FSNAU

Food Security and Nutrition Analysis Unit Somalia

Information for Better Livelihoods

FEWS NET
FAMINE EARLY WARNING SYSTEMS NETWORK

FAO
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Post Deyr '11/12

Presentation

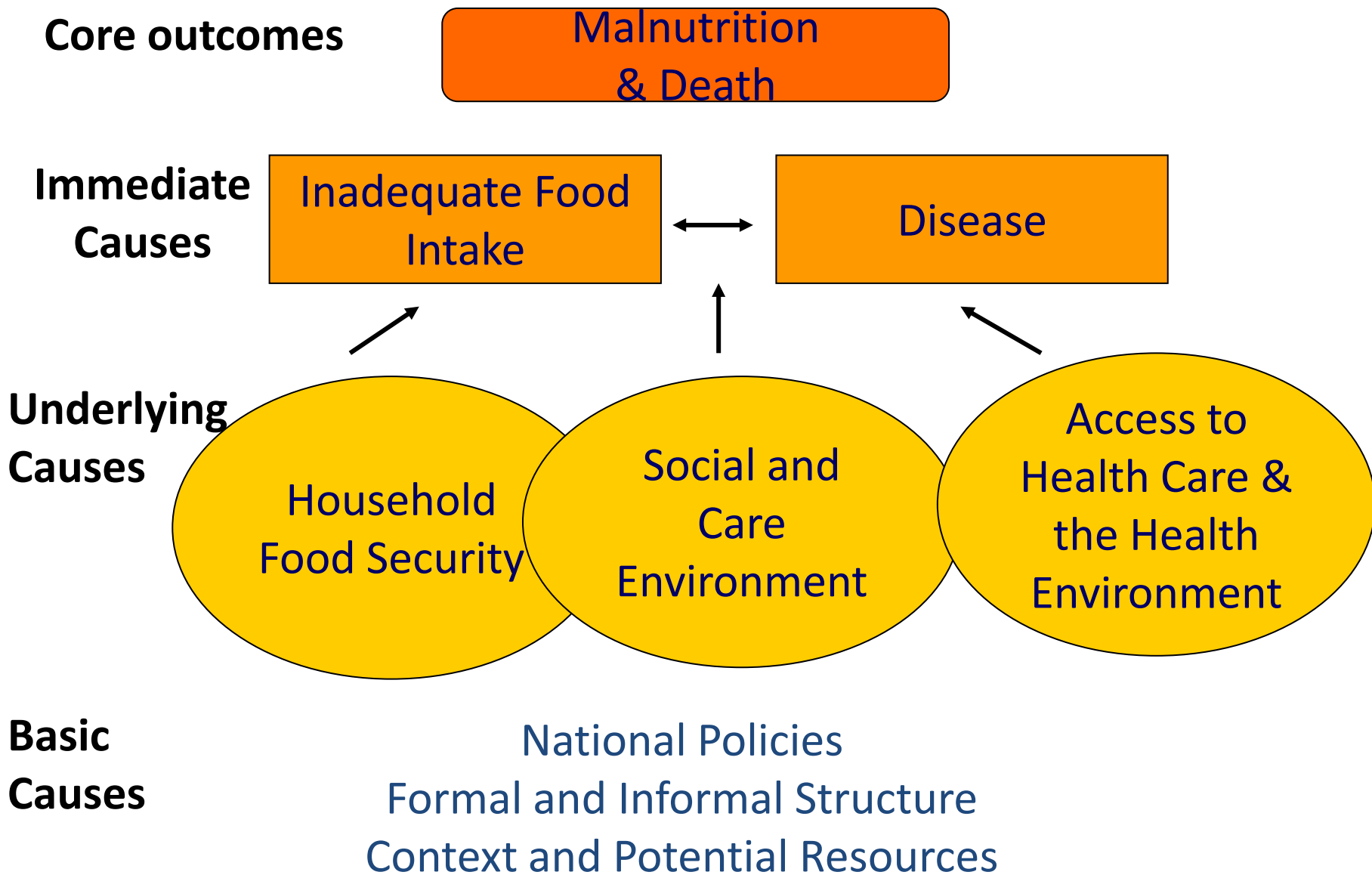January 24th, 2012

Integrated Nutrition Situation Analysis

Nutrition Situation Analytical Framework

Contextual issues

UNICEF Conceptual Framework on The Causes of Malnutrition

FSNAU

Core outcomes

Malnutrition & Death

Immediate Causes

Inadequate Food Intake ⟷ Disease

Underlying Causes

Household Food Security

Social and Care Environment

Access to Health Care & the Health Environment

Basic Causes

National Policies
Formal and Informal Structure
Context and Potential Resources

Nutrition Outcome Analysis

❑ Diverse information is required to estimate and interpret:

