

Reduced Version of Women's Empowerment in Livestock Index (WELI-FullBare version)

Immaculate Omondi, Nils Teufel, Farha Deba Sufian and Alessandra Galie

Background

Measuring the empowerment of women in livestock to is important to:

- Measure whether livestock interventions enhance/hinder women's empowerment
- Study how livestock-specific interventions affect women's empowerment
- Characterize women's empowerment through livestock specific activities
- Consider gender differences in roles/activities between livestock species
- Identify sources of disempowerment facing the women participating in livestock production

The Women Empowerment in Livestock Index (WELI) and the Women Empowerment in Livestock Business Index (WELBI) are 2 tools used to measure the empowerment of women in settings where livestock farming is the dominant form of livelihood. WELI is a standardized measure to assess the empowerment of women livestock producers. It was developed by livestock and gender experts from ILRI and Emory University in 2014/2015 • It was pilot tested in Tanzania in 2015 and aligned to pro-WEAI with IFPRI in 2019. WELBI: a standardized measure to assess the empowerment of women livestock agripreneurs. It was Constructed and aligned to pro-WEAI_VC in 2021 and has since been used to track the empowerment of agripreneuers engaged in livestock interventions supported by ILRI and partners in Ethiopia, Ghana, Tanzania and Uganda.

Users of WELI/WELBI tools have often cited the length of the tools as one of the drawbacks in using these tools. This document is a summary of the steps taken to create a reduced version of Women's Empowerment in Livestock Index (WELI) called WELI-FullBare.

Process creating WELI-FullBare

Construction

Figure 1 Shows the how WELI index is constructed in terms of which indicators form the index and how it compares with pro-WEAI.

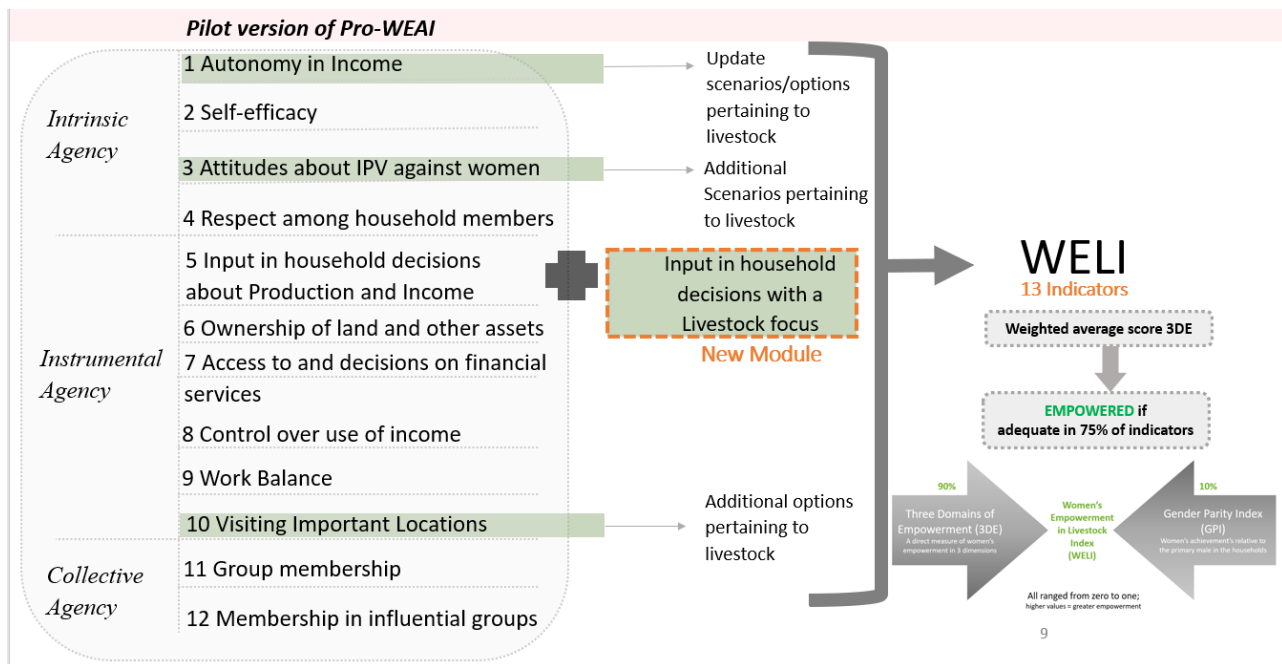


Figure 1: Construction of WELI index and how it compares with pro-WEAI

The motivation to adjust the tool was based on user feedbacks (Figure 2).

