IPC
Integrated Food Security Phase Classification

IPC for Acute Malnutrition

Concepts, Tools, and Procedures to be used to Classify Areas based on Acute Malnutrition

Cleared by the IPC Technical Advisory Group and endorsed by the IPC Steering Committee

Rome, 24 June 2016
Compiled by the IPC Nutrition Working Group
Technical Normative Development Coordinated by the IPC Global Support Unit

BACKGROUND

One of the lessons learned during the implementation of IPC over the past several years is that the levels of acute food insecurity and prevalence of acute malnutrition do not always match. It has been observed that, in some settings, while there are high levels of food insecurity, the prevalence of acute malnutrition is low. In other settings, the situation has been reverse – i.e. low levels of acute food insecurity with high levels of acute malnutrition. The reason for these differences is the fact that acute malnutrition, as an outcome, is influenced by many different factors other than food security. While some of these factors have negative impact on acute malnutrition other factors have protective and mitigating effect.

Nutrition is incorporated in the IPC analytical framework as both as an outcome of food insecurity and as a factor of food insecurity. Since IPC was first developed to classify the severity of food insecurity, nutrition was included mainly in relation to food security. It was decided not to merge food security with nutrition in the IPC as the information and response needs of the decision makers involved in these sectors are different. Additionally, although these sectors need to be well coordinated and linked, food insecurity and malnutrition also need specific responses. Thus, a full nutrition analysis which would take into account all factors contributing to malnutrition was not envisioned within the IPC food security analysis. Nevertheless, there is a gap of information for decision makers on severity and the identification of drivers of malnutrition.

To address this gap, the IPC Steering Committee (SC) in early 2014 endorsed the development of an IPC for Acute Malnutrition based on the nutrition classification tool that was developed and used by FAO Food Security and Nutrition Analysis Unit (FSNAU) in Somalia. An IPC Global Nutrition Working Group (NWG) was subsequently formed to lead the technical normative development of the IPC for Acute Malnutrition and, after nearly 2 years of pilot testing and revisions, the protocols for IPC for Acute Malnutrition have now been finalised.

This document which has been compiled by the IPC NWG, describes the concepts, tools, and procedures that are used for the IPC for Acute Malnutrition. The document is submitted to the IPC SC for endorsement.

DEFINITION OF CONCEPTS AND TERMS

Acute malnutrition is a form of malnutrition[1] that occurs when an individual suffers from current, severe nutritional restrictions, a recent bout of illness, inappropriate childcare practices or, more often, a combination of these factors. It is characterised by extreme weight loss, resulting in low weight for height, and/or bilateral oedema, and, in its severe form, can lead to death[2].

[1] Malnutrition encompasses both undernutrition, which include acute malnutrition, chronic malnutrition, and micronutrient deficiencies, as well as over-nutrition, which include overweight/obesity. IPC for Acute Malnutrition only focusses on acute malnutrition.
[2] Understanding malnutrition. Module 3. Harmonized Training Package. Version 2. 2011

Although acute malnutrition can affect anyone, it is a particular problem among children less than 5 years of age. Acute malnutrition prevalence among children 6-59 months is also used as a good proxy for the nutrition situation in the entire population.

The most visible consequences of acute malnutrition are weight loss (resulting in moderate or severe wasting) and/or nutritional oedema (i.e. bilateral swelling of the lower limbs, upper limbs and, in more advanced cases, the face). Acute malnutrition in children is measured by the presence of Oedema, by calculating Weight for Height Z-score (WHZ), or by measuring Mid Upper Arm Circumference (MUAC). Acute malnutrition identified by WHZ is reported together with Oedema as Global Acute Malnutrition (GAM) by WHZ. Similarly, acute malnutrition measured by MUAC is reported together with Oedema as GAM by MUAC.

Approach for Classifying Acute Malnutrition

IPC for Acute Malnutrition encompasses **classifying areas** based on the prevalence of acute malnutrition among children 6-59 months of age on a global scale, **identifying contributing factors** to acute malnutrition, and **recommending potential actions** to address acute malnutrition. It complements the IPC for Acute Food Insecurity by identifying non-food security related factors that may be contributing to acute malnutrition but are not analysed in the IPC for Acute Food Insecurity.

IPC for Acute Malnutrition has been developed based on the same IPC principles and approaches. It shares the same four core functions, which are: (1) Building Technical Consensus, (2) Classifying Severity and Underlying Factors, (3) Communicating for Action, and (4) Quality Assurance. The tools and procedures that have been developed to classify acute malnutrition follow the same approach and structure as those developed to classify acute food insecurity.

Key Parameters IPC for Acute Malnutrition

Five Phases: In line with the IPC for Food Insecurity, the IPC for Acute Malnutrition classifies the severity of acute malnutrition into five Phases. Classification of severity of acute malnutrition is done based on the prevalence of GAM, with higher prevalence characterizing the most severe phases.
Informing short and long term objectives to decrease acute malnutrition: Acute malnutrition as an outcome is affected by a range of factors. Some of these factors are structural such as maternal education while others are transitory such as disease epidemics and food crises. IPC for Acute Malnutrition has been developed in a way to inform both long term and short term objectives. Although the classification also informs long term actions, these actions are aimed at decreasing acute malnutrition and not chronic malnutrition. Further complementary assessments and analysis of chronic malnutrition and chronic food insecurity should support design of interventions with middle and long-term objectives to decrease also chronic malnutrition.
Seasonality based analysis: Both the current as well as the projection analysis of the IPC for Acute Malnutrition are seasonality based, similar to typical IPC for Acute Food Insecurity.
Unit of Analysis: Geographical areas (usually admin level 3) form the unit of analysis in the IPC for Acute Malnutrition.
Area Classification: Areas are classified into 5 different phases based on the prevalence of acute

malnutrition. The IPC for Acute Malnutrition does not enable classification of individuals or households. However, acute malnutrition among special population groups – for example (Internally Displaced Persons (IDPs) in a camp or pastoralists – can be analysed and included in the maps. Reliability of the indicators and methodology used in the classification are also taken into account when classifications are made using reliability scores.

Indicators: The outcome indicator used in the classification of areas is Global Acute Malnutrition (GAM). GAM may be measured either by Weight-for Height Z-score <-2 and/or Oedema or Mid-Upper Arm Circumference (MUAC) <125mm and/or Oedema. The preferred indicator in the IPC for Acute Malnutrition is GAM by WHZ; GAM by MUAC is only used when reliable evidence for WHZ is not available.