- **Core outcome** (nutrition levels and deaths)
- **Immediate causes (**food consumption and disease)
- **Underlying causes** (household food security, social care and health environment).

❑ In Somalia, diverse sources and methods are used to access the information to estimate both the core outcome, and contextual factors:

- Nutrition surveys based on SMART Methodology
- Rapid MUAC assessments
- Health facility nutrition data
- Admissions trends to feeding programs
- Secondary data on the food security, health, and on displacements.

❑ In Somalia, the Nutrition situation analytical framework is the basis for interpreting findings of each outcome, and of the overall situation.

The Nutrition Analytical Framework

❑ The Nutrition Analytical Framework

- **provides a contextual analysis** of the nutrition situation, rather than focus on prevalence estimates & thresholds which is traditionally the case in nutrition analysis.

- **Is based on international thresholds** (WHO, Sphere and Fanta) where available, and contextually relevant analysis where these are not available.

- forms the basis for the nutrition situation classification, the *Estimated Nutrition Situation maps*, & the caseloads Estimates maps.

- Has been **developed through a consultative process**,

❑ The July 2010 version accommodates up to research developments, including the shift from NCHS 1997 to WHO 2006 growth standards.

❑ The Nutrition Analytical Framework has three sections:

- Core Outcome Indicators (mainly anthropometry related information, and mortality)

- Immediate Causes

- Driving/Underlying Factors

CORE REFERENCE INDICATORS	Acceptable	Alert	Serious	Critical	Very Critical
Global Acute Malnutrition *(WHO Reference) Reliability (R) =1*	<5%	5 to <10%; Usual range and stable	10 to <15% or where there is significant increase from baseline/ seasonal trends in last ≥2 yrs	15 to <20% or where there is significant increase from baseline/ seasonal trends in last ≥2 yrs	>/=20% or where there is significant increase from baseline/ seasonal trends in last ≥2 yrs
Mean Weight-for-Height Z (WHZ) scores *(R=1)*	>-0.40	-0.40 to -0.69; Stable/Usual	-0.70 to -0.99; >usual/increasing	<-1.00; >usual/increasing	
SAM (WHZ and oedema) *(WHO to advice on thresholds) R=1)*	<3.0%	3.0 – 4.4%	4.5 – 5.4%	5.5 – 6.9% (or where there is a significant increase from baseline/seasonal trends in ≥2yrs	≥7.0% (Or where there is a very significant increase from baseline/ seasonal trends in ≥2 yrs
Crude death rate/ 10,000/day *(R=1)*	<0.5	0.5 to <1	1 to <2 Include information on the main causes	2 to ≤5 Include information on the main causes	>5 *or doubling of rate in preceding phase.* Include main causes
Under five years death rates/10,000/day *(R=1)*	<1	1-1.99/	2-3.9/10,000/day Include main cause	4 to 9.9 *or doubling from previous phase.* Include main cause	≥10 *or doubling of rate from preceding phase.* Include main cause
MUAC Children: (% <12.5cm): *Ref: FSNAU Estimates (R=2)*	<5%	<5% with increase from seasonal trends	5.0 - 9.9%	10.0-14.9%, or where there is significant increase from seasonal trends	>15%, Or where there is significant increase from seasonal trends
MUAC<11.5cm *(R=2)*			≤1.0%	>1.0%	
Adult MUAC - Pregnant and Lactating(%<23.0cm,Sphere04)	<9.5%	9.5 – 14.9%	15 – 21.9%	22.0 -27.9%	≥28%
Adult MUAC - Non-pregnant & non-lactating <18.5cm,Sphere04	<0.3%	0.3 – 0.49%	0.5 – 0.69%	0.7 – 1.99%	≥2.0%
Non Pregnant Maternal Undernutrition BMI<18.5	<10%	10.0 to 19.9%	20.0 to 39.9%	>40%	
Non Pregnant Maternal Overnutrition BMI>24.9	TBC	TBC	TBC	TBC	
HIS Trends of Acutely Malnourished Children *(Ref: HIS), (R=3)*	V. low (<5%) proportion in the preceding 3mths relative to ≥2yr seasonal trends	Low proportion (5 to <10%) and stable trend in the preceding 3mths relative to ≥2yr seasonal trends	Moderate (10 to <15%) and stable or low (5 to <10%) but increasing proportion in the preceding 3mths relative to ≥2yr seasonal trends	High (≥ 15%) and stable proportion in the preceding 3mths relative to ≥2yr seasonal trends	High (≥ 15%) and increasing proportion in the preceding 3mths relative to ≥2yr seasonal trends
Sentinel Site Trends: levels of children identified as acutely malnourished(WHZ), *FSNAU'06 SSS*	Very low (<5%) and stable levels	Low levels (5 to <10%)and one round indicating increase, seasonally adjusted	Low (5 to < 10%) & increasing or moderate (10 to <15%) levels based on two rounds (seasonally adjusted)	High levels (≥ 15%) of malnourished children and stable (seasonally adjusted)	High levels (≥ 15%) and increasing with increasing trend (seasonally adjusted)
OVERAL NUTRITION SITUATION	*Acceptable*	*Alert*	*Serious*	*Critical*	*Very Critical*

