

# FAMINE IN SOUTHERN SOMALIA

*Evidence for an updated declaration*

*Nairobi, Kenya  
September 2, 2011*



**USAID**  
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EUROPEAN COMMISSION



Swiss Agency for  
Development and  
Cooperation SDC



# Defining famine - The IPC Phases

PHASE		SUMMARY DESCRIPTION
	<b>GENERALLY FOOD SECURE</b>	More than 80% of households can meet basic food needs without atypical coping strategies.
	<b>BORDERLINE FOOD INSECURE</b>	For at least 20 percent of households, food consumption is reduced but minimally adequate without having to engage in irreversible coping strategies. These households cannot fully meet livelihoods protection needs.
	<b>ACUTE FOOD AND LIVELIHOOD CRISIS</b>	At least 20 percent of households have significant food consumption gaps OR are marginally able to meet minimum food needs only with irreversible coping strategies such as liquidating livelihood assets. Levels of acute malnutrition are high and above normal.
	<b>HUMANITARIAN EMERGENCY</b>	At least 20 percent of households face extreme food consumption gaps, resulting in very high levels of acute malnutrition and excess mortality; OR HH households face an extreme loss of livelihood assets that will likely lead to food consumption gaps.
	<b>FAMINE</b>	At least 20 percent of households face extreme food deficits and starvation, death, and destitution are evident ; and acute malnutrition prevalence exceeds 30% ; and mortality rates exceed 2/10000/day

# Defining famine

Using the IPC, evidence of three specific outcomes is required for a famine declaration:

- (1) at least 20% face extreme food deficits and have very limited ability to cope;
- (2) Global acute malnutrition prevalence must exceed 30%; and
- (3) Crude death rates must exceed 2/10,000/day.

In a famine, destitution, disease outbreaks, large-scale displacement, and social collapse are evident.

## Data collection and validation process

- 16 nutrition/mortality surveys were conducted during August – results have been received for 8 surveys, 8 surveys are ongoing or finalizing data entry. All surveys used SMART methodology for anthropometry and are statistically representative.
- Of the 8 sets of survey results received, 6 have been verified and endorsed by CDC as of this morning.
- The level of the current crisis suggested by survey data has been triangulated with extensive information from the recent post-Gu assessment and with information from partners on the ground.
- Consensus among key UN partners was reached regarding survey findings and famine classification.

# **CURRENT CONDITIONS AND OUTCOMES**

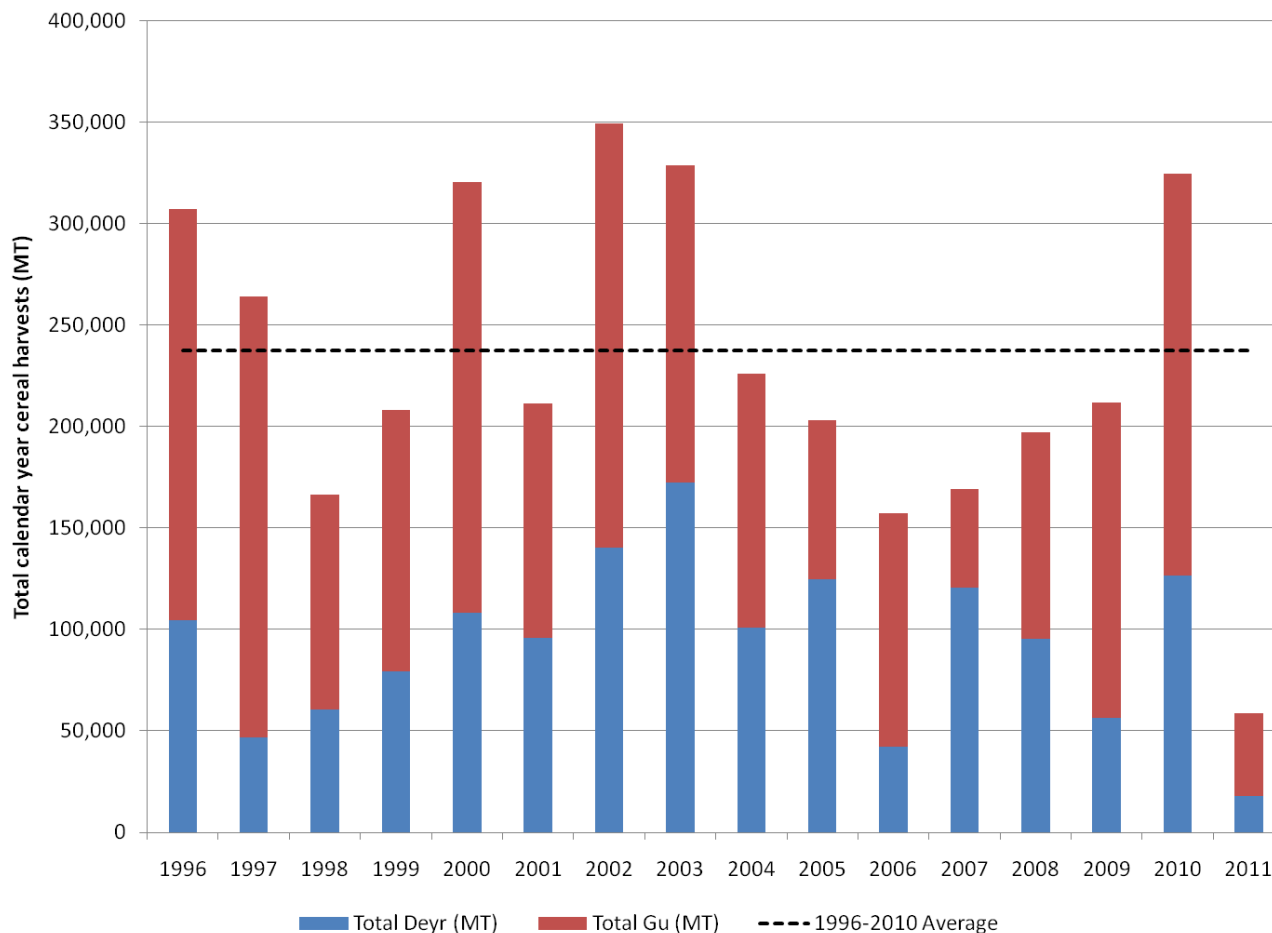
# Evidence of substantial constraints to food availability

