FSAU

Technical Series

Report No V. 9

September 15, 2006

2006 Post *Gu* Analysis

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Technical and Managerial Support

Funding Agencies

European Commission

Kingdom of Norway

USAID

Technical Partners

Acknowledgment

FSAU would like to thank all our partner agencies for their participation and cooperation in this assessment and analysis. This crucial assessment would not have been possible without the efficient and timely logistical and research assistance provided by the field staff of all our partners. This assessment and analysis would not have been possible without the dedication and expertise of FSAU's thirty four field based analysts who continue to work under very difficult conditions.

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LIST OF ACRONYMS

ARI	Acute Respiratory Infection
CCPP	Caprine Pleura Pneumonia
CMR	Crude Mortality Rate
FAO	Food and Agriculture Organization
FEWS/NET	Famine Early Warning Systems Network
FSAU	Food Security Analysis Unit
GAM	Global Acute Malnutrition
HA	Hectare
HRG	Humanitarian Response Group
IDP	Internally Displaced Persons
IDS	Institute for Development Studies
Lt	Litre
LZ	Livelihood Zone
MCH	Maternal and Child Health Center
Mt	Metric Tonne
MUAC	Mid Upper Arm Circumference
NDVI	Normalized Difference Vegetation Index
PWA	Post War Average
SAM	Severe Acute Malnutrition
SlSh	Somaliland Shilling
SoSh	Somali Shilling
TFC	Thearupetic Feeding Center
U5	Under Five
WFH	Weight for Height
HE	Humanitarian Emergency
AFLC	Acute Food and Livelihood Crisis

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1. EXECUTIVE SUMMARY

This technical series report presents the full analysis of the FSAU Post *Gu* '06 Assessment, and is the cumulative output from the Post *Gu* '06 fieldwork (June 22-July 22), regional and national analysis workshops (respectively July 11-20 and July 23-28), technical verification and partner vetting (Aug 1- 4) and final sectoral and regional integrated analysis (August 14-31). FEWS NET Somalia, along with more than forty partners, including regional authorities, international agencies, and local and international NGOs, participated in and supported this Post *Gu* '06 assessment and analysis process.

To facilitate a rapid uptake of assessment results, several presentations of the key findings were made throughout August, including at the SACB FSRD Special Meeting (August 9), the UN OCHA/IASC Meeting (August 8), the CAP/NAF Food and Livelihood Security Cluster Working Group (August 17), CAP Somalia Workshop (August 31), six Regional Presentations between August 16 -21 (Hargeisa, Garowe, Baidoa, Beletweyne, Mogadishu, Buale - see Appendix 5.4). FSAU and FEWS NET Somalia also issued a Press Release of the key findings on August 15 and an FSAU Special Brief Report (August 25). In addition, the Post *Gu* '06 Phase Classification Map, estimated population numbers by region, district and livelihood zone, as well as key findings of the sectoral and integrated regional analysis, were posted on the FSAU website from August 15.

1.1 KEY FINDINGS

Based on the Post *Gu* '06 Assessment, the Food Security Analysis Unit for Somalia (FAO/FSAU) and FEWS NET Somalia confirm earlier predictions (Press Release June 2, '06) that although there are some improvements in certain areas, the conditions of humanitarian crisis in Southern Somalia persist and will continue at least until December '06. Overall, an estimated **1.8 million people** are in need of urgent humanitarian assistance and livelihood support at least until the end of December '06. Of this total, an estimated **1.4 million people** in North, Central and Southern Somalia continue to face conditions of **Humanitarian Emergency** or **Acute Food and Livelihood Crisis,** while an estimated **400,000** are **IDPs** (*Internally Displaced Persons*),

The crisis is most severe in southern Somalia, where 80% of the 1.4 million people, or **1.1 million people**, are in need of urgent humanitarian assistance and livelihood support. Of these 1.1 million people in crisis, **425,000 are in a state of Humanitarian Emergency** and **680,000 are in a state of Acute Food and Livelihood Crisis**. The situation in Southern Somalia, however, has generally improved since the *Deyr* '05/'06 analysis, which is reflected in a more than 50% reduction in the total population in Humanitarian Emergency - down from 915,000 in the post *Deyr* '05/'06 analysis. The general improvement is also reflected in the removal of the early warning level of Moderate Risk of Famine for Gedo region. On the other hand, there is a 60% increase in the population in Acute Food and Livelihood Crisis due to a shift of the population from a phase of Humanitarian Emergency to Acute Food and Livelihood Crisis, as well as from a worsening of the situation in Hiran region, and in the Badhadhe and Kismayo districts of Lower Juba.

In Hiran, an estimated 125,000 people in pastoral, agro-pastoral and riverine livelihood zones are now in a phase of **Acute Food and Livelihood Crisis**, and of these 30,000 people in the riverine and agro-pastoral zones are at a **High Risk** of falling into a state of **Humanitarian Emergency** before December 2006. In the Shabelle valley, agro-pastoralists are in an **Early Warning level of Watch**, following rainfed crop failures and deteriorated pasture and water conditions in the traditional grazing areas.

In Humanitarian Emergency areas in southern Somalia, the nutrition situation is critical, with Global Acute Malnutrition (GAM) rates exceeding 20% in some areas (Map 5). The mixed outcome of the main seasonal *Gu* rains (April to June), combined with very high asset losses (cattle deaths of 40-60%) and financial indebtedness, means that full recovery especially for pastoral communities could take several years.

OUTLOOK UNTIL DECEMBER 2006

- **If There Is Widespread Conflict:** The ***presence and intensity of conflict*** will be a key factor in the evolving humanitarian situation in the next few months. If there is an escalation in the political crisis that results in widespread conflict and the disruption of inter-regional trade, the implications for the humanitarian situation will be severe. In such a scenario, the ***total number of people facing humanitarian crisis could double***. This would not only prolong the time period of the crisis, but further undermine the resilience and abilities of the population to manage future shocks. In the worst-case scenario, there would be increased population displacement into the neighboring countries, thus worsening the regional nature of the crisis. Therefore, if there is **widespread conflict** in the coming months, there is a **moderate risk of Humanitarian Emergency** of **significantly increased scale and magnitude for the whole of Central and Southern Somalia** (Map 1)**.**

IMPLICATIONS FOR RESPONSE

Populations in Humanitarian Emergency - require urgent complimentary interventions focused on immediate needs, such as increased access to food, plus sector support as necessary, including water, shelter, sanitation, and health. These populations also require immediate protection against the complete loss of their livelihood assets, to ensure future recovery.

Populations in Acute Food and Livelihood Crisis - require immediate interventions to support livelihoods and halt the stripping of livelihood assets. This may include strategic sectoral interventions such as repair and maintenance of boreholes and water catchments, support for clearing fallow fields and improving irrigation infrastructure, facilitation of increased access to financial credit and debt relief, improved access to human and livestock health services, and others depending on the regional and livelihood context.

Cross Cutting Response Issues -

- **A Recommitment to and Increased Effort for Peace -** Increased effort and commitment to peace and conflict prevention by all national and international actors. Given the profound humanitarian implications of widespread conflict, made worse by the current ongoing humanitarian situation in Southern Somalia, this should be a top priority.

- **Readdress and Advocate for Solutions to the Underlying Structural Causes of the Crisis** – Among others, these include the political instability and absence of strong, functioning government institutions; the trend of massive and nearly irreversible degradation of the environment, especially the deforestation of rangelands for charcoal production; and the dilapidated and crumbling infrastructure and public services.

Table 1: Estimated Population by Region in Humanitarian Emergency (HE) and Acute Food and Livelihood Crisis (AFLC), inclusive of the High Risk Groups.

Affected Regions	Estimated Population of Affected Regions [1]	Assessed and Contingency Population in AFLC and HE		
		Acute Food and Livelihood Crisis (AFLC) [2]	Humanitarian Emergency (HE) [2]	Total in AFLC or HE as % of Region Population
North [3]				
Bari	387,969	30,000	0	8
Nugal	125,010	10,000	0	8
Sanag	270,367	25,000	0	9
Sool	150,277	25,000	0	17
Togdheer	402,295	20,000	0	5
Coastal (fishing)		20,000		
SUB-TOTAL	***1,335,918***	***130,000***	***0***	*10*
Central				
Galgadud	330,057	40,000	0	*12*
Mudug	350,099	30,000	0	*9*
SUB-TOTAL	***680,156***	***70,000***	***0***	*10*
South				
Bakol	310,627	145,000	25,000	55
Bay	620,562	285,000		46
Gedo	328,378	70,000	160,000	70
Hiran	329,811	95,000	30,000	38
Lower Juba	385,790	45,000	90,000	35
Middle Juba	238,877	40,000	120,000	67
SUB-TOTAL	***2,214,045***	***680,000***	***425,000***	*50*
TOTAL	**4,230,119**	**880,000**	**425,000**	*31*

Table 1B: SUMMARY TABLE [2]

Assessed and Contigency Population Numbers in AFLC or HE	**1,305,000**	*17* [7]
Urban Populations in Crisis Areas in the South [4]	**40,000**	*1* [7]
Combined Assessed, Urban & Contingency Populations in AFLC and HE	**1,400,000** [5]	*19* [7]
Estimated Number of IDPs [6]	**400,000**	*5* [7]
Estimated Total Population in Crisis	**1,800,000**	*24* [7]

[1]Source: Population Estimates by Region/District, UNDP Somalia, August 1, 2005. Note this only includes population figures in affected regions. FSAU does not round these population estimates as they are the official estimates provided by UNDP.
[2]Estimated numbers are rounded to the nearest five thousand, based on resident population not considering current or ancipated migration, and are inclusive of population in High Risk of AFLC or HE for purposes of planning.
[3]Dan Gorayo District is included within Bari Region following precedent set in population data prior to UNDP/WHO 2005.
[4]Roughly estimated as 30% and 20% of urban population in HE and AFLC areas respectively.
5Actual number is 1,345,000, however, this is rounded to 1,400,000 for purposes of rough planning and ease of communication.
[6]Source: UN-OCHA updated April 2004 (376,630) and UNHCR IDP map Dec.2005 (407,000), rounded to 400,000 as an estimate.

Map 1: Somalia Food Security Situation Analysis: Post Gu 2006 Projection, July - December '06

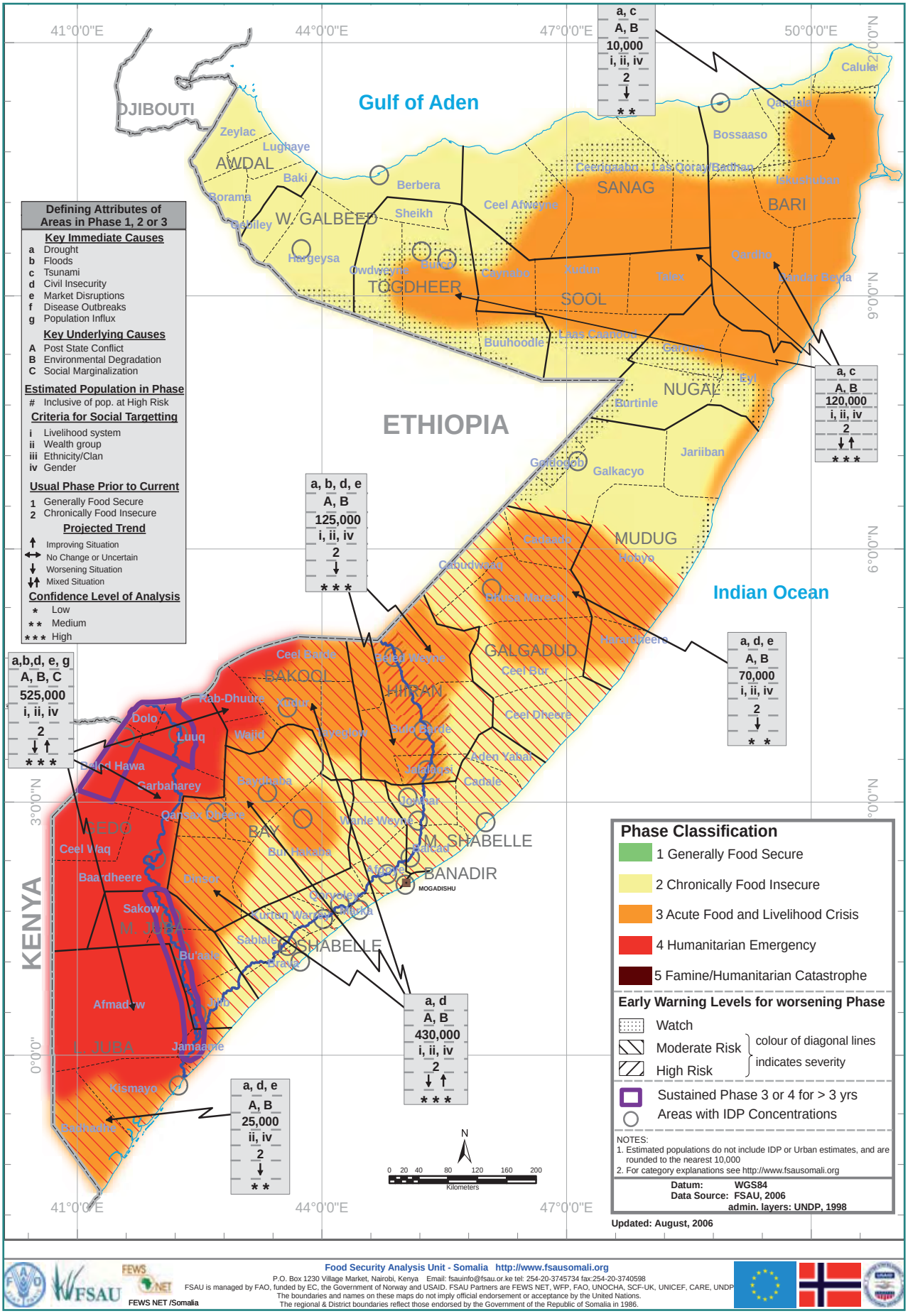


Table 2: Integrated Food Security and Humanitarian Phase Classification Reference Table (FAO/FSAU June 2006)

Phase Classification		Key Reference Outcomes *(current or imminent outcomes on lives and livelihoods; based on convergence of evidence)*		Strategic Response Framework *(mitigate immediate outcomes, support livelihoods, and address underlying/structural causes)*
1	Generally Food Secure	*Crude Mortality Rate*	< 0.5 / 10,000 / day	Strategic assistance to pockets of food insecure groups Investment in food and economic production systems Enable development of livelihood systems based on principles of sustainability, justice, and equity Prevent emergence of structural hindrances to food security Advocacy
		Acute Malnutrition	<3 % (w/h <-2 z-scores)	
		Stunting	<20% (w/age <-2 z-scores)	
		Food Access/ Availability	usually adequate (> 2,100 kcal ppp day), stable	
		Dietary Diversity	consistent quality and quantity of diversity	
		Water Access/Avail.	usually adequate (> 15 litres ppp day), stable	
		Hazards	moderate to low probability and vulnerability	
		Civil Security	prevailing and structural peace	
		Livelihood Assets	generally sustainable utilization (of 5 capitals)	
2	Chronically Food Insecure	*Crude Mortality Rate*	<0.5/10,000/day; U5MR<1/10,000/day	Design & implement strategies to increase stability, resistance and resilience of livelihood systems, thus reducing risk Provision of 'safety nets' to high risk groups Interventions for optimal and sustainable use of livelihood assets Create contingency plan Redress structural hindrances to food security Close monitoring of relevant outcome and process indicators Advocacy
		Acute Malnutrition	>3% but <10 % (w/h <-2 z-score), usual range, stable	
		Stunting	>20% (w/age <-2 z-scores)	
		Food Access/ Availability	borderline adequate (2,100 kcal ppp day); unstable	
		Dietary Diversity	chronic dietary diversity deficit	
		Water Access/Avail.	borderline adequate (15 litres ppp day); unstable	
		Hazards	recurrent, with high livelihood vulnerability	
		Civil Security	Unstable; disruptive tension	
		Coping	'insurance strategies'	
		Livelihood Assets	stressed and unsustainable utilization (of 5 capitals)	
		Structural	Pronounced underlying hindrances to food security	
3	Acute Food and Livelihood Crisis	*Crude Mortality Rate*	0.5-1 /10,000/day, U5MR 1-2/10,000/dy	Support livelihoods and protect vulnerable groups Strategic and complimentary interventions to immediately ↑ food access/availability AND support livelihoods Selected provision of complimentary sectoral support (e.g., water, shelter, sanitation, health, etc.) Strategic interventions at community to national levels to create, stabilize, rehabilitate, or protect priority livelihood assets Create or implement contingency plan Close monitoring of relevant outcome and process indicators Use 'crisis as opportunity' to redress underlying structural causes Advocacy
		Acute Malnutrition	10-15 % (w/h <-2 z-score), > than usual, increasing	
		Disease	epidemic; increasing	
		Food Access/ Availability	lack of entitlement; 2,100 kcal ppp day via asset stripping	
		Dietary Diversity	acute dietary diversity deficit	
		Water Access/Avail.	7.5-15 litres ppp day, accessed via asset stripping	
		Destitution/Displacement	emerging; diffuse	
		Civil Security	limited spread, low intensity conflict	
		Coping	'crisis strategies'; CSI > than reference; increasing	
		Livelihood Assets	accelerated and critical depletion or loss of access	
4	Humanitarian Emergency	*Crude Mortality Rate*	1-2 / 10,000 / day, >2x reference rate, increasing; U5MR > 2/10,000/day	Urgent protection of vulnerable groups Urgently ↑ food access through complimentary interventions Selected provision of complimentary sectoral support (e.g., water, shelter, sanitation, health, etc.) Protection against complete livelihood asset loss and/or advocacy for access Close monitoring of relevant outcome and process indicators Use 'crisis as opportunity' to redress underlying structural causes Advocacy
		Acute Malnutrition	>15 % (w/h <-2 z-score), > than usual, increasing	
		Disease	pandemic	
		Food Access/ Availability	severe entitlement gap; unable to meet 2,100 kcal ppp day	
		Dietary Diversity	Regularly 2-3 or fewer main food groups consumed	
		Water Access/Avail.	< 7.5 litres ppp day (human usage only)	
		Destitution/Displacement	concentrated; increasing	
		Civil Security	widespread, high intensity conflict	
		Coping	'distress strategies'; CSI significantly > than reference	
		Livelihood Assets	near complete & irreversible depletion or loss of access	
5	Famine / Humanitarian Catastrophe	*Crude Mortality Rate*	> 2/10,000 /day (example: 6,000 /1,000,000 /30 days)	Critically urgent protection of human lives and vulnerable groups Comprehensive assistance with basic needs (e.g. food, water, shelter, sanitation, health, etc.) Immediate policy/legal revisions where necessary Negotiations with varied political-economic interests Use 'crisis as opportunity' to redress underlying structural causes Advocacy
		Acute Malnutrition	> 30 % (w/h <-2 z-score)	
		Disease	pandemic	
		Food Access/ Availability	extreme entitlement gap; much below 2,100 kcal ppp day	
		Water Access/Avail.	< 4 litres ppp day (human usage only)	
		Destitution/Displacement	large scale, concentrated	
		Civil Security	widespread, high intensity conflict	
		Livelihood Assets	effectively complete loss; collapse	

Early Warning Levels	Probability / Likelihood (of worsening Phase)	Severity (of worsening phase)	Reference Hazards and Vulnerabilities	Implications for Action
Watch	As yet unclear	Not applicable	*Hazard:* occurrence of, or predicted event stressing livelihoods; with low or uncertain vulnerability *Process Indicators:* small negative change from normal	Close monitoring and analysis
Moderate Risk	Elevated probability / likelihood	Specified by predicted Phase Class, and as indicated by color of diagonal lines on map.	*Hazard:* occurrence of, or predicted event stressing livelihoods; with moderate vulnerability *Process Indicators:* large negative change from normal	Close monitoring and analysis Contingency planning Step-up current Phase interventions
High Risk	High probability; 'more likely than not'		*Hazard:* occurrence of, or strongly predicted major event stressing livelihoods; with high vulnerability *Process Indicators:* large and compounding negative changes	Preventative interventions--with increased urgency for High Risk populations Advocacy

1.2 REGIONAL HIGHLIGHTS

• Southern Region

Southern Somalia continues to experience conditions of precarious food, nutrition and livelihood insecurity. About **1.1 million people in Gedo, Juba, Bay, Bakool and Hiran** are identified to be in either **Acute Food and Livelihood Crisis or Humanitarian Emergency** and are in need of urgent humanitarian assistance and livelihood support (**Map 1** and **Table 1**). Of this number, **425,000 are in Humanitarian Emergency** and **680,000 are in Acute Food and Livelihood Crisis**. The situation, however, has improved since the *Deyr* '05/'06 analysis, which is reflected in a more than 50% reduction in the total population in Humanitarian Emergency in the south (down from 915,000 in *Deyr* '05/'06).

The general improvement is also reflected in the removal of the early warning level of Moderate Risk of Famine for Gedo region. On the other hand, there is a 60% increase in the population in Acute Food and Livelihood Crisis due to a shift of the population from a phase of Humanitarian Emergency to Acute Food and Livelihood Crisis, as well as from a worsening situation in Hiran region, and the Badhadhe and Kismayo districts of Lower Juba. In Hiran, an estimated 125,000 people in pastoral, agro-pastoral and riverine livelihood zones are now in a phase of **Acute Food and Livelihood Crisis** and of these, 30,000 people in the riverine and agro-pastoral zones are at a **High Risk** of falling into a state of **Humanitarian Emergency** before December 2006. In the Shabelle valley, agro-pastoralists are in an **Early Warning level of Watch**, following rainfed crop failures and deteriorated pasture and water conditions.

In general for the south, access to food and income remains severely stressed due to the compounded impacts of several seasons of poor crop and livestock production. The *Gu* '06 rainfall performance in southern regions was mixed, with cereal production well below the post-war average in Bakool (58%), Gedo (67%), Lower Juba (8%), Middle Juba (11%), and Lower Shabelle (69%) regions. In Juba, some off-season flood recession (*deshek*) production (primarily of sesame and cowpea cash crops) is expected from late October onwards. Rainfed sorghum production in the high-potential areas of Bay region, and irrigated maize in Middle Shabelle, was near post-war averages (98% and 109% respectively). Cereal prices in key reference markets have begun to decline from their record-high levels, following the start of the harvest in some regions and the delivery of food aid in other poor production regions. Cereal prices are, however, expected to remain relatively high due to the low stock levels throughout the south following three consecutive seasons of poor crop production.

Pastoral conditions are also varied within and between the regions. Water and pasture availability is average to good in south Gedo, Bay and pockets of Juba, but poor in Hiran, Bakool, north Gedo and the coastal and agro-pastoral areas of the Shabelle valley. In areas of **Humanitarian Emergency,** prolonged drought stress has led to low levels of calving, kidding and milk production, especially for cattle, sheep and goats. Poor milk production not only has negative implications for dietary diversity and nutrition but also income from reduced livestock product sales. Worryingly, *Gu* '06 conception rates for cattle, sheep and goats in north Gedo, Juba, Bay, Bakool and Hiran are still low, with knock-on impacts on livestock production (and milk availability) for the coming seasons.

High livestock losses during the period April 2005 to March 2006, notably cattle and sheep and goats (40-60% of cattle in Gedo, and 40-55% cattle in Juba), will mean that the recovery period in pastoral areas will take several years, even if subsequent seasons are good, especially for cattle-based pastoralists. Increasing livestock prices reflect improvements in livestock body conditions, although prices are still below pre-drought levels. For pastoralists, this has generally improved terms of trade and access to staple food, although cereal prices remain high in all southern regions. High cereal prices will continue to restrict the access of poor households, who depend on market purchase. Where livestock performance is poor, debt levels are increasing for households having to purchase staple foods and water for livestock. Malnutrition levels in Gedo, Juba, Bay and Bakool continue to be well above acceptable levels.

• Central Region

Galgaduud and south Mudug, areas previously recovering from **Humanitarian Emergency**, remain in **Acute Food and Livelihood Crisis** though the situation is deteriorating. This is reflected in an increase in population considered to be in **Acute Food and Livelihood Crisis** to an estimated 70,000 people (an increase of 10,000 people from the post *Deyr* '05/'06 assessment). Field assessments confirm that overall cumulative rainfall was well below normal, localized and poorly distributed through the season within the area identified in Acute Food and Livelihood Crisis. In pastoral areas, water availability and pasture conditions are poor (apart from pockets in Balanbaal and Haradheere districts) and body conditions for all species are poor and deteriorating.

In areas that did receive good rains, competition for available resources (also due to livestock in migration from Warder, Somali Region Ethiopia) will lead to a rapid depletion of pasture and water resources. Insecurity in Hobyo, Haradheere, Cadaado and Gellinsoor continues to disrupt pastoral livelihoods, displace populations, create large concentrations of IDPs, and disrupt regional and inter-regional trade.

- **Northern Region**

There has been a significant recovery in pastoral livelihoods over the last four seasons in the Nugal, Sool and eastern Hawd livelihood zones, an area which from 2002-04 suffered one of the worst prolonged droughts in decades, which in turn accelerated an environmental crisis (see Appendix 5.1.3 and 5.1.4, Post *Deyr* '05/'06 Analysis, for Timeline of the crisis). The area, however, still remains in a state of **Acute Food and Livelihood Crisis,** although the population in this phase**, estimated at 100,000**, is roughly half what it was estimated at during the post *Deyr* '05/'06 assessment. In some areas of Huddun and Taleh of Sool, parts of Sanaag, and Togdheer, the *Gu* '06 rains were below normal, which is a setback to recovery for pastoralists from these areas. A part of the area within Qandala, Alula and Iskushuban districts of NE Bari, identified with an early warning level of **Watch** in the post *Deyr* '05/'06 analysis, and the coastal fishing area of Eyl and Jariiban districts, are now considered to be in **Acute Food and Livelihood Crisis** (**Map 1**). The total number of people in Acute Food and Livelihood Crisis in the northern region is therefore estimated at **130,000** people.

In areas receiving below-normal *Gu* '06 rains, water and pasture availability is poor to average. Increased livestock off-take and debt levels have been reported in these areas to cover water trucking costs during the *Jilaal* season. A decline in income during the last fishing season (October '05 to April '06) and from frankincense production (in the Gagaab pastoral area of NE Bari) has contributed to an overall decline in food and livelihood security status in these areas. The Hawd of western Burtinle and Galdogob districts, and the Hawd of Hargeysa, are in an early warning level of **Watch** due to poor water and pasture availability, with abnormal livestock migrations observed. Both these areas will require close monitoring over the coming six months.

1.3 SECTOR HIGHLIGHTS

- **Climate**

Generally, throughout the country the performance of the *Gu* '06 season rains were mixed, both in terms of quantity of rainfall received and the distribution of rainfall throughout the season. Rains started early and in good amounts (late March rather than mid April) in many regions of the country, including the drought-affected regions of the Juba valley, Gedo, Bay and Bakool, as well as the Shabelle valley, parts of the Central regions, and the Northwest. As the season progressed, however, the rains became erratic, localized and intermittent over time in many of these regions.

Although satellite imagery indicates that the total cumulative rains for the season were significantly above normal in the Juba valley and Central regions (Map 2), field reports confirm that this is overstated by cloud coverage, and that most of the rain fell only during late March and early April. In both Bakool and Hiran regions, field reports confirm rains were well below normal for the entire season. Regions where rains continued and were more evenly distributed through the season include most of Bay region, Awdal and W. Galbeed in the northwest, and parts of Bari, Sanaag, Sool and Togheer regions in northeast. Rainfall performance in the neighboring regions of Northeastern Kenya were largely normal, while the Somali region of Ethiopia was mixed, with poor rainfall performance for border areas from eastern Bakool up through Toghdheer.

- **Agriculture**

Gu '06 cereal production in southern Somalia, estimated at around 113,000 MT, is only 73% of the *Gu* Post War Average (*Gu* PWA 1995–2005), primarily due to below-normal and poorly distributed rainfall. Although this year's *Gu* production is significantly better than last year's (*Gu* '05 cereal production was the lowest in a decade, at only 44% of PWA), this *Gu* season's production is the third lowest cereal production in the last decade. Of the two major cereal crops, sorghum production performed better (91% of PWA sorghum production) due to a good harvest from the key sorghum production region of Bay. Gu maize production, on the other hand, is only 62% of PWA, due to the failure of rainfed maize in the Shabelle valley and the complete crop failures in Hiran (33% of PWA), Lower Juba (8% of PWA), and Middle Juba (11% of PWA).

Irrigated maize in the largest maize production area of Lower and Middle Shabelle regions accounts for most of the Gu maize production this season (69% and 86% of PWA, respectively). A combination of poorly distributed rains, floods, and high infestation of army worms resulted in the third consecutive season of crop failure for Lower and Middle Juba regions (less than 10% of PWA). Over the next two months, the off-season recessional crop production from the *desheks* is expected to contribute a further 3,200 MT (*Gu* '06 cereal production is only 1,600 MT for Lower and Middle Juba combined). Cereal crop establishment for the Gu/Karan production in the northwest is estimated around 20,000MT, which is 117% of PWA (1998–2005).

Cereal prices peaked in May-June '06 in response to low cereal supplies following the poor crop performance in the *Gu* '05 and *Deyr* '05/'06 (up to 100-200% price increases). However, prices are starting to decline in some regions as the *Gu* harvest enters into the market. In Bay region, where *Gu* production was near the PWA, sorghum prices fell 18% between May and July, while maize prices in Shabelle valley dropped by 28% in the same time period. Given the overall low cereal stocks, combined with poor cereal production, cereal prices are not expected to continue to decline, and could very likely begin to increase again within the next two-three months. In Lower and Middle Juba, which experienced an almost complete *Gu* '06 cereal crop failure, cereal prices also declined in the last two months, by 50% between May and July. However, this decline is due to food aid distributions in the region.

The estimated Annual Cereal Balance Sheet (June '06 - May '07) for Somalia, using actual *Gu* '06 cereal production estimates and assuming a Post-War Average for the upcoming *Deyr* '06/'07, indicates no cereal deficit when including food aid in transit or the pipeline up to December '06. This holds even with a variation of assumptions on anticipated Net Commercial Imports. Total estimated cereal surplus ranges between 20,000 – 115,000 MT, depending on Net Commercial Import assumptions.

- **Livestock**

Generally, in the drought-affected regions of Gedo, Juba, and Bay, livestock body conditions are improving with the increased availability of pasture and water in some areas following the *Gu* '06 rains. In response, livestock prices, especially for cattle, have increased over the last three months, and terms of trade (livestock to cereal) have improved.

However, livestock losses as a result of the drought were significant in Gedo, Juba valley, Bakool and Bay regions. It is roughly estimated that cattle holdings from April '05 and June '06 were reduced by 40-60% in Gedo and Juba, and between 15-25% in Bakool and Bay. For the surviving cattle, body conditions are showing signs of improvement, but both conception and calving rates are very low, which means milk production is scarce and herd recovery to a sustainable level will take several seasons.

In the hinterland of Juba, although there is pasture, all natural water catchments are already completely dry. This has prompted a large and unusual pastoral early migration to tsetse fly-infested riverine areas, which will not only lead to disease exposure, but also conflict between herders and farmers over access to river water as well as competition for scarce resources. Similarly, rains were poor in northern Gedo and in Bakool, which is leading to abnormal migration both within Somalia and across borders to Ethiopia and Kenya.

In Hiran and the Central regions, livestock conditions, especially for cattle, are poor, and are expected to deteriorate further over the next four months due to limited pasture, water, and migration options following three consecutive seasons of below-normal rains in these regions. Conception rates, calving and kidding, and milk production are all low. There is unusual migration to riverine areas as far away as the Shabelle valley, and into Ethiopia. In the northeast and northwest, generally livestock body conditions are average to good, with normal conception and reproduction rates, hence normal milk production. In addition, livestock holdings are continuing to increase, especially in the northeast. It is roughly estimated, from the *Gu* assessment's pastoral herd size dynamics survey, that between April '05 –March '06 camel and sheep/goat holdings increased 30-40% and 10-20% respectively. Migration patterns are largely normal, with the exception of pockets in coastal deeh, highland areas in Bari and along the Hawd bordering Ethiopia.

- **Markets**

Generally, both the Somalia Shilling (SoSh) and Somaliland Shilling (SlSh) have been consistently stable for the last year and half (around 15,000 SoSh/US$ and 6,300 SlSh/US$). This period of stability was broken, however, when the SoSh in southern Somalia markets gained in value by 14% against the US dollar between January and March '06 (dropped to 13,400 SoSh/US$ in March '06). By July '06, however, the value of the SoSh slipped against the US dollar and is now trading on average at 14,400 SoSh/US$, only a 5% increase in value from January '06.

Despite the stronger Somali Shilling, imported food commodities prices, especially sugar, rice and vegetable oil, are still high in most of the main regional markets. This is due to a number of factors, including increased road blocks in some regions (Juba Valley), disruptions in the flow of imports through seaports (Kismayo), disruptions in regional supplies due to conflict and insecurity (Central regions), as well as the general increase in transportation costs as a result of increased global fuel prices. The reopening of the main seaport in Mogadishu (for the first time since 1995) should facilitate an improved supply of imported commodities; however, if widespread conflict erupts throughout the southern and central regions, all inter-regional and seaport supply lines will be significantly disrupted, with negative impacts on commodity flows and prices.

- **Civil Insecurity**

Localized conflict within areas currently identified as in **Humanitarian Emergency** and **Acute Food and Livelihood Crisis** continues to drive and compound food, nutrition and livelihood insecurity. Although impacts remained localised, several areas experienced conflict during the *Gu* season, which led to the destruction of livelihood assets, reductions in access to productive resources, and displacement. Areas of localized conflict include Maxaas, Jalalaqsi, Bulo Burti (Hiran region); Badaadhe, Kangiron and Beerhane (Kismaayo district, Lower Juba); and Karaban (Luuq district, Gedo region); and Kalabaydh and Dabaltaag (Lasanod district, Sool region). In Galgaduud and Mudug regions, this is the third consecutive rainy season in which sporadic conflict around Caadado, Gelinsoor, Hobyo, Haradheere and Ceel Buur have led to widespread disruption of pastoral grazing and migration (see Technical Series Reports No. IV 7 and 8). Further impacts beyond this conflict are disruptions in trade flows between Mogadishu and Galkaacyo, and population displacement to areas where clan and livelihood support are available.

The possibility of widespread conflict throughout the southern and central regions, arising from the deterioration in the relationship between the TFG and the Union of Islamic Courts, is of increasing concern. If there is an escalation of the political crisis that results in widespread conflict and the disruption of inter-regional trade, the implications for the humanitarian situation will be severe.

- **Nutrition**

A significant proportion of the population classified as being in Humanitarian Emergency or Acute Food and Livelihood Crisis (FSAU Post Gu '06) also faces critical levels of acute malnutrition (WHZ < -2 or oedema) of 15% and above (Map 1 and 12). Findings from nutrition assessments conducted in April – July '06 indicate an alarming situation in Gedo region, and parts of Lower and Middle Juba (Buale and Sakow, Afmadow and Juba Valley) where global acute malnutrition rates are greater than 20% (WHZ < -2 or oedema). The nutrition situation has deteriorated in since January '06 and in some areas is worse than typical.

The main factors contributing to this critical situation are inadequate dietary intake and high incidence of diseases, both of which are associated with limited access to food, safe water and health care services. The level of admissions of malnourished children into the therapeutic and supplementary feeding programs continues in Gedo, Marere and Huddur in Bakool.

2. ANALYTICAL PROCESSES AND METHODS

This Technical Series Report provides the full technical findings of the Post *Gu* '06 Analysis. The analysis focuses on the outcome of *Gu* seasonal rains (April-June '06) and provides food security projections to December '06. The analysis updates the Post *Deyr* '05/'06 Assessment Analysis (FSAU Technical Series, Report No IV. 8, February 22, 2006) and revises the annual food and livelihood security projections to December '06. FSAU collaborated with more than 40 partners in the field and in Nairobi at all stages of the assessment including planning, fieldwork, and analysis. Table 1A and 1B provide an overview of the analytical process and timeline. For a complete listing of partners and full timeline, see Appendix 3 and 4.

Analytical Process and Timeline

In early June, although the *Gu* rainy season was not yet complete, it was evident that the rains were mixed in performance, and FSAU issued a Press Release warning that the conditions of Humanitarian Emergency in Southern Somalia would likely continue from July through December '06 (FSAU Press Release, June 2, 2006). Shortly thereafter, FSAU began the preparations and planning for the in-depth Post *Gu* Assessment and Analysis to fully investigate and evaluate the food, livelihood and nutrition security situation following the outcome of the *Gu* '06 rains.

Table 3: Table 1: Overview of 2006 Post Gu Assessment Analytical Process and Timeline

Activity	Date	Description/Location
• FSAU Planning & Preparation	May15 - 29	NBI
• FSAU Issues Early Warning	June 2nd	FSAU Press Release "Humanitarian Emergency will continue in Southern Somalia"
• Partner Planning Meeting	June 8th	NBI with partners
• Regional Fieldwork Planning Workshops	June 25-26	Regional Partners Planning Meeting in NW, NE, S, SE, SW
• Fieldwork	June 27-July 16	Throughout the Regions with Partners
• Regional Analysis Workshops	July 17-July 22	Regional Workshops with Partners
• All Team Analysis Workshop	July 23-August 4	All Team (NBI and field) in Hargeisa, SL
• Analysis Consolidation with Partners	August 5-8	FSAU with Primary Technical Partners in NBI
• Technical Partner Vetting Results Meeting	August 7	Technical Partners, NBI
• Release of Results	August 8 August 9 August 15 August 15 August 16-23 August 17 August 25 August 30 September 7	Presentation to UNOCHA/IASC Meeting Presentation to SACB FSRD Special Meeting FSAU Press Release "Despite some Improvement, Conditions of Humanitarian Emergency Persist in Southern Somalia" Executive Results Posted on FSAU Website Presentation to Regional Meetings Baidoa (Aug 16th), Beletweyn (Aug 17th), Abudwaq (Aug 19th), Hargeisa (Aug 20th), Buale (Aug 21st), Garowe (Aug 22nd), Mogadishu (Aug 23rd) Presentation to CAP/NAF Food and Livelihood Security Cluster Working Group FSAU Special Brief - Post Gu '06 Analysis Presentation to CAP 2007 NBI Workshop Presentation to CAP 2007 Donor Consultation Meeting, NBI
• Release of Technical Series Report	September 15	FSAU Website, Email Distribution, Hardcopy Mailing

Two technical partner planning meetings were held in Nairobi on June 8, 2006, one with an agricultural sector focus and the other with pastoral and livestock sector focus. The purpose of these initial partner planning meetings was to finalise survey instruments, plan partner collaboration and coordinate and plan fieldwork logistics and support. Prior to the actual fieldwork, Regional Partner Planning Workshops, designed to train participants on field instruments and plan field logistics, were held in Hargesia, Garowe, Belet Weyne, Marka, Wajid and Buale, from June 23 - 26. The teams then conducted fieldwork in their respective regions between June 27 and July 16. Fieldwork was followed by regional analysis meetings (July 11-20) and then an FSAU All Team Analysis Workshop was held with FEWS NET and partners in Hargeisa, Somaliland, from July 23-August 4. The final analysis was then shared with major technical partners in a Technical Partner Vetting Meeting in Nairobi on August 7. Final results and key findings were first publicly released August 9, 2006, at an SACB FSRD Special Meeting in Nairobi.

FSAU All Team Post Gu Analysis held in Hargeisa, July '06.

To facilitate a rapid uptake of assessment results, several presentations of the key findings were made throughout August, including at the SACB FSRD Special Meeting (August 9), the UN OCHA/IASC Meeting (August 8), the CAP/NAF Food and Livelihood Security Cluster Working Group (August 17), CAP Somalia Workshop (August 31), six Regional Presentations (Hargeisa, Garowe, Baidoa, Hiran, Mogadishu, Buale) between August 16 - 21.

Immediately following the initial release of the Post *Gu* findings, FSAU with FEWS NET Somalia issued a Press Release on August 15, which was subsequently picked up by several news agencies (FSAU Press Release, "Despite Some Improvement, Conditions of Humanitarian Emergency Persist in Southern Somalia"). FSAU also conducted interviews with BBC Radio, both in Somali and English, as well as with the South Africa Broadcasting Corporation (SABC). To review the news articles written based on the FSAU press release and Special Monthly Brief, see FSAU website (http://www.fsausomali.org). From August 15 one could find posted on the FSAU's website the key results of the sectoral and integrated regional analysis, along with the Phase Classification Map and estimated population numbers by region, district and livelihood zone. On August 25, FSAU issued a Special Brief summarizing the sectoral and integrated regional analysis.

Assessment Methods and Instruments

Primary data collection methodologies included focus group discussions, key informant interviews, market price surveys, crop production surveys, livestock surveys, and food and livelihood security questionnaires (Appendix 5.4.2). During this exercise the FSAU strengthened further its evidence-based analysis by introducing an improved pastoral questionnaire which included a herd size dynamics survey component. In total, 440 crop production surveys, 202 pastoral questionnaires, 145 market price surveys, and 47 district conflict monitoring surveys were completed. These were supported and triangulated by secondary data (including livelihood profiles, regional and district administrative maps, USG/NVDI satellite imagery, nutrition and market data, and FSAU and partner situation reports). A map of GPS coordinates of the post *Gu* fieldwork data points is provided in Appendix 6. Areas not assessed due to security constraints include the area between south Galkayo and Hobyo (Mudug region), the districts of Bur Hakaba (Bay region), parts of Badade (L. Juba), and border areas of Bardera and El Waq (Gedo region).

