



# Annex 5:

## Detailed methodology & tools for Women's Empowerment indicator



Published 2022 by Better Cotton/ Delta Project Team<sup>1</sup>

Author: CARE International UK

Acknowledgements:

The author and editors wish to acknowledge and thank the following persons and organisations for their valuable support and contribution: Hayley Morgan and Vidyun Rathore (Better Cotton), Tanya Aucamp and Cotton SA.

[www.deltaframework.org](http://www.deltaframework.org)

**Disclaimer: The views expressed in this publication are those of the author and do not necessarily represent those of the ISEAL Secretariat, ISEAL members, or donor entities to the ISEAL Innovations Fund, or of the persons and organisations contacted or consulted by the Delta Project Team.**

**The project was possible thanks to a grant from the ISEAL Innovations Fund, which is supported by:**



Schweizerische Eidgenossenschaft  
Confédération suisse  
Confederazione Svizzera  
Confederaziun svizra

Swiss Confederation

Federal Department of Economic Affairs,  
Education and Research EAER  
**State Secretariat for Economic Affairs SECO**

---

<sup>1</sup> The four Delta Project partners are: Better Cotton, the Global Coffee Platform (GCP), the International Coffee Organisation (ICO), and the International Cotton Advisory Committee (ICAC).

## 5.2 Integrating participants from large farms

### 1. Background

Following development of the Women's Empowerment indicator for the Delta Framework, Better Cotton approached CARE International UK to develop a version of the indicator which would be more relevant for participants in large farms. The original version was developed with smallholder farmers in mind and it includes tried and tested sub-indicators commonly used with that group to measure women's empowerment. During the first pilot of the Women's Empowerment indicator, a woman spouse of the owner of a large farm was included in the sample. This participant's responses alluded to a lack of empowerment, but it was apparent that this was due to the criteria used by the indicator to measure women's empowerment – relevant to smallholder farmers but not to this participant.

#### 1.1. Adapting the Women's Empowerment indicator to large farm context

We identified that there were sub-indicators included in the original Women's Empowerment indicator that would not work outside smallholder farmer groups. We looked back to the three domains making up the original Women's Empowerment indicator and identified that **control over economic assets** highlighted the least relevance to women working in large farm contexts because of the hierarchies that exist in a formal place of employment and the variety of roles women occupy in these spaces. We identified that the other two domains, **leadership** and **decision-making**, were relevant empowerment measures for all women but needed adaptation from smallholder to large farm contexts.

Within the three domains were sub-indicators that we then reviewed for their relevance for women in large farm contexts. We recognised that each needed adaptation from smallholder to large farm contexts but that the only sub-indicator that we definitely needed to remove was **# of women and # of men who own or control productive asset** (one of two sub-indicators in the control over economic assets domain). The second sub-indicator for this domain – **gender equitable attitudes** – was identified as relevant but we needed to change the question to a context of employment rather than subsistence farming.

Following our review, the list of sub-indicators identified as relevant to the smallholder farm and to the large farm contexts was as follows:

#### **Smallholder farms:**

1. **Self-efficacy:** # of women and # of men reporting high levels of self-efficacy
2. **Communication and negotiation skills:** # of women and # of men reporting confidence in their communication and negotiation skills

3. **Collective action:** # of women and # of men reporting that they could work collectively with others in community to achieve a common goal
4. **Input in productive decision-making:** # of women and # of men who report they are equally able to input into productive decisions
5. **Control of productive assets:** # of women and # of men who own or control productive asset
6. **Gender equitable attitudes:** # of women and # of men who demonstrate gender equitable attitudes to control of economic assets

#### **Large farms:**

1. **Self-efficacy:** # of women and # of men reporting high levels of self-efficacy
2. **Communication and negotiation skills:** # of women and # of men reporting confidence in their communication and negotiation skills
3. **Collective action:** # of women and # of men reporting that they could work collectively with others in community to achieve a common goal
4. **Input into workplace decisions:** # of women and # of men who report they have meaningfully participated in decision-making in the workplace
5. **Gender equality policy:** # of large farms with at least one policy pertaining to gender
6. **Gender equitable attitudes:** # of women and # of men who demonstrate gender equitable attitudes in the workplace

