



Women's Empowerment in Fisheries and Aquaculture Index (WEFI): Guidance Notes

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A. Overview of the WEFI

What is the WEFI?

- The Women's Empowerment in Fisheries and Aquaculture Index (WEFI) measures the empowerment, agency and inclusion of women in fisheries and aquaculture contexts in an effort to identify ways to overcome those obstacles and constraints.
- It has a quantitative component (the index), and a qualitative component.
- The WEFI is based on the Women's Empowerment in Agriculture Index (WEAI).
- The WEFI will be used for performance monitoring within WorldFish projects. However, it is also a useful tool for policymakers, other research organizations, implementing organizations and academics seeking to measure and increase women's empowerment in a fisheries and aquaculture context.
- The WEFI also allows projects to track Reach-Benefit-Empower-Transform (RBET) outcomes for women in fisheries and aquaculture projects (McDougall et al., 2021).

How was the WEFI Developed?

- WorldFish, KIT Royal Tropical Institute and index experts collaboratively developed it.
- Some versions of the WEFI have been used previously in several contexts (Zambia and Bangladesh).
- The WEFI draws largely on the WEAI but is tailored to aquaculture and fisheries contexts in addition to capturing information on agriculture.
- The quantitative survey instrument was cognitively tested with 52 adult male and female respondents in 3 subdivisions in West Bengal, India. The results were used to assess respondent comprehension, retrieval, judgement and response.
- The results informed which versions of certain modules and/or questions to use as well as how to phrase questions better for respondents to understand.
- The qualitative tools have been derived from different sets of other tools used across the CGIAR and with KIT partners, but have not yet been tested as a whole.



B. Quantitative Methods of the WEFI

Quantitative Methods of the WEFI: An Introduction

- There are two versions: the pro-WEFI (project-level) and A-WEFI (abbreviated version) for different user needs. The pro-WEFI includes 12 indicators; the A-WEFI includes 6 indicators.
- These are the first standardized versions that are available to both external and internal users who want to measure men's and women's empowerment in fisheries and aquaculture contexts.
- WEFI is a survey based index, not based on aggregate statistics or secondary data, constructed using interviews of the primary male and primary female adults in the same household.
- It is an aggregate index, composed of two parts, which are the domains of empowerment and gender parity index.
- Scope of the WEFI: It focuses strictly on empowerment in aquaculture and/or fisheries, distinct from: economic status, education and empowerment in other areas. This enables clear analysis of determinants of empowerment in aquaculture and/or fisheries.
- A woman or man is empowered if she/he achieves adequacy (i.e. meets a set threshold) for 75% of the pro-WEFI indicators and 80% for the A-WEFI.
- WEFI is an international survey instrument, providing room for local adaptation.
- WEFI can be used in a wide range of applications including M&E, national surveys, impact evaluations, etc. to track and monitor as well as to assess program impact on empowerment.

