**Food and Nutrition Security and Climate Change Resilience**

**Supplementary indicators**

## **Domain 2 - Nutrition**

Important recommendations when incorporating and measuring these supplementary indicators

* All indicators should be collected in a sex + age + economic classification disaggregated way, looking at how we are impacting men and women differently. At the Household level, we should be looking at Male Headed Households and Female Headed Households
* All data should be coming at least at baseline and end line, if not also built into monitoring plans – data weight -should we count this or not? Mention if this would be population or participants based survey other key hints
* Wherever possible, we should be looking at counterfactuals—what is happening for people not in the program (especially at external mid-term and final evaluations)
* Data collection must done at the same season/time of year for allowing relevant diachronic analysis
* Representative sample or census -- Data collection must follow the methodology developed for each indicator
* The CI MEL Group and FNs team will make available to project teams links to required materials (questionnaires, sampling methods and data analysis and interpretation methods) and will carry out required capacity building for practitioners
* Data quality should be at center – use appropriate tools and instruments across
* Unit of measures, direction of desired changes (+ or -)

Gender, governance, environment, resilience, sustainability cost and time per indicator, etc. – should be taken into account adequately

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| FNS&CCR - NUT 1. Wasting – Moderate and severe: Percentage of children aged 0–59 months who are below minus two standard deviations from median weight-for-height (WHZ < -2SD) of the WHO Child Growth Standard |
| **Why this indicator? What will it measure and provide information for?**  Wasting or thinness indicates in most cases a recent and severe process of weight loss, which is often associated with acute starvation and/or severe disease and is strongly correlated with under-5 mortality. However, wasting may also be the result of a chronic unfavorable condition. Provided there is no severe food shortage, the prevalence of wasting is usually below 5%, even in poor countries.  If possible, measurements (height, weight, age) are generally taken at the same time. Hence, data for the stunting indicator (height-for-age) will also be collected. |
| **What Sustainable Development Goal is the indicator connected to?**  SDG 2: “End hunger, achieve food security and improved nutrition, and promote sustainable agriculture  2.1 by 2030 end hunger and ensure access by all people, in particular the poor and people in vulnerable situations including infants, to safe, nutritious and sufficient food all year round. 2.2 by 2030 end all forms of malnutrition, including achieving by 2025 the internationally agreed targets on stunting and wasting in children under five years of age, and address the nutritional needs of adolescent girls, pregnant and lactating women, and older persons”. |
| **Definitions and key terms**  Underweight: weight for age < –2 standard deviations (SD) of the WHO Child Growth Standards median  Stunting: height for age < –2 SD of the WHO Child Growth Standards median Wasting: weight for height < –2 SD of the WHO Child Growth Standards median Overweight: weight for height > +2 SD of the WHO Child Growth Standards median |
| **Data and information required to calculate the indicator**   * Numerator: a) number of children under five under moderate wasting and b) number of children under five under severe wasting * Denominator: Total number of children under 5 surveyed * Disaggregation: geographical area and sex |
| **Suggested method for data collection**   * User Manuals:   + FANTA project (for method): <http://www.fantaproject.org/tools/anthropometry-guide>   + WHO (for interpretation): <http://www.who.int/nutrition/nlis_interpretation_guide.pdf>   + WHO: <http://www.who.int/childgrowth/software/en/>   + WHO: <http://www.who.int/childgrowth/standards/weight_for_length_height/en/>   + UNICEF: [http://data.unicef.org/resources/child-nutrition-interactive-dashboard-2015-](http://data.unicef.org/resources/child-nutrition-interactive-dashboard-2015-edition.html)  [edition.html#](http://data.unicef.org/resources/child-nutrition-interactive-dashboard-2015-edition.html) |
| **Possible data sources**   * Household survey * Local, sub-national, national or regional nutritional surveys * WHO regional or global nutritional data * UNICEF regional and global nutritional data |
| **Resources needed for data collection**  The quantitative and qualitative data collection, storage and analysis will have to be conducted by CARE and partners (potentially including research / university partners). It needs to be included in the monitoring and evaluation plan and budgeted for. |
| **Reporting results for this indicator: number of people for which the change happened**   * Reporting Purpose: Baseline - Progress - Evaluation * The percentage and rate of children under five under moderate or severe wasting |
| **Questions for guiding the analysis and interpretation of data (explaining the how and why the change happened, and how CARE contributed to the change)**   * What is level of wasting amongst children under five year? * What are the underlying causes of the deteriorated nutrition? * How are boys and girls impacted differently?   This indicator provides information about the quality of food provision and of child care practices. |
| **Other considerations**  Focus group discussions can provide qualitative verification, especially in regards to other external factors (insecurity, political instability, disasters, fail crops, diseases outbreak, market’s inflation, etc.) which could have affected food availability, access and utilization or hygiene, sanitation and health conditions. |