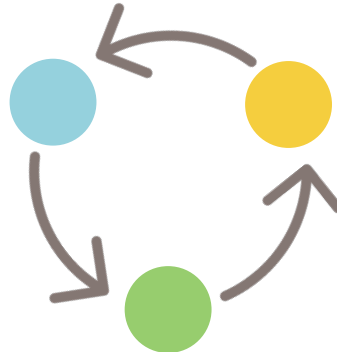
## **1.2. Adding a new indicator**

Throughout our discussions around how to adapt the Women's Empowerment indicator for a large farm context, we were conscious that decisions to remove indicators would have implications on our ability to capture a full picture of empowerment from the women participating in the surveys. In order to assess the implications of our adaptation decisions, we checked it against CARE's Gender Equality Framework. This framework was used to develop the original Women's Empowerment indicator and defines three domains of complementary change that can be used to understand the extent to which women are empowered: Agency, Relations and Structures.

## CARE'S GENDER EQUALITY FRAMEWORK

### BUILD AGENCY

Building consciousness, confidence, self-esteem and aspirations (non-formal sphere) and knowledge, skills and capabilities (formal sphere).



### CHANGE RELATIONS

The power relations through which people live their lives through intimate relations and social networks (non-formal sphere) and group membership and activism, and citizen and market negotiations (formal sphere).

### TRANSFORM STRUCTURES

Discriminatory social norms, customs, values and exclusionary practices (non-formal sphere) and laws, policies and procedures and services (formal sphere).

The list of 5 sub-indicators adapted from smallholder to large farm contexts covered the areas of Agency and Relations well but neglected the Structures domain. This domain is important because it helps us to understand the environment women are operating within, and how responsive formal and informal spaces are to them exercising their agency, rights and power.

We discussed including a sub-indicator to measure the existence of policies pertaining to gender in large farm workplaces as a means to explore the **Structures** sphere of the CARE Gender Equality Framework. This would not be a straightforward indicator to include due to the different nature of partnerships across the Delta Framework potential users and the extent to which organisations would be willing to share employment data.

**Table 1: Women’s Empowerment indicator for large farm context**

Delta domain of change	Sub-indicator of change	Indicator
Leadership	Self-efficacy	# of women and # of men reporting high levels of self-efficacy
	Communication and negotiation skills	# of women and # of men reporting confidence in their communication and negotiation skills
	Collective action	# of women and # of men reporting that they could work collectively with others in community to achieve a common goal
Decision-making	Input into workplace decisions	# of women and # of men who have meaningfully participated in decision-making process in the workplace/ or home (seasonal workers)
Gender equality in the workplace	Gender policy	# of large farms with at least one policy pertaining to gender
	Gender equitable attitudes	# of women and # of men who demonstrate gender equitable attitudes in the workplace

### 1.3. Identifying impact groups

One of our main areas of discussion when adapting the Women’s Empowerment indicator from smallholder to large farm contexts was the sheer variety of large farms that exist across the Delta Framework potential users – and by extension, the variety of roles that women hold in these organisations. We identified three main groups of women that we anticipate could be included in the Women’s Empowerment indicator in the Delta Framework:

1. Seasonal (field) workers
2. Permanent (field) workers
3. Office staff/ business employees

We have drafted questions that could be asked to these different groups. It is important to note that many of the questions have been drafted to include statements that participants can respond to using a Likert scale. Project teams should feel empowered to adapt these statements according to context if it will make the tool more relevant to the project participants. We have tried to anticipate differences where we can, but there will inevitably be outliers as this indicator is socialised across a variety of projects by Delta Framework potential users. As long as the substantive indicator remains the same (e.g., Self-efficacy or Decision-making) the means of determining progress against these indicators can be adapted.

