Economic capacity to meet essential needs (ECMEN)

Guidance Note

WFP
World Food Programme
SAVING LIVES
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Contents

I. About this guidance

This guidance is intended for analysts tasked with the computation of the economic capacity to meet essential needs (ECMEN) indicator. Its main objective is guiding the analyst through the steps that are needed to compute the indicator.

Useful resources for the computation of the indicator, including the standard modules and syntax files can be found in the ECMEN page of the VAM Resource Centre. For a broader overview of how the ECMEN is used within Essential Needs Assessments, see the Essential Need Assessment guidance note.

II. What is the ECMEN?

The ECMEN is a measure of the economic vulnerability of a population. It is defined as the percentage of households whose economic capacity is sufficient to meet their essential needs, as defined through the minimum expenditure basket (MEB).

Economic capacity is a concept that refers to the ability of households to consume goods and services using their own resources (i.e. in the absence of assistance). The concept of household economic capacity is proxied by consumption expenditures. Households are considered to have the economic capacity to meet their essential needs if their consumption expenditures exceed the MEB. In turn, a MEB is defined as what households require in order to meet their essential needs, on a regular or seasonal basis, and its cost. The MEB covers those needs that households meet fully or partially through the market. It serves as a monetary threshold that can be used to assess a household's economic capacity to meet their needs.

The ECMEN indicator is also informative of food insecurity in a population, since the ability to meet essential needs through the market includes, and can be an important determinant of, the ability to access food.

Two versions of the ECMEN are used in WFP:

- ECMEN excluding assistance, normally used for assessments.
- ECMEN including assistance, normally used for monitoring.

This guidance focuses on the version excluding assistance, but the differences between the two versions are clearly explained in Box 2.

III.What is the ECMEN used for?

The indicator has several uses within WFP. Among the most important:

- The ECMEN is one of the five core indicators of Essential Needs Assessments. Within these assessments, it is used, together with other indicators, to identify households in a population of interest who are unable to meet their essential needs. As such, it can be used to identify a target

group for operations with an essential needs approach (see the Essential Need Assessment guidance note).

- The two main elements used to compute the ECMEN – i.e. the household economic capacity aggregate and the MEB – can be used as the foundation for setting the transfer value in cash-based transfer operations (see guidance note on setting the transfer value for CBT operations).
- It is a mandatory indicator for monitoring multisector interventions including multipurpose or unrestricted cash programmes. As such, it is included among the mandatory indicators for corporate and/or country reporting of WFP's corporate results framework (CRF) 2022-2025[1].
- It is an optional indicator for the monitoring of all operations targeting households with "in-kind, cash or voucher transfers"[2].
- It can be used as one element to estimate food insecurity within the Consolidated Approach for Reporting Indicators of Food Security (CARI). In particular, the ECMEN is used in the CARI console to capture households' economic vulnerability and thus their ability to stabilize food consumption over time. For more details on how ECMEN is used in the CARI see chapter four of the Technical Guide on CARI.

IV. Which data sources can be used for computing the ECMEN?

The data to compute the ECMEN should be collected through household surveys. Examples of these household surveys are:

- Assessments: Essential Needs Assessments (ENA), Emergency Food Security Assessments (EFSA), Comprehensive Food Security & Vulnerability Analyses (CFSVA).
- Monitoring: Post Distribution Monitoring (PDM) and Food Security Outcome Monitoring (FSOM).

The household surveys used to compute the ECMEN should present three important features:

1) Include a full expenditure module.
2) Be statistically representative of the population of interest (i.e. the population for which the ECMEN has to be estimated).
3) Be collected through face-to-face interviews[3].

Even though it is possible to derive both elements required for the computation of the ECMEN – household economic capacity and the MEB - from the same household survey, sometimes it is possible and desirable to rely on an already-existing MEB[4]. Whenever it is considered to use an already-existing MEB, it is important to note the following:

[1] It is important to note that when the ECMEN is used for monitoring purposes, the household economic capacity aggregate should be computed differently than in the standard version used for assessments. The difference is that in the version used for monitoring, the household economic capacity aggregate includes received assistance. This is explained in detail in Box 2.
[2] See previous footnote.
[3] Household surveys carried out with remote interviews normally do not allow the inclusion of a full expenditure module (given their reduced length). Using shortened modules can lead to biases and overestimation of vulnerability.
[4] The MEB should be established based on the current guidance on MEB, whereas a hybrid approach in collaboration with partners is the preferred solution.

