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Fill the Nutrient Gap and Minimum Expenditure Basket

An explanation of approaches and identification of synergies

TECHNICAL NOTE

The objective of this technical note is to provide an overview of two approaches that establish the costs of reference food baskets with a view to informing programmes: the Fill the Nutrient Gap / Cost of the Diet (FNG/CotD) and the Essential Needs Analysis/Minimum Expenditure Basket (ENA/MEB).

Both approaches include stakeholders working with social safety nets and cash-based transfers (CBT). They are intended to inform dialogue on transfer values and programming modalities to meet food and nutrition needs, hence the importance of understanding the purpose and approach of each method and when and how they can complement each other.

THE TWO APPROACHES

Essential Needs Analysis (ENA) is a holistic analysis of people's essential needs, starting from the recognition that needs are interlinked and meeting food and nutrition needs often depend on fulfilling other essential needs too. Essential needs are defined as the essential goods and services required by households to ensure long-term survival and minimum living standards, without resorting to negative coping. The aim of ENA is to understand which needs are essential to households, how they meet and prioritise them, if they are supplied through the market or services, and where they may face gaps, in order to inform food security and essential needs programming for WFP and partners. Three guidance pieces underpin the analysis of essential needs, including the Essential Needs Assessment (ENA), the Supply Assessment and the **Minimum Expenditure Basket (MEB)**.

The MEB is defined as what a household requires in order to meet its essential needs, on a regular or seasonal basis, and its cost. It includes both food- and non-food needs. To construct a MEB, the starting point is typically household expenditure data. This data is used to examine how people who are 'just able to meet their essential needs' spend their money. Household expenditures are generally recognised as the best proxy measure for household consumption, which is why they form the basis of the analysis - expenditures can be used to understand consumption patterns. This type of MEB analysis is referred to as the expenditure-based approach and builds on the Cost-of-Basic Needs Approach often applied to construct national poverty lines. How to identify people who are just able to meet their essential needs depends on what is appropriate for the particular context, but criteria such as having an acceptable food consumption score, not using negative coping strategies, having adequate housing or not being in the poorest or wealthiest part of the expenditure distribution are often combined and applied.

Expenditures may not adequately capture all essential needs, for example if everyone in the analysed population is poor. A rights-based MEB approach entails using sector-based needs information, often aligning with sector Sphere Standards, to construct the MEB. These results can be used to cross-check and possibly adapt the results of the expenditure analysis. This is then referred to as a 'hybrid' MEB. As such, the WFP MEB methodology allows for some flexibility in how the MEB is designed. It is key to always reality check results. It is always recommended to use expenditure data to understand consumption patterns, and to ensure that the final total MEB for both food and non-food is realistic, adequate to cover needs and in line with consumption behavior.

Data requirements: 1) Household data containing an expenditure module covering food and non-food expenditures and 2) price data for items in the food basket and key non-food items and services. Data sources could be EFSA, CFVSA, ENA, pre-assistance baselines, LSMS, HIES or similar surveys at household level. Other information from sectoral surveys, focus group discussions, market assessments and other can all be used to triangulate and enrich the analysis.

Fill the Nutrient Gap (FNG) is a nutrition situation analysis to identify vulnerable populations' barriers to adequate nutrient intake. The availability, physical access, affordability and choice of nutritious foods and how systems can improve these aspects is central to the analysis. The FNG highlights likely nutrient gaps and identifies barriers to adequate nutrient intake in a specific context for specific target groups. The aim of an FNG analysis/assessment/process is to support multi-sectoral decision-making on the prevention of malnutrition, through increasing access to required nutrients, particularly in the form of nutritious foods and where necessary complemented by supplements.

One component of the FNG assessment is the **Cost of the Diet (CotD)** analysis that estimates how much it would cost households, at a minimum, to purchase a nutritious diet from locally available foods and whether a diet based on locally available foods can provide required nutrition. To estimate the cost of a nutritious diet, CotD uses linear programming, establishing the lowest cost diet that can meet requirements for energy, protein, fat and 13 micronutrients, for individuals in a population, considering age, gender, body weight, physical activity level and whether a woman is pregnant or lactating. WFP uses an average-size household to estimate a household's minimum cost of a nutritious diet. This calculation is compared with household food expenditure data to estimate the percentage of households that would be able to afford the minimum cost of this nutritious diet in the current context as a baseline assessment.

