

# **Technical Series**

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# 2004 Post Gu Analysis

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#### 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.

#### Husid

FSAU waxay warbixintaan u hurtay xaaskii, curuurtii iyo Qaraabadiisa uu ka geeriyooday Ahmed Ali Farah oo dhowaan ku geeriyooday Dhuusamareeb isagoo wakiil ugu ahaa FSAU Gobolka GalGuduud

#### **Dedication**

This report is dedicated to Ahmed ali Farah, FSAU's field analyst in Dusamareb who tragically lost his life on September 13, 2004.

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#### LIST OF ACRONYMS

ARI	Acute Respiratory Infection
ССРР	Caprine Pleura Pneumonia
CMR	Child Mortality Rate
FAO	Food and Agriculture Organization
FEWS/NET	Famine Early Warning Systems Network
FSAU	Food Security Analysis Unit
GAM	Global Acute Malnutrition
НА	Hectare
HRG	Humanitarian Response Group
IDP	Internally Displaced Persons
IDS	Institute for Development Studies
Lt	Litre
LZ	Livelihood Zone
MHC	Maternal and Child Health Center
MOHL	Ministry of Health and Labour Somaliland
МОН	Ministry of Health Puntland
Mt	Metric Tonne
MUAC	Mid Upper Arm Circumference
NDVI	Normalized Difference Vegetation Index
PWA	Post War Average
SAM	Severe Acute Malnutrition
SISh	Somaliland Shilling
SoSh	Somali Shilling
SRCS	Somali Red Crescent Society
TFC	Thearupetic Feeding Center
U5	Under Five
WFH	Weight for Height
WFP	World Food Programme
WHO	World Health Organization

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#### 1. EXECUTIVE SUMMARY

#### 1.1 Introduction

In July/August, FSAU completed its annual post *Gu* food, nutrition, and livelihood security assessment throughout Somalia. Seventeen UN agencies, INGOs, and Somali authorities participated in the field work (page 31). Preliminary results were reviewed with stakeholders in regional meetings in Somalia, with local and international partners in Nairobi, and published in the FSAU Monthly Report (August 2004). This technical report presents the final results of the 2004 Post *Gu* Analysis and confirms previous FSAU early warnings of severe food insecurity in pockets in the South, Central and Northern regions.

#### 1.2 Key Findings

• While much of the horn of Africa (including Ethiopia, Kenya, and Somalia) is currently affected by drought, "Somalia is having the most critical food security situation of the whole region" (JRC-MARS/ FAO/EC, August 2004).

#### Humanitarian Emergency and Livelihood Crisis Areas and Population Numbers

• An estimated **700,000 people** are in a state of **Humanitarian Emergency or Livelihood Crisis** in pockets of North, Central and Southern Somalia. These groups of people require **immediate humanitarian assistance** in the form of resource transfers and livelihood support (See Table 1 and Map 1).

• Northern Somalia, including the administrations of Somaliland and Puntland, is experiencing an environmental crisis of historic proportions due to charcoal production, *berkad* proliferation, and a general erosion of resource management since the collapse of the central government. A 3+ year drought has led to immediate humanitarian needs for an estimated 313,000 people in regions of Toghdeer, Bari, Nugal, Sanaag, and Sool. Dominated by pastoral livelihoods, some areas in the North have suffered cumulative livestock deaths of upwards to 60% for goats/sheep, and 80% for camels. Already there are large numbers of destitute people who have "dropped out" of pastoralism and are now entirely dependent on social and humanitarian support.

• Central Somalia is experiencing successive drought years combined with continued, sporadic civil conflict which is distorting markets and limiting access to grazing areas. An estimated 88,000 people in Galgadud and Mudug regions are in need of humanitarian assistance due to loss of livestock and livestock products.

• In **Southern Somalia**, critical regions include Lower and Middle Juba, Gedo, and Bakol. An estimated 300,000 people require immediate humanitarian assistance. Both Juba Valley and Gedo are areas of chronic food insecurity, which has been exasperated by extremely poor *Gu* harvests this year (<20% of post war average). Of particular concern for already vulnerable groups is a scenario of civil insecurity related to recent militia movements nearby Kismayo. Agropastoralists in Bakol region are also experiencing poor harvests of less than 20% of post war average. Malnutrition rates amongst Juba Valley riverine *(Key finidngs continued on page 3)* 

	Region		Humanitarian Emergency	Total in Need as % of
REGION	Population	Livelihood Crisis	(Level 2)	<b>Total Population</b>
North				
Bari	266,450	37,500	24,900	23
Nugal	113,265	23,800	10,200	30
Sanag	190,455	46,900	30,100	40
Sool	194,660	33,200	27,600	31
Togdheer	302,155	79,000	0	26
Subtotal	1,066,985	220,400	92,800	29
Central				
Galgadud	275,720	13,500	30,100	16
Mudug	251,520	30,100	13,900	17
Subtotal	527,240	43,600	44,000	17
South				
Bakol	215,180	15,600	0	7
Gedo	385,380	58,200	52,100	29
Lower Juba	329,240	58,600	0	18
Middle Juba	248,620	61,100	53,600	46
Subtotal	1,178,420	193,500	105,700	25
Total	2,772,645	457,500	242,500	25
Total number in need of assistance:			700,000	

#### Table 1: Post Gu 2004 Estimated Number of People in Need of Assistance

Note: Estimated numbers do not include IDPs or urban populations



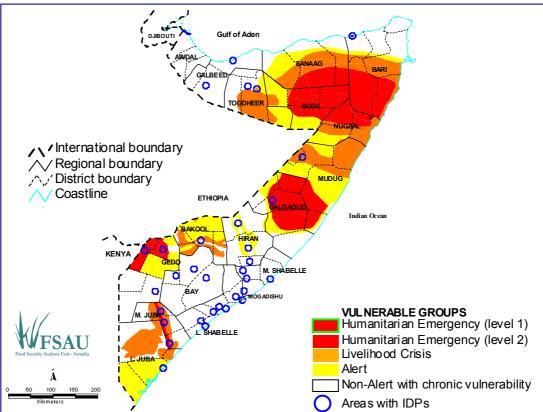


Table 2: Food and Livelihood Security Phase Classification

Phase		General Characteristics and Key Indicators	Implications
	Level 1	<ul> <li>CMR: &gt; 5 deaths / 10,000 / day</li> <li>Wasting: &gt; 40 % (W/H z-score)</li> <li>Large scale, concentrated destitution</li> <li>Widespread civil conflict</li> </ul>	<ul> <li>Critically urgent resource transfer (e.g., food or cash assistance)</li> <li>Critically urgent assistance on basic needs (e.g., health, shelter, water, etc.)</li> </ul>
Humanitarian Emergency Level 2		<ul> <li>CMR: &gt; 2 / 10,000 / day</li> <li>Under 5yrs death rate: &gt; 4 / 10,000 / day</li> <li>Wasting: &gt; 15 % (W/H z-score)</li> <li>Widespread, diffuse destitution</li> <li>Near complete asset depletion</li> <li>Credit limits nearly exhausted</li> <li>Large scale natural resource degradation</li> <li>Acute or widespread civil conflict</li> </ul>	<ul> <li>Urgent resource transfer (e.g., food or cash assistance)</li> <li>Provision of water, health services, etc.</li> <li>Preventative interventions</li> <li>Environmental protection and rehabilitation</li> </ul>
Livelihood Crisis		<ul> <li>CMR: 1-2 / 10,000 / day</li> <li>Under 5yrs death rate: 2-4 / 10,000 / day</li> <li>Wasting: 10 – 15 % (W/H z-score)</li> <li>Large and increasing debt</li> <li>Natural resource degradation</li> <li>Critical Asset Depletion</li> <li>Unusual large scale human migrations</li> <li>Acute civil conflict</li> </ul>	<ul> <li>Urgent livelihood support (e.g., food / cash for work, water supply assistance / rehabilitation, transportation assistance, health services support, education, etc.)</li> <li>Preventative interventions</li> <li>Environmental protection and rehabilitation</li> </ul>
Alert		<ul> <li>Wasting: 5 - 10 % (W/H z-score)</li> <li>CMR: 1-2 / 10,000 / day</li> <li>Lack of access to credit</li> <li>Declining terms of trade</li> <li>Livelihood shock</li> <li>Civil conflict</li> <li>Increased attendance at health clinics</li> </ul>	<ul><li>Careful monitoring</li><li>Preventative interventions</li></ul>
Non-Alert		<ul><li>Near normal conditions</li><li>Includes areas of chronic vulnerability</li></ul>	<ul><li>Longer term development</li><li>Sustained assistance to vulnerable groups</li></ul>

The **Food and Livelihood Security Phase Classification** is a new tool FSAU is developing to integrate multiple facets of food and livelihood security information into a simple statement indicating levels of severity and general implications for humanitarian response. The usefulness of this tool has already proven to enable strong linkages between information and response; therefore it continues to be used even though it is still under development and refinement. FSAU is currently working to incorporate additional objective food security indicators such as the Coping Strategies Index, an "entitlement gap" based on Household Economy Analysis, and a Livelihoods Index to be developed as part of a new monitoring system. Appendix 1 (page 30)provides a brief overview of this new classification approach.

#### Key Findings Continued

communities are already estimated at critical levels of 20% wasting, and expected to worsen in the coming months.

• The above analysis does not include the needs of the **376,000 Internally Displaced People** (IDPs) scattered in thirty-four urban settlement camps throughout Somalia (of which 250,000 are in Mogadishu alone), nor the urban populations in need of assistance (Map 1 and Appendix 5).