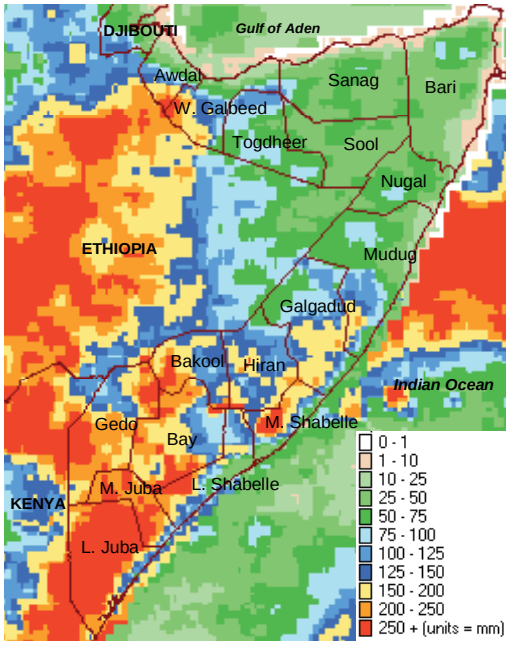
Nutritional data used during the analysis stage included recent district nutrition surveys, rapid assessments, trends in health facility data, and sentinel site data (68 sites, covering Gedo, Lower and Middle Juba, Bay and Bakol, Hiran, Lower Shabelle, south Mudug, and Galgadud). Weights for height (WFH) indicators were used in the nutrition surveys and health facility monitoring. Measurement of the Mid-upper Arm Circumstance (MUAC) and WFH indicators were utilized in rapid assessments. Nutritional data interpretation was based on the relationship to typical or expected trends in the district.

FSAU applies a livelihoods approach in its analysis to clearly highlight the causes and outcomes of food and livelihood insecurity, and to facilitate multi-sector response planning and monitoring. Evidence-based templates (Appendix 5.4.2.8) are used to organize and consolidate all analytical field and secondary data and analysis to arrive at an evidence-based identification of area-specific Food Security Phase Classifications (Appendix 5.1).

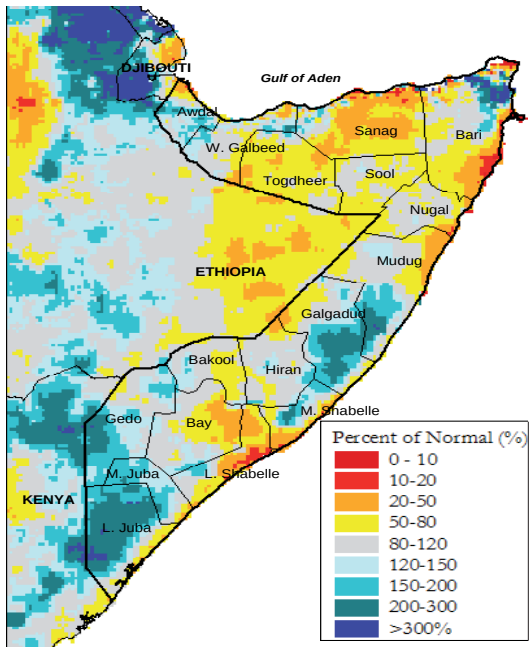
3. SECTOR REPORTS

3.1 CLIMATE AND RAINFALL OUTCOME

Map 2: Gu Cumulative Rainfall Amount (mm) for April-June 30, 2006



Map 3: Percent of Normal Rainfall for April-June, 2006



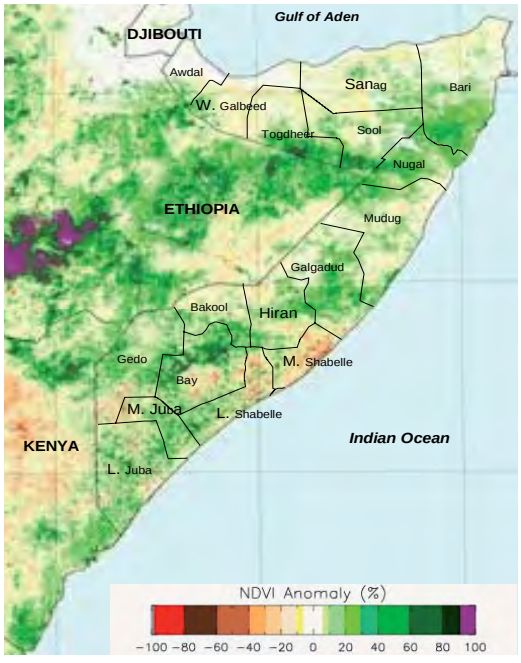
Generally, the performance of the *Gu* '06 season rains were mixed, both in terms of quantity and the distribution throughout the season in most parts of the country. Rains started early (late March rather than mid April) with good amounts in many parts of the regions, including the drought-affected regions of Juba Valley, Gedo, Bay and Bakool, as well as Shabelle Valley, parts of Central, and the Northwest.

As the season progressed, however, the rains became erratic, localized and intermittent over time and space in many of these regions. For instance, in Juba Valley and Central regions, although satellite imagery indicates that the total cumulative rains for the season were significantly above normal (Map 2), field reports and 'ground truthing' confirmed that this is overstated by cloud coverage, and that most of the rain fell only during late March and early April.

In Juba valley and south Gedo districts, though heavy rains of up to 200% of the average rainfall were received (Map 2 and 3), the overall performance of the season was poor, as rains were poorly distributed geographically and over time. High temperatures and dry winds led to high evaporation rates and rapid absorption of rainfall, resulting in the drying up earlier than normal of most of the natural and communal water catchments.

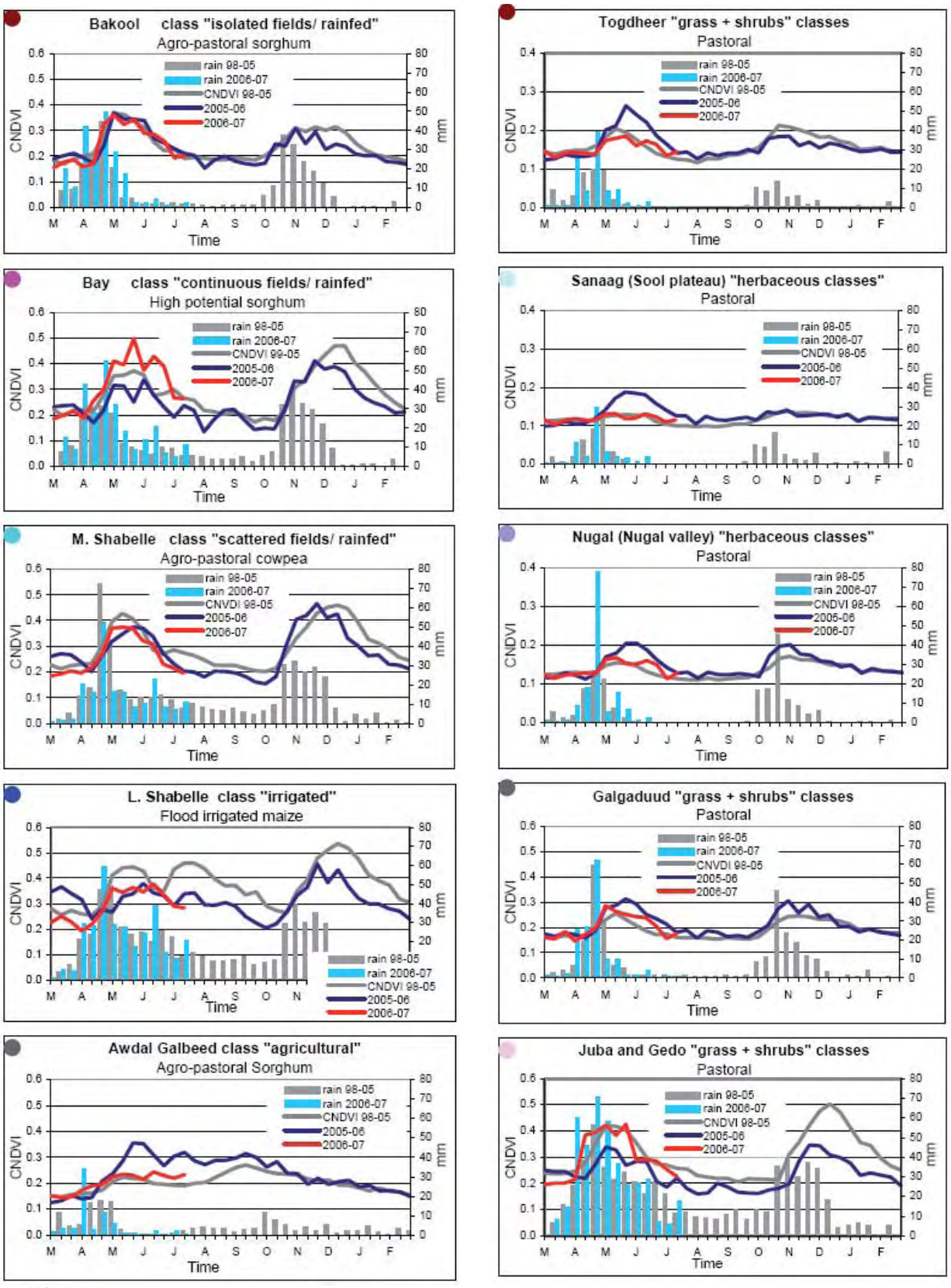
In both Bakool and Hiran regions, satellite imagery indicates, and field reports confirm, that rains were well below normal for the entire season. Similarly, in Shabelle valley, especially in the Lower Shabelle region, the performance of the *Gu* rains was very poor, leading to rainfed crop failure. Regions where good rains continued and were more evenly distributed throughout the season include most of Bay region, Awdal and W. Galbeed in the northwest.

Map 4: Spot/NDVI Anomaly (21-30 June 2006) Compared to Long Term Mean



Source: FEWS NET /USGS

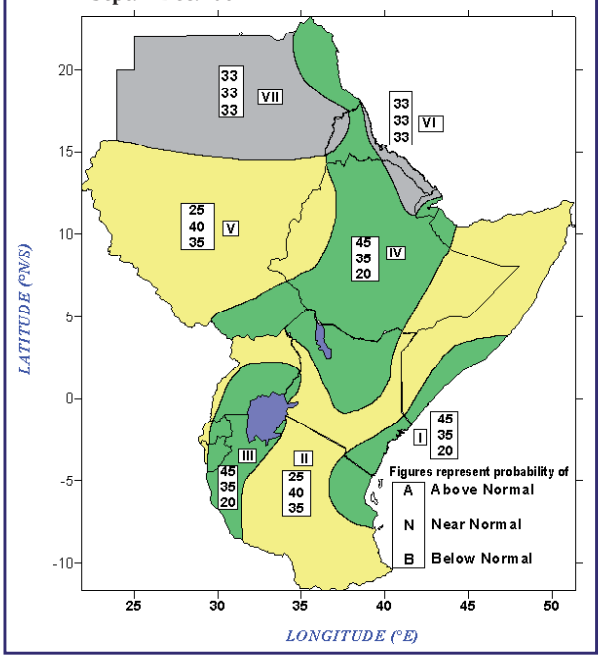
Figure 1: Rainfall Performances and NDVI for Awdal, Bakool, Togdheer, Nugal, Sanaag, Galgadud, Bay, Juba and Shabele Valley



In central rangeland areas, the overall *Gu* rainfall performance was poor. Compared to a long-term mean, most of these areas received less than 60% of the normal rains for the period April to June '06. Due to poor rains, most of the water reservoirs (*berkads*) remain unusually dry. Also, in key pastoral areas of the Northeast/west, Bari, Sanaag, Sool and Togdheer regions, rainfall performance was largely below normal, apart from parts of Nugal and Sool pastoral Livelihood Zones.

Rainfall performance in the neighboring regions of Ethiopia was largely below normal, leading to cross-border pastoral migration in the Hawd area of Nugal and Mudug regions of Somalia (Map 3 and 4). Rainfall in the neighboring part of northeastern Kenya was largely good, except for parts of Garissa and Wajir, where rains were poor, thus prompting cross-border migration into Afmadow and Juba *dheshek* and riverine areas.

Map 5: 18th Climate Outlook Forum -Rainfall Forecast Sept. – Dec. '06



Source: IGAD Climate Prediction and Applications Centre (ICPAC).

The Normalized Difference Vegetation Index (NDVI) obtained through satellite imagery shows that vegetation conditions over the third dekad of June were largely normal in most of the drought-affected regions. Where there were heavy *Gu* rains, the vegetation conditions were largely above the normal range. Exceptions are parts of Shabelle valley, Bakool, Hiran and parts of Gedo, where *Gu* rains were below normal. The NDVI value in Hawd of Ethiopia bordering central Somalia is also very low due to poor rains.

Empty Berkad, El Dhere, Galgadud Region, early July '06.

Empty Communal Dam, Hiran Region, late June '06.

Deyr '06/'07 Forecast

From August 31 to September 1, 2006, the eighteenth Climate Outlook Forum was convened in Nairobi, Kenya by the IGAD Climate Prediction and Application Centre (ICPAC) to formulate consensus for the September to December rainfall season in the Greater Horn of Africa, comprising of Burundi, Djibouti, Eritrea, Ethiopia, Kenya, Rwanda, Somalia, Sudan, Tanzania and Uganda. Experts from Meteorological Departments from most of these countries participated in the forum. The forum reviewed the state of the global climate system and its implications for the sub-region. Among the principal factors taken into account were the observed and predicted Sea Surface Temperature in the tropical Pacific Ocean, and over the tropical Atlantic and Indian Oceans.

Consensus outlook derived from prediction models of ICPAC and other climate centers indicates that there is an increased likelihood of near to below-normal rainfall over most of Somalia during the period Sept. to Dec. '06 (Map 6). According to the forecast, there is an elevated probability that most of Somalia will receive near to below-normal *Deyr* rains (40% near normal and 35% below normal). In other words, there is only a 25% probability that the *Deyr* rains will be above normal in most parts of Somalia (Map 5). However, in parts of Juba and Shabelle Valley and parts of Awdal regions, there is an elevated probability of near to above normal *Deyr* rains (45% above normal and 35% near normal)(Map 5).

3.2 CIVIL INSECURITY

Civil insecurity is a key driver affecting food, nutrition and livelihood security in Somalia. There are clear direct impacts of conflict, such as human deaths and injuries, population displacements, and the loss and destruction of livelihood assets, all of which impact on the food, nutrition and livelihood security situation of the population directly affected. There are, however, a number of indirect impacts stemming from conflict and civil tensions that also negatively impact on the food, nutrition and livelihood security of the larger population who may not be directly involved in the conflict or insecurity. These indirect impacts can include the disruption in inter-regional trade, which leads to market supply shortages or rapid and excessive prices increases, and the loss of access to production resources that are critical to livelihoods, such as access to grazing lands, water sources, markets, health services, schools, and agricultural land.

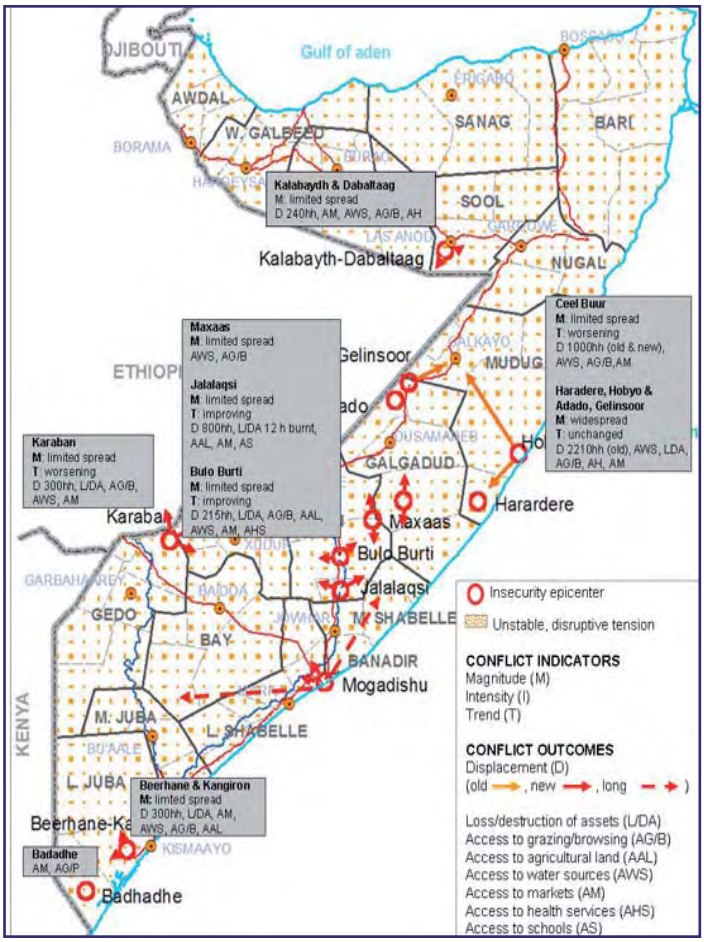
There are also different types and layers of insecurity, FSAU characterises three: 1.) localized disputes over access to natural resources, e.g. grazing land, forests in the production of charcoal, 2.) 'political' disputes, which can be local or widespread, and 3.) chronic 'unstable, disruptive tension' and structural violence of everyday life. FSAU began explicitly monitoring civil insecurity and its impact on food and livelihood security in 2005, both within seasonal analysis and monthly monitoring (see FSAU Technical Series Reports No. IV. 7 and 8, and FSAU Monthly Food Security and Nutrition Briefs).

FSAU does not analyze insecurity in isolation, but as it impacts on outcomes of food, nutrition and livelihood security. Insecurity is mapped and described only when it is considered to have significantly negative outcomes upon food, nutrition and livelihood security. This mapping of the immediate outcomes of insecurity excludes, however, the chronic 'unstable, disruptive tension' that affects Somali livelihoods. Though this is less 'visible' to analysis, it continues to shape livelihoods, for example in risk management strategies. This chronic 'unstable, disruptive tension' is reflected in Map 6 as an underlying background pattern of dots and is the Integrated Phase Classification reference outcome of Chronic Food Insecurity. The everyday 'violence' of inequality, including social marginalization and issues of gender, and their impact on food, nutrition and livelihood security outcomes arising from this are also not analysed here, but this is identified as a priority area to develop further.

The following civil insecurity analysis is based on information drawn from the *Gu* '06 seasonal assessment security monitoring form (Appendix 5.4.3.4) and FSAU monthly field reports and is triangulated with secondary information from other sources wherever possible. This analysis is for the *Gu* '06 season period (March to and including July) and covers the important seasonal agricultural cycle from land preparation and planting through to but not including harvest. For pastoral livelihoods it covers the opportunistic (normal) migration and forced (abnormal) migration in search of water and pasture resources in response to the *Gu* season rainfall. Disruption of agricultural activities will lead to a reduction in planted area, and consequent reduction in crop yield and cereal availability at household and national levels. Insecurity leading to disruptions in livestock migration, access to grazing/browsing and access to water will decrease livestock performance with consequent implications for livestock production, including conception and body condition.

Depending on the timing, severity and duration of insecurity the implications for food security may be experienced long after the seasonal production period ends. For example, if camel conception rates are reduced, this will be picked up twelve months later (the gestation period) in a reduction in births and therefore lactating animals and overall milk yields.

Map 6: Insecurity Outcomes for Food and Livelihood Security (March – July '06)

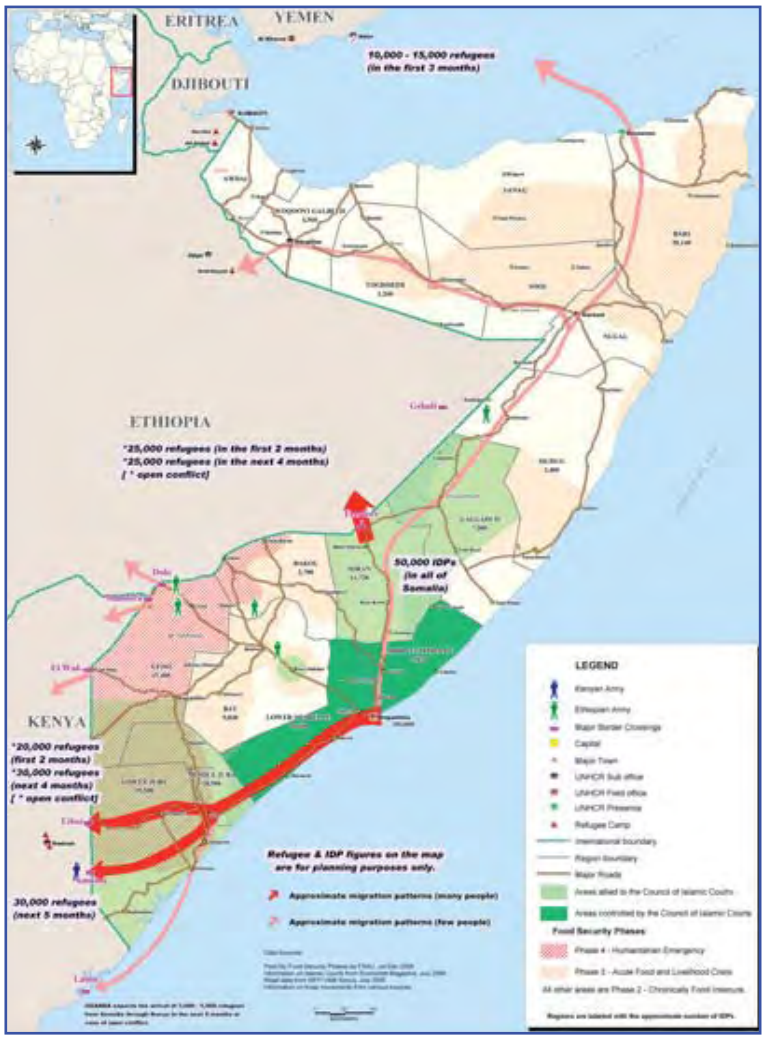


Source: FSAU July '06.

Map 6 shows the epicentres of insecurity considered serious enough to have had direct negative impacts on household food, nutrition and livelihood security during the *Gu* '06 season. These impacts, including the broad directions of displacement, are described in the legend for each epicentre. The numbers of displaced are at best rough estimates, based on figures provided by local organizations, elders and other key informants, including FSAU staff involved in the assessment. Accurate figures are difficult to establish, as the displaced are not found in 'camp' situations, but are dispersed and integrated within settlements, large and small, and within families. These estimates, therefore, should be taken only as indicative of the magnitude of the problem.

Of the thirteen epicentres identified, twelve are located in southern and central Somalia, and eleven of these (excluding Mogadishu which was not assessed) are within the areas currently identified as in Humanitarian Emergency and Acute Food and Livelihood Crisis. The arrival of *Gu* '06 rains led to reductions in tensions over access to water and grazing, and a reduction in localized resource-based conflicts within and between livelihood groups, particularly in the Juba regions. Improved security conditions from the last Deyr '05/'06 seasonal analysis in Dinsor, Tieglow, Qansadheere and El Wak districts led to a return of populations in time for *Gu* '06 season's agricultural production and pastoral activities.

Map 7: Contigency Planning Map - Somalia Population Displacement in Widespread Conflict Scenario



Source: UNHCR and RSAL, Nairobi, Kenya August 4, 2006.

Less positively, in some areas localized conflict and insecurity during the *Gu* season further compounded food, nutrition and livelihood insecurity in these areas, such as in Kalabaydh and Maxaas, Jalalaqsi and Bulo Burti (Hiran); Badaadhe, the villages of Kangiron and Beerhane (Kismaayo district, Lower Juba), and Karaban (Luuq district, Gedo) (Map 6). In the Central regions, continuing sporadic conflict in Cadado, Gelinsoor, Hobyo, Haradheere and Ceel Buur (Mudug and Galgadud) continues to cause widespread disruption of livelihoods (see also Technical Series Reports No IV 7 and 8). This continuing insecurity has also had an impact beyond the conflict boundaries, resulting in the disruption to trade flows between Mogadishu and Galkaacyo, and the displacement of populations to areas where clan/relatives' and livelihood support are available.

Of increasing concern is the possibility of widespread conflict throughout the South and Central regions arising from deterioration in the relationship between the Transitional Federal Government (TFG) and the Union of Islamic Courts[1]. If there is an escalation in the political crisis that results in widespread conflict, the implications for the humanitarian situation will be severe, given the already ongoing humanitarian crisis in these areas. In such a scenario, the severity, magnitude and duration of the crisis would be significantly increased, and the total number of people facing humanitarian crisis could even double. This will not only prolong the time period of the crisis, but would further undermine the resilience and abilities of the population to manage future shocks.

In addition to the direct impacts of death, injuries and displacement within Somalia and into neighbouring countries of Kenya and Ethiopia (Map 7), there would also be serious disruptions to social support networks and a likely reduction in humanitarian support as access becomes increasingly problematic. Indirect impacts will be evident in conflict, as well as non-conflict areas, as commercial trade flows (including staple cereals) are disrupted within Somalia and across international borders - with a consequent decrease in market supply and an increase in food prices. For host communities in non-conflict areas, the impact will be felt as they endeavour to support the displaced. UNHCR and RSAL have estimated, for contingency planning purposes that around 50,000 people could be displaced into Ethiopia, another 80,000 into Kenya, and a further 15,000 to Yemen and abroad (Map 7). Furthermore, the impacts of conflict will be felt long after conflict subsides, as people's resilience to future shocks and stresses is further reduced, and the recovery period for existing or new areas of Humanitarian Emergency or Acute Food and Livelihood Crisis is prolonged, even with good subsequent seasonal rainfall.

[1]Also known as the Supreme Council of the Islamic Courts (SCIC).

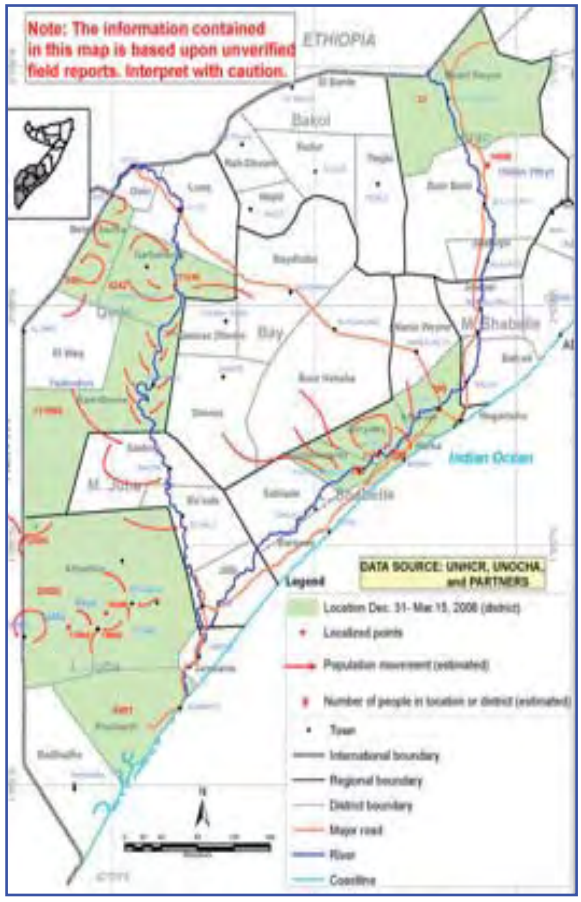
3.3 POPULATION DISPLACEMENT AND MOVEMENT IN SOMALIA

Internally Displaced Populations in Somalia

Since the collapse of the central government of Somalia in 1990, continuing intra/inter-clan conflicts have forced thousands of households to leave their homes and areas of origin, with most losing their means of livelihoods in the process. In addition to conflict, natural disasters, such as tsunami, drought, and flooding, also continue to generate population movement and new displacements, as the general resilience of the more vulnerable households is undermined through loss of assets and livelihoods. Although, it is extremely difficult to estimate IDPs population numbers, UN-OCHA (Somalia) roughly estimates there are currently around 400,000 people[1] in Somalia who are 'Internally Displaced People' (IDPs), of which 250,000, 28,000, and 15,000 live in Mogadishu, Bossaso and Kismayo, respectively. UNHCR also tracks, on a monthly basis, population movements of newly displaced people.[2]

Most IDPs survive through a mixture of casual work and begging, and their income is barely sufficient for one meal a day. FSAU nutrition assessments among IDP populations over the last few years, generally indicate high levels of malnutrition rates among displaced populations, as many have limited access to food to enable a diversified diet, and living conditions are poor (crowding, limited access to proper amenities, such as toilets and health facilities) which predisposes them to high disease incidence and acute malnutrition (FSAU July '06 Nutrition Update). OCHA reports that in Bossaso (Puntland) around 70% of IDPs have no access to clean water, while around 80% of have no access to sanitation. The situation among IDPS in the south and central regions is considered to be far worse. Among Bosasso IDPs, current data from routine nutritional screening of children aged below 5 years indicates acute malnutrition levels of 20% and above. Similarly, a total population nutrition assessment conducted among Galkayo IDPs in July 2006, indicates global acute malnutrition of 17.7% in Galkayo town IDPs and 16% in Mergaga settlements.' IDPs also have weak social support networks and continue to face discrimination, exploitation and physical violence, as most IDPs belong to weak or minority clans.

Map 8: Somalia - General Population Movement: Arrival of People and their Current Locations (Dec 31 - Mar 15 '06)



Recent Drought and Conflict Induced Population Movements

By end of March 2006, at the peak of the drought in Southern Somalia, UNHCR/UNOCHA roughly estimated that the drought led to the movement/displacement of an estimated 300,000 people in Southern Somalia (Map 8). The depletion of water and pasture was the driving factor for most of the population movement, as agro-pastoralists and pastoralists moved with their livestock in search of food and water. In some instances, however, whole families abandoned their homes altogether after losing all their means of livelihoods and outstripped their coping capacity. With the *Gu* '06 rains in March, many people started to return to their areas, but livelihoods remain disrupted and stressed.[3]

UNHCR, through its Population Movement Tracking, reported that between April-July '06, an estimated 100,909 people were displaced within Somalia and to cross-border areas (Kenya, Ethiopia, and Yemen) due to conflict, drought and floods[4]. Most of the cross border movement was related to the Mogadishu conflict and the deterioration in the political situation in South Central[5]. Since the clashes subsided, some of these people, mainly those that had been displaced within Mogadishu and who had moved to nearby areas in the Lower/Middle Shabelle region, have returned to their residences in Mogadishu. Others, however, especially those who moved to areas far from Mogadishu (South/Central, Puntland and Somaliland) where they can access social support and clan protection, continue to return gradually.

Cross-border population movement into Kenya, Ethiopia and Yemen since January '06 has been significant. Cross-border population movement is difficult to measure, but some data provides indicative trends, such as people arriving in refugee camps. In July'06 alone, UNHCR reported that around 2,677 people arrived in Dadaab Refugee Camps in Kenya, while in June '06 around 1,870 people[6] from Mogadishu passed through Dolo and Hargeisa to cross the border into Ethiopia. Also reported, is around 5,969 Somalis[7], between January – July '06, crossing into Yemen through the Bossaso port, while in July alone around 130 people crossed the sea arriving at the Mayfa'a Reception Centre (Yemen).

[1]UN OCHA Somalia, Brief on IDPS (Internally Displaced People), August 2006.
[2]UNHCR Somalia, Monthly Population Movement Tracking, Somalia.
[3]UN OCHA Somalia, Temporary Displacement, IDPS Brief, August 2006.
[4]UNHCR Somalia, Monthly Population Movement Tracking Reports, May – July 2006.
[5]UNHCR Ethiopia.
[6](UNHCR Nairobi) Population Movement Tracking Report – July 2006.
[7](UNHCR Somalia) Population Movement Tracking Report – July 2006.

3.4 GU '06 CEREAL CROP PRODUCTION

Table 4: Gu '06 Crop Production (Maize and Sorghum) Estimate in Southern Somalia

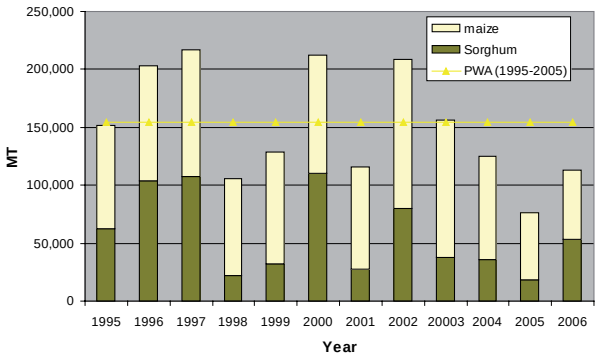
Regions	Gu 2006 Production in MT			Gu 2006 as % of Gu 2005	Gu 2006 as % o Gu PWA
	Sorghum	Maize	Total Cereal		
Bakool	1,230	195	1,425	146%	58%
Bay	35,400	2,740	38,140	296%	98%
Gedo	2,960	1,515	4,475	827%	67%
Hiran	885	560	1,445	1033%	33%
L/Juba	40	495	535	63%	8%
L/Shabelle	4,500	42,560	47,060	128%	69%
M/Juba	280	815	1,095	32%	11%
M/Shabelle	7,695	11,050	18,745	92%	109%
Gu 2006 Total	**52,990**	**59,930**	**112,920**	**149%**	**73%**

Gu '06 cereal production in southern Somalia is estimated at about 113,000 MT (53% maize and 47% sorghum), which is only 73% of the *Gu* Post War Average (1995 - 2005) (Table 4 and Map 2). Although this year's *Gu* cereal production is significantly better than last year's record low (149% of Gu '05), it is still the third lowest *Gu* production level in a decade (Figure 2). This season's poor production is mainly attributed to moisture stress caused by below-normal and poorly distributed rains, as well as added factors of flooding, pests, and civil insecurity in some areas.

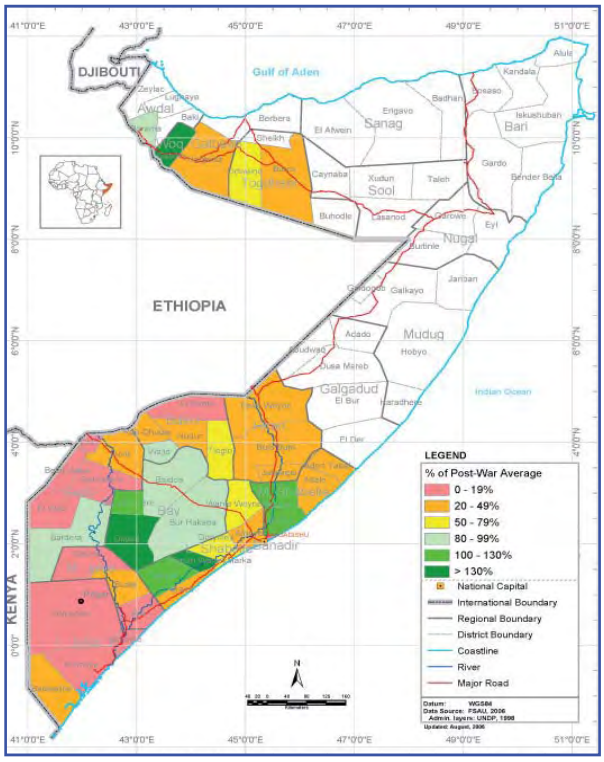
Two regions, Lower and Middle Juba, experienced almost complete cereal crop failure, with cereal production estimated at only 11% and 8% of *Gu* PWA (1995–2005), respectively. Poorly distributed rain through the season, combined with flooding and an army worm infestation, are the primary factors that led to crop failure. Over the next two months in Juba Valley, it is expected the off-season recessional crop production from the desheks will contribute a further 3,200MT, which is critical given *Gu* '06 cereal production is only 1,600 MT for Lower and Middle Juba combined. This is the third consecutive season of poor crop production for these two regions, as *Deyr* '05/'06 also failed (1% and 7% of PWA) and *Gu* '05 was significantly below normal (32% and 63% of PWA).

Similarly, *Gu* '06 cereal production in Hiran was also extremely poor (33% of PWA), but somewhat better than the crop failures of *Deyr* '05/'06 (16% of PWA) and *Gu* '05 (3% of PWA). In Bakool and Gedo regions, cereal production is also below normal at 58% and 67% of PWA. Generally, in a normal *Gu* season the bulk of the cereal production in southern Somalia comes from Bay (sorghum) and Lower Shabelle (maize) regions. This *Gu* '06 season, the cereal production for these two regions is 98% and 69% of PWA, respectively (Table 4). Low cereal production in Lower Shabelle is due to the almost complete failure of all rainfed maize (roughly 80% of rainfed maize failed) due to widespread germination failure and moisture stress.

Figure 2: Gu Cereal Production Trends (1995 - 2006)



Map 9: Gu '06 Production as Compared to Post War Average

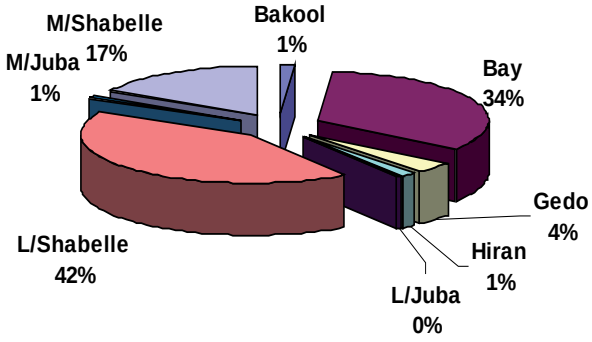


Source: FSAU July '06.

The only two regions with almost average *Gu* cereal production are Bay and Middle Shabelle, at 98% and 109% of PWA, respectively (Table 4). These two regions benefited from normal or above-normal cumulative rainfall that was well distributed throughout the season, with the exception of some pockets in both regions. In addition, the irrigation infrastructure in Middle Shabelle was effective.

In a normal year, Shabelle Valley and Bay regions produce 80% of all *Gu* season cereals in Southern Somalia. However this season, they contribute roughly 92% of all cereal, due to the significant crop failures in Juba Valley and Hiran regions (Figure 3). Most of the cereal production from Shabelle Valley is maize collected from irrigated areas (along the riverine areas of Jawhar, Balad, Afgoi, Jannale, Qoryoolay, Kurtunwarey). Likewise, the cereal production from Hiran and Gedo (Bardhere district) is maize and sorghum produced along the vicinity of irrigation network systems. The rainfed cereal contribution from these regions is virtually insignificant. Most of the cereal production from Bay and Bakool is sorghum in rainfed areas.

Figure 3: Regional Contribution of Gu '06 Cereal Production



In the northwest, agro-pastoral areas in Awdal, Galbeed and Togdheer districts cultivate rainfed cereals (sorghum and maize in particular) and employ shallow-well irrigation systems to grow vegetables and fruits. The agro-pastoral community, especially in Togdheer region, also practices growing fodder for which there is a continuous high demand due to their close proximity to the Burao livestock market (one of the largest livestock markets in east and central Africa), and the Berbera port's export livestock holding grounds. Fodder production is, therefore, highly commercialized, while cereal production has a more subsistence structure, with sale limited to surpluses. Unlike the rest of Somalia, where there is a bimodal rainy season (*Gu and Deyr*), there is only one main cropping season in the northwest (*Gu/Karan*), which is from April to November.

In agro-pastoral areas, *Gu/Karan* '06 cumulative rainfall was above normal in Awdal and Gebiley, while Hargeisa and Togdheer received below-normal rains. Cereal crop establishment for the *Gu/Karan* is estimated at 20,000 MT, which is 117% of PWA (1998-2005) (Table 5 and Figure 4). Crop production in Toghdeer is below the long-term average (85% of PWA), due not only to poor rainfall in Toghdeer, but also in the highlands of Hargeisa – Togdheer agro-pastoralists practice rainfed agriculture, but also depend on the floods from the highland of Sheikh and Adadley (Hargeysa) districts as an additional source of water for spate irrigation. Since the rainfall performance in the highland areas was poor, spate irrigation was also inadequate.

Table 5: Northwest Gu/Karan '06 Cereal Crop Production Establishment Estimates

Regions	Gu 2006 Production in MT			Gu 2006 as % of Gu 2005	Gu 2006 as % o Gu PWA
	Sorghum	Maize	Total Cereal		
Awdal (Borama / Baki)	2,500	470	2,970	59%	95%
Galbeed (Gabiley / Hargeisa)	15,270	1,265	16,535	84%	123%
Togdheer (Odweine, Sheik, Burao)	385	25	410	43%	85%
Gu -Karan 2005	**18,155**	**1,760**	**19,915**	**77%**	**117%**

Figure 4: Trend in Gu/Karan Cereal Production in Somaliland (1998 - 2006)

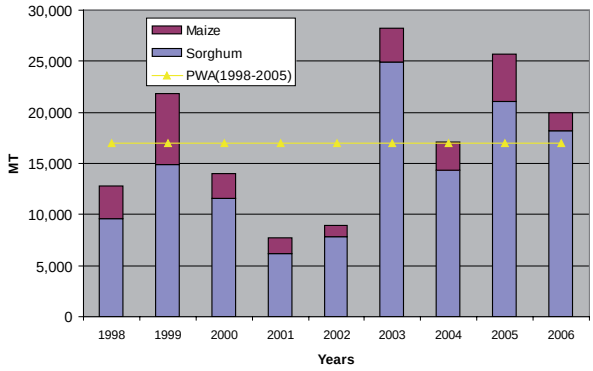
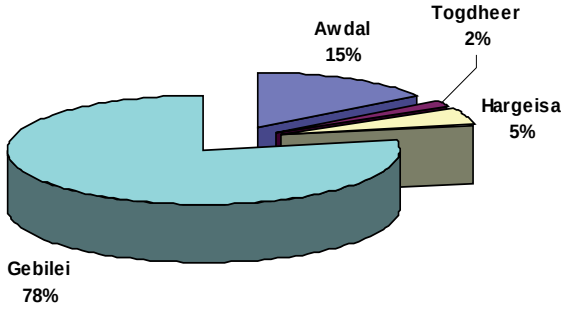


Figure 5: Regional Contribution Gu/Karan '06 Cereal Crop Establishment Estimates



The cereal harvest period in the northwest will occur in late Nov. or early Dec. '06. Gebiley, the highest cereal producing district in the region, is expected to contribute 78% of the total cereal production from northwest, with Awdal, Hargeisa, and Togdheer making up the rest (Figure 5).