Regions	Gu 2011 Production in MT			Gu 2011 Production Historical Comparison		
	Maize	Sorghum	Total Cereal	% of Gu 2010	% of 5 year average (2006-2010)	% of Gu PWA (1995-2010)
Bakool	100	300	400	9%	29%	17%
Bay	400	7, 100	7, 500	10%	20%	19%
Gedo	700	0	700	11%	26%	13%
Hiraan	300	300	600	90%	45%	18%
Juba Dhexe (Middle)	600	0	600	5%	7%	6%
Juba Hoose (Lower)	300	0	300	6%	11%	6%
Shabelle Dhexe (Middle)	2, 500	900	3, 400	16%	28%	22%
Shabelle Hoose (Lower)	18, 300	4, 800	23, 100	35%	47%	37%
<b>Total</b>	<b>23, 200</b>	<b>13, 400</b>	<b>36, 600</b>	<b>19%</b>	<b>32%</b>	<b>26%</b>

Source: FSNAU

# Evidence of substantial constraints to food availability

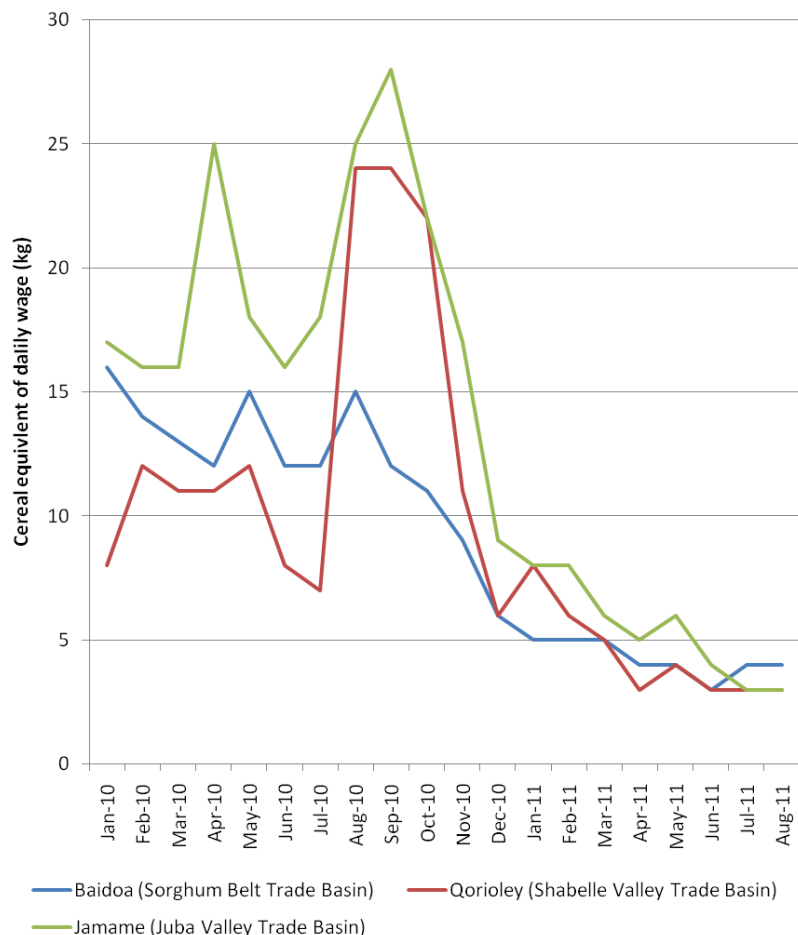
Calendar year cereal harvests in southern Somalia (1996-2011) compared to average