#### **Cereal Production and Annual Cereal Balance**

• Agricultural areas in the South are experiencing one of the three worst cereal production years since

**1995**, with total cereal production of 125,305 MT, which is of 75% of the post war average (page 7).

• In ten Southern districts, *Gu* 2004 crop production is **20% or less of Post War Average** (page 7). These 10 districts are in Juba, Gedo, Bakol regions (page 7).

• Annual Cereal Balance for Somalia 2004/05, updated with current *Gu* 2004 cereal production and current food aid estimates, indicates an estimated **36,000 MT cereal food gap** or shortfall in national cereal supply (page 9); including anticipated commercial and food aid imports. Note that the national cereal balance sheet does not take into consideration food access problems faced by the majority of the estimated 700,000 people in need of humanitarian assistance.

#### Rainfall

• Generally, Gu 2004 rains were erratic and started late in most parts of the country.

• *Gu* 2004 rains were below normal in most of the South and Central regions, leading to poor crop performance, poor pasture and limited water availability. Compared to long term average, rainfall was poor in Juba and Bakol regions (page 5).

• In some pockets in the North, rains were significantly higher than normal and attracted livestock immigration from surrounding drought affected areas resulting in over grazing and early depletion of resources (Page 5 and 24).

#### **Market Prices and Exchange Rates**

• Somaliland Shilling (SISh) and Somalia Shilling (SoSh) have been appreciating against the dollar since early 2003, but are still lower than pre-livestock ban levels (page 13).

• Cereal prices in US Dollar terms have, in general, increased significantly across the country since the beginning of this year. Cereal prices in the South did not drop as normal after harvest due to the overall poor performance of *Gu* 2004 crop production (page 9).

• As of August 2004, total livestock exports this year from Berbera and Bossaso totaled 1,465,684 heads. Livestock exports have shown a steady growth, but are still lower than pre-2000 livestock ban levels. Prices of export quality goats have continued to increase and are now comparable to pre-ban levels (page 11).

#### Nutrition

• The overall nutrition status of the Somalia population is not within acceptable global standards of less than 5% GAM. Food insecurity, civil insecurity, inadequate health infrastructure, poor water and sanitation, diseases and limited diet diversification are some of the key factors associated with the poor nutrition situation in Somalia. Southern Somalia nutrition situation lies within the serious and critical nutritional status and mortality rates categories.

#### **1.3** Cross Cutting Issues:

# The Acceleration of Environmental Degradation in Somalia: Implications for Livelihoods and Food Security

• Evidence indicates that environmental degradation is accelerating and undermining current and future livelihoods and food security throughout Somalia

• Uncontrolled destruction of the environment is severely affecting all productive areas, not only pastoral rangelands, but also productive agricultural lands.

• In pastoral rangelands, environmental degradation is resulting from a number of factors, including excessive tree clearing for charcoal production and exportation, lack of rangeland management, increased sedentarisation due to proliferation of berkeds, and one of the worst prolonged droughts in recent times.

• In agricultural productive areas, it is due to uncontrolled and accelerated tree clearing and charcoal production, invasion of foreign weeds and noxious plants, encroachment of sand dunes, and increasing trends of erratic and below normal rainfall.

FSAU is planning a series of research studies on the environment degradation, its impact on current and future food and livelihood security.

# analytical processes and methods

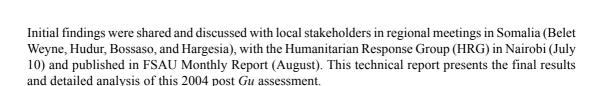
#### 2. ANALYTICAL PROCESSES AND METHODS

FSAU's annual Gu assessment was expanded to address growing concern over priority 'emergency' pockets in Somalia. Meetings with partners were held (July 9 & 13) to identify the critical "hot spot areas", which were then targeted with rapid assessments and detailed studies to accompany the annual Gu assessments (See Appendix 2 for list of partners). "Hot spot areas" identified included the Sool Plateau and Lower Nugal, Gedo, Juba Riverine, Mudug and Galgadud. Methodologies and tools were developed along side partners in preparation for fieldwork within 'hot spot areas'.

Fieldwork throughout Somalia, for both the normal *Gu* assessment and rapid emergency assessment, took place between July 17<sup>th</sup> and August 5<sup>th</sup>. Data collection methodologies included focus group discussions and key informant interviews, rapid nutrition assessments and surveillance, market surveys, crop production surveys and livestock holding surveys (See Appendix 3). FSAU operationalized a livelihoods approach to analyze the situation to clearly highlight root causes of food and livelihood insecurity. The new livelihoods approach emphasizes livelihood assets (physical, natural, financial, social and human) and livelihood strategies (strategies of accessing food and income, coping strategies, and expenditure patterns). Assessments also integrated food security and nutrition information collection to further enhance the analytical linkages between these.

In pastoral livelihood zones, researchers and analysts focused on the impact of the prolonged drought on the pastoral livelihoods, focusing on issues of water and range conditions, destitution, livestock losses, exports, body condition and productivity, and migration trends. In agricultural livelihood zones, researchers and analysts focused on crop production estimates, coping mechanisms, term of trade of grain and labour and the projected national cereal balance to indicate the macro level cereal supply and demand situation for the country. All survey data collected was triangulated with secondary data from satellite imagery, market data, nutrition data and agency's reports.

Nutritional data utilized during the analysis of the Gu assessment was obtained from district nutrition surveys, rapid assessments and analysis of trends of health facility data in the last one year. Weight for height (WFH) indicator was used in the nutrition surveys and health facility data. Measurement of the Mid-upper arm circumference (MUAC) indicator was used in rapid assessments. Interpretation of the current nutrition situation is based on the relationship to typical or expected trends in the area.

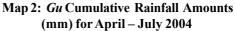


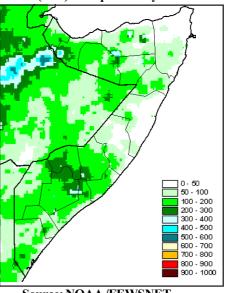
#### **3 SECTOR REPORTS**

#### 3.1 CLIMATE AND RAINFALL OUTCOME

Generally, Gu rains were erratic and started late in most parts of the country. In some pockets in the North, rains were significantly higher than normal and attracted huge livestock immigration from surrounding drought affected regions (Map 6). This has led to overgrazing and early depletion of resources. In pastoral areas of the North, greenness of rangeland vegetation, as measured by trends in NDVI indicate that the dryness of the Northern and Central pastoral areas has not improved during the *Gu* Season (Map 2 and 3). Following on three very dry years, this situation has led to extremely hard conditions for livestock and pastoralists in the North.

In most of the South and Central Regions, with the exception of parts of the Bay and Hiran regions (Figure 1), rains were below normal, leading to crop failure, poor pasture and limited water availability. Greenness of agricultural vegetation, as measured by trends in NDVI, is low after the *Gu* season, with exception of Lower Shabelle where the late rain led to

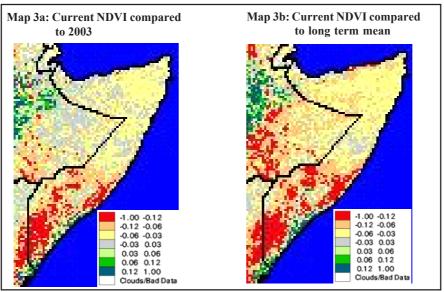




Source: NOAA/FEWSNET

a delayed crop cycle. The overall cereal production in Southern Somalia is significantly worse than 2003. In Awdal Galbeed the second crop season appears to be slightly delayed according to satellite imagery.

The normalized difference vegetation index (NDVI) image in Map 3a and 3b shows vegetation ("greeness") conditions in mid August as compared with last year and the long term average (since 1982). For the North, the images indicate an improvement for the Toghdeer area compared with last year, but still less than the long term average; and for the Sool area the vegetation conditions are generally the same as last year, but less than the long term average. Central has less vegetation than the long term average. In the South, the Bay area has a significant increase compared with the long term average, while the Bakol and Gedo areas have less vegetation than the long term average. **Map 3: Normalized Difference Vegetation Index** 



Source: FEWSNET/USGS

Towards the end of August, climate and food security experts specializing in the Greater Horn, gathered in Nairobi, for the fourteenth *Climate Outlook Forum*. Based on global climate system trends, observed and predicted sea surface temperatures in the Pacific, Atlantic and Indian oceans; a rainfall forecast was projected for the period September to December 2004. This period corresponds to the *Deyr* rainy season in Somalia, which has become critical, due to poor *Gu* rains (April-July) in most areas in the country earlier this year.