- The value of the MEB should always be updated based on the changes in prices that occurred between the moment in which the MEB was established (or last updated) and the moment in which household data is collected for the estimation of the ECMEN.
- The relevance of the MEB should always be verified. This means that the already-existing MEB should still reflect the consumption habits of the population of interest at the moment of estimating the ECMEN. For example, shocks, population changes, strong increases in prices for specific consumption items, and changes to the supply of good and services might substantially change the consumption patterns of the population of interest. In these cases, it is recommended to review the composition of the MEB or reconstruct it to reflect these changes.
- When the already-existing MEB was established based on an expenditure-based approach, it is strongly desirable that consumption expenditure module used to originally establish the MEB is identical (or reasonably similar) to that being used for estimating household economic capacity. This is important to avoid biases, since the granularity of a module can have an important impact on the level of consumption expenditures that is reported (i.e. the more items are included in an expenditure module, the higher the level of consumption expenditures reported by respondents on average).

V. WFP modules to construct the ECMEN

Most information needed for the calculation of household economic capacity comes from an expenditure module; however, information on some aspects such as household size, received cash assistance and, in some instances, housing characteristics, may be found in other modules. The standard WFP modules needed to compute the ECMEN are available in the Survey Designer and the ECMEN page of the VAM Resource Centre.

Expenditure module

The standard expenditure module used to compute the ECMEN is composed by three submodules:

- Food expenditures in the previous seven days[5].
- Non-food expenditures in the previous 30 days.
- Non-food expenditures in the previous six months.

Food expenditures in the previous seven days

In the standard expenditure module, food expenditures are collected at the food group level (e.g. cereals, tubers, pulses etc.). However, if more detailed information is required, it is also possible to

[5] Although the default recall period for the module on food expenditures is seven days, in some cases it is advised to use a 30-day recall. This is the case when: 1) it is not possible to spread interviews throughout the weeks of the reference period of the survey; 2) the module is administered for monitoring purposes right after value vouchers have been redeemed by beneficiaries. Regarding the first point, if the objective of the survey is providing a picture of households' economic capacity in a given reference period (e.g. a specific month or a quarter of the year), then interviews should be spread over this period. For example, if interviews are all concentrated in one week, the survey would implicitly assume that the food consumption observed in the seven days prior to the week in which interviews were conducted is representative of the typical consumption that household have during the reference period, which could lead to biases. In these circumstances, the issue can be mitigated using the longer recall period of 30 days. On the other hand, a longer recall period for food consumption present important disadvantages as it requires greater efforts in recalling, with consequent tendency to underreport consumption expenditures and longer time needed to administer the questionnaire. Regarding the second point, the redemption of value vouchers counts as expenditures made in cash.

collect food expenditure data at the food item level, including the most relevant food items for each food group.

Independently from whether the information is collected at the food group or at the food item level, this part of the expenditure module should capture:

- The value of food purchases made in cash or credit.
- The value of consumed food received through in-kind assistance or in-kind gifts.
- The value of consumed food from own production.

Note that, when programming questionnaires, in no case the food expenditure submodule should be linked through skip patterns to other modules such as the Food Consumption Score one.

Non-food expenditures in the previous 30 days

This part of the expenditure module captures expenditures on a set of most-frequently purchased non-food categories (e.g. hygiene items, transport, communication etc.). Specific non-food items can be added to the standard module to reflect context-specific consumption habits.

This part of the expenditure module should capture:

- The value of non-food purchases made in cash or credit.
- The value of consumed non-food items received through in-kind assistance or in-kind gifts.

Non-food expenditures in the previous six months

This part of the expenditure module captures expenditures on a set of less-frequently (but still recurrently) purchased non-food items (e.g. expenses related to health, education, housing etc.).

This part of the expenditure module should capture:

- The value of non-food purchases made in cash or credit.
- The value of consumed non-food items received through in-kind assistance or in-kind gifts.

Other modules

The following modules are complementary to the expenditure module to calculate the ECMEN.

Assistance module

The purpose of this module is collecting information on the amount of cash assistance received by households, by default in the previous three months. The information on cash assistance received is collected separately for assistance provided by WFP, other humanitarian partners, and other sources (e.g. government, relatives, religious organizations).

This implies that if a monitoring exercise purposedly interviews households a week after value vouchers are redeemed (in cases when the value vouchers need to be redeemed in a given week), then respondents will present anomalously higher expenditures in the seven days prior to the interview. It follows that assuming that the expenditures observed in the last seven days represent the typical weekly expenditure of households, would lead to overestimating household expenditures.

