FSNAU

Food Security and Nutrition Analysis Unit Somalia

Information for Better Livelihoods

FEWS NET
FAMINE EARLY WARNING SYSTEMS NETWORK

Post Gu '11

Presentation

August 16th, 2011

Integrated Nutrition Situation Analysis – Vetting Meeting

Nutrition Situation Analytical Framework

UNICEF Conceptual Framework on The Causes of Malnutrition

Core outomes

Malnutrition & Death

Immediate Causes

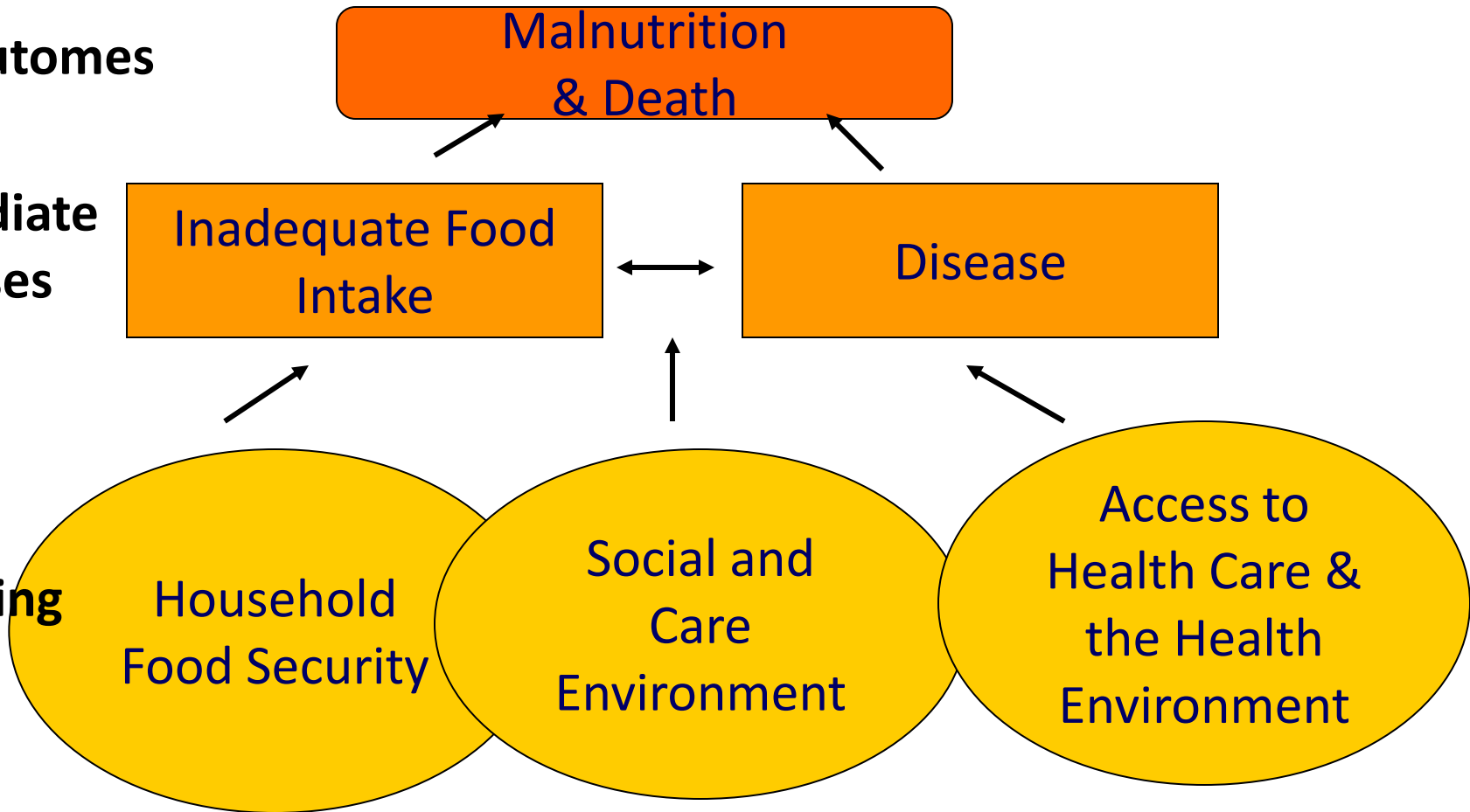Inadequate Food Intake