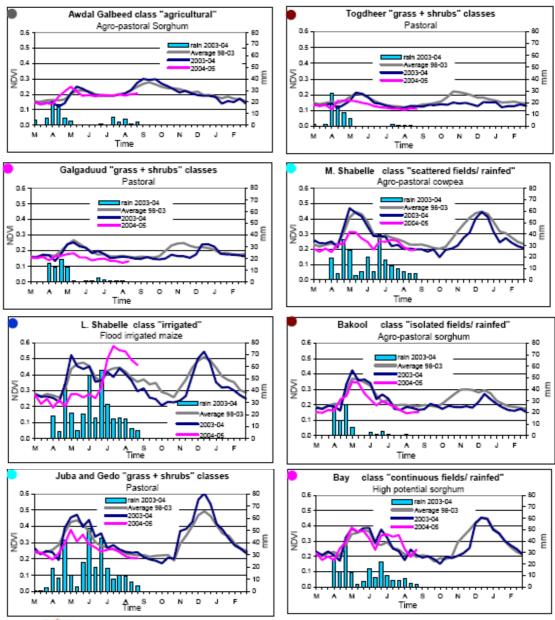


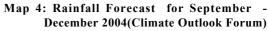
Figure 1: Rainfall Performance and NDVI for Awdal Galbeed, Togdheer, Galgadud, Middle Shabelle, Lower Shabelle, Bakol, Juba and Gedo and Bay

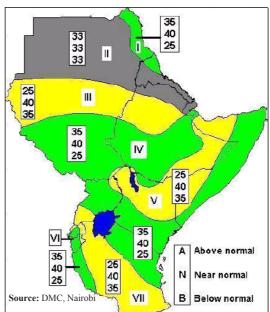
Source: MARS

Deyr 2004 rainfall forecasts for Somalia indicates that in (Map 4) the Western areas of the country (shaded yellow) rainfall is likely to be normal to below normal and areas in the east (Northeast and Southeast), especially in the coastline, (shaded green) rainfall is likely to be normal to above normal. The short rains from September to December are critical for all the Somali regions as the season will be followed by the long dry season (*Jilal*- January to April). The increased likelihood of normal or below normal rainfall along with the bad *Gu* rainfall earlier this year, raises serious concern for the livelihoods and food security of agriculture and pastoral communities in the sorghum belt, Gedo, parts of Hiran, Togdheer and Sool

The map on the right indicates the probabilities of receiving above normal,near normal or below normal rainfall. For example Region 5 has a 40 per cent probability of receiving near normal rainfall. Please note the following definitions:

Above normal rainfall is defined as within the wettest third of record rainfall amounts in each zone; Near normal is defined as the third centered around the climatological median and below normal rainfall as within the driest third of the rainfall amounts.





#### Overview: Gu Crop Production 2004

*Gu* 2004 cereal production in Southern Somalia is estimated at 125,305 MT, which is 75% of Post-War Average (PWA) and is one of the three worst production seasons since 1995 (See Figure 2). Crop production estimates for Northwest agro-pastoral areas in Awdal, Galbeed, and Togdheer are not available at this time, as the harvest period occurs later than the South, i.e. late November 2004. Crop establishment estimates for the Northwest, however, are around 11,400 MT (Table 3).

Rainfall was unevenly distributed over time and space across Southern Somalia. During April-May 2004, cereal crops faced severe stress in both rainfed and irrigated areas of Southern Somalia. June-July rains led to recovery in some rainfed lowland areas. Crop recovery, in general, was markedly evident on late planted crops (rainfed and irrigated) and pasture of the Shabelle Valley, Bay, Hiran and Juba Valley regions. The effect of June-July rains was more conspicuous on pasture regrowth and regeneration than crops in Lower and Middle Juba, Hiran and parts of Gedo regions.

June-July rains saved the Shabelle valley and Bay regions from complete crop failure. Moreover, the coastal rains or *Hagai* encouraged substantial sesame planting thus ensuring an income source for Riverine and Agro-pastoral communities of Shabelle and Juba Valley regions. *Hagai* is usually limited to coastal areas of Shabelle and Juba Valley regions. Unexpectedly, *Hagai*-rains in the 2004 *Gu* were exceptional. *Hagai* rains reached further into inland areas of the Shabelle Valley, Bay, Hiran and Juba Valley regions. Before these *Hagai*-rains, riverine, agro-pastoral and pastoral livelihood remained desperate in almost all livelihood zones of Southern Somalia. With the June-July rains the livelihoods regained hope.

#### Area Planted in Cereal Crops

About 85-90% of cereal production in the South is based on rainfed farming. In the event of rainfall failure, cereal crops are supplemented, in certain areas, with gravity or pump irrigation. However, competition for gravity irrigation (Shabelle valley) and high diesel costs in pump-irrigated areas (Hiran, Gedo, lower and Middle Juba), limits the extent of these options. Even if irrigation facilities are accessed at the onset of the season, farmers are reluctant to irrigate crops lest irrigation and rainfall coincide. Farmers, therefore, always rely on rainfall during the months of April-May and try to resort to irrigation whenever they lose hope of rainfall.

#### Figure 3: Cereal Production in Southern Somalia for Gu 2004

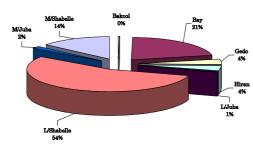
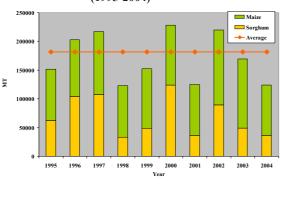


Figure 2 : Gu Annual Cereal Production (1995-2004)



In Southern Somalia an estimated coverage of 326,400 Ha (57% sorghum and 43% maize) has been projected at harvest of the 2004 *Gu*. Despite constraints in the gravity irrigation in Lower and Middle Shabelle, area coverage under maize is increasing, especially in the Kurtun-Warrey district of Lower Shabelle. This fertile area has recently attracted bush clearing by wealthy merchants, as well as attracting casual labour in-migration and sharecropping systems. New villages, such as Mustaqbal and Duray, have also emerged to utilize the fertile areas of irrigated Kurtun-Warrey. Area under cereal crop in Lower Shabelle is around 35% of the total area of Southern Somalia (78% maize and 22% sorghum).

In the Juba Valley, Deshek farming or flood recession farming is a major cropping system for maize production. In the last three years, the flooding of river Juba into the depression areas of Deshek has not materialized across Lower and Middle Juba regions. Consequently the absence of flood recession cultivation in the Deshek has caused cereal deficits frequently in the Juba Valley regions.

#### **Cereal Production Levels**

Crops (maize, sorghum) of the 2004-*Gu* emerged with the rainfall at the end of April and 1<sup>st</sup> week of May 2004. Except for crops on the down stream of Lower Shabelle (Kurtun-Warrey, Merka and Qoryoley), all other crops of Southern Somalia faced a long dry spell of 45-50 days. Some crops recovered and reached irreversible wilting-points. June-July rains restored hope of cereal producers and encouraged sesame planting across Southern Somalia.

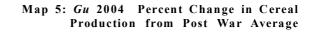
Total cereal production of Southern Somalia, estimated at 125,305 Mt (71% maize and 29% sorghum), is one of the worst production performance in the post-war era. It is lower than seven out of 10 Gu-seasons in the postwar period (Fig.4). In the Bay region (the sorghum basket of Somalia), in an average Gu season, the region produces 40-45% sorghum of Southern Somalia (Figure 3). Sorghum is the most affected in terms of yield/unit area (0.2Mt/ Ha) across southern Somalia. Maize has also faced serious constraints at growth and grain filling stages. Yield/unit area of maize is estimated at approximately 0.6Mt/Ha. Figure 3 summarizes estimated regional contribution of cereal production by Southern Somalia for Gu 2004.

#### **Other Crops**

Sesame is one of the most important cash crops produced in Southern Somalia. This is further supported by the fact that in the *Gu* 2004 season the area under sesame cultivation increased by 25% compared to last year. This increase in land cultivation under sesame is attributed to its high demand for export to Gulf countries. Sesame pure seed is sold at 22,000 SoSh/kg and for oil it sells for 20,000 SoSh/kg. Sesame is extensively produced from Shabelle valley. The total estimated production for this *Gu* 2004 is 10,130Mt.

#### **Overall the 2004** *Gu* Cereal Production Faced the Following Constraints:

- Erratic and uneven distribution of rainfall
- Inefficiency of irrigation infrastructure
- Mismanagement of irrigation water sharing
- Moisture stress at growth and grain filling stage
- Pests like Aphids, stem borers, smut and birds
- Insecurity during the 2004 Gu season



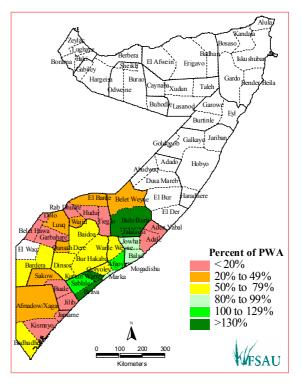
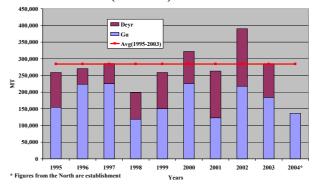


Table 3: Gu Cereal Production Estimates -Regional Breakdown

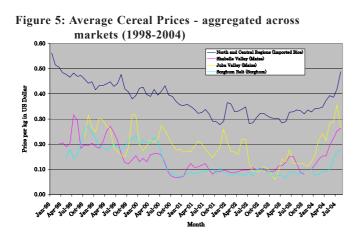
	Gu 20	04 Produc	ction in Mt	Gu 2004	Gu 2004 as
Regions	Sorghum	Maize	Total Cereal	as % of Gu 2003	% of Gu PWA
Bakool	450	20	470	140%	16%
Bay	22,700	4,100	26,800	92%	62%
Gedo	2,885	1,795	4,680	100%	62%
Hiran	1,890	2,540	4,430	498%	92%
L/Juba	245	610	855	13%	10%
L/Shabelle	5,000	63,610	68,610	74%	95%
MJuba	820	1,140	1,960	37%	17%
<b>M/Shabelle</b>	2,300	15,200	17,500	109%	104%
SUB TOTAL	36,290	89,015	125,305	80%	75%
Somaliland	10,925	515	11,445	41%	73%
TOTAL	47,215	89,530	136,750	74%	75%

Figure 4: Annual Cereal Production by Agricultural Season (1995-2004)



#### **Cereal Prices**

Local and imported cereal prices have increased significantly across the country making food access even more difficult for poor pastoralists, agro-pastoralists and riverine communities (Figure 5). Local produced cereals are closely linked to local cereal production and stock levels. Three consecutive seasons of poor production depleted stocks, increased demand for purchased cereal, and created shortages in market supply, all of which has contributed to significantly increased cereal prices. This sharp increase in prices is especially burdening food accessibility of the poor. Poor agro-pastoralists and agriculturalist must access more food from the market due to their poor harvest and reduced amount of own production available for consumption. At the same time, they are faced with significantly higher cereal market prices that reduce the amount they are able to purchase. Pastoralists are also negatively



affected by cereal price increases as they are dependent on cereal purchases to cover most of their food needs (70-80%).

