</i>			
Autonomy in income	<p>Are you like this person?</p> <p>"[example name] uses her (his) income how another person tells her (him) she must use it."</p> <p>"No one tells [example name] how to use her (his) income. But, she (he) uses her (his) income in the way that her (his) family or community expects."</p> <p>"[example name] chooses to use her (his) income how she (he) personally wants and thinks is best."</p>	G7.01	15
Self-efficacy	<p>Think about how each statement relates to your life, and then tell me how much you agree or disagree with the statement:</p> <ol style="list-style-type: none"> 1) When facing difficult tasks, I am certain that I will accomplish them. 2) In general, I think that I can obtain outcomes that are important to me. 3) I am confident that I can perform effectively on many different tasks. 4) Even when things are tough, I can perform quite well. 	<u>G7.02</u>	16
Attitudes about intimate partner violence against women	<p>In your opinion, is a husband justified in hitting or beating his wife in the following situations?</p> <ol style="list-style-type: none"> 1) If she goes out without telling him? 2) If she neglects the children? 3) If she argues with him? 4) If she refuses to have sex with him? 5) If she burns the food? 	G8.01	17

[Link to survey](#)

HOUSEHOLD ID						
RESPONDENT ID						

<i>Instrumental Agency</i>			
Input in livelihood decisions	How much input did you have in making decisions about: food crop farming, cash crop farming, livestock raising, fish culture, non-farm economic activities, wages? To what extent do you feel you can participate in decisions regarding these aspects of household life if you want(ed) to?	G2.01-04	5
Ownership of land and other assets	Does anyone in your household currently have any [ITEM]? Do you own any of the [ITEM]? Agricultural land, Large livestock, Small livestock, Poultry, Fish pond/equip; Farm equip (non-mech); Farm equip (mechanized) Nonfarm business equipment House; Large durables; Small durables; Cell phone; Non-ag land (any); Transport	G3.01-04	7
Access to and decisions on financial services	Would you or anyone in your household be able to take a loan or borrow cash/in-kind from [SOURCE] if you wanted to? Has anyone in your household taken any loans or borrowed any cash/in-kind from [SOURCE] in the past 12 months? Who made the decision to borrow/what to do with money/item borrowed from [SOURCE]? Non-governmental organization (NGO); Informal lender; Formal lender (bank); Friends or relatives; ROSCA (savings/credit group). Do you, either by yourself or together with someone else, currently have an account at a bank or other formal institution?	G3.05-09	10
Control over use of income	How much input did you have in decisions on the use of income generated from: food crop farming, cash crop farming, livestock raising, fish culture, non-farm economic activities, wages? How much input did you have in decisions on the use of outputs to keep for consumption at home rather than selling from: : food crop farming, cash crop farming, livestock raising, fish culture, non-farm economic activities, wages?	G2.05-06	5
Work balance	Worked more than 10.5 hours in previous 24 hours.	G4.01-02	12
Visiting important locations	How often do you visit: urban center, market, family, health service, public village gathering / community meeting / training?	G6.01-05	14
<i>Collective Agency</i>			
Group membership	Are you a member of any: Agricultural / livestock/ fisheries producer/mkt group; Water; Forest users'; Credit or microfinance group; Mutual help or insurance group (including burial societies); Trade and business association; Civic/charitable group; Religious group; Other group	G5.01	13

Sample size: Impact evaluations

- Power and sample size estimation are used to determine the number of respondents needed in a study to answer the research question
- The sample size of your study depends on the main outcomes of interest and the effect size you want to detect at a specified significance level
- Please consult a statistician to determine the best sample size for your project
- Example ranges:
 - ANGeL: Control 875 HHs; each treatment arm 625 HHs
 - SELEVER:
 - 1st level: 900 HHs each in treatment and control arms
 - 2nd level: ~450 HHs in each of three arms

Embedding pro-WEAI survey modules

- Entire modules can be rearranged
 - Example: It is okay for Module G5 to precede Module G2(A)
- Questions *within* a module should **NOT** be reordered
 - Skip patterns could cause you to lose key data
- Modules with sensitive topics that are subject to response bias are generally administered towards the end of the survey
 - For example, attitudes towards IPV against women
- Balance decreasing both sensitivity bias and respondent fatigue

Definition of household

- In most household surveys, including pro-WEAI surveys, we define a household as a group of people who live together and take food from the “same pot” (share food expenses)



Photo by Kalyani Raghunathan

- Household types are defined as follows:
 - Dual adult households are households with both a male and female aged 18 and over;
 - Female adult households are households with females aged 18 and over but no males aged 18 and over;
 - Male adult households are households with males aged 18 and over but no females aged 18 and over.

