

Gap analysis to inform transfer values of CBT operations



World Food Programme

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I. About this guidance

This guidance is intended for analysts tasked with undertaking a gap analysis. Its main objective is to guide the analyst through the information and the steps that are needed to conduct a gap analysis. While the guidance provides some reflections on how a gap analysis can inform transfer values for Cash-Based Transfer (CBT) operations, this topic is addressed more systematically in WFP's guidance note on [Setting the Transfer Value for CBT Operations](#).

II. What is a gap analysis?

A gap analysis aims at measuring the distance between the cost of households' essential needs and their economic capacity to autonomously cover those costs. Such analysis goes beyond the identification of the share of the population who does not have the economic capacity to meet their essential needs, captured by the Economic Capacity to Meet Essential Need ([ECMEN](#)) indicator, and reveals the depth of deprivation among groups of vulnerable households.

In practice, a gap analysis consists of estimating the average distance between the cost of essential needs and the economic capacity of targeted vulnerable households whose economic capacity is not enough to cover the cost of essential needs, by subtracting the latter from the former:

$$\text{Gap} = \text{Cost of Essential Needs} - \text{Household Economic Capacity}$$

Depending on the data and information available, there are different ways of estimating the gap, outlined in the remainder of this document.

III. What is a gap analysis used for?

A gap analysis is a good practice when setting a transfer value for CBT operations¹. Indeed, a gap analysis allows to estimate the average amount of monetary resources needed to lift the economic capacity of the targeted population to the level of the cost of essential needs, providing critical insights for setting an appropriate transfer value.

However, the gap identified through a gap analysis might not always correspond to the final transfer value established for a CBT programme. While the gap analysis is a tool to help guide such decision, the choice of a transfer value will reflect also programmatic considerations such as programme objectives, beneficiary preferences, funding, donor requirements, and harmonization with interventions of governments and partners. For more details on the additional programme considerations that drive transfer value decisions, see WFP's guidance note on [Setting the Transfer Value for CBT Operations](#).

¹ This guidance focuses on informing transfer values for General Food Assistance (GFA) and Unconditional Resource Transfers (URT) CBT operations. Transfer values for conditional programming such as Food Assistance for Assets, Food Assistance for Training, or Nutrition and School-based programmes might require different analyses. Please consult respective programmatic guidance and/or ask global.cbtsupport@wfp.org for specific advice.

IV. What information is needed?

A gap analysis should be based on representative survey data including a detailed expenditure module, whenever possible. Household expenditure data can be derived from WFP's assessments such as Essential Needs Assessments (ENA), Emergency Food Security Assessments (EFSA), and Comprehensive Food Security & Vulnerability Analyses (CFSVA). However, when relevant to the population of interest, external surveys can be used such as Household Consumption and Expenditure Surveys (HCES), Household Budget Surveys (HBS), or Living Standards Measurement Surveys (LSMS)².

When the analyst cannot rely on household survey data, the gap can still be estimated using alternative sources of information. The rest of the document will present the steps and the information requirements under the ideal scenario in which the gap analysis is conducted based on representative household survey data. However, alternatives are presented to address situations in which such survey data are not available.

V. How to conduct a gap analysis?

In general, a gap analysis is composed of four steps:

- Identifying the cost of essential needs;
- Computing the household economic capacity;
- Identifying the gap analysis cohort;
- Estimating the gap.

This section describes these steps in detail. The order in which the steps are presented is the one recommended when the gap analysis is conducted based on household survey data. However, when the gap analysis is conducted based on secondary data sources, the identification of the gap analysis cohort should be the first step (while the order of the remaining steps remains unchanged).

An example of a syntax to conduct a gap analysis based on survey data including an expenditure module can be [found here](#).

Step 1: Identifying the cost of essential needs

Identifying the cost of essential needs is the first step of a gap analysis. The cost of essential needs is the average monetary value that households need to cover their essential needs without resorting to negative coping strategies or compromising essential livelihood assets, in the context of interest.

Usually, this monetary value is represented by a Minimum Expenditure Basket (MEB)³, expressed in monthly terms.