The bulk of cereal production from Southern Somalia is expected to enter into the markets at the end of August 2004, therefore the visibly high prices of cereal, i.e. 4500-5000 SoSh/Kg are expected to decline slightly during the months of September-October-November 2004. Thereafter, cereal prices are expected to show an upward trend till the *Deyr* 2004/05 harvest. If

the 2004/05 *Deyr* is a normal season, again a short period of cereal price decline is expected. Otherwise, cereal prices will be unaffordable even in the major producing areas of Southern Somalia up to July 2005. Imported rice prices in the Northern Somalia show a similar increasing trend since early 2003 (Figure 5), but are more the result of rising livestock prices. Imported rice prices in the North are more closely linked with livestock export prices, as it is the common rate of exchange for pastoralists exporting livestock.

#### **Cereal Food Balance Sheet**

In June, in response to a growing concern over the poor performance of the Gu rains in agricultural areas of Southern Somalia, FSAU estimated a preliminary Somalia Cereal Supply/Demand Balance Forecast modeling a 'bad' and 'good' Gu outcome to assist in contingency planning for the coming few months (FSAU Monthly Food Security Report, June 2004). Actual Gu 2004 production levels are very close to the 'bad' Gu scenario modeled in June. The 'bad' Gu scenario was estimated as the three worst Gu production seasons in post war Somalia and was estimated as 131,000 MT.

This preliminary Cereal Balance Sheet is updated with actual Gu 2004 Crop Production estimates, as well as more current information on food aid imports, to arrive at a current estimated cereal shortfall – or cereal supply gap for Somalia (See Table 4). Gu agricultural production is critical in Somalia's annual food supply as it constitutes 65-70 percent of annual production in normal years. Calculations and underlining assumptions of the Cereal Balance Sheet are fully referenced.

Cereal Balance Sheets only provide an overall indication and estimation for the macro-level cereal supply and demand situation, i.e. overall cereal availability in relation to overall per capita needs. It does not address issues of food access, nor vulnerability levels related to access problems.

#### Summary Cereal Supply/Demand Balance in Somalia:

In summary estimated annual cereal balance for 2004/05, updated with current *Gu* 2004 cereal production estimates and current food aid estimates indicates:

- Cereal supply shortfall of 36,000 MT
- National cereal supply shortfall estimate does not account for food access problems created by the ongoing humanitarian emergency in the North, Gedo, Juba Valley and Central Somalia

• National cereal supply shortfall estimate does not take into account the severe food access problems faced by people identified to be in a state of humanitarian emergency or livelihood crisis. Even if cereal is available in the market the poor in these areas do not have the resources, either cash or credit, to purchase cereal in the market.

Cereals Balance Sheet for Somalia, 2004/2005	Post War Average <sup>1</sup> ('000MT)	<i>Gu</i> Productions <sup>2</sup> ('000MT)
DOMESTIC AVAILABILITY	303	258
Opening Stocks <sup>4</sup>	20	20
Domestic Cereal Supply 2004/05	283	238
<i>Gu</i> 2004	182	137 <sup>3</sup>
<i>Deyr</i> 2005 <sup>5</sup>	101	101
DOMESTIC UTILIZATION		
Cereal Utilization Requirements <sup>6</sup>	590	590
IMPORT REQUIREMENTS		
Anticipated Commercial Imports <sup>7</sup>	242	242
Food Aid Distributed, Stocks, Transit or Pipeline <sup>8</sup>	28	54
ESTIMATED SHORTFALL – CEREAL GAP	17	36 <sup>10</sup>

# Table 4: Cereal Supply and Demand Balance Forecast for 2004/05 Marketing Year and Gu2004Season Cereal Production

#### List of assumptions and calculations:

<sup>1</sup> Post War Average (PWA) *Gu* crop production estimate (1995-2003). Historical Crop Production Estimates 1995-2003 FSAU.

<sup>2</sup> Actual Gu and estimated *Deyr* crop production figures. For further explanation see footnote number three and five.

<sup>3</sup> Total crop production estimate is 136,705MT for Somalia (rounded to 137,000MT), which is the 2004 *Gu* Crop Production estimates in Southern Somalia (125,305), plus 2004 crop establishment estimates for Northwestern Somalia (11,400). Crop established are used in the Northwest because the harvest does not occur until late November 2004.

<sup>4</sup> Estimated opening stock consists of food aid and commercial import stocks at ports to markets. As of June 1, 2004 WFP stocks are roughly 4000MT, CARE 0 MT, and commercial stocks are estimated at 16,000 MT based on 1999 FAO/WFP Crop and Food Supply Assessment, September 9, 1999.

<sup>5</sup> Annual Domestic Cereal Supply assumes an 'average' 2004/05 *Deyr* Crop Production, calculated as average of 1995-2003 and is 101,458 MT. Historical Crop Production Estimates 1995-2003 FSAU.

<sup>6</sup> Total cereal utilization requirement composed of 546,000 MT food use, 3,000MT feed use, 21,000MT seed losses, and 20,000MT closing stocks. 'Food use' calculated based on assumption of total population of 6,823,288 (WHO 2002) and per capita cereal consumption of 80 kg/year (1999 FAO/WFP Crop and Food Supply Assessment, September 9, 1999). Per capita cereal consumption in Somalia is lower than would be dictated by the standard 2100 kilocalorie per capita per day. The percentage of kilocalories from cereals needs further research. Feed use and seed losses based on estimates derived for Cereal Supply/Demand Balance, 1999/2000, FAO/WFP Crop and Food Supply Assessment, September 9, 1999.

<sup>7</sup> Anticipated commercial imports estimated as actual three year average cereal imports for 1999

-2001, for Berbera, Bossaso, El-Ma'an and Jazira Ports. The three year average is 242,176MT, with 255,618MT in 1999, 255,756MT in 2000, and 215,153MT in 2001. 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 flour, and pasta and are expressed in cereal equivalents with conversion factors of wheat flour = 1.33, pasta=2.00 and rice= 1.

<sup>8</sup> In June to August 2004 WFP distributed 4932MT of food in Somalia. As of September 1, 2004 WFP reports 2,103MT in stocks, 1,240MT in transit and 24,782MT in the pipeline. CARE reports 1,586MT of food distributed in July and August, 19,028 MT planned for distribution from September through to March 2005.

<sup>9</sup> Calculation based on estimated population in need of assistance in Humanitarian Emergency (95,000) and in Livelihood Crisis (123,000) in northern pastoral areas under stress, FSAU Monthly Report, Feb. 2004. Assumed full ration until next *Deyr* rains, i.e. 12 kg/person/month for 6 months.

<sup>10</sup> This estimate does not include the likely requirement for additional food aid to mitigate the predicted food access problems among pastoralists in the north and central parts of Somalia, nor the needs of settlement based IDPs. For further explanation see text above.

#### 3.3 LIVESTOCK PRODUCTION AND EXPORT

#### **Overview Of Livestock Exports**

Livestock production and marketing dominates the economy in the North and is the primary livelihood strategy for most of the population there. Livestock from Northern Somalia are exported mainly through the ports of Berbera and Bossaso, but originate from varied locations within Northern, Central Somalia, as well as Zone V in Ethiopia. For the period of January to July 2004, Bossaso port leads in shoat exports, while the port of Berbera leads in cattle and camel exports (See Table 5 and 6). The highest shoat exports are recorded in the month of January, with Berbera and Bossaso exporting 177,376 and 189,167, respectively, reflecting the high shoat demands during the Hajj season in Saudi Arabia. Exports of shoats have decreased for Berbera and Bossaso between July and August 2004, but this is a normal seasonal trend and exports are expected to increase leading up to peak export season around the Ramadan and Hajj season (Id al-Fitir and Id al-Adha).