## 2. Methodology

This methodology section will include information on:

- Sampling
- Frequency of data collection
- Sub-indicator weighting
- Aggregation
- Women's Empowerment and Gender Parity scores
- Aggregation with smallholder farmer version of Women's Empowerment indicator

### 2.1. Sampling

Each of these sub-indicators have been designed to be asked to women and men participants. This is so we can calculate both a Women's Empowerment score (using women participants' responses only) and a Gender Parity score (comparing the responses of women and men participants). Inclusion of the Gender Parity score, though illuminating, should be at the discretion of the project team as we recognise these questions can be time-consuming to collect data on. Where budget and time constraints do not allow, we recommend focussing on the Women's Empowerment score, and thus inclusion of women participants.

Sample size is entirely dependent on the size of the project and so this paper will not offer prescriptive guidance on this area. Some general guidance to consider would be:

- When determining population size for Women's Empowerment score, the population is the total number of women workers in large farms. When determining population size for Gender Parity score, the population is the total number of workers in large farms – but it is important to also determine the ratio of men and women in this population.
- Where population size (total women workers in large farm) is 100 women or less, project teams should aim for a minimum sample size of around 80%. The smaller the population size however, the greater percentage of participants should be interviewed. For example, if the total number of women workers is 20, project teams should aim to interview all 20 women.
- Where population size is over 100 women, and especially if over 1000 women, project teams should aim to calculate sample size based on a 95% confidence level and 5% margin of error. This can be easily calculated using an online tool (e.g., <https://www.surveymonkey.co.uk/mp/sample-size-calculator/>).

- While selecting the sample size we encourage project teams to also consider the available resources including financial and time. Decision should be taken based on what is feasible or doable while not compromising too much on data accuracy.
- When calculating a sample for Gender Parity score, it is important to interview an **equal number of men and women participants**. We recommend ensuring that your sample of women workers is as representative as possible first (using the guidance above), then matching this number with men participants where possible.

## 2.2. Frequency of data collection

We recommend that data for the Women’s Empowerment indicator is collected annually. However, we appreciate that projects may not have the resources to complete this on an annual basis, in which case they can collect data every two or three years. If this is the case, it should be transparently reflected in the Delta Framework as a limitation of the data.

## 2.3. Sub-indicator weighting

There are three domains in the Women’s Empowerment indicator for large farms:

- Leadership
- Decision-making
- Gender equality in the workplace

Each of the domains has been weighted equally, meaning that each is worth one-third. Adjusting the sub-indicators allows us to maintain this equal weighting, regardless of how many sub-indicators are used to measure a domain.

For example, the Leadership domain has three sub-indicators while the Gender Equality domain has two sub-indicators. By adjusting the Gender Equality domain (giving it 1.5 times the weight), it makes an equal contribution to the overall Women’s Empowerment score as the sum of the three Leadership sub-indicators.

**Women’s Empowerment = Leadership + Decision-Making + Gender Equality in the workplace**

**Leadership 1 + Leadership 2 + Leadership 3**  
**Women’s Empowerment = + Decision-making x 3**  
**+ (Control of economic assets 1 + Control of economic assets 2) x 1.5**



## 2.4. Aggregation

When aggregating data for the Women's Empowerment indicator, there are a few steps for each sub-indicator that need to be followed before inputting data into the analytical framework. This section gives a step-by-step guide for preparing the data for the analytical framework.

