

Term	Definition	Level of Metric
Adequacy cutoff (z_j)	<ul style="list-style-type: none"> The threshold at which a person is considered to have adequate achievement in an indicator j 	NA
Adequacy headcount ratio (H_e)	<ul style="list-style-type: none"> Proportion of women in the sample who are empowered Same as % achieving empowerment when calculated for women Preferred mathematical notation: $H_e = 1 - \frac{q}{n}$, where q is the number of disempowered women and n is the number of women in the sample Alternative mathematical notation: $H_e = 1 - H_p$ 	Sample
Adequate	<ul style="list-style-type: none"> Person who has achieved adequacy in an indicator Person i is considered adequate if his or her level of achievement, x_{ij}, in indicator j is equal to or greater than the adequacy cutoff, z_j, for the indicator (i.e., $x_{ij} \geq z_j$) 	Individual
Agency	<ul style="list-style-type: none"> “Ability to make strategic choices” (Kabeer 1999) Pro-WEAI measures three types of agency: intrinsic agency (power within), instrumental agency (power to), and collective agency (power with) For other definitions and reviews of the literature see: Alsop et al., 2006; Gammage et al., 2016; Klugman, 2014; Sen, 1999. 	NA
Average inadequacy score of disempowered women (A_p)	<ul style="list-style-type: none"> Reflects the intensity or breadth of disempowerment among women Mathematical notation: $A_p = \frac{\sum_{i=1}^n c_i(k)}{q}$, where q is the number of disempowered women 	Sample
Average empowerment gap (I_{GPI})	<ul style="list-style-type: none"> The mean or average empowerment gap is the average percentage shortfall that a woman without parity experiences relative to her partner. The mean empowerment gap reflects the average difference between the adequacy scores of the man and woman in the household, and is only calculated for those households that do not achieve gender parity. In other words, the mean empowerment gap is the average intrahousehold inequality score for households that do not achieve gender parity. This gives us an idea of the performance of household that do not meet gender parity. Average percentage gap between the censored inadequacy scores of women and men living in dual-adult households that lack gender parity Mathematical notation: $I_{GPI} = \frac{1}{h} \sum_{i=1}^h \frac{c'_i(k)^M - c'_i(k)^W}{1 - c'_i(k)^M}$, where $c'_i(k)^W$ and $c'_i(k)^M$ are the censored inadequacy scores of the woman and man, respectively, living in household i and h is the number of dual-adult households that lack gender parity 	Sample

Censored inadequacy headcount ratio ($h'_j(k)$)	<ul style="list-style-type: none"> Proportion of women in the sample who are disempowered and simultaneously inadequate in an indicator j Mathematical notation: $h'_j(k) = \frac{1}{n} \sum_{i=1}^n g'_{ij}(k)$, where $g'_{ij}(k) = g_{ij}$ if $c_i > k$ (i.e., if person i is disempowered) and $g'_{ij}(k) = 0$, otherwise (i.e., if person i is empowered) and n is the number of women in the sample 	Sample
Censored inadequacy score ($c'_i(k)$)	<ul style="list-style-type: none"> Equal to the inadequacy score (c_i), if person i is disempowered, and equal to zero, otherwise (i.e., if person i is empowered) Mathematical notation: $c'_i(k) = c_i$ if $c_i > k$ and $c'_i(k) = 0$ if $c_i \leq k$ 	Individual
Censoring	<ul style="list-style-type: none"> Process used in pro-WEAI to focus measurement on the disempowered 	
Collective agency	<ul style="list-style-type: none"> Power with (others) Power derived from acting together with others 	NA
Contribution to disempowerment	<ul style="list-style-type: none"> The index of disempowerment, M_0, can be decomposed to show the contribution of each indicator Absolute contribution of indicator j to disempowerment: $w_j \times h'_j(k)$ Relative contribution of indicator j to disempowerment: $\frac{w_j \times h'_j(k)}{M_0}$ Whenever the relative contribution to disempowerment of an indicator greatly exceeds its weight (always equal to 1/12 in pro-WEAI), this suggests that the disempowered are disproportionately more inadequate in this indicator compared to other indicators. 	Sample
Disempowered	<ul style="list-style-type: none"> Does not satisfy the empowerment cutoff Adequate in <i>less than</i> 8 of 10 indicators, or 80% of the indicators Person i is considered disempowered if their inadequacy score is greater than the disempowerment cutoff ($c_i > k$) 	Individual
Disempowerment cutoff (k)	<ul style="list-style-type: none"> Share of weighted indicators in which a person must be inadequate to be considered disempowered Pro-WEAI uses a disempowerment cutoff equal to 30% A person is identified as disempowered if they are inadequate in 3 or more of the 10 indicators 	NA
Disempowerment headcount ratio (H_p)	<ul style="list-style-type: none"> Proportion of women in the sample who are disempowered Preferred mathematical notation: $H_p = \frac{q}{n}$, where q is the number of disempowered women and n is the number of women in the sample Alternative mathematical notation: $H_p = 1 - H_e$ 	Sample