Multi-agency and multi-sectorial analysis: Like IPC for Acute Food Insecurity and IPC for Chronic Food Insecurity, the IPC for Acute Malnutrition is a multi-agency and multi sectorial analysis carried out under a technical working group – see annex 1 for the technical working group matrix.

Added value of IPC for Acute Malnutrition: IPC for Acute Malnutrition not only enables classifications based on different methods and indicators of acute malnutrition (with clear statements of the most reliable indicators), but also allows analysis and identification of key contributing factors to acute malnutrition. The IPC for Acute Malnutrition also supports projection of the situation, identification of data gap, and communication of actionable information linking to decision making.

Complementarity between the IPC for Acute Malnutrition and IPC for Acute Food Insecurity: The IPC for Acute Malnutrition complements the IPC for Acute Food Insecurity by providing information on non-food security related factors that contributes to malnutrition. Additionally, the outcome of the IPC for Acute Food Insecurity analysis is used as an input in the IPC for Acute Malnutrition. IPC for Acute Malnutrition should ideally be carried out at the same unit of analysis and at the same time as the IPC for Acute Food Insecurity in order to ensure this complementarity.

Tools and Procedures for Classifying the Severity of and Identifying Contributing Factors to Acute Malnutrition

IPC for Acute Malnutrition uses the UNICEF Conceptual Framework on Malnutrition as the analytical framework in its analysis (see annex 2). The steps used in the IPC for Acute Malnutrition are specified in the table 1 below:

Table 1: IPC for Acute Malnutrition Analysis Steps

Analysis Step	Description
Step 1	Define analysis area
Step 2	Document evidence in repository
Step 3	Analyse evidence on outcome indicators
Step 4	Make Phase classification (current)
Step 5	Analyse evidence on contributing factors and other issues
Step 6	Identify major contributing factors and other issues
Step 7	Identify potential changes in the contributing factors and other issues
Step 8	Identify potential changes in the outcome indicators
Step 9	Make Phase classification (projection)
Step 10	Identify limitations of the analysis
Step 11	Suggest priority response objectives

In **step 1**, the areas of the analysis are clearly defined. Although the classification can be done at any level there is a need to ensure that the choice of analysis units complements the analysis units used for the acute food insecurity classification, is relevant for decision making, and evidence is available at those levels to arrive at a classification.

Once areas of analysis are defined, reports and data available for the analysis are collected and organised using the document repository (see annex 3) as **step 2** of the analysis process.

In **steps 3 and 4**, evidence on acute malnutrition outcome indicators are analysed using the Analysis Worksheet (see annex 3) and Reference Table (see annex 4) and current Phase classifications are carried out.

The analysis of contributing factors and identification of major contributing factors to acute malnutrition in an area of analysis is the heart of the IPC for Acute Malnutrition analysis and this is carried out in **steps 5 and 6**.

The **steps 7, 8 and 9** involve projection analysis. In **step 7**, the potential changes in the contributing factors are determined and in **steps 8 and 9** potential changes in the outcome indicators (as a result of the changes in the contributing factors) are decided and projected Phase change, if any, is agreed.

In **step 10**, limitations of the analysis are documented and proposed priority response objectives are determined in **step 11**.

MAPPING PROTOCOL AND COMMUNICATION BRIEF

The IPC for Acute Malnutrition mapping protocols (see annex 5) are similar to those used in the mapping of IPC for Acute Food Insecurity[3] – i.e. a five-level colour coding scheme is used to classify the area.

However, while GAM by WHZ based classification is depicted in solid colours, GAM by MUAC based classification will be portrayed using hash lines, in order to distinguish the different indicators used in the classification. It should be noted that, as mentioned below, if information on GAM by WHZ and GAM by MUAC are both available, information on GAM by WHZ will be used to make the classification and that mapping will also be done accordingly. Callout boxes are included to indicate the magnitude of the problems (i.e. number of cases and prevalence of acute malnutrition). Any mortality exceeding emergency thresholds are also highlighted in the map to highlight the severity of the situation.

TECHNICAL DEVELOPMENT OF IPC FOR ACUTE MALNUTRITION VERSION 1.0

The development of IPC protocols for classifying Acute Malnutrition began in early 2014 with the approval of the IPC SC. A multiagency IPC NWG was formally set up at the global level to technically lead the

[3] Some concerns have been raised regarding using the same colour coding for both IPC Acute Malnutrition and Acute Food Insecurity classifications – i.e. the maps may be confusing. During the 1st round of the rollout, feedback from the IPC users on this and a final decision will be made with the NWG based on the user feedback.

development of the IPC in April 2014 – the working group has representatives of most of the global partners (ACF, FAO, FEWS-NET, CARE, JRC, Save the Children, and WFP), donors (DFID), technical agencies (CDC and ICH), other UN agencies and global bodies (UNICEF, WHO, gFSC, and GNC) as well as other key stakeholders, such as the World Bank, CILSS and PRESANCA.

The first prototype IPC for Acute Malnutrition was developed in June 2014. Three rounds of pilots involving 8 countries were carried out between June 2014 and October 2015. After each round of pilots, the feedback and lessons learned from the pilots were reviewed with the IPC NWG and the prototype was revised. The IPC for Acute Malnutrition was finalised in December 2015.

Once the tools are endorsed by the IPC SC, an addendum to the IPC manual on Acute Malnutrition (version 1.0) will be developed along with training materials. The IPC for Acute Malnutrition is expected to be rolled out from June 2016 onwards.