There are two main ways in which the MEB can be identified:

- 1) Using an existing MEB that has been identified as appropriate for the population of interest, that reflects recent costs for the relevant point in time, and that is considered robust from a

² These types of surveys can usually be found and accessed through the [World Bank Microdata Library](#), the [International Household Survey Network \(IHSN\)](#), or the websites of national statistical offices.

³ More detailed information on the MEB and how to estimate it is available in WFP's [MEB guidance note](#).

methodological point of view. In addition to requiring a more limited analytical effort, this option is particularly preferred when an existing MEB has been already accepted and agreed upon by humanitarian partners in a given context.

- 2) Calculating a MEB using the same expenditure data that are used to estimate households' economic capacity. An advantage of this option is that it reduces the risk of biases implied by using different sources of data to calculate the MEB and households' economic capacity. When this option is chosen, it is still recommended that a hybrid approach is taken, as described in WFP's [MEB guidance note](#).

Different MEBs might exist (or could be established) for different population groups. For example, MEBs could differ across rural and urban areas, administrative regions, or different household sizes.

In particular, relying on MEBs differentiated by household size or by category of household sizes (e.g. small, medium, and large) is fundamental to take into account economies of scale. While the needs of a household grow with each additional member, this increase in needs is not always proportional to the increase in household size. This is because some goods consumed within a household are shared among household members: housing space and electricity expenses for instance are not necessarily three times bigger for a household with three members than for a single-person household. Chapter 7 of the MEB guidance note discusses the topic in more detail and presents different approaches to adjust the MEB by household size.

If the gap analysis needs to inform a CBT programme that will implement transfer values differentiated by household size, choosing a MEB differentiated by household size becomes particularly important. If a MEB directly proportional to household size, thus not accounting for economies of scale, is used in a context with large economies of scale, the resulting MEB will underestimate the needs of small households and overestimate the needs of large households. This will lead to biased gaps, with inadequate transfer values for small households and excessive transfer values for larger households.

Once the appropriate MEB(s) have been identified, it is important that the correct MEB is applied for each household in the following steps of the gap analysis. In addition, it is recommended that MEBs are expressed in per capita monthly terms, in order to be able to proceed with the next steps of the analysis.

Whenever a MEB is not available, the analyst can use the best proxy of the cost of essential needs available, such as a poverty line, always expressed in per capita monthly terms. In the rest of the document, the term "MEB" will be used to refer to the more general concept of "cost of essential needs", bearing in mind that all considerations related to the MEB still apply when the analyst is using a different proxy for the cost of meeting essential needs.

Step 2: Computing the household economic capacity

The second second step is to compute the household economic capacity aggregate for each household. Household expenditure data on food and non-food items from a recent survey representative of the population of interest are the preferred source of information to operationalize the concept of economic capacity and conduct a gap analysis. This is because a) consumption expenditures are considered a more accurate proxy of welfare than income in low-income countries and among poorer populations; and b) WFP's surveys usually include detailed expenditure modules to estimate the ECMEN and/or Food Expenditure Share (FES) indicators.

The computation of the household economic capacity should follow the methodology used for the ECMEN indicator (version excluding assistance)⁴. In general terms, consumption expenditures based on households' economic capacity are used to calculate the aggregate. This means that, for each household, the aggregation should sum the expenditures on all recurrent and regular food and non-food consumption items made in cash or credit, as well as the estimated value of food consumption from own production. It is important to remember that expenditures made for investments, business inputs, and transfers to other households should not be part of the aggregate.

Additionally, the value of cash assistance received from WFP and partner humanitarian organizations should be deducted from the household economic capacity aggregate of each household. Note that, based on the ECMEN methodology, only the share of the received cash assistance that households use for consumption (as opposed to other uses such as investments, purchase of business inputs, transfer to other households), should be deducted. The objective of this deduction is to remove the part of household consumption done thanks to the cash assistance from the household economic capacity aggregate. The detailed steps to compute the household economic capacity based on WFP's standard expenditure module are included in the WFP's [ECMEN guide](#).