Maize Production

Gu '06 maize production in southern Somalia is very low compared to the long-term average, roughly 40% lower than the Post War Average (1995-2005), and more or less similar to the *Gu* '05 maize production (104% of *Gu* '05). Estimated at 59,930MT, *Gu* '06 maize production is about 60% of *Gu* PWA and contributes 53% of the total *Gu* '06 cereal production. Generally, Lower and Middle Shabelle are the main maize-producing regions in southern Somalia, producing on average 70% of all *Gu* season maize (PWA). This season, however, due to maize crop failures in other regions, almost 90% of the total *Gu* '06 maize production (71% from Lower Shabelle and 18% from Middle Shabelle) comes from these two regions (Figure 6).

As was the case with *Deyr* '05/'06 rainfed maize production, almost all *Gu* '06 rainfed maize either failed or performed poorly due to excessive moisture stress during the development stage. Areas where rainfed maize failed include Lower Shabelle, Hiran, Gedo and Juba Valley. Irrigated maize in Lower and Middle Shabelle, therefore, account for most of the maize production this *Gu* season.

The *Gu* '06 floods in Juba Valley in late April and May filled the *desheks*, thus creating opportunities for off-season food and cash crop production. Based on a projection of existing trends, the off-season crop production in Juba Valley is estimated 3,200MT, but will be confirmed through fieldwork surveys in the next two months.

Figure 6: Regional Contribution of Gu '06 Maize Production

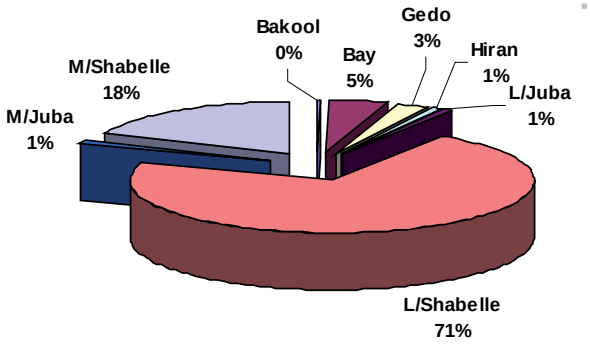
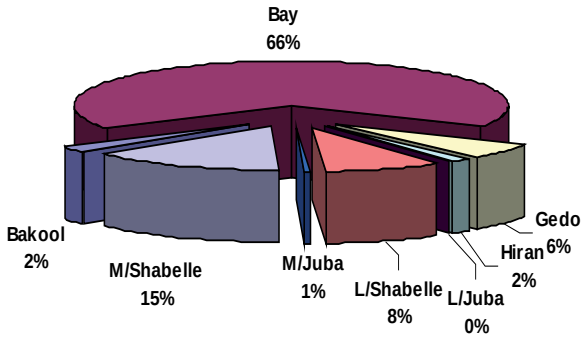


Figure 7: Regional Contribution of Gu '06 Sorghum Production



Sorghum Production

Sorghum is the most important staple cereal in rainfed agro-pastoral and pastoral livelihood zones in southern Somalia, while maize is for riverine and urban livelihoods. *Gu* '06 sorghum production, estimated at 52,990MT, is 91% of PWA (near average), 287% of *Gu* 2005 sorghum production and constitutes 47% of total *Gu* '06 cereal production as well. The production of sorghum is rain-dependent and is more drought- resistant than maize. In the last two seasons (*Gu* '05 and *Deyr* '05/'06) with the poor performance of rainfall, the entire sorghum grain harvest in southern Somalia has been hit by drought. However, the sorghum production is improved in this season due to the fact that Bay, the largest sorghum-producing region, and Middle Shabelle, the second largest sorghum-producing region, received normal to above-normal *Gu* '06 rains.

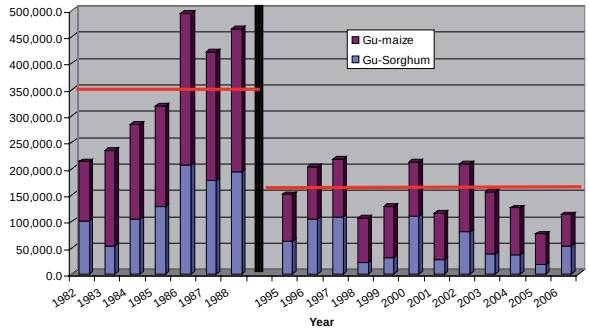
Generally, the bulk of *Gu* season sorghum production comes from three regions, Bay, Lower Shabelle, and Middle Shabelle (82% of Gu PWA sorghum production). This *Gu* season, almost 90% of the total *Gu* '06 sorghum production comes from these three regions: Bay (67%), Middle Shabelle (15%), and Lower Shabelle (8%) (Figure 7). Only 10% of *Gu* '06 sorghum production comes from the other 'Sorghum Belt regions' of Bakool, Hiran and Gedo, which is close to their PWA contribution of 9%. Less than 1% of Gu '06 sorghum production comes from Juba Valley (PWA contribution from Lower and Middle Juba is 0.6%). In areas of poor sorghum production, short and erratic *Gu* '06 rains caused germination failure and discouraged most agro-pastoral households from second planting. Flood, insect and bird damage has contributed to sorghum failure in Juba Valley.

Cereal Prices

Maize and sorghum prices in southern Somalia are closely linked to local production and stocks levels, with prices increasing in the lead-up to the main production and harvest season, then decreasing from the time of harvest. The *Gu* season is the primary production season in the year. Cereal prices generally reach their highest levels in the year around May –July, then decrease with harvest in August, and depending on the performance of the *Gu* season production, begin to increase from October (Figure 9). Over the last three years, since July 2003, the seasonal swings in cereal prices in southern Somalia have been more dramatic and reached higher overall price levels, primarily due to three consecutive seasons of low and decreasing *Gu* cereal production (Figure 9). This has resulted in depleted cereal stocks and generated scarcity in market supply, which is indicated in considerably greater than before cereal prices.

3.5 FAILED AGRICULTURAL SECTOR RECOVERY IN THE POST-WAR PERIOD

Figure 8: Gu Cereal Production in the last 20 years



Pre-war (1982 -1988) *Gu* cereal production in Somalia was considerably higher, more than double the amount of the post-war (1995-2006) *Gu* cereal production (Figure 8)[1]. Average pre-war (1982-1988) estimated cereal production in southern Somalia is around 347,200 MT, of which 58% is maize production and 42% is sorghum production. Land cultivated under maize increased regularly from 1982 till 1987, by about 4.4% per year and is attributed primarily to the Gu maize production grown under rain-fed conditions[2].

Gu post-war average (1995 - 2005) cereal production, estimated at 154,600 MT, is less than half (roughly 45%) of the *Gu* pre-war average cereal production[3]. Both post-war sorghum and maize average production is equally reduced in comparison to pre-war levels, 42% and 46% of pre-war average respectively. This year's *Gu* '06 cereal production, estimated at about 113,000 MT (53% maize and 47% sorghum), is only one third or 33% of the *Gu* pre-war average cereal production. It has now been almost sixteen years (1990-2006), since the collapse of the agricultural sector, for which, unlike the livestock export sector in which the number of livestock exported in 1997 surpassed pre-war levels[4], there has been no significant recovery.

The collapse of the state and with it the collapse of critical agricultural projects, services, and investments, combined with significant population displacements and general insecurity, are the primary factors that explain the dramatically decreased and consistently low cereal production levels in the post-war period. The reduction in production is due to a number of factors, including insecurity which created population displacement and the abandonment of agricultural areas, as well as due to the termination of credit and farming subsidy programs, extension services and irrigation infrastructure rehabilitation programs, which were very critical to the agricultural sector during the pre-war period.

Also during the pre-war era, there were large government owned and managed collective farms, such as the Mugambo, Fanole, and Jowhar/Barawein Rice Projects in Lower & Middle Juba, and Middle Shabelle, which over 90% of the area is now left fallow and uncultivated. In Lower Shabelle, which is a high potential irrigation area, after the collapse of government many of the secondary and primary irrigation canals fell into disrepair and are currently not functioning. Some efforts have been made by international agencies and NGO's to rehabilitate parts of the canals; however, the majority of the canals are still ineffective and need rehabilitation. Many other agricultural support projects, which were critical the overall development of the agricultural sector, collapsed after the war and have not been taken up by the private sector or international agencies of any significant scale, e.g. Bay Agriculture Development Project (Bay), Agricultural Farm Management and Extension Services Project (AFMES), and Center for Agricultural Research Stations (CARS). In the pre-war period, extension services and agricultural research centers provided important services to cereal production regions, including farmer training, piloting improved technologies and new variety in demonstration plots.

In pre-war southern Somalia, banana production was a significant export crop. Produced in large plantations in Lower Shabelle and Lower Juba during, these plantations generated significant labor opportunities, as well as hard currency through exports to Italy and other European countries. Banana plantation workers, besides earning a wage, were given land and inputs (tractors, seeds, and fertilizers) to produce cereals for their own consumption and sale. Grapefruit and watermelons are two other crops that were productive and were exported, although on a smaller scale than bananas.

IMPLICATIONS FOR ACTION:

- Prioritize agricultural sector for 'EARLY RECOVERY ACTIVITIES' within the context of humanitarian response
- Initiate a wide range of agricultural investments and activities to revitalize the agriculture sector, both in the production of cereal crops (rice, sorghum, and maize) and in non-cereal crops (vegetables, fruits, sesames seeds, etc).
- Implementation of agricultural finance and credit facilities
- Rehabilitation of irrigation infrastructure
- Reestablishment of agricultural extension services and research centers
- Initiate activities to improve agricultural marketing channels

[1]The data source for the pre-war crop production estimates is Somali Democratic Republic, Wasaaradda Beeraha, Ministry of Agriculture, Food Early Warning Systems Department, Compendium of Agricultural Statistics, Technical Report No. 11, FEWS Project, December 1988. This compendium presents all available statistics about crop production in Somalia which was gathered by the Food Early Warning Systems Project from 1982 onwards and data is from the Agricultural Service within the Food Early Warning Systems Department, compiled by Michel Leblanc, Technical Assistance Expert, and Mr. Ahmed Hassan Mohamed, Head of Agricultural Services.

[2]Food Early Warning System Department, Compendium of Agricultural Statistics, Dec. 1988, Mogadishu, Somali Democratic Republic, section 5.4.1.1.

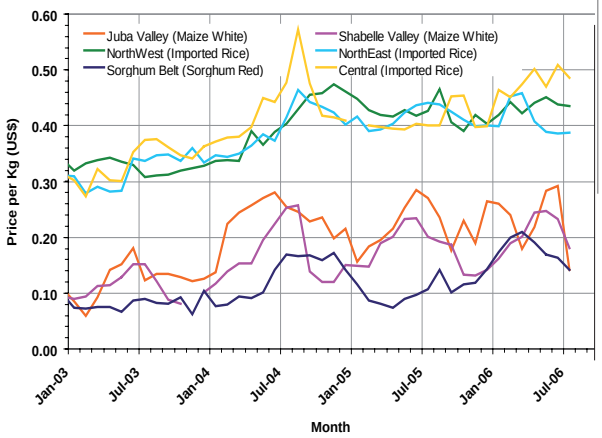
[3]Crop production estimates from 1995 to 2006 are generated crop production surveys carried out by agricultural analysts by the Food Security Analysis Unit (FSAU), of which fourteen of these analysts worked for either the Ministry of Agricultural or the Ministry of Livestock during the pre-war period.

[4]C. Holleman, The Socio-Economic Implications of the Livestock Ban in Somaliland, FEWSNET Somalia, December 2002, p. 3.

This season cereal prices peaked in March – June '06 (up to 100-200% price increase from Oct. '06) in response to low cereal supplies following the poor crop performance in the *Gu* '05 and *Deyr* '05/'06. Sorghum prices peaked earlier in March and reached their highest levels in more than six years, due to three consecutive seasons of poor sorghum production and limited stock levels. Sorghum prices in March '06 (0.21 US$/kg) were 262% higher than they were in the same month last year (March '05, .08 US$/kg) and were even higher than the generally more expensive maize (Figure 9).

Cereal prices, however, dropped significantly in most regions in July '06 (Figure 9), with the start of the *Gu* harvest in Shabelle Valley and the Sorghum Belt, and following food aid distributions in Juba Valley. Sorghum prices declined by 33% between March '06 and July '06 (from 0.21 to 0.14 US$/kg), following near average production in Bay region, but prices are still 27% higher than they were in July '05 (0.11 US$/kg). Maize prices in Shabelle Valley dropped by 28% between May and July '06 (from 0.25 to 0.18 US$/kg), following the availability of green maize, and are expected to decline further in August as the maize is harvested. Maize prices will remain high, however, due to the overall poor *Gu* maize production (60% of PWA).

Figure 9: Regional Average Monthly Cereal Prices (US$)



Rainfed Maize Crop Failure, Afgoi, Lower Shabelle, July '06.

Maize Affected by Moisture Stress, Middle Juba, July '06.

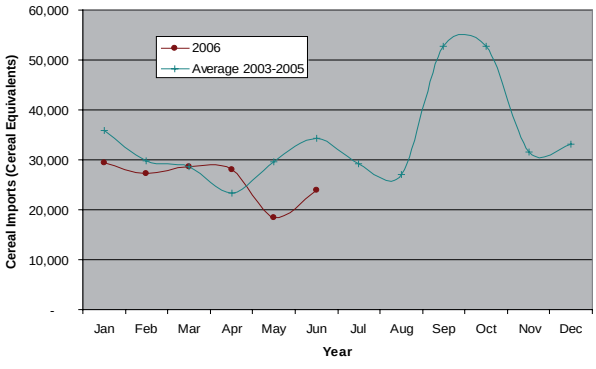
Unusual floods during August in Shabelle Valley are reported to have destroyed existing stocks, as well as standing *Gu* crops not yet harvested, which will only lead to more pressure for prices to increase. Maize prices in Juba Valley declined 51% between June and July '06 (0.29 to 0.14 US$/kg); however, this is not due to cereal harvests, as the region experienced almost complete crop failure this *Gu*, but rather to large double ration food aid distributions in May and June.

Generally, cereal prices in all southern markets are expected to begin to increase again in the coming two to three months, follow an increasing trend until the next *Deyr* '06/'07, and depending on the outcome of the *Deyr* '06/'07, reach peak levels just before the *Gu* '07 production season. In areas of *Gu* season crop failures, including Juba valley, Hiran, and northern Gedo, cereal prices are expected to be higher and fluctuate depending on inflows of food aid and marketed cereals from other regions. In Juba Valley, projected off-season maize production may provide some short-term benefits, but is not expected to decrease the pressure for cereal prices to increase, as this production will contribute only a small amount to overall maize in the region (3,200MT).

Cereal Balance Sheet

A new annual Cereal Balance Sheet is calculated for the period of June '06 through May '07 (Table 6). Within this cereal balance sheet, domestic cereal supply is based on actual southern Somalia post *Gu* '06 crop production estimates, northwest *Gu/Karan* crop establishment estimates, estimated Juba valley off-season crop estimates and the assumption of a 'normal' or post war average *Deyr* '06/'07 crop production. Estimated opening stocks as of June 2006 consist of actual food aid in stocks and an estimated commercial import stock level.

Figure 10: Commercial Cereal Import Trends (2003- 2005)



Anticipated commercial imports are estimated as the actual three-year average cereal imports for 2003 to 2005 for Berbera, Bossaso, El-Maan and Jazira Ports (Figure 10). So far, this year's actual commercial cereal imports (January–June '06) are following a trend and levels similar to the three-year average for the same time period, as depicted in Figure 10 (actual January to June total commercial cereal imports are 25,354 MT for 2006, against a three-year average of 30,289 MT). Estimated cereal imports consists of rice, wheat grain, wheat flour, pasta and small amounts of maize and sorghum, all expressed in cereal equivalents.

Estimating anticipated cereal imports is difficult in the context of Somalia, because there is not a complete monitoring of cereal flows into and out of the country. Cereal imports (primarily rice) through Bossaso and Berbera Ports in the north are well documented through official port statistics; however, some of these imports are destined for Zone V of Ethiopia, for which there is no cross-border monitoring of outflows. Likewise, regular cereal import data from two of the primary ports in the south, El-Ma'an and Jazira Port, are collected by WFP, but there are no cross-border cereal flow figures to Kenya and Ethiopia. In addition, there are no cereal import figures available for other minor ports in the south or from Kismayo Port.

Table 6: Cereal Balance Sheet

Annual Cereal Balance Sheet for Somalia (June 2006 to May 2007)	***CURRENT ESTIMATED Estimates***	
	100% Net Commercial Imports ('000MT)	***75% Net Commercial Imports*[1] ('000 MT)**
DOMESTIC AVAILABILITY	**298**	**298**
Opening Stocks[2]	60	60
Domestic Cereal Supply 2004/05 Gu 2006[3] Gu-Karan 2006 Northwest[4] Off-season Gu 2005[5] Deyr 06-07[6](Estimated as Deyr PWA 1995-'05')	 238 113 20 3 102	 238 113 20 3 102
DOMESTIC UTILIZATION		
Cereal Utilization Requirements[7]	**643**	**643**
IMPORT REQUIREMENTS		
Anticipated Commercial Imports[8]	**390**	**295**
ESTIMATED SURPLUS/DEFICIT – CEREAL	**45**	**-50**
Food Aid Stocks, Transit or Pipeline[9]	**70***	**70***
ESTIMATED SURPLUS/DEFICIT – CEREAL	**115**	**20**

List of assumptions and calculations:

[1]Anticipated commercial imports estimated as 70 percent of imports from Berbera and Bossaso ports, and 90 percent of imports from El Maan and Jazira ports. This caters for imports assumed to be going into Ethiopia.

[2]Estimated opening stock consists of food aid and commercial import stocks at ports to markets. As of May 29, 2006 WFP stock are 41000 MT, CARE 2500MT and commercial stocks are estimated at 16,000MT based on FAO/WFP Crop and Food Supply Mission to Somalia, Sept 3, 1999.

[3]2006 Gu Crop production estimates in Southern Somalia is 112875 MT (rounded to 113,000MT).

[4]Gu-Karan 2005 crop Establishment estimates for Northwest Somalia is 19,912MT (rounded to 20,000MT).

[5]Off-season crop estimates are 3,200MT (rounded to 3,000MT).

[6]2006/07 Deyr Crop production for Juba in Southern Somalia is assumed to be equivalent to Deyr PWA (1995'-05) 102,000MT.

[7]Total cereal utilization requirement composed of 600,000 MT food use, 3000MT feed use, seed losses which are 10 percent of the crop production and 60,000MT closing. 'Food use' calculated based on assumption of total population of 7,502,654 (UNDP SOMALIA, 1 August 2006) and per capita cereal consumption of 80kg/year (1999 FAO/WFP Crop and Food Supply Mission to Somalia, September 9, 1999). Per capita cereal consumption in Somalia is lower than would be dictated by the standard 2,100 kilocalorie per capita per day. The percentage of kilocalories from cereals needs further research. Feed use and seed losses based on Assumptions based on Cereal Supply/Demand Balance, 1999/2000, FAO/WFP Crop and Food Supply Mission to Somalia, September 9, 1999.

[8]Anticipated commercial imports estimated as actual three year average cereal imports for 2003 to 2005, for Berbera, Bossaso, El-Ma'an and Jazira Ports. The three year average is 390,060MT (rounded to 390,000), 482,912MT in 2003, and 340,533MT in 2004 and 346,735 MT in2005. Data are from Berbera and Bossaso Official Port Import Statistics and El-Ma'an and Jazira Port Figures collected by WFP. Estimated commercial imports consist of rice, wheat grain, wheat flour, pasta and small amounts of maize and sorghum. These are expressed in cereal equivalents with conversion factors of wheat flour = 1.33, pasta=2.00 and rice= 1.

[9]As from June to end of July 2006, WFP reports 20,453MT in stock and 10,875MT in the pipeline. As of end July 2006, CARE had 8,237MT in stocks and 1,830MT in transit.

In the absence of complete net commercial cereal import figures, two scenarios are developed to provide an estimated 'range' for net commercial imports. The first scenario, referred to in the Cereal Balance Sheet table as 'Scenario A: 100% Net Commercial Imports' (Table 6), assumes that the net effect of the unknown cereal inflows and outflows balances out, and that the actual commercial cereal imports from the four ports of Berbera, Bossaso, El-Ma'an and Jazira, are approximate net commercial imports (inflows – outflow). The second scenario, referred to as "B: 75% Commercial Imports', is based on key informants and local understanding, and estimates that 25% of the total commercial cereal imports from the four ports flows across the borders into Ethiopia and Northern Kenya (see Table 6 footnote for details). This is the only difference introduced in the two columns of the cereal balance sheet – all other components remain the same.

Note that cereal balance sheet calculations and underlying assumptions are fully referenced in the footnotes to Table 6.

In summary, the estimated annual Somalia Cereal Balance Sheet for 2006/07 (June 2006 to May 2007) indicates:

- No overall cereal supply deficit for June 2006 to May 2007,
- There is a total estimated cereal surplus, ranging between 20,000 to 115,000 MT, depending on assumptions of projected net cereal imports,
- Estimated domestic cereal supply covers only 37% of total domestic cereal requirements,
- Net commercial cereal imports are estimated to cover between 45 - 60% of total domestic cereal requirements, depending on the assumptions of net commercial import levels,
- If the *Deyr* '06/'07 cereal crop production is significantly below normal (50% of *Deyr* PWA or 51,000MT) or fails (30% of *Deyr* PWA or 31,000MT), then:
    - Scenario A: there would be an estimated cereal deficit of approximately 30,000 to 50,000 MT,
    - Scenario B (75% Net Commercial Imports): there still would not be a cereal deficit,

It is important to highlight that the cereal balance sheet analysis does not take into account the food access problems faced by populations identified in either **Humanitarian Emergency (HE)** or **Acute Food and Livelihood Crisis (AFLC)**. Even if cereal is available in the local markets, populations in these two phases either have inadequate resources, either cash or credit, to buy staple food in the market **(HE)** or they may have adequate access to market purchases, but at the cost of asset stripping **(AFLC).**

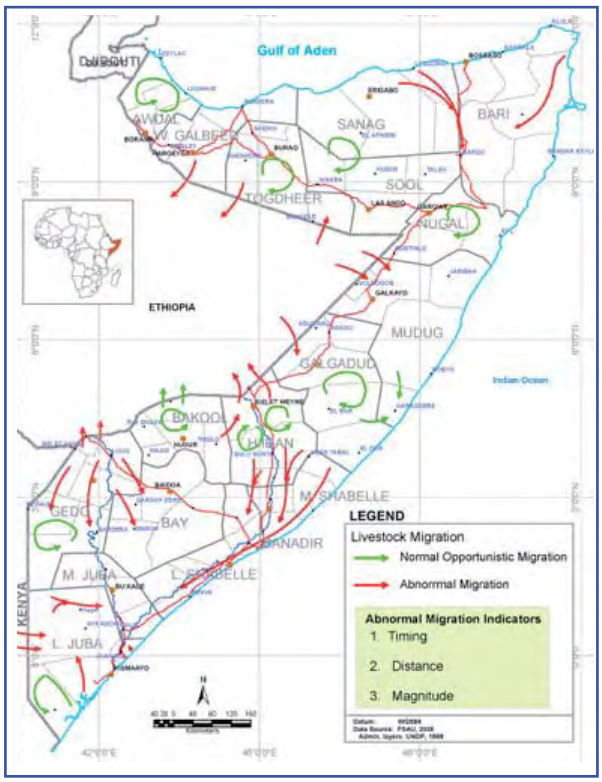
The Cereal Balance Sheet only provides an overall indication and estimation for the macro-level cereal supply and demand situation for the entire country, i.e. overall cereal supply in relation to overall per capita needs. It does not account for regional differences or blockages in cereal supply and flows, nor does it address issues of food access, nor vulnerability levels related to access problems.

3.6 LIVESTOCK PRODUCTION AND EXPORT

Livestock production and migration

The livestock sector is the mainstay of the national economy, and the livelihoods of the majority of the Somali population depend on the livestock sector and related activities. Camel, cattle, sheep and goats are all major livestock species reared in the pastoral and agro-pastoral livelihood zones. In a 'normal' year, the bulk of food and income of a typical pastoral household comes from livestock and livestock products. The livestock sector and the pastoral community as a whole face serious challenges, including recurrent conflict, drought, export restrictions and environmental degradation.

Map 10: Livestock Migration Trends March - July '06



Generally, in the southern drought-affected regions of Gedo, Juba, and Bay, livestock body conditions are improving with the increased availability of pasture and water in some areas following the *Gu* '06 rains (Table 7). In response, livestock prices, especially for cattle, have increased over the last three months, and terms of trade (livestock to cereal) improved. However, livestock losses as a result of the drought were significant in Gedo, Juba Valley, Bakool and Bay regions. It is roughly estimated that cattle holdings from April '05 and June '06 were reduced by 40-60% in Gedo and Juba, and between 15-25% in Bakool and Bay (Table 8). For the surviving cattle, body conditions are showing signs of improvement, but both conception and calving rates are very low, which means that milk production is scarce, and herd recovery to a sustainable level will take several seasons.

In the hinterland of Lower Juba, although there is pasture, all natural water catchments are already completely dry. This has prompted a large and unusual pastoral early migration to tsetse fly infested riverine areas, which will not only lead to disease exposure, but also conflict between herders and farmers over access to river water as well as competition for scarce resources (Map 10). Similarly, rains were poor in northern Gedo and in Bakool, which is leading to abnormal migration both within Somalia and across borders to Ethiopia and Kenya.

Table 7: Water, Rangeland and Livestock Body Conditions

Region	Water Availability	Pasture Conditions	Body Conditions	Migration Patterns
Gedo	South : **Average to Good** North: **Poor**	South: **Good to Average** (with increasing competition for resources) North: **Poor**	South: **Average to Good** North: **Poor**	For Dawo pastoral)from north to south Gedo (to Southern Inland Pastoral) and from north Gedo to Ethiopia: **Abnormal**
Juba Valley	Rangeland Areas: **Poor** Riverine Areas : **Average** Coastal Areas: **Average**	**Average to Good**	Most Areas: **Average to Good** Exception: For cattle between Jamaame and Bulo Haji: - **Poor**	From north and west Hagar and border areas to riverine and coastal to south inland and riverine: **Abnormal**
Bay/Bakool	Bakool: **Poor to Average** Bay: **Average**	Bakool: **Poor** Bay: **Average**	**Bakool**: For cattle, average for camel, sheep and goats - **Poor** Bay: For all species- **Average**	For Southern Inland Pastoral from north Tieglow to Buqgosaar area of west Belet Weyne district for pasture; **Abnormal** Inter-regional: **Normal**
Shabelle Valley	**Average to Poor**	Agro-pastoral: **Poor** Coastal Areas: **Poor** Riverine Areas: **Average**	Riverine & South Brava: **Average** In-migrated cattle from M Shabelle and parts of L Shabelle (Afgoi, Wanle Weyn): **Poor**	Early migration to riverine and south Brava: **Abnormal**
Hiran	**Poor**	**Poor**	For all species: **Poor**	For Hiran agro-pastoral and some Southern Inland Pastoral to Shabelle Valley: **Abnormal**
Galgaduud and south Mudug	**Poor**	Most Areas: **Poor to Very Poor** Exceptions: **Average** in Balanbaal area and pockets in Haradhere	For all species: **Poor**	From Ethiopia to Balanbaal: **Abnormal** Inter-regional: **Normal**
Northeast	Most Areas: **Average** In Eastern Addun, Western Hawd of Burtinle, Goldogob, Eastern Gebi and parts of Gagab: **Poor**	**Average to Poor**	**Average to Good** For in-migrating livestock from Zone 5: **Poor**	**Generally normal**, but **abnormal** from highlands to Sool and in-migration from Zone 5 to western Hawd
Northwest	**Average to Poor**	**Average to Poor**	**Average to good**	**Normal** except in Hawd LZ of Hargeisa cross border to Ethiopia

In Hiran and the Central regions, livestock conditions, especially for cattle, are poor, and expected to deteriorate further over the next four months due to limited pasture, water, and migration options following three consecutive seasons of below normal rains (Table 7). Conception, calving and kidding rates are all low. The low conception rate is attributed to poor performance of the *Gu* season since livestock are under stress due to lack of water and pasture. Milk production is below normal throughout these regions due to the low calving and kidding of all livestock species (Table 8). Due to poor pasture and water availability, there is unusual migration to riverine areas as far away as Shabelle Valley, and into Ethiopia (Map 10). Pockets in Galgaduud region that received normal rains in *Gu* 06 attracted abnormal pastoral in-migration from neighboring Region V of Ethiopia. There is also significant intra-regional migration into these areas, leading to overgrazing and early depletion of already meager pasture resources available in the area. Asset holding, especially shoats (sheep and goats), which are the main livestock species in these regions, indicate a decreasing trend of up to 5% (April '05-March '06) due to high off-take during the harsh *Jilaal* '05 to cover expensive water trucking costs (Table 8).

In the northeast and northwest, generally livestock body conditions are average to good, with normal conception and reproduction rates, hence normal milk and ghee production (Table 7 and 8). In addition, livestock holdings are continuing to increase, especially in the northeast. It is roughly estimated, from the *Gu* assessment pastoral herd size dynamics survey, that between April '05 –March '06 camel and sheep/goat holdings increased 30-40% and 10-20%, respectively (Table 8). The large increase in herd size is attributed to a number of factors, including several seasons of normal rainfall, improved rangeland condition, and sustained humanitarian and livelihood support by the aid agencies since 2004. Migration patterns are largely normal, with the exception of pockets in the coastal *deeh*, the highland areas in Bari, and along the Hawd bordering Ethiopia (Map 10). Water availability is largely normal, though in the Hawd of Hargiesa, Togdheer, parts of Sool, eastern Sanag, and parts of Bari region, problems of water shortages have been reported following below-normal rainfall. Most of the *berkads*, which are the main water sources, are dry, which may increase water prices during the *Hagar* season. Already, abnormal pastoral migration from Togdheer and Hawd of Hargeisa to Ethiopia in search of pasture and water has been reported (Table 7).

LIVESTOCK EXPORT, VOLUME, PRICES AND TERMS OF TRADE

Southern Somalia Livestock Trade

Cattle are the main livestock species exported in southern Somalia. As a result of the 2005/06 drought, cattle populations are significantly smaller, due to declining reproduction, significant cattle deaths, and increased distress sales. Consequently there is a notable decline in the number of sellable animals in the local markets. The collapse of the local markets has also drastically affected the cross-border cattle trade between southern Somalia and Kenya. Income and food sources for pastoral communities and other market participants (cattle traders, buyers, and brokers and people employment in the associated service sector) are continuing to be affected by the negative consequences of the drought, despite the benefits of the *Deyr* '05/'06 rains. Before the drought, cattle were traded to Kenya and Tanzania, where cattle prices are typically high.

Table 8: Trends in Livestock Holdings and Milk Production

Region	Trends in LS holdings (April 05 – March 06)	Conception (Gu '06)	Calving/kidding (Gu '06)	Milk production (Gu '06)
Gedo	Significantly Decreased Cattle & Shoats Camel –5% to -10% Cattle -40% to -60% Shoats -30% to -50%	South: medium for all species; North: low for all species	Low for all species	Below average
Juba Valley	Significantly Decreased Cattle & Shoats Camel 0% to -5% Cattle -40% to -55% Shoats -15% to 30%	Cattle low; shoats low; camel medium	Cattle none; shoats and camel low	Below average
Bay/Bakool	Decreased Cattle & Shoats Bakool: Camel 0% to +10% Cattle -15% to -20; Shoats 0% to -15% Bay: Camel +5% to +14%, Cattle -15% to 25%, Shoats 0% to -15%	Bakool: cattle none to low; shoats low; camel medium Bay: cattle low; shoats and camel medium to high	Bakool: cattle and shoats low; camel low to medium Bay: cattle low; shoats and camel low to medium	Below average
Shabelle Valley	No Change	Medium to low	Cattle low; camel and goats medium	Below average (cattle)
Hiran	No Change, Indications of Decreasing Trend	Low for all species	Low for all species	Below average
Galgaduud & south Mudug	Slight Decrease Camel 0% to +15%, Cattle 0% to -5%, Shoats 0 to -5%	Cattle low to none; shoats low to medium; camel none	Cattle and camel low; shoats low to none	Below average
Northeast	Significantly Increased Camel & Shoats Camel +30% to +40%, Shoat +10% to +20%	Sheep low; goats medium; camel low	Shoats low except medium in Nugal, Sool and E Hawd LZ; camel low	Average to above average
Northwest	Increased Camel +5 to +10%, Shoat +5 to +10%	Medium to low	High in shoats; medium in camel	Average

Table 9: Livestock Exports from Bossaso January to July '06

Livestock Exports from Bossaso			
Month	**Shoats**	**Cattle**	**Camels**
January	86,480	6,080	3,064
February	80,935	11,250	6,215
March	95,220	6,183	8,450
April	119,872	7,059	7,045
May	127,880	5,939	1,070
June	113,710	11,905	861
July	183,040	11,900	988
Total	**807,137**	**60,316**	**27,693**

Table 10: Livestock Exports from Berbera January to July '06

Livestock Exports from Bossaso			
Month	**Shoats**	**Cattle**	**Camels**
January	99,956	9,142	563
February	56,053	8,628	1,884
March	86,187	6,020	4,170
April	66,784	4,005	4,384
May	67,553	3,942	876
June	56,919	3,803	1,703
July	88,887	8,807	1,023
Total	**522,339**	**44,347**	**14,603**

Due to the regional nature of the drought, however, cattle prices in most of the reference markets dropped due to low demand and poor livestock body conditions. In the last two months, in some areas cattle prices slightly increased, but are still well below their pre-drought levels. Generally, the volume of the cattle exported declined drastically in 2005-06 due to livestock mortality and poor livestock body conditions.

In response to the drought of 2005/06, cattle prices dropped dramatically in Juba Valley and the Sorghum Belt (Gedo, Bay, and Hiran) between April '05 and Dec. '06 (Figure 11). During this period, cattle prices declined by 38% in the Sorghum Belt (from US $93 to $58 per head) and by more than 70% (from US $89 to $26 per head) in Juba Valley. As a result of the *Gu* '06 rains, by the month of May '06 cattle prices began to increase with improved livestock body conditions, except in Hiran, reaching up to US $95 per head in the Sorghum Belt and US $84 per head in Juba valley. Similarly, sheep/goat prices fell between April '05 to January '06 by 35% (from US $17 to $11 per head) in the Sorghum Belt and by 65% in Juba Valley (from US $17 to $6 per head).

Figure 11: Regional Average Monthly Prices Local Quality Cattle (US$)

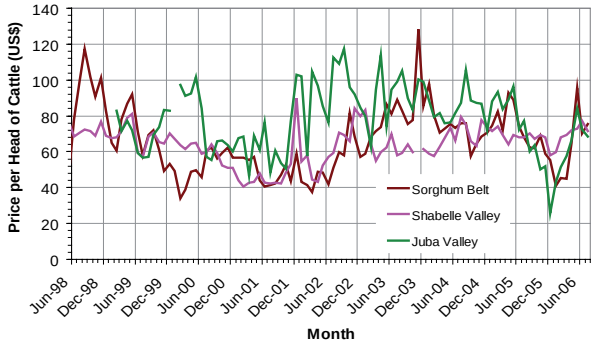
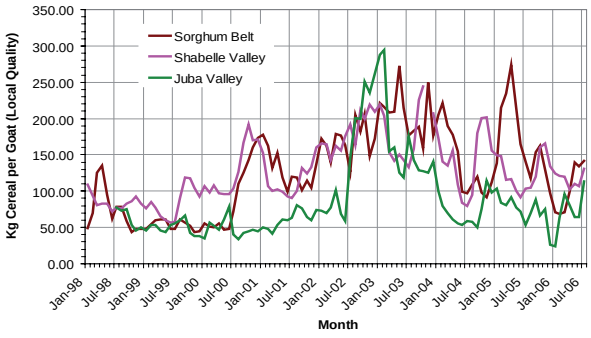


Figure 12: Regional Trend in Terms of Trade: Cereal to Local Goat



Overall, increased livestock prices and decreased cereal prices during the *Gu* '06 season have improved terms of trade between livestock and cereals, thereby improving pastoral households' purchasing power (Figure 12). Declining cereal prices between May - July are mainly attributed to large food relief distributions in Gedo and Juba Valley, and near-normal *Gu* '06 sorghum production in Bay region.

Northern Livestock Trade

Livestock production in the north has increased over the past two years, as the pastoral sector recovered from the prolonged droughts of 2002-04. The export of sheep and goats, the dominant livestock species exported through Berbera and Bossaso Ports to the Arabian Gulf states, peaks in response to the high demand period around the Hajj (October and December). Outside this peak export period, however, significant numbers of live animals continue to be exported throughout the year.

Official livestock export figures from Berbera and Bossaso Ports indicate that a total of 1,476,435 animals (1,329,476 shoats, 104,663 of cattle, and 42,296 camels) were exported so far this year (January-July '06) (Table 9 and 10 and Figure 13). A total of 581,289 animals (shoats, camel and cattle) were exported through Berbera Port from January-June '06, which is an 19% increase from the same period last year (489,229 heads). Likewise, from January to June '06, 895,146 animals (shoats, cattle and camel) were exported through Bossaso port, a 13% increase compared to same months last year (791,782 heads).

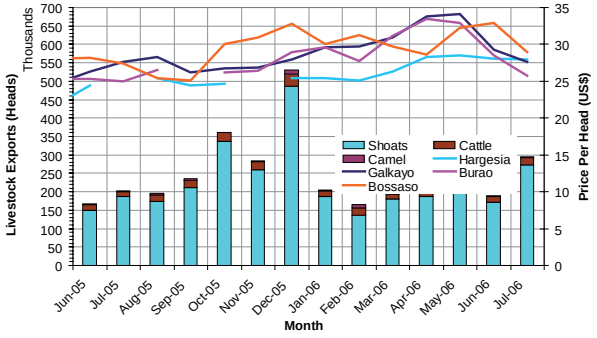
Of the total 1,476,435 animals exported so far this year, 39% were exported through Berbera port, while 61% were exported through Bossaso port. Though the export figures during the first half of the year are outside the peak Hajj export period, both ports recorded increased export volumes compared to last year (Berbera 19% and Bossaso 13%) and last year's total exports were the highest levels in recent years (see FSAU Post Deyr '05/'06 Technical Series Report No IV. 8, 22 February 2006). This increased livestock export volume has had the effect of increasing the import capacity of local traders, and as a result, the supply and availability of imported food commodities in the main local markets has also increased, leading to stable average prices for most of the staple food commodities.

Export-quality goat and sheep prices show a continuous and steady increasing trend over the past year in most of the main reference markets in the north (Galkayo, Hargeisa, and Bossaso - Figure 13). Prices reached a peak during April '06, but are still between 4-8% higher in July '06 than they were last year at this same time.

Prices of export quality shoats (sheep and goats) are expected to increase over the coming month, with increased demand for the Eid al-Fitr festival at the end Ramadan (late October '06), followed by the Hajj period in early January 2007. During the Hajj, the demand for Somali live animal exports is expected to increase and reach a peak level in December.

Similarly, terms of trade between imported cereal and exported quality goats show a slightly increased trend during this same year period for most areas in the north and central areas, although the rate of increase is not high, due to high and slightly increased cereal prices.

Figure 13: Berbera & Bossaso: Livestock Exports (Heads) and Export Quality Goat Prices (US$)2



Poor Recovery of Cattle Body Condition Belet-wein, Hiran Regions, June '06

Table 11: Exportation of Chilled Meat from Burao and Belet Weyne Abbatoir (January – June '06)

Month (2006)	Burao Abattoir (No. head exported)	Belet Weyne Abbatoir (No. head exported)	Mogadishu Abbatoir (No. head exported)
January	6,000	8,699	NA
February	5,000	9,298	NA
March	4,000	6,270	NA
April	15,000	10,381	NA
May	0	8,649	20,000
June	6,000	8,649	20,000
July	NA	NA	30,000
August	NA	NA	48,000
Total	36,000	51,946	118,000

Chilled Meat Exports

The exportation of chilled meat from abattoirs or slaughter houses is a fairly new and developing export sector in Somalia. Currently, there are four abattoirs located in Burao, Galkayo, Beletweyne, and Mogadishu, which export chilled whole goat carcasses (chilled meat) to Arabian Gulf States by means of daily and/or weekly flights. FSAU has begun to monitor and report on monthly chilled meat exports and prices from the Burao, Belet Weyne, and Mogadishu abattoirs, and will begin to monitor exports from the Galkayo abattoir soon.

The Mogadishu is the largest exporter of the three abattoirs of Burao, Belet Weyne, and Mogadishu abattoirs), exporting between 20,000 to 50,000 head of chilled meat between May and August '06 (Table 11). Although Burao abattoir is not the largest exporter, it is one of the most advanced in terms of completely mechanized state-of-the-art equipment from Europe. Between January and June '06, a total of 87,946 head of chilled meat were exported through these the Burao and Belet Wyne abattoirs (Table 11). On average, live goat/sheep during this period were purchased for US $11 per head in Belet Weyne, and for US $15 per head in Burao. The selling price of the export carcasses was US $13.50 per head at the Belet Weyne abattoir, and US $18 per head at the Burao abattoir.