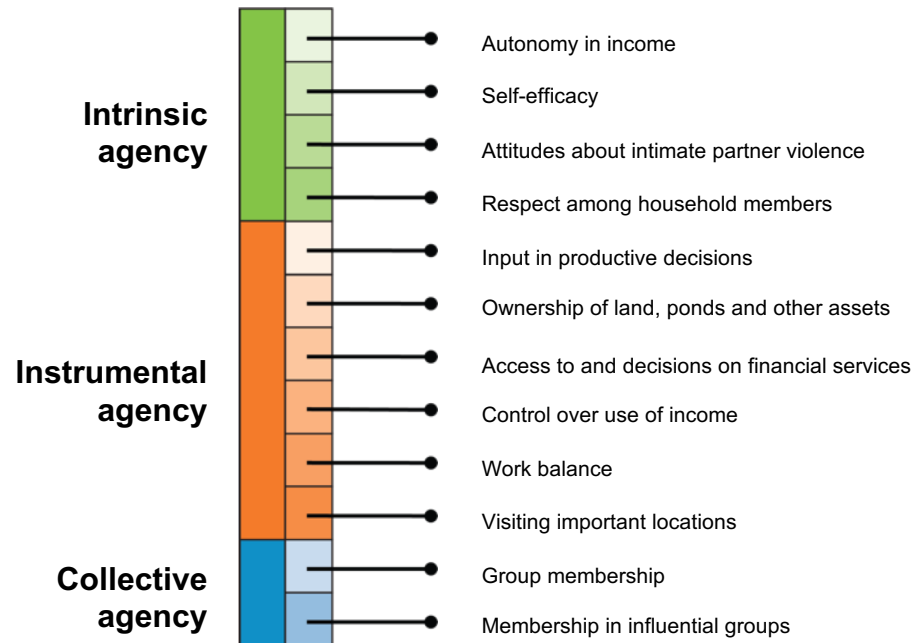
Structure of the Two Versions of the WEFI: Project WEFI (Pro-WEFI) and Abbreviated WEFI (A-WEFI)

- The structure of the WEFI is similar to that of the WEAI in that it is comprised of both the domains of empowerment (DE) and gender parity index (GPI).
- There are two versions of the WEFI – the A-WEFI as well as the pro-WEFI, which generally align with the modules covered in the A-WEAI and pro-WEAI.
- The A-WEFI only takes ~30 minutes to administer and captures five domains of empowerment (5DE): production, resources, income, time and leadership.
- The pro-WEFI is longer to capture project level detail and allows for a number of optional questions may be important to track for project purposes. It is aligned based on three domains of empowerment: intrinsic, collective and instrumental agency.
- The A-WEFI and pro-WEFI retain the same questions as the A-WEAI and pro-WEAI but the activities, assets, etc. have been changed and/or added, as needed, to reflect an aquaculture and fisheries context.

WEFI Domains and Indicators

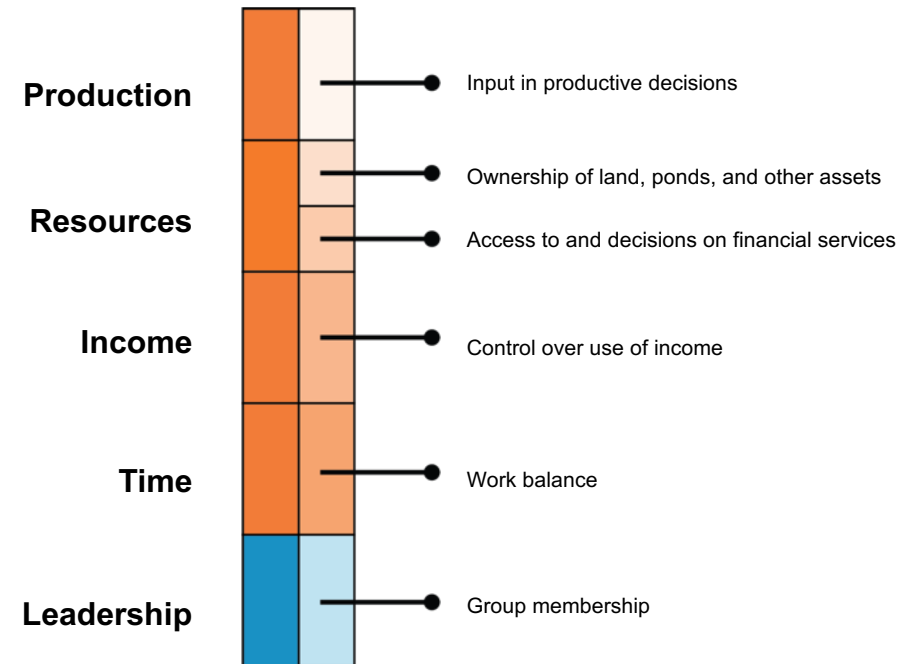
Pro-WEFI

- It has 12 indicators
- Each indicator receives **equal** proportion (1/12) of the overall weight
- An individual is **empowered** if adequate in 75% of indicators (8/12 indicators).