Two important recent trends in livestock exports in the North are highlighted in Figure 6. First, livestock exports show impressive recovery since the collapse of the export market brought on by the Gulf States Livestock Ban in 2000. Shoat exports have increased from a low 600,000 (heads) in 2001, to more than 2 million heads in 2003. This growth in shoat exports is occurring despite the continued livestock ban by Saudi Arabia, the primary importer of Somalia livestock, i.e. Saudi Arabia accounted for 94% of all Somalia livestock export prior

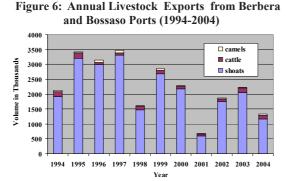
Table 5:	Livestock Exports from	ł
	Bossaso Jan - Aug 2004	4

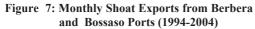
		•	
Month	Shoats	Cattle	Camels
January	189167	7944	99
February	118014	5041	52
March	74257	11842	175
April	98780	4766	478
May	106040	6439	66
June	79150	9670	466
July	126295	5904	479
August	59060	4050	120
Total	850763	55656	1935

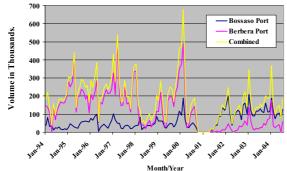
# Table 6: Livestock Exports fromBerbera Jan - Aug 2004

Month	Shoats	Cattle	Camels
January	177376	14792	0
February	35573	9435	1018
March	25207	10782	1250
April	35176	10995	0
May	42030	7461	625
June	39800	8390	726
July	59041	11950	0
August	55874	9829	0
Total	470077	83634	3619

to the ban. Many of the livestock exported are finding there way to Saudi Arabia, through the back-door of Yemen. Ongoing discussions within the Red Sea Livestock Commission are encouraging and some people are optimistic that if negotiations continue to be positive, Saudi Arabia might lift the livestock ban. If this happens, livestock exports would increase significantly, as the flow of livestock exports to Saudi Arabia would be easier and less costly. The second important trend is that Bossaso Port now leads as the primary port for shoat (sheep/goat) exports. Prior to the livestock ban, Berbera Port dominated (See Figure 7), attributed to the increased port fees and associated costs of Berbera over Bossaso.







#### **Livestock Production and Migration**

Overall water and pasture condition, livestock body condition, and migration patterns for the North and Central rangeland areas are outlined in Table 7. Livestock body conditions are poor in Bari (Sool Plateau area), North Nugal/South Bari, Sool, Sanag and Toghdheer. The worst affected areas in terms of worsening livestock body condition are Sool and North Mudug/South Nugal regions. Livestock have good body conditions in parts of Bari (Coastal and Dharoor Livelihood Zone), North Mudug/South Nugal, and Awdal regions. The improvement in livestock body condition is because of better range and water conditions as a result of rains received. Generally, weather conditions (and the resultant availability of water and pasture) determine the magnitude and direction of livestock migration in Somalia's pastoral areas. Table 7 highlights the importance of livestock migration from drier to wetter areas.

Region	Water and Pasture Condition	Body Condition	Migration	Map 6: <i>Gu</i> 2004 Livestock Migration Trend	
Bari	Normal in coastal area. Below normal in Dharoor & Sool Plateau	Normal in coastal area & Dharoor area. Poor in Sool Plateau.	Livestock have migrated to Sanaag & other wetter areas in the region	Herds are moving from drought affected	
North Mudug/ South Nugal	Normal	Normal to Poor	Some returning; others migrating to wetter areas	areas to wetter areas during and after the Gu of 2004.	
North Nugal/ South Bari	Deteriorating	Poor	Migration for those who can afford		
NW and Awdal	Normal	Normal	Livestock returning		
Sanaag	Deteriorating because of over- use of resources	North - Normal South - Poor	Immigration from Bari and Sool	DIBOUTIV Guf of Aden Variage	
Sool	Poor	Poor	Migration to Sanaag	1ughaye Iskustution	
Togdheer	Deteriorating due to scarcity of permanent water points	Poor, especially sheep and came	Moved to Western Hawd of Togdheer and highlands, while migrants from Somali region of Ethiopia have moved in	Borger and Art	
Livestock ready for export					

#### Table 7: Water and Pasture Condition, Livestock Body **Condition and Migration Summary**

Livestock ready for export

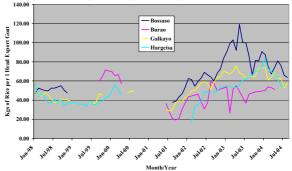
#### Livestock Prices and Terms of Trade

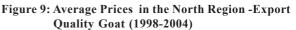
Export quality goat prices in the selected towns of Bossaso, Burao, Galkayo, and Hargeisa in Northern Somalia in real terms (expressed in US\$) have increased steadily since the livestock export market collapsed in 2001 and are now at comparable pre-ban levels (Figure 9). Export livestock prices are following the normal seasonal trend with prices high at the peak of the export season (average \$25 per head in January

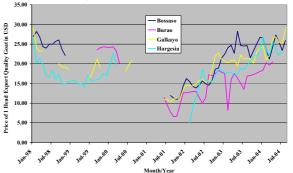
2004) and falling to lower levels thereafter (\$22 per head in March 2004). Export prices are now beginning to increase once again leading up to Ramadan and the next peak period (\$24 per head in July 2004).

Generally, the terms of trade (TOT) of shoats for imported rice has improved significantly in the selected towns of Bossaso, Burao, Galkayo, and Hargeisa in Northern Somalia since 2002 (Figure 8). This translates into pastoralists acquiring an increasing amount of rice for a head of shoat. At the peak of livestock export season TOT was 83 kg rice/head goat (January 2004), this is comparable to the TOT (80-100kg rice/head of goat at peak export period) prior to the imposition of the September 2000 livestock ban. The TOT improvement in the favor of pastoralists can be attributed to general improvements in livestock export prices. The increase in TOT is not as dramatic as livestock price increases, because rice prices have also steadily increased during this same time (Figure 5).

Figure 8: Terms of Trade Imported Rice to Export **Ouality Goat (1998-2004)** 







#### 3.4 MARKET ANALYSIS AND TRENDS

Despite recent gains in the Somalia and Somaliland Shilling, the values are still lower than the pre 2000 values (Figure 10). The Somalia Shillings (SoSh) and the Somaliland Shilling (SlSh) have been gradually loosing value since mid-2000, due to the livestock ban. Livestock exports are a major source of foreign exchange earnings and the collapse of the livestock exports translated immediately into fewer dollars available. This combined with the anticipation of future shortages, lead to an immediate increase in the 'price' of the dollar (Figure 10).

Trends of both currencies and the percent change as compared to January 2000 (as baseline) are presented in Figure 11 and 12. Prior to 2000, normally both currencies gain value in September due to low internal demand for dollar and the increase in the supply of dollars earned through rising livestock exports. However as shown in Figure 11 and 12, both currencies drastically lost value after 2000; the SoSh reached its lowest level at the beginning 2002 (130%) and SISh in mid-2003 (180%).

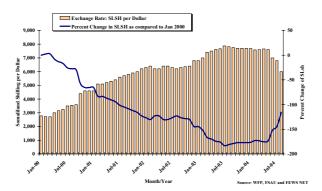
#### 30,000.00 25,000.00 20,000.00 10,000.00 5,

# Figure 10 : Exchange Rate- SoSh and SISh to USD (1998-2004)

Figure 11: Exchange Rate and Percent Change in Mogadishu Market in Somali Shilling (SoSh) (2000 - 2004)



Figure 12: Exchange Rate and Percent Change in Haregeisa Market in Somaliland Shilling (SISh) (2000 - 2004)



Currently the Somalia Shillings (SoSh) is appreciating in value, i.e. gaining in strength against the dollar, and has been since the beginning of 2002 (Figure 11). This appreciation is partly attributed to the large increase in livestock exports from Bossaso Port, to overall levels that are higher than before the 2000 livestock ban (Figure 7). Prior to the livestock ban in 2000, the bulk of shoats were exported through Berbera Port, however, since 2001 Bossaso Port exports the larger share (page 11).

Currently, the SoSh is at roughly 50% of its value in 2000. The sharp appreciation in the SoSh in the last four months is attributed to a sense of heightened prospects for a government in Somalia as a result of ongoing peace talks, which is creating optimistic speculations on the Somali Shilling.

The Somaliland Shilling (SISh), on the other hand, depreciated significantly again early last year (2003), as the result of political uncertainty and change in government. The SISh began to appreciate in mid-2004 and is now at around 116% of its value in 2000.

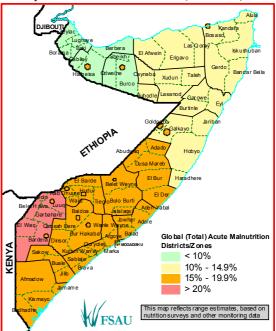
The overall depreciation of both shillings has increased the cost of imported commodities, including fuel (and therefore transport and pump irrigation costs), sugar, rice and other goods. However, when the shillings started to appreciate, some imported food prices dropped slightly in most urban markets during 2004.

#### 3.5 **NUTRITION OVERVIEW**

In recent years, nutrition surveillance throughout Somalia has shown some distinct trends in the typical levels of malnutrition seen in different parts of the country. While the issue of food security remains one of the most significant factors influencing these trends, numerous other factors have an effect too. Among the factors underlying the consistent high levels of malnutrition among Somali people (also in Somali region of Ethiopia and in North Eastern Province of Kenya) are limited dietary diversity, seasonal fluctuations in access to key foods, poor early child feeding practices (exclusive breastfeeding is rarely practiced), low level of contact with health services for young children and women of reproductive age. The overall wellbeing of the population is also reflected in the high under-five mortality rates observed during surveys.

There can be little doubt that the levels of civil insecurity and social support have a significant impact not only on food security at household

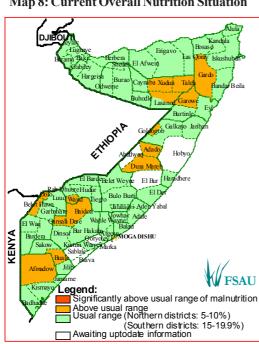




level but also on the capacity of households to cope with food insecurity and their levels of resilience. Map 7 depicts current estimations of the ranges within which malnutrition rates typically fall throughout Somalia, outside times of crisis. By international standards, an acceptable level of malnutrition is expected to be less than 5% (WFH score).