Disease

Underlying Causes

Household Food Security

Social and Care Environment

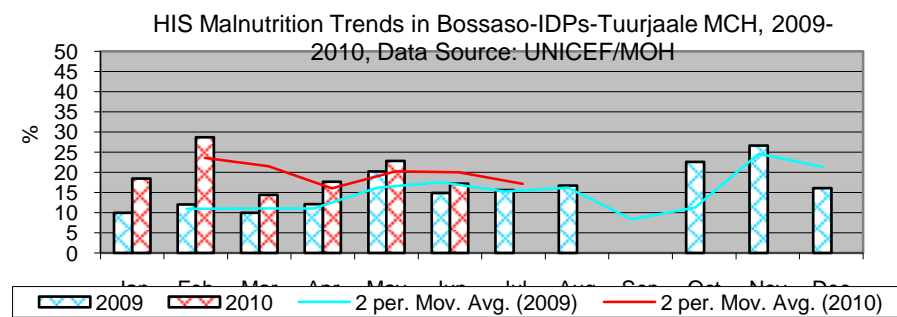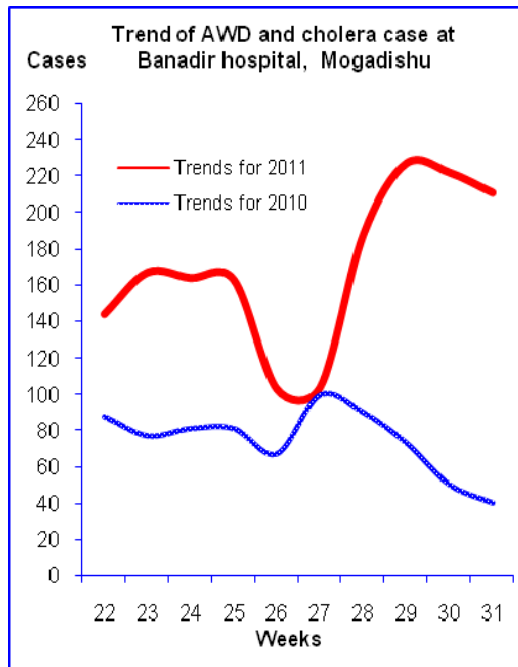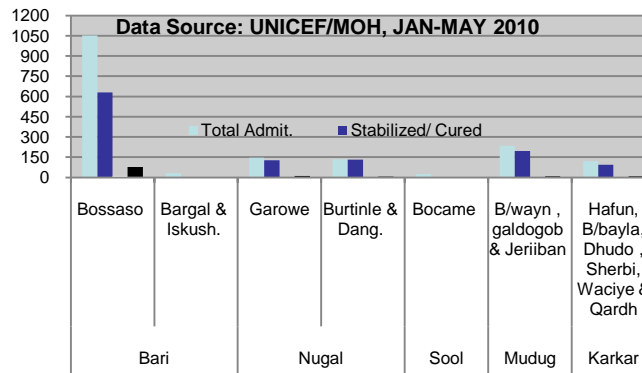Access to Health Care & the Health Environment

Basic Causes

National Policies
Formal and Informal Structure
Context and Potential Resources

DIVERSE
Nutrition Information & Sources *Gu* 2011 (June-July)