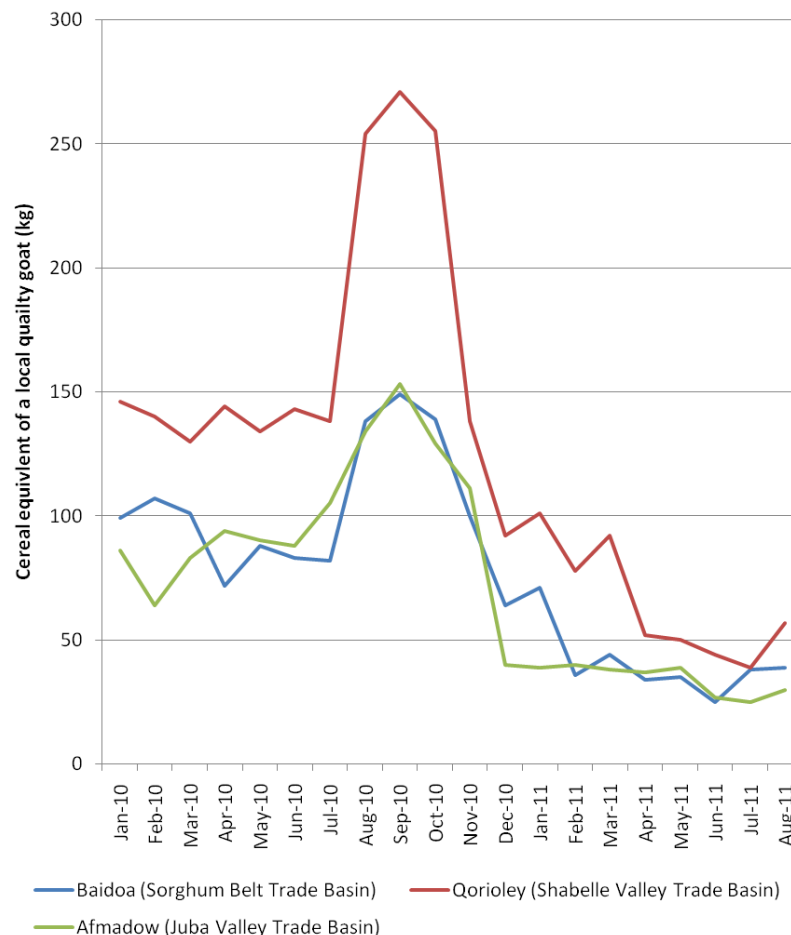
Source: FSNAU

# Evidence of substantial constraints to food access

## Daily wage:cereal Terms of Trade



## Local quality goat:cereal Terms of Trade



Source: FSNAU/FEWS NET



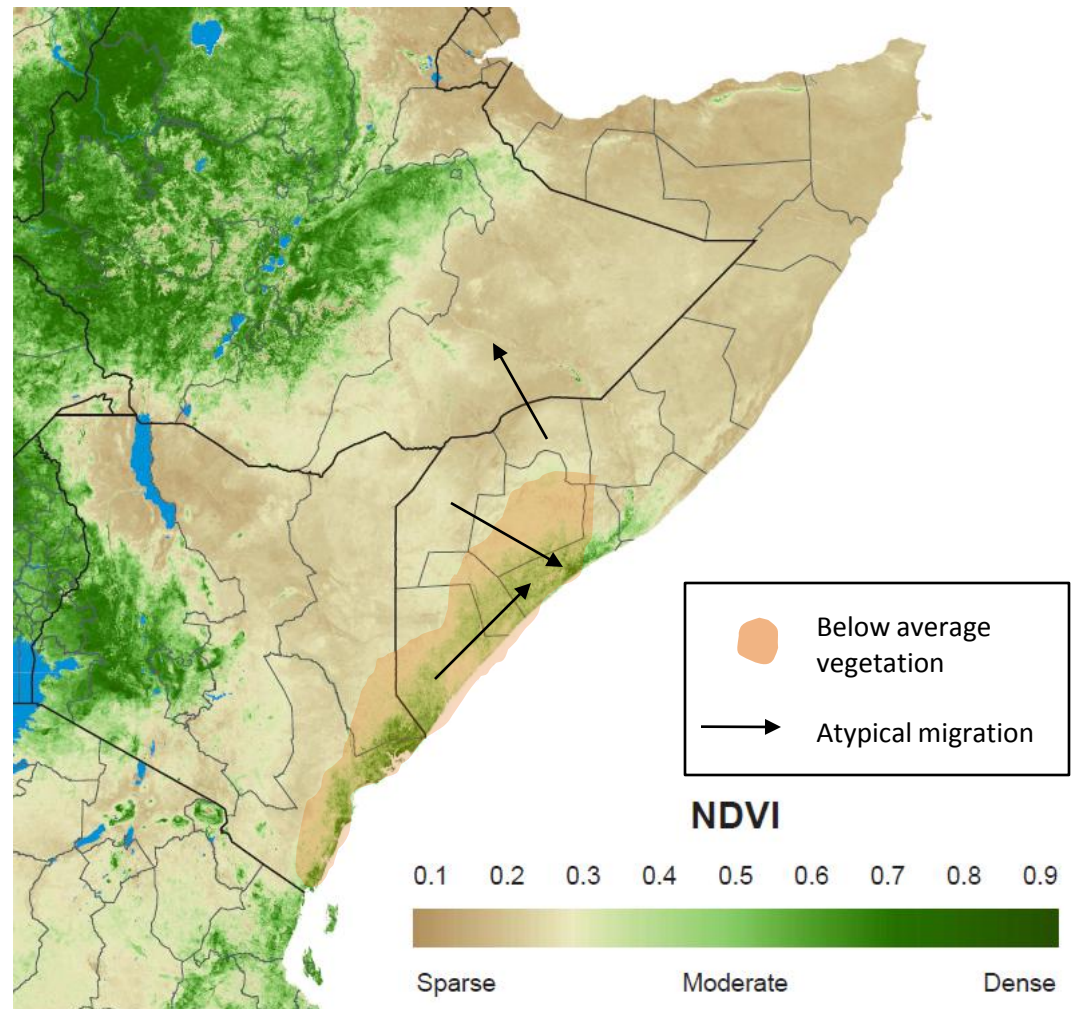
## Evidence of substantial constraints to food access

Location	Proportion of HH classified as "poor"	Sources of food for poor households	Relative importance of food source (% of minimum food basket in the baseline year)	Change in 2010/11 compared to baseline year	Likely impact on Aug/Sept 2011 food access
<b>Bakool Agropastoral</b>	40%	Own crop production	25%	88% decline in crop production	<b>Poor households only able to access 40-50 percent of food needed for survival</b>
		Purchases funded by wage labor	25%	57% decline in wage:sorghum ToT	
		Purchases funded by livestock sales	25%	76% decline in goat:sorghum ToT	
		Other	25%	Net decline likely	
<b>Bay Agropastoral High Potential</b>	35%	Own crop production	60%	80% decline in crop production	<b>Poor households only able to access 40-50 percent of food needed for survival</b>
		Purchases funded by wage labor	10%	82% decline in wage:sorghum ToT	
		Other	30%	Net decline likely	
<b>Lower Shabelle Riverine</b>	38%	Own crop production	75%	64% decline in crop production	<b>Poor households only able to access 40-50 percent of food needed for survival</b>
		Purchases funded by crop sales	15%		
		Purchases funded by wage labor	10%	46% decline in wage:maize ToT	

# Evidence of substantial constraints to food access

- Large areas of southern Somalia are seasonally dry and in those areas where pasture does exist, its availability is far below-average.
- These poor pastoral conditions have resulted in atypical migration of men and camels towards Lower Shabelle (where pasture is more available due to average to above-average Hagaa rains) and Ethiopia.
- Thus, even in areas where household camel holdings are near baseline, food access remains very limited for household members who have stayed behind in areas of origin.

Temporally smoothed eMODIS 250m NDVI (August 16-25, 2011)