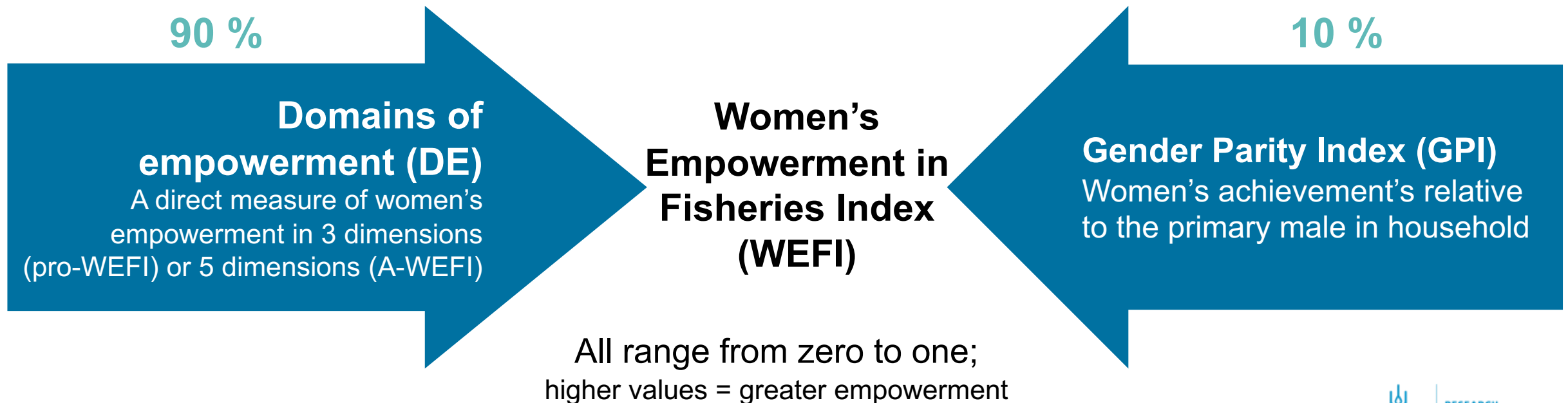
A-WEFI

- It has 6 indicators
- Each *domain* receives equal proportion (1/5) of the overall weight
- An individual is empowered if adequate in 80% of indicators (4/5 domains).



A-WEFI and Pro-WEFI Index Composition

- For the A-WEFI 5 domains of empowerment (5DE): Assesses the degree to which women are empowered in the 5 domains of empowerment.
- For the Pro-WEFI 3 domains of empowerment (3DE): Assesses the degree to which women are empowered in the 3 domains of empowerment.
- Gender Parity Index (GPI): Reflects the percentage of women who are empowered or who are as empowered as the men in their households.