Nutrition surveillance is undertaken throughout Somalia using information from a number of sources, including surveys, rapid assessments, health facility data, selective feeding programmes, sentinel site surveillance and field observations. During periods of worsening food insecurity, FSAU and partners attempt to estimate the extent to which malnutrition has increased over those typically seen in the area.

The word 'normal' is deliberately avoided when referring to malnutrition rates in Somalia as 'normal' by international standards is very rarely seen. Because 'typical' levels throughout the country are significantly different, comparisons of malnutrition levels between areas are not useful during periods of crisis (e.g. a malnutrition rate of 17% in Borama would suggest a very worrying situation but would be considered below the rate usually seen in Belet Hawa). Neither is it possible to have clear cutoff points



Map 8: Current Overall Nutrition Situation

to define a crisis, although in another context it would be justified to classify much of the Southern Somalia as being in 'crisis' even outside times of acute episodes of worsened food insecurity.

Populations in various areas of Somalia respond differently to food insecurity. In some populations a slight deterioration in food security can result in a very significant impact on the population e.g. In Gedo, Juba Valley and IDP camps, whereas other populations cope better with a crisis in the short-term. The nature of the episode of food insecurity, as well as the social support systems, appear to have a significant influence on this.

Map 8 shows current estimations of changes in malnutrition levels throughout the country, based on all available data. This needs to be interpreted with Map 7 to understand that the usual range seen in many areas is still in the 'critical' category by international standards and needs to be addressed in order to reduce malnutrition related morbidity and mortality. Details are provided in the relevant regional sections.

#### 4 **REGIONAL HIGHLIGHTS**

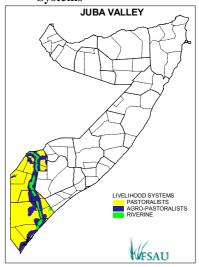
#### 4.1 SOUTHERN SOMALIA

#### 4.1a Juba Valley and Gedo

#### **Overview of Events**

There are two areas in a state of humanitarian emergencies in this region. One is Northern Gedo, where it is estimated that 52,000 are in a state of humanitarian emergency and another 58,000 are in a livelihood crisis, due to chronic and ongoing civil insecurity (Table 8 and Map 10). The second area is the riverine communities in Middle Juba, where it is estimated that 54,000 people are in a state of humanitarian emergency, and another 61,000 are in livelihood crisis (Table 8 and Map 10). The poor in this area in good years face seasonal swings in food insecurity and live on the margin. Consecutive seasons of near crop failure, unaffordable food prices, limited income earning opportunities, and limited social support networks have pushed this fragile group into a state of humanitarian emergency. An additional 59,000 agro-pastoral and pastoralists are facing a livelihood crisis in Afmadow and Jamame districts (Table 8 and Map 10).

#### Map 9: Juba Valley Livelihood Systems

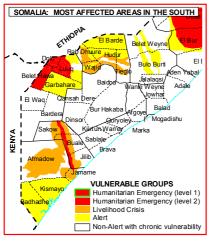


Poor rainfall and civil insecurity have directly contributed to a near total crop failure in Juba riverine and agro-pastoral rainfed

regions in Northern Gedo. 45-50 days of dry spell during the critical stage of grain setting has resulted in a serious crop failure. Other contributing factors to the crisis in the region include:

- Heavy insect infestation for cereals and bird attack for sorghum
- Conflict/insecurity during planting time forced farmers to abandon their farms
- Localized floods in Juba valley delayed timely planting
- High fuel prices for irrigation and land preparation hampered potential production in the valleys
- Low river level in Juba necessitated irrigation pumps, while the high cost of diesel fuel has restricted the choice of gravity irrigation, hence reducing production
- Area cultivated was limited by inadequate farming practices (lack of crop rotation and diversification), and inappropriate technology (e.g. uncertified seeds)
- High prices of commodities due to increasing number of road blocks
- High pastoral immigration from North Eastern Kenya resulted in stiff competition for scarce resources (pasture, water, market etc.)

#### Map 10: Somalia Most Affected Areas in the South



#### Table 8: People in Need of Assistance - Juba and Gedo

			Humanitarian	
	District	Livelihood	Emergency	Total in Need as %
DISTRICT	Population	Crisis	(Level 2)	of Total Population
Gedo				
Bardera	76,850	0	0	0
Belet Xaawo	68,135	20,700	14,600	52
Ceel Waaq	52,150	0	0	0
Dolow	39,050	17,800	15,600	86
Garbahaarey	76,075	0	0	0
Luuq	73,120	19,700	21,900	57
SUB TOTAL	385,380	58,200	52,100	29
Lower Juba				
Afmadow	100,075	25,800	0	26
Badhadhe	41,695	0	0	0
Jamame	100,625	32,800	0	33
Kismayo	86,845	0	0	0
SUB TOTAL	329,240	58,600	0	18
Middle Juba				
Buale	50,000	10,900	14,900	52
Jilib	114,720	24,500	24,400	43
Sakow	83,900	25,700	14,300	48
SUB TOTAL	248,620	61,100	53,600	46
TOTAL	963,240	177,900	105,700	29

Note: Population Source are WHO and UNICEF supplement immunisation activities (2002). The numbers presented are estimates.

#### **Effects on Livelihood Assets**

**Natural Capital:** Extreme water shortage exists in Hagar district as rainfall water catchments are dry due to *Gu* 2004 rain failure in the area. About 80% of the communities (pastoral, agropastoral, urban) have fled to the riverine zone in search of water and cereal food. Water shortages are also present in Bless Qoqani of Afmadow district. Juba River water level is low, and both gravity and pump irrigation is difficult. Several seasons of erratic rainfall and crop failure in Juba riverine and Northern Gedo have aggravated conflict over potential (high fertility) areas for farming and grazing. Environmental degradation and deforestation through charcoal production is on the rise in Juba valley.

**Physical Capital:** Poor and deteriorating road networks and transport infrastructure is restricting flows of services and commodities, and leading to increased prices of local and imported food commodities. Juba river is heavily silted and embankments are in poor condition. Due to extreme conditions in highlighted areas, farmers are being forced to sell part or all their land to settle their debts, while pastoralists are forced to sell their pack-camels. Large in-migration of livestock from Garissa District of Kenya has occurred due to poor pasture and water conditions across the border. Incidences of foot and mouth diseases are reported in the cattle in Afmadow, Badhadhe and Kismayo districts. Most of the livestock in the region are reported to be in good condition regarding production and reproduction. However, due to the water stress from the inland zone and across the border in Kenya, animals are overpopulated at water points, which will increase overgrazing and disease dissemination.

**Social Capital**: The weak social/kinship support among Juba riverine communities has increased their vulnerability to food and livelihood insecurity. Recurrent civil insecurity has increased the number of IDPs and destitute people. In Gedo, remittances are more prevalent in urban areas and only occasionally do pastoralist and agro-pastoralist receive remittance from abroad or locally. Remittances are reported to be declining in term of quantity and frequency.

**Human Capital:** High malnutrition levels and disease burden, particularly diarrhea, malaria and respiratory infections, limit the population potential to exploit other livelihood assets. Malnutrition rates in Middle Juba riverine communities are significantly above usual range of malnutrition (19.5% WFH < -2 z score) and in Afmadow district and Gedo malnutrition rates are above the usual range (Map 8).

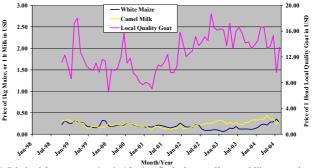
**Financial Capital**: According to the business people interviewed more than 30 percent have closed their shops due to non-repayment of debt by pastoralists and agro-pastoralists in the area. This was further supported by key informants who reported that a number of farmers had sold part or all of their land to repay debt, while pastoralists have sold even pack-camels. High level of unemployment resulted in low incomes. Unstable exchange rates weakened purchasing power and the terms of trade.

#### **Effects on Livelihood Strategies**

Both the poor riverine and agro-pastoralists main food source is own production (50-60%), which is supplemented by food purchases, i.e. cereal, sugar, oil, fresh milk and skimmed milk (35-45%) and only about 0-5 percent of food is acquired through gifts. The poor riverine have two main sources of income, employment/self-employment (60%) and crop sales (35%), while agro-pastoralists income portfolio is more diversified, including crop sales (15-50% depending on area and group), livestock sales (20-30%), employment/self-employment (35-55%)

**Income Sources:** Income from employment and self-employment is severely limited as local and distant work opportunities are scare or nonexistent. Business in surrounding areas is depressed and slowed, as Kismayo port is closed for almost four months due to armed conflict and sea closure. Income from animal sale in agro-pastoral is low due lower cattle demand in Garissa markets. Meat and milk prices have continually declined over the last five months (Figure 13). Terms of trade, both in terms of the amount of cereals one can

Figure 13: Average Prices in Juba Valley- Various Commodities (1998 -2004)



\* Calculated from average prices in Afmadow, Buale, Jamame, Hagar, and Kismayo market

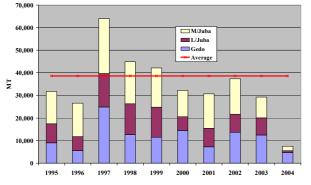
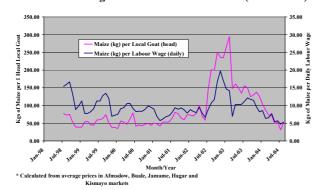


Figure 14: Gu Crop Production in Juba Valley

(1995-2004)

Figure 15 : Terms of Trade- in Juba Valley -Sorghum to Goat and Labour (1995-2004)



obtain from daily wage and from sale of local goat, has been declining rapidly since the beginning of the year and are now at the lowest level in years (Figure 15).