The FNG models interventions that have the potential to improve affordability of a nutritious diet, by lowering cost of nutritious foods, including by fortifying foods (staples as well as special nutritious foods for specific target groups) to become more nutritious, and by increasing income. These interventions can specifically target an individual with high nutritional needs with nutrition-specific interventions (e.g. micronutrient supplements for pregnant women or a fortified complementary food for young children) or can support the household in meeting food and nutrition needs, including through nutrition-sensitive interventions (e.g. increasing the diversity and productivity of horticulture, debottleneck supply chain to lower cost of eggs, vegetables or fruits, fortifying rice etc). Social safety net interventions, such as using cash-based transfers, are included in the interventions modelled in an FNG assessment as they can increase the affordability of a nutritious diet for vulnerable households.

Data requirements: 1) Food prices (either from market surveys, including Consumer Price Index data, or household expenditure surveys) to assess the cost of a nutritious diet and 2) household food expenditure from household surveys, e.g. household income and expenditure survey (HIES) living standard measurement study (LSMS) or WFP expenditure survey data to assess the proportion of households able to afford a nutritious diet.

Figure 1 represents how the two assessments contribute to inform programming to meet essential needs.

WFP'S ANALYTICAL TOOLS FOR FOOD AND NUTRITION ASSISTANCE

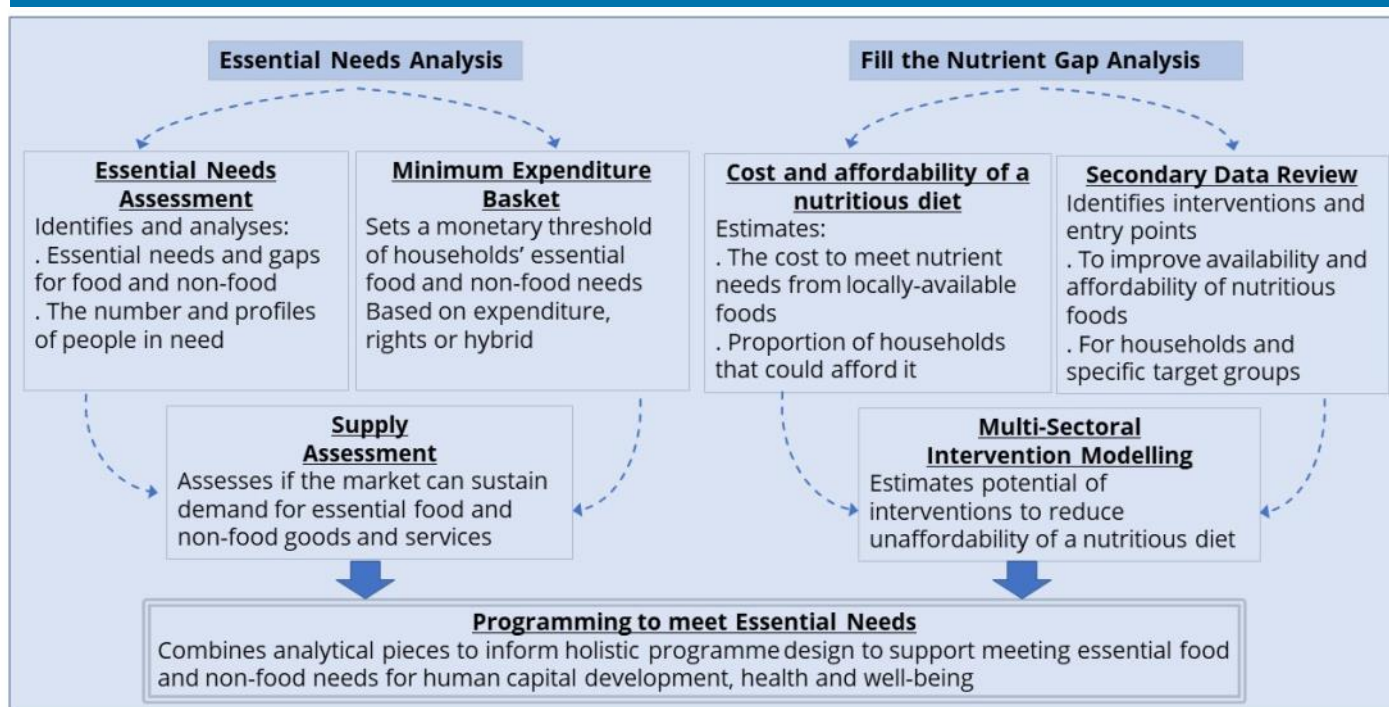


Figure 1: Conceptual framework of WFP analytical tools for food and nutrition assistance

ENGAGEMENT WITH WFP COUNTRY OFFICES AND STAKEHOLDERS

As at June 2020, an FNG/CotD and an ENA/MEB were - or are currently being - undertaken in 15 countries ([see map](#)). To ensure good use and cross-fertilization of both assessments, the following is recommended when engaging with stakeholders:

1. **Develop partnerships and buy-in on both assessments.** Map the main stakeholders and form a technical working group to ensure the right level of expertise and a high level of ownership of both processes.
2. **Educate stakeholders on both processes,** clarifying the different methodologies, interpretation of findings and complementarity between the analyses.
3. **Make explicit linkages between both analyses** and avoid duplication in data collection.
4. **Support a joint discussion, interpretation and use of results by stakeholders,** including a section linking findings from both analyses in the final report.

The cost of the MEB and the cost of a nutritious diet should be continuously monitored and updated to reflect changes in the costs to meet essential needs.

INTERPRETATION OF FNG AND MEB ESTIMATES

The CotD is the lowest cost of a diet that meets all nutrient needs. The MEB is the cost of what a household requires to meet its essential needs.