3.7 MARKET ANALYSIS AND TRENDS

Somalia and Somaliland Exchange Rate

Both Somali and Somaliland Shillings have remained consistently stable for the last year and half at around 15,300 SoSh/US$ and 6,300 SlSh/US$, respectively. Breaking this cycle of stability, the Somali shilling in southern Somalia markets gained in value (appreciated) between January and March '06 by 9% against the US dollar (from 15,200 to 13,700 US$/kg). By July '06, however, the SoSh slipped in value and is now only on average 14,600 SoSh/US$, a 3% increase in value from Jan. '06. The Somaliland shilling devaluated only slightly, at about 2%, from 6,450 to 6,550 SlSh/US$ between Jan. and July '06. The value of both currencies, however, are still significantly lower compared to pre-livestock export 2000 ban levels (Figure 16).

The slight appreciation of Somaliland and Somali shillings in the north (Bossaso and Hargeisa) between Jan. and March '06 is primarily due to the increased livestock exports during this period, which is a major source of foreign exchange earnings. The more significant appreciation of the Somali shilling in southern markets during this same period is primarily the result of the low demand for foreign currency (dollar) due to the large injection of dollars into the southern markets following the political and conflict situation. Another contributing factor is the slow down of business trade in the south as a result of the increased sea piracy activities which discouraged potential importers and reduced the need for hard dollars.

Figure 14: Juba Valley: Trend in Imported Commodity Prices compared to Exchange Rate

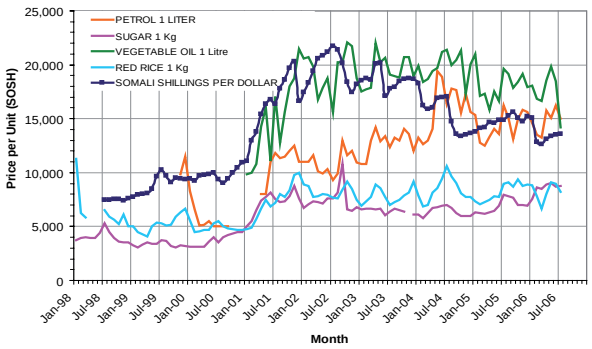


Figure 15: Central: Trend in Imported Commodity Prices compared to Exchange Rate

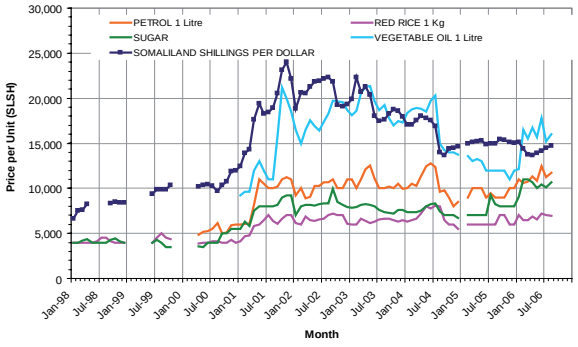


Figure 16: Monthly Exchange Rates - SOSH and SLSH to USD

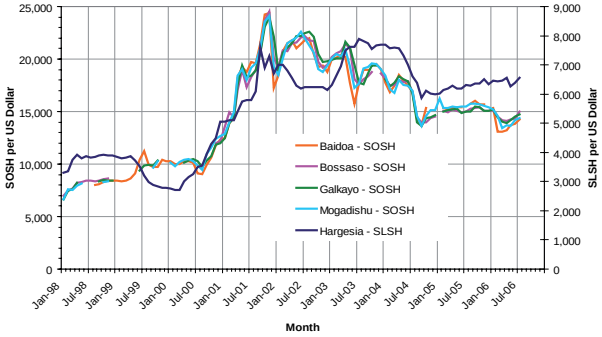
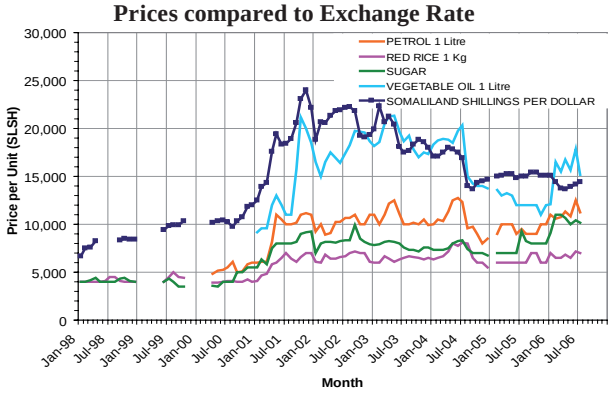


Figure 17: Sorghum Belt: Trend in Imported Commodity Prices compared to Exchange Rate



Imported Commodity Prices and Trends

Despite the strong Somalia Shilling, imported food commodity prices, especially sugar, rice and edible oil, increased significantly since Jan. '06 and are still high in many of the main regional markets, especially those in the hinterland. The increase is due to a number of factors, including increased road blocks in some regions (Juba Valley), disruptions in the flow of imports through seaports (Kismayo), disruptions in regional supply lines due to conflict and insecurity (Central region), as well as the general increase in transportation costs as a result of globally increased fuel prices.

Many livelihood groups are reliant on imported commodities, not only for basic non-cereal food commodities, such as edible oils, and sugar, but also for cereals - as over 50% of national per capita food requirements are met through commercial cereal imports (see section 3.4 and Table 6). All pastoralists' trade livestock for cereals, many agro-pastoralists and agriculturalists, especially the poor, do not produce enough cereals to meet all their cereal needs in a year, and urban dwellers are solely dependent on the markets. Commercial imports are especially critical now, due to the extremely low cereal stocks resulting from multiple seasons of poor crop performance (last year was the lowest annual cereal production in a decade), and since several regions experienced crop failures this *Gu* season (Lower and Middle Juba, Hiran, northern Gedo, rainfed maize farmers in Shabelle Valley, and Bakool). High and increasing import commodities prices will directly and negatively affect food access for a significant proportion of the population.

Imported commodities prices are especially high in Juba valley and Central regions, due to road blocks that increase the price of commodities through exorbitant transit charges, increased insecurity that increases transportation costs due to higher risks associated with safety and theft, rising fuel prices that translate into higher delivery costs, and limited and poor road infrastructure, which makes these regions especially difficult and costly to access. Between January and June this year, all key import commodity prices increased in Juba Valley; sugar increased 15%, vegetable oil 2%, rice increased 2%, and petrol 11% (Figure 14) similarly, in Central region, the same commodities increased between 3 - 47% for the same period (Figure 15). It is expected that demand for imported commodities will increase over the coming months due to low domestic cereal production and limited cereal stocks. However, the reopening of the main seaport in Mogadishu, for the first time in 16 years, should improve the supply of imported commodities and help to reduce prices. If conflict erupts in the south and central regions as a result of an escalation in the ongoing political crisis, however, food commodity supply lines would be significantly disrupted which will have severe negative impact on food access for the entire southern and central Somalia region.

3.8 NUTRITION OVERVIEW

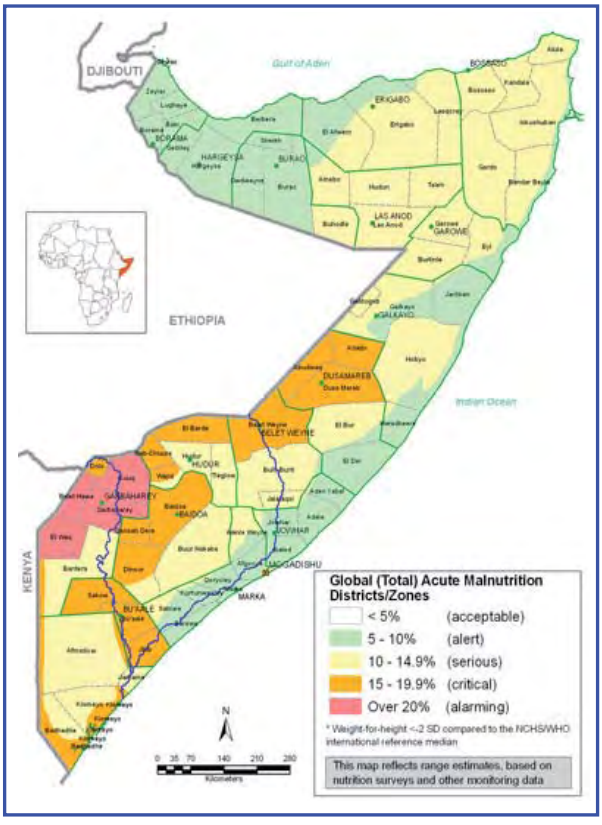
The following maps illustrate estimated levels of acute malnutrition in Somalia. Map 11 presents long term levels of global acute malnutrition (presented as weight for height < -2 z scores or oedema) and shows consistent tendencies over the past six years. Generally, lower rates of < 10% (WHZ < -2 z scores or oedema) are common in areas with greater political stability, civil security and food and livelihood security. Higher rates are typical in areas that have experienced civil unrest, severe food access problems, and/or disease and health problems. Levels above 15% (WHZ < -2 z scores or oedema), or even over 20% in Gedo and Juba valley are among the highest in the Somalia.

Map 12 presents the current range estimates of acute malnutrition, which indicate significant deterioration in Gedo, Middle and Lower Juba, pockets in Galgaduud and parts of Bay and Bakool regions. The information that has enabled the development of these maps and the estimation of ranges is derived from nutrition assessments, sentinel site surveillance and field visits. No single data set is used in isolation, but rather triangulation is undertaken for an overall understanding of the nutrition situation in each area.

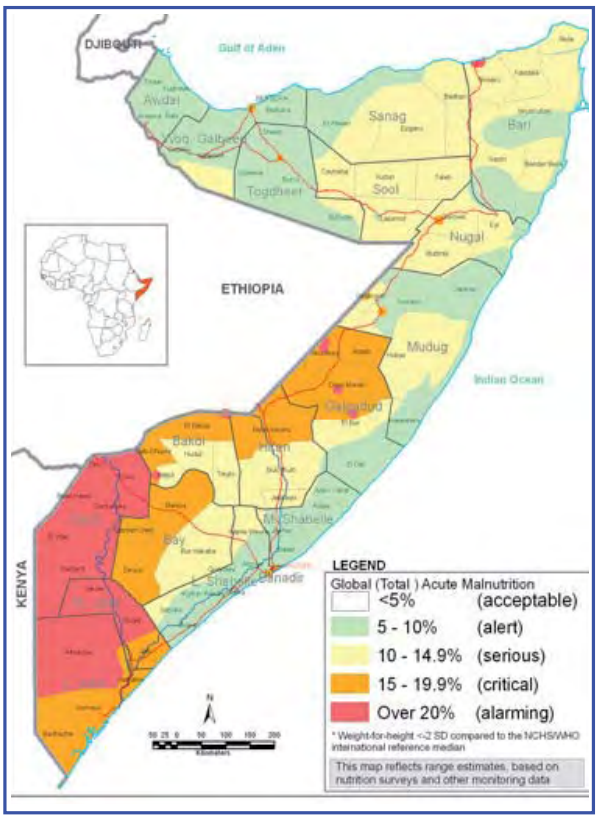
Between April and July '06, interagency nutrition assessments were conducted in Buale and Sakow districts, Jilib Riverine Livelihood Zone, Afmadow district, Bardera town and Dinsor district and indicated a critical situation in most areas. Additionally, at least three rounds of surveillance were conducted in about 100 sentinel sites since January '06. Findings in most of the sites indicate fluctuating or increasing trends of acute malnutrition. The maps are updated as new information becomes available.

Two interagency nutrition assessments have been completed in Sool Plateau and Berdale district, and analysis is ongoing. An additional six nutritional assessments are planned in various parts of the country by the end of the year (December '06).

Map 11: Somalia - Malnutrition Long Term Levels (1999-2005)



Map 12: Somalia - Current Range Estimates of Malnutrition July, 28 2006



4. REGIONAL ANALYSIS

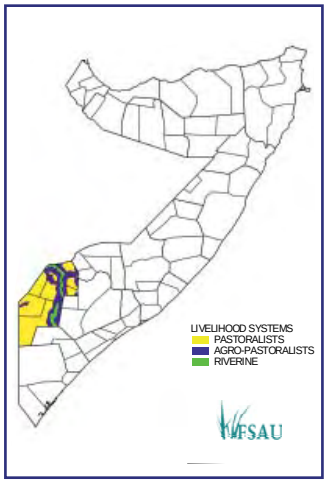
4.1 SOUTHERN SOMALIA

4.1.1 Gedo Region

Overview

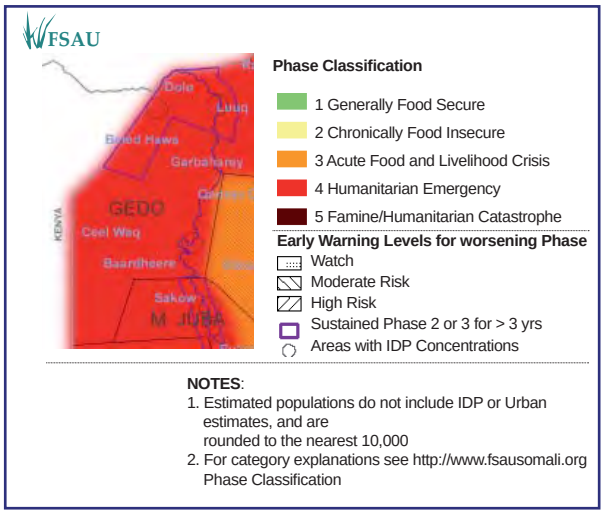
Although there is some improvement in the food security situation, which is reflected by the removal of the early warning level of Moderate Risk of Humanitarian Catastrophe/Famine, Gedo region is still identified in a state of **Humanitarian Emergency** (Map 14). An estimated 230,000 people, or roughly 70% of the entire Gedo region's population, are identified either in **Humanitarian Emergency (HE)** or **Acute Food and Livelihood Crisis (AFLC)** (160,000 and 70,000 people, respectively) (Table 12). Roughly 60% of the population in HE or AFLC are pastoralists, with the worst affected livelihood zones being the Dawo Pastoral and Southern Inland Pastoral livelihood zones.. The balance of the estimated population in crisis includes 64,000 agro-pastoralists and 28,000 of riverine farmers, 28% and 12%, respectively (Table 13).

Map 13: Gedo Valley Livelihood Systems.



The key driving force of the current crisis is the year-long drought, which was regional in nature, affecting both Kenya and Ethiopia, but of which Gedo region was the epicentre. The *Gu* '06 rains have provided some relief to the drought, as they started unusually early (late March as opposed to mid-April) and alleviated water and pasture problems temporarily. However, the overall performance of the *Gu* rains throughout the season was below normal, with poor distribution both in time and area of coverage. Poor rains in northern Gedo resulted in poor pasture conditions and water availability, thus stimulating an out-migration to southern Gedo, where *Gu* rains were better, as well as into Bay region and into Zone V of Ethiopia. Heavy pressure on limited grazing in these southern rangeland areas, however, is leading to an early depletion of grazing there. Gedo recorded the greatest livestock losses in southern Somalia during the drought. Between April '05 and May '06 it is estimated that livestock holdings were reduced 40-60% for cattle, 30-50% for sheep/goats, and 5-10% for camels (Table 8, Section 3.6).

Map 14: Food Security Phase Classification - Gedo.



Currently there are extremely low levels of calving, kidding and milk production due to prolonged drought stress. Even more worryingly, *Gu* '06 conception rates are still very low, which will mean that the recovery period in pastoral areas will take several seasons, even if subsequent seasons are good, especially for cattle pastoralists. Cattle prices declined significantly during the drought; in Bardera market, in June'06, one head of local quality cattle was 44% lower than the pre-drought price (August '04). High cereal prices and low cattle prices have eroded the purchasing power of pastoralists. Between Jan. '04 and Jan. '06, the terms of trade of local goat to sorghum declined 78% (from 232 kg to 51 kg of sorghum).

Table 12: Estimated Population by District in Humanitarian Emergency (HE) and Acute Food and Livelihood Crisis (AFLC), inclusive of the High Risk Groups in Gedo

Affected Regions and Districts	Estimated Population of Affected Districts [1]	Assessed and Contingency Population in AFLC and HE		
		Acute Food and Livelihood Crisis (AFLC) [2]	Humanitarian Emergency (HE) [2]	Total in AFLC or HE as % of Region Population
Gedo				
Bardera	106,172	24,000	44,000	64
Belet Xaawo	55,989	10,000	31,000	73
Ceel Waaq	19,996	6,000	4,000	50
Dolow	26,495	5,000	17,000	83
Garbahaarey	57,023	11,000	36,000	82
Luuq	62,703	13,000	28,000	65
SUB-TOTAL	**328,378**	**69,000**	**160,000**	70

See Appendix 5.2.2 for Footnotes

Table 13: Estimated Population by Livelihood Zone in Humanitarian Emergency (HE) and Acute Food and Livelihood Crisis (AFLC), inclusive of the High Risk Groups in Gedo

Affected Regions and Livelihood Zones	Estimated Population of Affected Livelihood Zones [1]	Assessed and Contingency Population in AFLC and HE		
		Acute Food and Livelihood Crisis (AFLC) [2]	Humanitarian Emergency (HE) [2]	Total in AFLC or HE as % of Region Population
Gedo				
Southern Agro-Pastoral	38,827	2,000	35,000	95
Bay-Bakool Agro-Pastoral	31,852	5,000	22,000	85
Southern Inland Pastoral	88,643	30,000	22,000	59
Dawa Pastoral	100,506	25,000	61,000	86
Juba Pump Irrigated Riverine	36,089	7,000	20,000	75
SUB-TOTAL		69,000	160,000	

See Appendix 5.2.3 for Footnotes

The overall *Gu* '06 cereal production in Gedo region is below normal, or 67% of the Post War Average (PWA) (Figure 18). This poor harvest follows two consecutive seasons of total crop failure (*Deyr* '05/'06 was 14% of PWA and *Gu* '05 was 7% of PWA). Most of the region's total *Gu* '06 cereal, around 93%, comes from only one district, Bardera district (80% of PWA), while other districts experienced almost complete crop failure. Cereal stocks are depleted and cereal prices reached their highest levels in more than six years. In June '06 sorghum and maize prices in Bardera town were 83% and 40% higher than the pre-drought prices (Aug. '04), respectively. More than two-thirds of households throughout Gedo region are currently eating less diversified food (<3 food groups) for one to two times a day instead of three times or more in normal circumstances. Acute malnutrition levels for the whole of Gedo region are extremely high, over 20%.

Other factors that contributed to the severity of the current crisis in this region include increasing and recurrent conflicts, population displacement, migration fluxes and restrictions on market options, all of which have undermined the overall resilience and livelihoods of the populations and led to a state of chronic 'structural vulnerability' (FSAU Focus: Gedo A Complex Emergency, February 2002).

Effects on livelihood assets

Natural Capital: According to rainfall conditions during the *Gu* '06 season, Gedo region can be divided into two zones: 1) *Northern Gedo:* (Dolo, Luuq, most parts of Belet Hawa, Garbaharey and Burdubo districts). Rainfall started in late March to early April '06, with large amounts and good coverage at this initial stage, however in the months of late April, May and June rains were erratic and localized, which led to poor overall rainfall conditions. The impact of poor *Gu* '06 rainfall is compounded by preceding poor rainfall performance in the *Deyr* '05/'06 and *Gu* '05, which were also significantly below normal. Because of the poor rainfall performance in north Gedo, both pasture and water availability is below average. *2) Southern Gedo:* (El Wak and Bardera and pockets in southern areas of Belet Hawa, Burdubo and Garbaharey districts). Rains started early, with large amounts and good distribution through April '06 and May '06 across the livelihood zones of south Gedo, but faltered in June '06, becoming more localized. Overall, though, the rainfall situation in south Gedo can be considered average to good, which led to average to good pasture and water availability. As a result, south Gedo hosted large in-migrated livestock herds from north Gedo, which is putting pressure on pasture and water resources. The pastoralists from north Gedo have also migrated to Bay, Lower and Middle Juba regions, as well as Zone V of Ethiopia, in search of pasture and water.

Physical Capital: Many villages in north Gedo are currently consuming poor-quality water due to brackish shallow wells. Road infrastructure in the region is amongst the poorest in Somalia, and there is no consistency in infrastructure maintenance or development. Seasonal floods have also contributed to deteriorating road conditions, which negatively affect staple food supply to markets and prices. Three main bridges in the region (Luuq, Burdubo and Bardera) require urgent repair works, especially one in Bardera, which is close to collapse. Its collapse will have negative impacts on livestock, human movement and humanitarian aid deliveries. River banks along the Juba River are eroded, as trees along the banks have been cut down for animal feed and construction materials; therefore, seasonal floods have become a common occurrence every year, which results in crop losses. River embankment work is urgently required in this region.

Social Capital: Local social support systems are generally in the form of in-kind transfer of gifts, such as livestock, cereals and milk. However, due to the huge livestock loss during the drought, overall poor livestock production, and poor cereal crop production in three consecutive seasons, there is very little means for providing social kinship support from within the community.

Human Capital: Global acute malnutrition (WHZ < -2z score or oedema) levels in Gedo region (except Bardera Town) are currently greater than 20%. Findings from the FSAU led nutrition assessment conducted in Gedo Region in March 2006 indicate global acute malnutrition (WHZ < -2 z scores or oedema) of 23.8%.

This rate is the highest observed in the country, and indicates an alarming nutrition situation that is unacceptable by international standards. A nutrition assessment conducted in Bardera Town in April '06 indicated a critical situation with global acute malnutrition of 19.0%. The on-going sentinel sites surveillance data shows increasing or fluctuating trends of acute malnutrition (Figure 19 and 20).

For the past three years, this region has faced sustained high levels of malnutrition attributed to insecurity, limited interventions, poor health services, and worsening food security and poor access to quality water. Poor dietary diversity, out break of measles, watery diarrhoea, acute respiratory infections, malaria, and intestinal parasites are the immediate causes of high levels of malnutrition. The health services are limited mainly to urban centres, while the rural areas have no health services. Some of the few operational schools were closed, while attendance rates of others declined, as children where withdrawn from schools, because parents could not pay school fees or children were required to support household activities (self/employment, livestock herding etc).

Figure 19: Distribution of Children's Nutritional Status in the Sentinel Sites in Gedo Region

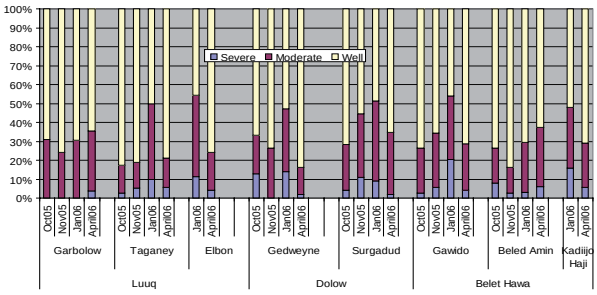
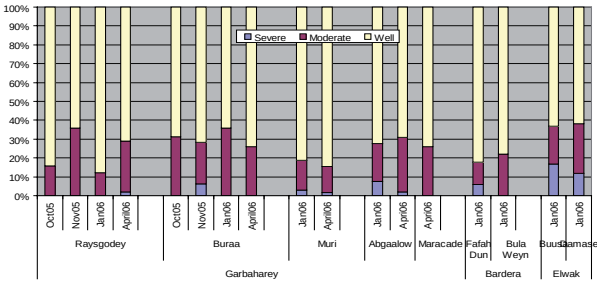


Figure 20: Distribution of Children's Nutritional Status in the Sentinel Sites in Gedo Region



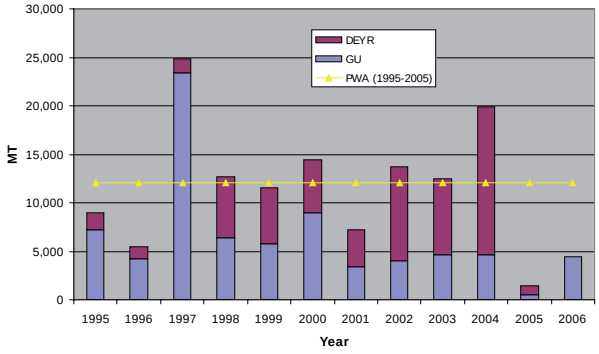
Financial Capital: Pastoralist's primary livelihood asset, which generates their financial capital or income, is their livestock. The drought has led to a drastic decline in household livestock holdings according to the Post *Gu* '06 pastoral herd dynamics survey, which found that between April '05 and May '06, livestock losses ranged between 40-60% for cattle, 30-50% for sheep/goats, and 5-10% for camels. If households have livestock to sell currently, livestock prices are low compared to pre-drought levels. The northern districts of the region have suffered more than three years of humanitarian emergency. Unemployment is high, with little opportunities for work, and there is a dependence on humanitarian assistance. Access to credit has declined, as the poor and middle wealth group households could not repay debts incurred during the drought and have become indebted over the last two seasons.

Effects on Livelihood Strategies

In Gedo region, agro-pastoralist rely primarily on their own production of cereals to cover the bulk of their food needs (50-65%), supplemented by food purchases (35-45%), and milk and livestock products (5-10%). Under normal conditions, most agro-pastoralist rely primarily on livestock and livestock product sales as main source of income (55-75%), but supplement this income with crop sales (10-20%) and remittances (15-25%). The poor agro-pastoralists have smaller livestock holdings, and therefore a much smaller share of income (10-20%) derived from livestock and livestock product sales. They supplement their income with self employment (collection and sale of bush products, honey and dik dik sales) and employment (agricultural labour, portaging, herding) (see FSAU Baseline Profiles).

Pastoralists in the region depend on food purchases as their main source of food (40-60%), supplemented with own production of meat, and milk and other dairy products from their livestock. Most of the income of pastoralists, if not all for the middle and better off households, comes from livestock sales followed by milk and dairy sales. Poor pastoralists supplement this income with small amounts of employment in herding or sales of bush products, such as resin.

Figure 18: Annual Cereal Production in Gedo

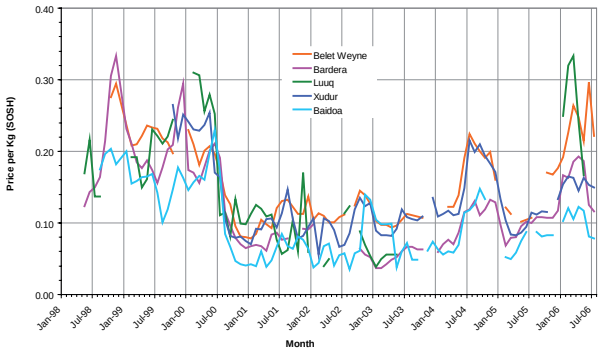


Food Source: Agriculturists and agro-pastoralists in the region face acute food access problems attributed mainly to three consecutive seasons of either total or partial cereal crop failure (*Gu* '05, *Deyr* '05/'06 and *Gu* '06) (Figure 18). In Gedo region, the overall *Gu* '06 cereal production was 67% of PWA; however, around 93% of this harvest came from Bardera district in the south. In the other five crop-producing districts (Luuq, Dolow, Beledhawo, Garboharey and Burdubo), cereal production failed, with an estimated average maize and sorghum production of 18% and 4% of Post War Average, respectively. Cereal stocks are also depleted, as this *Gu* crop failure is preceded by two consecutive seasons of cereal production failure *(Deyr* '05/'06 of 14% of PWA and *Gu* '05 of 7% of PWA). Three consecutive seasons of total and or partial crop failure translates into the lowest cereal production in the post-war years. Although rain failure was the primary reason for three consecutive seasons of cereal production failure, irrigated farms, which are not as adversely affected by poor rainfall, also had limited production in the last two seasons due to the flooding of the Juba River during the *Gu* '05 and *Gu* '06.

The flooding not only destroyed crops during these two seasons, but also destroyed productive assets, such as irrigation pumps and canals.

In terms of cereal purchases, buyers are facing significantly increased market prices. In Bardera market, sorghum prices increased by 211% between May '05 and May '06 (from .09 to .19 US$/kg) (Figure 21). Although still higher than last year, cereal prices dropped in the last two months by 37% between May '06 and July '06 (from .19 to .12 US$/kg), due to large food aid distributions combined with expectations of the cereal harvest. Food access for pastoralists is also severely constrained by high cereal prices, as well as low and limited livestock and livestock production earnings and consumption options, as the result of the significant livestock losses during the last *Jilaal* drought and extremely low livestock reproduction in this *Gu* '06 season.

Figure 21: Sorghum Prices (US$in Bay, Bakool, Hiran and Gedo Regions



Failed Sorghurm Crop in Luuq, Gedo Region, July '06

Income sources: All major sources of income of pastoralists, agro-pastoralists and agriculturalists, such as crop sales, livestock and livestock product sales, are severely constrained and reduced. Due to total or partial cereal production failure, income opportunities from agricultural labour, such as harvesting, are also significantly below normal. Livestock market prices are still considered low, and are the worst affected in north Gedo. In Bardera town, current prices of export and local quality goats are still 20% and 30% lower than the price in Aug. '04 (pre-drought level) (FSAU Market Update, Aug. '06). The current price of local quality cattle is 44% lower than the price of Aug. '04 (pre-drought level). Terms of trade of local goat to cereal (sorghum) are still low as the result of low livestock prices and high cereal prices. Currently, in June '06, one head of local quality goat can be traded for around 162 kg of sorghum instead of 232 kg in Jan. '04. Between Jan. '04 and Jan.'06, terms of trade declined 78% (from 232 to 51 kg of sorghum per head). There is some recent improvement in the terms of trade between May and June '06, mainly due to improved livestock market prices, nevertheless terms of trade in June are around 70% of Feb. '05. The low livestock reproduction rate has resulted in significantly below-average milk production and sales, and consequently income from milk sales is limited.

Expenditure: The complete failure of the *Gu* '06 cereal crops in north Gedo and the partial cereal failure in southern Gedo, combined with seriously below-normal livestock production levels, mean that most people are now dependent on market purchases for food. Cereal prices are high and increasing, while income opportunities are declining. Imported commodity prices (sugar, rice, wheat flour and vegetable oil) are also high. High staple cereal prices (sorghum and maize) are expected to continue to increase through the dry season (*Hagaa* season). Households are, therefore, faced with increasing expenditure to cover their basic food needs, while their incomes are dwindling.

Coping strategies: In Gedo region, distress (north Gedo) and crisis (south Gedo) coping strategies are being adopted by pastoralist and agro-pastoralist alike, as people try to recover or to survive the hardships brought upon them by the drought. Households are filling the gaps in their food access by adopting different coping strategies such as above-normal livestock sales, food purchases on credit, increased seeking of support from relatives, begging in the streets, petty trading, reducing the number of meals per day, as well as reducing meal portions. According to an FSAU nutrition survey, over 80% of the households surveyed are consuming food from three food groups or less, switching to cheaper foods, increasing their collection of bush products (fire woods, charcoal, and construction poles/sticks) and water sales, and/or rely on food aid.

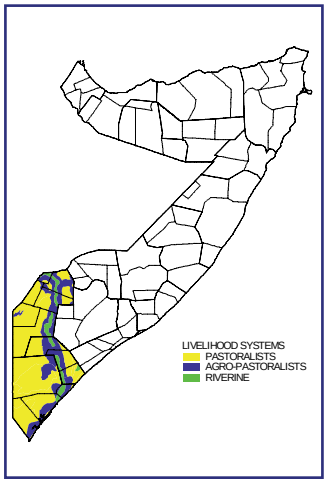
Nutrition Situation: Over the past five years of monitoring, malnutrition levels in north Gedo have consistently remained among the worst in Somalia. The FSAU led interagency nutrition assessment in March '06 revealed malnutrition rates, with global acute malnutrition level of 23.8% (w/h <-2 Z score), severe acute malnutrition level of 3.7% (w/h <-3 Z score), and serious crude mortality rate (CMR) of 1.04 per 10/000 per day. Similar findings were obtained in the Bardera Town assessment (April '06) with global acute malnutrition of 19.0%, severe malnutrition of 3.9% and crude mortality rate of 0.83 per 10,000 per day. Sentinel sites surveillance data shows increasing or fluctuating levels of acute malnutrition. This situation is associated with poor dietary diversity and high incidences of diseases especially diarrhea acute respiratory infections, and malaria. The recurrent drought and successive poor harvest and the insecurity in the region were the major underlying causes.

4.1.2 Lower and Middle Juba

Overview

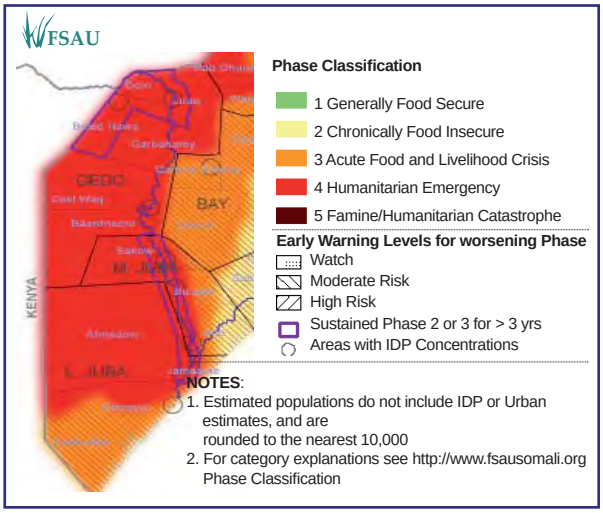
Lower and Middle Juba regions continue to experience deteriorating food and livelihood security since *Gu* '05. An estimated 297,000 people, or 48% of the population, are facing either a state of **Humanitarian Emergency** or **Acute Food and Livelihood Crises,** and require continued humanitarian and livelihood support (Table 14 and Map 16). Of these, about 210,000 are in **Humanitarian Emergency** and 87,000 are under **Acute Food and Livelihood Crisis.** Three of the main livelihood systems in the region, cattle pastoralists, agro-pastoralists and riverine agriculturalists, are equally affected by the drought and are facing crisis conditions (Table 15).

Map15: Juba Valley Livelihood Systems



In Lower Juba, 35% of the population are either in a state of Humanitarian Emergency and Acute Food Livelihood Crisis, estimated at around 45,000 and 91,000, respectively (Table 14). Of these, 24,000 are pastoralists, 55,000 agro-pastoralists and 57,000 are riverine agriculturalists communities. In Middle Juba region, on the other hand, 67% of total population are facing either Humanitarian Emergency (119,000) or Acute Food and Livelihood Crisis (42,000). Pastoral and agro-pastoral livelihoods remain in a state of Humanitarian Emergency from *Deyr '05/'06*, given limited improvements during the *Gu* ''06 and the cumulative impact of the drought. Riverine communities, however, remain the most affected population group, as they are experiencing **sustained conditions of Humanitarian Emergency** for the fourth consecutive year.

Map 16: Food Security Phase Classification - Juba



Generally *Gu* '06 rains were poor, both in intensity and distribution over time and geographically, despite some improvement in pasture and browsing conditions in the hinterland. Water availability is, however, critical in rangeland areas, where 60-70% of the communal water catchments are now empty. There is some water available from privately owned water sources, but water prices are abnormally high and beyond the reach of many people (SoSh 20,000-30,000/drum). Many pastoralists and agro-pastoralists have migrated, as early as June '06, towards riverine and coastal areas in search of water, due to water shortages in the hinterland and high competition for resources from in-migrated livestock from Gedo and Northeastern Kenya,

Lower and Middle Juba regions have also experienced a third consecutive season of cereal crop failure, Middle Juba 8% of PWA and Lower Juba 11% of PWA. As a result, household stocks are extremely low, leading to increased staple

Table 14: Estimated Population by District in Humanitarian Emergency (HE) and Acute Food and Livelihood Crisis (AFLC), inclusive of the High Risk Groups in Juba Valley

Affected Regions and Districts	Estimated Population of Affected Districts [1]	Assessed and Contingency Population in AFLC and HE		
		Acute Food and Livelihood Crisis (AFLC) [2]	Humanitarian Emergency (HE) [2]	Total in AFLC or HE as % of Region Population
Lower Juba				
Afmadow	51,334	9,000	24,000	64
Badhadhe	38,640	7,000		18
Jamame	129,149	10,000	53,000	49
Kismayo	166,667	19,000	14,000	20
SUB-TOTAL	**385,790**	**45,000**	**91,000**	35
Middle Juba				
Buale	59,489	11,000	35,000	77
Jilib	113,415	18,000	55,000	64
Sakow	65,973	13,000	29,000	64
SUB-TOTAL	**238,877**	**42,000**	**119,000**	67

See Appendix 5.2.2 for Footnotes

Table 15: Estimated Population by Livelihood Zone in Humanitarian Emergency (HE) and Acute Food and Livelihood Crisis (AFLC), inclusive of the High Risk Groups in Juba Valley

Affected Regions and Livelihood Zones	Estimated Population of Affected Livelihood Zones [1]	Assessed and Contingency Population in AFLC and HE		
		Acute Food and Livelihood Crisis (AFLC) [2]	Humanitarian Emergency (HE) [2]	Total in AFLC or HE as % of Region Population
Lower Juba				
Southern Agro-Pastoral	12,834	3,000	8,000	86
Lower Juba Agro-Pastoral	81,408	23,000	21,000	54
Southern Inland Pastoral	69,910		4,000	6
South-East Pastoral	47,759	14,000	6,000	42
Southern Juba Riverine	61,869	5,000	52,000	92
SUB-TOTAL		45,000	91,000	
Middle Juba				
Southern Agro-Pastoral	55,902	15,000	35,000	89
Lower Juba AgroPastoral	11,342	3,000	6,000	79
Southern Inland Pastoral	27,511	0	7,000	25
South-East Pastoral	23,100	13,000	0	56
Southern Juba Riverine	75,111	6,000	64,000	93
Juba Pump Irrigated Riverine	19,792	5,000	7,000	61
Southern Coastal Pastoral	14,177	0	0	0
SUB-TOTAL		42,000	119,000	

See Appendix 5.2.3 for Footnotes

food prices and poor access to food for most of the poor households in these regions. Due to the cumulative effect of the drought and poor rains, income from livestock, crop, and related activities were seriously affected. The post *Gu* pastoral herd dynamics survey in the key pastoral areas in the region confirms a significant reduction in livestock holdings between April '05 and March '06, an estimated reduction of between 15% to 25% in sheep and goats, and between 40% to 55% in cattle. High livestock mortality rates coupled with unusual distress sales during the drought have seriously diminished household herd sizes. Due to high cereal prices (with an increasing trend expected over the coming months) and poor terms of trade, pastoralists and agro-pastoralist households will face food access problems as their purchasing power continues to diminish.

Effects on Livelihood Assets

Natural Capital: Overall, the *Gu* rains were normal to above normal in amount for inland areas, but poorly distributed geographically and concentrated over a short period of time. Rains were below-average in amount, intensity and coverage for Jamame and the coastal areas. Due to below-normal rainfall, coupled with high temperature, high evaporation rates and over-concentration of livestock (including the presence of livestock from Garissa and Wajir of Northeastern Kenya and from Gedo), most of the communal water catchments are already completely dry, especially in the traditional grazing areas in Hagar, Buale, Jilib and Sakow districts. Similarly in parts of Afmadow, and coastal areas of Jamame, Kismayo and Badhaadhe districts of Lower Juba, there is a serious water shortage in grazing areas, leading to early and abnormal pastoral migration. However, rains impacted positively on pasture regeneration in the hinterland in both regions following two poor seasons.

Despite the improved rangeland conditions, the increased number of private pasture enclosures and severe water shortages are limiting access to pasture. Therefore, many pastoralists have moved with their livestock to riverine and recession *(dheshek)* areas of the lower Juba valley, thus creating pressures in these areas with the possibility of conflict due to competition over resources. Riverine areas are tsetse fly infested; therefore, early migration to these areas also exposes livestock to the associated tsetse fly diseases.

The lucrative, large-scale charcoal production in Juba region fell significantly because of heavy tax levies imposed by local authority (Juba Valley Alliance, JVA) in order to discourage production, but there are remote areas of Badhadhe district in which charcoal is still produced. Despite the halt of charcoal production, which has already resulted in large-scale deforestation, the trend of environmental degradation still remains high, as many poor families affected by successive poor seasons and droughts are resorting to extensive exploitation of natural resources for alternative income. These extreme coping strategies will continue to compromise the future livelihood security of the various communities in the region.

Physical Capital: Seasonal floods during the last 15 years have caused serious damage to the feeder roads and bridges, which lack maintenance in the absence of functioning institutions normally responsible for such services. Again initial heavy *Gu* '06 rains had adverse effects on the road network. Rains washed away parts of the main tarmac road between

Kismayo and Mogadishu and made transport movement to and from the region difficult. Consequently, transport costs and commodity prices increased substantially between April and June '06. Effects of rains on feeder roads between and within districts and villages have not only disturbed the smooth flow of internal trade, but also hampered distribution of relief food supplies to the area. Floods in areas along the Juba River in April and May '06 washed off the riverbanks linking desheks, thus submerging villages and destroying homes and underground granaries. It is estimated that *Gu* floods destroyed about 5,000 hectares of maize and cowpea crops in April. Farmers consequently started replanting crops, which, if successful, will be harvested in Oct./Nov. '06. The prospect of the off-season harvest in Juba Valley, however, depends on *Deyr* season floods, which normally occur in late Nov. to early Dec.

Qaysangur- dried maize at filing stage August '06.