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| FNS&CCR - NUT 2. % of children 6–23 months of age who receive a minimum acceptable diet (apart from breast milk) |
| **Why this indicator? What will it measure and provide information for?**  This indicator measures the proportion of children 6-23 months of age who receive a minimum acceptable diet (MAD), apart from breast milk. The “minimum acceptable diet” indicator measures both the minimum feeding frequency and minimum dietary diversity, as appropriate for various age groups. If a child meets the minimum feeding frequency and minimum dietary diversity for their age group and breastfeeding status, then they are considered to receive a minimum acceptable diet.  It is recommended that the indicator be further disaggregated and reported for the following age groups: 6–11 months, 12–17 months and 18–23 months of age, if sample size permits.  This indicator is primarily used for:   * *assessing*: to make national and sub-national comparisons and to describe trends over time; * *targeting*: to identify populations at risk, target interventions, and make policy decisions about resource allocation; * *monitoring and evaluating*: to monitor progress in achieving projects’ goals and to evaluate the impact of interventions; |
| **What Sustainable Development Goal is the indicator connected to?**   * SDG Goal 2.1. * SDG Goal 2.2. |
| **Definitions and key terms**  This indicator measures the proportion of children 6-23 months of age who receive a minimum acceptable diet (MAD), apart from breast milk. |
| **Data and information required to calculate the indicator**   * Numerator: Number of children 6-23 months who receive a minimum acceptable diet * Denominator: Total number of children 6-23 months surveyed |
| **Suggested method for data collection**   * WHO (for method): <http://bit.ly/2a6p18G> * WHO (for definitions): <http://bit.ly/29Ly64V> |
| **Possible data sources**   * Household survey * Demographic and Health Survey (DHS) is implemented every 5 years * WHO regional or global nutritional data * UNICEF regional and global nutritional data |
| **Resources needed for data collection**  The quantitative and qualitative data collection, storage and analysis will have to be conducted by CARE and partners (potentially including research / university partners). It needs to be included in the monitoring and evaluation plan and budgeted for. |
| **Reporting results for this indicator: number of people for which the change happened**   * Reporting Purpose: Baseline Progress Evaluation * A Change in the number/percentage of children 6–23 months who receive a minimum acceptable diet (apart from breast milk) |
| **Questions for guiding the analysis and interpretation of data (explaining the how and why the change happened, and how CARE contributed to the change)**   * Breastfed children 6-23 months of age who had at least the minimum dietary diversity and the minimum meal frequency during the previous day? * Breastfed children 6-23 months of age? * Non-breastfed children 6-23 months of age who received at least 2 milk feedings and had at least the minimum dietary diversity not including milk feeds and the minimum meal frequency during the previous day? * Non-breastfed children 6-23 months of age? |
| **Other considerations**   * Focus group discussions can provide qualitative verification, especially in regards to other external factors (insecurity, political instability, disasters, fail crops, diseases outbreak, market’s inflation, etc.) which could have affected food availability, access and utilization or hygiene, sanitation and health conditions. * DHS surveys are not conducted annually in any specific country, so data may not be available at the optimal intervals for evaluation. |