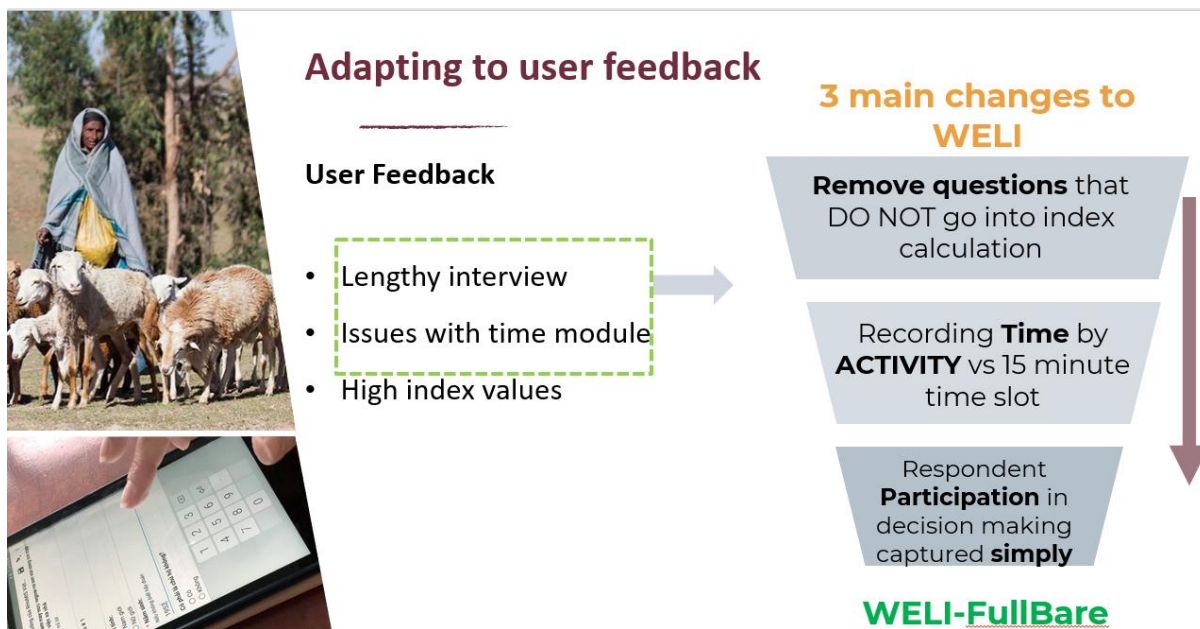


Figure 2: Adapting to user feedbacks in the construction of a reduced WELI version

Construction of WELI-FullBare

The main objective to create a reduced version is to generate a tool that is comparable to the original index WELI, devoid of questions that do not go into generating indicators for the index, therefore resulting into lesser interview time. We achieve this by two key tasks, dropping questions that do not go into the index and restructuring other time-consuming modules. The major changes to WELI to produce the FullBare version included:

1. Dropping the module on household roster
2. In other modules, particularly Module G2 (farm and livestock activities), dropping rows with items that do not go into the index
3. In other modules, dropping some columns that do not go into the index
4. Restructuring questions that ask for more than 1 decision maker
5. Consolidating the module on time allocation to make it shorter but still capture the relevant information
6. Restructuring the module on intrahousehold relationships to minimize non-response rate

WELI-Full Bare Validations:

1. pilot study

We used data from a pilot study WELI-FullBare questionnaire on 16 dual adult households (16 women and 16 women) in Ethiopia. the results of WELI calculations from the pilot data are presented in Table 1.

Table 1: Pilot study results

<i>ETHIOPIA</i>	<i>Women</i>	<i>Men</i>
Number of observations	16	16
3DE score	0.84	0.86
Disempowerment score (1 – 3DE)	0.16	0.14
<u>% achieving empowerment</u>	0.56	0.56
% not achieving empowerment	0.44	0.44
Mean 3DE score for not yet empowered	0.64	0.67
Mean disempowerment score (1 – 3DE)	0.36	0.33
Gender Parity Index (GPI)	0.95	
<u>% achieving gender parity</u>	0.69	
% not achieving gender parity	0.31	
Average empowerment gap	0.16	

2. Simulations using existing data on WELI to run WELI-FB syntax

We also used existing WELI data from one project in Tanzania to test how different the WELI-FullBare could be from the full WELI. The existing data were simulated to generate variables that are in the same format as the WELI-FullBare data format. The results presented in Table 2 reveals no difference in the index generated from the two datasets leading to a conclusion that the WELI-FullBare is a stable tool and would generate the same indices as the full WELI.

Table 2: WELI-FullBare Simulation results

TANZANIA	WELI	WELI-FB Simulated
<u>Number of observations</u>	210	210
WELI (3DE score)	0.86	0.86
Disempowerment score (1 – 3DE)	0.14	0.14
% achieving empowerment	62	62
<u>% not achieving empowerment</u>	38	38
Mean 3DE score for not yet empowered	0.63	0.63
Mean disempowerment score (1 – 3DE) for not yet empowered	0.37	0.37

3. Length of the interviews

Finally, we investigated whether the WELI-FullBare resulted to reduction in survey time. The challenge we face was that the recoded survey time from our data collection tool in ODK included review time i.e. enumerators completed the survey but spent some time to review the data to ensure completeness before submitting the data to the server. The recorded time therefore summed the total time between when the survey started and when it was submitted. That notwithstanding, we compared the mean survey time across projects (restricting to survey duration less than 7 hours). The results presented in Table 3 below shows that the WELI-FullBare records the lowest survey time on average.

Table 3: Survey time comparison

<i>Estimate source</i>	<i>Mean (hrs)</i>	<i>Min (hrs)</i>	<i>Max (hrs)</i>
Full WELI (Tanzania)	5.2	1.9	6.9
Full WELI (Ethiopia)	5.6	4.0	6.9
WELI – FB (Ethiopia)	4.8	2.0	6.8