While the broader objectives of the approaches are different, one of the outcomes of both processes is the cost of a reference food basket. Because of the differences in methodology, they may produce food baskets and costs that are different from each other. **In practice, the cost of a nutritious diet may be higher than the cost of the food component of the MEB (see Figure 2 for an actual comparison).**

The FNG approach estimates diet costs that meet the recommended intake for a comprehensive set of nutrients. The modelled household in the FNG approach is constructed to include individuals with nutritional vulnerabilities across the lifecycle (e.g. children under 2 years of age and adolescent girls). The cost reflects the investment required to raise income or economic capacity to meet nutritional requirements, including for the vulnerable individuals, based on the choice of available foods optimized for nutritional value and cost.

The MEB builds on consumption patterns of those households that are just able to meet their essential needs. It reflects the typical diet consumed by this group of households (usually scaled to 2,100 kcal/person/day). Generally, MEB can be understood as the average, typical, recurrent consumption pattern and associated cost for those who are just able to meet their essential needs. It does not explicitly account for individual needs as it is a household-level analysis. It takes into account the needs of individuals with particular requirements (e.g. pregnant and lactating women) to the extent that such individuals are part of the average composition of the selected group of households, and whether they have adapted their diet to meet specific needs. When the expenditure-based MEB is triangulated with rights-based information, the composition can further take into account specific food or nutritional requirements.

The costs of the FNG and MEB baskets are not meant to be directly translated into transfer values.

The lowest cost estimate of a nutritious diet from the FNG should be used to inform modelling for multisector interventions and programme design to deliver more nutrition, including for specific target groups. The FNG modelling compares interventions through CBT only, in kind only and/or mixed modalities, to discuss what makes the most sense in the context and for the target group(s).

By undertaking a gap analysis (i.e. analysing the difference between the cost of the MEB and what people who are targeted for assistance are able to pay themselves), the MEB can form the basis for a CBT

transfer value that will bring households to the point where they can cover their essential needs.

For a cash transfer to improve nutrition the following conditions must be met:

- 1) nutritious foods are available for the households to purchase;
- 2) households know which foods are nutritious;
- 3) households choose to purchase nutritious foods.