IMMEDIATE UNDERLYING CAUSES Reference Indicators	Acceptable	Alert	Serious	Critical	Very Critical
Poor HH Dietary Diversity (% consuming<4fdgps) Mean HH dietary diversity Score	<5% TBC	5 – 9.9% TBC	10-24.9% TBC	25 – 49.9% TBC	$\geq$50% TBC
Disease Outbreaks: (seasonally adjusted). Frequency of reported outbreaks of AWD &, malaria & measles	• Normal levels, & seasonal trends, • Review data in relevant context	-AWD 1 case -Measles 1 case -Malaria–doubling of cases in 2 weeks in hyper endemic areas– using RDT	Outbreak not contained and/or in non endemic area – limited access to treatment: CFR for AWD >2% rural CFR for AWD >1% urban AWD – duration exceed >6 wks		
Morbidity Patterns: Proportion of children reported ill in 2wks prior to survey *(R=2)* **Health facility morbidity trends (R=3) /WHO surveillance (R=1)**	TBC Very low proportion reportedly sick	TBC Low & stable proportion of reportedly sick based on seasonal trends	TBC Low proportion reportedly sick, from previous months but increasing in >2 months based on seasonal trends	TBC High levels and stable numbers in >2 months based on seasonal trends	TBC High with significant Increase in numbers of sick children, based on seasonal trends

UNDERLYING FACTORS Reference Indicators	Acceptable	Alert	Serious	Critical	Very Critical
Complementary feeding in addition to breastfeeding i. Introduction of complementary food at 6 months of age: %introduced ii. Meeting minimum recommended feeding frequency iii. Dietary diversity score	≥95% ≥95% ≥95%	80-94% 80-94% 80-94%	60-79% 80-94% 80-94%	0-59% 0-59% 0-59%	0-59% 0-59% 0-59%
Breastfeeding (BF) Practices *I. Exclusive BF for 6mths* *ii).Continued BF at 1 yr* *iii)Continued BF at 2yr reference*	≥90% ≥90% ≥90%	50-89% 50-89% 50-89%	12-49% 12-49% 12-49%	0-11% 0-11% 0-11%	
Measles immunization/Status **Vitamin A Supplementation** **Coverage**:1 dose in last 6 months	>95% >95%	80-94.9% 80-94.9%	<80% <80%		
Population have access i). to a sufficient quantity of water for drinking, cooking, personal & domestic hygiene–min 15lts pp/ day **ii).Sanitation facilities**	100% 100%	TBC TBC	TBC TBC	TBC TBC	TBC TBC
Affected pop with **access to formal/informal services:** health services	Should not be necessary	Access to humanitarian interventions for most vulnerable	Reduced access to humanitarian support for most vulnerable	Limited access to humanitarian support for majority	Negligible or no access
Selective Feeding Programs Available: Coverage of TFP /SFP & referral systems(Sphere04); **-Admissions trends** *(R=3)*	Should not be necessary	Access for most vulnerable	None available		
Food Security Situation- current IPC status	Generally Food Secure	Borderline Food Secure	Acute Food and Livelihood Crisis	Humanitarian Emergency	Famine/Humanitarian Catastrophe
Civil Insecurity	Prevailing structural peace	Unstable disrupted tension	Limited spread, low intensity	Widespread, high intensity	Widespread, high intensity
3 MONTH NUTRITION SITUATION OUTLOOK	*Convergence of evidence on immediate Causes/Driving factors* vis-à-vis *Projected trend in 3 months time* *No change: Stable; Uncertain: Potential to deteriorate Potential to improve:*				