Definition of “household member”

- Household members are those who have lived in the household:
 - at least six months
 - at least half of the week in each week of those months
- Even individuals who are not blood relations are household members if they meet the criteria above
- If someone stays in the same household but does not bear any costs for food or does not take food from the same pot, they are not considered household members



Definition of “household member”

- Consider the following as household members, even if they have not lived in the household for 6 months:
 - a newborn child less than 6 months old
 - someone who has joined the household through marriage less than 6 months ago
 - servants, lodgers, and agricultural laborers who arrived less than 6 months ago but plan to stay longer than 6 months in total and share food from the same pot



Definition of “household member”

- **Do not consider** the following as household members:
 - someone who has permanently left the household less than 6 months ago
 - for example, a son or daughter who left the household for marriage or permanently for another reason, excluding death
 - servants, lodgers, and agricultural laborers who stayed more than 3 months in last 6 months but left permanently
- A recently deceased person is no longer considered a household member



MODULE Y2: ROLE IN HOUSEHOLD DECISION-MAKING AROUND PRODUCTION AND INCOME GENERATION

Activity		Did you (singular) participate in [ACTIVITY] in the past 12 months? Yes 1 No..... 2 >> next activity	How much input did you have in making decisions about [ACTIVITY]?	How much input did you have in decisions on the use of income generated from [ACTIVITY]
ActivityCode	Activity Description	Y2_2	Y2_3	Y2_4
1	Food crop farming: crops that are grown primarily for household food consumption			
2	Cash crop farming: crops that are grown primary for sale in the market			
3	Irrigated food crop farming			
4	Irrigated Cash Crop farming			
5	Livestock raising			
6	Non-farm economic activities: Small business, self-employment, buy-and-sell			
7	Wage and salary employment: in-kind or monetary work both agriculture and other wage work			
8	Fishing or fishpond culture			
			<u>Y2_3/Y2_4: Input into decision making</u> No input 1 Input into very few decisions 2 Input into some decisions 3 Input into most decisions 4 Input into all decisions 5 No decision made 6	

Section B: Land

		1	2	3	4	5	6	7	8		9	10	11	12	13	14
Parcel number	Plot number	How is the plot used during Rainy 2014?	How is the plot used during Dry 2014?	How large is this plot?	Distance from home	Soil fertility	Slope	Soil type	Soil erosion 1 No erosion 2 Mild erosion 3 Severe erosion	Use tractor: Tractor fee	How did you acquire the plot?	Who makes the majority of decisions regarding this plot?	Is the plot registered? 1 Yes 2 No >> 13 -7 Don't know	Whose name is on the land registration certificate?	If land was rented in for cash payment, how much did you pay?	If land was share-cropped in, what was the division of production (1/4, 1/2, etc)
Repeat parcel number if there are multiple plots on the parcel	Given each parcel an individual number															