Pro-WEFI Definitions of Adequacy

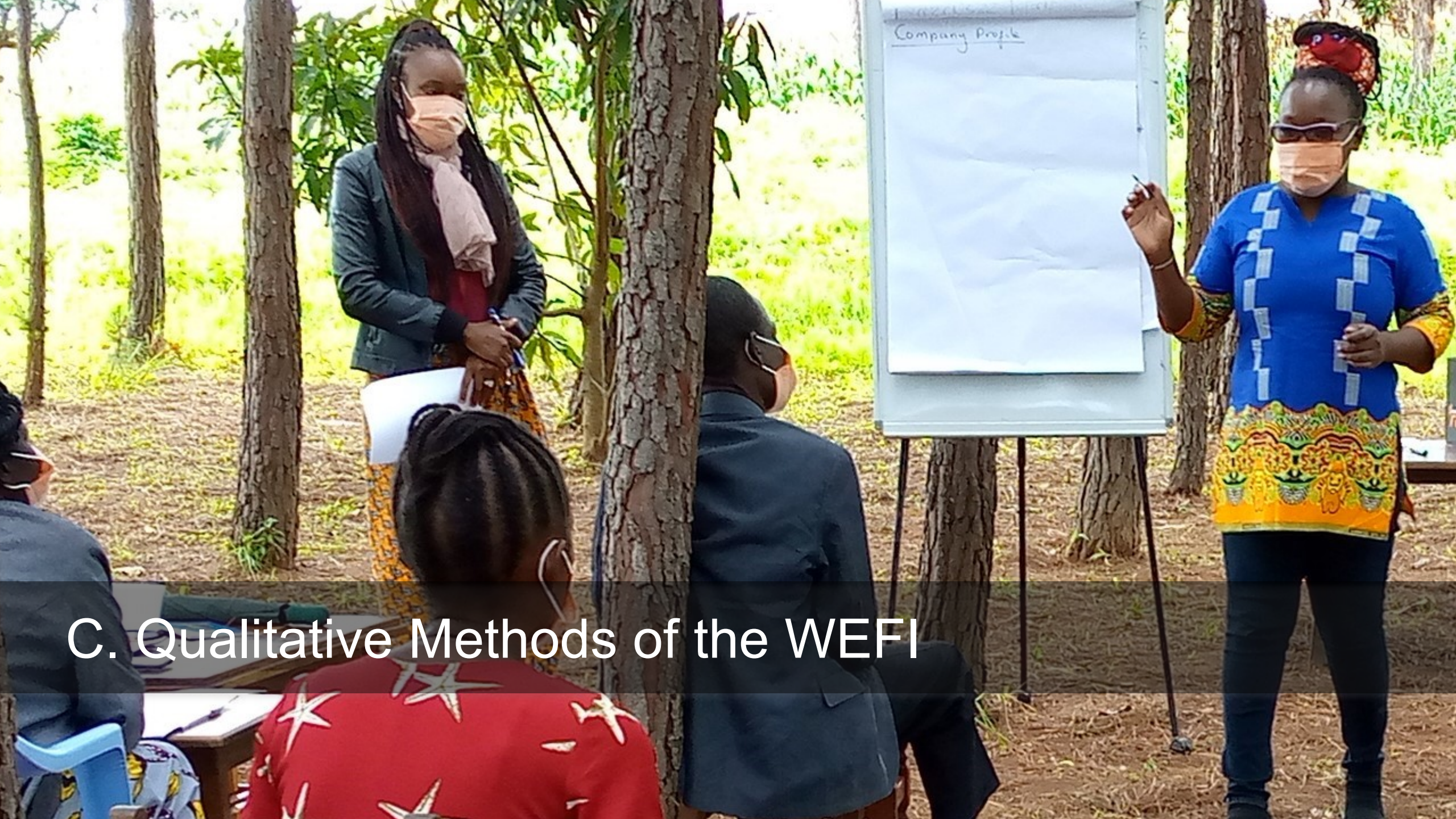
Indicator	Definition of adequacy
Intrinsic agency	
Autonomy in income	An individual is motivated by own values than by coercion or fear of others' disapproval (1=yes, 2=no): 1 for vignette 3 (autonomous motivation) and 2 for vignette 1 (external motivation) and 2 for vignette 2 (introjected motivation)
Self-efficacy	"Agree" or greater on average with self-efficacy questions: New General Self-Efficacy Scale C score >=36
Attitudes about intimate partner violence	An individual believes husband is NOT justified in hitting or beating his wife in all eight scenarios: <ol style="list-style-type: none"> 1. She goes out without telling him 2. She neglects the children 3. She argues with him 4. She refuses to have sex with him 5. She burns the food 6. She decides how to use income (i.e. spends money) without his permission 7. She does not support her husband in his work 8. She attends trainings or meetings without telling him
Respect among household members	An individual meets ALL of the following conditions related to their spouse, the other respondent, or another household member: <ol style="list-style-type: none"> 1. Respondent respects relation (MOST of the time) AND 2. Relation respects respondent (MOST of the time) AND 3. Respondent trusts relation (MOST of the time) AND 4. Respondent is comfortable disagreeing with relation (MOST of the time)
Instrumental agency	
Input in productive decisions	An individual meets at least ONE of the following conditions for ALL of the agricultural, aquaculture and fisheries activities they participate in <ol style="list-style-type: none"> 1. Makes related decision on their own, 2. Makes the decision jointly and has at least some input into the decisions 3. Feels could make decision if wanted to (to at least a MEDIUM extent)
Ownership of land, ponds and other assets	An individual owns, either solely or jointly, at least ONE of the following: <ol style="list-style-type: none"> 1. At least THREE three assets 2. Land or pond 3. Gleaning area (access)
Access to financial services	An individual meets at least ONE of the following conditions: <ol style="list-style-type: none"> 1. Belongs to a household that used a source of credit in the past year AND participated in at least ONE sole or joint decision about it 2. Belongs to a household that did not use credit in the past year but could have if wanted to from at least ONE source 3. Has access, solely or jointly, to a financial account
Control over use of income	An individual has input in decisions related to how to use BOTH income and output from ALL of the agricultural, aquaculture and fisheries 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
Work balance	An individual works less than 10.5 hours per day: Workload = time spent in primary activity + (1/2) time spent in childcare as a secondary activity
Visiting important locations	An individual meets at least ONE of the following conditions: <ol style="list-style-type: none"> 1. Visits at least TWO locations at least ONCE PER WEEK of [city, market, family/relative], OR 2. Visits at least ONE location at least ONCE PER MONTH of [health facility, public meeting, public religious place]
Collective agency	
Group membership	An individual is an active member of at least ONE group
Membership in influential groups	An individual is an active member of at least ONE group that can influence the community to at least a MEDIUM extent