The module also includes a question asking respondents to estimate the share of the received cash assistance used for purchasing food or non-food items intended for the consumption of their household.

Information on cash assistance is collected because the amount of cash assistance used for consumption received from WFP and other humanitarian partners needs to be deducted from the household economic capacity aggregate.

Note that this module is strictly necessarily for the computation of the ECMEN excluding assistance (for assessments).

Housing module

This module is needed in contexts where rent is included in an already-established MEB, but many households do not spend on rent as they own their dwelling or occupy it for free. In these cases, the housing module allows estimating the potential rental cost for the type of housing owned or occupied by households. The module captures information on the type of dwelling, its tenure status, its size, and many other characteristics (e.g. type of wall, roof, floor, presence of toilet etc.).

VI. Steps to calculate the ECMEN

Calculating the ECMEN requires undertaking the following four steps, described in detail in this section:

1. Identify the relevant MEB
2. Aggregate consumption expenditures to establish household economic capacity
3. Compare the economic capacity of each household against the MEB to establish whether a household is above this threshold.
4. Compute the ECMEN indicator by calculating the percentage of households whose economic capacity is equal or greater than the MEB threshold.

Syntax files for computing the ECMEN using different statistical software are available in ECMEN page of the VAM Resource Centre.

Identify the relevant MEB

The MEB is a prerequisite for the calculation of the ECMEN - the first step is therefore identifying a relevant MEB. There are two main ways in which the MEB can be identified:

1) It can be calculated using the same expenditure data that are used to estimate households' economic capacity. An advantage of this option is that it minimizes 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.
2) It is possible to use an existing MEB that has been identified as appropriate for the population of interest, and that is considered robust from a methodological point of view. In addition to requiring a more limited analytical effort, the advantage of this option is the possibility of working

with an MEB that might have been already accepted and agreed upon by humanitarian partners in a given context.

Note that 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 for different household sizes. The correct MEB needs to be applied for each household.

Independently from how the MEB is identified, it is important to keep in mind that the reliability and accuracy of the ECMEN indicator is closely connected to the methodological rigor used to construct the MEB. For best practices on constructing MEBs, refer to WFP's MEB guidance note.

Sometimes the ECMEN is computed using a survival MEB (SMEB) instead of (or in addition to) the MEB. In this case, the considerations above and the analytical steps described in the reminder of this section remain the same. More information on the SMEB can be found in Chapter eight of the MEB guidance note.

Aggregate consumption expenditures to establish household economic capacity

To calculate household economic capacity, consumption expenditures need to be aggregated and turned into per capita values at the end of the aggregation process.

In general terms, only consumption expenditures made based on households' own economic capacity should be included in the aggregate. In practice, the aggregation should include expenditures on all recurrent and regular food and non-food consumption items made in cash or credit[6], as well as the estimated value of food consumption from own production. Instead, the value of consumed food and non-food items received as in-kind assistance or gifts are excluded because these do not represent a household achieving consumption thanks to their own economic capacity.

Additionally, the value of cash assistance received from WFP and partner humanitarian organizations should be deducted from the household economic capacity aggregate.[7][8]

[6] Note that in the previous version of the ECMEN methodology, the value of purchases made on credit were excluded from computation of household economic capacity.

[7] To assess the vulnerability of its target populations, WFP needs to take into account the assistance (both in cash and in-kind) that the organization and its humanitarian partners provide. If households are able to meet essential needs because of WFP's and partners' assistance, the households should still be considered economically vulnerable and should continue to be targeted by WFP's programmes. This is the reason why the value of consumed in-kind assistance is not included in the aggregate and the value of cash assistance received is deducted. At the same time, WFP does not aim to crowd out the assistance provided by governments and the private sector (including other households). This is why the value of cash assistance provided by governments, non-humanitarian actors, and households (including remittances) is not deducted from the aggregate.

[8] Note that for estimating an MEB with the expenditure-based approach, a different aggregate is used. The computation of this aggregate, that can be referred to as a household consumption aggregate, is different from the computation of the household economic capacity aggregate in two important ways: 1) the value of consumed food and non-food from in-kind assistance and gifts is included in the aggregate; 2) the value of received cash assistance is not deducted from the aggregate. This is because, for estimating a MEB, what is relevant is the total value of what it is consumed by the household, not the value of the consumption that the household can achieve thanks to its own capacity. In addition, sometimes the value of consumption expenditures on items that are not considered essential (like alcohol and tobacco) is not included in the consumption aggregate used to estimate the MEB. However, this decision will depend on the context.