When calculating the household economic capacity, it is important to ensure that it is comparable to the previously identified MEB. For this reason, and to facilitate the next steps of the gap analysis, it is advised to express the both the MEB and the household economic capacity aggregate in monthly per capita terms. In addition, the MEB and the economic capacity aggregate need to refer to the same timeframe, for example both the MEB and the economic capacity aggregate need to refer to the same dates, such as the months and year when the survey used for the analysis was conducted. If, for example, the MEB was established some months before the time in which data on household economic capacity was collected, the analyst must make sure to express the value of the MEB with the prices at the time of the data collection. This can be done using price monitoring data (if they are available available and if the MEB has an explicit item composition), or inflating the MEB value using a consumer price index.

Box 1 below presents different scenarios for calculating the household economic capacity when a household survey with expenditure data is not available.

Box 1: Computing household economic capacity when a household survey with expenditure data is not available

When a recent household survey with expenditure data is not available for the relevant population of interest, different scenarios can be outlined.

Scenario 1 - A recent household survey is available for the population of interest, but the survey does not include expenditure data.

Check if the survey includes an income module. If the income module is complete and of good quality given the context, it is possible to use income per capita to approximate the per capita household economic capacity. Sometimes income modules might not be detailed enough to provide a reasonable approximation of household economic capacity. Examples include: a) modules that only include questions about the income of the head of the household or that only refer to the "main" income source of the household, in contexts where households typically rely on multiple income sources; b) modules that fail to adequately capture income from own-businesses including agricultural activities, especially

⁴ See the [ECMEN guide](#) in the [ECMEN page of the VAM resource centre](#).

when these form of livelihoods are important for the population of interest. In this regard, it should be noted that income from businesses should reflect the net profit and not the simple revenues of the activities.

All income sources representing household economic capacity must be included in the aggregate, whereas the value of in-kind and cash assistance received from the humanitarian sector (income modules often include received assistance as a source of income) should not be included, as it does not represent household economic capacity.

Scenario 2 – A survey including expenditure data is available for the population of interest, but it is outdated.

It might be possible to update the economic capacity of households to reflect the most recent economic conditions by applying assumptions and/or models to the available survey. These models can go from simple assumptions regarding household expenditures based on macroeconomic trends (such as GDP growth) to more sophisticated models. Specific attention needs to be given to the impact of any shocks that occurred during the uncovered period. In any case, this requires substantial technical expertise. This approach is feasible only if the data is not too old (preferably not older than three years and in no case older than five years). This approach could also be applied to an outdated survey including an income module, following the considerations outlined in Scenario 1 above.

Scenario 3 – Survey data is not available and/or accessible

Updated secondary information might be used to approximate the household economic capacity of the population of interest. National statistical offices might publish aggregated information on income or expenditure distribution, or similar information might be available from ad-hoc studies conducted by academia or partner organizations. For example, these could include studies conducted using the Household Economy Approach.

Step 3: Identifying the gap analysis cohort

The third step is to select the population of interest - i.e. the gap analysis cohort - for which the economic capacity of households should be compared against the MEB to calculate the gap. The gap analysis cohort should ideally represent the vulnerable households that are meant to be reached by assistance. Hence, before starting a gap analysis there should be a certain level of clarity regarding the target population of the CBT programme. If needed, multiple gaps can be estimated for multiple gap analysis cohorts.

After checking that the survey data used for the analysis include households similar to the ones meant to be reached by assistance, the gap analysis cohort is identified by selecting one or more relevant indicators (and relevant categories for each indicator) that identify those households. The vulnerability status based on ENA or the food security status based on the CARI are common vulnerability frameworks used to identify the gap analysis cohort, with relevant categories being for example “highly and extremely vulnerable households” or “food insecure households”. A common gap analysis cohort is also represented by all households with economic capacity below the MEB.

The programme for which the transfer value needs to be set influences the gap analysis cohort, and the indicators and categories selected for this purpose. For example, if we are conducting a gap analysis to inform the transfer value for a programme that aims to reach “the most deprived” among a population, the gap analysis cohort could be defined as those households in the lowest quintiles of the per capita expenditure distribution. Similarly, if a programme targets the severely food insecure population, the gap analysis cohort could be formed by the set of households identified as severely food insecure using the CARI console. The criteria and indicators used to define the gap analysis cohort should be adapted to the context and objective of the analysis. At this stage, it is always recommended to coordinate this decision with Programme colleagues.