A-WEFI Definitions of Adequacy

Domain	Indicator	Definition of adequacy
Production	Input in productive decisions	An individual meets at least ONE of the following conditions for ALL of the agricultural, aquaculture and fisheries activities they participate in: <ol style="list-style-type: none"> 1. Makes related decision solely 2. Makes the decision jointly and has at least some input into the decisions 3. Feels could make decision if wanted to (to at least a MEDIUM extent)
Resources	Ownership of land, ponds, and other assets	An individual owns, either solely or jointly, at least ONE of the following: <ol style="list-style-type: none"> 1. At least THREE three assets 2. Land or pond 3. Gleaning area (access)
	Access to financial services	An individual meets at least ONE of the following conditions: <ol style="list-style-type: none"> 1. Belongs to a household that used a source of credit in the past year AND participated in at least ONE sole or joint decision about it 2. Belongs to a household that did not use credit in the past year but could have if wanted to from at least ONE source 3. Has access, solely or jointly, to a financial account
Income	Control over use of income	An individual has input in decisions related to how to use BOTH income and output from ALL of the agricultural, aquaculture and fisheries 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
Time	Work balance	An individual works less than 10.5 hours per day: Workload = time spent in primary activity + (1/2) time spent in childcare as a secondary activity
Leadership	Group membership	An individual is an active member of at least ONE group

How to Calculate the WEFI Quantitative Data

- At the highest level, the WEFI is a composite [index score](#) comprised of the domains of empowerment (90%) as well as the gender parity index (10%), resulting in a score between 0 and 1. The higher the values the greater is the empowerment level of the woman.
- All the indicators are weighted equally for the pro-WEFI (1/12). All the domains are weighted equally for the A-WEFI (1/5).
- The quantitative survey instrument is administered to both primary male and female decision makers within households. See the [A-WEAI instructional guide](#) for detailed relevant information.
- Once the data is cleaned, a prep followed by an analysis using Stata.do files must be used to construct the WEFI. Learn more from [WEAI training videos](#).