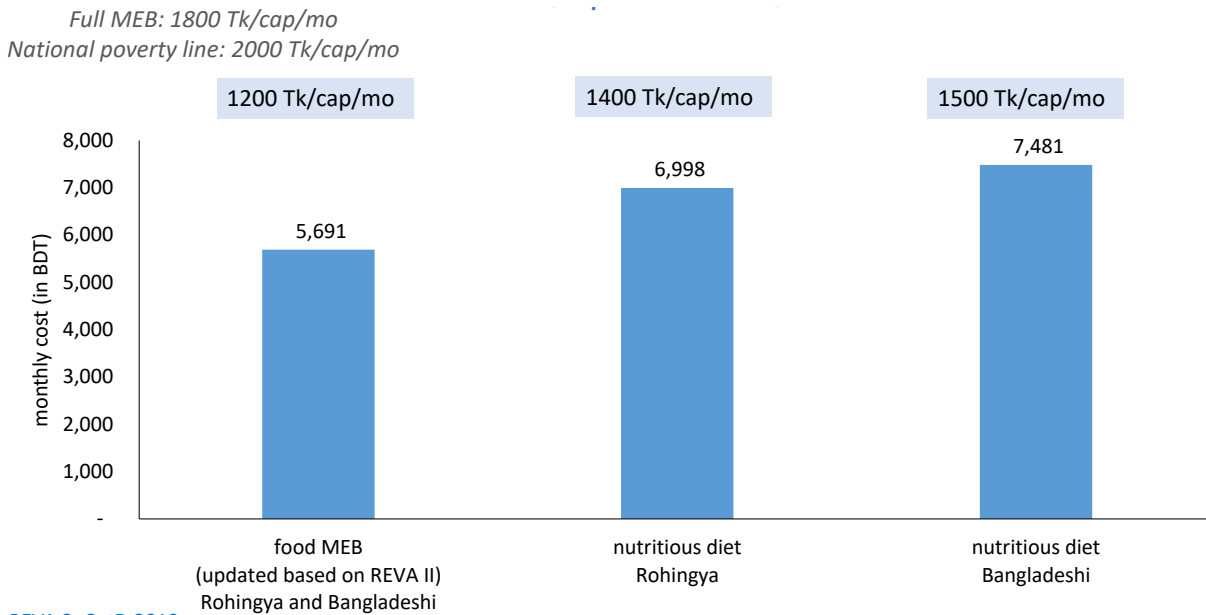
Where the cost of a nutritious diet is found by CotD analysis to be considerably higher than the cost of the food component of the MEB, the drivers for the cost difference would have to be analysed. It could reflect many realities, among them: constraints regarding availability, food preferences, affordability and/or required knowledge of nutritious foods; the need for specific, possibly targeted, interventions that aim to better meet nutrition needs, such as staple food fortification or a voucher for nutrient-dense fresh foods, and/or; the need for interventions to reduce inefficiencies in the supply side of nutritious foods to reduce their retail prices. Behaviour change interventions may be needed in order to stimulate consumers to make more optimal food choices and/or to demand nutrition-specific interventions and use them as recommended.

An area for further joint exploration is to examine the expenditure and consumption patterns of people whose income is above the MEB. Examining how better-off people spend their money could help stakeholders to understand if transferring more resources (e.g. setting a transfer value higher than the typical MEB) would lead to different or more nutritious consumption patterns. This knowledge could be useful in informing programming. The FNG secondary data analysis looks at disaggregated nutrition outcome indicators and can also provide information on behaviours in different wealth quintiles.

Note on national poverty lines

Any monetary threshold used to distinguish whether people are able to fulfil their needs can be thought of as a poverty line. WFP constructs MEBs to understand the minimum cost of needs for particular subsets of the population or in a particular location, where the national poverty line may not be adequate or applicable. Often the national poverty line is not updated and therefore not useful for informing programme decisions. The MEB is designed as an operational tool rather than a national threshold. In cases where the national poverty line is current and adequate for analytical and programme needs, a new MEB may not be necessary.