Annex 1: IPC for Acute Malnutrition Technical Working Group Matrix

IPC FOR ACUTE MALNUTRITION

TECHNICAL WORKING GROUP MATRIX

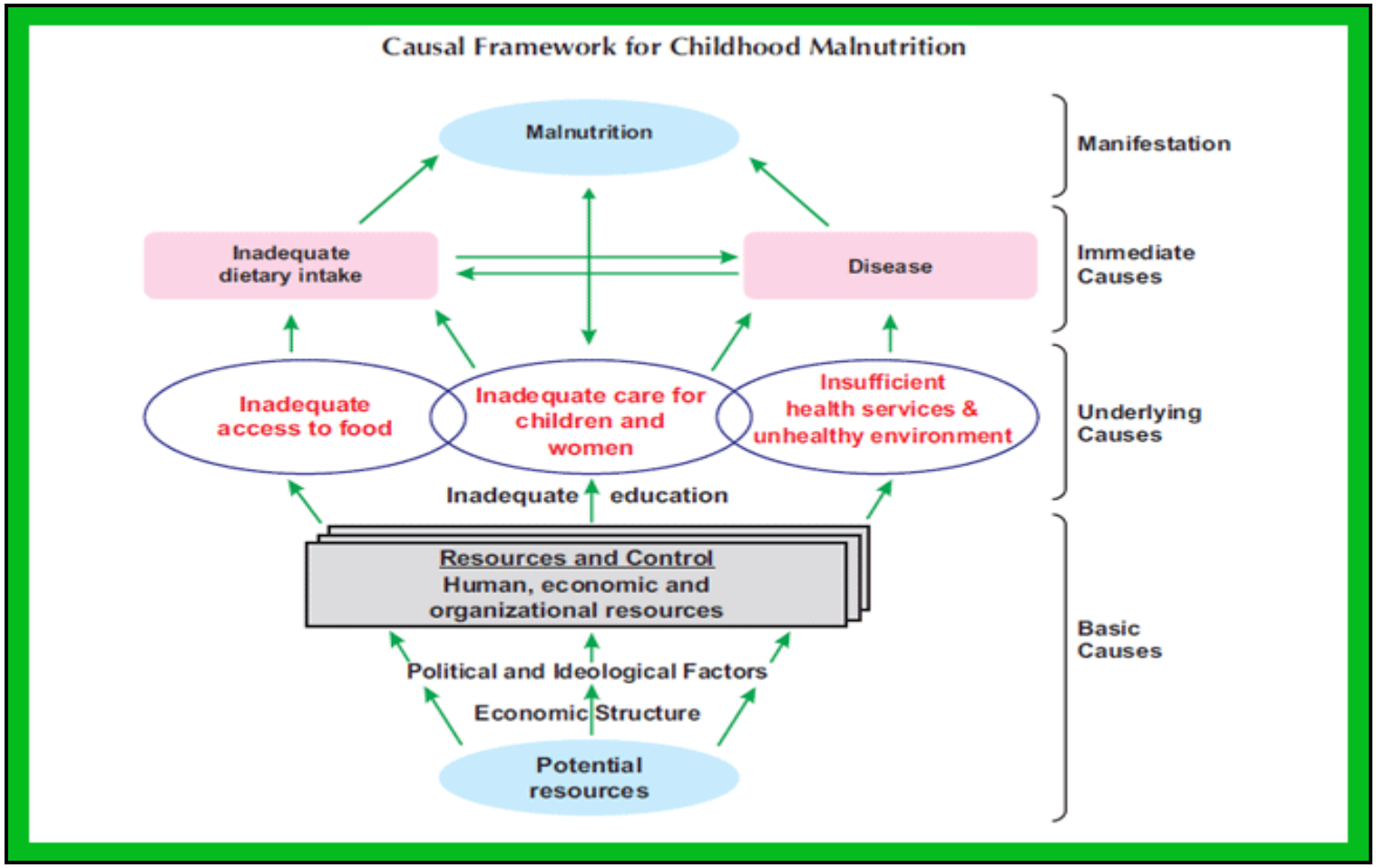
CHAIRPERSON & HOSTING ORGANIZATION:		**STAKEHOLDER ORGANIZATION REPRESENTATION** [Aim to include at least one representative from all applicable groups]				
		National Government [At all relevant levels]	National NGOs/ Civil Society/ Private Sector	International NGOs	United Nations	Technical Agencies
AREA OF EXPERTISE [Include as relevant for analysis; one person can have expertise in several areas]	Nutrition[4]					
	Food Security/ Livelihoods					
	Health					
	Water/Sanitation					
	Gender					
	Statistics					
	Other 1					
	Other 2					
	Other 3					

[4] In contexts where majority of analysts represent both nutrition and health sectors together and have expertise in both sectors, these sectors can be combined and indicated as health and nutrition

Annex 2: IPC for Acute Malnutrition Analytical Framework

IPC FOR ACUTE MALNUTRITION

ANALYTICAL FRAMEWORK: UNICEF CONCEPTUAL FRAMEWORK ON MALNUTRITION



Annex 3: IPC for Acute Malnutrition Analysis worksheet

See file attached separately.

Annex 4: IPC for Acute Malnutrition Reference Table

USAGE: Classification of areas based on the prevalence of Global Acute Malnutrition (GAM) measured either by Weight for Height Z-score (WHZ) or Mid-Upper Arm Circumference (MUAC).
PURPOSE: To guide decision-making on addressing acute malnutrition on the short and long term.

Phase Name and Description	PHASE 1 Acceptable	PHASE 2 Alert	PHASE 3 Serious	PHASE 4 Critical	PHASE 5 Extreme critical
	<5% of children are acutely malnourished by GAM by WHZ measure or **<6%** of children are acutely malnourished by GAM by MUAC measure	Even with any humanitarian assistance, about **5-10%** of children are acutely malnourished by GAM by WHZ measure or about **6-11%** of children are acutely malnourished by GAM by MUAC measure.	Even with any humanitarian assistance, about **10-15%** of children are acutely malnourished by GAM by WHZ measure or about **6-11%** of children are acutely malnourished by GAM by MUAC measure.	Even with any humanitarian assistance, about **15-30%** of children are acutely malnourished by GAM by WHZ measure or about **11-17%** of children are acutely malnourished by GAM by MUAC measure, showing conditions for excess mortality.	Even with any humanitarian assistance, **>30%** of children are acutely malnourished by GAM by WHZ measure **or >17%** of children are acutely malnourished by GAM by MUAC measure, showing conditions for widespread death.
Priority Response Objective to decrease Acute Malnutrition[5]	Maintain the low prevalence of acute malnutrition	Strengthen existing response capacity and resilience. Address contributing factors to malnutrition. Monitor conditions and plan response as required.	Urgently reduce acute malnutrition levels through → Scaling up of existing capacity and response as well as addressing contributing factors to malnutrition	Significant scale up with external help, if needed, of nutrition response and addressing of contributing factors to malnutrition in close co-ordination with other sectors	Addressing widespread acute malnutrition and death by all means. Also address all causes of malnutrition through greater scaling up of all public health programme interventions in close co-ordination with all other sectors.
GAM by Weight for Height Z-score (WHZ) <-2 standard deviation and/or Oedema	< 5%	5.0 to 9.9%	10.0 to 14.9%	15.0 to 29.9%	≥30%
GAM by MUAC < 125 mm and/or Oedema	<6%	6.0 to 10.9%		11.0 to 16.9%	≥17%

[5] Priority response objectives recommended by the IPC for Acute Malnutrition focuses on decreasing acute malnutrition levels; specific actions should be informed through a response analysis based on the information provided by analyses of contributing factors to acute malnutrition as well as delivery related issues, such as government and agencies capacity, funding, and insecurity in the area, etc.