# Evidence of GAM prevalence >30 percent

Region	Survey date	Livelihood	GAM prevalence	SAM Prevalence
Lower Shabelle	July 2011	Riverine	<b>28.7%</b> (24.4-33.5 95% CI)	<b>14.2%</b> (11.6-17.3 95% CI)
		Agpast./Past	<b>40.6%</b> (34.6-46.8 95% CI)	<b>20.9%</b> (16.2-26.5 95% CI)
Middle Shabelle	July 2011	Riverine	<b>19.6%</b> (16.4-23.2 95% CI)	<b>8.2%</b> (5.7-11.6 95% CI)
		Agpast.	<b>35.3%</b> (24.9-47.3 95% CI)	<b>17.1%</b> (10.3-27.1 95% CI)
Bay	<b>August 2011</b>	Agpast.	<b>58.3%</b> (52.1 - 64.2 95% CI)	<b>22.1 %</b> (18.2 - 26.5 95% CI)
Bakool	<b>August 2011</b>	Agpast.	<b>41.1%</b> (35.1 – 47.4 95% CI)	<b>13.1%</b> (10.5 – 16.2 95% CI)
	July 2011	Pastoral	<b>55.9%</b> (50.6 - 61.2 95% CI)	<b>20.4%</b> (15.2-26.7 95% CI)
Middle/Lower Juba	<b>August 2011</b>	Riverine	<b>39.6%</b> (35.4 - 43.9 95% CI)	<b>19.0%</b> (15.7 - 22.7 95% CI)
		Agpast.	<b>34.4%</b> (29.8 - 39.2 95% CI)	<b>14.2 %</b> (11.5 - 17.4 95% CI)
		Pastoral	<b>31.2%</b> (26.1 - 36.7 95% CI)	<b>12.8 %</b> (9.9 - 16.4 95% CI)
Gedo	<b>August 2011</b>	Riverine*	<b>39.4%</b> (33.1 – 46.0 95% CI)	<b>20.2%</b> (16.4 – 24.7 95% CI)
		Agpast.*	<b>27.2 %</b> (22.8 - 32.2 95% CI)	<b>12.9 %</b> (10.1 - 16.3 95% CI)
		Pastoral	<b>32.9 %</b> (27.9 - 38.3 95% CI)	<b>17.7 %</b> (14.4 - 21.6 95% CI)
Hiran	July 2011	Riverine	<b>20.7%</b> (18.4-23.2 95% CI)	<b>9.1%</b> (7.2-11.5 95% CI)
		Agpast.	<b>43.2%</b> (37.7-48.9 95% CI)	<b>12.8%</b> (10.5-15.6 95% CI)
		Pastoral	<b>27.3%</b> (24.2-30.6 95% CI)	<b>16.3%</b> (13.4-19.6 95% CI)
Afgoye	July 2011	IDP	<b>40.7%</b> (34.5-47.2 95% CI)	<b>17.7%</b> (13.4-22.9 95% CI)
Mogadishu	July 2011	IDP	<b>39.4%</b> (32.4-46.9 95% CI)	<b>15.3%</b> (11.6-19.8 95% CI)

# Evidence of famine-level mortality

Region	Survey date	Livelihood	CDR	U5DR
Lower Shabelle	July 2011	Riverine	<b>6.12</b> (4.3 - 7.93)	<b>20.3</b> (13.0 - 27.6)
		Agpast./Past	<b>4.29</b> (3.1 - 5.46)	<b>13.2</b> (8.7 - 17.7)
Middle Shabelle	July 2011	Riverine	1.72 (1.14 - 2.3)	<b>5.29</b> (3.78 - 6.82)
		Agpast.	<b>2.3</b> (1.6 - 2.9)	<b>7.0</b> (4.8 - 9.2)
Bay	<b>August 2011</b>	Agpast.	<b>2.15</b> (1.5-2.8)	<b>6.16</b> (3.91-8.40)
Bakool	<b>August 2011</b>	Agpast.	<b>2.11</b> (1.4- 2.83)	<b>5.18</b> (3.06-7.3)
	July 2011	Pastoral	<b>1.94</b> (1.44-2.43)	<b>5.3</b> (4.02-6.59)
Middle/Lower Juba	<b>August 2011</b>	Riverine	<b>1.76</b> (1.20-2.32)	<b>4.22</b> (2.56-5.87)
		Agpast.	<b>1.82</b> (1.23 - 2.41)	<b>4.62</b> (2.87-6.37)
		Pastoral	<b>1.25</b> (0.77 - 1.73)	<b>2.61</b> (1.32 - 3.88)
Gedo	July 2011 (August data unusable)	Riverine	<b>1.62</b> (1.00 - 2.25)	<b>6.20</b> (4.21 - 8.19)
		Agpast.	<b>1.68</b> (1.08 - 2.28)	<b>5.42</b> (3.80-7.04)
		Pastoral	<b>1.21</b> (0.64 - 1.78)	<b>6.06</b> (4.39-7.74)
Hiran	July 2011	Riverine	<b>1.41</b> (0.86 - 1.96)	<b>4.2</b> (3.15 - 5.26)
		Agpast.	<b>1.5</b> (0.9 - 2.1)	<b>4.32</b> (3.1 - 5.5)
		Pastoral	<b>1.76</b> (1.22 - 2.3)	<b>4.41</b> (3.28 - 5.53)
Afgoye	July 2011	IDP	<b>4.33</b> (3.39 - 5.26)	<b>13.21</b> (9.6 - 16.82)
Mogadishu	July 2011	IDP	<b>4.37</b> (3.42 - 5.32)	<b>15.04</b> (10.8 - 19.2)

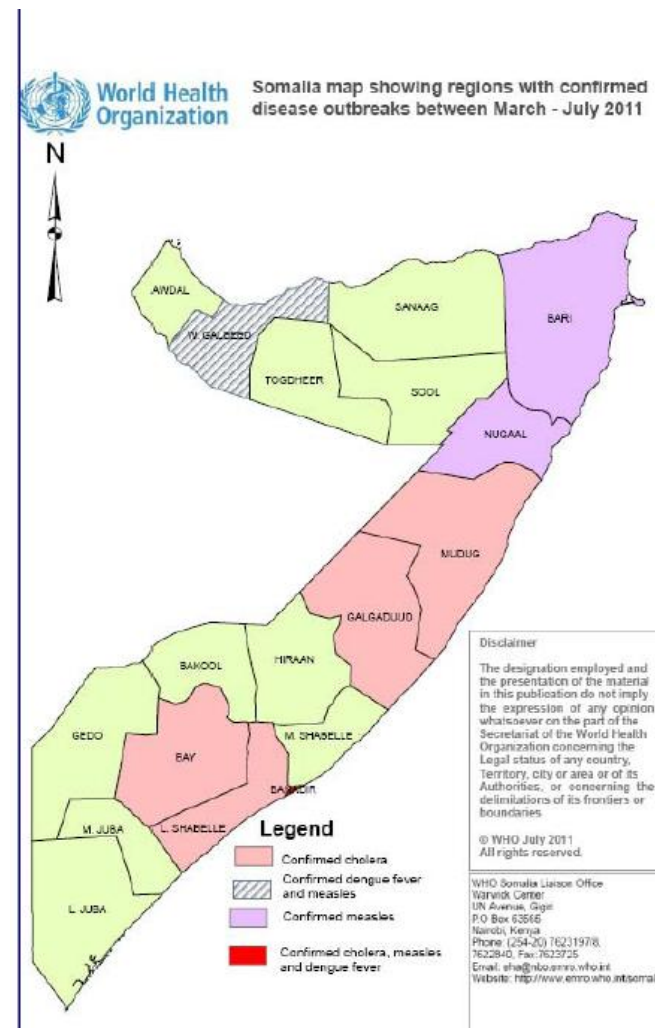
# Additional evidence to support a famine declaration