Disempowerment index (M_0)	<ul style="list-style-type: none"> • Reflects the overall level of disempowerment among women in the sample population • Calculated as the product of the disempowerment headcount ratio and the intensity of disempowerment (preferred mathematical notation) or, alternatively, as the average censored inadequacy score among women (see alternative mathematical notation [b]) • Preferred mathematical notation: $M_0 = H_p \times A_p$ • Alternative mathematical notation: (a) $M_0 = 1 - 3DE$; (b) $M_0 = \frac{1}{n} \sum_{i=1}^n c'_i(k)$, where n is the number of women in the sample 	Sample
Domains	<ul style="list-style-type: none"> • Refers to the 3 domains of empowerment, or types of agency, measured in pro-WEAI: intrinsic agency, collective agency, and instrumental agency. 	NA
Dual-adult household	<ul style="list-style-type: none"> • A household with both female and male adult residents 	
Empowered	<ul style="list-style-type: none"> • An individual is considered empowered if he/she is adequate in 80% (or 8 out of 10) of the indicators. • Individuals below the cutoff are considered disempowered • Satisfies the empowerment cutoff • Person i is considered empowered if their inadequacy score is less than or equal to the disempowerment cutoff ($c_i \leq k$) • We use adequacy to express how an individual fares with respect to each indicator and empowerment to express how someone fares across all 10 indicators. For example, an individual who is adequate in only 5 indicators is considered disempowered. 	Individual
Empowerment	<ul style="list-style-type: none"> • Process of change by which people expand their ability to make strategic life choices in contexts in which this ability had been denied to them (Kabeer 1999). • “The ability to exercise choice encompasses three dimensions: resources (defined to include not only access but also future claims to material, human, and social resources), agency (including processes of decision-making, negotiation, and even deception and manipulation), and achievements (well-being outcomes)” (Malapit et al. 2019). • For other definitions and reviews of the literature see: Alsop et al., 2006; DAW, 2001; Mosedale, 2005; Narayan, 2002; Oxaal & Baden, 1997; Raj, 2017; VeneKlasen & Miller, 2002. 	NA
Empowerment cutoff	<ul style="list-style-type: none"> • Share of weighted indicators in which a person must be adequate to be considered empowered • Pro-WEAI uses an empowerment cutoff equal to 80% 	NA

	<ul style="list-style-type: none"> • A person is identified as empowered if they are adequate in 8 or more of the 10 indicators 	
Empowerment score	<ul style="list-style-type: none"> • Reflects the percentage of indicators in which a person has achieved adequacy • Share of weighted indicators in which a person is adequate • Calculated as the inverse of the inadequacy score ($1 - c_i$) or, alternatively, by summing a person's adequacy status (1 = adequate; 0 = inadequate) across all 10 indicators, each multiplied by their corresponding weight of 1/10 • Often used in regressions (on the left- or right-hand side) as a metric of individual-level empowerment • Mean values can be calculated separately for empowered and disempowered individuals (i.e., mean empowerment score for the empowered, mean empowerment score for the disempowered) • Sometimes referred to as the adequacy score 	Individual/sample
Female-only household	<ul style="list-style-type: none"> • A household with no male adult residents (only female adults) 	NA
Gender parity	<ul style="list-style-type: none"> • A household achieves gender parity if either of the following conditions are true: (a) the woman is empowered or (b) the woman's empowerment score is equal to or greater than the man's empowerment score • This means that all empowered women have achieved gender parity. 	Household
Gender Parity Index (GPI)	<ul style="list-style-type: none"> • A composite index that measures two aspects of empowerment (at the household-level) in the sample population: (a) the proportion of households that achieve gender parity and (b) the average empowerment gap among households that lack gender parity • The GPI reflects the extent (prevalence) and intensity (depth) of gender parity in the sample. • The GPI adapts the Foster-Greer-Thorbecke Poverty Gap measure to reflect gender parity. • One of two sub-indices that comprise pro-WEAI • Mathematical notation: $GPI = 1 - (H_{GPI} \times I_{GPI})$ 	Sample
Inadequacy score (c_i)	<ul style="list-style-type: none"> • Share of weighted indicators in which a person is inadequate • Calculated by summing the inadequacy status of all indicators, each multiplied by their corresponding weight, $w_j = \frac{1}{10}$ (all 10 indicators in pro-WEAI are equally weighted) • Mathematical notation: $c_i = \sum_{j=1}^{10} w_j \times g_{ij}$ 	Individual
Inadequate ($g_{ij} = 1$)	<ul style="list-style-type: none"> • A person who has not achieved adequacy in an indicator 	Individual