Notes:

1) GAM by WHZ may come from representative surveys or sentinel sites and GAM by MUAC may come from representative surveys, sentinel sites, or screening (either exhaustive or sample screening).

2) Minimum criteria have been established for each source of data and include the following:

Representative surveys:

(1) Surveys should be representative at the unit of analysis, validated by the in-country nutrition cluster or nutrition information working group, and from the same season (2) If surveys are 'validated with caution[6]' and weight-for-height standard deviation is >1.2, calculated prevalence (rather than the observed prevalence[7]) should be used; this will be highlighted in the maps, (3) If surveys are validated with caution but SD is <1.2, observed prevalence should be used, (4) Recent surveys validated with caution will get the reliability score of 1, (5) If there is no survey validation mechanism in place in a country, a survey should only be used in the classification based on the plausibility check results as follows: Plausibility check score <15: use without any restrictions – apply Reliability 2, Plausibility check score 15-25: use with caution – apply Reliability 1, Plausibility check score >25: do not use, (6) Anthropometric data coming from Food Security Monitoring Systems (FSMS) or other cross sectional surveys will be considered for classifications provided that they meet minimum standards for nutrition surveys as previously defined and follow the following: Sampling design is done at the unit of analysis, and have minimum of 25 clusters per unit of analysis (if 20-24 clusters, seek expert advice from SMART technical group or UNICEF/nutrition cluster and if the number of clusters per unit of analysis is <20 clusters, the survey results should not be used), (7) If surveys are covering only part of the unit of analysis, only the area covered by the survey will be classified, (8) MUAC from representative surveys at the unit of analysis should follow the guidance for surveys, (9) For Simple Spatial Surveying Method (S3M) surveys the following are recommended: Administrative level with at least 20 clusters/sites and at least 200 children can be used as a unit of analysis and Plausibility check should be applied to the anthropometric data collected in S3M

Sentinel sites

(1) Sentinel sites are usually purposively selected based on some pre-set criteria, (2) Anthropometric data coming from sentinel sites should have: (a) at least 75 children who are randomly selected per site and (b) at least 4 sites per unit of analysis[8], (3) Prevalence will be calculated by taking average from all sites in a given unit of analysis (no weights will be applied), (4) No trend data will be used in the classification however trend data may be used (same season in the previous year(s)) in the interpretation of the results, (5) Data from sentinel sites will be subjected to the same plausibility checks that of the surveys, (6) Data from rapid assessments should be treated as sentinel sites if they are carried out for referral purposes, (7) Data can be either MUAC or weight-for-height

Screening:

(1) The selection of children should be random or exhaustive, (2) At least 200 children per site should be measured (or all children measured if exhaustive, in that case can be <200 per site) and there should be at least 3 different sites per unit of analysis, (3) The screening should have been carried out in the same season as analysis in all sites if seasonality is an issue, (4) Age distribution must not be skewed – check the quality of MUAC data using the CDC quality check for MUAC data, including digit preference for MUAC and age/sex ratios (5) Provided that MUAC screening is representative and exhaustive, raw data is available, and quality is checked, exhaustive MUAC screening at the unit of analysis level will get reliability score of 2, (6) Prevalence estimates from each screening site should be calculated separately, (7) If all prevalence estimates converge and indicate the same phase, it will be taken as the final phase; if not, final phase will be determined using consensus – if there's no consensus, this data will not be used in the analysis, (8) When there is no age information on MUAC data, the data will be used in the classification under the following conditions: (a) screening is exhaustive and (b) have at least 200 children measured per site with at least 3 different sites, (9) If screening is done on a monthly basis, the latest information from the season of analysis should be used, (10 Data from rapid assessments should be treated as screening if they are done to quickly assess the situation

3) GAM obtained from representative surveys has higher reliability than GAM from sentinel sites and screening. Evidence with lower reliability should be used only when there is no information from representative surveys.

4) GAM by WHZ is preferred over GAM by MUAC. If GAM by WHZ and GAM by MUAC are both available, GAM by WHZ should be used in the classification.

5) The reliability score for each source of data that meet the minimum criteria as specified in table 1 along with the preference ranking of indicators.

Table 1: Reliability Scores and preference ranking for use of indicators

Indicator and Methods	Reliability Score[9]	Preference Ranking
GAM by WHZ from representative survey	2/1	1
GAM by WHZ from sentinel sites	1	2
GAM by MUAC from representative survey	2	3
GAM by MUAC from exhaustive screening	2	4
GAM by MUAC from sentinel sites	1	5
GAM by MUAC from screening	1	6

[6] In some cases, surveys are validated with caution by the in-country nutrition cluster or nutrition information working group because of concerns related to data quality, representativeness, etc.

[7] Information on SD, calculated prevalence, and counted prevalence can be obtained from annex of a SMART survey report; for additional information on plausibility check, please visit: http://smartmethodology.org/survey-planning-tools/smart-methodology/

[8] IPC NWG Recommendation

[9] Reliability score of 2 indicates high reliability and reliability score of 1 indicates low reliability.

6) The GAM by MUAC cut-offs are based on CDC analysis of survey data (unpublished) that best correlate with the WHZ thresholds. These cut-offs are provisional and pending validation. Further analysis are also currently underway to determine the need for regional thresholds. The application of these thresholds will be evaluated through IPC for Acute Malnutrition Lessons Learning Process. IPC for Acute Malnutrition done by MUAC will have a lower confidence level, which will be indicated by hash lines on the maps.
7) The colour coding of different phases are based on the IPC for Acute Food Insecurity. This will also be tested during the first round of rollout and the need to change the colour coding will be determined.