## Displacement

- From January 1.8 million have been displaced from Jan 2011 (UNHCR) - 89% due to drought
- Although the numbers of overall population displacement have reduced since June & July, 1,000 – 1,200 people per day are still arriving Kenya's Dadaab camps with 250 people per day arriving in Dollo Ado camp in Ethiopia and substantial new flows into Gode.

## Health

- Increases in confirmed measles in Mogadishu and other regions of Somalia
- 53% increase in AWD cases in Kismayo in the last week to 635 cases, increases also reported in cholera cases in Mogadishu.

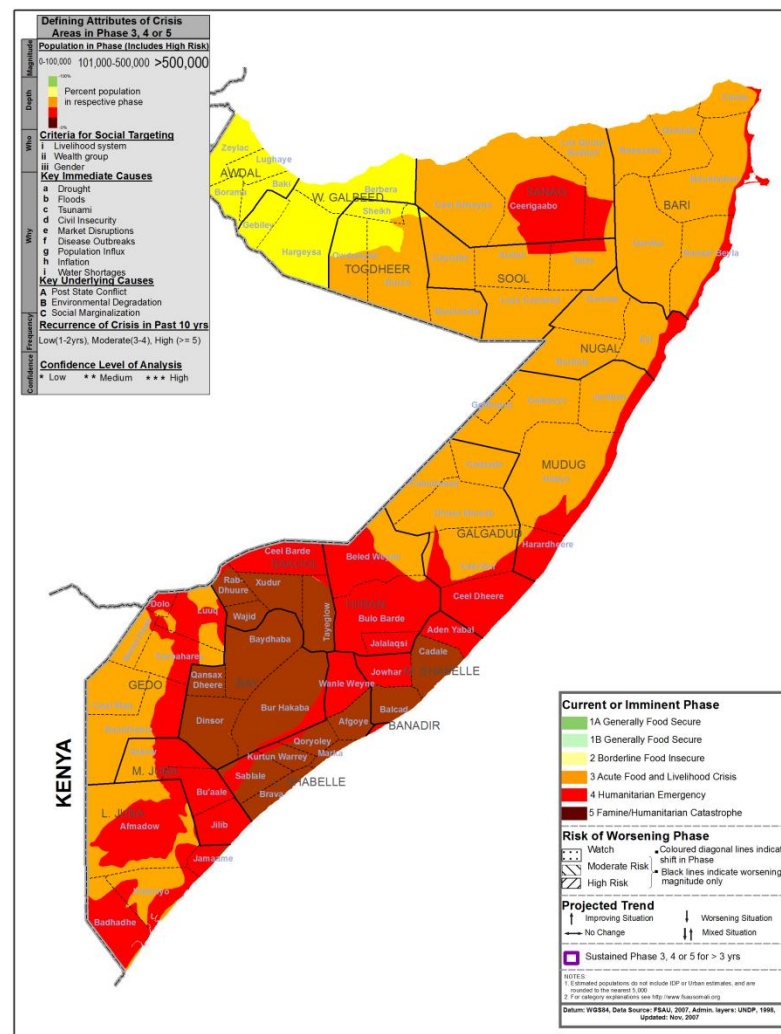




# Current food security classification

## *Somalia as of September 2, 2011*

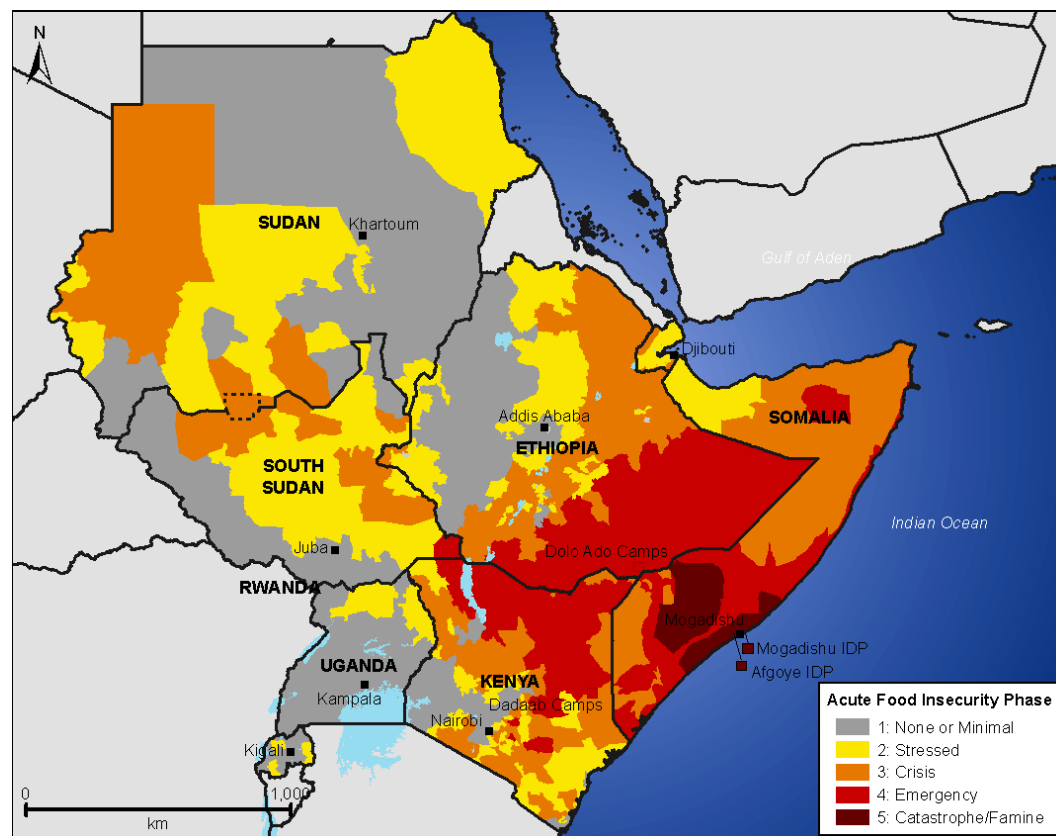
- Number of people in crisis nationwide (AFLC, HE, and Famine): **4.0 million**, compared to 3.7 million in July 2011 and 2.85 million in June 2011. 3.0 million are in the south.
- Number in need of lifesaving assistance nationwide: (HE and Famine): **3.3 million**
- Number in need of lifesaving assistance in southern Somalia (HE and Famine): **2.6 million** compared to 1.75 million in June 2011.
- Number of people in famine : **750,000**.
- 25-75 percent of poor agropastoral households in Gedo and Juba and pastoral households in Bakool face famine level of food deficits.