Formally, the economic capacity of a household is computed as:

$$EC = C_c + C_o - (\delta)A_c$$

Where:

- C_c: Monthly value of expenditures made in cash or credit.
- C_o: Monthly value of consumption made through own production.
- A_c: Monthly value of cash assistance received from the humanitarian sector.
- δ: Share of received cash assistance used for consumption[9].

To aggregate consumption expenditures, the following steps are recommended:

1. **Calculate households' monthly food consumption expenditures**

   Calculate the monthly food consumption expenditure of the household by adding:

   - The value of food expenditures made in cash or credit
   - The value of food items consumed from own production

   If food expenditures are collected using the seven days recall period recommended in the standard WFP expenditure module, remember to divide the households' food expenditures by seven and then multiply by 30 to report them in monthly terms.

2. **Calculate households' monthly non-food consumption expenditures**

   To do this:

   - Aggregate the value of non-food expenditures made in cash or credit in the previous 30 days
   - Aggregate the value of non-food expenditures made in cash or credit in the previous six months[10]. Consider including rent expenditures depending on the circumstances as explained in Box 1. Then divide the aggregate by six to report it on a monthly basis.
   - Sum up the two aggregates above to obtain total non-food expenditures.

   It is important to keep in mind that, in no case, expenses on celebrations, festivals, donations, large and one-ff household expenses (e.g. a house or a vehicle), as well as expenditures for livelihood inputs (e.g. any input used for productive activities such as agricultural inputs and hired labour) should be considered in the households' non-food expenditures and included in the household economic capacity aggregate[11].

[9] In contexts where it is safe to assume that beneficiaries of cash assistance spend it (almost) entirely on consumption, this share can be considered equal to one and ignored. However, when it is likely (or even desired) that beneficiaries spend part of that assistance on investments (e.g. for agricultural inputs or family businesses), it is recommended to estimate the share of cash assistance that is devoted to consumption. This can be asked directly to the respondent after the question on the amount of received cash assistance.

[10] Note that, in the previous version of the ECMEN methodology, these expenditures also included household debt repayment and savings. These are no longer included in the computation of household economic capacity.

[11] These types of items are not included in the standard expenditure module. However, in some context, information on expenditures on these items might still be collected for other analytical purposes (e.g. for analysis of livelihoods). In these cases, it is important that the analyst pays attention not to include them in the household economic capacity aggregate.

Box 1: Should rent be included in households' expenditures?

The decision on whether to include rent in households' expenditures to calculate their economic capacity is very sensitive, as rent can represent a large share of households' budgets in certain contexts. The decision primarily depends on whether rent was included in the MEB:

- If rent is not included in the MEB, it should not be included in ECMEN, even if some households spend on rent.
- If rent is included in the MEB, it should be included in ECMEN.

However, in this second case, rent can lead to strong biases if households do not spend on rent as they own their dwelling. Households who own their dwelling and hence do not pay rent might be classified as unable to cover their needs just because they do not have any major shelter expenditures. In this case, it may be a solution to impute rent expenditures for the non-renters by estimating the would-be rental cost for the type of housing they live in. Doing this typically requires a housing module in the household survey, including questions on ownership, type, and size of the dwelling.

3. Calculate households' total monthly consumption expenditures

Sum up households' food and non-food monthly consumption expenditures to obtain total monthly consumption expenditures.

4. Deduct monthly cash assistance received from the humanitarian sector

As mentioned, the value of received assistance from the humanitarian sector should not be included in the computation of household economic capacity. However, differently from in-kind assistance, purchases made from cash assistance cannot be distinguished from other cash expenditures. Hence, the value of received cash assistance from the humanitarian sector reported by households needs to be deducted from their total consumption expenditures.

To compute the amount of cash assistance to be deducted:

- Consider only the cash assistance received from WFP or other humanitarian organizations.
- Calculate the value per month. In WFP's standard assistance module for the calculation of the ECMEN, cash assistance is reported for the previous three months. If this module is used, divide the value of received cash assistance by three, to express it on a monthly basis.
- Multiply this amount by the estimated share of this assistance that households spend for regular consumption (i.e. not on livelihood inputs and investments, taxes, debt repayment and savings etc.).