Table of indicators for the analysis of contributing factors and other issues

USAGE: Help identify factors that may be contributing to acute malnutrition in an area; it also helps identify other key issues related to malnutrition such as anaemia that may be of concern in the area of analysis. For definition and sources of these indicators as well as cut-offs for those applicable, refer to annex 6.
PURPOSE: To be used to facilitate analyses of contributing factors to support design and focus of response planning. Note that mortality is not a contributing factor to malnutrition; it is included here to assess the situation – all CDR >2/10,000 people/day (excluding trauma and conflict related deaths) will be highlighted in the maps.

C1. IMMEDIATE CAUSES: INADEQUATE DIETARY INTAKE	
C1.1	Minimum Dietary Diversity (MDD)
C1.2	Minimum Meal Frequency (MMF)
C1.3	Minimum Acceptable Diet (MAD)
C1.4	Minimum Dietary Diversity – Women (MDD-W)[10]
C2. IMMEDIATE CAUSES: DISEASES	
C2.1	Diarrhoea
C2.2	Dysentery
C2.3	Malaria/fever
C2.4	Acute Respiratory Infection (ARI)
C2.5	HIV/AIDS prevalence
C2.6	Cholera or Acute Watery Diarrhoea (AWD)
C2.7	Measles
C3. UNDERLYING CAUSES: INADEQUATE ACCESS TO FOOD	
C3.1	The outcome of the IPC for Acute Food Insecurity analysis should be used in the analysis of food security as a contributory factor in the analysis
C4. UNDERLYING CAUSES: INADEQUATE CARE FOR CHILDREN AND WOMEN	
C4.1	Exclusive breastfeeding under 6 months
C4.2	Continued breastfeeding at 1 year
C4.3	Continued breastfeeding at 2 years
C4.4	Introduction of solid, semi-solid or soft foods by 6 months of age
C5. UNDERLYING CAUSES: INADEQUATE CARE FOR CHILDREN AND WOMEN	
Access to health and nutrition services	
C5.1	Routine measles vaccination coverage
C5.2	Routine polio vaccination coverage
C5.3	Routine vitamin A supplementation coverage

[10] Women consuming foods from ≥5 food groups out of a standardized list of 10 food groups have a greater likelihood of meeting their micronutrient needs than women consuming foods from fewer food groups. Indicator developed by FAO [Women's Dietary Diversity Follow-up Project (WDDP-II)]

C5.4	Campaign measles vaccination coverage
C5.5	Campaign polio vaccination coverage
C5.6	Campaign vitamin A supplementation
C5.7	Measles vaccination coverage from surveys
C5.8	Polio vaccination coverage from surveys
C5.9	Vitamin A supplementation coverage from surveys
C5.10	Coverage of all basic vaccinations from surveys
C5.11	Skilled attendant at delivery
C5.12	Health seeking behaviour
C5.13	Coverage of outreach programmes – CMAM programme coverage (SAM, MAM, or both)[11]
Access to safe WASH	
C5.14	Access to a sufficient quantity of water[12]
C5.15	Access to improved sanitation facilities
C5.16	Access to safe/improved drinking water
D1. OTHER ISSUES: OTHER OUTCOMES	
D1.1	Anaemia among children 6-59 months[13]
D1.2	Anaemia among pregnant women[14]
D1.3	Anaemia among non-pregnant women [15]
D1.4	Vitamin A deficiency among pre-school children (6 – 71 months)[16]
D1.5	Vitamin A deficiency among non-pregnant women (15 – 49 years) [17]
D1.6	Low birth weight
D1.7	Fertility rate
D2. OTHER ISSUES: MORTALITY	
D2.1	Crude Death Rate (CDR)[18]
D2.2	Under Five Death Rate (U5DR)[19]

[11] Rural areas: >50% | urban areas: >70 | camp situation: >90 %. Sphere standard

[12] Phase 1: usually adequate (> 15 litres ppp day), stable | Phase 2: borderline adequate (15 litres ppp day); unstable |Phase 3: 7.5-15 litres ppp day, accessed via asset stripping |Phase 4: < 7.5 litres ppp day (human usage only) Phase 5: l. < 4 litres ppp day (human usage only). PC for Acute Food Insecurity Reference Table.

[13] Normal: ≤ 4.9| Mild: 5 – 19.9| Moderate: 20 – 39.9 | Severe: ≥ 40

[14] Normal: ≤ 4.9| Mild: 5 – 19.9| Moderate: 20 – 39.9 | Severe: ≥ 40

[15] Normal: ≤ 4.9| Mild: 5 – 19.9| Moderate: 20 – 39.9 | Severe: ≥ 40

[16] Mild: ≥2 – 10| Moderate: ≥10 – <20| Severe: ≥20

[17] Mild: ≥2 – 10| Moderate: ≥10 – <20| Severe: ≥20

[18] Minimal/stressed: <0.5 | Crisis: 0.5 to <1| Emergency: 1 to <2| Famine : >2. CDR>2 (excluding trauma and conflict related deaths) must be highlighted in the map. IPC for Acute Food Insecurity