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| FNS&CCR - NUT 3: % of women (15-49 years) who consume at least 5 out of 10 defined food groups (Minimum Dietary Diversity – Women) |
| **Why this indicator? What will it measure and provide information for?**  MDD-W is outcome focused and is promoted by USAID and FAO. It focuses on dietary diversity and quality. Lack of dietary diversity has been shown to be a crucial issue, particularly in the developing world where diets consist mainly of starchy staples with less access to nutrient-rich sources of food such as animal protein, fruits and vegetables. Women and children are particularly vulnerable to ill effects.  This indicator tracks dietary diversity, a vital element of diet quality, by measuring the consumption of a variety of foods across and within food groups, and across different varieties of specific foods, to ensure adequate intake of essential nutrients and important non-nutrient factors. Research has demonstrated a strong association between dietary diversity and diet quality, and nutritional status of children.  This indicator complements the “Minimum Dietary Diversity” (MDD) indicator previously defined for infants and young children; see: WHO. 2008. Indicators for assessing infant and young child feeding Indicator should be linked to other household dietary diversity scores (HDDS) and can be used as a proxy to describe women’s diet quality (micronutrient adequacy) at national and sub-national levels. |
| **What Sustainable Development Goal is the indicator connected to?**   * SDG Goal 2.1 |
| **Definitions and key terms**  MDD-W is the acronym for “**Minimum Dietary Diversity**-**Women**.” MDD-W is a dichotomous indicator of whether or not **women** 15-49 years of age have consumed at least five out of ten **defined** food groups the previous day or night. |
| **Data and information required to calculate the indicator**   * Numerator: Number of surveyed women 15-49 years of age have consumed at least five out of ten defined food groups the previous day or night * Denominator: Total number of children 6-23 months surveyed |

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| **Suggested method for data collection**   * FAO (for method): <http://www.fao.org/3/a-i5486e.pdf> * WHO (for definition): <http://whqlibdoc.who.int/publications/2008/9789241596664_eng.pdf> |
| **Possible data sources**   * Household survey * Demographic and Health Survey (DHS) is implemented every 5 years * WHO regional or global nutritional data * UNICEF regional and global nutritional data |
| **Resources needed for data collection**  The quantitative and qualitative data collection, storage and analysis will have to be conducted by CARE and partners (potentially including research / university partners). It needs to be included in the monitoring and evaluation plan and budgeted for. |
| **Reporting results for this indicator: number of people for which the change happened**   * Reporting Purpose: - Baseline - Progress - Evaluation * Changes in the quality of the diet of women 15-49 years of age |
| **Questions for guiding the analysis and interpretation of data (explaining the how and why the change happened, and how CARE contributed to the change)**   * Numerator: What is the number of women (15-49 years) leaving in the project area who consume at least 5 out of 10 defined food groups? * Denominator: what is the number of women (15-49 years) leaving in the project area? * This indicator can help assess progress (success or failure) against food diversity activities targeting specifically women 15-49 years of age. |
| **Other considerations**   * Focus group discussions can provide qualitative verification, especially in regards to other external factors (insecurity, political instability, disasters, fail crops, diseases outbreak, market’s inflation, etc.) which could have affected food availability, access and utilization or hygiene, sanitation and health conditions. * The data collection for this indicator should be carried out at the same period of the year considering the food access and availability seasonality in low income and developing countries which can compromise data quality. |