If the CBT Programme for which the gap analysis is being conducted has an already-established targeting method, it is also important to align the choice of the gap analysis cohort to it as much as possible. This is particularly the case if the targeting system is based on a data-driven approach⁵. If so, it is recommended that the gap analysis cohort is defined using the same vulnerability framework (i.e. outcome indicator or combination of outcome indicators) used to define the targeting method (e.g. scorecard or proxy means testing).

The gap analysis group should always include only households whose economic capacity is below the MEB. This implies that the MEB is identified before undertaking this step. The population group targeted by a CBT operation might include households whose economic capacity is equal or above the cost of meeting essential needs. However, when estimating the gap for a certain population group, these households need to be excluded from the gap analysis cohort. In other words, the gap analysis is estimated on the subset of households whose economic capacity is below the MEB within the population of interest.

If the gap analysis is conducted based on secondary aggregate information, the identification of the cohort implies the use of secondary data that best reflects the situation of the targeted population group.

Box 2: Dividing the gap analysis cohort into further groups to inform differentiated transfer values

Even though a CBT programme might target a general population group such as the “highly vulnerable” or the “food insecure”, sometimes programmes aim at setting differentiated transfer values for specific groups of households within the target group. This usually comes from the recognition that households within the same target group might face different conditions and thus require different levels of assistance. A common example is when different transfer values are set for different regions within a country. Another common example is when CBT programmes aim to distribute different transfer values according to the size of households.

The standard procedure for the gap analysis can be easily applied also in the cases outlined above. In practice, it is possible to break the gap analysis group into sub-groups (e.g., by household size or region of residence) and repeat the calculation of the gap – as presented in the next section - for each sub-group. A prerequisite for disaggregation is that the sample size is sufficiently large for each sub-group.

⁵ See WFP’s [Targeting and prioritization Operational Guidance Note](#) for more details on targeting approaches and methods

Step 4: Estimating the gap

The last step is calculating the gap as the distance between the MEB and the household economic capacity of the gap analysis cohort(s), by subtracting the latter from the former⁶:

$$Gap = MEB - Household Economic Capacity$$

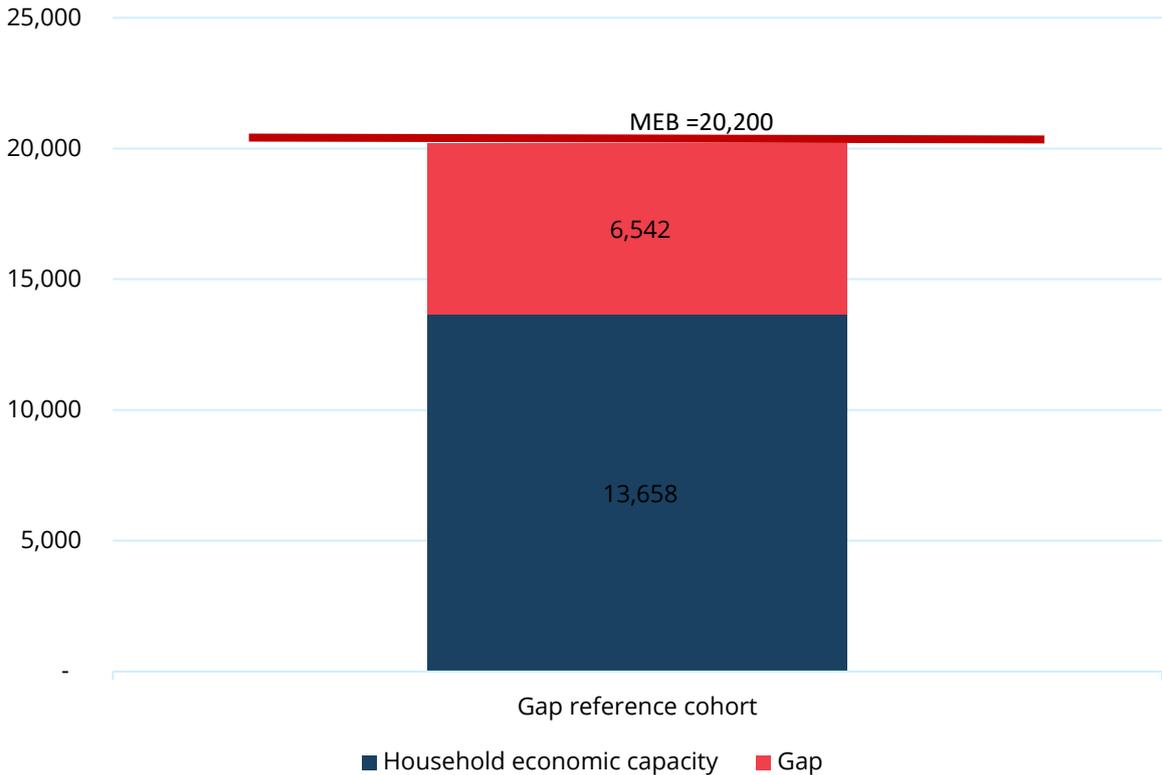


Figure 1: The MEB, household economic capacity, and gap for the gap analysis cohort

As an additional step, the average gap can be expressed as a share of the MEB⁷:

$$Gap\ as\ \% \ MEB = (Gap / MEB) * 100$$

Compared to expressing the gap as a monetary value, such a way of expressing the gap is very effective to convey the level of deprivation experienced by the gap analysis cohort, and it is a useful monitoring tool, allowing the comparison of the gap across countries and over time.

Last, the per capita gap might need to be expressed as a household level gap. There are different ways to address this step, depending on whether and to what extent the transfer value needs to be different by

⁶ Formally, the gap can be expressed as $Gap = \frac{1}{N} \sum_1^N (MEB_i - HEC_i)$. Where N is the number of households in the gap analysis cohort, MEB_i is the Cost of Essential Needs faced by each household i in the gap analysis cohort, and HEC_i is the household economic capacity of each household i in the gap analysis cohort.

⁷ If the MEB value per capita is not unique, for example if the MEB is adjusted by household size, or if there are a different MEBs for different population sub-groups, then the equation needs to be applied separately for each MEB. Otherwise, it is possible to calculate the (weighted) average gap over the (weighted) average MEB.

household size. There are three main cases that depend on the design and implementation arrangements of a programme:

1. The program will rely on a single transfer value. In this case, a unique transfer value considering an average household is set. Thus, the analyst can calculate the gap for the average household by multiplying the per capita gap by the average household size.
2. The program will rely on different transfer values for classes of homogeneous household size. For instance, there could be three transfer values, for small, medium and large households. In this case, three household-level gaps can be calculated, one for each class, by multiplying the per capita gap of each class by the average household size that represents each class. As an example, for the class of small households with size one to three, one might multiply the per capita gap by two.
3. The program will implement a different transfer value for each household size. In this case, it will be sufficient to multiply the per capita gap by household size.

When a programme provides transfer values differentiated by household size, it is highly recommended to make sure that economies of scale are taken into account in the MEB, as discussed under Step 1. The analysis of economies of scale in the data, as discussed in chapter 7 of WFP’s MEB Guidance Note, can also provide useful information to guide the decision on how and to what extent transfer values should be different by household size.

