Cognitive testing to improve questions in the Women's Empowerment in Fisheries and Aquaculture Index (WEFI)

#### By

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# Content of this presentation

- What is the WEFI?
- Development of the WEFI
- WEFI domains and indicators
- Why did we do cognitive testing?
- How did we do it?
- Some of the key findings
- Summary
- Next steps...



# 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 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.

# Development of the WEFI

- WorldFish, KIT Royal Tropical Institute and index experts collaboratively developed it.
- Different 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 in West Bengal, India.
- 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.

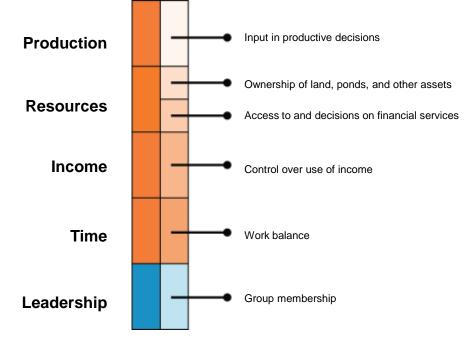
## WEFI Domains and Indicators

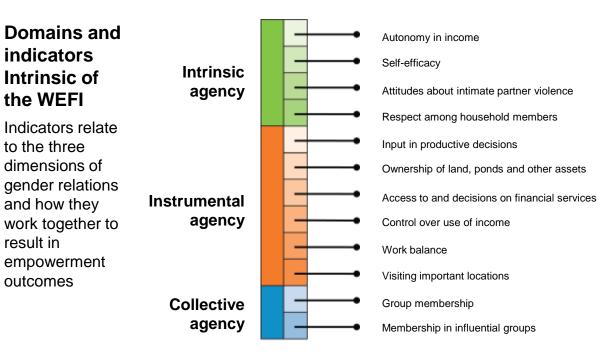
#### **Pro-WEFI**

- 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).





# Why did we do cognitive testing?

- To assess respondent comprehension & question validity
- Is an evidence-based, qualitative method
- Systematically identifies & corrects problems with the survey questions – improve the quality & accuracy of the instrument.
- Four specific cognitive processes:
  - Comprehension
  - Retrieval
  - Judgement
  - Response





# How did we do it?

- Sample: 52 respondents (14 men & 38 women) + 4 respondents (female headed households)
- Location: Birbhum, Bankura & North 24 Parganas Districts, West Bengal, India in September 2021
- Cognitively tested 9/10 modules
- Field team: Ecociate Consultants
- Language: Bengali
- Context: A variety of aquaculture & fisheries

# Some of the key findings



### MODULE G2: Power/input in household decisionmaking around production and income generation

Cognitive Probe		Associated WEFI Question	Had difficulty %
1.	Earlier I ask you if you had participated in several activities in the past 12 months, that is, the last (one/two) cropping seasons. Was this question easy or difficult?	G2.01 Did you yourself (singular) 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?	Easy: 98.08% Difficult: 1.92%
1.	Why was it difficult to answer?		Unable to understand clearly. Needed more explanation. X 1
1.	What period of time did you include in your response?		Ranges from one season to > 40 years.

# MODULE G3 (A): Access to and control over productive capital (Land & Pond)

Cognitive Probe	Associated WEFI Question	Had difficulty %
Earlier I asked you if you owned or cultivated any ponds. In your own words, what does it mean to "own or cultivate a pond"?	G3.01. Does anyone in your household currently own or cultivate land?	32.00% (16 respondents) could not answer or gave an answer that was not correct. Common terms used to describe ownership include: "legal rights/ownership", "in my name", "lease".
	G3.06. Does anyone in your household currently own or cultivate ponds?	
Earlier I asked you if you accessed any fishing grounds or gleaning areas. In your own words, what does it mean to "access fishing grounds or gleaning areas"?	G3.11. Does anyone in your household currently access fishing grounds/gleaning areas?	52.00% (26 respondents) could not give an answer or gave an answer that was not correct. Common terms used to describe gleaning areas include: "common or village ponds".

### MODULE G5: Group Membership

Cognitive Probe	Associated WEFI Question	Had difficulty %
Earlier I asked you about what role you took in these various groups. Was this question easy or difficult to answer?	G5.04 What role do you take in this [GROUP]?	Easy: 90.38% Difficult: 9.62%
Why was it difficult to answer?		"Doesn't understand term active member." X6
What does it mean for you to be "an active member" of a group?		→ 50.00% (26 respondents) could not give definition or did not understand.
What is an example of a water users' group?	Activity D	→ 90.38% could not give definition or did not understand.
What is an example of a forest users' group?	Activity E	→ 92.31% could not give definition or did not understand.

## In summary

- Some of the questions were hard for most of the respondents to answer; some concepts were not familiar; some of the questions were not distinguishable from each other.
- There were also modules which didn't have any cognitive difficulties (e.g., G6 Physical Mobility).
- Revision were made to the tool based on the findings; allowed us to determine which version of specific modules and their questions to use; how to better structure questions.



# Next step...

- We revised the WEFI tool and validated it in Bangladesh in mid 2022.
- The field work has been completed and now in the process of data analysis and write-up.



# Resources

https://gender.cgiar.org/toolsmethods-manuals/qualitativetools-womens-empowermentfisheries-and-aquaculture-indexwefi

https://gender.cgiar.org/news/gend er-research-tools-help-design-cgiarprojects-nutrition-outcomes



# Thank You







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