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| FNS&CCR - NUT 4. Percentage of women of reproductive age (15-49 years) with anemia and % children 6-23 months/ 6-59 months with anemia |
| **Why this indicator? What will it measure and provide information for?**  Anemia is associated with increased morbidity and mortality for children and women, and reduced work output among adults. Micronutrient deficiencies are especially devastating to pregnant women and children, as deficiencies during the first 1000 days can have lifelong effects on physical, mental, and emotional development. Anemia is a multi- factorial disorder caused mainly by iron deficiency and infections and to a lesser extent by deficiencies of vitamin A, vitamin B12, folate, and riboflavin. It is estimated that half the cases of anemia are due to iron deficiency. Anemia in women of reproductive age serves as a proxy for micronutrient deficiencies in the absence of more comprehensive indicators. |
| **What Sustainable Development Goal is the indicator connected to?**   * SDG Goal 2.1. * SDG Goal and 2.2. |
| **Definitions and key terms**  Anemia, according to the WHO, is a condition in which the number of red blood cells or their oxygen- carrying capacity is insufficient to meet physiologic needs, which vary by age, sex, altitude, smoking, and pregnancy status. |
| **Data and information required to calculate the indicator**   * Numerator: Numbers of women of reproductive age (15-49 years) with anemia / number of children (boys and girls) of children 6-23 months/6-59 months with anemia * Denominator: Total number of surveyed women of reproductive age (15-49 years) / Total number of surveyed children 6-23 months/6-59 months |
| **Suggested method for data collection**   * WHO: <http://bit.ly/29NlVEN> * WHO: <http://www.who.int/vmnis/indicators/haemoglobin.pdf> |
| **Possible data sources**   * Household survey * Data from clinics/health centers * Demographic and Health Survey (DHS) is implemented every 5 years |
| **Resources needed for data collection**  The quantitative and qualitative data collection, storage and analysis will have to be conducted by CARE and partners (potentially including research / university partners). It needs to be included in the monitoring and evaluation plan and budgeted for. |
| **Reporting results for this indicator: number of people for which the change happened**   * Reporting Purpose: Baseline - Progress - Evaluation * Changes in percentage of anemia amongst women of reproductive age and children of 6-23 months/6-59 months |
| **Questions for guiding the analysis and interpretation of data (explaining the how and why the change happened, and how CARE contributed to the change)**   * Denominator: What is the number of women (15-49 years) and children 96-23 months & 6-59 months) leaving in the project area? * Numerator: What is the number of women (15-49 years) and children 96-23 months & 6-59 months) leaving in the project area diagnosed with anemia? * This indicator can help assess progress (success or failure) against nutrition activities targeting specifically women of reproductive (15-49 years) and children of children 6-23 months/6-59 months |
| **Other considerations**   * Focus group discussions can provide qualitative verification, especially in regards to other external factors (insecurity, political instability, disasters, fail crops, diseases outbreak, market’s inflation, etc.) which could have affected food availability, access and utilization or hygiene, sanitation and health conditions. * The data collection for this indicator should be carried out at the same period of the year considering the food access and availability seasonality in low income and developing countries that may influence the prevalence of anemia amongst the targeted populations. |

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| FNS&CCR - NUT 5. Exclusive breastfeeding under 6 months: % of infants 0–5 months of age fed exclusively with breast milk |
| **Why this indicator? What will it measure and provide information for?**  Breastfed children have at least a six-times greater chance of survival in the early months than non- breastfed children. An exclusively breastfed child is 14 times less likely to die in the first six months of life than a non-breastfed child, and breastfeeding drastically reduces deaths from acute respiratory infection and diarrhea, two major child killers.  The potential impact of optimal breastfeeding practices is especially important in developing country situations with a high burden of disease and low access to clean water and sanitation. Exclusive breastfeeding also has a protective effect against obesity and certain non-communicable diseases later in life.  It is recommended that the indicator be further disaggregated and reported for the following age-groups: 0–1 month, 2–3 months, 4–5? months and 0–3 months. |
| **What Sustainable Development Goal is the indicator connected to?**   * SDG Goal 2.1. * SDG Goal 2.2. |
| **Definitions and key terms**  **Exclusive breastfeeding:** is defined as no other food or drink, not even water, except breast milk (including milk expressed or from a wet nurse) for 6 months of life, but allows the infant to receive ORS, drops and syrups (vitamins, minerals and medicines). |
| **Data and information required to calculate the indicator**   * Numerator: infants (girls and boys) 0-5+wk?? months of age who received only breast milk during the previous day * Denominator: infants 0-5+wk?? months of age |
| **Suggested method for data collection**   * WHO (for method): <http://bit.ly/2a6p18G> * WHO (for definitions): <http://bit.ly/2a6p18G> |
| **Possible data sources**   * Household survey * Nutrition centers * Demographic and Health Survey (DHS) is implemented every 5 years |
| **Resources needed for data collection**  The quantitative and qualitative data collection, storage and analysis will have to be conducted by CARE and partners (potentially including research / university partners). It needs to be included in the monitoring and evaluation plan and budgeted for. |
| **Reporting results for this indicator: number of people for which the change happened**   * Reporting Purpose: Baseline Progress Evaluation * A change in the number/percentage of children (girls and boys) who are exclusively breastfed. |
| **Questions for guiding the analysis and interpretation of data (explaining the how and why the change happened, and how CARE contributed to the change)**   * What is the total number of children (girls and boys) under 5 months leaving the project area? * What is the total number of these children (girls and boys) who are exclusively breastfed? * This indicator provides a measure of changes in children under 6 months exclusive breastfeeding and contributes to documenting the success of failure of the actions taken to improve the adoption of children under 6 months best feeding practices and more broadly best children care practices |
| **Other considerations**   * Focus group discussions can provide qualitative verification, especially in regards to other external factors (insecurity, political instability, disasters, fail crops, diseases outbreak, market’s inflation, etc.) which could have affected food availability, access and utilization or hygiene, sanitation and health conditions. * The data collection for this indicator should be carried out at the same period of the year considering the food access and availability seasonality in low income and developing countries that may influence the breastfeeding women nutrition status and ability to exclusively breastfeed their child. |