Box 3: Gap analysis with and without assistance

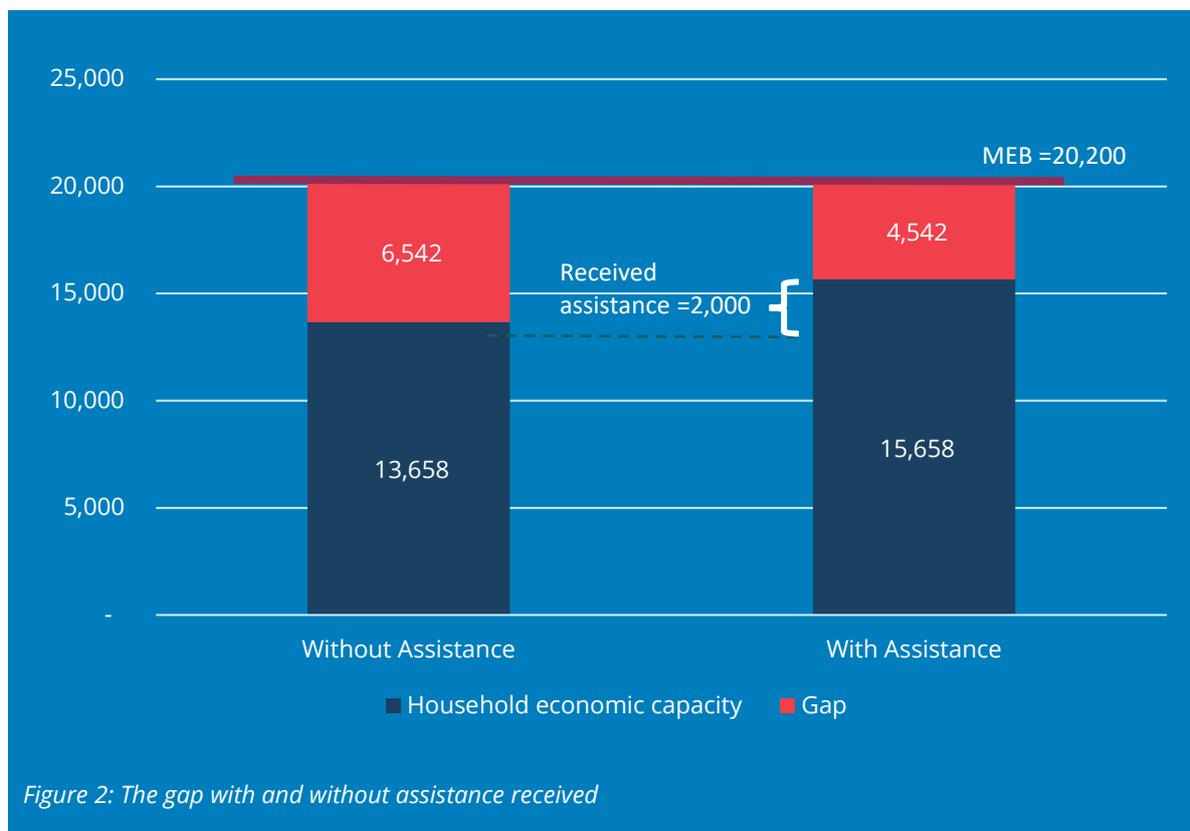
When using consumption expenditure data to estimate household economic capacity, the value of consumption from in-kind assistance and in-kind gifts is normally excluded since that consumption does not represent households’ economic capacity. In addition, the value of received cash assistance from the humanitarian sector is normally deducted⁸. In this way, the gap can be calculated by simulating a scenario in which households have not received assistance, thus reflecting the full amount of monetary resources that households require to meet their essential needs.

However, in some cases, it might be useful to calculate the gap using a version of the household economic capacity “including assistance”⁹. The comparison between the gaps obtained using the two versions of household economic capacity can show how much of the gap is already covered by WFP’s or other actors’ assistance. As such, it could be a useful tool for advocacy and fundraising purposes (see Figure 2).

In addition, estimating the gap “including assistance” can be useful to coordinate effectively with other cash actors, for example when the gap analysis is being conducted to inform the value of a possible top-up to the transfer value already being provided by partners.

⁸ This way of computing household economic capacity is that used for the version of ECMEN “excluding assistance”, used for WFP assessments. See WFP’s [ECMEN guide](#).

⁹ This way of computing household economic capacity is used for the version of ECMEN “including assistance”, normally used for WFP monitoring. For details on how to compute this version of household economic capacity see Box 2 in WFP’s [ECMEN guide](#).



VI. What if you need to estimate a food gap?

WFP's recommended practice for setting transfer values is that they should be informed by a gap analysis that considers all essential needs (including food and non-food). This is based on the consideration that essential needs are interlinked and a holistic approach is needed to achieve the food security of assisted households.

However, sometimes donors or partners request to estimate a gap specific to food needs, or food gap. This is often the case when there is an attempt to set transfer values that are meant to strictly cover food needs. Another common case is when resources are not available to cover the entire gap and so it is decided to cover only part of it. Still another case is when, working with other partners, WFP is requested to cover only the food part of people's needs (with the rest of the gap being covered by partners).

While it is technically possible to estimate this reduced gap, it should be considered that, with a transfer value based on the food gap, it will be less likely that people meet their food needs in the absence of further assistance, as households with limited resources constantly have to prioritize competing needs. When requested to estimate a food gap, it is recommended to always calculate both the full gap and the food gap. This will provide a more comprehensive picture and help to make informed decisions.