C. Qualitative Methods of the WEFI

Qualitative Methods of the WEFI: An Introduction

The purpose of adding qualitative research to the calculation of the index serves the following purposes:

1. Contextualizing the WEFI survey questions
2. Gaining a more in-depth understanding of the local context of women's empowerment and the links with the project
3. Qualitative evaluation of changes in empowerment (baseline/endline comparison)
4. Enabling the interpretation of the findings of the WEFI (retrospectively)

A guidance document can be found here:

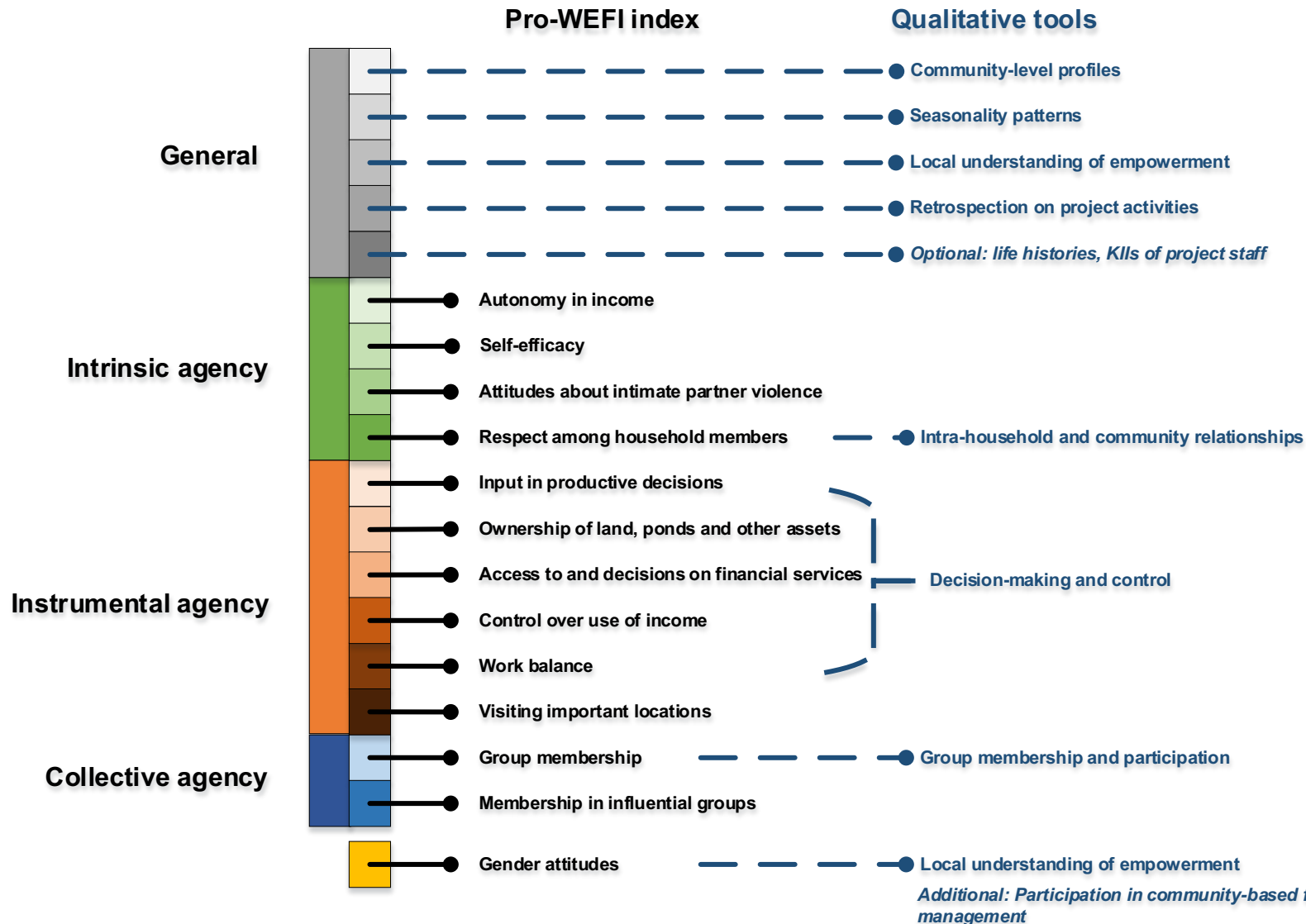
<https://hdl.handle.net/20.500.12348/5093>