Regarding the share of cash assistance that households use for regular consumption, it is advised that it is obtained as the median share reported by the population. However, if there is reason to believe that different population groups use their received cash assistance in a substantially different way (e.g. because the assistance is provided through different programmes, modalities and in different amounts), then the analyst can also estimate and apply different median shares for different population groups (e.g. for different geographic areas or for IDPs/host communities), when data allow it.

Once cash assistance is deducted, households' economic capacity is obtained. Table 1 summarizes the components that are needed to calculate households' economic capacity.

Table 1 - components of households' economic capacity.

Component	Details
A. Monthly food consumption expenditures	A.1. Value of food expenditures made in cash or credit A.2. Value of consumed food from own production
B. Monthly non-food consumption expenditures	B.1. Value of non-food expenditures made in cash or credit
C. Total consumption expenditures	(A + B)
D. Cash assistance received	D.1 Share of cash assistance received from the humanitarian sector spent on consumption
E. Household economic capacity	(C – D)

5. Express households' economic capacity in per capita terms

As a final step, households' economic capacity should be expressed in per capita terms. That is, for each household, the household economic capacity obtained in step 4 should be divided by the total household size.

In some instances, an MEB might have been established in "adult equivalent" terms instead of per capita terms. In this case, also households' economic capacity should be expressed in adult equivalents. See Chapter seven of WFP's MEB guidance note for more details.

It is important to note that expressing household economic capacity in adult equivalent terms should be done if and only if the MEB was calculated in adult equivalent terms too. Instead, if the MEB was calculated in simple per capita terms, household economic capacity should also be calculated in per capita terms.

Box 2: Differences in the computation of household economic capacity when ECMEN is used for monitoring (version of ECMEN including assistance)

When the ECMEN is used for assessing the economic vulnerability of a population, WFP needs to take into account the assistance that it provides (both in cash and in-kind). If households are able to satisfy their essential needs because of WFP's and partners' assistance, the households should still be considered economically vulnerable and should continue to be targeted by WFP's programmes. This why the value of consumed in-kind assistance is not included, and the value of cash assistance received is deducted from household economic capacity.

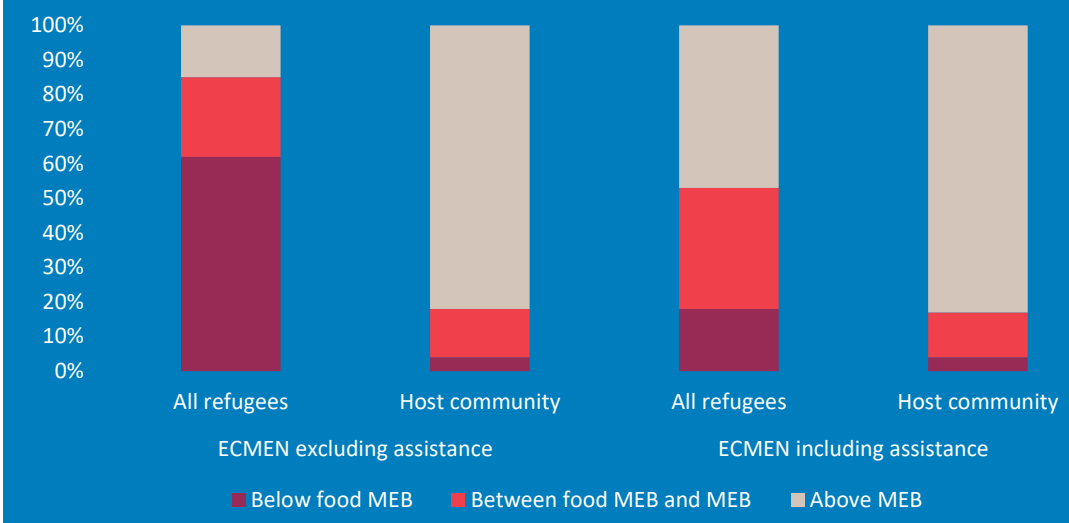
However, when the ECMEN is used for monitoring (for example for monitoring multipurpose CBT operations as requested by the CRF), it is important to understand whether the population can meet its essential needs with the assistance provided. This tells if the assistance provided is being effective and whether it is enough. This is why, in the version of ECMEN used for monitoring, the household economic capacity aggregate should include the value of consumed in-kind assistance and should not deduct the value of received cash assistance, as shown in Table 2

Table 2 - Components of households' economic capacity in the version of ECMEN including assistance (used for monitoring)