# Current food security classification

## *East Africa as of September 2, 2011*

Country	Food insecure population
Somalia	4.0 million
Ethiopia	4.95 million (including 450,000 refugees)
Kenya	4.15 million (including 402,000 refugees)
Sudan	4 million
South Sudan	1.5 million
Uganda	169,000
Djibouti	140,000 (including 20,000 refugees)
<b>TOTAL</b>	<b>18.91 million</b>

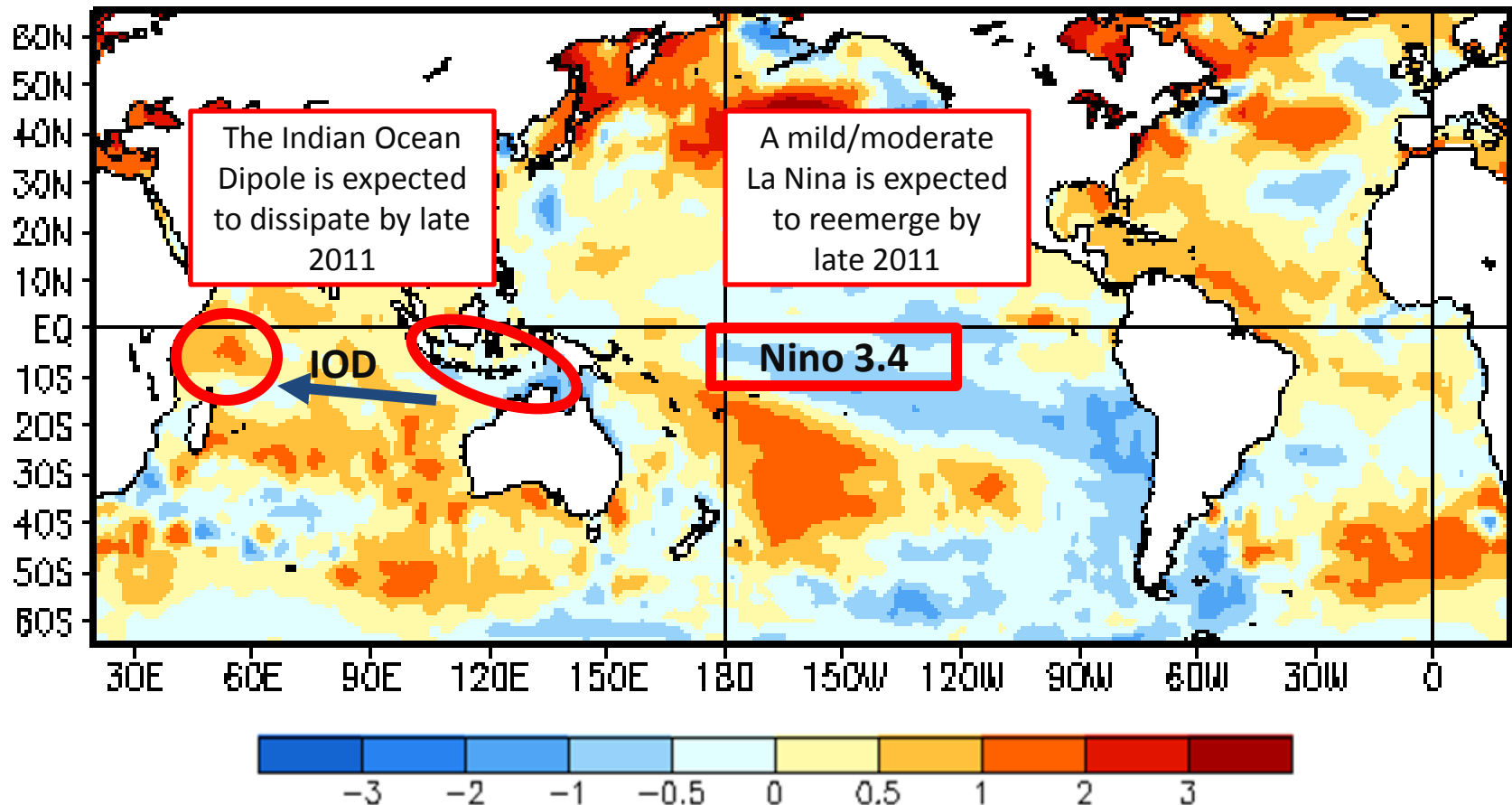


# MOST-LIKELY PROJECTION



# Drivers of rainfall in the eastern Horn

Average Sea-surface Temperature Anomalies (August 20-24, 2011)



