

Food Security and Gender Equality:

Math behind the 150 million more hungry women than men from [CARE's report](#)

Calculating how many women and how many men are hungry

To calculate the gender gap in food security, we started with the indicator on prevalence of moderate or severe food insecurity in the adult population (15+), as reported on [UN Women's SDG Indicator Dashboard](#). Because this data only covers the sex-disaggregated experiences in the adult population, and it does not provide the ability to estimate the differences between boys and girls under the age of 15, we chose to extrapolate this data to the entire global population to understand what the gap might look like if it also includes boys and girls under the age 15. While the underlying indicator is not built to report on sex-disaggregation in young people's experience of food insecurity, there is no indicator that measures sex-disaggregated experiences of food insecurity under the age of 15. FAO's validated data—all available for download and exploration at [FAO Stat](#)—does not endorse extrapolating data in this way because the [Food Insecurity Experience Scale](#) is **designed to measure sex-disaggregated experiences only in people who are 15 years old or older**.

However, because CARE's work focuses on women *and girls*, we worked to understand the comprehensive picture of food insecurity, understanding that girls under the age of 15 also face significant inequality and many of the same challenges and social norms that adult women face. In a paper designed to explore the gaps and potential insights available in current gender and food datasets, we felt it important to explore the potential implications of this gap in data around girls' experience. Rather than creating a complex set of assumptions with limited theoretical grounding, for the purposes of this estimate, we chose to rely on the simplest possible assumption—that the rates of food insecurity are similar among young people as they are for adults. This **highlights a gap in the data and existing research base** that needs further exploration. The experiences of young men and women are not clearly represented in the current data. This is a clear gap that merits further exploration and research in future years.

1. For the data from 2014 to 2020 we used the [UN Women dashboard](#) on SDG #2.
2. Prevalence of moderate/severe food insecurity among the population (+15 years old).
3. Click on "region", then in every region. Each one has sex-disaggregated data.
4. Used [The World Bank](#) Population data set on total male and female population each year.
5. Go to the row "world" to get the demographics of every year per sex. Keep in mind that the data is divided by sub-regions, therefore you will need to add each one to determine the total population in the region/continent.
6. Multiply the demographics of every sex per year with their designated prevalence. For example, if the female population in 2014 was 45 million, we multiply that (45 million) by the female prevalence of moderate/severe food insecurity, let's say it is 12%. Example, 45 million x 12% = 5.4 million. That means that 5.4 million women in 2014 experienced moderate/severe food security.
7. Then, for 2021 we looked at the [FAO SOFI 2022](#) report on page 19 or xvii.
8. Repeat step 6.

Calculating the gender gap in hunger

1. To calculate how many more women than men are hungry you will need the sex-disaggregated data of the previous steps.

2. Once you have female versus male in every year and/or region you will subtract female versus male. For example, if the 14 women and 8 men have moderate/severe food insecurity in 2015 you will just subtract $14 - 8 = 6$. This means that 6 more women than men were hungry that year.
3. It is unlikely to encounter a case where more males than females are hungry. In case this happens, you can keep using the same subtraction order as in step 2 (female-male), and if you get a negative number that will mean that more males than females were hungry in a given year/region.

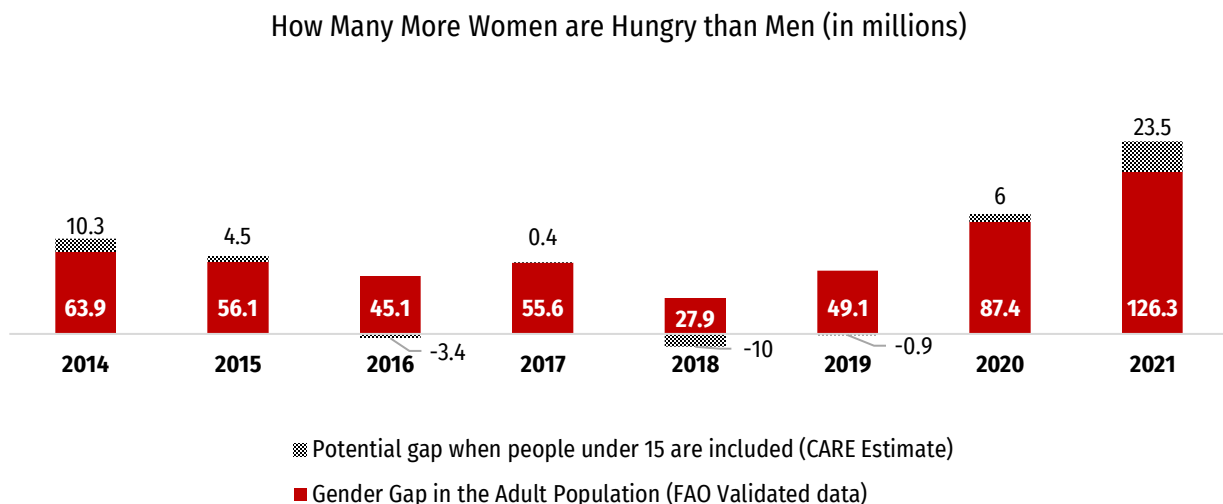
In case you want to do this analysis per region please keep in mind that the UN Women and FAO separates the continents/regions differently. It is also important to note that there is overlap in the downloadable datasets that means the data when you add all regions together is higher than the global data alone. Wherever practical, we used the “world” data. There are also slight discrepancies in the FIES prevalence rates between what appears on the UN Women dashboard and the FAO stat database, which account for some of the imprecision in this data.

Calculating the growth in the number of women who fall in gender gap

- The total gap in 2021/the total gap in 2018 = the magnitude of the increase in women in the gap
- The total gap in 2021 was 149.8 million women
- The total gap in 2018 was 17.9 million women
- $149.8 / 17.9 = 8.37$

If the gap is calculated based on the FAO validated numbers, the 2018 number is 27.9 million women, and in 2021 it is 126.3 million women. Using the same calculation—the number of women in the gap is 4.5 times higher in 3 years. That is still a dramatic increase in the human cost of the gender gap in the prevalence of food insecurity.

Difference between FAO validated data and CARE’s estimates



In the interests of transparency, we are presenting the difference between FAO’s validated numbers and CARE’s estimates based on the methodology in this graph.