**Food Sources**: Own crop production, the primary source of food for riverine and agro-pastroalists in Middle Juba was severely affected by a near crop failure. Gu 2004 crop production for this area is 1,960 MT which is 17% of post war average. The other main source of food, purchases, is also severely constrained as cereal prices are at their highest levels ever, due to overall crop failure in the region and high transportation costs (Figure 14).

**Expenditure:** Expenditures of riverine and agro-pastoral households have been increasing because of increasing cost of local and import commodities.

#### **Nutrition Situation**

Persistent insecurity, poor crop performance for several consecutive years, asset loss, disruption of livelihood systems, increased food prices and inadequate health services have predisposed the M/L Juba and Gedo populations to increasing levels of malnutrition. Nutrition indicators reflect an emergency situation in some parts of these regions. In May 2004, GAM rate of 19.5% (W/H<-2 z score or oedema) and SAM rate of 3.7% (W/H<-3 z score or oedema) in Jilib riverine population was recorded. An U5 mortality rate of 5.4/10,000/day and CMR of 2.2/10,000/day were also recorded; an indication of critical emergency situation. The poor situation of the riverine population is attributed to lack of access to adequate food, lack of access to safe water, poor sanitation, inadequate health services, fragile social support network system and a poor social care environment for women and children with the insecure environment being a major contributor. The affected communities are coping through reduced meal frequency, migration to urban areas for job opportunities and intensified wild food collection.

Above usual malnutrition rates are recorded in pastoral and agro-pastoral Northern Gedo population, a situation attributed to food insecurity and collapsed livelihoods amidst chronic civil insecurity. Surveillance data suggests that malnutrition levels are higher than those typically seen in the area. The nutrition situation in the predominant agro-pastoral and riverine Southern Gedo population is not as critical as in the North.

#### **Coping Strategies**

The coping strategies reported include, collection of bush products for alternative income sources, migration to urban areas in search of employment, collection of wild fruits, fishing for subsistence, land sale (especially in the riverine areas), reducing the number of meals, and consumption of non preferred foods. Families are splitting as active members migrate to urban areas for work and dependence on food aid is increasing.

#### **Future Outlook**

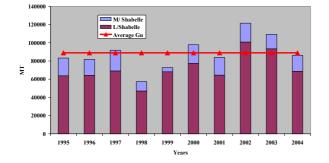
Given the overall poor performance of Gu 04 crop production, the price of cereal is likely to remain high, thus making accessibility difficult for the poor. If the increased conflict and insecurity around Kismayo continues this will further limit opportunities for employment, lead to higher food prices, and create greater food and livelihood insecurity in the region.

#### Overview

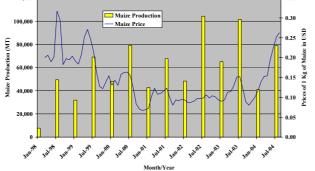
Uneven and below normal rainfall over the last three years has seriously impaired the livelihoods in the Shabelle region. The Gu 2004 rainfall started on time in April throughout the region, but then stopped leading to a prolonged dry spell for May-June. The last week of June through July, heavy *Hagai*-rains (coastal-rains) over the coastal and inland areas of Lower and Middle Shabelle regions provided relief and recovery. The *Hagai* rains has facilitated animated livestock condition, growth recovery of late planted maize, extensive sesame planting, replanting of maize and sorghum, and enhanced labour opportunity. On the negative side the rains have also encouraged outbreak of pests (Aphids, Smut), increased weed density and outbreaks of localized cattle diseases.

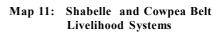
Cereal production of the Shabelle Valley is estimated to be close to the post-war average (Figure 16 and Table 3). While the rains have alleviated short term food insecurity, the region still faces structural problems including large scale degradation, inefficient infrastructure and limited access to finance. The high price of cereal (maize, sorghum) in Lower and Middle Shabelle are of concern, however, with the *Gu* harvest flooding the market and a successful *Deyr* season prices should go down (Figure 17).

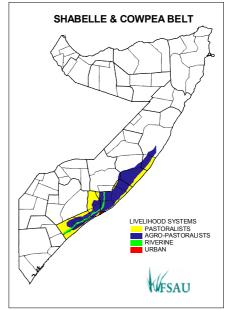
#### Figure 16: Gu Cereal Production in Lower and Middle Shablle (1995-2004)











#### Effects on Livelihood Assets

Natural Capital : While the Hagai rains moderately replenished pasture and grazing lands, the natural wealth in the Shabelle Valley is vanishing due to resource degradation and exploitation over the fourteen years of civil insecurity. Charcoal production for export, overgrazing, and resource conflicts have made many parts of the Shabelle Valley bare. Throughout the Shabelle Valley regions, charcoal made from acacia trees species is being exported to Gulf countries leading to large scale degradation. Reserve areas for livestock at Warmaxan in the Wanle Weyne district have been destroyed. Clashes between farmers and livestock owners over pasture have aggravated civil insecurity.

**Physical Capital:** In the pre-war era, to support the banana and sugar plantations extensive physical capital (barrages, irrigation network canals, culverts, bridges, network and feeder roads) was developed which has attracted agro-pastoralists and pastoralists from Bay, Bakol and Central regions in the event of shocks or hazards. Over the years due to the lack of governing bodies and inefficient management, the physical capital has deteriorated. Problems include:

- Silt deposit in the main canals and the river bed which has made certain villages of the Shabelle Valley flood prone areas.
- Inefficient irrigation infrastructure (barrages, irrigation network canals, culverts, bridges). While the water catchments and wells were replenished by the June-July rains, the silt deposit has hindered the efficiency of this infrastructure. Irrigated agricultural land further from the source is nearly abandoned or dependent on rains. Almost 85-90% of the agricultural-land is based on rainfed farming due to inaccessibility of gravity irrigation.
- Tarmac and feeder roads are in poor state and with rains become untraversable, as a result transport costs are high which in turn increase the prices of imported and locally produced food items at the main markets.

**Financial Capital**: Across the Shabelle Valley many trust based credit forms have emerged due to the absence of legal financial institutions. Among the poor agro-pastoralists and riverine communities, donations in cash or credit in-kind are common during the *Hungry Period* (20-25 days) in the *Gu* and *Deyr* seasons. A creditor, based on the farmers crop harvest expectation, offers 100 shot of grain (*shot* of grain of maize = 0.75kg) for a repayment SoSh.100,000 at harvest. While this capital is crucial for investment, due to the low prices of maize at harvest the farmer/debtor will have to sell 200 shot of grain to repay SoSh 100,000. In some cases the rate is as low as SoSh 1 to 1 shot of grain depending on the convenience of the creditor and debtor, yet the lack of regulated access to capital forces farmers to accept exploitative terms of credit. Share cropping is another source of financial capital for riverine villages with bad irrigation infrastructure.

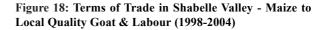
**Social Capital**: Strong social networks exist within the communities and support destitute, disabled and the poorer families. *Zaaka* and *Sadaqa*, both religiously sanctioned alms are widespread in the region. *Zaaka* refers to a specific percentage of your earnings (in-cash or in-kind - around 2.5%) which must be donated to those who are worse off, while *Sadaqa* is free and unspecified gift giving support to the poor. Contribution of remittance to riverine, agro-pastoral and pastoral livelihoods is negligible.

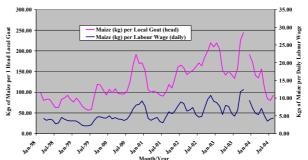
**Human Capital:** Ongoing nutritional surveillance using information from a number of sources indicates that malnutrition rates are within their usual range for this region, however, the 'usual' range for most of the Southern districts is between 15%-

19.9%, a level that by International Sphere Standards, is already critical.

#### Effects on Livelihood Strategy

There are two primary livelihood strategies in the Shabelle Valley, the Lower Shabelle, Agro-Pastoral (rainfed, flood irrigated, maize and cattle) and the Shabelle Riverine (irrigated maize). Both the poor agropastoralists and the riverine communities, rely primarily on own crop production for their food needs (65-80%), supplementing this with purchases (10-20%) and animal products (0-15%). On the income side, poor agro-pastoralist earn 45-65% of cash income through employment and selfemployment, i.e. agricultural labor, collection and sale of bush products, which is supplemented with the sale of livestock and livestock products (0-20%). Poor riverine households earn more than half their income from crop sales, both cereals and non-cereals, followed by seasonal casual labor.





\* Calculated from average market prices in Afgoye, Jowhar, Merka and Qoryoley



Tub: Maize stocks for threshing in Lower Shabelle

**Income Sources:** Opportunities for crop sales are normal as a result of normal Gu 2004 production. Gu 2004 cereal production for the whole of Shabelle Valley is estimated to be 86,110 Mt (9% sorghum and 91% maize), which is normal when compared with the post war average (-3%). Lower Shabelle production dominates the valley, contributing 80% of the total cereal production of he Shabelle Valley region. After the June-July rains substantial areas of the Shabelle Valley were allocated for *Hagai*-sesame production. An estimated 8,000 Mt of sesame, an important cash crop, is expected from Shabelle Valley this year. Sesame for seed purpose is sold at SoSh.22,000/kg and for oil pressing SoSh 20,000/kg, the highest prices compared to both the pre-war and post-war era. The upsurge in prices is attributed to the boost of sesame export from to the *Gulf* countries through the port of Elma'aan. Sesame planting brought increased casual labor opportunities for sesame planting across irrigated and rainfed areas. With the onset of the good *Hagai* rains, terms of trade began to improve for both crop and livestock producers (Figure 18).