Own additional land/plot? _____

Plot size _____

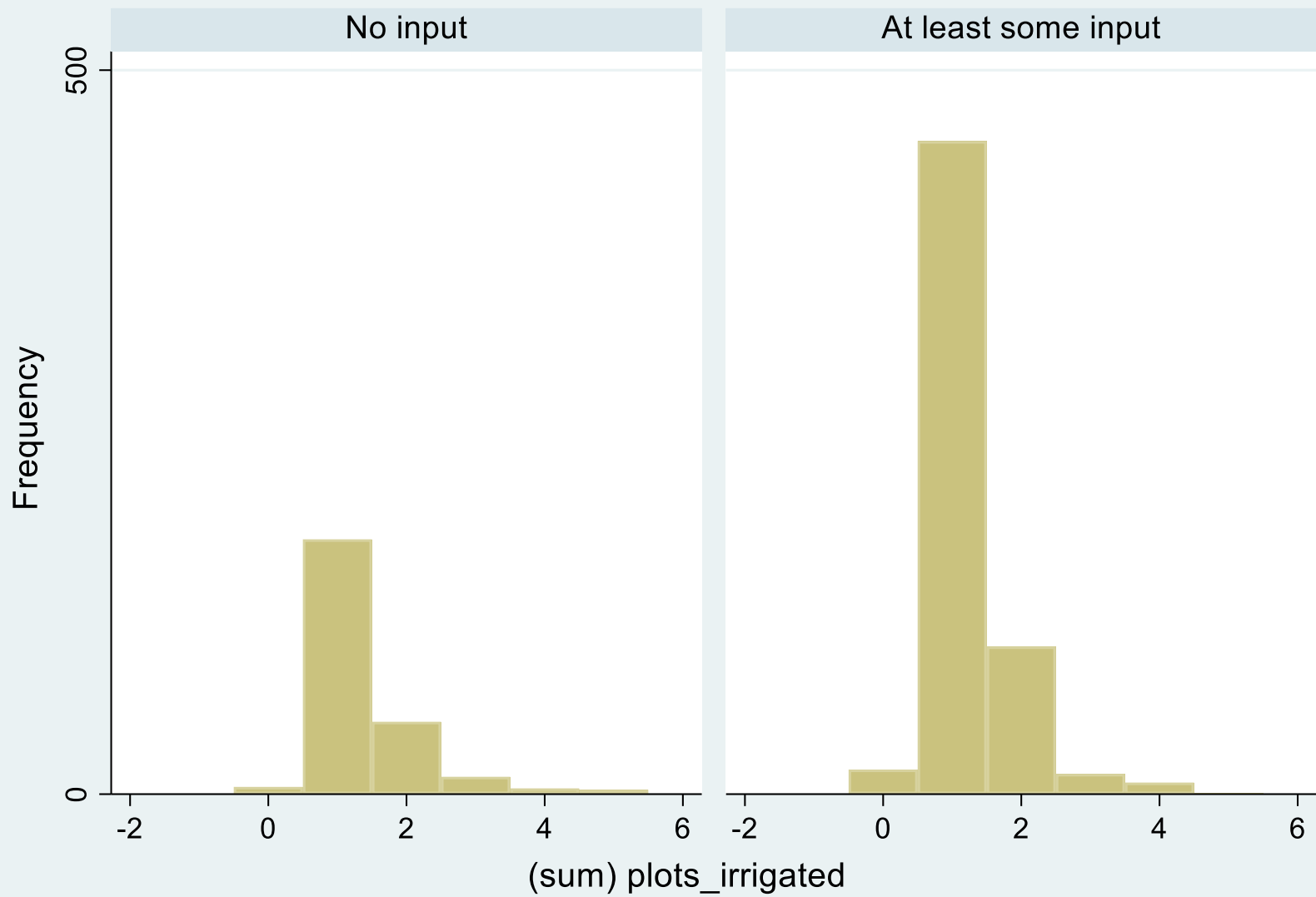
Plot unit _____

Plot acquired by _____

Major decision-maker on plot _____

Is the plot registered _____

Name in registration _____

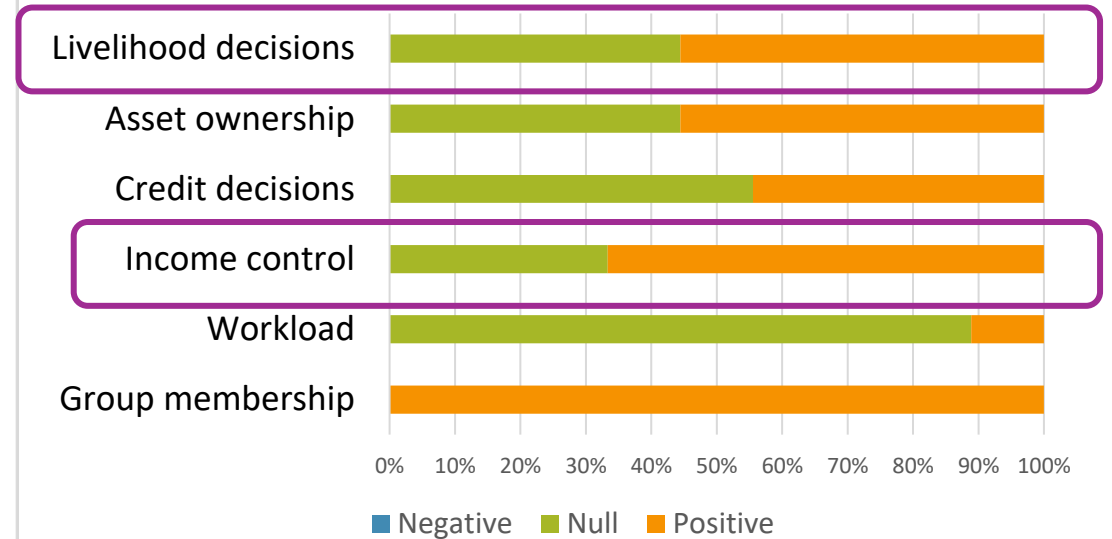