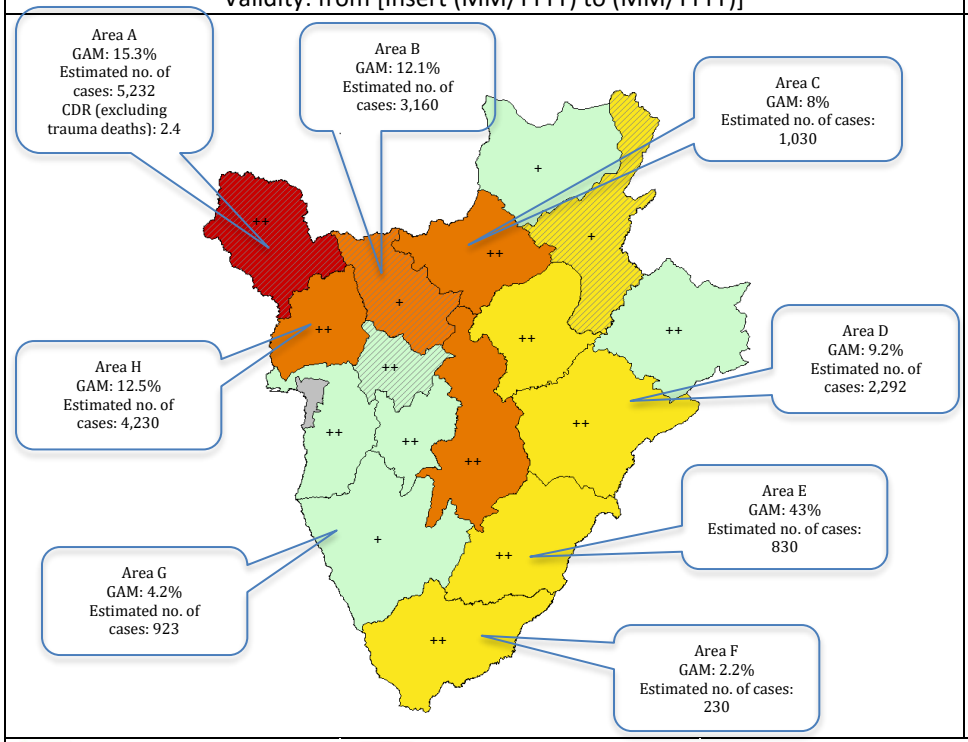
[19] Minimal/stressed: <1| Crisis: 1 to <2| Emergency: 2 to <3| Famine : >4. IPC for Acute Food Insecurity

Annex 5: IPC for Acute Malnutrition Communication Brief

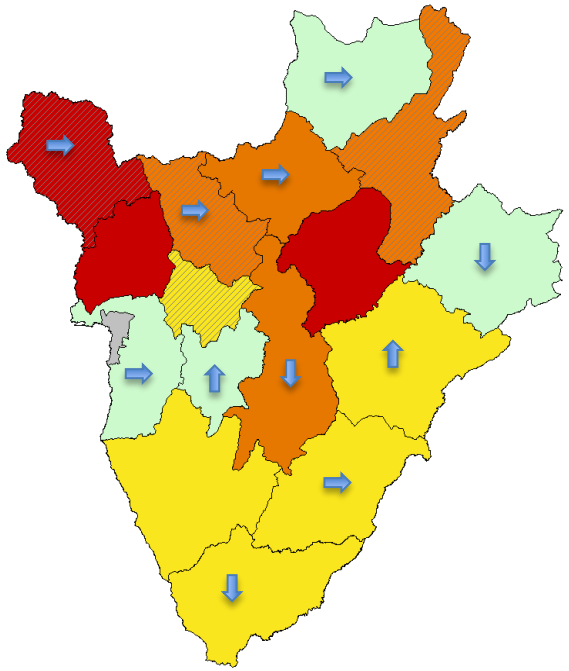
IPC FOR ACUTE MALNUTRITION

COMMUNICATION BRIEF (note that maps are included here for illustration purposes only)

IPC for Acute Malnutrition Map – Current
Validity: from [Insert (MM/YYYY) to (MM/YYYY)]



IPC for Acute Malnutrition Map – Projection
Validity: from [(MM/YYYY) to (MM/YYYY)]



Acceptable
Acceptable-MUAC
Alert
Alert-MUAC
Serious
Serious-MUAC
Critical
Critical-MUAC
Very Critical
Very Critical-MUAC
Insufficient data

++ Reliability Score – High
+ Reliability Score – Low

Likely to improve
Likely to stay the same
Likely to deteriorate

[Indicates changes within a phase within a speicifed phase – i.e. overal situation may deteriorate without a phase change]

Contact for Further Information
[Insert contact information]

Analysis Partners & Supporting Organizations
[Insert logos]

SUMMARY OF FINDINGS, METHODS, AND NEXT STEPS

Key Findings and Issues

[Briefly discuss key findings that will inform response; include in bullet points up to 5 major issues]

Methods & Processes

[Write a brief description of the methods used and challenges encountered during analyses]

Seasonality and Monitoring Implications

[Describe issues that are going to be major concerns and that need to be monitored and addressed in the upcoming season]

Recommendations and Next Steps for Analysis and Decision Making

[Discuss expected and recommended next steps focusing on analytical activities, monitoring actions and linkage to action]

Summary Contributing Factors

SUMMARY CONTRIBUTING FACTORS BY AREA Major contributing factor / Minor contributing factor / Not a contributing factor		AREA A	AREA B	AREA C	AREA D	AREA E	AREA F	AREA G	AREA H	AREA I	AREA J
Inadequate dietary intake	Minimum Dietary Diversity (MDD)										
	Minimum Meal Frequency (MMF)										
	Minimum Acceptable Diet (MAD)										
	Minimum Dietary Diversity – Women (MDD-W)										
	Others										
Diseases	Diarrhoea										
	Dysentery										
	Malaria										
	HIV/AIDS prevalence										
	Acute Respiratory Infection										
	Disease outbreak										
	Others										
Inadequate access to food	Outcome of the IPC for Acute Food Insecurity analysis										
Inadequate care for children	Exclusive breastfeeding under 6 months										
	Continued breastfeeding at 1 year										
	Continued breastfeeding at 2 years										
	Introduction of solid, semi-solid or soft foods										
	Others										
Insufficient health services & unhealthy environment	Measles vaccination										
	Polo vaccination										
	Vitamin A supplementation										
	Skilled birth attendance										
	Health seeking behaviour										
	Coverage of outreach programmes – CMAM programme coverage (SAM, MAM, or both)										
	Access to a sufficient quantity of water										
	Access to sanitation facilities										
	Access to a source of safe drinking water										
	Others										
Basic causes	Human capital										
	Physical capital										
	Financial capital										
	Natural capital										
	Social capital										
	Policies, Institutions and Processes										
	Usual/Normal Shocks										
	Recurrent Crises due to Unusual Shocks										
	Other basic causes										
Other nutrition issues	Anaemia among children 6-59 months										
	Anaemia among pregnant women										
	Anaemia among non-pregnant women										
	Vitamin A deficiency among children 6-59 months										
	Low birth weight										
	Fertility rate										
	Others										