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| FNS&CCR - NUT 6. Mid-Upper Arm Circumference (MUAC) for children 5-59 months and women of reproductive age 15-49 |
| **Why this indicator? What will it measure and provide information for?**  The MUAC is usually used by humanitarian health workers to screen and assess for acute malnutrition among children (5-59 months) and women of reproductive age (15-49 years).  At the individual level, MUAC can be used to initially screen individuals for admission to selective feeding programs or therapeutic nutrition care. For pregnant women of any age BMI is an inadequate nutritional index and MUAC is recommended. At the population level, it is recommended that MUAC information is collected in nutrition surveys for use in program planning, but that MUAC should not be used as the single measure in anthropometric surveys. Research is underway to determine appropriateness of using MUAC to estimate population level nutrition status.  Excerpt from HTP, module 6: MUAC has been successfully used with low-skilled staff given training and supervisory support, and is especially suitable for use in the community. It does not require heavy material and can be used with a single cut-off for boys and girls. It is increasingly being incorporated into guidelines for the treatment of severe and moderate malnutrition. However, there are drawbacks to using MUAC in emergencies. The chance of inaccurate measurement is high due to differing techniques, and there is limited evidence documenting ethnic differences in MUAC measurements. |
| **What Sustainable Development Goal is the indicator connected to?**   * No SDG indicator |
| **Definitions and key terms**  **Mid-Upper Arm Circumference (MUAC)** is the **circumference** of the **left upper arm**, measured at the **mid**- point between the tip of the **shoulder** and the tip of the elbow (olecranon process and the acromium). |
| **Data and information required to calculate the indicator**   * Numerator: children 5-59 months and women of reproductive age 15-49 years with diagnosed severe and moderate malnutrition * Denominator: children 5-59 months and women of reproductive age 15-49 years surveyed |
| **Suggested method for data collection**   * FANTA Project (for method): <http://bit.ly/2abA2IC> * WHO (for definition & method): <http://bit.ly/2a0TLIY> * UN SCN (for method): <http://www.unscn.org/en/gnc_htp/modul.php?modID=27> |
| **Possible data sources**   * Household survey * Nutrition/health centers * Demographic and Health Survey (DHS) is implemented every 5 years |
| **Resources needed for data collection**  The quantitative and qualitative data collection, storage and analysis will have to be conducted by CARE and partners (potentially including research / university partners). It needs to be included in the monitoring and evaluation plan and budgeted for. |
| **Reporting results for this indicator: number of people for which the change happened**   * Reporting Purpose: Baseline - Progress - Evaluation * A change in the number/percentage of children (girls and boys) and women of reproductive age suffering from acute malnutrition |
| **Questions for guiding the analysis and interpretation of data (explaining the how and why the change happened, and how CARE contributed to the change)**  This indicator provides a measure of changes in acute malnutrition amongst children 5-59 months and women of reproductive age 15-49 years and contributes to documenting the success of failure of the actions taken to improve children under five and women or reproductive health nutrition status. |
| **Other considerations**   * MUAC is not the best index for use in nutrition assessment surveys as it does not for example tell if children are chronically malnourished, and as in some areas, chronic malnutrition may be more important than acute malnutrition; this methodology may represent an important limit to the study carried out. Therefore, it is highly suggested to use (when possible) the weight-for-height tool for measuring acute malnutrition instead of the MUAC. |