Social Capital: Traditional social support systems, such as zaka and *irmansi* (lending of milking animals), have been severely damaged and exhausted by the 2005/06 drought. The kinship support system is further deteriorating due to current *Gu* '06 crop failures, high livestock (cattle and shoats) mortality in the past drought, as well as low calving and kidding rates. The poor and middle wealth groups generally do not have social or kinship links abroad, therefore they have limited access to remittances. On the positive side, there is a significant number of multi-agency drought response activities (cash relief, cash for work projects and food aid relief.) ongoing in many parts of the Juba region. If this livelihood support continues, it may help offset the significant reduction in social support and sharing among livelihoods.

Financial Capital: The level of indebtedness remains high for the second year, as many people who were already indebted during *Gu* '05 and *Deyr* '05/'06 drought have now reached a point where they are unable to repay their debts and also cannot access extra loans. Current debt levels for the average poor households range from USD150-300. The most affected are the Southeast Cattle Pastoralists, who experienced significant livestock asset losses and whose livestock (cattle) are more vulnerable to drought than other species (camel and shoats). Purchasing power among pastoral and agro-pastoral middle and poor wealth groups was also affected by reduced livestock holdings, through high mortality and distress sales. Income from crops, fodder, sale of livestock and livestock products is low. Farming communities along the Juba River have faced crop failures for three consecutive seasons. The burden of high cereal prices and limited on-farm labour opportunities is further aggravating the food security situation.

Drought also affected labour opportunities in the valley to a point where almost all are exhausted, although there are a few options reportedly remaining for the poor, i.e. trekking livestock to remote markets. In Lower Juba, riverine areas have some planting labour opportunities, but there is considerable labour out-migration from rural areas towards Kismayo, Jilib and Afmadow and Jamame districts. Charcoal production declined significantly in the valley, yet production is still going on in Badhaade district. Construction and port labour activities have also stopped due to sea closure.

Human Capital: Education facilities are not functional, as attendance levels dropped because of the drought. A few areas have open schools, such as Kismayo, Salagle, Buale and Jilib, where schools are mainly privately owned. High malnutrition levels of 22% of GAM and 4.20 of SAM and CMR of 0.77/10,000/day are reported from Afmadow and Hagar districts. In addition to poor dietary diversity, diseases and low access to health facilities are reportedly among the contributing factors to the high malnutrition rates in the valley.

Effects of Livelihood Strategies: Three main livelihoods systems in Juba valley are riverine agriculturalists (purely maize and sorghum farmers), agro-pastoralists (cattle plus rain-fed/recessional sorghum) and pastoralists (cattle with sheep/goats and camel with sheep/goats). In the normal year, the main food sources for riverine agriculturalists and agro-pastoralists are own crop production (50-60%) followed by market purchase (35-45%) and gifts and transfers. Pastoralists primarily depend on market purchase and their own livestock production, which account for 60-75% and 25-35% of their annual food requirements, respectively.

Most of the income for riverine farmers in a normal year comes from self-employment and employment. Unlike the riverine agriculturalist's livelihood, agro-pastoralists have relatively diversified income sources and 35-55% of poor household's annual income is derived from employment/self-employment activities, while 55-75% comes from livestock and livestock product sales. Camel and cattle pastoralists, irrespective of their wealth earn 65-85% of their annual income from livestock and livestock product sales supplemented by petty trade and/or employment. Most of the above-mentioned food and income sources were seriously affected by the drought.

Food Sources: Droughts over the last three seasons negatively affected main food sources and access for most of the livelihoods in Juba region. *Gu* '06 cereal crop production is considered a complete crop failure, as overall cereal production accounts is only 8% and 11% of PWA, respectively for Middle and Lower Juba, due to inadequate rains, floods, and an army worm outbreak. More importantly, this is the third consecutive season of crop failure in Juba Valley, and there are no current and/or carry-over stocks available at the household level (Figure 22 and 23). Some off-season crops, being an important supplement to *Gu* production, are expected from the *dhesheks*, roughly estimated at 3,200 MT.

Agro-pastoral and pastoral livelihoods in the region suffered from low or no milk consumption due to high livestock losses, compounded with low conception rates since *Deyr* '05/'06. These conditions have reduced food access, particularly milk and ghee. Moreover, large reductions in livestock prices since June '05 and record high maize prices also meant poor terms of trade between livestock and cereals. In June '06, average maize prices reached the highest in 7 years, at around SoSh 3,829/kg or USD 0.29/kg, which is 71% and 61% higher than the price in March'06 in SoSh and USD term, respectively (FSAU Market Update, June '06).

WFP and Muslim Aid relief food distribution in May and June '06 increased availability of food at markets, and stabilized prices in some areas, thereby improving food access for many poor households. Because of successive seasons of crop failures, food aid is now considered as an element in determining food availability in market.

Figure 22: Gu Cereal Production in Middle and Lower Juba (1995-2006)

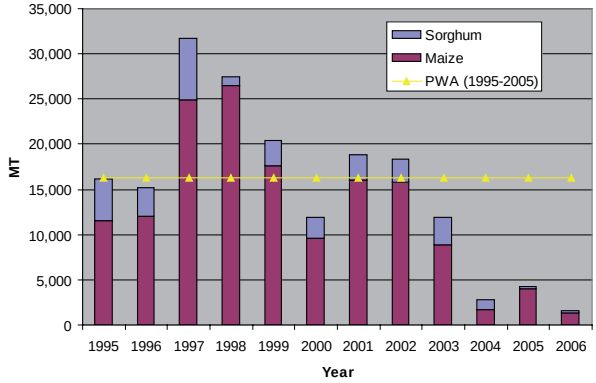
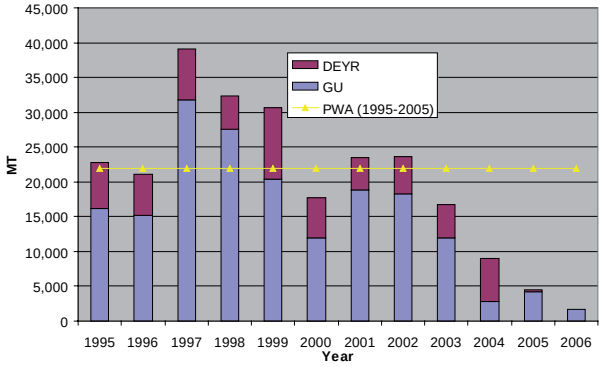


Figure 23: Annual Cereal Production in Middle and Lower Juba (1995-2006)



Income Sources: The combination of the drought of 2005/06 and the overall poor performance of the *Gu* '06 season have resulted in drastically reduced incomes for agro-pastoralists, riverine farmers, and pastoralists in Juba valley, due to the absence of cereal crops for sale (complete cereal crop failure), limited livestock and livestock sales (significantly reduced herds and limited milk production), and scarce employment opportunities (casual labour opportunities of harvesting, herding, and milk marketing).

Cattle prices reached a record low in Dec. '05 in response to the dramatic deterioration in cattle body conditions - a drop of more than 60% as compared to cattle prices the same time the year before (Dec. '04) (Figure 24). Cattle prices, began to increase by March '06, but according to the post *Gu* herd dynamics survey, most of the cattle (40-55%) had already either died or been sold through distress sale by this time (herds were significantly reduced between April '05 and March '06). With significantly reduced herd sizes, low calving and kidding rates and low conception rates, income options will further shrink for many poor households.

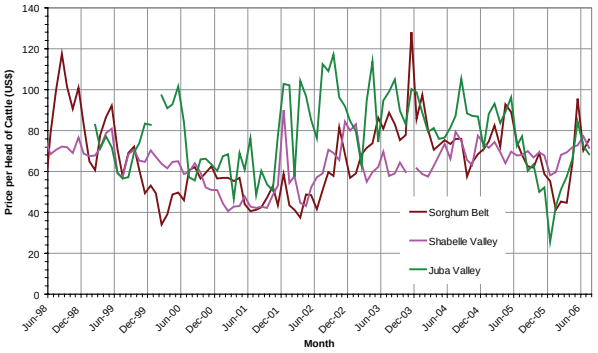
The ongoing recessional off-season crops (primarily cash crops of sesame and some subsistence crops of maize), will provide some opportunities for casual labour employment, and if the sesame production is successful, this will provide income during harvest time between Oct./Nov.

Expenditure patterns: Riverine farmers and agro-pastoralists are currently reliant on cereal market purchases, due to their depleted cereal stocks and another crop failure this season. Pastoralists normally rely on marketed cereals, as they trade livestock or sell milk in exchange for cereals. All livelihood groups, therefore, are currently dependent on market cereal supplies. Over the last three years, especially since July 2003, the seasonal swings

Massive early migration at Afmadow, July '06.

in cereal prices in Juba Valley have been more dramatic and reached higher overall price levels, primarily due to three consecutive seasons of low and decreasing *Gu* cereal production.

Figure 24: Regional Average Monthly Prices Local Quality Cattle (US$



Cereal market prices in Juba Valley have fluctuated dramatically, with record peaks in June '05 (0.28 US$/kg or 4,195 SoSh/kg), Jan '06 (0.26 US$/kg or 3,935 SoSh/kg) and June '06 (0.29 US$/kg or 3,829 SoSh/kg) (FSAU Market Update, July '06) (FSAU Market Update, Aug. '06). Maize prices in Juba Valley, declined 51% between June and July, however, this is not due to cereal harvests (as the region experienced almost complete crop failure this *Gu*), but is due to large double ration food aid distributions in May and June '06. Projected off-season maize production may provide some short-term benefits, but is not expected to decrease the pressure for cereal prices to increase, as this production will add only contribute a small amount to overall maize in the region (roughly estimated at 3,200MT).

The effect of high and fluctuating cereal prices, compounded by low income options, indicates heavy and more spending on cereals than other essentials. Given that spending on cereals is likely to increase further over the coming months, most poor households will face increased difficulties in purchasing food.

In addition, imported food and non-food commodity prices in Juba Valley are among the highest in southern Somalia, due to 1) rains and road blocks that increase the price of commodities through very high transit charges; 2) heightened insecurity, which increases transportation costs due to higher risks associated with safety and theft; 3) rising fuel prices that translate into higher delivery costs; and 4) limited and poor road infrastructure, which makes the Juba Valley regions especially difficult and costly to access. Between January and June this year, all key import commodity prices increased significantly in Juba Valley: sugar and petrol increased 18% and 11% respectively, while vegetable oil, rice and wheat flour increased by 2% (Market Section 3.7, Figure 14).

Coping Strategies: The main coping strategies currently employed in the valley include unsustainable and increased livestock sales, increasing access to food aid, reduction of expenditure on non-staples, seeking of kinship and social support, wild food consumption, green mango consumption, and fresh water fishing, specifically for riverine communities.

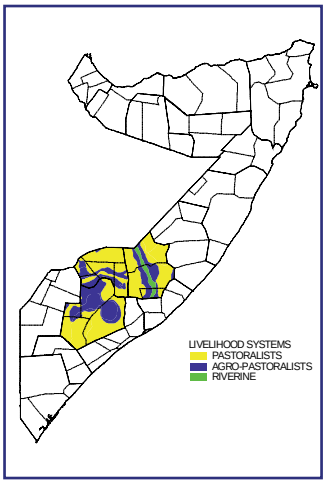
Nutrition Situation: The FSAU nutrition surveillance system and recent nutrition assessments conducted in most of the districts indicate alarming levels of global acute malnutrition (WHZ < -2 z scores) of 22% in Afmadow and Xagar districts (May '06), 16.2% in Jilib Riverine Livelihood zone and 21.9% in Buale Sakow. The extreme levels of severe acute malnutrition (SAM) of 4.2% and above indicate an alarming situation in Juba Valley.

Since January '06, there has been an increasing trend of admissions of the severely malnourished children into the therapeutic feeding centre in Marere, which is the only operating TFC in the valley. Majority of those admitted are reportedly from the riverine, agro-pastoral and pastoral areas of Afmadow, Xagar, Buale, Sakow and Kismayo. The combination of general insecurity, limited interventions, poor health services, and worsening food security conditions are among the factors attributed to the elevated levels of malnutrition. Higher incidences of diseases, such as malaria, acute respiratory infections (ARI), watery diarrhoea, and intestinal parasites, are also among the immediate causes of malnutrition.

4.1.3 Bay & Bakool

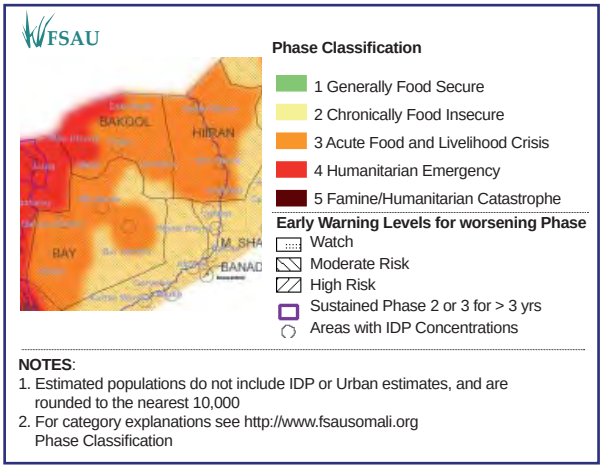
Overview

Map 17: Sorghum Belt Livelihood Systems



In January '06, following the failure of the rains and deteriorating conditions in both *Gu* '05 and *Deyr* '05/'06 seasons, an estimated 680,000 people in Bay and Bakool regions were identified to be either in a state of **Acute Food and Livelihood Crisis** or at a **moderate risk to Humanitarian Emergency** before July 2006 (see FSAU Post Deyr '05/'06 Technical Series Report, No. IV. 8, 22 February '06). However, the Post *Gu* '06 assessment and analysis indicates that although conditions of both regions remain precarious, the overall situation is improved in most parts of Bay region. The area continues to be identified in a phase of **Acute Food and Livelihood Crisis** (Map 18), but the early-warning level of a moderate risk of Humanitarian Emergency is removed. In the pastoral areas of Bakool, however, the situation has deteriorated following very poor *Gu* '06 rainfall, therefore pastoral areas previously identified to be at a moderate risk of Acute Food and Livelihood Crisis are now in this phase (Map 18).

Map 18: Food Security Phase Classification Bay, Bakol and Hiran



Currently 286,000 people in Bay and 147,000 people in Bakool are in an **Acute Food and Livelihood Crisis** (Table 16). Bakool region is the worst hit where an estimated 27,000 people (70% agro-pastoral and 30% pastoral) in Rabdhure district and pockets of Elbarde district continue to face a state of **Humanitarian Emergency.** Also in Bakool region, an estimated 147,000 (130,000 agro-pastoralists and 17,000 pastoralists) are in state of **Acute Food and Livelihood Crisis** in Tiyeglow, Xudur, Wajid and Elbarde districts. In Bay region, due to improved *Gu* '06 rains, near-average cereal production and improving pasture and water conditions, the Humanitarian Emergency areas of Qansahdhere and pockets of Dinsor and Baidoa in *Deyr* '05/'06 is downgraded to **Acute Food and Livelihood Crisis**. Of the estimated total of 433,000 people in Acute Food and Livelihood Crisis from both regions, most are agro-pastoralists (397,000 people), while the rest are pastoralists (36,000 people) (Table 17).

Among the immediate causes of the deteriorated food security situation in Bay and Bakool is a combination of failed *Gu* '05 and *Deyr* '05/'06 seasons, which resulted in a severe depletion of pasture and water resources and subsequent livestock mortalities, distress and increased livestock sales, and loss of access to milk for consumption and sales. Also, food stocks at household level were also exhausted due to crop failures in Gu '05 (only 23% & 13% of PWA

Table 16: Estimated Population by District in Humanitarian Emergency (HE) and Acute Food and Livelihood Crisis (AFLC), inclusive of the High Risk Groups in Bay Bakol

Affected Regions and Districts	Estimated Population of Affected Districts [1]	Assessed and Contingency Population in AFLC and HE		
		Acute Food and Livelihood Crisis (AFLC) [2]	Humanitarian Emergency (HE) [2]	Total in AFLC or HE as % of Region Population
Bakol				
El Barde	29,179	4,000	5,000	31
Hudur	93,049	49,000		53
Rabdure	37,652	9,000	22,000	82
Tieglo	81,053	44,000		54
Wajid	69,694	41,000		59
SUB-TOTAL	**310,627**	**147,000**	**27,000**	56
Bay				
Baidoa	320,463	147,000		46
Burhakaba	125,616	57,000		45
Dinsor	75,769	36,000		48
Q/dheere	98,714	46,000		47
SUB-TOTAL	**620,562**	**286,000**	**0**	46

See Appendix 5.2.2 for Footnotes

Table 17: Estimated Population by Livelihood Zone in Humanitarian Emergency (HE) and Acute Food and Livelihood Crisis (AFLC), inclusive of the High Risk Groups in Bay Bakol

Affected Regions and Livelihood Zones	Estimated Population of Affected Livelihood Zones [1]	Assessed and Contingency Population in AFLC and HE		
		Acute Food and Livelihood Crisis (AFLC) [2]	Humanitarian Emergency (HE) [2]	Total in AFLC or HE as % of Region Population
Bakol				
Southern Agro-Pastoral	209,750	120,000	16,000	65
Bay-Bakool Agro-Pastoral	19,976	10,000	3,000	65
Southern Inland Pastoral	81,081	17,000	8,000	31
SUB-TOTAL		**147,000**	**27,000**	
Bay				
Southern Agro-Past	188,890	92,000	0	49
Bay-Bakool Agro-Pastoral	333,454	175,000	0	52
Southern Inland Pastoral	43,465	0	0	0
South-East Pastoral	32,449	19,000	0	59
SUB-TOTAL		**286,000**	**0**	

See Appendix 5.2.3 for Footnotes

for Bakool & Bay, respectively) and *Deyr* '05/6 (13% and 35% of PWA in Bakool and Bay respectively) and purchasing power of the people was weakened due to low income from normal sources and large deficits in expenditure, all which led to crisis and/or distress strategies among the poor and lower ranks of the middle wealth groups.

Malnutrition levels (among children aged under five years), which had already been alarming, continued to deteriorate and remained above the usual range due to the effect of food insecurity, high incidences of diseases (such as diarrhoea, malaria, cases of measles and acute respiratory infections), poor health care and sanitation. There have also been large internal and external migrations to Bay region, Hiran and corresponding parts of Zone V of Ethiopia.

The mixed outcome of the *Gu* '06 rains in Bay and Bakool has meant mixed results for the region overall. Poor *Gu* '06 rains, 50-80% of long term average, in Bakool, has led to another poor crop production (58% of *Gu* PWA). Water and pasture conditions are also poor, and consequently livestock conditions are continuing to deteriorate in pastoral areas. Sufficient *Gu* '06 rains in the sorghum-producing areas in Bay region, on the other hand, have led to near-normal cereal production (98% of *Gu* PWA) and improving livestock conditions, prompting some recovery.

Effects on Livelihood Assets

Natural Capital: Below-normal *Gu* '06 rains were received in Bakool region, while amounts and distribution of the rainfall were average to above-average in Bay region, with the exception of the east and south of Burhakaba district. The rate of environmental regeneration (grazing and browsing) and replenishment of water catchments and shallow wells was poor in Bakool because of below-average rainfall. With three consecutive drought seasons in '05 and '06 and the early return of migrated livestock during last *Gu* '06, the region is experiencing acute water and pasture shortages, especially in pastoral areas, which again prompted livestock out-migration (camel and cattle) towards agro-pastoral livelihood zones in Bay region, pockets of Bakool and Hiran regions, and Zone V of Ethiopia as well. An outbreak of army worms in early May was reported in the north and west of Tiyeglow district, which significantly depleted the pasture and triggered livestock outward migration.

Natural resource exploitation continues at a higher pace in both regions. Bush product collection by the poor wealth groups, such as materials for building, fencing, and charcoal and lime production, is common, and further speeding up deforestation and endangering indigenous tree species, such as Acacia Tortus, Dolabra Glabra (umbrella tree), and others. Because of fewer income options, many poor families have had to resort to these activities to make up the income deficit sustained over the seasons. The most affected livelihoods are Southern Inland Pastoral areas in Rabdhure, Elbarde, Hudur and Tiyeglow districts of Bakool region, the south and east of Burhakaba, and the south eastern part of Dinsor district in Bay region.

Physical Capital: Bay and Bakool regions are characterised with poor basic infrastructure (roads, bridges, water sources, etc). Increasing and sustained checkpoints are placing added burdens on transport movements, leading to high extortion levies placed on commodities (staple and non-staple), which increase prices of goods. Some road blocks were removed in and around Baidoa district. Small feeder road bridges, especially in Bay region, are in poor shape, owing to the cumulative effects of rains, both seasonal and El-Nino induced, constant overuse and lack of maintenance.

The most important water sources in Bakool region are water catchments, and the majority of these are now empty. The water that is remaining will not last long due to high use, high evaporation rates, and lack of regular maintenance. Pastoral areas in Rabdhure, Elbarde, and Tiyeglow of Bakool and Burhakaba and Dinsor of Bay region are currently experiencing critical water shortages.

Gu '06 Good Sorghum Crop - Wariishe Burhakaba, Bay.

Gu '06 Crop Failure - Abal Hudur, Bakool.

Social Capital: Social support networks are an important social capital among the pastoral and agro-pastoral livelihoods. However, due to succeeding droughts from *Gu* '05, the impact of general insecurity and the significant loss of assets (livestock, cereal stocks, depleting natural resources, etc.), support as a social input has declined, especially for poor wealth groups. Poor crop prospects in *Gu* '06 in Bakool region indicate that poor agro-pastoral households expect little or no access to *zaka* (charity) from the harvest at this time of the year, and consequently many poor households have already moved to Bay region, where *Gu* '06 cereal production is average.

Moreover, the provision of lactating animals to the poor significantly dropped due to the combined effects of low livestock conception and high livestock mortalities. Overall, during the bad years, all wealth groups are equally affected and almost all social support mechanisms become ineffective and/or overstretched. It is worth noting a local wisdom saying: "in *times of drought, if you retain your assets and keep them to yourself (and your family) you lose your kinship; conversely, if you care for your relations and extended families you lose your wealth and become broke"*, quoted from key informant in Bakaaryarey village of Wajid district during Gu '06 assessment.

Financial Capital: The collective effects of successive droughts in 2005-'06 have negatively impacted on the income options and the financial flows of pastoral and agro-pastoral households. Among the resulting factors that particularly impact the agro-pastoralists are reduced household cereal stocks due to successive crop failures in *Gu* '06 and *Deyr* '05/'06 and increased cereal prices (Figure 24 and 25).

In addition, for pastoralists and agro-pastoralists, financial flows are negatively affected by low livestock prices (poor livestock body conditions) and high livestock mortalities (reduced number of saleable animals). Between April '05 and March '06 livestock holdings declined 15-25% for cattle and 0-15% for sheep/goats (Section 3.6 Table 8). The level of indebtedness also increased between April '05 and March '06 among pastoralists and agro-pastoralists and is estimated at an average of US$100-200 per household, which many households are still unable to repay in the short-term.

Furthermore, livestock conception rates, calving and kidding, and production were all well below average during the *Gu* '06. In Bakool region, these factors are further aggravated by poor *Gu* '06 cereal production (58% of PWA).

Human Capital: School attendance remains very low in both agro-pastoral and pastoral livelihood zones due to poor education systems. Enrolment of students is slightly better in urban settlements. Similarly, health infrastructure falls far short of the needs of the people, with inadequate health services, a shortage of professional staff, and a very low supply of human drugs. The nutrition status of both regions remains critical, with Global Acute Malnutrition (GAM) of 15-19.9%. However, there are slight improvements in Baidoa, Elberde, Qansahdhere and some parts of Dinsor, from GAM of 20% and above to 15-19.9%. Vulnerable population groups, for example IDPs in Wajid, show Global Acute Malnutrition rates of 20% and above due to poor dietary intake and high incidence of diseases such as watery diarrhoea, malaria and acute respiratory illnesses (ARI). Cases of measles are reported to be high in Bay region, Baidoa and Dinsor in particular.

Labour opportunities for agro-pastoralists are drastically reduced due to successive crop failures, although agricultural labour improved in Bay region in response to the near average *Gu* '06 cereal production. In the pastoral livelihood zones, labour opportunities are extremely limited, and are available when there is livestock herding.

Effects of Livelihood Strategies: Agro-pastoralists normally access their food from different sources. The poor agro-pastoral households obtain 50-75% of their annual food from their own crop and livestock production, followed by 30-45% from food (staple & non-staple) purchases, while the rest comes from gifts and wild foods. For their annual income, 40-50% comes from employment (agricultural labour, portering and construction) and self-employment (sale of bush products: collection of construction sticks, poles and firewood, charcoal production), 10-20% comes from the sale of livestock and livestock products, while the rest comes from crop production sales and remittance. Pastoralists slightly differ from agro-pastoralists in terms of sources of food and income.

The poor pastoralists derive 50-60% of their annual food from market purchases, while the rest is accessed through livestock products (milk and meat). In addition, most of their annual income (80-90%) in a normal year comes from livestock and livestock product sales, supplemented with self-employment activities (sale of gums, resins, etc.).

Food Sources: *Gu* '06 crop production in Bakool region is poor, 58% of *Gu* PWA (with complete crop failures in Rabdhure & Elbarde districts), while cereal production is estimated near *Gu* PWA (98%) in Bay region. Both regions, however, experienced crop failures in the preceding *Gu* '06 and *Deyr* '05/'06 cropping seasons. Production in *Gu* '05 was 23% and 13% of PWA for Bakool and Bay regions, respectively, while 13% and 35% of PWA in the Deyr '05/'06 for Bakool and Bay regions, respectively (Figures 25 and 26).

In Bakool region, local cereals were in short supply between January-April '06 in the main markets; much of what was available was food aid. Since Jan. '05, price of sorghum in Hudur market was the highest between Jan. to July '06 and fluctuating from $0.15 to $0.16; May '06 price was 40% higher than was the price in May '05. Conversely, due to current average crop harvest prospects in Bay region, cereal prices fell by 44% in Baidoa market between May and July '06, where sorghum prices decreased from 0.12 US$/kg in May '06 to 0.08 US$/kg in July '06, and where in the near term the downward trend is likely to continue. Despite the average crop production in Bay region, cereal prices in Bakool are not expected to decline due to little or no stock at the household level (caused by *Gu* and *Deyr* '05 crop failures), poor *Gu* '06 crop production and increasing cereal demand from other regions, including Hiran and Central regions.

Figure 25: GU Cereal Production in Bay (1995 -2005)

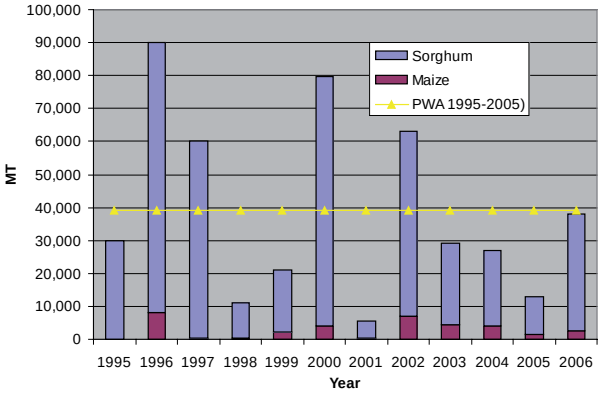


Figure 26: Trends in Gu Cereal Production in Bakool

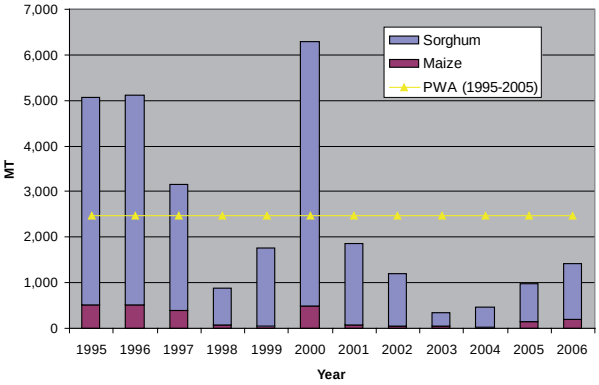
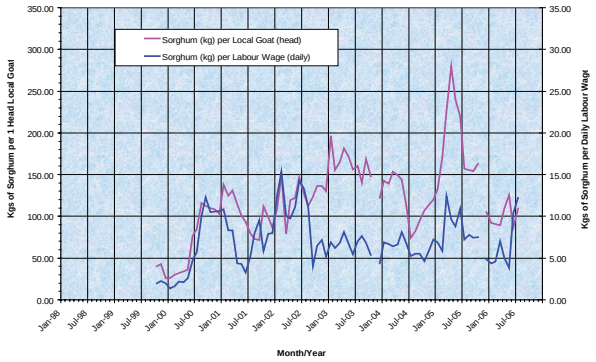


Figure 27: Terms of Trade in Bakol,Sorghum to Local Goatand Labour (1995-2006)



High cereal prices from January to June '06 and corresponding low livestock prices translated into low terms of trade between cereals on one side and labour, livestock and milk on the other, i.e. average terms of trade for all options between January-June '06 are 50% of the same period in 2005 (Figure 27).

Income Sources: Most of the main sources of income in Bay and Bakool regions were drastically affected by the successive below-normal rains in the last three seasons. Deteriorated livestock conditions in 2005, which worsened in the dry season of Jilaal (Jan. through April '06), have resulted in reduced livestock herds, low livestock conception rates and reduced calving and kidding rates. Subsequently, milk production is poor and livestock herds reduced between 15-25% for cattle and 0-15% for sheep/goats, due to livestock deaths and distress sales. For pastoralists and agro-pastoralists, these shocks translated into limited income from livestock in terms of animal and milk sales.

Livestock prices dropped significantly between October '06 and March '06, due to declining livesock conditions. For example, local quality goat prices fell 33% between Oct. and March '06 (from 285,000 SoSh/head to 190,000 SoSh/head). However, livestock prices began to increase as livestock body conditions started to improve slightly with the onset of *Gu* '06 rains. Local quality goat prices increased by 16% from March '06 to July '06.

In general, purchasing power (as measured by terms of trade) in Bakool has deteriorated since January, as compared to the same time last year. Terms of trade weakened following increased cereal prices and declining income from livestock and limited labour opportunities (Figure 27). Terms of trade in January '06 for cereals to labour was low in Hudur market, (only 4 kg of sorghum/labour day), which is 64% lower than in June '05 (11kg of sorghum/labour daily earnings). Average terms of trade from January to June '06 (5kg/labour day) is about 50% what is was in the same period in 2005 (10kg/labour day). Similarly, terms of trade between sorghum and local goat in June '06 was 87kg/head, i.e. 60% lower compared to June '05 (220kg/head) (Figure 27).

Poor agro-pastoralists in Bakool have had fewer agro-labour opportunities than those in Bay region due to poor rains and poor or failed crop production, a situation which has prompted many people to seek labour opportunities and social support from Bay region. Self-employment activities have significantly increased beyond normal, mainly seen in an increase and over-supply of charcoal production and building materials for sale in main markets. Remittances contribute less among pastoral and agro-pastoral livelihoods.

Expenditure: Due to the cumulative effects of consecutive crop failures, high animal mortalities, and increased cereal prices, pastoralists and agro-pastoralists are spending almost all available income on cereal purchase, which means many households have had to forego or drastically reduce spending on other necessary non-staple and non-food and non-essential items. In addition, imported commodity prices throughout the Sorghum Belt region have been increasing since Jan. '06. Prices of sugar and vegetable oil (which are important food supplements to staple food used by livelihoods), increased by 18% and 24% between Jan. and July '06, respectively. The increase in prices is mainly attributed to low commodity supplies in the main wholesale markets, rainy conditions that restricted transport movement during the *Gu* '06 season, and increased transportation costs (primarily due to the proliferation of road blocks and their associated levies).

Coping Strategies: Coping strategies among agro-pastoral livelihoods include increased collection of bush products for sale, social support seeking into Bay region and other potential urban areas, reducing the frequency and amount of meals, relief food (free food and Supplementary Feeding Programs (SFP) with family rations), and cash for work projects on rehabilitation of water catchments. For pastoralists from Bakool region, people are increasing self-employment, migration with livestock towards agro-pastoral areas in Bay and Hiran regions and Zone V of Ethiopia, seeking loans and introducing food rationing practices at household level.

Nutrition Situation: Wajid IDPs manifest an alarming nutrition situation with Global Acute Malnutrition (GAM) levels of 20% and above. In most of the other parts of Bay and Bakool the situation remains critical with GAM levels of 15 – 19.9%. However, there are slight improvements in Qansahdhere, Baidoa, Elberde and parts of Dinsor from GAM of 20% and above in January 2006, to 15 – 19.9%. This situation is associated with poor dietary intake and high incidence of diseases.

At the few health facilities, MCH centers in particular, the attendance of children due to sickness is high. From April and June '06 a significant number of malnourished children have been admitted to supplementary and therapeutic feeding program (S/TFP) in Wajid and Huddur. Increasing and fluctuating malnutrition levels are also reported in many areas of the region (FSAU sentinel site surveillance data). In addition to food insecurity, diarrhoea, malaria, ARI, and cases of measles are reported to be among the immediate causes of the high malnutrition levels.

Poor health care services, improper sanitation and poor child care are the main underlying causes to the high disease incidence. Although *Gu* '06 rains (with positive crop prospects in Bay region) improved dietary diversity of many households (particularly in Bay region), the number of people consuming less than three food groups is on the increase.

4.1.4 THE IMPACT OF MIRA ON FOOD SECURITY AND LIVELIHOODS

Right: *A man chews miraa*

Below: *Bundles of miraa on display*

The practice of chewing the leaves or soft branches of the plant **Khata edulis**, commonly known as khat, chat or mira, is widespread in Somalia, and on the increase. Khat is a mild drug whose leaves act as a stimulant. In the past, elderly people used to chew khat only at social gatherings, but this tradition has evolved over time, to the extent that now large numbers from all social groups - elders, youth, and women - chew khat on a daily basis.

The commercialization of khat started in Somalia well before independence in 1960. However, khat use increased dramatically after the outbreak of the civil war and the collapse of the state in early 1990's. Some people maintain that its trade is very much associated with a war economy, where 'its import and distribution are linked to airstrips and the rival militias that control them'[1]. Today, khat is big business in Somalia, and run as efficiently as other drug enterprises elsewhere in the world. Khat is mostly grown and imported from Somalia's neighboring countries, Kenya and Ethiopia. Highly perishable, it is rushed daily by airplane and 4WD vehicle to the main urban centers in Somalia, and then distributed to the rural areas by light vehicles.

Although the khat business provides a wide variety of livelihoods to those involved in its import, distribution and sale, many believe, that the drain on the productivity of households and society at large caused by the use of this stimulant far outweighs its employment benefits. Indeed, khat was actually banned twice, once before independence in British Somaliland and again in 1983 throughout Somalia, in recognition of its negative effects (in both cases, the bans were short-lived due to difficulties in enforcement).

There is very little information on the khat trade, its use and its impact on society and the economy as a whole. In terms of its impact on food, livelihood and nutrition security, even less is known. As a first step in trying to understand the influence khat has on livelihoods, FSAU recently took an exploratory, qualitative look at the consumption of khat in Galgadud region. Interviews were conducted with focus groups and key informants in Abudwaq, Adado and Balanbale districts[2]. Here is what they had to say on khat consumption:

> "Most of the people who chew khat leaves do so largely on a daily basis, indifferently by age groups, livelihoods and wealth ranking. The number of khat consumers has increased since the collapse of the Somali state, which may be attributed to the lack of employment, limited schooling and education, and a general degradation of social ethics. One estimate is that approximately 30-40% of pastoralists in the region consume khat, and the rate of consumption is higher among urban populations. Consumers' perceptions of chewing khat include the belief that: it helps people remain active and vigilant, it reduces hunger and fatigue from hard labour, and also provides pain relieving medical benefits,. Many also believe, however, that khat chewing mostly creates health problems, such as difficulties in sleeping, loss of appetite, and malnutrition. Clan elders also use khat when settling difficult disputes and negotiations during clan conflicts, and offering khat makes it easier to gather people to meetings.
>
> A high proportion of income either received through friendly gifts (shaxad) or from the livestock sales, remittances and other employment is spent on khat chewing on daily basis. Typically one person can consume four bundles of khat on average in a month at the cost of 12 US$ per bundle, or 48 US$ per month. In the pastoral context, this 48 US$ could have supported the household with 2 bags of imported rice on average at a cost of 24 US$ per bag. On the other hand, there are also a large numbers of poor households in the urban centers and in rural areas as well, who are engaged in the business of khat selling, especially poor urban women, to earn a daily income in order to meet their livelihood needs.''

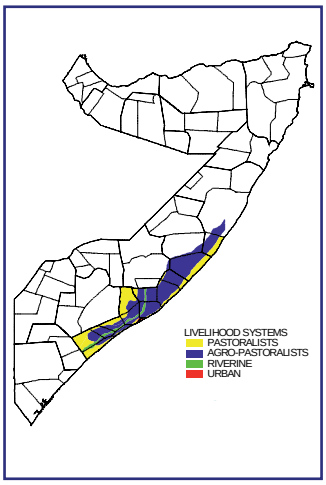
[1]Arms, Miraa Trade Keep Somalia Aflame, www.somalilandtimes.net/2003/89/8909.

[2]FSAU, Informal rapid review through key informants and focus groups interviews, August/September 2006.

4.1.5 Lower and Middle Shabelle

Overview

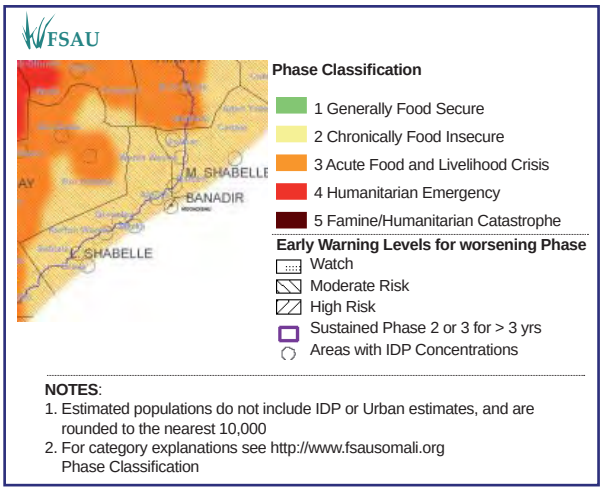
Map 19: Shabelle and Cowpea Belt Livelihood Systems



Agro-pastoral areas in Shabelle Valley are identified in an early warning level of **Watch**, primarily due to poor rainfall over the last three seasons, with negative cumulative impacts on food and income access for poorer households. A number of factors are contributing to this strain on livelihoods, including three consecutive seasons of below-normal cereal production, low household cereal stocks, high cereal prices, poor water and pasture conditions in parts, medium to low livestock conception rates, low to medium calving and kidding rates, and below-average cattle milk production. Households are more able to cope with these shocks in Shabelle Valley than in other regions, however, due to the region's greater economic activity which creates more opportunities of casual work and larger and more endowed social support networks.

The *Gu* '06 rains were below average across the Shabelle Valley, in terms quantity, geographic distribution and over the season. Although some pockets within the valley received above-normal rains, satellite imagery indicates only 45-70% rains compared to the long-term mean, a situation which is also confirmed by ground truthing. Both pasture and water conditions are mixed, depending on the area. Water shortages are already reported in agro-pastoral areas of Qoriyoley, Afgoye and Barava districts and water prices are high (as much as SoSh 20,000 – 30,000 per drum).

Map 20: Food Security Phase Classification - Shabelle



Poor pasture conditions in rangeland areas is also prompting abnormal livestock migration towards riverine areas, especially along the southern coastal parts of Barava. Currently, Lower Shabelle riverine areas are hosting cattle from as far away as Adale and Adan Yabale of Middle Shabelle. Apart from in-migrated livestock into Lower Shabelle, however, livestock body conditions remain fairly normal, as wells as milk production and prices. The heavy concentration of livestock and increasing competition for grazing resources, however, are likely to reduce production and further increase market prices in the coming months.

In Shabelle Valley, *Gu* seasonal production contributes normally 65-70% of total annual cereal production for southern Somalia. Due to inadequate *Gu* rainfall this season, rainfed cereal crops experienced severe moisture stress, leading to almost complete crop failure of all rainfed maize, as well as much of the more drought-resistant sorghum crops. Most of the cereal production this season, therefore, comes from irrigated farms, especially from areas along the riverine strips of Merka, Kurtun Warey, Qoryoley, Jowhar and Afgoye districts, where availability of irrigation infrastructure is fairly good. The expected bulk of the rainfed sorghum crop will come mainly from Jowhar and Balad of Middle Shabelle and Wanlaweyn of Lower Shabelle.

The total cereal production of this *Gu* is estimated at around 47,000 Mt in Lower Shabelle, of which 10% is sorghum and 90% is maize. This season's cereal production is better than last *Gu* season's (128% of *Gu* '05 production), but is below normal as compared to the PWA production (69% of Post-War Average). Cereal production in Middle Shabelle is estimated at 18,700 Mt, (41% is sorghum and 59% is maize) and is 92% of *Gu* '05 production and 109% of the PWA production. Normal cereal production in Middle Shabelle is mainly due to the improved irrigation system in this region. It is important to mention that this year's low production in Lower Shabelle, which normally produces the bulk of the cereals in the valley and which also experienced poor productions in the last two

Rainfed Maize Crop Failure, Afgoi, Lower Shabelle, July '06.