Source: NOAA and ECMWF

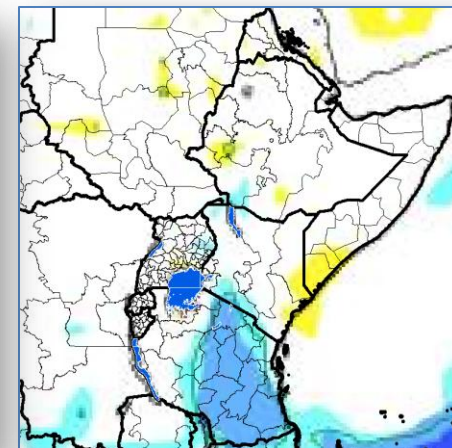
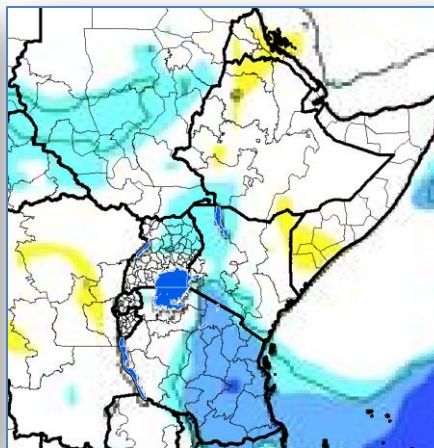
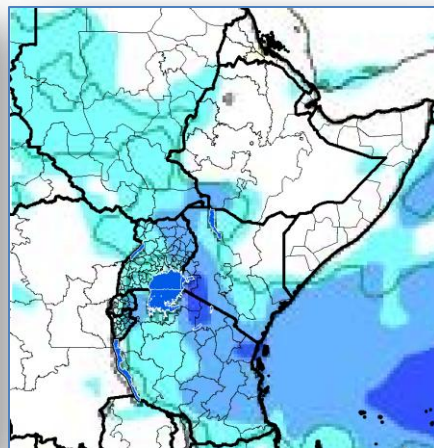
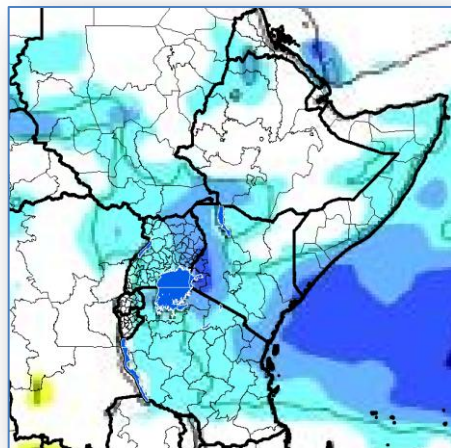
# Oct-Dec seasonal rainfall forecast

Sept. – Nov. 2011

Oct. – Dec. 2011

Nov. 2011 – Jan. 2012

Dec. 2012 – Feb. 2012



Source: ECMWF

1. In the most-likely scenario the Oct-Dec rains are expected to start on time and overall season totals are expected to be average, though rains during the second half of the season are likely to be less favorable.
2. The consensus regional seasonal rainfall outlook will be provided by 3<sup>rd</sup>. Sept, and national forecasts for Ethiopia and Kenya are expected the following week. Both will provide more details/an update on these preliminary indications.

# Impact of changing Thai rice policy

## Daily Rice Option Prices – November Delivery



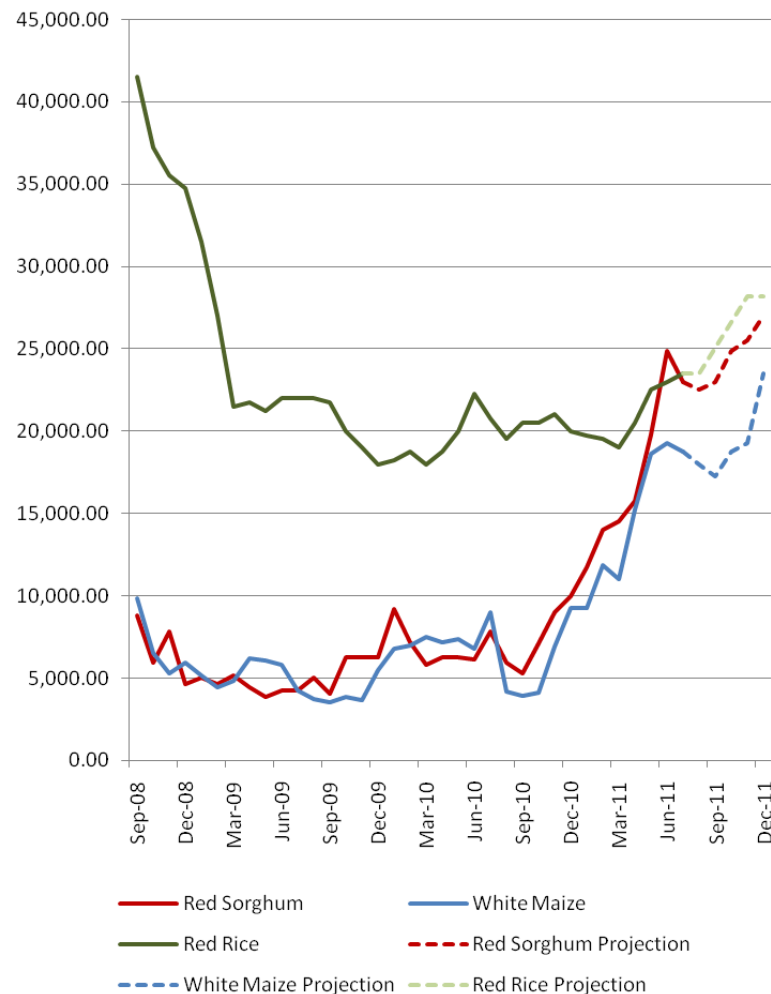
Source: Chicago Board of Trade

# Likely price movement in southern Somalia (Sep-Dec 2011)

Staple cereal prices and projections - Baidoa



Staple cereal prices and projections - Qorioley



# Crop and livestock assumptions

- September *Hagaa* cereal harvests in Middle Juba and Lower Shabelle will be below-average but will improve stocks compared to current levels
- Significant presence of able-bodied people in Bay region for planting.
- Oct-Dec labor supply and demand are expected to vary significantly by region, but high cereal prices will keep wage:cereal ToT far below average.
- Pastoralists in southern and central regions will return to typical wet-season grazing areas by late October.
- Milk availability will improve for shoats and camels, but remain average to below-average due to reduced conceptions over the past year. Cattle milk availability will remain very limited.