- ☐ **Nutrition Surveys (based on WHZ, WHO):** 45 detailed nutrition surveys (34 large sample, 3 small sample, 2 exhaustive) conducted to establish the situation from 6 months ago:
  - *18 in the Southern populations, including Afgooye & Mogadishu IDPs*
  - *2 in Central rural LZ (Hawd, Addun)*
  - *7 in northwest and northeast*
  - *9 focused on NW/NE IDP populations (Hargeisa, Berbera, Burao, Galkayo, Bossaso, Garowe, Margaga, Qardho, Dusamareb).*
  - *8 urban LZ surveys (5 in NW & 3 in NE). Mogadishu Urban done in April 2011*
- ☐ **Rapid Nutrition assessments based on MUAC**
  - *Coastal Deeh (Central Regions)*
  - *Cowpea belt (Central Regions)*
  - *Kismayo IDPs*
  - *Bardera IDPs*
  - *Urban centers in over 20 sites in Central and South*
- ☐ **Health Center Monitoring (HIS):** Collected from 100 health facilities from all regions
- ☐ **Related Selective Feeding Centre Data**
- ☐ **Secondary Related Data (risk factors for deterioration)**
  - *Disease outbreaks:*
    - *Cholera in Shabelle, Central & Juba regions*
    - *AWD in L & Middle Shabelle, W. Golis, Measles in Hiran & Bakool ; Dengue fever (W.Galbeed). (Source-WHO & Somalia Health Sector Bulletins, Jun-Jul'11)*
  - *Drought, food insecurity and displacements in most parts of S (Source: FSNAU, OCHA and UNHCR bulletins)*

Nutrition Survey Findings					
		GAM <-2 WHZ +/- oed	SAM <-3 WHZ +/- oed	Total At Risk (MUAC <12.5)	Severe Risk (MUAC<11.5)
NW	Togdheer Agro-p	12.2	2.3	4.8	1
	Awd/Galb Agrop	8.8	0.3	5.8	0.4
	N. Valley Pastoral	7.9	0.1	2	1
	W. Golis Pastoral	13.8	2.3	3.5	0.5
	S Plateau Pastoral	7.0	0.6	2.5	0.5
	East Golis Pastoral	9.3	0.1	2.5	1.5
NE	N. Valley Pastoral	8.8	0.6	2.0	1.0
	S Plateau Pastoral	5	0.6	2.0	0.0
	Coastal Deeh	10.8	2.2	6.5	2.5
	Golis/Kakaar Past	16.3	1.7	5.1	0.5
Central	Hawd Pastoral	15.3	3.9	6.0	1.1
	Afgoye IDP	15.1	1.7	7.2	0.5

**OTP PERFORMANCE INDICATORS IN NE
(Nos. of Children Admitted, Cured, Dead, Defaulted)**

Data Source: UNICEF/MOH, JAN-MAY 2010

Total Admit.   Stabilized/ Cured

Bossaso | Bargal & Iskush. | Garowe | Burtinle & Dang. | Bocame | B/wayn , galdogob & Jeriiban | Hafun, B/bayla, Dhudo , Sherbi, Waciye & Qardh

Bari   Nugal   Sool   Mudug   Karkar

Trend of AWD and cholera case at Banadir hospital, Mogadishu

Cases

Trends for 2011
Trends for 2010

Weeks

HIS Malnutrition Trends in Bossaso-IDPs-Tuurjaale MCH, 2009-2010, Data Source: UNICEF/MOH

%

2009   2010   2 per. Mov. Avg. (2009)   2 per. Mov. Avg. (2010)

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.
  - **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.
  - **developed through a consultative process**,
- The July 2010 version accommodates current research developments, and the switch from NCHS 1997 to WHOGS 2006.
- 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*

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

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	>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:*				

## Example of summary nutrition data and overall analysis, vis-à-vis seasonal trends

Outcome indicators	EAST GOLIS/GEBBI VALLEY Livelihood Zone, Summary of Findings		
	Gu'10, N=198	Deyr 2010/2011 N = 659	Gu'11 N=727
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

Reliability of data represented in solid lines or hash lines:

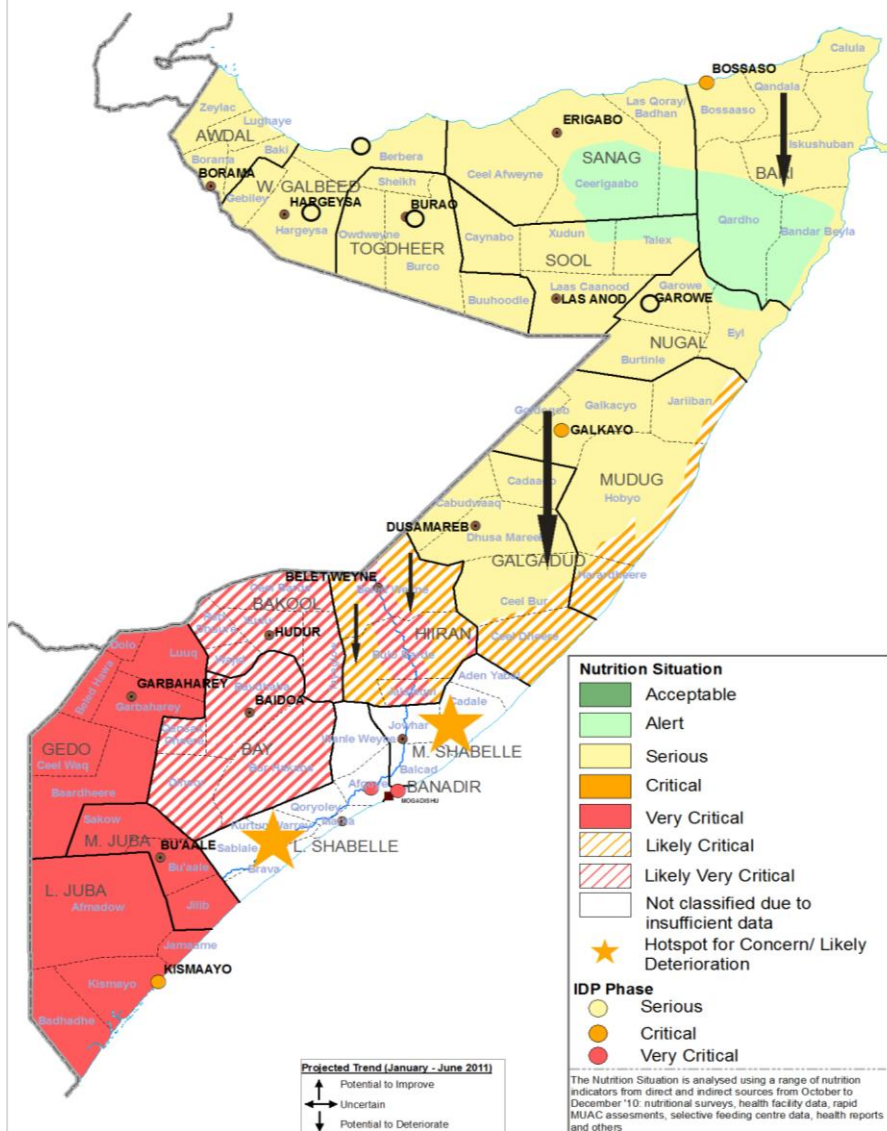**Solid Colours – when reliable surveys, or at least 3 sources of reliable anthropometric data**