The food gap can be defined as the average distance between the food component of the MEB (i.e. the cost of essential food needs) and the food component of the household economic capacity (i.e. the part of household economic capacity used for food).

Food Gap = Food MEB – Household Economic Capacity used for food

The food gap can be estimated in different ways depending on data availability. Remember to always estimate and report on the full gap, before estimating the food gap.

Estimating the food gap when data on food expenditures is available

When data on food expenditures is available, the food gap can be directly estimated as the average difference between the cost of essential food needs and the household economic capacity used for food.

The cost of essential food needs is usually represented by the food component of the MEB. If a MEB is not available, the cost of essential food needs could be approximated by national food poverty lines or the Cost of the Diet.

The food part of the household economic capacity is estimated by aggregating expenditures as per the ECMEN methodology, but considering only consumption expenditures related to food. In addition, only the part of received cash assistance that is likely used for food consumption should be deducted from the aggregate¹⁰.

Finally, when calculating the food gap, the gap analysis cohort must include only households in the target group whose economic capacity used for food is lower than the cost of essential food needs.

Estimating the food gap when data on food expenditures is not available

When food expenditure data are not available, the method outlined above is not applicable. For example, this is the case when the gap analysis is being conducted using income or using secondary aggregate data on expenditures.

In these cases, the food gap can be estimated as a percentage of the total gap. Therefore, unmet food needs are defined in relation to the totality of households' essential needs.

Which percentage should be applied to the gap to derive the food gap? This decision will always need to rely on assumptions regarding the proportion of unmet needs that is represented by unmet food needs. For example, it is recommended to use the share between the cost of food essential needs and the cost of total essential needs. When a MEB is available, this share is equal to the ratio between the food component of the MEB and the MEB. Then the food gap can be expressed as:

$$\text{Food Gap} = \text{Gap} * (\text{Food MEB}/\text{MEB})$$

The same approach can be used with poverty lines if, in addition to the poverty line, a food (or extreme) poverty line is also available. If this disaggregation is not available, secondary data on the average food

¹⁰ If no specific information on the utilization of cash assistance is available in the survey data, this share can be approximated as the food expenditure share of the gap analysis cohort (for details on how to compute the food expenditure share, see the [FES page](#) of the VAM resource centre). If this is not possible (e.g. because the survey does not include information on non-food expenditure), it can be approximated as the share between the food component of the MEB and the MEB. If a MEB is not available, it can be approximated using secondary data and/or expert judgement.

expenditure share of the population (i.e. the share of households' consumption expenditures used for food), can be used to approximate the share of food in the poverty line.

VII. Glossary

Cost of Essential Needs: a monetary threshold indicating the amount of money that households require to cover their essential needs. Usually operationalized by a MEB.

Essential Needs: essential goods and services required on a regular or seasonal basis by households to ensure survival and minimum living standards, without resorting to negative coping strategies or compromising their health, dignity, and essential livelihood assets.

Food Expenditure Share: share of households' food consumption expenditures in households' total consumption expenditures.

Food Gap: the average distance between the cost of essential food needs (usually operationalized by a food MEB) and the part of household economic capacity used for food in the gap analysis cohort.

Food MEB: monetary threshold indicating the amount of money to cover food essential needs.

Gap analysis cohort: households taken as a reference to estimate the gap.

Gap: the average distance between the Cost of Essential Needs and the economic capacity of the households in the gap analysis cohort. Both food and non-food needs are included in the gap.

Household Economic Capacity: the value of what households can consume through their resources. When conducting a gap analysis, households' consumption expenditures on food and non-food are the preferred way to operationalize the concept of economic capacity.

Minimum Expenditure Basket (MEB): monetary threshold defined as what a household requires on average to meet its essential needs, on a regular or seasonal basis. The MEB includes both food and non-food essential needs.

Non-food MEB: monetary threshold indicating the amount of money to cover non-food essential needs.

Survival Minimum Expenditure Basket (SMEB): absolute minimum amount required to maintain existence and cover lifesaving needs.

Transfer Value: net monetary amount that is transferred to beneficiaries -as cash or vouchers- to help them meet their needs.

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