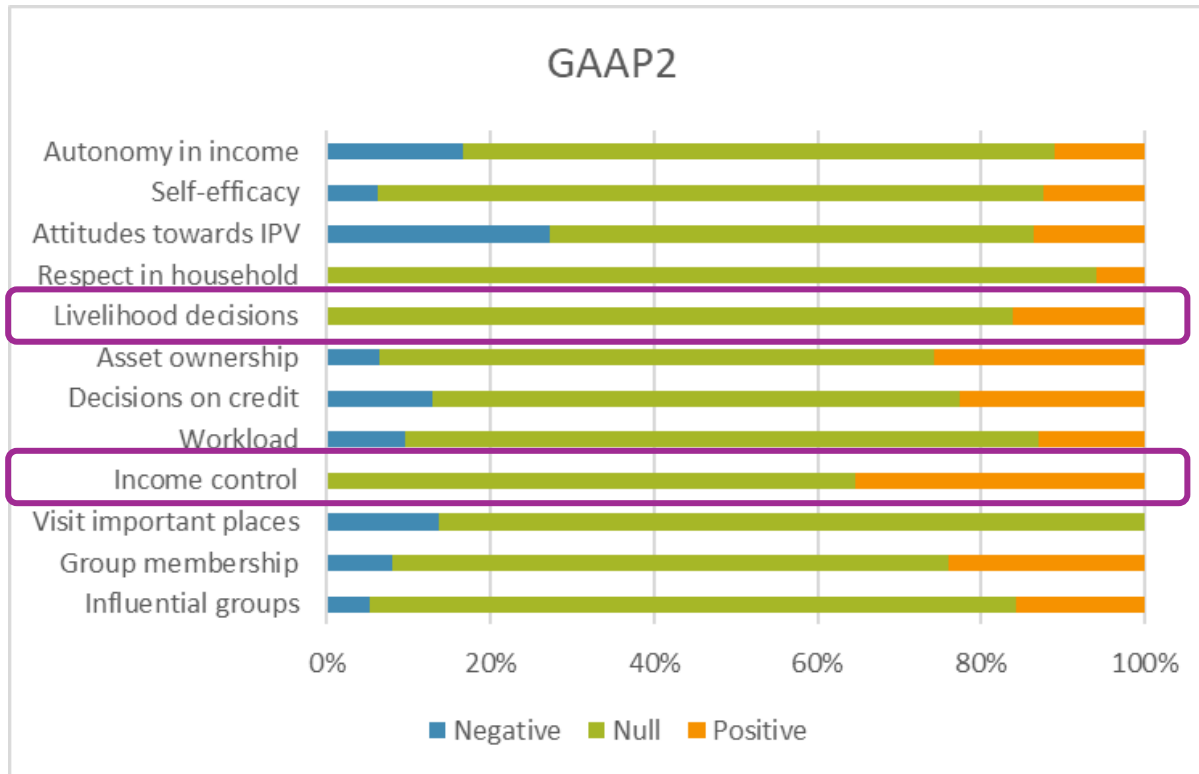


Graphs by G2_criteria4

Number of plots irrigated by women’s input into decisions on irrigated cash crop farming

Households where women have at least some input in decision-making are more likely to irrigate one or two plots.