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

SOMALIA - ESTIMATED NUTRITION SITUATION JULY 2011
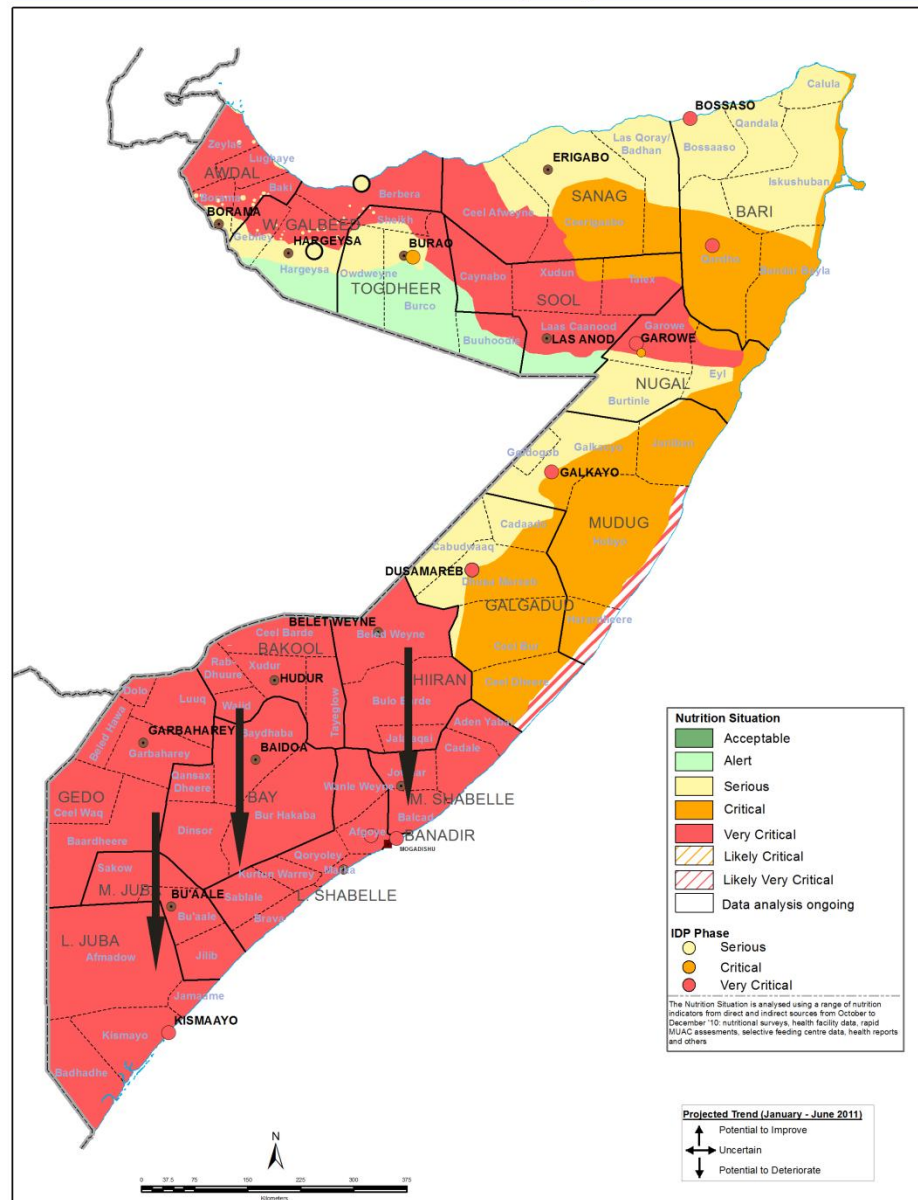Based on June/July surveys
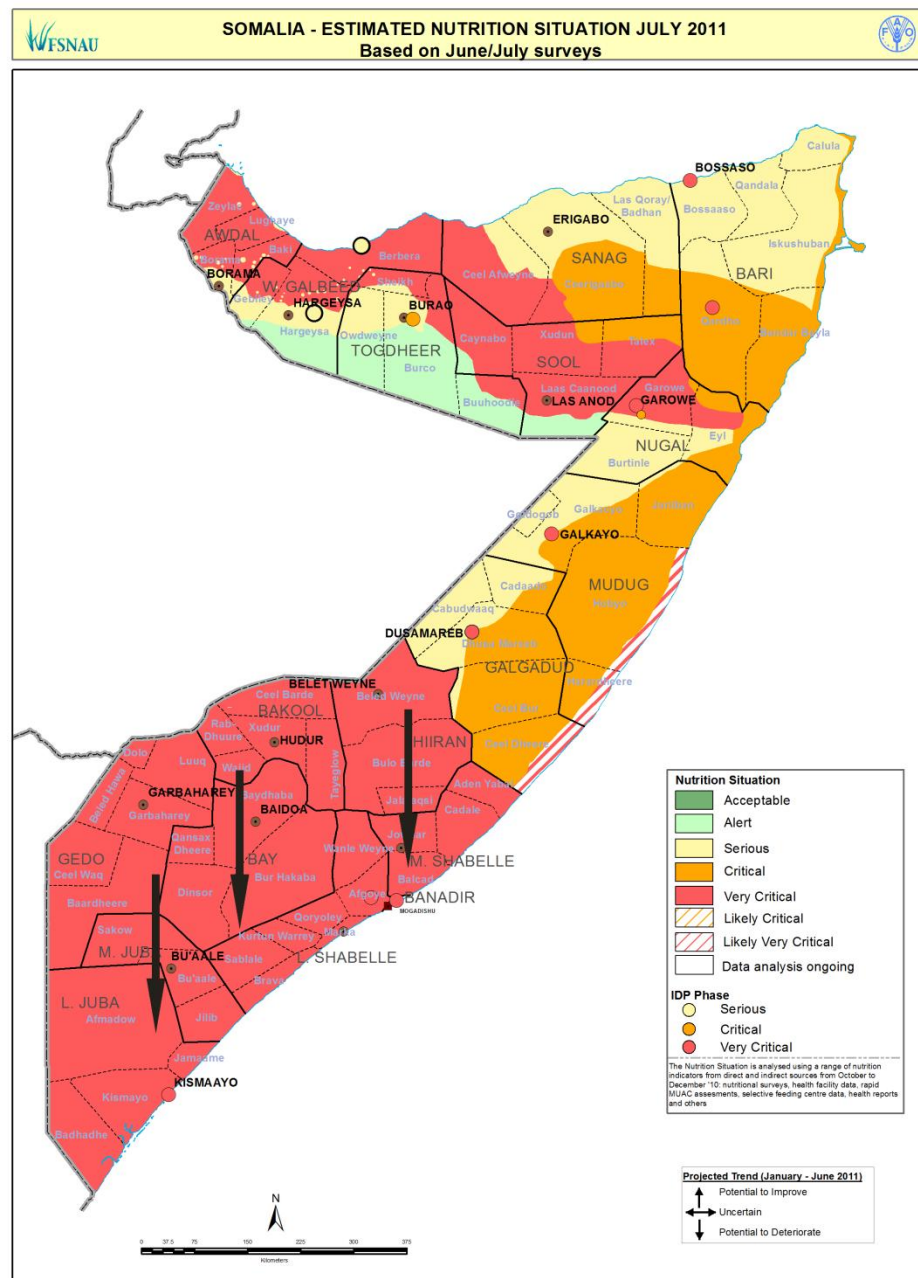
Progression/Time Series - Maps