Analytical Process: Key Points

- To make a statement on the
  - Nutrition situation: A minimum of **two Core indicators** are recommended ensuring a reliable analysis
  - Projected trend: A minimum of two **risk factors (immediate or underlying)** are recommended ensuring a reliable analysis.
- The overall classification of the nutrition situation for a given area is done taking into account historical nutrition and contextual data. Triangulation of all indicators is also undertaken.
- It is not necessary for all the indicators to fall into one category in fact this will rarely happen, the idea is to look at the bigger picture in terms of where the indicators are currently, where they have come from and where they are likely to go to make the overall statement of the situation.
- Where possible nutrition information should be analyzed at livelihood level, & not at administrative, this is the case in Somalia.
- The references or cut offs used for GAM, SAM, CDR and Immunization coverage are consistent with the international ranges. However, for many of the other indicators, agreed international ranges/ thresholds for each categorization are lacking. As such, the various ranges have been developed following analysis of available nutrition data from Somalia.
- Other contexts needed to refine certain indicators such as dietary diversity & MUAC - currently they are based on historical analysis from FSNAU
- Further inclusion of indicators relating to (i). Displacement and (ii). Population concentration for displacement is required.
- The age of the data needs to be considered and ideally should be from the current season. If the data is from an earlier season this needs to be considered in the overall analysis and may affect the results.
- This tool should only be used by nutrition experts who have the ability to critically evaluate and contextualize nutrition information

Example: Summary nutrition data and overall analysis, highlighting key indicators vis-à-vis previous season for trends

| Outcome indicators	NORTHWEST EAST GOLIS/GEBBI VALLEY Livelihood Zone, Summary of Findings		
	Gu'10, N=198 July 2010	**Deyr 2010/2011 N = 659 December 2011**	**Gu'11 N=727 July 2011**
Child Nutrition status			
o *GAM (WHZ<-2 or oedema)*	>9.3%	11.1 (8.0- 15.1)	12.2(8.5- 16.9)
o *SAM (WHZ<-3 or oedema)*	> 0.1%	2.1 (1.2-3.9)	1.1 (0.0-2.7)
o *Mean Weight-for height WHZ score*	-0.84	-0.53	-0.81±1.03
o *Oedema*	0	0.3	0.4
o *MUAC (<12.5 cm or oedema)*	2.5% (0.3-4.6)	5.8% (3.8-8.6)	5.5%(3.9-7.0)
o *Severe MUAC (<11.5 cm)*	1.5 (0-3.2)	0.3% (0.0-2.4)	1.2%(0.5-1.9)
o *HIS Nutrition Trends*	Low (<10%) and stable trends	*Low 10-15% and fluctuating*	*High (<10%) and decreasing*
o *TFPs/SFPs Admission trends*	High and stable numbers	Low and decreasing in Badhan	*High and decreasing numbers*
Crude death Rate/10,000/day (90days)	N/A	0.13 (0.05-0.33)	0.98 (0.54-1.77)
Under 5 death Rate/10,000/day (90days)	N/A	0.30 (0.07-1.20)	1.44 (0.79-2.61)
OVERALL NUTRITION SITUATION	***Alert***	***Serious***	***Serious***
Child Morbidity, Immunization, IYCF			
o *Disease Outbreaks:*	No outbreaks	No outbreaks	No out break disease:
o *Morbidity based on 2wk recall*	19.1	43.1; Diarrhoea- 17.8; Pneumonia 21.4	Morbidity, 41.2; Diarrhoea 16.6;
o *Immunization status/Vit. A*	N/A	Vit A- 80.9; Measles- 77.1	Vitamin A; 77.7; Measles 81.8
o *Children eating from <4 fdgps*	N/A	98	95.8
o *Children meeting min. feeding freq.*	N/A	35.0	23.3
Public Health Indicators; Gender	N/A	**N= 420**	**N=536**
o *Households (HH) accessing safe water*	N/A	49.8	15.2
o *HH accessing sanitation facilities*	N/A	61.7	68.2
o *Relation between GAM & child sex*	Insignificant	Insignificant	Insignificant
o *Relation between GAM & sex of hh head*	N/A	Insignificant	Insignificant
Proportion of hh consuming <4 fd gps	N/A	6.7	36.4
Food Security Phase	***BFI***	***BFI***	AFLC
Overall Risk to Deterioration	**STABLE**	***POTENTIAL TO DETERIOATE***	**POTENTIAL TO DETERIOPRATE**