Irrigated Maize in Qoryoiley, L. Shabelle, July '06

Massive Cattle Migration from Adale, M. Shabelle.

seasons (51% of PWA in *Gu* '05 and 64% of PWA in *Deyr* '05/'06), is mainly caused by inadequate rains. Sesame production, which is the most important cash crop for the region, failed this season in both irrigated and rainfed areas of the valley, due to the combined effects of insufficient rains and large insect infestations**.**

Effects on livelihood assets

Natural capital: Pasture and grazing resources are largely scarce in Shabelle Valley, which induced early migrations from agro-pastoral areas to the riverine areas, as well as led to resource competition, disputes, and inflated prices of fodder and grazing of fallow fields. There are shortages of water and high water prices (SoSh 20,000-30,000/drum) in most the agro-pastoral and pastoral areas of the region. Water prices are expected to continue to increase over the coming months, and further livestock movements towards riverine areas is expected. As a result of the poor rains and low crop production, unsustainable natural resource exploitation, especially the clear cutting of trees for charcoal production, is speeding up the rate of environmental degradation, with negative short-term and long-term implications on lives and livelihoods of the valley.

Physical capital: Much of the pre-war infrastructure, such as roads, bridges and river banks, is in a severely degraded state, particularly in riverine areas, which negatively impacts on market accessibility and the transport of goods, in terms of time and cost. Some rehabilitation of irrigation infrastructure has occurred in the region, such as the rehabilitation of the irrigation infrastructure in Kurtun Warey district (Concern) and the Governo canal (32km long) which is contributing to improved crop production and water supply in the areas that previously experienced consecutive crop failures (Golweyn and Buulo).

The rehabilitation of the canal (UNDP and DBG) in Middle Shabelle contributed positively to *Gu* '06 cereal production there (*Gu* '06 cereal production is 'normal' 109% of PWA). Apart from these localized efforts, the overall area under irrigation has contracted due to the inaccessibility and/or high cost of inputs, including tractor hire, pesticides, fuel, and silted canals and river beds. In some areas, the influx of livestock to the riverine areas is inflicting damage on the already dilapidated irrigation infrastructure (canals, river banks etc) and crop fields.

Social capital: Generally, the social support network in Shabelle Valley is larger and more endowed (in terms of ability to support), than in other regions, given the overall higher level of economic activity and urbanization in the region. The cumulative effects of poor and failed crops over the last three seasons, however, will limit payment of *zaka* and alms from crop production to the poor households.

Human capital: Overall acute malnutrition levels are within the usual range of < 10% (WHZ >-2Zscore or oedema). Although this level is among the lowest in the country and mainly associated with dietary diversity and access to health services, the available health facilities are not enough to satisfy the needs of the population, as villagers have to trek long distances to access health facilities in the adjacent district towns. Lack of safe water (with the exception of Kurtunwarey and other villages with access to protected wells) and poor sanitation are among the main cause of ill-health. Access to education is generally poor, but a formal education system is being developed in Marka and Kurtunwarey districts with the help of INGOs (Water for Life and Concern).

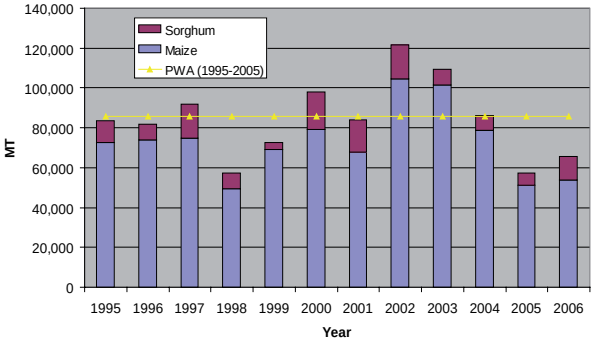
Financial capital: The availability of loans and credit generally is better than in other regions, due to the high level of economic activity in the region and the high production of surplus cereals destined for sale in the markets. Most riverine farmers have access to loans and credit from the better-off households and retailers of shops, due to crop

production prospects. In rainfed areas, poor rainfall this season and the cumulative effect of three consecutive seasons of crop failures means that less credit and fewer loans are available to agro-pastoral communities. Indebtedness is increasing in the rainfed areas.

Livelihood strategies: There are three main livelihood systems in Shabelle Valley outside of urban livelihoods, which are riverine farmers (irrigated farms), agro-pastoralists (rainfed farms and cattle rearing) and pastoralists (Map 20: Camel, sheep, goats and cattle). Both poor agro-pastoralists and riverine communities primarily rely on their own crop production for their food needs (65-80%), supplementing this with market purchases (10-20%) and animal products (0-15%). Poor agro-pastoralists earn 45-65% of their cash income through employment and self-employment, i.e. agricultural labour, gathering and sale of bush products and sale of livestock and livestock products (0-20%). Poor riverine farmers earn half of their income from crop sales (cereals and non-cereals), followed by seasonal casual labour.

Food sources: This is the second consecutive season of below-normal *Gu* cereal production in Shabelle Valley (Figure 28). The *Gu* '06 cereal production is estimated at 47,000 Mt (69% of the PWA) in Lower Shabelle and 18,700 MT for Middle Shabelle (109% of PWA) (Figure 28).

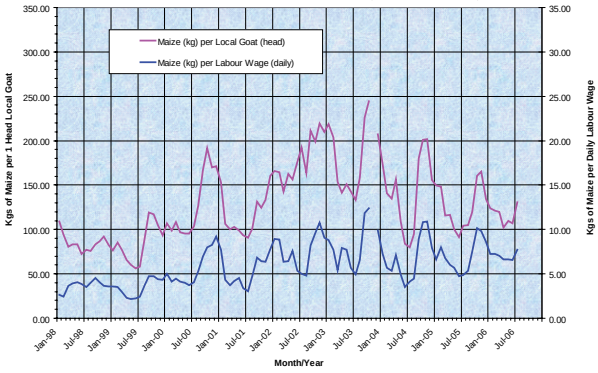
Figure 28: Shabelle Valley Cereal Production Trends Compared to PWA



The bulk of this season's cereal production is irrigated maize from areas along the river banks, as most rainfed cereal crops (in agro-pastoral areas) failed. Most wealth groups of riverine farmers are expected to benefit from their own harvest in September, however, agro-pastoralists will not have any significant cereal harvest. Many poor agro-pastoral households (rainfed farmers), particularly in Lower Shabelle, are already reliant on market purchases, as the previous cereal stocks are depleted and the consumption and sale of livestock products is exhausted.

Average maize prices in the Shabelle Valley increased 85% between Oct. 18 '05 and May '06, as a result of the below normal crop production of the *Gu* '06 and *Deyr* '05/'06 (Section 3.4 Figure 9). After May '06, maize prices began to fall in anticipation of the nearing crop harvest (August/September) in irrigated areas, and by July '06 had declined by 28% (as compared to May '06 levels). Maize prices are expected to decline further in the short-term, as the bulk of the harvest enters the market, but are expected to increase sharply again, due to the overall below normal *Gu* cereal production.

Figure 29: Terms of Trade in Shabelle Valley - Maize to Local Goat and Labour (1995-2006)



Agro-pastoral livestock production will be challenged by the poor pasture and water conditions, as well as by the competition for resources from the high concentration of in-migrated cattle from within Shabelle Valley and from as far away as Hiran region. Many of the poor agro-pastoral households will have limited milk supply and consumption at the household level until the next *Deyr* '06/'07 season.

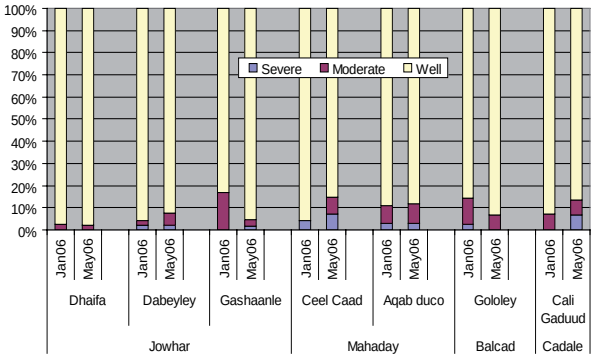
Income sources: Overall, agricultural labour is close to normal, with the exception of the lack of harvesting-related opportunities in rainfed areas. In agro-pastoral areas, opportunities for crop sales for the poor households will be limited as there are no carry-over stocks from previous crop seasons and they tend to keep their anticipated crops for consumption. Crop sales and fodder sales at the end of the harvest will contribute much to the income for a significant number of riverine communities. Terms of trade between maize and daily wage earnings has generally increased over the last ten years, with seasonal fluctuations (Figure 29). Currently, terms of trade between maize and daily wages is high (7.7 kg/labour day in July '06), but is lower than Nov. '05 (9.8 kg/labour day), but significantly higher still than in July 0'5 (4.8 kg/labour day). Terms of trade between local-quality goat and maize follow a similar fluctuation pattern, but are generally lower now than it was between 2002 and 2003 (Figure 29).

Expenditure: Cereal purchases currently constitute one of the largest expenditure items for poor agro-pastoralist households. In rainfed areas with reported water shortages, such as Farsooley and Toortorow areas of Qoryoley and Brava districts, households are also spending more on water for human consumption due to increased water prices; for example, one barrel of water costs around 20,000-30,000SoSh. Other expenses, such as fodder and animal drugs, remain the same and are considered at normal levels.

Coping Strategies: The most common coping strategies of the agro-pastoral livelihood in Shabelle Valley include water and pasture-related livestock migration to riverine areas, with the associated 'family splitting', leaving women and children behind. Many poor families are also seeking loans from better-off relatives and friends, some are share-cropping in riverine areas, and others are expanding production and sale of charcoal and other bush products. Other coping strategies include reduction of meals, significant curtailement of non-staple and non-essential expenditure, and increased livestock sales.

Nutrition Situation: Malnutrition levels remain within the typical levels for both regions (Middle and Lower Shabelle), which are generally lower compared to other regions in Southern Somalia. Dietary diversity and low morbidity levels are among the factors contributing to the better nutrition situation. In order of importance cereals, milk, fruits, sugar, pulses and oil are the commonly consumed food groups. Notably, a significant proportion of households consume micronutrient rich foods, namely milk, fruits, pulses and vegetables. However, malnutrition rates of agro-pastoralists in pocket areas of Mungiya and Roobow of Lower Shabelle and Gololey and Masajid Ali Gadud of Middle Shabelle are showing increasing trends (Figure 30). FSAU has intensified nutrition surveillance and set-up sentinel site surveillance in both regions to monitor the situation. Malaria and measles were reported to be the most prevalent diseases.

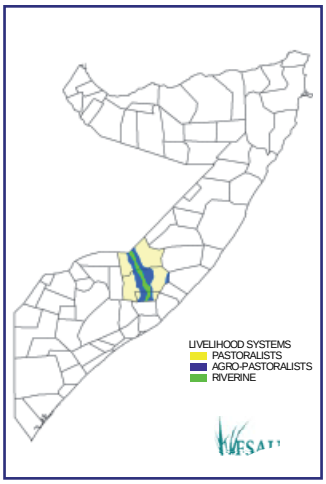
Figure 30: Distribution of Children's Nutritional Status in the Sentinel Sites in Middle Shabelle Region



4.1.6 Hiran region

Overview

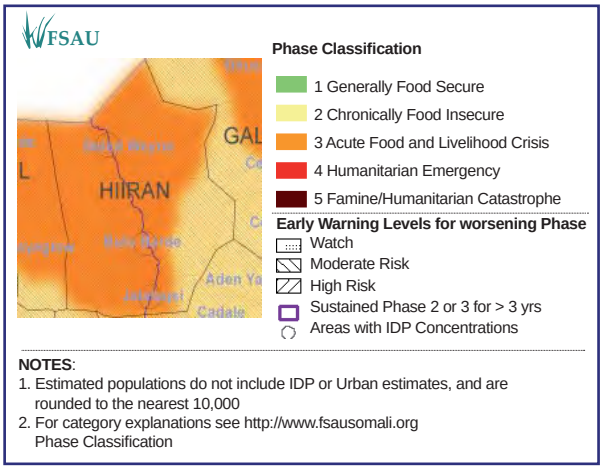
Map 21: Hiran Livelihood Systems



The food security and humanitarian situation in Hiran region has deteriorated in the last six months, from a High Risk to Acute Food and Livelihood Crisis for agro-pastoralists and riverine agriculturalists in the post *Deyr* '05/'06, to the current situation where the entire Hiran region is now identified in a state of **Acute Food and Livelihood Crisis,** with agriculturalists and agro-pastoralist at a **High Risk** to falling into a **Humanitarian Emergency before Dec. '06** (Map 22). An estimated 125,000 people, or roughly 38% of the entire Hiran region's population, are in an **Acute Food and Livelihood Crisis**, of which 32,000 are at high risk of **Humanitarian Emergency** (Table 18). The worst-affected are the people of the Southern Agro-pastoral Livelihood Zone, who number 90,000. Of the remaining 28% of the affected population, an estimated 21,000 people are pastoralists and 14,000 riverine agriculturalists (Table 19).

The immediate key driving force of the current crisis is a year-long drought in the region. Both satellite and ground assessments agree that the *Gu* '06 rains were well below normal (50-60% of long-term mean), and NDVI readings confirm that vegetative cover is very poor in many parts of the region. *Gu* '06 cereal production is considered a failure, estimated at around 30% of the post war average (PWA), and this season's poor harvest is preceded by a total crop failure in the *Deyr* '05/'06 and *Gu* '05, which were 3% and 7% of PWA, respectively.

Map 22: Food Security Phase Classification Hiran



Due to the lack of pasture and water, body conditions of all livestock are weak, and are expected to deteriorate further as the dry Hagaa season progresses. Many are concerned that livestock mortality, especially for cattle, will begin to occur before the *Deyr* rains arrive. Abnormal migration is ongoing to riverine areas within Hiran region, but also out-migration to Shabelle Valley riverine areas is occurring. *Gu* '06 calving and kidding rates for all livestock species are low, causing milk production to be below average. Conception rates are also low, which means that calving and kidding rates during the coming months will also be low, with further knock-on effects for future milk production and livestock herd sizes.

Access to cereal through purchases is limited for most of the poor wealth groups, as cereal prices increased and income, through livestock-related sales, crop sales, or employment, is low. Livestock prices have declined since January '06, due to deteriorating livestock body conditions. Between Jan.'06 and July '06, cattle prices in Belet Weyne decreased 32% (from 1,125,000 SoSh/head to 760,000 SoSh/head) and local goat prices declined by 25% (265,000 SoSh/head to 198,000 SoSh/head) (FSAU Market Update, August '06). The current terms of trade of goat to cereal are also low – in June '05 one goat traded for 175 kg of cereal, but in June '06 it only traded for 44 kg of cereal. Similarly, terms of trade for labour to cereal decreased by 133 % over this same period (21 kg/daily wage in June '05 to 9 kg/daily wage in June '06).

Table 18: Estimated Population by District in Humanitarian Emergency (HE) and Acute Food and Livelihood Crisis (AFLC), inclusive of the High Risk Groups in Hiran

Affected Regions and Districts	Estimated Population of Affected Districts [1]	Assessed and Contingency Population in AFLC and HE		
		Acute Food and Livelihood Crisis (AFLC) [2]	Humanitarian Emergency (HE) [2]	Total in AFLC or HE as % of Region Population
Hiran				
Belet Weyne	172,049	57,000	18,000	44
Bulo Burti	111,038	31,000	13,000	40
Jalalaqsi	46,724	5,000	1,000	13
SUB-TOTAL	**329,811**	**93,000**	**32,000**	38

See Appendix 5.2.2 for Footnotes

Table 19: Estimated Population by Livelihood Zone in Humanitarian Emergency (HE) and Acute Food and Livelihood Crisis (AFLC), inclusive of the High Risk Groups in Hiran

Affected Regions and Livelihood Zones	Estimated Population of Affected Livelihood Zones [1]	Assessed and Contingency Population in AFLC and HE		
		Acute Food and Livelihood Crisis (AFLC) [2]	Humanitarian Emergency (HE) [2]	Total in AFLC or HE as % of Region Population
Hiran				
Southern Agro-Pastoral	159,299	65,000	25,000	56
Hiran Riverine	38,533	7,000	7,000	36
Southern Inland Pastoral	73,878	9,000	0	12
Ciid Pastoral	34,410	12,000	0	35
SUB-TOTAL		93,000	32,000	

See Appendix 5.2.3 for Footnotes

Other factors that contributed to the severity of **Acute Food and Livelihood Crisis** in this region include the recurrence of conflicts, population displacement and restrictions in market access, which are undermining the coping strategies and livelihoods options of the rural populations in the region.

Cattle Browse to Survive, Belet-wein, Hiran July '06.

Effects on livelihood assets:

Natural capital: Due to poor rains during the *Gu* '06 season, around 90% of the water catchments in rural areas of the region remain dry. Pasture conditions, both grazing and browsing, are also very poor and may not support the livestock in the region up to the coming *Deyr* '06/'07 rainy season. Livestock body conditions are currently poor, especially for cattle. Livestock body conditions will deteriorate further before the expected *Deyr* rains not only because of below-normal water and pasture availability, but also because of longer trekking times between grazing lands and water points, as the distance between the two increases. Fodder prices are increasing, as demand is increasing and availability of fodder is limited. Currently, the market price of fodder is around 4,000 SoSh/bundle, instead of the normal price of 2,000 SoSh/bundle. This price trend is anticipated to continue to increase up to the onset (mid- October) of the coming *Deyr* season.

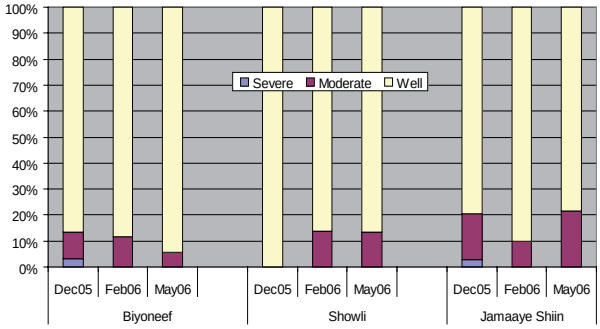
Physical capital: Shabelle river levels are normal, which means that riverine and agro-pastoral communities will not have a water problem. However, lack of water availability is the major problem in pastoral areas, as around 90% of the water catchments in the area are currently dry. Overcrowding by all livestock species at the limited number of boreholes has led to overworked and failing water pumps. Roads and general infrastructure are in a poor state following a general lack of maintenance in the last sixteen years. Increased roadblocks, particularly between Bulo Burti and Jalalaqsi districts, contributed to increased prices of cereals and other commodities. Successive floods have destroyed infrastructure like bridges, irrigation pumps and canals, as well as river embankments. Floods have become normal seasonal occurrences that destroy early planted crops along the river at harvest stage, particularly in Jalalaqsi district.

Social capital: Normally**,** social support systems are based on gifts from relatives and religious support. This support has declined due to the poor crop harvest, as well as below normal livestock production and body conditions. Local social support networks are also weakened by localized insecurity, as clan conflicts have persisted in the region and directly affected urban communities, of which many are the displaced people (in Bulo burti and Jalalaqsi towns, around 1000 to 1,500 households are displaced people), and indirectly affected agro-pastoral and riverine communities as host communities. The main social support currently available for poor and IDPs is to borrow food from better-off relatives, and this support is anticipated to decline as the dry *Hagaa* season progresses.

Financial capital: Access to credit is very limited. Cereal crop production, both in irrigated and rain fed areas, has failed, with total cereal production of the *Gu* '06 estimated at 33% of the Post War Average. Cereal prices are significantly above normal levels, and poor households are already indebted as the result of previous expenditure deficits. The main sources of household indebtedness are water (mainly pastoralists), food and agricultural inputs. Trust-based credit from better-off relatives (within the different livelihood zones, as well as from traders in the urban centers), has also declined due to the generalized poverty brought on by successive rain failures. The average level of indebtedness for poor households is currently over 140% of the last *Deyr* '05/'06 seasons' debt levels.

Human capital: Acute malnutrition in the region remains high and within the usual range of 15-19.9% in Beletweyne and 10-14.9% in BuloBurti and Jalalaqsi. Data from nine sentinel sites in BuloBurti and Jalalaqsi indicate a rising trend. This is associated with poor dietary diversity (Figure 31) following poor access of cereal through purchase, low crop and livestock production, and an outbreak of measles. There are a limited number of health posts and facilities minimizing access. According to SLIMS data, school attendance declined over 60%, due to insecurity and temporary displacement.

Figure 31: Propotion of Children from Households Consuming Different Food Groups in Sites within Buloburit District



Effects on livelihood strategies

Generally, under normal conditions, agro-pastoral and riverine communities rely primarily (almost 50-70%) on their own crop production, followed by purchases. Pastoralists rely on market purchases, supplemented with own livestock production consumption. Poor riverine agriculturalists earn some of their income from crop sales (25-40%), as well as employment (5-15%), self-employment (25-35%) and honey production (5-1-%%). For poor pastoralists, 45-55%% of all income is derived from livestock sales and livestock product sales, 25-30% from self-employment, 5-15% from social support, and 5-15% from other sources.

Food source: Access to cereal is very strained due to the combination of failed cereal production, below-normal household cereal stocks and increasing market cereal prices. Between June '05 and June '06 in Beletweyne, the price of red sorghum increased 62%, from 1,600 SoSh/kg in June '05 to 4,200 SoSh/kg in June '06. Similarly, the white sorghum price in Belet Weyne increased 56% during the same time period (from 3,200 SoSh/kg in June '05 to 5,000 SoSh/kg in June '06 (Section 3.4, Figure 9). The price of white maize in the same market over the same time period increased 21%. All cereals available in the main markets are either imported cereals, relief food from within Somalia and/or from Ethiopia, or imported from other producing regions, mainly Bay and Bakool. The cereal supply from Ethiopia is not dependable due to the successive floods that destroyed crop production in Ethiopia. Due to reduced employment opportunities, declined livestock market value and increased cereal prices, terms of trade such as labor to cereal and goat to cereal declined significantly.

Income source: Agricultural labour, employment, self-employment, and fodder and crop sales are the main income sources for agriculturalists and agro-pastoralists in the region. However, due to the poor *Gu* '06 season, the availability of and the access to these income sources are well below normal, especially agricultural labour and crop and fodder sales. Livestock prices have declined since January '06, due to declining livestock body conditions. Between January '06 and July '06, cattle prices in Belet Weyne decreased 32% (from 1,125,000 SoSh/head to 760,000 SoSh/head) and local goat prices declined by 25% (265,000 SoSh/head to 198,000 SoSh/head). The current terms of trade of goat to cereal is also low: in June '05 one goat traded for 175 kg of cereal, but in June '06 it only traded for 44 kg of cereal. Similarly, terms of trade for labour to cereal decreased by 133 % over this same period (21 kg/daily wage in June '05 to 9 kg/daily wage in June '06) (FSAU Market Update August '06).

Self-employment activities, such bush product collection (fire wood collection, charcoal production, etc) have increased, and the price of charcoal dropped by 25% in June '06 as compared to the same time last year. This drop in charcoal prices is mainly attributed to increased supply, as many poor households opted to engage in charcoal production as alternative income sources. A significant number of households from agro-pastoral and riverine communities are migrating into the main towns, like Belet Weyne. However, labour migrants from Ethiopia into Belet Weyne town has increased the competition of the limited labor opportunities in the town, as well as reduced the daily wage rate of unskilled activities.

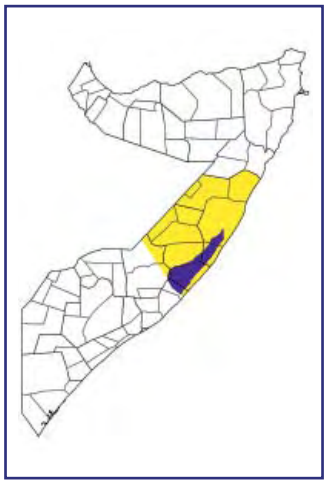
Expenditure: Household expenditure across all livelihoods has significantly increased due to their reliance on expensive market staple cereals. Non-staple food prices in the market have also increased. The price of sugar increased 29% in June '06 as compared to the same time last year (June '05 to June '06). Diesel prices, which are very important for irrigation pumps along the river, increased 22%, from 9,000 SoSh/liter in June '05 to 11,000 SoSh/litre in June '06 (FSAU Market Update August '06). Staple food price increases, coupled with declining income earning options, have led to erosion in purchasing power for all livelihood groups, and placed an extra burden on the poor.

Coping strategies: Several distress coping strategies are observed including, human migration to urban centers, confused livestock migration, feeding cattle with fodder and sometimes grain at unaffordable prices, distress sale of the livestock (sale of large number of livestock at very low prices), family splitting and reduction number of meals from three to two meal per day. Sale of premature and irrigated crops for fodder and premature crop consumption in irrigated areas is also observed, especially in the riverine areas of Jalalaqsi district. Among the pastoral community, there is the beginning of a shift in consumption patterns, from cereal to wheat flour, due to the poor availability and high price of cereals. Most of the poor of all livelihood groups, are seeking social support, for which there is not enough available to meet everyone's needs.

4.2 CENTRAL REGION

Overview

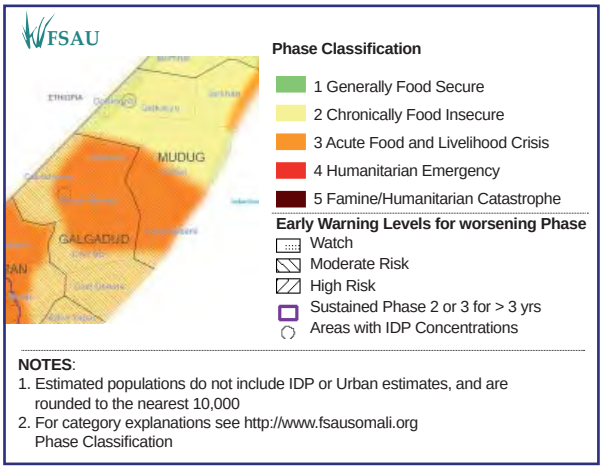
Map 23: Central Region: Livelihood Systems



Parts of Galgadud and south Mudug, previously recovering from **Humanitarian Emergency (***Gu* '04 and *Deyr* '04/'05, see Appendix 5.1.3 for timeline), remain in an **Acute Food and Livelihood Crisis.** However, the situation is deteriorating, which is reflected in an increase in population in this phase, estimated at 70,000 people (an increase of over 10,000 people from the post *Deyr* '05/'06 assessment) (Table 20 and Map 24).

Field assessments confirm that overall cumulative *Gu* '06 rainfall was well below normal, localized and poorly distributed through the season within the area identified in Acute Food and Livelihood Crisis. In pastoral areas, water availability and pasture conditions are poor (apart from pockets in Balanballe and Haradheere districts) and body conditions for all species are poor and deteriorating. In areas that did receive good rains, competition for available resources (also due to livestock in-migration from Warder, Somali Region Ethiopia) will lead to a rapid depletion of pasture and water resources. Rural communities in Galgadud and south Mudug regions are normally dependent on rainwater harvesting (*berkads*). Currently, water availability is considered poor, and early water trucking has started in parts of Eldheer, Adado, Dusamareb, Guricel, Balanballe and Abudwak districts. Cowpea production in Harardhere and Eldheer districts has completely failed, as a result of the below-normal *Gu* '06 rains. Cereal prices have increasing, and commercial imports of other non-cereal commodities are high and increasing.

Map 24: Food Security Phase Classification Central Region



Insecurity in Hobyo, Haradheere, Cadaado and Gellinsoor continues to disrupt pastoral livelihoods, displace populations, create large concentrations of IDPs, and disrupt regional and intra-regional trade. The Central region has faced long periods of insecurity related to land ownership and natural resources (pasture and water in particular) and political issues. In the last few months, it is reported that the number of IDPs within the region has increased and is more concentrated (following the recent conflict in Mogadishu), especially in the districts of Adado, Elbur, Hobyo, Haradhere and Bandiradley. Taken together, these factors, along with well below-normal rains this *Gu* '06 season, are leading to a deterioration in livelihoods and compromising the gains made in recovery over the last two seasons.

Table 20: Estimated Population by District in Humanitarian Emergency (HE) and Acute Food and Livelihood Crisis (AFLC), inclusive of the High Risk Groups in Central Region

Affected Regions and Districts	Estimated Population of Affected Districts [1]	Assessed and Contingency Population in AFLC and HE		
		Acute Food and Livelihood Crisis (AFLC) [2]	Humanitarian Emergency (HE) [2]	Total in AFLC or HE as % of Region Population
Galgadud				
Abudwaq	41,067	2,000	0	5
Adado	45,630	6,000	0	13
Dusa Mareb	91,260	16,000	0	18
El Bur	79,092	18,000	0	23
El Der	73,008	0	0	0
SUB-TOTAL	**330,057**	**42,000**	**0**	13
Mudug				
Galkayo	137,667	0	0	0
Goldogob	40,433	0	0	0
Haradhere	65,543	9,000	0	14
Hobyo	67,249	20,000	0	30
Jariban	39,207	0	0	0
SUB-TOTAL	**350,099**	**29,000**	**0**	8
TOTAL	**680,156**	**71,000**	**0**	10

See Appendix 5.2.2 for Footnotes

Effects on Livelihood Assets

Dried Berkads in El-dher, Galgadud, July '06.

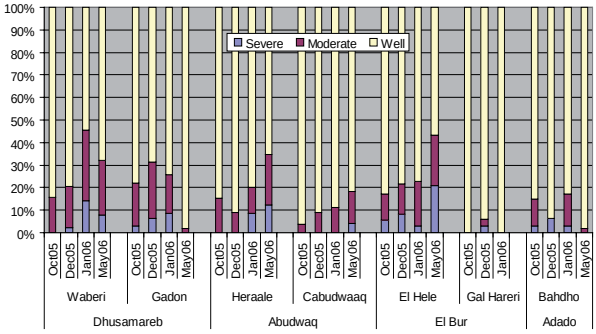
Natural Capital: Galgaduud region and south Mudug received below average *Gu* '06 rains, with poor distribution across the region and over the season. As a result, the availability of water and pasture in many areas is poor. *Berkad* water-dependent communities in Adado, Abudwak, Elder, Dhusamareb and Guricel have started early water trucking, as the majority of the *berkads* in these districts are empty. Pockets in Haradhere and Balanbale districts that received early good rains attracted large in-migrating livestock from Zone V of Ethiopia (towards Balanballe) and within the region. This has increased grazing pressure on available rangeland and water resources, which will not support the livestock up to the next wet season (*Deyr* '06/'07). As in the *Deyr* '05/'06 season, the advance of mobile sand dunes to grazing lands remains a concern in Harardhere and Eldher.

Physical Capital: Roads and basic transport infrastructure are poor and deteriorating, making the central region one of the most isolated, costly, and difficult to reach. In the coastal districts of Haradhere and Eldheer, the encroachment of mobile sand dunes on roads limits transportation movement, resulting in higher costs of commercial goods. The tarmac road that links the central regions to Galkacyo, Hiran, and Mogadishu is in very poor condition, with numerous potholes, which make the tarmac road impassable. Water infrastructure, such as *berkads* and shallow wells, is not well maintained or protected, and thus there is a high incidence of water-borne diseases and poor sanitation.

Social Capital: Social support systems are generally in the form of in-kind transfer of gifts, such as livestock, milk, and cowpeas, but cash is also given as gifts. However, due to below-average *Gu* '06 rains, cowpea production failure, low livestock milk production, as well as livestock market value throughout the region, social support (*kaalmo, irmansi and amah*) is weakened and is considered below normal, but still remains important in the area.

Human Capital: Estimates of Global Acute Malnutrition (WHZ < -2 z scores or oedema) of 15-19.9% in Dhusamareeb and Adado districts and 20% and above in Abudwaq and Elbur (Galgadud region) indicate a critical nutrition situation in the Central region. Sentinel site surveillance data indicates an increasing and worrying trend in Abudwaq and Elbur districts (Figure 32). Most of the malnourished children cases reported in the region are attributed to diseases and poor dietary practices, with three or less food groups consumed. Most primary schools in this region use different syllabi and are lacking a co-ordinated curriculum for primary education. Therefore, the quality of the education in terms of school attendance rates and course content is poor.

Figure 32: Distribution of Children's Nutritional Status in the Sentinel Sites in Galgadud Region



Financial Capital: Due to the limited ability of households to repay their accumulated debts from past borrowing, rural households now have difficulty in getting access to credit from their urban sources. The two main reasons for indebtedness of the poor and middle wealth groups in most parts of this region are staple food and water, resulting from the below-normal rains of *Deyr* '05/'06 and the *Gu* '06. Declining livestock body conditions, poor milk production, and declining prices for both, means that financial flows from the sales of these are reduced for pastoralists.

Effects on Livelihood strategies

Understanding the main sources of food and income is important in identifying the overall impact of different hazards on food and livelihood security. Under normal conditions, all pastoralists in this region, irrespective of their wealth groups, rely on livestock and livestock product sales for income generation (65-75%). The exception is the poor wealth groups, whose livestock income (35-45%) is supplemented by self-employment and employment (40-50%). All pastoralists purchase most of their food needs, which consist mostly of rice or sorghum, sugar and oil. The consumption of their own livestock products (meat, ghee, and milk) makes up the balance of their food needs (15-35%) (see FSAU Baseline Profiles).

Food source: In Elder and Harardher districts, the main cowpea production belt, the cowpea crop production failed at the establishment stage in most areas due to poor rains. Therefore, agro-pastoral crop production consumption and sales are insignificant. Agro-pastoral households are coping with this shortfall in their own production by purchasing on the market, by selling more livestock, and borrowing on credit.

For pastoralists, the main source of food is market cereals, mainly rice and sorghum, which they purchase by selling livestock and livestock products. Both rice and sorghum prices are high and show increasing trends. Between Jan. '06 and July '06, imported rice prices increased 5%, while, sorghum prices during this same time period increased significantly more, by about 30% (Figure 33).

Non-cereal import commodity prices in Central region are the highest and show the largest price increase as compared to the rest of the country. Between Nov. '05 and June '06, all key import commodity prices increased significantly: sugar increased 30%, vegetable oil 61%, and petrol 24% (Figure 34). Prices dropped slightly in July '06, but are still very high.

Figure 33: Rice & Sorghum Prices in Galkayo

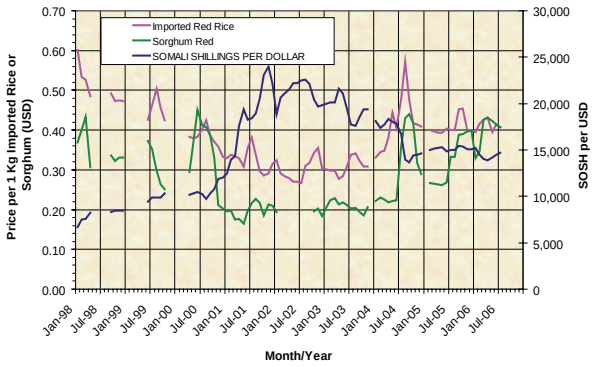
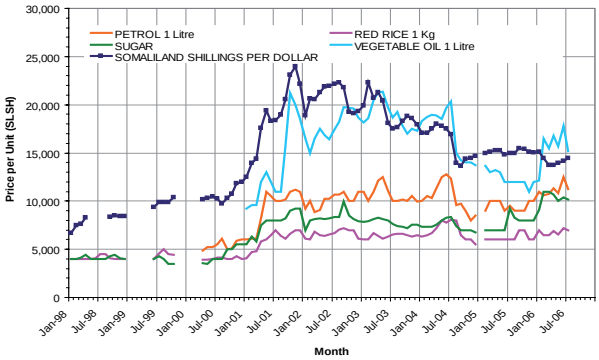


Figure 34: Central: Trend in Imported Commodity Prices compared to Exchange Rate



Income Source: The main income source for pastoralists comes from livestock sales and livestock product sales. However, due to below-normal milk production and reduced livestock market prices, incomes are constrained. Between April and July '06, local goat prices decreased 22% and 39%, respectively in Abudwaq and Dhusamareb markets. Similar decreasing trends of local goat prices in the other district livestock markets are also observed and reported. Lower livestock market prices are mainly attributed to deteriorated livestock body conditions, as the result of poor rangeland conditions due to below-normal *Gu* '06 rainfall. Income from milk sales is also limited, as milk production for most of the region is below normal, due to declining livestock body conditions, low rates of calving among camel and cattle, and low to no kidding for sheep and goats. Worryingly, the *Gu* '06 season's conception rates for cattle are low to none, those of sheep and goats are low to medium, and camels have not conceived at all. This has knock-on effects in the coming seasons, as it translates into low calving and kidding rates for the next cycle, thus negative implications for herd sizes and future milk production.

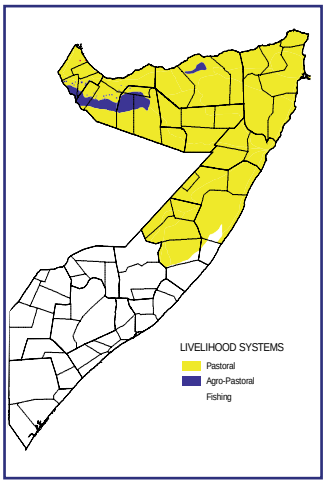
Expenditure: As a result of high and increasing staple cereal prices, non-staple food prices, and water (in some areas), household expenditure is in general high and increasing. Purchasing power of pastoralists is also reduced due to falling livestock prices, limited livestock product sales (milk, ghee and meat), and increased cereal and non-cereal market prices. In areas where early water trucking is reported, many pastoralists will be forced to access loans and credit to meet the increased expenditure needs, thus increasing cumulative debts.

Coping strategies: Conflict-induced migration of pastoral households, both in terms of seeking protection and support from relatives, is occurring due to unsettled conflicts in parts of Galgadud and south Mudug. Pastoralists have begun to sell more animals in order to survive their increased hardships, and it is reported that there is an increase in pastoralists seeking social support and loans, mainly from better-off relatives in the main towns.

4.3 NORTHEAST AND NORTHWEST SOMALIA

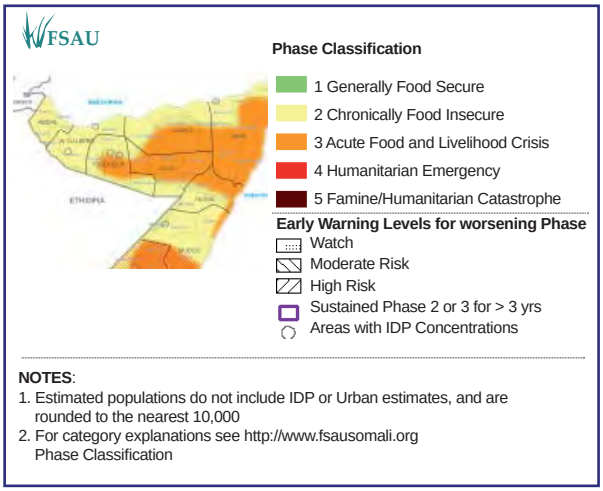
Overview

Map 25: North and Central Regions: Livelihood Systems



There has been a significant recovery in pastoral livelihoods over the last four seasons in the Nugal, Sool and eastern Hawd livelihood zones, an area which from 2002-04 suffered one of the worst prolonged droughts in decades and which in turn accelerated an environmental crisis (see Appendix 5.1.3 for timeline of the crisis in the north). The area, however, still remains in a state of **Acute Food and Livelihood Crisis,** although the population in this phase**, estimated at 100,000**, is roughly half what it was estimated at during the post *Deyr* '05/'06 assessment. In some areas of Huddun and Taleh of Sool, parts of Sanaag, and Togdheer, however, the *Gu* '06 rains were below normal, which is creating a setback in recovery for pastoralists from these areas. A part of the area within Qandala, Alula and Iskushuban districts of northeast Bari, which was identified with an early warning level of **Watch** in the post *Deyr* '05/'06 analysis, along with the coastal fishing area of Eyl and Jariiban districts, are now considered to be in **Acute Food and Livelihood Crisis** (Map 26). The total number of people in Acute Food and Livelihood Crisis in the northern region is therefore estimated at **134,000** people (Table 21).

Map 26: Food Security Phase Classification- North



Although some areas in Acute Food and Livelihood Crisis are showing a continuing improving trend until Dec. '06, due to good *Gu* '06 rains, other areas rains were not as good, as a result the livelihoods of poor pastoralists still in recovery faced with increased livelihood stress. In areas receiving below normal *Gu* '06 rains, water and pasture availability is poor to average. Increased livestock off-take and debt levels have been reported in these areas to cover water trucking costs during the *Jilaal* season. These areas include, parts of the Hawd pastoral areas of Togdheer, Sool and Sanag (Badhan, Dararweyne, El Afweyn, Fiqi Fuliye, parts of Taleh, Hudun and Lasanod) and agro-pastoral of Odweyne in Northwest and Iskushuban, Alula, Kandala, Bossasso, Gardo, Dangarayo, Jerriban and Eyl of Northeast.

A decline in income during the last fishing season (October '05 to April '06) and from frankincense production (in the Gagaab pastoral area of NE Bari) has contributed to an overall decline in food and livelihood security status in these areas. The Hawd of western Burtinle and Galdogob districts, and the Hawd of Hargeysa, are in an early warning level of **Watch** due to poor water and pasture availability, with abnormal livestock migrations observed. Both these areas will require close monitoring over the coming six months.

Livestock body conditions in both regions are average to good (except poor body conditions of the in-migrated livestock from Zone V Ethiopia). In general, livestock recovery continues, although at a lower rate in areas that experienced poor *Deyr/Heys* '05 and *Gu* '06. The post *Gu* '06 livestock herd dynamics survey found significant increases in livestock holdings between April '05 and March '06 in the Northeast (30 – 40% increase for camel, and 10-20% increase for sheep/goats) and positive, but lower increases in livestock holdings in the Northwest (5 – 10% increase for camel, and 5-10% increase for sheep/goats). Increased spending on water trucking during the *Jilaal* season was a significant problem for pastoralists in areas where rains were poor in *Deyr*/*Heys* '05/'06 and *Gu* '06.