SOMALIA - ESTIMATED NUTRITION SITUATION JANUARY 2011

SOMALIA - ESTIMATED NUTRITION SITUATION JULY 2011
Based on June/July surveys

Nutrition Situation
- Acceptable
- Alert
- Serious
- Critical
- Very Critical
- Likely Critical
- Likely Very Critical
- Not classified due to insufficient data
- ★ Hotspot for Concern/ Likely Deterioration

IDP Phase
- Serious
- Critical
- Very Critical

The Nutrition Situation is analysed using a range of nutrition indicators from direct and indirect sources from October to December '10: nutritional surveys, health facility data, rapid MUAC assesments, selective feeding centre data, health reports and others

Projected Trend (January - June 2011)
- ↑ Potential to Improve
- ↕ Uncertain
- ↓ Potential to Deteriorate

Nutrition Situation
- Acceptable
- Alert
- Serious
- Critical
- Very Critical
- Likely Critical
- Likely Very Critical
- Data analysis ongoing

IDP Phase
- Serious
- Critical
- Very Critical

The Nutrition Situation is analysed using a range of nutrition indicators from direct and indirect sources from October to December '10: nutritional surveys, health facility data, rapid MUAC assesments, selective feeding centre data, health reports and others

Projected Trend (January - June 2011)
- ↑ Potential to Improve
- ↕ Uncertain
- ↓ Potential to Deteriorate

End

For comments contact:

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