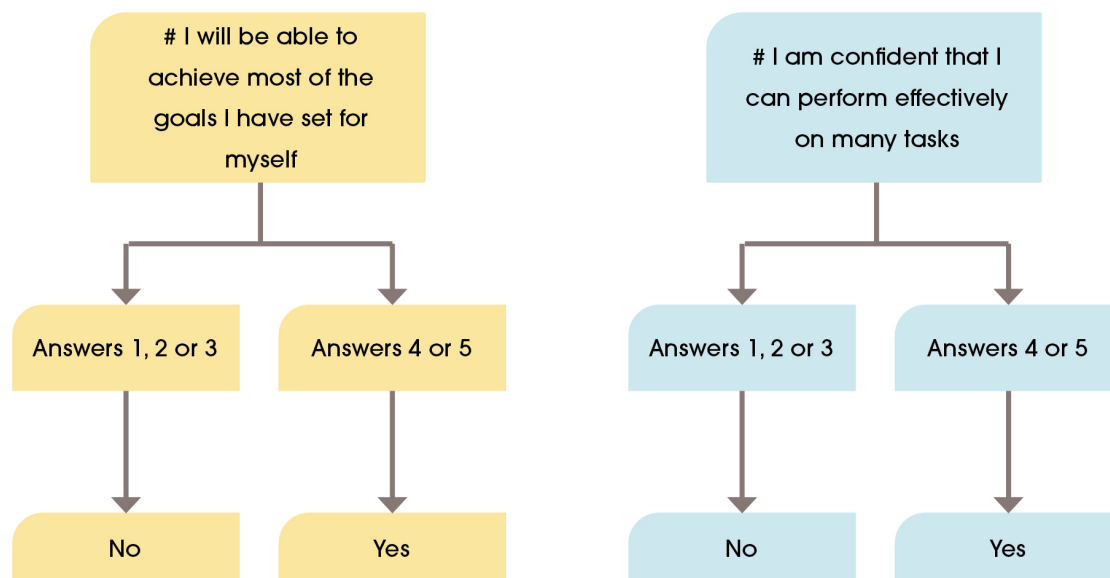
- 1. Aggregation method:** the method for aggregating data for the analytical framework is simple. For the data analyst responsible for data aggregation, the central question is: do these answers indicate that the respondent is empowered or not?

The data aggregation is essentially our way of determining whether the answer to that central question is 'Empowered' or 'Not Empowered'. If the response indicates 'Empowered', we input '1' into the analytical framework, if the response indicates 'Not Empowered', we input '0' into the analytical framework. These scores then allow us to calculate the total empowerment score explained in the 'Weighting' section.

- 2. 'Achievement':** before we can input a score for each indicator, we need to determine which answers indicate women's empowerment or not. For many of the indicators, there is more than one proxy i.e., the respondent will give more than one answer. There is guidance in the framework for how many 'Achievements' are needed for the response to be counted as empowered or not (e.g., marked as 1 or 0).

Generally, the rule for 'Achievement' is over 50% of the statements indicating empowerment. For example, if there are 5 statements for the respondent to agree or disagree with, and agreement can be an indication of empowerment, a respondent would need to agree with at least 3 out of 5 statements for us to count that as 'Empowered' (=1) rather than 'Not Empowered' (=0).

- 3. Inadequacy cut-off:** so how do we know which responses to statements indicate empowerment or not? The Inadequacy cut-off column tells us which answers indicate empowerment (Yes) or not (No). The diagram below gives an example of the process for determining either achievement or inadequacy cut-off in Sub-indicator 1: Self-efficacy.



### 2.4.1 Exercise: data aggregation scenario and quiz

Using the example data below, aggregate the data for Sub-indicator 1: Self-efficacy into the analytical framework formatted blank table.

#### Sample data

Respondent	# I will be able to achieve most of the goals that I have set for myself	# I am confident that I can perform effectively on many tasks
1001	1. Strongly disagree	5. Strongly agree
1002	2. Disagree	3. Neither agree nor disagree
1003	4. Agree	5. Strongly agree
1004	4. Agree	3. Neither agree nor disagree
1005	2. Disagree	2. Disagree

#### Analytical framework

Respondent	Self-efficacy
1001	
1002	
1003	
1004	
1005	

#### Answers

Respondent	Self-efficacy
1001	1
1002	0
1003	1
1004	1
1005	0

## 2.5. Women's Empowerment and Gender Parity scores

The Delta Framework Women's Empowerment indicator is scored on a scale of 0-9. This means that for each respondent, their answers to the various sub-indicators will generate a score that we can use as an indication of their level of empowerment. For ease of reporting and communication, we can consider a scores of 4.5-9 to be indicative of 'empowered' and scores of 0-4.4 to indicate that more could be done to ensure women are empowered. A Women's Empowerment score at farm, regional and country levels can also be calculated using average of women's overall empowerment scores at each of these levels.