How were the Qualitative Tools Developed?

Tools based on several other tools, developed during different projects:

1. Protocol of second phase of the Gender, Agriculture, and Assets Project (GAAP2)
<https://weai.ifpri.info/files/2018/04/GAAP2-Qualitative-Protocols-no-comments-.pdf>.
2. Value chain analysis tools of the CGIAR research program on Livestock and Fish: <https://cgspace.cgiar.org/handle/10568/105608>.
3. Tools used for a value chain analysis of the aquaculture value chain in Northwestern Bangladesh. Tools not available online, a report is available here: <https://gender.cgiar.org/publications-data/gendered-aquaculture-value-chain-analysis-northwestern-bangladesh>.
4. Tools from GENNOVATE: <https://gennovate.org/gender-tools-for-scientists/>.
5. Tools from a WorldFish/KIT study on women's empowerment and the introduction of a technology. Tools not available online, description of intervention is available here: <https://www.worldfishcenter.org/pages/gill-net/>.
6. Tools from the ILRI/ KIT 'African Chicken Genetic Gains' project. Tools not available online, gender strategy is available here: https://www.kit.nl/wp-content/uploads/2019/01/acgg_gender_strategy.pdf
7. Tools developed for a WorldFish study on the degree to which and for whom Community-based fisheries resources management institutions are inclusive. Tools not available online, more information is available here: <https://gender.cgiar.org/publications-data/gender-inclusive-facilitation-community-based-marine-resource-management-addendum>.
8. Monitoring tools of the Rare/KIT 'Fish Forever' program Indonesia. Tools not available online, a short description of the project can be found here: <https://www.kit.nl/project/sea-of-change/>.

Qualitative Tools by Indicator of the Pro-WEFI



The tools aligned with the 6 indicators of the A-WEFI can be used in addition to a selection of the general tools, depending on project resources.

Overview of Tools and their Use (1)

Guiding notes for qualitative methods weblink: <https://hdl.handle.net/20.500.12348/5093>

Tool	Purpose	WEFI	Source
Community-profile	Elicit social, economic, agricultural aquaculture/fisheries and background information about the community.	General	GAAP2 – tool B
Seasonality patterns	Create a production calendar that shows how seasonal variations affect time use for women and men, and provides context for the time-use indicator of the WEFI (peak or slack).	General, G4	GAAP2 – tool C
Local understanding of empowerment	Elicit local understanding of empowerment, and validate/contextualize the WEFI quant survey.	General	GAAP2 – tool D
Local understanding of empowerment (alternative)	Elicit local understanding of empowerment, and validate/contextualize the WEFI quant survey.	General, G10	WEFI qualitative guidance
Retrospection	Evoke retrospection on the effect of project interventions on women's empowerment	General	WEFI qualitative guidance
Life histories (optional)	Understand perceptions and experiences of women's empowerment within the context of aquaculture/fisheries intervention projects.	General	GAAP2 – tool E

Overview of Tools and their Use (2)