Effects on Livelihood Assets

Natural Capital: Pasture and water are generally average to poor in the northeast and northwest regions, due to the mixed performance of rains in the *Gu* '06 and preceding (*Gu, Deyr and Heys)* seasons. Some areas within both regions are, however, experiencing below-average conditions, limited water and rangeland resources. Shortages of pasture in the Northwest (*Hawd of Hargeisa, Odweyne in Togdher, Ainabo, Badhan, parts of Hudur and Taleh and eastern part of Lasanod*) and the whole of the Northeast, with the exception of Sool and Nugal Valley livelihood zones, prompted normal and abnormal livestock migrations towards Zone V of Ethiopia, Balliweyn and Odweyne of Togdheer and the foothills of the extended Golis highlands. Although water availability is average, acute water shortages are reported from the coastal areas, the eastern part of Addun livelihood, the western Hawd in Burtinle and Goldogob, eastern Gebi and Gagaab livelihoods in the northeast, Sarar and Hawd area in Togdher and Ban'adde

Table 21: Estimated Population by District in Humanitarian Emergency (HE) and Acute Food and Livelihood Crisis (AFLC), inclusive of the High Risk Groups in Central Region

Affected Regions and Districts	Estimated Population of Affected Districts [1]	Assessed and Contingency Population in AFLC and HE		
		Acute Food and Livelihood Crisis (AFLC) [2]	Humanitarian Emergency (HE) [2]	Total in AFLC or HE as % of Region Population
Bari				
Bender Beila	14,376	2,000	0	14
Bossaso	164,906	0	0	0
Calula	40,002	0	0	0
Gardo (includes Dangoroyo)	81,156	16,000	0	20
Iskushuban	45,027	6,000	0	13
Kandala	42,502	4,000	0	9
SUB-TOTAL	**387,969**	**28,000**	**0**	7
Nugal				
Burtinle	34,674	0	0	0
Eyl	32,345	3,000	0	9
Garowe	57,991	5,000	0	9
SUB-TOTAL	**125,010**	**8,000**	**0**	6
Sanag				
Las Qoray (includes Badhan)	89,724	17,000	0	19
Ceel Afweyn	65,797	5,000	0	8
Ceerigaabo	114,846	5,000	0	4
SUB-TOTAL	**270,367**	**27,000**	**0**	10
Sool				
Caynaba	30,702	2,000	0	7
Laas Caanood	75,436	5,000	0	7
Taleh	25,354	12,000	0	47
Xudun	18,785	8,000	0	43
SUB-TOTAL	**150,277**	**27,000**	**0**	18
Togdheer				
Buhodle	38,428	1,000	0	3
Burco	288,211	19,000	0	7
Odweine	42,031	2,000	0	5
Sheikh	33,625	0	0	0
SUB-TOTAL	**402,295**	**22,000**	**0**	5
Coastal Fishing		**22,000**		
TOTAL	**1,335,918**	**134,000**	**0**	**10**

See Appendix 5.2.2 for Footnotes

plains of Sanag region; availability of water for livestock and humans will be severely strained over the months to come if *Deyr* rains prove poor and inadequate.

Physical capital: Most of the strategic boreholes in the northwest are operational, with the exception of Armale and Baragaha Qol in Sanaag region. Conversely, a significant number of the boreholes in the northeast, particularly in Qardho, Adinsoore, Rako and others, are not functional, and many *berkads* are broken and require rehabilitation. The road infrastructure in both regions, particularly the coastal and Golis zones in the northwest and much of the northeast, remains poor, severely limiting access to markets and other services for pastoral livelihoods.

Social capital: The ongoing recovery since the *Gu '05* in parts of the northern regions is helping reduce the reliance on the weakened social support systems among the pastoralists. However, the system continues and might potentially increase in areas currently under **Acute Food and Livelihood Crisis** and which are experiencing three consecutive seasons of below-average rains and poor rangeland conditions. Traditional and local social support (*kaalmo, zakaat, ir-maansi, amah, etc.)* remains an important social asset, which households can rely on in periods of shock and stress.

Human Capital: Access to primary and secondary schooling for pastoralists in the northeast and northwest remains limited, as there are either few or no schools in pastoral areas, or pastoralists are unable to afford school fees. Access and enrolment rates are, however, improving in the northwest (Hargeisa, Awdal and Togdheer) due to school feeding, mobile schools and alternative school programmes implemented by WFP, SC UK and SC Denmark, respectively. Overall, the nutrition status throughout the northern regions remains within the typical long-term range, with the exception for IDPs in Bosasso, Garowe, Galkayo and coastal community of Eyl in the northeast and Burao and Berbera in the northwest, which is above the usual range, i.e. >15% (WHZ <-2 z-score or oedema).

Financial capital: In general, the level of indebtedness is decreasing in the areas identified in Acute Food and Livelihood Crisis, particularly in areas that received average to above-average *Gu* '06 rains, as there are improved rangeland conditions, increased livestock reproductivity and production (milk and meat), all of which have boosted the income of pastoralists. Debt levels (with an average of $150-300 per household) remain the same or are increasing in areas with poor *Deyr/Heys* '05/'06 *and Gu* '06 rains, due to increased costs of water trucking during the dry *Jilaal* in January - April '06. Pastoralists financially benefited from improving livestock prices from February - May '06 and high export demand during the peak Hajj season. The average price of export quality goat (February - June '06) increased by 15 – 30% in Bosasso,Galkayo, Hargeisa, and Burao markets ,as compared to the same period in 2005.

Improved Goat Body Condition, Harada, Togdheer.

Livelihood strategies: A basic understanding of how pastoralists make ends meet (access to food and income, expenditure patterns) in a normal situation provides a basis for analyzing the impact of a particular shock or combination of shocks, such as drought, conflict, outbreak of diseases, etc. and how they cope with these shocks in terms of access to food and income. In northern regions, most pastoralists normally rely on food purchases, which account for 60-80% of their annual food needs in an average year. Livestock products (milk and meat) from the pastoralists' herds make up the remaining food basket. Additionally 50-65% of the poor pastoralists' income is derived from livestock sales while 25-30% is from employment and 15-25% from livestock product sales. Middle and better-of pastoralist households, generally, earn most of their income from livestock and livestock product sales.

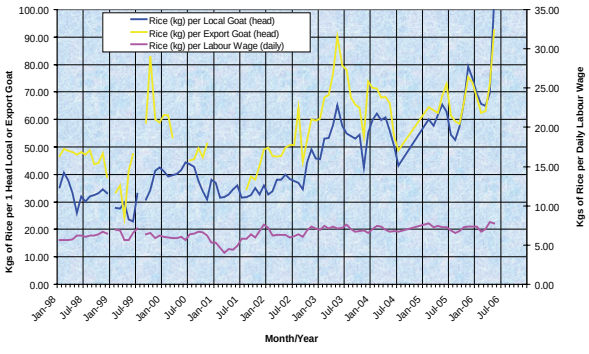
Food sources: Due to the recovery over the last three wet seasons in Northeast and Northwest regions, access to food through production and purchase is considered normal. However, areas that have had poor climatic and grazing conditions over the seasons are currently experiencing limited access to milk, as they prefer to sell the available amount in order to purchase food and other necessities. In Hargeisa and Burao markets, average cereal (rice) prices were fluctuating, but gradually increased by 7% between Jan. '06 and July '06 (from $0.42/kg to $ 0.45/kg) and by 15% in Bosasso and Galkayo markets ($0.40/kg to 0.46/kg) (FSAU Market Update Aug. '06).

Income sources: Generally, livestock body conditions are average to good, with normal conception and reproduction rates, hence normal milk and ghee production. This positive trend in livestock production corresponds with increased opportunities for livestock and livestock product sales. In addition, livestock holdings are continuing to increase, especially in the northeast. It is roughly estimated from the *Gu* '06 assessment pastoral herd size dynamics survey that in the northeast between April '05 –March '06, camel and sheep/goat holdings increased 30-40% and 10-20%, respectively. Livestock holdings also indicate increased trends over the same period, but not as large (5– 10% increase for both camel and sheep/goats).

Export quality goat and sheep prices show a continuous and steady increasing trend over the past year in most of the main reference markets in the north (Galkayo, Hargeisa, and Bossaso). Prices reached a peak during April '06, but are still between 5-15% higher in July '06 than they were at the same time last year. Prices of export-quality shoats (sheep and goats) are expected to increase over the coming months, with increased demand for the Eid al-fitr festival at the end Ramadan (late October '06), followed by the Hajj period in early January '07.

Terms of trade for pastoralists in the north, generally, are high, with an increasing trend over the past two years of pastoral recovery (Figure 35). In the northwest, the terms of trade between export-quality goats and imported red rice fluctuated between January and July '06, in response to the seasonality of the peak export season, but by July '06 were still 5-15% higher than in they were in July '05 (FSAU Market Update, August '06). A similar pattern is found in the northeast, with fluctuating terms of trade between January '06 and July '06, but by July '06 terms of trade were still 21% higher as compared to the same time last year (Figure 35).. Terms of trade between rice and labour for the poor slightly increased by 2% in the northeast, while in the northwest it increased by 5% between January'06 and July '06.

Figure 35: Terms of Trade in Northeast - Rice to Local or Export Goat & Labour (1998-2006)



Expenditure: In areas of poor *Deyr* '05/'06 performance, pastoralists experienced increased expenditure in water trucking during the *Jilaal* (Jan.-April '06) due to empty *berkads* and high water costs at boreholes, which has further increased debt levels for pastoralists in these areas. Water prices in the Hawd of Togdher, for example, where up to $2.5 per drum, i.e. five-fold of the average rate ($0.5/drum), while similar conditions are also experienced in large parts of the northeast (apart from Sool and Sanag regions). Generally, however, expenditure for most pastoralists is manageable due to significantly improved terms of trade or (purchasing power) over the last two years.

Impoved Sheep Body Conditions, Garowe-Addo-Dhero, Nugal Region, July '06.

Coping strategies: In the rain-deficit areas, distress social support, such as *kaalmo* and loans, was reported during the *Gu* '06 assessment. Livestock migration is a common coping strategy for pastoralists. This season, large-scale and early abnormal migration from the foothills of the uplands and Gebi valley to Sool plateau and from Zone V (Ethiopia) to the Hawd of Goldogob is reported. Out-migration of livestock with herders is commonly apparent in parts of Sool, Sanag and Togdher regions. The migration pattern to Zone V of Ethiopia is considered abnormal in Togdher, while the inter-regional livestock movements are regarded as normal. Another widely observed coping strategy for many poor wealth groups is charcoal burning, which is continuing unabated in many areas and is contributing to a worsening of the already degraded environment.

Good Sorghum Crop, Ijara Village, Galbeed July '06

Nutrition: Analysis of the nutrition situation indicates acute malnutrition rates are within the usual range in most parts of the northeast, except for IDPs centers and Eil town of Coastal Deeh in which GAM is in the range of 10-15% which is above the long term typical range and this is mainly due to limited access in food, poor child feeding practices and poor water and sanitation. High incidence of acute respiratory infections (ARI), diarrhea and malaria is also noted in Nugal Valley and Sool plateau. There is concern of a deteriorating nutrition situation in Aula, Kandala and Iskushuban areas and a nutrition assessment is scheduled for October '06 for detailed analysis of the situation.

Children Standing Outside Temporary Houses, IDP Camp, Bosasso.

In the other parts of Northwest, the current nutrition situation of Awdal, Galbeed, Togdheer, Sool and Sanag regions are within the long term levels. However, the Hawd of Hargeisa shows slightly higher than usual levels (11.4%) of malnutrition attributed to poor access to food and water, higher incidence of ARI, diarrhoea and measles. In IDPs/Returnees and urban poor populations the levels of malnutrition is higher than the long term levels in Burao and Berbera town which are 15.3% and 16.3% respectively. The immunization campaigns and Vitamin A supplementation were covered well throughout the regions of the northwest.

5. APPENDIX

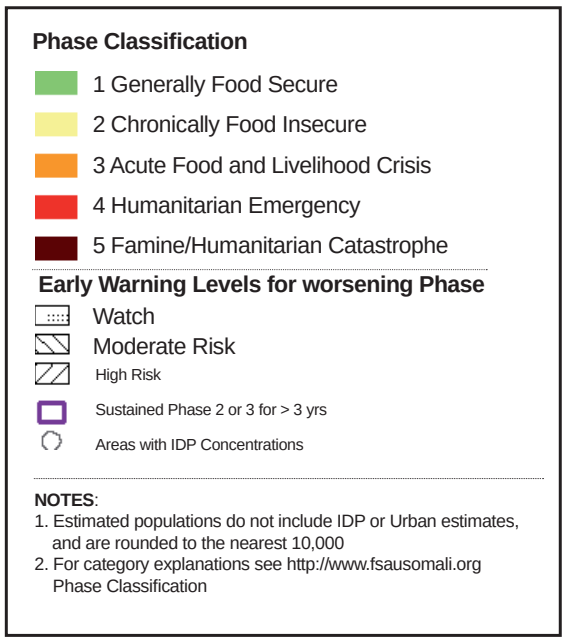
5.1. COMPONENTS OF THE FOOD SECURITY AND HUMANITARIAN PHASE CLASSIFICATION

5.1.1. Explanation of the Integrated Food Security and Humanitarian Phase Classification

Since February '04 the Food Security Analysis Unit for Somalia (FSAU[1]) has been using and progressively developing a tool to meet these challenges called the **Integrated Food Security and Humanitarian Phase Classification** (IPC[2]). Drawing from extensive literature on international humanitarian guidelines, aspects of existing classification systems, and *in situ* analysis of food security in Somalia, the IPC has consistently proven to improve analysis and enable more effective response. The IPC summarizes **Situation Analysis**, a distinct, yet often overlooked (or assumed) stage of the food security analysis-response continuum. Situation Analysis is a foundational stage whereby fundamental aspects (severity, causes, magnitude, etc) of a situation are identified—aspects for which there is optimally broad-based consensus by key stakeholders including governments, UN and NGO agencies, donors, the media, and target communities.

The analytical logic of the IPC is that varying phases of food security and humanitarian situations are classified based on outcomes on lives and livelihoods. Outcomes are a function of both immediate hazard events along with underlying causes, and the specific vulnerabilities of livelihood systems (including both livelihood assets and livelihood strategies). The outcomes are referenced against internationally accepted standards, and their convergence substantiates a phase classification for any given area. Each phase is associated with a unique strategic response framework, while the outcome configuration for any given situation guides the development of the most appropriate responses within that framework. While the phase classification describes the current or imminent situation for a given area, early warning levels are a predictive tool to communicate the risk of a worsening phase. Risk is a function of the probability of a hazard event, exposure, and the specific vulnerabilities of livelihood systems.

The IPC **Reference Table** guides analysis for both the **Phase Classification** and **Early Warning Levels**. The Phase Classification is divided into five **Phases**—***Generally Food Secure***, ***Chronically Food Insecure***, ***Acute Food and Livelihood Crisis***, ***Humanitarian Emergency***, and ***Famine/Humanitarian Catastrophe***. The five phases are general enough to accommodate a wide range of causes, livelihood systems, and political/economic contexts—yet their distinction captures essential differences in implications for action (including strategic design, urgency, and ethical imperative).



A comprehensive set of **Key Reference Outcomes** on human welfare and livelihoods are associated with each Phase to guide the classification, including: *crude mortality rate, acute malnutrition, disease, food access/availability, dietary diversity, water access/availability, destitution and displacement, civil security, coping,* and *livelihood assets.* The breadth of outcomes enables triangulation and ensures adaptability of the IPC to a wide variety of situations. Referencing the outcomes to international standards ensures comparability and consistency of the phase classification in different countries and contexts. The **Strategic Response Framework** unique to each Phase provides strategic, yet generic guidance to achieve three objectives: (1) mitigate immediate negative outcomes, (2) support livelihoods, and (3) address underlying/structural causes.

The Reference Table also includes three **Early Warning Levels**: (1) ***Alert***, (2) ***Moderate Risk***, (3) ***High Risk***. Each of these is associated with key information required for effective early warning: **Probability**, **Severity**, **Reference Hazards and Vulnerabilities**, **Implications for Action,** and **Timeline**.

The **Analysis Templates** are tables which organize key pieces of information in a transparent manner and facilitate analysis to substantiate a Phase Classification and guide response analysis. The **Cartographic Protocols** are a set of standardized mapping and visual communication conventions which are designed to effectively convey key information concerning situation analysis on a single map. The **Population Tables** are a means to consistently and effectively communicate population estimates by administrative boundaries, livelihood systems, and livelihood types.

5.1.2 Integrated Food Security and Humanitarian Phase Classification Reference Table (FAO/FSAU June '06)

Phase Classification		Key Reference Outcomes *(current or imminent outcomes on lives and livelihoods; based on convergence of evidence)*		Strategic Response Framework *(mitigate immediate outcomes, support livelihoods, and address underlying/structural causes)*
1	Generally Food Secure	*Crude Mortality Rate*	< 0.5 / 10,000 / day	Strategic assistance to pockets of food insecure groups Investment in food and economic production systems Enable development of livelihood systems based on principles of sustainability, justice, and equity Prevent emergence of structural hindrances to food security Advocacy
		Acute Malnutrition	<3 % (w/h <-2 z-scores)	
		Stunting	<20% (w/age <-2 z-scores)	
		Food Access/ Availability	usually adequate (> 2,100 kcal ppp day), stable	
		Dietary Diversity	consistent quality and quantity of diversity	
		Water Access/Avail.	usually adequate (> 15 litres ppp day), stable	
		Hazards	moderate to low probability and vulnerability	
		Civil Security	prevailing and structural peace	
		Livelihood Assets	generally sustainable utilization (of 5 capitals)	
2	Chronically Food Insecure	*Crude Mortality Rate*	<0.5/10,000/day; U5MR<1/10,000/day	Design & implement strategies to increase stability, resistance and resilience of livelihood systems, thus reducing risk Provision of 'safety nets' to high risk groups Interventions for optimal and sustainable use of livelihood assets Create contingency plan Redress structural hindrances to food security Close monitoring of relevant outcome and process indicators Advocacy
		Acute Malnutrition	>3% but <10 % (w/h <-2 z-score), usual range, stable	
		Stunting	>20% (w/age <-2 z-scores)	
		Food Access/ Availability	borderline adequate (2,100 kcal ppp day); unstable	
		Dietary Diversity	chronic dietary diversity deficit	
		Water Access/Avail.	borderline adequate (15 litres ppp day); unstable	
		Hazards	recurrent, with high livelihood vulnerability	
		Civil Security	Unstable; disruptive tension	
		Coping	'insurance strategies'	
		Livelihood Assets	stressed and unsustainable utilization (of 5 capitals)	
		Structural	Pronounced underlying hindrances to food security	
3	Acute Food and Livelihood Crisis	*Crude Mortality Rate*	0.5-1 /10,000/day, U5MR 1-2/10,000/dy	Support livelihoods and protect vulnerable groups Strategic and complimentary interventions to immediately ↑ food access/availability AND support livelihoods Selected provision of complimentary sectoral support (e.g., water, shelter, sanitation, health, etc.) Strategic interventions at community to national levels to create, stabilize, rehabilitate, or protect priority livelihood assets Create or implement contingency plan Close monitoring of relevant outcome and process indicators Use 'crisis as opportunity' to redress underlying structural causes Advocacy
		Acute Malnutrition	10-15 % (w/h <-2 z-score), > than usual, increasing	
		Disease	epidemic; increasing	
		Food Access/ Availability	lack of entitlement; 2,100 kcal ppp day via asset stripping	
		Dietary Diversity	acute dietary diversity deficit	
		Water Access/Avail.	7.5-15 litres ppp day, accessed via asset stripping	
		Destitution/Displacement	emerging; diffuse	
		Civil Security	limited spread, low intensity conflict	
		Coping	'crisis strategies'; CSI > than reference; increasing	
		Livelihood Assets	accelerated and critical depletion or loss of access	
4	Humanitarian Emergency	*Crude Mortality Rate*	1-2 / 10,000 / day, >2x reference rate, increasing; U5MR > 2/10,000/day	Urgent protection of vulnerable groups Urgently ↑ food access through complimentary interventions Selected provision of complimentary sectoral support (e.g., water, shelter, sanitation, health, etc.) Protection against complete livelihood asset loss and/or advocacy for access Close monitoring of relevant outcome and process indicators Use 'crisis as opportunity' to redress underlying structural causes Advocacy
		Acute Malnutrition	>15 % (w/h <-2 z-score), > than usual, increasing	
		Disease	pandemic	
		Food Access/ Availability	severe entitlement gap; unable to meet 2,100 kcal ppp day	
		Dietary Diversity	Regularly 2-3 or fewer main food groups consumed	
		Water Access/Avail.	< 7.5 litres ppp day (human usage only)	
		Destitution/Displacement	concentrated; increasing	
		Civil Security	widespread, high intensity conflict	
		Coping	'distress strategies'; CSI significantly > than reference	
		Livelihood Assets	near complete & irreversible depletion or loss of access	
5	Famine / Humanitarian Catastrophe	*Crude Mortality Rate*	> 2/10,000 /day (example: 6,000 /1,000,000 /30 days)	Critically urgent protection of human lives and vulnerable groups Comprehensive assistance with basic needs (e.g. food, water, shelter, sanitation, health, etc.) Immediate policy/legal revisions where necessary Negotiations with varied political-economic interests Use 'crisis as opportunity' to redress underlying structural causes Advocacy
		Acute Malnutrition	> 30 % (w/h <-2 z-score)	
		Disease	pandemic	
		Food Access/ Availability	extreme entitlement gap; much below 2,100 kcal ppp day	
		Water Access/Avail.	< 4 litres ppp day (human usage only)	
		Destitution/Displacement	large scale, concentrated	
		Civil Security	widespread, high intensity conflict	
		Livelihood Assets	effectively complete loss; collapse	

Early Warning Levels	Probability / Likelihood (of worsening Phase)	Severity (of worsening phase)	Reference Hazards and Vulnerabilities	Implications for Action
Watch	As yet unclear	Not applicable	*Hazard:* occurrence of, or predicted event stressing livelihoods; with low or uncertain vulnerability *Process Indicators:* small negative change from normal	Close monitoring and analysis
Moderate Risk	Elevated probability / likelihood	Specified by predicted Phase Class, and as indicated by color of diagonal lines on map.	*Hazard:* occurrence of, or predicted event stressing livelihoods; with moderate vulnerability *Process Indicators:* large negative change from normal	Close monitoring and analysis Contingency planning Step-up current Phase interventions Preventative interventions--with increased urgency for High Risk populations Advocacy
High Risk	High probability; 'more likely than not'		*Hazard:* occurrence of, or strongly predicted major event stressing livelihoods; with high vulnerability *Process Indicators:* large and compounding negative changes	

The IPC is not an assessment method, *per se*, but a classification system for Situation Analysis that integrates multiple data sources, methods, and analyses (example options for specific assessment methodologies include those endorsed by WFP, ICRC, Save the Children UK, and many others). Effective use of the IPC encourages a mixed-method approach which is obligatory given the complexity of the analysis and the need for triangulation. In this manner, the IPC provides a consistent and meaningful structure to the final statement. To substantiate an IPC statement, whatever the specific methodologies, the legitimacy of data sources and analytical methods is rigorously evaluated and reflected in the overall confidence level.

• ***Sustained Conditions:*** In general, the longer a crisis continues the relatively more essential it is to address underlying or structural causes if interventions have any chance of sustained positive effects. A *purple* border denotes areas of "sustained" levels of crisis in Phase 3, 4, or 5 for greater than three years (though an arbitrary threshold, it is inclusive of several seasonal cycles),. By hi-lighting these areas, it informs the type of strategic response and draws attention to "forgotten emergencies" for which complacency may have set in.

• ***Defining Attributes of Crisis Areas.*** For each area currently in or at risk of Phase 3, 4, or 5 a call-out box is included with situation specifics. A symbol key is provided for each defining attribute, including:

- Key immediate hazards
- Key underlying causes
- Estimated magnitude (i.e., the number of people estimated in Phase or at High Risk)
- Criteria for social targeting
- Usual Phase prior to current (which allows for distinction between chronic and transitory food insecurity)
- Projected trend
- Overall confidence level of analysis (which is an overall, heuristic statement on the confidence of the analysis as assessed by the analyst)

The key is generic, whereas the call-out boxes contain the specific attributes relevant to that crisis area. The attributes currently include those which have relevance to various places in Somalia. However, this can easily be expanded to suit a wider array of situations.

Defining Attributes of Areas in Phase 3, 4 or 5

Immediate Hazards
a Drought
b Floods
c Tsunami
d Civil Insecurity
e Market Disruptions
f Disease Outbreaks
g - - - -

Key Underlying Causes
A Post State Conflict
B Environmental Degradation
C Social Marginalization
D - - - -

Estimated Population in Phase
Inclusive of pop. at High Risk

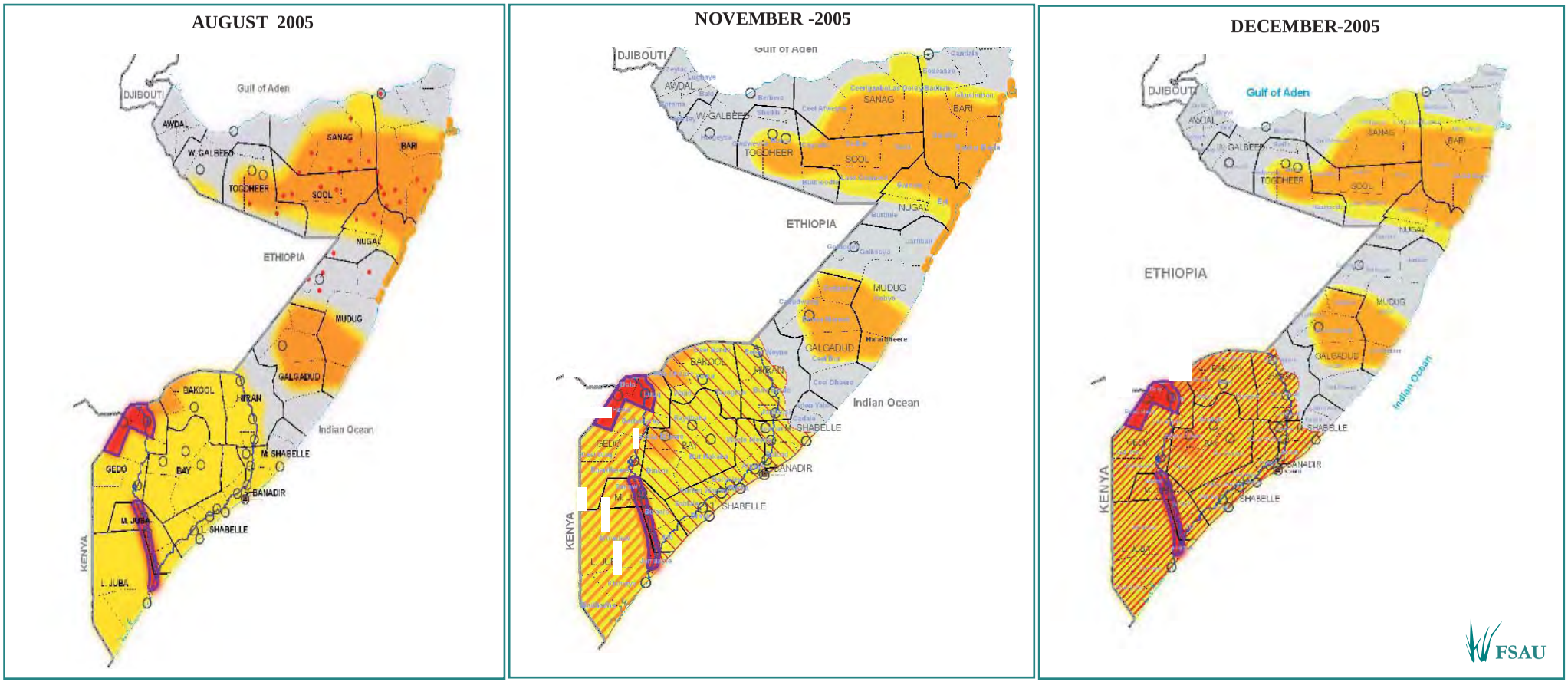
Criteria for Social Targeting
i Livelihood system
ii Wealth group
iii Ethnicity/Clan
iv Gender
v - - - -

Usual Phase Prior to Current
1 Generally Food Secure
2 Chronically Food Insecure

Projected Trend
Improving Situation
No Change or Uncertain or mixed
Worsening Situation

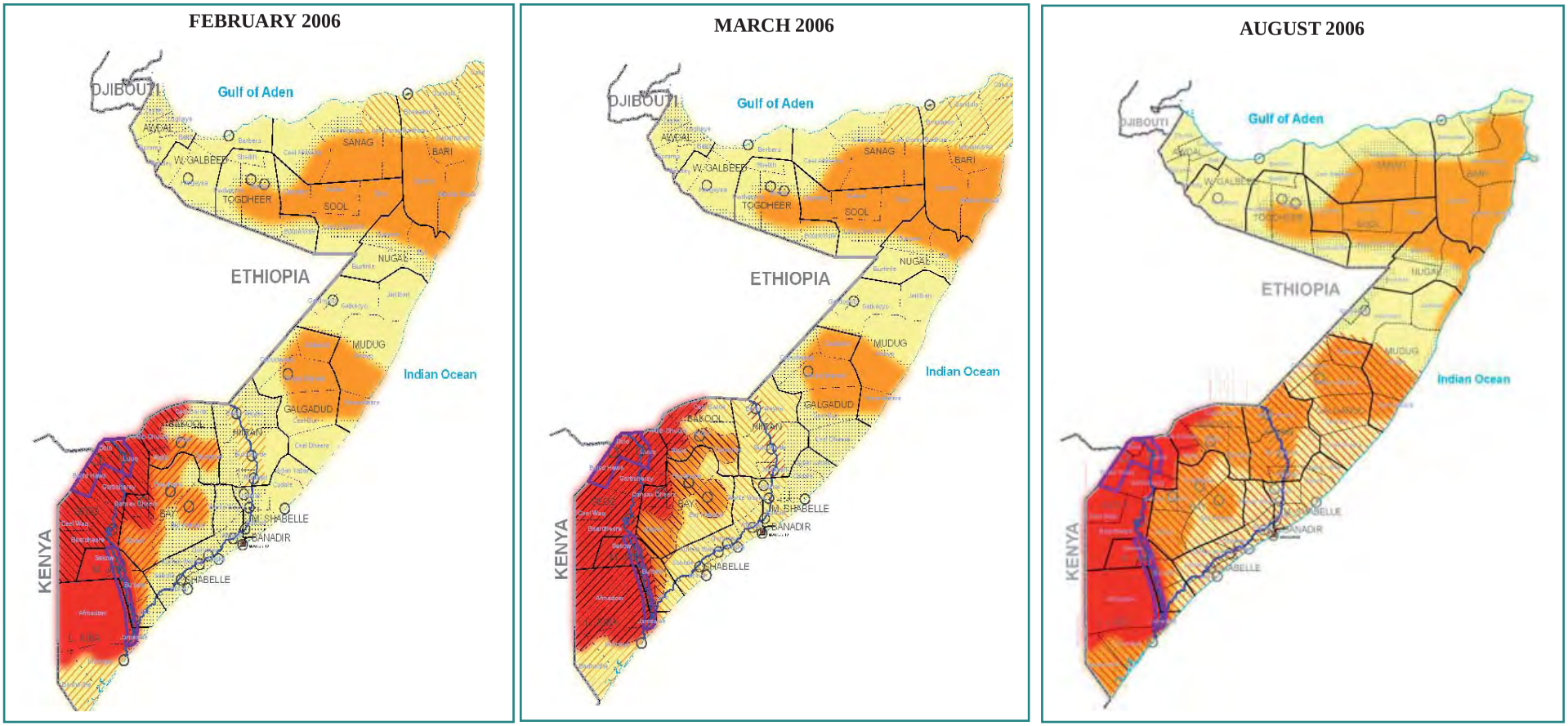
Confidence Level of Analysis
* Low
** Medium
*** High

5.1.3. Comparison of FSAU Integrated Food Security Phase Classification for Gu '05, Deyr '05/'06 and Gu '06



The FSAU Food Security Phase Classifcation has been used since February 2004. Presented here are the food security phase classifications for *Gu* '05, *Deyr* '05/'06 and the *Gu* '06 for trend analysis. See page 59 for the explanation and evolution of the phase classification. The tool improves and illustrates the complex linkages between food , nutrition and livelihood information and response. See FSAU Technical Series Report No. IV. 11 issued May 11, 2006

5.1.4. Progression of Early Warning



Presented here are the food security phase classifications for February and March '06 and the Somali Food Security Situation Analysis: Post Gu Projection, July-December '06

5.2 ESTIMATED POPULATION FIGURES

5.2.1 Table 1A: Estimated Population by Region in Humanitarian Emergency (HE) and Acute Food and Livelihood Crisis (AFLC), inclusive of the High Risk Groups.

Affected Regions	Estimated Population of Affected Regions [1]	Assessed and Contingency Population in AFLC and HE		
		Acute Food and Livelihood Crisis (AFLC) [2]	Humanitarian Emergency (HE) [2]	Total in AFLC or HE as % of Region Population
North [3]				
Bari	387,969	30,000	0	8
Nugal	125,010	10,000	0	8
Sanag	270,367	25,000	0	9
Sool	150,277	25,000	0	17
Togdheer	402,295	20,000	0	5
Coastal (fishing)		20,000		
SUB-TOTAL	***1,335,918***	***130,000***	***0***	*10*
Central				
Galgadud	330,057	40,000	0	*12*
Mudug	350,099	30,000	0	*9*
SUB-TOTAL	***680,156***	***70,000***	***0***	*10*
South				
Bakol	310,627	145,000	25,000	55
Bay	620,562	285,000		46
Gedo	328,378	70,000	160,000	70
Hiran	329,811	95,000	30,000	38
Lower Juba	385,790	45,000	90,000	35
Middle Juba	238,877	40,000	120,000	67
SUB-TOTAL	***2,214,045***	***680,000***	***425,000***	*50*
TOTAL	**4,230,119**	**880,000**	**425,000**	*31*

Table 1B: SUMMARY TABLE [2]

Assessed and Contigency Population Numbers in AFLC or HE	**1,305,000**	*17* [7]
Urban Populations in Crisis Areas in the South [4]	**40,000**	*1* [7]
Combined Assessed, Urban & Contingency Populations in AFLC and HE	**1,400,000** [5]	*19* [7]
Estimated Number of IDPs [6]	**400,000**	*5* [7]
Estimated Total Population in Crisis	**1,800,000**	*24* [7]

[1]Source: Population Estimates by Region/District, UNDP Somalia, August 1, 2005. Note this only includes population figures in affected regions. FSAU does not round these population estimates as they are the official estimates provided by UNDP.
[2]Estimated numbers are rounded to the nearest five thousand, based on resident population not considering current or ancipated migration, and are inclusive of population in High Risk of AFLC or HE for purposes of planning.
[3]Dan Gorayo District is included within Bari Region following precedent set in population data prior to UNDP/WHO 2005.
[4]Roughly estimated as 30% and 20% of urban population in HE and AFLC areas respectively.
5Actual number is 1,345,000, however, this is rounded to 1,400,000 for purposes of rough planning and ease of communication.
[6]Source: UN-OCHA updated April 2004 (376,630) and UNHCR IDP map Dec.2005 (407,000), rounded to 400,000 as an estimate.

5.2.2 Table 2A: Estimated Population by District in Humanitarian Emergency (HE) and Acute Food and Livelihood Crisis (AFLC), inclusive of the High Risk Groups.

SOUTH

Affected Regions and Districts	Estimated Population of Affected Districts [1]	Assessed and Contingency Population in AFLC and HE		
		Acute Food and Livelihood Crisis (AFLC) [2]	Humanitarian Emergency (HE) [2]	Total in AFLC or HE as % of Region Population
Bakol				
El Barde	29,179	4,000	5,000	31
Hudur	93,049	49,000		53
Rabdure	37,652	9,000	22,000	82
Tieglo	81,053	44,000		54
Wajid	69,694	41,000		59
SUB-TOTAL	**310,627**	**147,000**	**27,000**	56
Bay				
Baidoa	320,463	147,000		46
Burhakaba	125,616	57,000		45
Dinsor	75,769	36,000		48
Q/dheere	98,714	46,000		47
SUB-TOTAL	**620,562**	**286,000**	**0**	46

Affected Regions and Districts	Estimated Population of Affected Districts [1]	Assessed and Contingency Population in AFLC and HE		
		Acute Food and Livelihood Crisis (AFLC) [2]	Humanitarian Emergency (HE) [2]	Total in AFLC or HE as % of Region Population
Gedo				
Bardera	106,172	24,000	44,000	64
Belet Xaawo	55,989	10,000	31,000	73
Ceel Waaq	19,996	6,000	4,000	50
Dolow	26,495	5,000	17,000	83
Garbahaarey	57,023	11,000	36,000	82
Luuq	62,703	13,000	28,000	65
SUB-TOTAL	**328,378**	**69,000**	**160,000**	70

Affected Regions and Districts	Estimated Population of Affected Districts [1]	Assessed and Contingency Population in AFLC and HE		
		Acute Food and Livelihood Crisis (AFLC) [2]	Humanitarian Emergency (HE) [2]	Total in AFLC or HE as % of Region Population
Hiran				
Belet Weyne	172,049	57,000	18,000	44
Bulo Burti	111,038	31,000	13,000	40
Jalalaqsi	46,724	5,000	1,000	13
SUB-TOTAL	**329,811**	**93,000**	**32,000**	38

Affected Regions and Districts	Estimated Population of Affected Districts [1]	Assessed and Contingency Population in AFLC and HE		
		Acute Food and Livelihood Crisis (AFLC) [2]	Humanitarian Emergency (HE) [2]	Total in AFLC or HE as % of Region Population
Lower Juba				
Afmadow	51,334	9,000	24,000	64
Badhadhe	38,640	7,000		18
Jamame	129,149	10,000	53,000	49
Kismayo	166,667	19,000	14,000	20
SUB-TOTAL	**385,790**	**45,000**	**91,000**	35
Middle Juba				
Buale	59,489	11,000	35,000	77
Jilib	113,415	18,000	55,000	64
Sakow	65,973	13,000	29,000	64
SUB-TOTAL	**238,877**	**42,000**	**119,000**	67

CENTRAL

Affected Regions and Districts	Estimated Population of Affected Districts [1]	Assessed and Contingency Population in AFLC and HE		
		Acute Food and Livelihood Crisis (AFLC) [2]	Humanitarian Emergency (HE) [2]	Total in AFLC or HE as % of Region Population
Galgadud				
Abudwaq	41,067	2,000	0	5
Adado	45,630	6,000	0	13
Dusa Mareb	91,260	16,000	0	18
El Bur	79,092	18,000	0	23
El Der	73,008	0	0	0
SUB-TOTAL	**330,057**	**42,000**	**0**	13
Mudug				
Galkayo	137,667	0	0	0
Goldogob	40,433	0	0	0
Haradhere	65,543	9,000	0	14
Hobyo	67,249	20,000	0	30
Jariban	39,207	0	0	0
SUB-TOTAL	**350,099**	**29,000**	**0**	8
TOTAL	**680,156**	**71,000**	**0**	10

NORTH

Affected Regions and Districts	Estimated Population of Affected Districts [1]	Assessed and Contingency Population in AFLC and HE		
		Acute Food and Livelihood Crisis (AFLC) [2]	Humanitarian Emergency (HE) [2]	Total in AFLC or HE as % of Region Population
Bari				
Bender Beila	14,376	2,000	0	14
Bossaso	164,906	0	0	0
Calula	40,002	0	0	0
Gardo (includes Dangoroyo)	81,156	16,000	0	20
Iskushuban	45,027	6,000	0	13
Kandala	42,502	4,000	0	9
SUB-TOTAL	**387,969**	**28,000**	**0**	7
Nugal				
Burtinle	34,674	0	0	0
Eyl	32,345	3,000	0	9
Garowe	57,991	5,000	0	9
SUB-TOTAL	**125,010**	**8,000**	**0**	6
Sanag				
Las Qoray (includes Badhan)	89,724	17,000	0	19
Ceel Afweyn	65,797	5,000	0	8
Ceerigaabo	114,846	5,000	0	4
SUB-TOTAL	**270,367**	**27,000**	**0**	10
Sool				
Caynaba	30,702	2,000	0	7
Laas Caanood	75,436	5,000	0	7
Taleh	25,354	12,000	0	47
Xudun	18,785	8,000	0	43
SUB-TOTAL	**150,277**	**27,000**	**0**	18
Togdheer				
Buhodle	38,428	1,000	0	3
Burco	288,211	19,000	0	7
Odweine	42,031	2,000	0	5
Sheikh	33,625	0	0	0
SUB-TOTAL	**402,295**	**22,000**	**0**	5
Coastal Fishing		**22,000**		
TOTAL	**1,335,918**	**134,000**	**0**	**10**

Table 2B: Population Estimates for the North, Central and South [3]

	Estimated Population Affected in North, Central and South [1]	Assessed and Contingency Population in AFLC and HE		
		Acute Food and Livelihood Crisis	Humanitarian Emergency	Total in AFLC or HE as % of Region
SOUTH	2,214,045	680,000	425,000	50
CENTRAL	680,156	70,000	0	10
NORTH	1,335,918	130,000	0	10
TOTAL	4,230,119	880,000	425,000	31

Table 2C: SUMMARY TABLE

Assessed and Contigency Population Numbers in AFLC or HE	1,305,000	17 [7]
Urban Populations in Crisis Areas in the South [4]	40,000	1 [7]
AFLC and HE	1,400,000 [5]	19 [7]
Estimated Number of IDPs [6]	400,000	5 [7]
Estimated Total Population in Crisis	1,800,000	24 [7]

[1]Source: Population Estimates by Region/District, UNDP Somalia, August 1, 2005. Note this only includes population figures in affected regions. FSAU does not round these population estimates as they are the official estimates provided by UNDP.
[2]Estimated numbers are rounded to the nearest one thousand, based on resident population not considering current or ancipated migration, and are inclusive of population in High Risk of AFLC or HE for purposes of planning.
[3]Estimated numbers based on region estimates rounded to the nearest five thousand.
[4]Roughly estimated as 30% and 20% of urban population in HE and AFLC areas respectively.
[5]Actual number is 1,345,000, however, this is rounded to 1,400,000 for purposes of rough planning and ease of communication.
[6]Source: UN-OCHA April 2004 (376,630) and UNHCR IDP map Dec.2005 (407,000), rounded to 400,000 as an estimate.
[7]Percent of total population of Somalia estimated at 7,502,654 (UNDP/WHO 2005).