Because the questions can be posed to both men and women farmers, we have an opportunity to calculate a Gender Parity score alongside the Women's Empowerment score. This is very simple to calculate, requiring the analyst to take an average of the women's overall empowerment scores and an average of the men's overall empowerment scores. The difference between these two scores is our indication of the level of gender parity. These averages can be calculated at farm, regional and country levels.

## 2.6. Aggregating data from smallholder farms and large farms

While the tools for smallholder and large farm participants will differ, the structure of each indicator remains largely the same. The symmetry between both versions of the Women's Empowerment indicator allows us to easily aggregate the data from both versions into one dataset. We can do this by focussing on the **weighted totals** in the analytical framework.

For smallholder farm participants, their responses will generate weighted totals for the domains of leadership, decision-making, and control of economic assets – each worth three points. For large farm participants, their responses will generate weighted totals for the domains of leadership, decision-making, and gender equality in the workplace – each worth three points.

This means that in both versions, we have three domains, each worth three points and totalling an empowerment score out of 9. For aggregation purposes only, we can use control of economic assets and gender equality in the workplace interchangeably – according to which version of the Women's Empowerment indicator the participants have contributed to.

Here are examples of the analytical frameworks for each version of the Women's Empowerment indicator, alongside a view of the overall aggregated table for both versions. The data in all tables is fabricated and only to exemplify how the analytical framework will be used to aggregate data from the sub-indicators.

### Version 1: Smallholder farmers

Gender	Farmer type	Leadership					Decision-making			Control of economic assets				TOTAL
		Self-efficacy	Communication	Collective action	Total	Weighted total	Decision-making	Total	Weighted total	Asset ownership	Gender equitable attitudes	Total	Weighted total	
Female	Smallholder	1	1	1	3	<b>3</b>	1	1	<b>3</b>	1	1	2	<b>3</b>	<b>9</b>
Male	Smallholder	0	0	1	1	<b>1</b>	0	0	<b>0</b>	1	1	2	<b>3</b>	<b>4</b>
Male	Smallholder	1	0	1	2	<b>2</b>	0	0	<b>0</b>	0	1	1	<b>1.5</b>	<b>3.5</b>
Female	Smallholder	1	1	0	2	<b>2</b>	1	1	<b>3</b>	1	0	1	<b>1.5</b>	<b>6.5</b>

### Version 2: Large farms

Gender	Worker type	Leadership					Decision-making			Gender equality in the workplace				TOTAL
		Self-efficacy	Communication	Collective action	Total	Weighted total	Decision-making	Total	Weighted total	Gender equality policy	Gender equitable attitudes	Total	Weighted total	
Female	Seasonal worker	1	1	1	3	<b>3</b>	1	1	<b>3</b>	1	1	2	<b>3</b>	<b>9</b>
Male	Permanent worker	0	0	1	1	<b>1</b>	0	0	<b>0</b>	1	1	2	<b>3</b>	<b>4</b>
Male	Seasonal worker	1	0	1	2	<b>2</b>	0	0	<b>0</b>	0	1	1	<b>1.5</b>	<b>3.5</b>
Female	Office worker/ business staff	1	1	0	2	<b>2</b>	1	1	<b>3</b>	1	0	1	<b>1.5</b>	<b>6.5</b>

### Overall aggregation

Participant ID	Gender	Age	Worker type	Leadership	Decision-making	Control of economic assets/ Gender equality	Total
1001	Female	35	Seasonal worker	3	3	3	9
1002	Male	24	Permanent worker	1	0	3	4
1003	Male	36	Seasonal worker	2	0	1.5	3.5
1004	Female	18	Office worker/ business staff	2	3	1.5	6.5
1005	Female	35	Smallholder farmer	3	3	3	9
1006	Male	24	Smallholder farmer	1	0	3	4
1007	Male	36	Smallholder farmer	2	0	1.5	3.5
1008	Female	18	Smallholder farmer	2	3	1.5	6.5

Published 2022 by Better Cotton/ Delta Project Team

Better Cotton  
Chemin de Balxert 7-9  
1219 Chatelaine  
Switzerland  
[www.deltaframework.org](http://www.deltaframework.org)