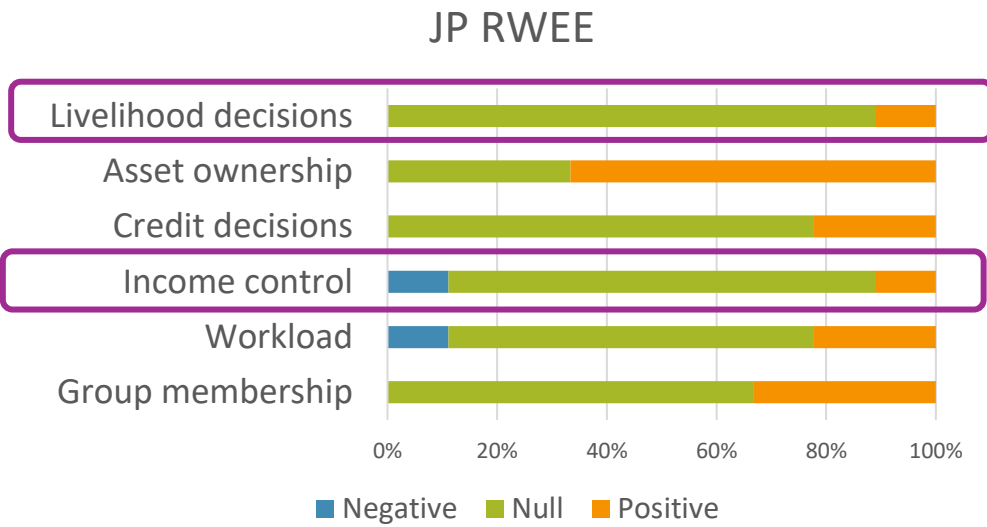
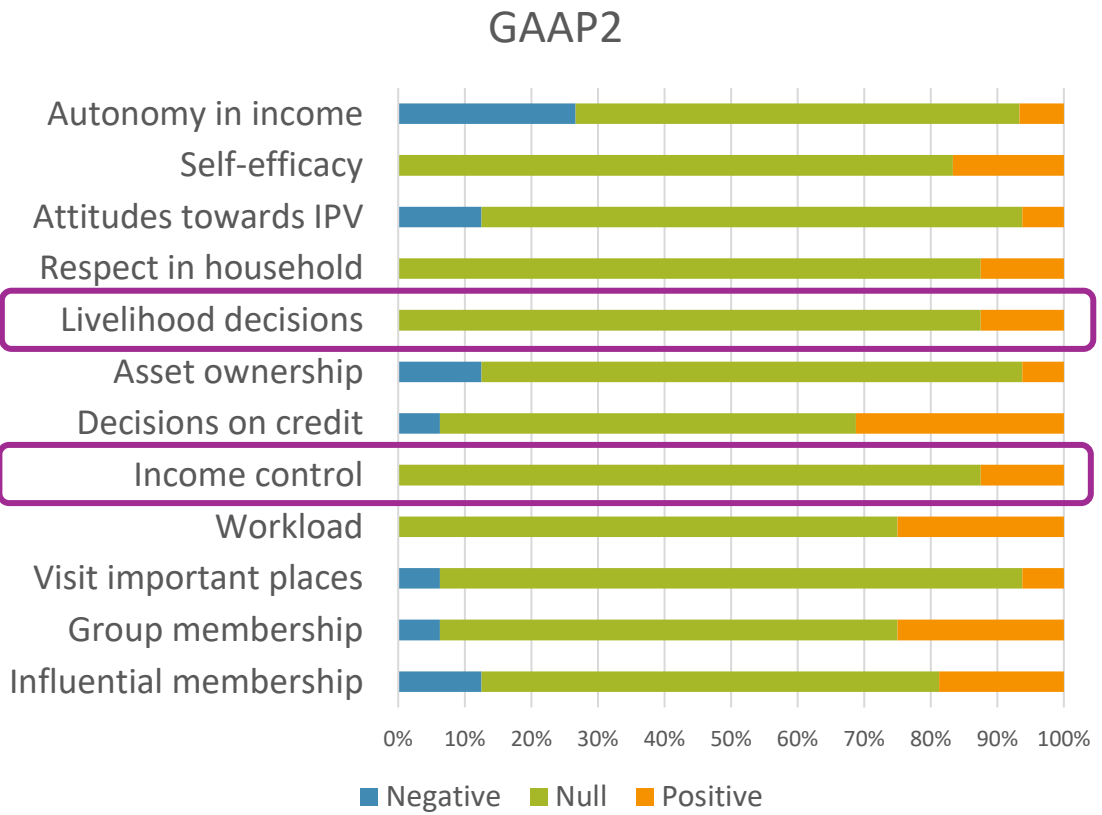
GAAP2 projects report a larger proportion of null impacts on women's continuous indicators compared to JP RWEE.