## Additional assumptions for the Most-likely scenario

- Distress migration flows to Ethiopia, Kenya, Central regions, and Mogadishu – will stabilize or decline because of response and the start of the cropping season.
- Above-average malaria mortality risk with the onset of October rains. Continued measles outbreaks.
- Food access response is projected at current levels
  - Relatively better: *Northern Gedo, Northern Bakool, Juba, Mogadishu, Hiran, localized areas of the Shabelles*
  - Very limited: *Bay, Southern Bakool, much of Lower Shabelle including Afgoye*

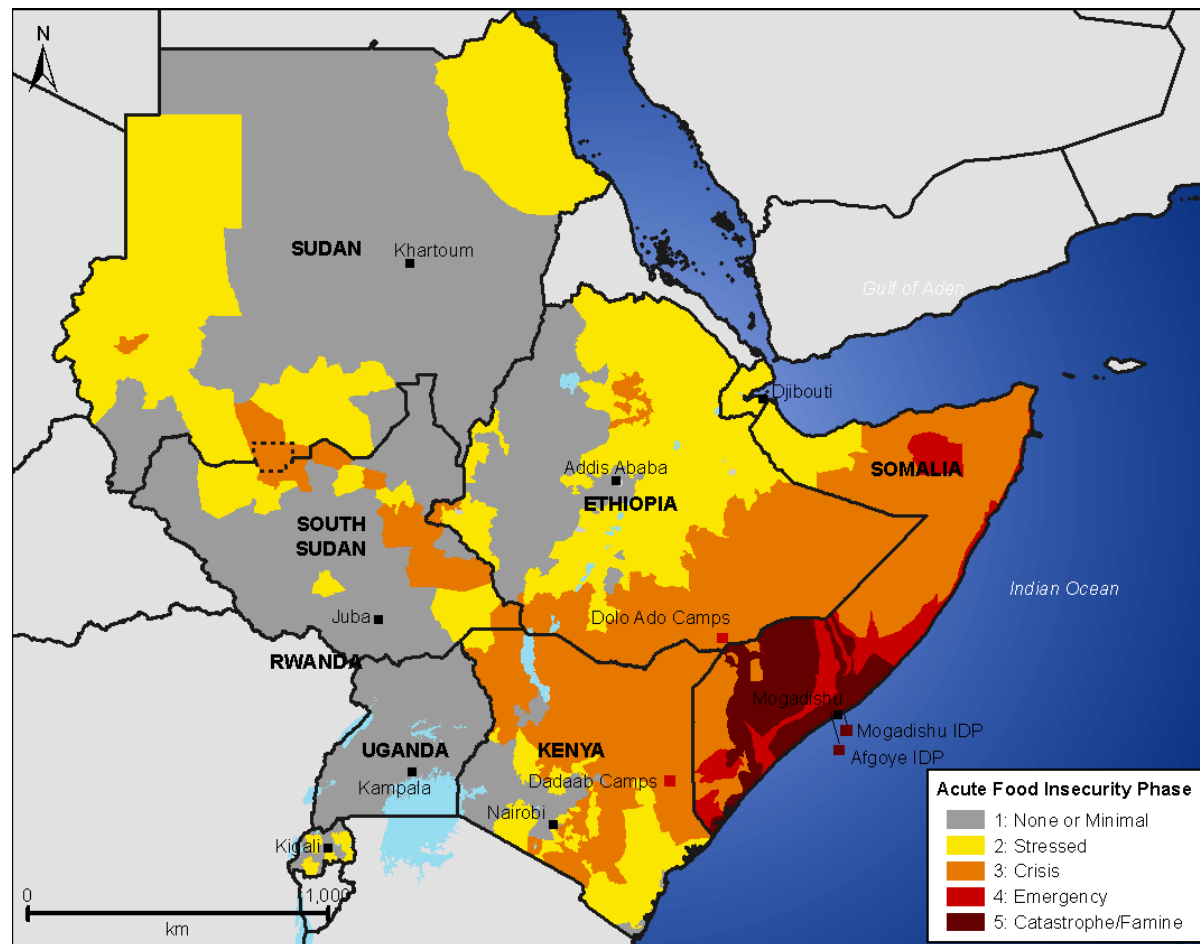




# Most likely food security outcomes

*East Africa Oct-Dec 2011*

- Improvements are expected in southern Ethiopia and Kenya, largely due to the impact of the October to December rains and response.
- Outcomes are also expected to improve in the Dadaab and Dolo Ado Camps but these areas will likely remain in Phase 4 – Emergency





## Events which would further exacerbate the famine

- Deyr season starts normally but overall totals are up to 50mm below average due to a poor second half of the season.
- Limited return of farmers to Bay region for planting
- International rice prices increase up to 50 percent by November.
- Uncontrolled malaria or measles outbreaks
- Humanitarian access deteriorates, including Mogadishu

**Implications:** Poor January crop harvests, further reductions in purchasing power, persistence of famine beyond the 2012 deyr harvest

## Next Steps

- UN Resident Coordinator press conference September 5<sup>th</sup> on behalf of the Humanitarian Country Team
- Simultaneous joint press release by FSNAU/FEWS NET.
- Continued joint FEWS NET/FSNAU dekadal reporting.
- Updated nutrition/mortality data for Hiran, Middle Shabelle, Mogadishu and Afgoye IDPs, as well as a rapid assessment data for Kismayo, available by September 9<sup>th</sup>.
- Off-season harvests and dry season impact assessment in September/October 2011.
- Continued nutrition/mortality surveys across the south.
- Current and projected analysis will be updated in October

# Key Messages

1. In addition to the five areas where famine has already been declared:
  - All of Bay region has now met the three famine criteria.
  - 25-75 percent of poor agropastoral households in Gedo and Juba and pastoral households in Bakool face famine level of food deficits.
2. Concerns persist regarding pastoral populations in northeast and northwest, agropastoralists in the Cowpea Belt of central, and coastal livelihoods of central where half of pastoralists have lost all livestock and are destitute.
3. Food security outcomes have improved for camel pastoralists in Gedo and Juba, and pastoralists in the Addun and Hawd zones of Central/Northern regions
4. In total 4.0 million people are in crisis nationwide (Phase 3, 4, 5), of which 3.0 million are in the south. 750,000 people are experiencing famine-level outcomes
5. Despite, a large-scale increase in humanitarian response, evidence suggests that food security in agropastoral and riverine areas of the south will deteriorate further over the coming four months. Famine is considered likely by Dec 2011 in agropastoral and riverine areas of Gedo and Juba, and agropastoral of Middle Shabelle and Hiran.