Nutrition Situation Estimates - Maps

Nutrition Situation, August 2011

Reliability of data represented in solid lines or hash lines:

Solid Colours – when reliable surveys, or at least 3 sources of reliable anthropometric data

Hash lines if failed plausibility test <3 sources of non survey data
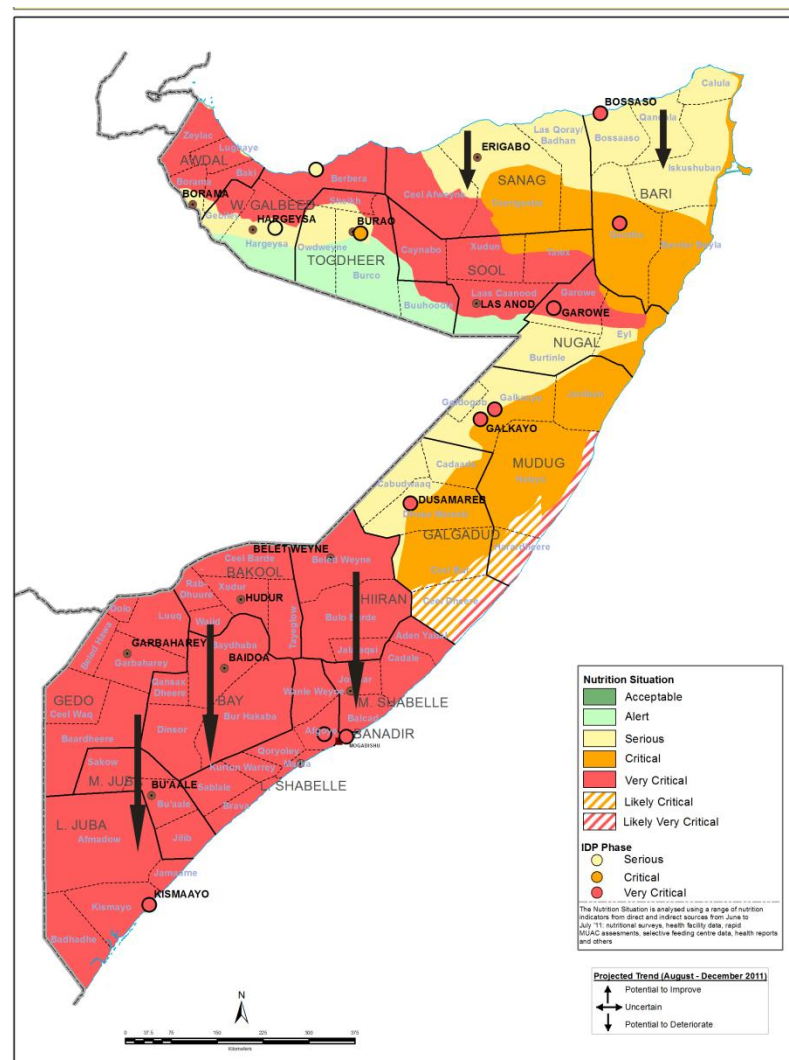
The End

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