GAAP2 projects report more null impacts, but also some significant positive impacts and some negative impacts. JP RWEE has a larger proportion of positive impacts, except for workload (a positive impact indicates increased work hours). Group membership impact in JP RWEE reflects group-based nature of programming.

Source: [Quisumbing et al \(2023\)](#); [Quisumbing et al \(2024\)](#)

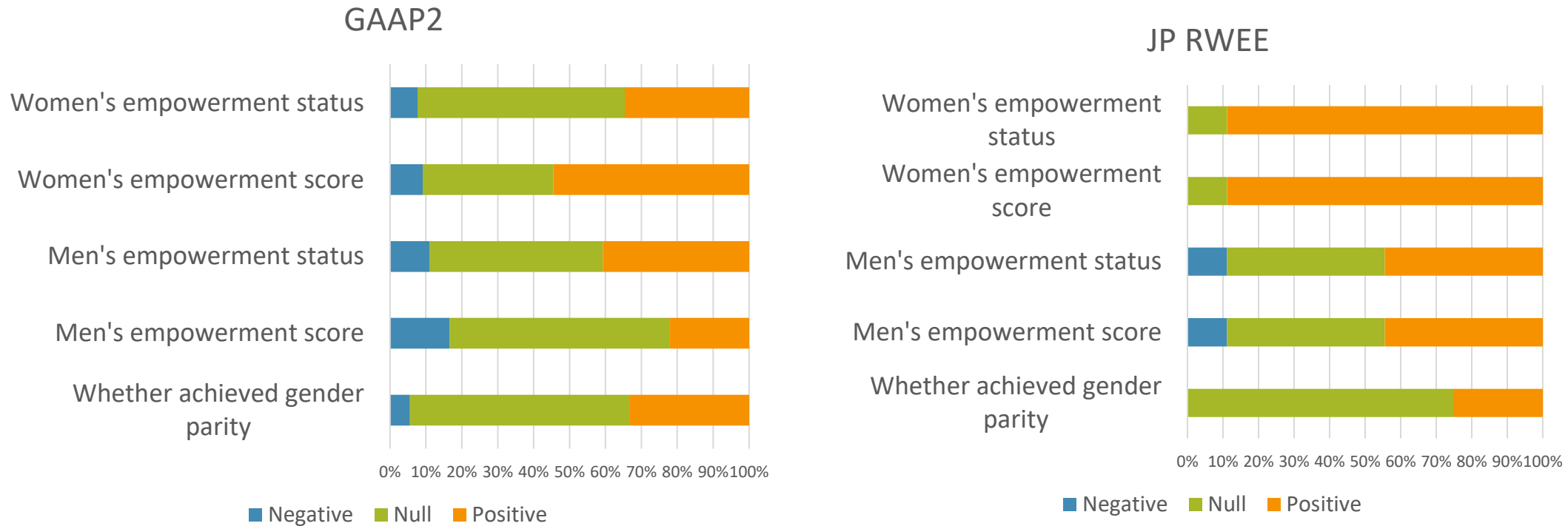
Both GAAP2 and JP RWEE show more null impacts on men's continuous indicators, but also some positive impacts



Negative impacts indicate potential for backlash. Positive impacts on workload means it has also increased for men

Source: [Quisumbing et al \(2023\)](#); [Quisumbing et al \(2024\)](#)

JP RWEE has a greater proportion of positive impacts on composite empowerment indicators and gender parity



Despite the smaller sample size, JP RWEE shows a higher proportion of positive impacts on women's empowerment indicators than the GAAP2 portfolio, reflecting more women-focused programming. But both programs report a large proportion of null results on men's empowerment and whether the household achieved gender parity. Gender parity is more difficult to achieve.