Annex 6: Indicator definition and sources of indicators

IPC FOR ACUTE MALNUTRITION

DEFINITION AND POTENTIAL SOURCES OF INDICATORS

IPC FOR ACUTE MALNUTRITION - PHASE CLASSIFICATION

B	ACUTE MALNUTRITION OUTCOME INDICATOR	DEFINITION	SOURCE	REMARKS
B.1	GAM by WHZ from Representative Survey	Percentage of children between 6-59 months with WHZ<-2 and/or oedema from representative surveys	SMART Surveys, FSMS, KAP surveys, S3M, national nutrition surveys, DHS, MICS, etc.	Refer to the IPC for Acute Malnutrition manual for minimum criteria for this indicator
B.2	GAM by MUAC from Representative Survey	Percentage of children between 6-59 months with MUAC<125mm and/or oedema from representative surveys	SMART Surveys, FSMS, KAP surveys, S3M, national nutrition surveys, etc.	Refer to the IPC for Acute Malnutrition manual for minimum criteria for this indicator
B.3	GAM by WHZ from Sentinel Site Data	Percentage of children between 6-59 months with WHZ<-2 and/or oedema from sentinel site data	Sentinel site information system	Refer to the IPC for Acute Malnutrition manual for minimum criteria for this indicator
B.4	GAM by MUAC from Sentinel Site Data	Percentage of children between 6-59 months with MUAC<125mm and/or oedema from sentinel site data	Sentinel site information system	Refer to the IPC for Acute Malnutrition manual for minimum criteria for this indicator
B.5	GAM by MUAC from Screening Data	Percentage of children between 6-59 months with MUAC<125mm and/or oedema from screening data	MUAC screening and rapid assessment	Refer to the IPC for Acute Malnutrition manual for minimum criteria for this indicator
B.6	GAM by MUAC from Exhaustive Screening Data	Percentage of children between 6-59 months with MUAC<125mm and/or oedema from screening data	MUAC screening and rapid assessment	Refer to the IPC for Acute Malnutrition manual for minimum criteria for this indicator

ANALYSIS OF CONTRIBUTING FACTORS BASED ON THE UNICEF CONCEPTUAL FRAMEWORK ON MALNUTRITION

C1. IMMEDIATE CAUSES: INADEQUATE DIETARY INTAKE				
INDICATORS		**DEFINITION**	**SOURCE**	**REMARKS**
C1.1	Minimum Dietary Diversity (MDD)	Percentage of children 6–23 months of age who receive foods from 4 or more food groups	SMART surveys, KAP surveys, S3M, IYCF assessments, DHS, MICS, etc.	It is measured using 24 hour recall.
C1.2	Minimum Meal Frequency (MMF)	Percentage of breastfed and non-breastfed children 6–23 months of age who receive solid, semi-solid, or soft foods (but also including milk feeds for non-breastfed children) the minimum number of times or more	SMART surveys, KAP surveys, S3M, IYCF assessments, DHS, MICS, etc.	MMF varies by age of the child and breastfeeding status – i.e. 2 times for breastfed infants 6–8 months; 3 times for breastfed children 9–23 months; and 4 times for non-breastfed children 6–23 months. It is measured using 24 hour recall.
C1.3	Minimum acceptable diet (MAD)	Percentage of children 6–23 months of age who receive a minimum acceptable diet (apart from breast milk)	SMART surveys, KAP surveys, S3M, IYCF assessments, DHS, MICS, etc.	This is a composite indicator calculated using MDD and MMF – i.e. proportion of children who meet both MDD and MMF.
C1.4	Minimum Dietary Diversity – Women (MDD-W)	Percentage of women of reproductive age (15-49 years old) who ate foods from at least 5 food groups the previous day, using a standardized list of 10 food groups	KAP surveys, S3M, IYCF assessments, DHS, MICS, Living standards survey, etc.	MDD-W is a new indicator. It is being integrated into living standards survey in some countries. It may be incorporated in other surveys as well.

C2. IMMEDIATE CAUSES: DISEASES				
INDICATORS		**DEFINITION**	**SOURCE**	**REMARKS**
C2.1	Diarrhoea	Percentage of children 6-59 months who have had diarrhoea (3 or more loose or watery stools per 24 hour period) in the last two weeks prior to the survey	SMART surveys, KAP, S3M, DHS, MICS, etc.	
C2.2	Dysentery	Percentage of children aged 6-59 months who had bloody diarrhoea in the last two weeks prior to the survey	SMART surveys, KAP, S3M, DHS, MICS, etc.	
C2.3	Malaria/fever	Percentage of children aged 6-59 months who had malaria/fever in the last two weeks prior to the survey	SMART surveys, KAP, S3M, DHS, MICS, etc.	
C2.4	Acute Respiratory Infection (ARI)	Percentage of children aged 6-59 months who had ARI in the last two weeks prior to the survey	SMART surveys, KAP, S3M, DHS, MICS, etc.	

C2.5	HIV/AIDS prevalence	Percentage of adults (15-49 years) living with HIV/AIDS	HIV/AIDS surveys, DHS, and MOH reports	
C2.6	Cholera or Acute Watery Diarrhoea (AWD)[20]	A case of cholera is confirmed when Vibrio cholera O1 or O139 is isolated from any patient with diarrhoea; Laboratory confirmation of the first 10–20 cases is essential to ascertain that this is a cholera outbreak	MOH reports	Any outbreak must be confirmed by the national health authorities
C2.7	Measles	The definition of measles outbreak will vary according to the phase of measles control in a country.	MOH reports	Any outbreak must be confirmed by the national health authorities

C3. UNDERLYING CAUSES: INADEQUATE ACCESS TO FOOD				
OUTCOME OF THE IPC FOR ACUTE FOOD INSECURITY ANALYSIS		**DEFINITION**	**SOURCE**	**REMARKS**
C3.1	Outcome of the IPC for Acute Food Insecurity analysis – IPC Product or IPC Compatible, when IPC Product is unavailable	Refer to IPC for AFI	IPC for AFI communication template	

C4. UNDERLYING CAUSES: INADEQUATE CARE FOR CHILDREN AND WOMEN				
INDICATORS		**DEFINITION**	**SOURCE**	**REMARKS**
C4.1	Exclusive breastfeeding under 6 months	Proportion of infants 0–5 months of age who are fed exclusively with breast milk.	SMART surveys, KAP, S3M, DHS, MICS, etc.	
C4.2	Continued breastfeeding at 1 year	Proportion of children 12–15 months of age who are fed breast milk.	SMART surveys, KAP, S3M, DHS, MICS, etc.	
C4.3	Continued breastfeeding at 2 years	Proportion of children 20–23 months of age who are fed breast milk.	SMART surveys, KAP, S3M, DHS, MICS, etc.	
C4.4	Introduction of solid, semi-solid or soft foods by 6 months of age	Proportion of infants 6–8 months of age who receive solid, semi-solid or soft foods.	SMART surveys, KAP, S3M, DHS, MICS, etc.	