Component	Details
A. Monthly food consumption expenditures	A.1. Value of food expenditures made in cash or credit A.2. Value of consumed food from own production A.3. Value of consumed food from in-kind assistance and gifts
B. Monthly non-food consumption expenditures	B.1. Value of non-food expenditures made in cash or credit B.2. Value of received non-food in-kind assistance and gifts
C. Total consumption expenditures = Household economic capacity	(A + B)

Computing the ECMEN including and excluding assistance can be an informative exercise to get insights on the effects of assistance provided by WFP and partners. The comparison of ECMEN excluding and including assistance can represent a rough approximation of what the economic vulnerability of a population would look like, should assistance not be provided. As such, such comparisons could be made for advocacy and fundraising purposes. Figure 1 shows an example of such comparison.

Figure 1 – Comparing the ECMEN excluding and including assistance



Source: WFP. 2019. Refugee influx Emergency Vulnerability Assessment (REVA) for Cox's Bazar, Bangladesh

Compare the economic capacity of each household against the MEB.

To establish whether households have the capacity to meet their essential needs, their economic capacity is compared to the MEB. If its economic capacity is at or above the MEB, a household is considered potentially able to meet its essential needs. Conversely, if a household's economic capacity is below the MEB, the household is considered unable to meet all its essential needs.

In the simplest scenario, a single (or static) MEB will have been defined for all households. However, in other cases, different MEBs will have been defined for different households based on their size[12]. In this situation, a household economic capacity should be compared to the specific MEB assigned to households of its size.

In addition, different MEBs can be used by region/area to account for differences in prices or essential needs.

Compute the ECMEN indicator

Once it has been established if the economic capacity of each household in the sample is above the MEB, it is finally possible to estimate the ECMEN indicator. The ECMEN of a certain population is obtained as the percentage of households in the population whose economic capacity is equal or greater than the MEB.

[12] This practice is encouraged in the presence of not-negligible household economies of scale. However, it is not always feasible or desirable. Sometimes expenditure data might not have a sample large enough to calculate the MEB separately for different household sizes. Also, when MEBs are used to calculate household transfer values, it may not be operationally possible to handle different per-capita size transfers for differently sized households, and the extra effort of defining different MEBs by household size may not be worth it. For more details see chapter seven of WFP's MEB guidance note.

It is important to note that, unless the sample is self-weighting, the analyst will need to apply sample weights to each observation for computing the ECMEN.

VII. Limitations and complementarity with other indicators

The main limitation of the ECMEN indicator is that it only looks at needs that are met through the market. This implies that the indicator:

- does not capture households' access to *public* basic services such as water, sewage, transportation, transportation and communication infrastructure, and health and education services, in situations where these are not accessed through a market-like system.
- does not fully reflect issues in the quality of goods or services which may affect the ability to meet essential needs.

Taking into considerations these limitations, it is recommended to combine the analysis of the ECMEN with complementary indicators regarding the functionality of markets and the provision of public services in the area of interest, as well as indicators of households' access to non-markets good and services such as the multidimensional deprivation index (MDDI).

In addition, the indicator looks at households' economic capacity in a given moment but is not able on its own to determine whether households are meeting their essential needs in a sustainable way. For this reason, it is recommended to analyse the ECMEN in combination with the livelihood coping strategy index for essential needs (LCS-EN) and/or debt indicators. Such triangulation provides information on the sustainability of livelihoods, by indicating whether households are depleting their resources in order to meet their essential needs.

For more details on how the ECMEN is used in combination with other indicators within Essential Need Assessments, see the Essential Need Assessment guidance note.

Acronyms

CARI	Consolidated Approach to Reporting Indicators of Food Security
CFSVA	Comprehensive Food Security and Vulnerability Analyses
CRF	Corporate Result Framework
ECMEN	Economic Capacity to Meet Essential Needs
EFSA	Emergency Food Security Assessment
ENA	Essential Needs Assessment
FSOM	Food Security Outcome Monitoring
LCS	Livelihood Coping Strategies indicator
MDDI	Multidimensional Deprivation Index
MEB	Minimum Expenditure Basket
OECD	Organisation for Economic Co-operation and Development
PDM	Post Distribution Monitoring
SMEB	Survival Minimum Expenditure Basket
WFP	World Food Programme

World Food Programme
Via Cesare Giulio Viola 68/70,
00148 Rome, Italy
T +39 06 65131 wfp.org

For further information, please contact:
Research, Assessment and Monitoring Division (RAM)
Global.ResearchAssessmentMonitoring@wfp.org