COMPARISON OF FOOD MEB AND COST OF A NUTRITIOUS DIET IN COX'S BAZAAR



REVA 2; CotD 2019

Figure 2. The food MEB established for Rohingya refugees in Cox's Bazar and the cost of nutritious diets as assessed by CotD analysis. The FNG modeled household typically consists of a 1 yr old breastfed child, a school-age child, an adolescent girl, a lactating woman and an adult man. Sensitivity analyses have shown that the per capita cost of this household is comparable to that of households of other compositions. While the adolescent girl and lactating woman have relatively high costs, the two children have relatively low cost, especially because their energy and quantity requirements are lower.



MEB and COTD – at a glance

Minimum Expenditure Basket

The MEB is the cost of what a household requires to meet its essential needs

Cost of the Diet

The CotD is the lowest cost of a diet that meets all nutrient needs

How is it calculated?



Calculates cost and content needed to meet **essential needs for both food and non-food**



Uses household expenditures to examine household demand, often combined with other household needs information



Food basket based on average diets of households 'just meeting their needs'



Typically, 8 – 9 food groups included and results are at commodity or group level



Calculates cost and content needed to meet **recommended nutrient intake (food only)**



Based on individual needs for a healthy diet



Food needs of a household's different individuals considered (e.g., nutritional vulnerability and local availability of foods)



Typically, 8 – 9 food groups included and results are at commodity level (specific foods)

What do results tell us?



Provides average, recurrent cost of minimum basket for households and is based on actual demand behaviour
Shows both food and non-food needs



Considers specific nutritional vulnerabilities and their cost
Identifies options for targeted and blanket programs



Considers average essential needs for households, not one-off needs or individual nutrient requirements



Does not reflect non-food needs and does not factor in actual demand behaviour
Needs to be contextualized to inform programs (FNG)

How is it used to inform food assistance and other programs?

- Helps household **assistance programs to be more effective** through a holistic understanding of needs
- Advises on **transfer values** to meet essential food/non-food needs
- Establishes the **number and profile of people in need** and can be used for **targeting and prioritization**
- Analyses a variety of needs and how people prioritise them to help inform interventions for food security and beyond (ENA)

- Helps household **food assistance support nutritious diets**
- Food basket composition, selection of cost effective modalities to compose food basket, identify cost drivers of nutritious diets
- Assesses food consumption patterns in different wealth quintiles
- **Models interventions for different target groups**
- Prioritizes a **package of multisectoral interventions** to close nutrient gaps, specific to the context (FNG)



Map of countries that conducted an FNG/CotD and/or an ENA/MEB assessment



FNG/CotD and ENA/MEB countries		
Countries	Location, year of FNG analysis	Location, year of MEB analysis
Burkina Faso	National FNG, 2019-2020	ENA for IDP crisis, 2019
Mali	National FNG, 2019-2020	National MEB analysis, 2020
Niger	National FNG, 2018 – phase 2 FNG in Maradi and Zinder, 2019-2020	MEB analysis, 2020
Democratic Republic of Congo	Cost of the Diet in Tanganyika and Kasai central, 2019 – national FNG, 2020	Urban ENA and MEB in Kinshasa, 2018
Madagascar	National FNG, 2016	MEB, southern regions, 2019
Malawi	National Cost of the diet, 2017	Rural and urban MEB, 2020
Syria	Cost of the Diet (Aleppo, Homs, Lattakia, Tartous), 2019	National MEB, 2020
Ethiopia	National FNG, 2019-2020	Somali region MEB, 2020
Somalia/Somaliland	National FNG, 2019	National, MEB revision, 2020
Uganda	National FNG, refugees, Karamoja, 2018	ENA and MEB, 2019-2020
Bangladesh	National and Cox's Bazaar FNG, 2019	Cox' Bazar, MEB and ENA, 2019
Cambodia	National FNG, 2019	Shock-prone zones, MEB analysis, 2020
Myanmar	National FNG, 2019	Yangon, urban ENA with UNICEF, 2019
Sri Lanka	National FNG, 2018	Colombo, urban ENA, 2019
Philippines	National FNG, 2019	Manila, urban ENA, 2020

Next steps:

This technical note aims to encourage and guide linking MEB and FNG assessments in more countries. A review of case studies conducted in 2020 will further refine this interim note in 2021.

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