[20] If there is cholera/AWD, additional include information on the scale (i.e. number. of people affected) and any available response under remarks

C5. UNDERLYING CAUSES: INADEQUATE CARE FOR CHILDREN AND WOMEN				
INDICATORS		**DEFINITION**	**SOURCE**	**REMARKS**
C5.1	Routine measles vaccination coverage	Proportion of children 12-23 months of age vaccinated against measles through routine immunisation services	EPI/MOH	These indicators shows how well the health facilities are functioning
C5.2	Routine polio vaccination coverage	Proportion of children 12-23 months of age vaccinated against polio (all 4 doses) through routine immunisation services	EPI/MOH	
C5.3	Routine vitamin A supplementation coverage	Proportion of children 6-59 months of age provided with vitamin A supplementation through routine immunisation services in the past 6 months	EPI/MOH	
C5.4	Campaign measles vaccination coverage	Proportion of children vaccinated against measles through immunisation campaigns	Coverage surveys, SMART surveys, KAP, S3M, DHS, MICS, etc.	
C5.5	Campaign polio vaccination coverage	Proportion of children vaccinated against polio (all 4 doses) through routine immunisation campaigns	Coverage surveys, SMART surveys, KAP, S3M, DHS, MICS, etc.	
C5.6	Campaign vitamin A supplementation	Proportion of children 6-59 months of age provided with vitamin A supplementation during immunisation campaigns in the past 6 months	Coverage surveys, SMART surveys, KAP, S3M, DHS, MICS, etc.	
C5.7	Measles vaccination coverage from surveys	Proportion of children 12-23 months of age vaccinated against measles assessed from surveys	SMART surveys, KAP, S3M, DHS, MICS, etc.	
C5.8	Polio vaccination coverage from surveys	Proportion of children 12-23 months of age vaccinated against polio (all 4 doses) assessed from surveys	SMART surveys, KAP, S3M, DHS, MICS, etc.	
C5.9	Vitamin A supplementation coverage from surveys	Proportion of children 6-59 months of age provided with vitamin A supplementation assessed from surveys	SMART surveys, KAP, S3M, DHS, MICS, etc.	
C5.10	Coverage of all basic vaccinations from surveys	Proportion of children vaccinated against all basic vaccination in the country assessed from surveys	SMART surveys, KAP, S3M, DHS, MICS, etc.	According to WHO, children are considered to have received all basic vaccinations when they have received a vaccination against tuberculosis (also known as BCG), three doses each of the DPT-HepB-Hib (also called

				pentavalent) and polio vaccines, and a vaccination against measles
C5.11	Skilled attendant at delivery	Percentage of births attended by skilled health personnel (doctors, nurses or midwives)	SMART surveys, KAP, S3M, DHS, MICS, etc.	Referred to the last delivery of the mother.
C5.12	Health seeking behaviour	Percentage of caregivers who sought treatment from health facilities for treatment for common childhood illnesses	SMART surveys, KAP, S3M, DHS, MICS, etc.	Follow up question usually included for children who were sick in the last 2 weeks preceding the survey.
C5.13	Coverage of outreach programmes – CMAM programme coverage (SAM, MAM, or both)	Proportion of children with acute malnutrition who receive CMAM care	Coverage surveys	
C5.14	Access to a sufficient quantity of water	Proportion of households that use an adequate quantity of water per person per day (for drinking, cooking, personal & domestic hygiene – minimum 15 liters per person per day)	SMART surveys, KAP, S3M, etc.	
C5.15	Access to improved sanitation facilities	Proportion of households with access to improved sanitation facilities	SMART surveys, KAP, S3M, DHS, MICS, etc.	
C5.16	Access to safe/improved drinking water	Proportion of households with access to a source of safe/improved drinking water	SMART surveys, KAP, S3M, DHS, MICS, etc.	

D1. OTHER ISSUES: OTHER OUTCOMES				
OTHER OUTCOMES		**DEFINITION**	**SOURCE**	**REMARKS**
D1.1	Anaemia among children 6-59 months	Proportion of children 6-59 months having anaemia	SMART surveys, KAP, S3M, DHS, MICS, etc.	Hemoglobin levels are measured in grams per deciliter (g/dl); <11 g/dl is considered anaemia
D1.2	Anaemia among pregnant women	Proportion of pregnant women having anaemia	SMART surveys, KAP, S3M, DHS, MICS, etc.	Hemoglobin levels are measured in grams per deciliter (g/dl) ; <11 g/dl is considered anaemia
D1.3	Anaemia among non-pregnant women	Proportion of non-pregnant women having anaemia	SMART surveys, KAP, S3M, DHS, MICS, etc.	Hemoglobin levels are measured in grams per deciliter (g/dl) <12 g/dl is considered anaemia

D1.4	Vitamin A deficiency among pre-school children (6 – 71 months)	Proportion of pre-school children (6 – 71 months) with vitamin A deficiency	SMART surveys, KAP, S3M, DHS, MICS, etc.	Measured by serum retinol; serum retinol 0.70 µmol/l or below constitutes deficiency
D1.5	Vitamin A deficiency among non-pregnant women (15 – 49 years)	Proportion of non-pregnant women (15 – 49 years) with vitamin A deficiency	SMART surveys, KAP, S3M, DHS, MICS, etc.	Measured by serum retinol; serum retinol 0.70 µmol/l or below constitutes deficiency
D1.6	Low birth weight	Proportion of live births that weigh less than 2,500 g out of the total of live births during the same time period	MOH records	
D1.7	Fertility rate	Mean number of children ever born to women age 40-49 years	DHS	

D2. OTHER ISSUES: MORTALITY				
MORTALITY		**DEFINITION**	**SOURCE**	**REMARKS**
D2.1	Crude Death Rate (CDR)	Total number of deaths per 10,000 people per day	SMART surveys	The CDR should exclude trauma and conflict related deaths
D2.2	Under Five Death Rate (U5DR)	Total number of deaths among children less than 5 years of age per 10,000 children less than 5 years of age per day	SMART surveys	