	<ul style="list-style-type: none"> • Person i is considered inadequate if his or her level of achievement, x_{ij}, in indicator j is less than the adequacy cutoff, z_j, for the indicator • Formally, each person in each indicator is assigned an inadequacy status $g_{ij} = 1$, if $x_{ij} < z_j$, and $g_{ij} = 0$, otherwise. 	
Indicators	<ul style="list-style-type: none"> • Refers to the 12 indicators of empowerment included in pro-WEAI: autonomy in income, self-efficacy, attitudes about intimate partner violence against women, respect among household members, input in productive decisions, ownership of land and other assets, access to and decisions on financial services, control over use of income, work balance, visiting important locations, group membership, and membership in influential groups 	NA
Instrumental agency	<ul style="list-style-type: none"> • Power to • Ability to make decisions in one's own best interest 	NA
Intrahousehold inequality score	<ul style="list-style-type: none"> • Difference between the empowerment scores of the man and woman within a household • Ranges from -1 to 1 • A positive score indicates that the man is more empowered than the woman, while a negative score indicates that the woman is more empowered than the man. A score of 0 indicates that there is no difference in their empowerment scores. • Higher intrahousehold inequality scores indicate a larger gap between the empowerment of husband and wife. • Often included in regressions (on the left- or right-hand side) as a metric of household-level empowerment 	Household
Intrinsic agency	<ul style="list-style-type: none"> • Power within • One's personal sense of agency or internal voice, self-respect, or self-confidence 	NA
% Achieving empowerment	<ul style="list-style-type: none"> • Proportion of women or men in the sample who are empowered • Same as adequacy headcount ratio when calculated for women 	Sample
% Achieving gender parity (H_{GPI})	<ul style="list-style-type: none"> • Proportion of households in the sample that achieve gender parity • Preferred mathematical notation: $H_{GPI} = \frac{r}{m}$, where r is the number of households that lack gender parity and m is the number of dual-adult households in the sample 	Sample
Project-level Women's Empowerment in Agriculture Index (pro-WEAI)	<ul style="list-style-type: none"> • A composite index that reflects the extent of women's empowerment in the sample population based on the 3DE and GPI sub-indices • Mathematical notation: $pro - WEAI = \frac{9}{10} 3DE + \frac{1}{10} GPI$ 	Sample

	<ul style="list-style-type: none"> • The weighting scheme reflects the greater overall importance of individual empowerment. The smaller weight assigned to GPI acknowledges the importance of empowerment dynamics within the household, but also recognizes that the GPI can only be calculated in households where both men and women respondents are present. • The pro-WEAI score therefore encompasses the two elements of the 3DE, the % achieving empowerment and the empowerment score among the disempowered, and the two elements of the GPI, the % of households achieving gender parity as well as the average empowerment gap. • As the 3DE reflect the extent (prevalence) and intensity (depth) of individual empowerment in the sample and the GPI reflects the extent (prevalence) and intensity (depth) of gender parity in the sample, the pro-WEAI reflects both the extent and intensity of empowerment taking gender parity into consideration. • Ranges from 0 to 1, where higher values indicate greater empowerment • Sample-level metric (as opposed to individual- or household-level) • Not a percentage 	
Three Domains of Empowerment Index (3DE)	<ul style="list-style-type: none"> • The 3DE is based on the Alkire Foster methodology and reflects: <ol style="list-style-type: none"> 1) Incidence of empowerment: The percentage of women who are empowered. 2) Adequacy among the disempowered: The weighted share of indicators in which disempowered women achieve adequacy. • These two elements capture how widespread empowerment is, and how close disempowered individuals are to becoming empowered. • The 3DE therefore reflect the extent (prevalence) and intensity (depth) of empowerment in the sample. Considering both of these elements is important for understanding disempowerment within a sample population. • This reflects the extent of individual empowerment in the sample without taking gender parity into consideration. • Note that 3DE is calculated using information from all women in the sample, regardless of whether she belongs to a dual-adult household, where both male and female decision makers are present, or a female-only household, where there is no male decision maker present. • One of two sub-indices that comprise pro-WEAI • Preferred mathematical notation: $3DE = H_e + (H_p \times A_e)$ • Alternative mathematical notation: (a) $3DE = 1 - M_0$; (b) $3DE = 1 - (H_p \times A_p)$ 	Sample
Uncensored inadequacy headcount ratio (h_j)	<ul style="list-style-type: none"> • Proportion of women or men who are inadequate in an indicator j, regardless of whether they are empowered or disempowered 	Sample

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| | <ul style="list-style-type: none">• Mathematical notation: $h_j = \frac{1}{n} \sum_{i=1}^n g_{ij}$, where n is the number of women in the sample | |
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- Note: Keep in mind that the 3DE, GPI, and thus pro-WEAI as a whole, can only be calculated at the project-, population- or treatment arm- level. Only individual empowerment status and the empowerment scores can be calculated at the individual level. While gender parity status and intra-household inequality scores can be calculated at the household level.

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