5.2.3 Table 3A: Estimated Population by Livelihood Zone in Humanitarian Emergency (HE) and Acute Food and Livelihood Crisis (AFLC), inclusive of the High Risk Groups.

Affected Regions and Livelihood Zones	Estimated Population of Affected Livelihood Zones [1]	Assessed and Contingency Population in AFLC and HE		
		Acute Food and Livelihood Crisis (AFLC) [2]	Humanitarian Emergency (HE) [2]	Total in AFLC or HE as % of Region Population
Bakol				
Southern Agro-Pastoral	209,750	120,000	16,000	65
Bay-Bakool Agro-Pastoral	19,976	10,000	3,000	65
Southern Inland Pastoral	81,081	17,000	8,000	31
SUB-TOTAL		**147,000**	**27,000**	
Bay				
Southern Agro-Past	188,890	92,000	0	49
Bay-Bakool Agro-Pastoral	333,454	175,000	0	52
Southern Inland Pastoral	43,465	0	0	0
South-East Pastoral	32,449	19,000	0	59
SUB-TOTAL		**286,000**	**0**	

Affected Regions and Livelihood Zones	Estimated Population of Affected Livelihood Zones [1]	Assessed and Contingency Population in AFLC and HE		
		Acute Food and Livelihood Crisis (AFLC) [2]	Humanitarian Emergency (HE) [2]	Total in AFLC or HE as % of Region Population
Gedo				
Southern Agro-Pastoral	38,827	2,000	35,000	95
Bay-Bakool Agro-Pastoral	31,852	5,000	22,000	85
Southern Inland Pastoral	88,643	30,000	22,000	59
Dawa Pastoral	100,506	25,000	61,000	86
Juba Pump Irrigated Riverine	36,089	7,000	20,000	75
SUB-TOTAL		69,000	160,000	

Affected Regions and Livelihood Zones	Estimated Population of Affected Livelihood Zones [1]	Assessed and Contingency Population in AFLC and HE		
		Acute Food and Livelihood Crisis (AFLC) [2]	Humanitarian Emergency (HE) [2]	Total in AFLC or HE as % of Region Population
Hiran				
Southern Agro-Pastoral	159,299	65,000	25,000	56
Hiran Riverine	38,533	7,000	7,000	36
Southern Inland Pastoral	73,878	9,000	0	12
Ciid Pastoral	34,410	12,000	0	35
SUB-TOTAL		93,000	32,000	

Affected Regions and Livelihood Zones	Estimated Population of Affected Livelihood Zones [1]	Assessed and Contingency Population in AFLC and HE		
		Acute Food and Livelihood Crisis (AFLC) [2]	Humanitarian Emergency (HE) [2]	Total in AFLC or HE as % of Region Population
Lower Juba				
Southern Agro-Pastoral	12,834	3,000	8,000	86
Lower Juba Agro-Pastoral	81,408	23,000	21,000	54
Southern Inland Pastoral	69,910		4,000	6
South-East Pastoral	47,759	14,000	6,000	42
Southern Juba Riverine	61,869	5,000	52,000	92
SUB-TOTAL		45,000	91,000	
Middle Juba				
Southern Agro-Pastoral	55,902	15,000	35,000	89
Lower Juba AgroPastoral	11,342	3,000	6,000	79
Southern Inland Pastoral	27,511	0	7,000	25
South-East Pastoral	23,100	13,000	0	56
Southern Juba Riverine	75,111	6,000	64,000	93
Juba Pump Irrigated Riverine	19,792	5,000	7,000	61
Southern Coastal Pastoral	14,177	0	0	0
SUB-TOTAL		42,000	119,000	

Table 3B: South Region Livelihood System Population Estimate.

Affected Livelihood Systems	Estimated Population of Affected Livelihood Systems [1]	Assessed and Contingency Population in AFLC and HE		
		Acute Food and Livelihood Crisis (AFLC) [3]	Humanitarian Emergency (HE) [3]	Total in AFLC or HE as % of Region Population
Agropastoral	**1,143,534**	**510,000**	**170,000**	59
Pastoral	**636,889**	**140,000**	**105,000**	38
Riverine	**231,394**	**30,000**	**150,000**	78
TOTAL	**2,011,817**	**680,000**	**425,000**	

Table 3C: SUMMARY TABLE [3]

AFLC or HE in the South	**1,105,000**	*18* [7]
AFLC or HE in the North and Central	**200,000**	*4* [7]
Urban Populations in Crisis Areas in the South [4]	**40,000**	*1* [7]
Populations in AFLC and HE	**1,400,000**	*19* [7]
Estimated Number of IDPs [6]	**400,000**	*5* [7]
Estimated Total Population in Crisis	**1,800,000**	*24* [7]

[1]Source: Population Estimates by Region/District, UNDP Somalia, August 1, 2005. Note this only includes population figures in affected regions. FSAU does not round these population estimates as they are the official estimates provided by UNDP.
[2]Estimated numbers are rounded to the nearest one thousand, based on resident population not considering current or ancipated migration, and are inclusive of population in High Risk of AFLC or HE (estimated at 210,000) for purposes of planning.
[3]Estimated numbers are rounded to the nearest five thousand.
[4]Roughly estimated as 30% and 20% of urban population in HE and AFLC areas respectively.
[5]Actual number is 1,345,000, however, this is rounded to 1,400,000 for purposes of rough planning and ease of communication.
[6]Source: UN-OCHA April 2004 (376,630) and UNHCR IDP map Dec.2005 (407,000), rounded to 400,000 as an estimate.
[7]Percent of total population of Somalia estimated at 7,502,654 (UNDP/WHO 2005).

5.3 LIST OF PARTNER AGENCIES

FSAU would like to thank all the agencies that participated and made this assessment possible. Our regional partners assisted with data collection and logistical support.

1. Famine Early Warning Systems Network (FEWSNET)
2. International Committee of The Red Cross (ICRC)
3. Candlelight
4. Horn of Africa Volunteer Youth Organization (HAVAYOCO)
5. Somali Red Crescent Society (SRCS)
6. Ministry of Health and Labour (Somaliland)
7. Ministry of Livestock (Somaliland)
8. Ministry of Agriculture (Somaliland) ,
9. National Environmental Research and Disaster Preparedness (NERAD)
10. United Livestock Professional Association (ULPA)
11. CARE
12. SACID
13. United Nations Children's Fund (UNICEF)
14. Agrosphere
15. Somalia Euroean Committee for Agricultural Training (CEFA)
16. Africa Rescue Committee (AFREC)
17. Action Internationale Centre la Faim (ACF)
18. World Vision International (WVI)
19. Save The Children Fund
20. UN Office for Coordination of Humanitarian Affairs (OCHA)
21. Danish Refugee Council (DRC)
22. Pastoral and Environmental Network for the Horn of Africa (PENHA),
23. Food and Agricultural Organisation (FAO),
24. Oxfam GB
25. Vetaid
26. Horn Relief
27. Ministry of Fisheries Puntland
28. Ministry of Agriculture and Livestock and Environment (Puntland) ,
29. Humanitarian Affairs and Disaster Management Agency (HADMA) Puntland,
30. Concern
31. Ministry of Planning and Rural Development (MPRD)
32. Ministry of Water & Mineral Resources Somaliland (MWMR)
33. Committee for Development and Initiatives (CDI)
34. Jubbaland Charity Center (JCC)
35. Society Development Initiative Organization (SDIO)
36. Somali Aid Foundation (SAF)
37. MERCY
38. Sanag Agricultral Development Organization (SADO)
39. ACA
40. BARDA
41. Transitional Federal Government of Samalia (TFG)
42. World Food Programme (WFP)
43. CARE/SSS
44. Adventist Development and Relief Agency (ADRA)
45. Coordinating Committee of Organization for Voluntary Service (COSV-PHC)
46. Advancement for Small Enterprise Program (ASEP)
47. Ministry of Pastoral Development (MOPDE)
48. Agriculture Development Organisation (ADO)
49. Social-Life & Agriculture Development Organization - South (SADO)
50. Green Hope

5.4 ASSESSMENT PROCESS, ANALYTICAL TOOLS AND TIMELINE

5.4.1 Post Gu '06 Assessment Timeline

Activity	Date	Description/Location
• FSAU Planning & Preparation	May15 - 29	NBI
• FSAU Issues Early Warning	June 2nd	FSAU Press Release "Humanitarian Emergency will continue in Southern Somalia"
• Partner Planning Meeting	June 8th	NBI with partners
• Regional Fieldwork Planning Workshops	June 25-26	Regional Partners Planning Meeting in NW, NE, S, SE, SW
• Fieldwork	June 27-July 16	Throughout the Regions with Partners
• Regional Analysis Workshops	July 17-July 22	Regional Workshops with Partners
• All Team Analysis Workshop	July 23-August 4	All Team (NBI and field) in Hargeisa, SL
• Analysis Consolidation with Partners	August 5-8	FSAU with Primary Technical Partners in NBI
• Technical Partner Vetting Results Meeting	August 7	Technical Partners, NBI
• Release of Results	August 8 August 9 August 15 August 15 August 16-23 August 17 August 25 August 30 September 7	Presentation to UNOCHA/IASC Meeting Presentation to SACB FSRD Special Meeting FSAU Press Release "Despite some Improvement, Conditions of Humanitarian Emergency Persist in Southern Somalia" Executive Results Posted on FSAU Website Presentation to Regional Meetings Baidoa (Aug 16th), Beletweyn (Aug 17th), Abudwaq (Aug 19th), Hargeisa (Aug 20th), Buale (Aug 21st), Garowe (Aug 22nd), Mogadishu (Aug 23rd) Presentation to CAP/NAF Food and Livelihood Security Cluster Working Group FSAU Special Brief - Post Gu '06 Analysis Presentation to CAP 2007 NBI Workshop Presentation to CAP 2007 Donor Consultation Meeting, NBI
• Release of Technical Series Report	September 15	FSAU Website, Email Distribution, Hardcopy Mailing

5.4.2 FSAU Regional Meetings on the Post Gu '06 Results

Region	Place and Date	Time	Contact
Northwest Galgadud.	Abudwaq Hospital 19/08/06	8:30 am	Abdulkadir Diriye Roble Field Analyst jilbogaab@hotmail.com
Bay/Bakool	Baidoa @ UNICEF Office 16/08/06	9:00am	Abdulbari Abdulkadir Sheikh Field Analyst abdulbari51@yahoo.com
M/L Juba	Buale @ World Vision Office 21/8/06	3.00pm	Nur Moallim Ahmed Juba Valley FP ahmedmadobe3@yahoo.com
Banadir/Lower and Middle Shabelle	Mogadishu @ SRCS Office 23/08/06	11:30am	Abdikadir Abikar (Food Security) Mogadishu FP abikarow@yahoo.com
Northwest	Hargeisa @ FSAU Office 20/08/06	9:30 am	Mahdi Kayad xoogimaal1@yahoo.com
Central	Beletweyn @ SCF-UK Office 17/08/06	9:00 am	Abdi Hussein Roble Central FP Abdi_roble@yahoo.com
Northeast	Garowe@ PDRC 22/08/06	9.00 am	Mohamed Salad Field Analyst msalaad01@yahoo.com

The tools used during the Post Deyr Assessment and Analysis process are listed below.

5.4.3 Assessment Instruments and Tools

5.4.3.1 Food Security Livelihoods and Nutrition Assessment Pastoral Questionnaire
5.4.3.2 Food Security, Livelihood and Nutrition Assessment: Crop Production Survey
5.4.3.3 Food Security, Livelihood and Nutrition Assessment: Market Questionnaire
5.4.3.4 Fsau Gu Assessment: Conflict Monitoring Form
5.4.3.5 Gu Assessment: Conflict Monitoring Form Notes
5.4.3.6 Evidence Based Analysis Template: Post Gu 06 Assessment

appendix

5.4.3 Assessment Instruments and Tools

5.4.3.1 Food Security Livelihoods and Nutrition Assessment Pastoral Questionnaire

FOOD SECURITY ANALYSIS UNIT (FSAU)/FEWSNET
FOOD SECURITY, LIVELIHOODS AND NUTRITION ASSESSMENT
PASTORAL QUESTIONNAIRE

Date: _____ **Interviewer's name:** _____ **Region:** _____
District: _____ **Village/Settlement** _____ **Livelihood zone:** _____
GPS Coordinates **North:** _____ **East:** _____
Key informant/focus group/household interview: (circle one) **Data entry Number** _____

1.0 SEASONAL PERFORMANCE: RAINFALL

Amount	**Duration** *(from first to last rain)*	**Frequency**	**Distribution**

Note: Classify each as follows: ***1*** *very poor,* ***2*** *poor,* ***3*** *average,* ***4*** *good,* ***5*** *very good*

2.0 SEASONAL PERFORMANCE: KEY EVENTS

Note the **key events** for the current season. Key events may include, for example, reference to floods, drought, freezing rains, conflict, and extreme currency fluctuation. Note whether these are positive or negative in their impact

3.0 SEASONAL PERFORMANCE: CONCEPTIONS, BIRTHS AND DEATHS

Livestock Type			**Camels**			**Cattle**			**Shoats**		
Year	Seasonal performa-nce	(1-5*)	Concept-ions	Births	Deaths	Concept-ions	Births	Deaths	Concept-ions	Births	Deaths
2006	Gu										
2006	Jilaal										
2005	Deyr										
2005	Hagaa										
2005	Gu										

**** Classify each season as follows:***
5 = a very good season for livestock production (e.g. due to good rains, little disease, etc)
4 = a good season or above average season for livestock production
3 = an average season in terms of livestock production
2 = a poor season for livestock production
1 = a very poor season for livestock production (e.g. due to drought, livestock disease, etc.)

Use the following categories to indicate levels of conceptions, births and deaths:
high, medium, low, none

Remember that births occur:
12 months after conception in camels
9 months after conception in cattle
5 months after conception in small stock

4.0 LIVESTOCK HERD DYNAMICS

	Livestock Type		
April 2005 - March 2006	**Camels**	**Cattle**	**Shoats**
No. owned during Gu 2005	20	20	50
No. adult females			
No. born Gu 2005			
No. born Deyr 2005			
No. sold during the year			
No. slaughtered			
No. died during the year			
No. bought during the year			
No. at end of year (reported by informants)			

appendix

April 2006 – now	Camels	Cattle	Shoats
No. owned during Gu 2006 (cross-checked)			
No. born Gu 2006			
No. lactating now (reported)			
Milk yield Gu 2006 (l/day)			

Cross-checks:

	Camels	Cattle	Shoats
No. at end of year ie. March 2006 (calculated)			
= (no. owned during Gu 2005) + (births Gu + births Deyr + no. bought) – (sales + slaughtered + died)			

No. lactating now (calculated)			
= births in	Deyr '05 + Gu '06	since Deyr '05	Gu '06

Results Summary:

No. lactating per 100 animals			
Milk yield Gu 2006 (l/day)			
Bear in mind *the following figures for East African pastoral herds in a year of no herd growth. In most years sold + slaughtered should be less than this to allow for some increase in herd size.*			

Typical figures for births, deaths, sale and slaughter

	Camels	Cattle	Shoats
No. owned at start of year (total)	20	20	50
No. adults females:	11	8	28
No. born during year	4.5	5.5	33
No. sold + slaughtered during year	3	4	21
No. died during year	1.5	1.5	12
No. bought during year	0	0	0
No. at end of year	20	20	50
% sold + slaughtered			

Notes:
*[**1**] No. died includes deaths of newborn animals.*
Deaths in the 1st year of life are about 65% of total deaths for cattle.
Deaths in the 1st year of life are about 85% of total deaths for shoats.
*[**2**] Estimates of sold + slaughtered are based on zero herd growth.*

5.0 LIVESTOCK-MIGRATION

5.1 Are livestock movements in this area 'normal' for this season? *(Note: 'normal' in this sense is not resulting from unusual shortage of water and/or pasture or from insecurity)*	[ ] YES	[ ] NO
5.2 Do you expect there to be abnormal livestock migration before the start of the next rainy season?	[ ] YES	[ ] NO
5.3 What are the **reasons for any abnormal migration**? Rank them 1-4 in order of importance with '1' being the most important?	[ ] WATER [ ] PASTURE [ ] INSECURITY [ ] OTHER (SPECIFY)	
5.4 If there has already been ABNORMAL migration, from where to where (list main 4 routes and rank 1-4 in order of importance, with '1' being the most important)?	1. 2. 3. 4.	

6.0 DEBT

6.1 What is the average level of **accumulated household debt for poor households** in the current season?	US$	[ ]
6.2 Has this level of debt increased, remained the same, or decreased from this season last year?	[ ] [ ] [ ]	Increased Same Decreased
6.3 What are the two most important **types of household debt for poor households** this season? 1. Food (staple food purchase), 2. Food (non-staple food purchase), 3. Transport, 4. Human health services, 5. Livestock health services, 6. Water (human), 7. Water (livestock), 8. Other (specify_____)	a. Main Source b. Secondary Source	[ ] [ ]

7.0 EFFECTS ON LIVELIHOOD ASSETS - SOCIAL CAPITAL

7.1 Are pastoralists receiving **distress social support** from relatives and friends?	[ ] YES	[ ] NO
7.2 If YES, currently, what are the **main types of distress social support**? Rank 1- 4 (with 1 being the most important and 4 being the least important)	a. Amah b. Remittances c. Kaalmo d. Other (specify)	[ ] [ ] [ ] [ ]

8.0 OTHER MAJOR SOURCES OF CASH INCOME

List in the table below other major sources of cash income for pastoralists in this area.
Is access to these income sources different this season compared to usual?

Source of cash income	Relevant in this area?	Change in access this season compared to usual for this time of year
Remittances	Yes [ ] No [ ]	Decreased [ ] no change [ ] increased [ ]
Wood/charcoal	Yes [ ] No [ ]	Decreased [ ] no change [ ] increased [ ]
Gums/resins	Yes [ ] No [ ]	Decreased [ ] no change [ ] increased [ ]
Other	Yes [ ] No [ ]	Decreased [ ] no change [ ] increased [ ]
Give reasons for any change in access, e.g. insecurity, changes in market conditions (supply and demand, price, trading patterns, local food insecurity leading to increased competition for resources, etc.)		

9.0 ISSUES OF CONCERN

Note major issues of concern that have not been covered in the questions above

What is the quality of the interview? *(circle one)* a. Overall reliable b. Generally reliable with areas of concern c. Unreliable	**Signed: Interviewer** **Signed: Team Leader**

5.4.3.2 Food Security, Livelihood and Nutrition Assessment: Crop Production Survey

THE FOOD SECURITY ASSESSMENT UNIT FOR SOMALIA (FSAU)

2006 GU SEASON CROP PRODUCTION SURVEY

Interviewer's name: _____ **Region:** _____
Date of interview: _____ **District:** _____
Supervisor's name: _____ **Village:** _____
Date checked: _____ **Name of the farmer:**_____
Household size (in numbers): _____

In collaboration with

The Food Agriculture Organization of the United Nations (FAO)
The Famine Early Warning System (FEWS/USAID)

1. CROP CONDITION
{For crops not grown, leave rows blank}

1.1 What was the crop condition this *Gu* season? *{Specify other crops}*

CROP	Crop Failure	Poor crop	Normal crop	Good crop	Other
Maize					
Sorghum					
Beans					
Sesame					
Other					

2. CROP PRODUCTION
{For crops not grown, leave rows blank}

2.1 For each field you planted this *Gu* season, indicate the size of

UNIT OF MEASUREMENT: _____

CROP		FIELD No.1	FIELD No.2	FIELD No.3	OTHER FIELD	TOTAL AREA
Maize	Irrigated					
	Rainfed					
Sorghum	Irrigated					
	Rainfed					
Beans	Irrigated					
	Rainfed					
Sesame	Irrigated					
	Rainfed					
Other	Irrigated					
	Rainfed					

2.2 For each crop grown, indicate the **amount** harvested this Gu season?

UNIT OF MEASUREMENT: _____

CROP	HARVEST
Maize	
Sorghum	
Beans	
Sesame	
Other	

2.3 How does this season's production compare with a normal *Gu* season? *{Present farmer with 20 seeds or stone. Ask him/her to divide the pile into two – one indicating the size of a normal Deyr harvest and one for this year's harvest. Count the number of seeds/stones and record below. Repeat for each crop grown.}*

CROP	Normal *Gu*	This *Gu*
Maize		
Sorghum		
Beans		
Sesame		
Other		

2.3 How does this season's production compare with a normal *Gu* season? *{Present farmer with 20 seeds or stone. Ask him/her to divide the pile into two – one indicating the size of a normal Deyr harvest and one for this year's harvest. Count the number of seeds/stones and record below. Repeat for each crop grown.}*

CROP	**Normal *Gu***	**This *Gu***
Maize		
Sorghum		
Beans		
Sesame		
Other		

2.4 What were the major production constraints this *Gu* season and rank them in order of importance (1 being the most important)

- ☐ Seed availability
- ☐ Tractor availability
- ☐ Pests and diseases
- ☐ Fuel costs
- ☐ Labour availability
- ☐ Other (specify)

3. LIVESTOCK

3.1 How were pasture conditions this *Gu* season?

☐ 1. Bad ☐ 2. Normal ☐ 3. Good

3.2 Have there been any outbreaks of livestock diseases in the last one month?
☐ 1. Yes ☐ 2. No (skip 3.3)

3.3 Were there any livestock deaths?

☐ 1. Yes ☐ 2. No (Skip Q3. 4)

3.4 How many livestock died as a result of abnormal disease out-breaks (numbers/types)?
_____

3.5 Are livestock drugs available at the nearest local market?

☐ 1. Yes ☐ 2. No

4. COPING MECHANISMS

4.1 How much food will you have in stock after this harvest?
_____ (Specify units)

4.2 How long do you expect this food to last?
_____(Specify month/weeks)

4.3 If your food stock do not last until the Deyr 03/04 harvest, how Will you cope with the shortfall?

- ❑ 1.Purchase food
- ❑ 2.Stop non-food uses
- ❑ 3.Sell livestock
- ❑ 4.Non-food activities
- ❑ 5. Other (specify)

Quality of the interview (circle one): A. overall reliable; B. generally reliable with areas of concern; C. unreliable

Comments on the interview:_____
_____
_____

5.4.3.3 Food Security, Livelihood and Nutrition Assessment: Market Questionnaire

FOOD SECURITY ANALYSIS UNIT (FSAU)/FEWSNET
FOOD SECURITY, LIVELIHOODS AND NUTRITION ASSESSMENT
MARKET QUESTIONS

Date & season: _____ **Interviewer's name:** _____
Market location (region): _____ **Market location (district):** _____
Market location (settlement): _____ **Livelihood zone:** _____
GPS Coordinates: North: _____ **East:** _____

	Unit	Current prices (note currency)	Supply (*)
1. Price of major staples and non-staples			
Imported rice	1 kg		
White Sorghum	1 kg		
Red Sorghum	1 kg		
Yellow Maize	1 kg		
White Maize	1 kg		
Wheat flour	1 kg		
Vegetable oil	1 lt		
Sugar	1 kg		
2. Employment (non-skilled) wage rates			
Herding	Per day		
Agricultural labouring	Per day		
Construction	Per day		
Other (specify):	Per day		
Other (specify)	Per day		
3. Sale price of bush products (self-employment)			
Firewood/logs	Bundle		
Charcoal	Bag		
Incense/gum	1 kg		
Other (specify):			
Other (specify):			
4. Sale price of livestock products			
Fresh camel milk	1 lt		
Fresh cow milk	1 lt		
Other (specify):			
Other (specify):			
5. Sale price of livestock			
Export shoats	Per head		
Local shoats	Per head		
Local cattle	Per head		
Export cattle	Per head		
Local camel	Per head		
Other (specify):	Per head		
Other (specify):	Per head		
6. Price of water			
Water (human) (specify unit)	1 unit		
7. **Local exchange rate**	US$1 =		

Note *. Supply conditions: (5) surplus, (4) above normal, (3) normal, (2) below normal, (1) scarce, (0) not available

5.4.3.4 Fsau Gu Assessment: Conflict Monitoring Form

THE FOOD SECURITY ASSESSMENT UNIT FOR SOMALIA (FSAU)

FSAU GU ASSESSMENT CONFLICT MONITORING FORM

Interviewer's name: _____ **Region:** _____
Date of interview: _____ **District:** _____
Supervisor's name: _____ **Village:** _____
Date checked: _____ **Name of the farmer:** _____
Household size (in numbers): _____

Reporting date:	**Region:**	**District (use pre-war districts names only):**	**Analyst name:**

CONFLICT INDICATORS	**SOMALI / ENGLISH**	**ANSWER**	**ADDITIONAL COMMENTS**
1. Location of insecurity	*xuddun dagaal* / epicentre of the insecurity (name of town or village)		
2. Magnitude (select only one)	**2a**. *kooban* / limited spread; **2b**. *baahasan* / widespread		
3. Trigger (select all that apply by indicating Yes or No)	**3a**. *biyo iyo daaq* / water and pasture		
	3b. *sheegasho dhuleed* / land ownership dispute		
	3c. *dagaal sooh'din* / boundary dispute		
	3d. *dagaal siyaasadeed* / political dispute		
	3e. *argoosi/aane* / retaliation		
	3f. *dhac xoolaad* / livestock raiding		
	3g. *bililiqaysi* / looting		
	3h. humanitarian aid		
4. Type (select only one)	**4a**. *colaad sokeeye* / within same clan; **4b**. *colaad qabiil* / between different clans		
5. Intensity (select all that apply by indicating Yes or No)	**5a**. *nabad* / peace		
	5b. *qasnaan* / tense, fluid, insecure, but no fighting		
	5c. *diyargarow dagaal* / preparation for war (including arming)		
	5d. *colaad* / clans separated, no fighting		
	5e. *dagaal go'beed* / fighting where some groups not targeted		
	5f. *xasuuq* / fighting where all groups are targeted		
6. Resolution (select all that apply by indicating Yes or No)	**6a**. *wada hadal la'an*/ no dialogue		
	6b. *wada hadal* / dialogue		
	6c. *xabad joojin* / ceasefire agreement		
	6d. *walaayo* / terms accepted		
	6e. *bixin diyo* / compensation paid ('blood' payment)		
	6f. *heshiis buuxa* / complete conflict resolution		
7. Overall insecurity trend (select only one)	**7a**. *hagageysa* / improving; **7b**. *deganaansho* / unchanged; **7c**. *sii xumaaneysa* / worsening		
CONFLICT OUTCOMES			
8. Displacement	*barakac* / conflict induced displacements	1: From: To: No. of hh:	
		2. From: To: No. of hh:	
		3: From: To: No. of hh:	
		4: From: To: No. of hh:	
9. Human deaths and injuries	Deaths: T ; FA ; MA ; C	Injuries: T ; FA ; MA ; C	
10. Loss and/or destruction of assets	Asset 1: Quantity:	Asset 2: Quantity:	Asset 3: Quantity:
11. Access to grazing/browsing	L1:	L2:	L3: L4:
12. Access to agricultural land	L1:	L2:	L3: L4:
13. Access to water sources	L1:	L2:	L3: L4:
14. Access to markets	L1:	L2:	L3: L4:
15. Access to health services	L1:	L2:	L3: L4:
	T %; FA %; MA %; C %	T %; FA %; MA %; C %	T %; FA %; MA %; C % T %; FA %; MA %; C %
16. Access to schools	L1:	L2:	L3: L4:
	T %; FC %; MC %	T %; FC %; MC %	T %; FC %; MC % T %; FC %; MC %
17. Roadblocks	Point 1:	Point 2:	No. of roadblocks:

5.4.3.5 Gu '06 Assessment: Conflict Monitoring Form Notes

EXPLANATION

1. The aim of this form is to track changes in insecurity during the gu season in a systematic manner. However, FSAU will not use this form to report on insecurity and conflict in a separate report. The information will be integrated into and strengthen the FSAU analysis of food and livelihood security. This form will be used to monitor all forms of insecurity, including conflict, tension but no fighting, and even the presence of roadblocks. It will also be used to try to develop initial data on the outcomes of insecurity by incorporating indicators of availability and access across the livelihood capitals.

2. One form should be completed in soft copy for each district. Where there is more than one 'conflict' or incident of insecurity per district separate forms should be completed for each.

3. The form should cover analysis for the CURRENT GU SEASON, not the day of data collection.

4. When completing the form follow the specific instructions given for each question.

5. You are not expected to travel to areas of conflict. All information should be collected through your normal information networks and during the course of the gu assessment fieldwork. If the information is available but you are unable to collect information for points 1 to 17 (perhaps for personal security reasons), please note 'Unable to collect'.

6. Do not leave blanks/uncompleted questions/sections.

Reporting date – the current date
Region – region name
District – district name (use pre-war district names only)
Analyst Name – your full name

CONFLICT INDICATORS

1. Location of the insecurity. Note the epicentre of the insecurity, where the insecurity is concentrated.

2. Magnitude. Note whether the insecurity is of limited spread or it is widespread (indicate 2a or 2b). In the space for specific comments try to describe the boundaries of the insecurity, for example, within a named town or spread across several named villages or even part of a district.

3. Trigger. Identify and note the initial trigger for the current dispute or insecurity (indicate Yes or No).

4. Type. Identify and note whether the insecurity is between sub-clans within the same clan or between different clans (indicate 4a or 4b). If you wish these clans and sub-clans can be named.

5. Intensity. This is a SCALE of intensity, from peace to the most severe conflict where everyone is targeted. Identify the level of intensity of the conflict reached during the reporting period (indicate Yes or No). More than one level of conflict may be noted, for example, 'tense, fluid, insecure, but no fighting' and 'clans separated, no fighting'.

6. Resolution. This is a SCALE of resolution, from no dialogue, through a ceasefire, to complete conflict resolution where all compensation has been paid. Note the phase that has been reached in the reporting period (indicate Yes or No).

7. Overall insecurity trend. Note whether the overall level of insecurity or conflict has improved, remained unchanged, or has worsened compared to the previous month (indicate 7a or 7b or 7c).

CONFLICT OUTCOMES

8. Displacement. For conflict induced displacement only give details (region, district, settlement) of up to 4 main locations that households (or partial households) have been displaced from and where they have moved to - give the numbers of households (or partial households) displaced to each of those named locations. If there are fewer than 4 main locations note 'no data' in the relevant space. If households (or partial households) start returning note the number of households (or partial households) who have returned to their home area. Try to provide information that is broken down by gender (men, women, and children).

9. Human deaths and injuries. If there have been any human deaths or injuries estimate these in total for the reporting period. Note total deaths (T) and by gender if possible: Female Adult (FA), Male Adult (MA) and Children (C)

10. Loss and/or destruction of assets. If there has been any loss and/or destruction of assets specify which assets and try to quantify the level of asset loss (e.g. homes, food stores, standing crops, seeds, livestock (camels, cattle, goats and sheep), water catchments, business assets (such as shops), and tools) (by gender if this is different).

11. Access to grazing/browsing. Note the main locations (L)(up to 4 in order of importance) (by district and nearest town) of grazing/browsing where access has reduced due to insecurity.

12. Access to agricultural land. Note the main locations (L)(up to 4 in order of importance) (by district and nearest town) of agricultural land where access has reduced due to insecurity.

13. Access to water sources. Note the main locations (L)(up to 4 in order of importance) (by district and nearest town) of water sources for human and livestock use where access has reduced due to insecurity.

14. Access to markets. Note the main locations (L)(up to 4 in order of importance) of the markets (for food purchases and/or asset sales) where access has reduced due to insecurity.

15. Access to health services. Note the main locations (L)(up to 4 in order of importance) of health services where access has been reduced by insecurity. Note total % change (T), increase or decrease by gender if this is different: Female Adult (FA), Male Adult (MA) and Children (C)

16. Access to schools. Note the main locations (L)(up to 4 in order of importance) of schools (dugsi) where access has been reduced by insecurity. Note total % change (T), increase or decrease by gender if this is different: Female Child (FC); Male Child (MC).

17. Roadblocks. For 1 named main commercial transport route in the district note the number of roadblocks/checkpoints between identified locations (Point 1 and Point 2). For example, on the stretch of road between Point 1 and Point 2 there are 5 roadblocks/checkpoints. The same route should be reported on from month to month so that trends can be identified.

ADDITIONAL COMMENTS

Please note any supplementary information that will strengthen the analysis in the spaces provided or on a separate sheet of paper.

5.4.3.6 - Evidence Based Analysis Template: Post Gu '06 Assessment

Part 1: Analysis of Key Reference Outcomes and Evidence

Part 1: Area Affected, Phase Classification, and Evidence in Support of Phase Classification and Early Warning Levels					
Affected Area (Region, District, and/or Livelihood Zone)	**Applicable Reference Outcomes** (As defined by IPC Reference Table)	**Direct Evidence** • Direct Outcome Evidence in support of phase classification • Source of Evidence • Evidence Reliability Score (1=very reliable, 2=somewhat reliable 3=unconfirmed) • Write 'Not Applicable' if the outcome does not apply to situation • Write 'Not Available" if there is no reliable direct evidence • Identify the Phase Classification for each piece of evidence (GFS, CFI, AFLC, HE, F/HC)	**Indirect Evidence (e.g., process or proxy indicators)** • Indirect Evidence in support of phase classification • Source of Evidence • Evidence Reliability Score (1=very reliable, 2=somewhat reliable 3=unconfirmed)	**Phase Classification** (Tick Appropriate Box)	**Early Warning** (Tick Appropriate Boxes)
	Crude mortality rate	•	•	☐ Generally Food Secure ☐ Chronically Food Insecure ☐ Acute Food and Livelihood Crisis ☐ Humanitarian Emergency ☐ Famine	☐ No Early Warning ☐ Alert ☐ Moderate Risk o ACFL o HE o Famine/HC ☐ High Risk o ACFL o HE o Famine/HC
	Acute malnutrition	•	•		
	Disease	•	•		
	Food Access/Availability	•	• *Income sources:* • *Purchasing power:* • *Food sources:* • *Expenditures:* • *Supply lines:* • *Social Access:* • *Others:*		
	Dietary diversity	•	•		
	Water access/availability	•	•		
	Destitution/ Displacement	•	•		
	Civil Security	•	•		
	Coping	•	•		
	Structural Issues	•	•		
	Hazards	•	•		
	Livelihood Assets (5 capitals)	•	•		

Part 2: Analysis of Immediate Hazard, Effects on Livelihood Strategies, and Implications for Immediate Response

Part 2: Immediate Hazards, Direct Food Security Problem, Effects on Livelihood Strategies, Risks to Monitor and Opportunities for Response								
ANALYSIS							ACTION	
Affected Area (Region, District, and Livelihood Zone)	**Phase Classification** (Tick Appropriate Box)	**Immediate Hazards** (Driving Forces)	**Direct Food Security Problem** (Access, Availability, and/or Utilization)	**Effect on Livelihood Strategies** (Summary Statements)	**Population Affected** (Characteristics & Percent of Population)	**Projected Trend** (Improving, No change, Uncertain, Worsening)	**Risk Factors to Monitor**	**Opportunities for Response** (Immediate Response to Improve Access to Food and Assist with Other Immediate Needs, i.e. Health, Shelter, etc.)
	☐ Generally Food Secure ☐ Chronically Food Insecure ☐ Acute Food and Livelihood Crisis ☐ Humanitarian Emergency ☐ Famine							

Part 3: Analysis of Underlying Structures, Effects on Livelihood Assets, and Opportunities for Mitigation in the Medium and Long Term

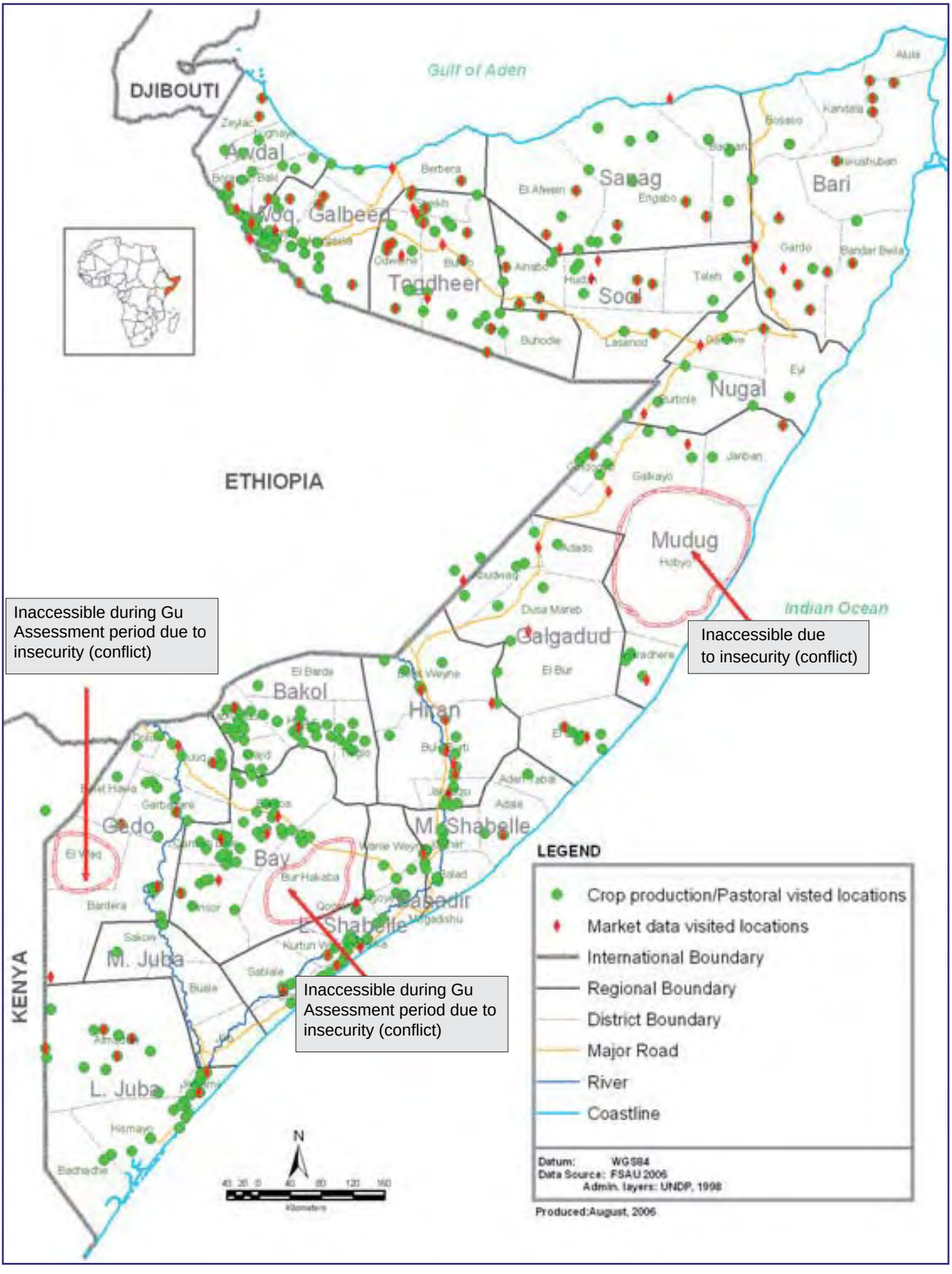
Part 3: Undermining Structures and Processes, Effects on Livelihood Assets, and Mitigation in the Medium and Long Term					
ANALYSIS					ACTION
Affected Area (Region, District and Livelihood Zone)	**Phase Classification** (Tick Appropriate Box)	**Underlying Causes** (Environmental Degradation, Social, Poor Governance, Marginalization, etc.)	**Effect on Livelihood Assets** (Summary Statements)	**Projected Trend** (Improving, No Change, Uncertain, Worsening)	**Opportunities to support livelihoods and address underlying causes** (Policy, Programmes and/or Advocacy)
	☐ Generally Food Secure ☐ Chronically Food Insecure ☐ Acute Food and Livelihood Crisis ☐ Humanitarian Emergency ☐ Famine		Physical Capital:		
			Social Capital:		
			Financial Capital:		
			Natural Capital:		
			Human Capital:		
			Local Political Capital:		

Note on Estimation of Affected Population Numbers

1. Define geographic area that spatially delineates the affected population (Chronically Food Insecure, Acute Food and Livelihood Crisis, Humanitarian Emergency, or Famine).
2. Identify the most current population estimates for this geographic area (i.e. WHO 2004 population estimates by district).
3. Adjust total population estimates to account for any known recent migration in or out of the affected area.
4. Estimate the percent of the population affected (for each Phase of Famine/Humanitarian Catastrophe, Humanitarian Emergency and Acute Food and Livelihood Crisis) within the affected geographic area. The most appropriate method could be by livelihood zone, wealth group, but in come instances may be more accurate to estimate by clan, gender, etc.

APPENDIX 6

Map 27: Somalia - Gu '06 Assessment Data Point Locations



APPENDIX 7

Map 28: Livelihood Zones of Somalia