Tool	Purpose	WEFI	Source
KIIs of project staff (optional)	Collect basic information about the project and communities, and the relation between the project's interventions and women's empowerment.	General	GAAP2 – tool G
Intra-household and community relationships	Input for the list of actors to include in the WEFI survey, and generate understanding of how they enable or block success in fisheries/ aquaculture.	G7	WEFI qualitative guidance
Decision-making and control	Learn how decisions relevant to aquaculture/fisheries are made in the household, and understand reasons for gendered patterns in decision-making.	G2, G3(A), G3(B), G6, G11	WEFI qualitative guidance
Group membership	List relevant groups in the community, learn how decisions relevant to aquaculture/fisheries are made in groups, and understand the reasons for gendered patterns in decision-making.	G5	WEFI qualitative guidance
Ladder of participation in CBFMR	Generate understanding of participation in fisheries management (only applicable for projects on fisheries management).	Not in WEFI yet	WEFI qualitative guidance

Data Collection, Recording and Analysis

- Specific guidance on how to implement each of the tools is provided in the qualitative tools guideline.
- Ensure a social scientist is involved in the entire process.
- All notes should be labeled. Full transcription of interviews / focus groups is highly recommended when resources allow for it.
- How to analyze the data will depend on the purposes set out at the start of the project. Some guidance is provided with each of the tools.
- Qualitative data can be coded using qualitative analysis software (e.g. NVivo, Atlas).



D. Bringing Together the Mixed Methods, Interpretation and Use

How to Combine the Qualitative and the Quantitative Results and Triangulation of the Data

- How to bring together the results of the quantitative and qualitative tools depends on the purpose of the analysis.
- In some cases the qualitative tools provide inputs needed to contextualize the survey.
- In other cases the scores on the different dimensions of the index can be examined together with the qualitative results to understand why results are as they are or to identify inconsistencies.
- Qualitative results can also support the identification of key areas to address in order to achieve a higher score.



E. Looking Ahead and Resources

Future Plans for the Quantitative WEFI Tool

- The pro-WEFI will test several additional modules in 2022 as part of the validation component of the survey development.
- Since the WEFI versions will still undergo pilot testing and validation, the final versions of the WEFI might slightly differ from the information presented here.
- The pro-WEFI pilot testing will also test three additional indicators: (1) attitudes about gender roles; (2) access to information and extension services; and (3) nutrition and health (which are also based on those developed as part of optional modules for the pro-WEAI).

Future Plans for the Qualitative WEFI Tools

- The qualitative tools will be pilot tested in early 2022.
- Based on the pilot test they will be revised.
- A guideline will then be developed that explains the tools and how to implement them and analyze and use the results.
- Since the qualitative tools will still undergo pilot testing, the final version of the tools may slightly differ from the information presented here.

Resources to Help Further Understanding of the WEFI

- There are a number of detailed WEAI resources that describe how to administer and calculate the WEAI which are also applicable to the WEFI. [[WEAI surveys and do files](#)]
- The protocols of GAAP2 can be found here:
<https://weai.ifpri.info/files/2018/04/GAAP2-Qualitative-Protocols-no-comments-.pdf>
- WEAI resource link from IFRPI: <https://www.ifpri.org/publication/weai-resource-center-website>
- Tools developed for GENNOVATE, a community of practice within the CGIAR Collaborative Platform for Gender Research can be found here: <https://gennovate.org/gender-tools-for-scientists/> .
- What gets measured matters: A methods note for measuring women and girls' empowerment.
https://www.gatesgenderequalitytoolbox.org/wp-content/uploads/BMGF_Methods-Note-Measuring-Empowerment-1.pdf
- White paper: A conceptual model of women and girls' empowerment.
https://www.kit.nl/wp-content/uploads/2018/10/BMGF_KIT_WhitePaper_web-1.pdf
- McDougall C, Newton J, Kruijssen F and Reggers A. 2021. Gender Integration and intersectionality in food systems research for development: A Guidance Note. Penang, Malaysia: CGIAR Research Program on Fish Agri-Food Systems. Manual: FISH-2021-26.

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