The lack of adequate rainfall over the last three years has impaired the livestock economy, especially negatively affecting cattle in the region. Domestic livestock (she-camel, she-shoats) have been exported abroad due to the decline in local demand and decreased productivity of cattle. While the *Hagai* rains helped livestock, many herders during the stress of the 2004 *Gu* season, were forced to sell their livestock to support their daily household needs.

**Food Sources:** Consumption of own production is normal due to normal 2004 *Gu* production throughout the valley. Cereal prices are relatively high, but households are not dependent on cereal purchases at this time as they have sufficient own production (Figure 16). Maize price currently range from SoSh 4000-4500 per kg, whereas, sorghum is SoSh 3100 per kg.

#### **Nutrition Situation**

The nutrition situation in the Shabelle and the neighbouring Benadir regions remains poor but is within the usual range of malnutrition rates for the area. Health facility based surveillance indicates increasing numbers of malnourished children in Merka (Shahambood area) and Jowhar. Food insecurity particularly among the IDPs and the poor population, disease and the poor environmental sanitation negatively affects the population's wellbeing. Diarrhea and malaria are some of the common diseases affecting the population. Mitigation activities have been minimal due to insecurity encountered by the humanitarian agencies.

#### **Future Outlook**

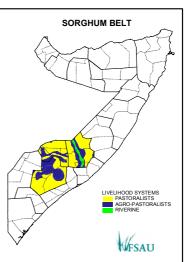
The *Gu* 2004 produce is expected to enter into the market in September-October 2004, forcing the prices to go down by 50% through September-November 2004. If the *Deyr* is normal, the cereal prices (maize and sorghum) will be 'normal'; if not the high prices will make cereals unaffordable for the poor wealth groups.

#### 4.1c Bay, Bakol and Hiran

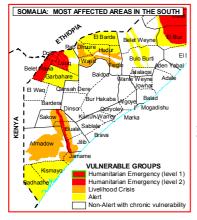
#### Overview

Bay, Bakol and Hiran are the major sorghum producers in the region. Livelihood strategies in the region include agropastoralists, pastoralists and agricultural communities along the Shabelle riverine. This 2004 Gu season, Hiran had near normal Gu production. Livestock condition and productivity is normal with the exception of cattle of the agro-pastoralists, pasture is better than the other regions, and business and trade is vibrant. Crop production in Bay was 62% of post war average and pasture conditions are attracting some in-migration from surrounding areas. Bakol experienced a near crop failure (16% of post war average) and is faced with severe food insecurity among the poor. Poor agro-pastoralists in Bakol are the worst affected, with severely stressed and deteriorating food and livelihood security as the result of three consecutive seasons of near crop failure,

#### Map 12: Sorghum Belt Livelihood Systems



#### Map 13: Somalia Most Affected Areas in the South



# Table 9: Estimated number of Agro-pastoralist facing Livelihood Crisis in Bakol

DISTRICT	District Population	Livelihood Crisis	Humanitarian Emergency (Level 2)	Total in Need as % of Total Population
Bakol				
El Barde	42,350	900	0	2
Hudur	51,725	4,100	0	8
Rabdure	33,580	2,400	0	7
Tieglo	57,525	5,400	0	9
Wajid	30,000	2,800	0	9
SUB TOTAL	215,180	15,600	0	7

Note: Population Source are WHO and UNICEF supplement immunisation activities (2002). The numbers presented are estimates.

water shortages due to prolonged drought, falling water table, rising cereal prices, rapidly deteriorating terms of trade, and increased levels of indebtedness. It is estimated that 16,000 poor agro-pastoralists in Bakol are already in a state of livelihood crisis and require immediate livelihood support (Table 9 and Map 13). There is also a State of Alert issued for pastoralists in Bakol and agro-pastoralists bordering the Shabelle Riverine Communities in Hiran (See Map 1).

#### **Effects on Livelihood Assets**

**Natural Capital:** There is widespread deforestation and pasture degradation throughout the region due to the cutting down of the *Harar (Terminalia spp)* trees for construction. It is being exported for construction to places as far away as Puntland. The tree is an important source of browse for livestock in the region, as well as crucial to honey production, an important source of income for the poor. Water is very scarce in many parts of Bakol. INGOs have helped communities dig shallow wells, but most are now dry as the water table has fallen.

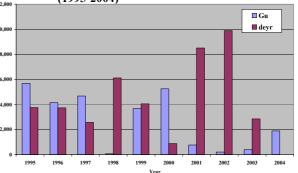
**Physical Capital:** Poor road network, transport infrastructure and increased road blocks, especially in Bakol region, are restricting the smooth flow of services and commodities, and leading to price increases for staple foods. Livestock deaths are increasing in Bakol due to disease and prolonged drought. Carcasses are being burned to stop the spread of disease (Picture below). After five successive seasons below normal rainfall, a large number of pastoralists in Bakol have migrated into parts of Bay, Hiran and Zone IV of Ethiopia in search of better pasture and water sources. It is estimated that as many as three fourths of all livestock, in Tielgo District in Bakol have migrated out of their normal areas. In Hiran, livestock condition is good except for agro-pastoral cattle milk production and availability in market has declined mainly due to exports to Central and Puntland regions for higher price gains.

**Social Capital:** Social support through gifts and loans are the main coping strategies available to the poor agro-pastoral and poor riverine communities. Remittances, in general are prevalent predominantly in urban areas for the city dwellers. In Bay and Bakol, some households are reporting to have received remittances from family members who have migrated to Hiran, Mogadishu and Puntland in search of



Carcasses of livestock are being burnt to avoid the spread of dieases

Figure 19: *Gu* and *Deyr* Cereal Production in Hiran (1995-2004)



labour opportunities. This is supported by hosting migrant regions reports of large immigration of active family members from Bay and Bakol.

**Human Capital:** Malnutrition rates are significantly above usual range in Southern Bakol and Northwestern Bay regions (Map 8). Nutrition survey results in the past one year, indicate serious to critical malnutrition rates. Some feeding programmes have been established. Mothers and children in particual spend time at the feeding programmes or in search of health services at the expense of other productive livelihood activities.

**Financial Capital:** In Bay, especially in Bakol, household indebtedness is increasing and many households are finding repayment difficult or impossible. Failure of repayment is increasing the tension between businessmen and households and a rising issue of concern in the region. Interviews with traders and money vendors reveal that some households are migrating out of the area to avoid confrontation over the money they owe. In Hiran region, credit availability is not constrained. Business is 'booming' and borrowing money from traders and better-off people is on the rise as crop harvest is higher than neighboring regions and better pasture has attracted many pastoralists.

#### Effects on Livelihood Strategies: Focus on Bakol Agro-pastoralists in Livelihood Crisis

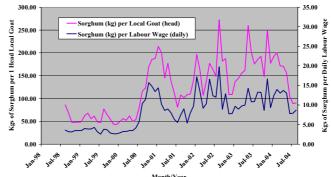
The poor Southern Agro-Pastoralists in Bakol in general have a diversified portfolio of annual cash income sources, earning most of their income (34-55%) through employment (e.g. agricultural labor, portering, herding) and self-employment (e.g. sale of bush products, including honey and wild meat). Another 20-30% originates from the sale of livestock and livestock products, followed by 5 -15% from the sale of crops. Crop production is the main source of food for the poor agro-pastoralists accounting for 50-60% of their total annual food needs. Own production is supplemented with food purchases (35-45%) to meet the balance of their food needs.

Poor agro-pastoralists in Bakol are in a state of severe livelihood crisis, not only because they have lost most of their main source of food due to crop failure, i.e. own crop production, but their ability to compensate or even maintain normal levels of food purchases is severely limited because of sky rocketing

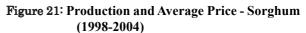
cereal prices, and sharply falling terms of trade for their main source of cash income, i.e. casual labor and livestock sales. Livestock holdings for this wealth group are small, and what they own is weak and producing minimal livestock products due to shortages of water and pasture. Three seasons of crop failure, has also lead to high debt levels which they are unable to repay, thus limiting their current loan options.

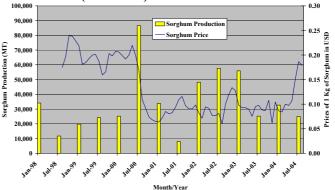
**Income Sources**: All main sources of income for the poor are severely constrained and reduced. The amount of cereal (kg) one can purchase from a daily wage, the terms of trade between cereal and wage rates, has been reduced by half since October 2003; from 16 kg per daily wage to less than 8 kg per daily wage (Figure 19). Terms of trade for local goat to cereal shows a similar deterioration and livestock for this group are generally weak, dead or not producing livestock products. There

Figure 20: Terms of Trade in Bay, Bakol and Hiran Region -Sorghum to Local Quality Goats & Labour (1998-2004)



Calculated from average prices in Baidoa, Belet Weyne and Hudur marke





is no income from crop sales due to crop failure.

**Food Sources:** Gu 2004 sorghum production in all three regions is below normal, but Bakol had the greatest crop failure. Bakol experienced its third consecutive season of near crop failure producing less than 500 MT or 16 % of PWA (page 7). Bay production was 26,800 MT (62% of PWA) and in Hiran was 4,430 MT (92% of PWA). Insufficient rain, could be blamed for the near crop failure in Bakol, but field analyst and agricultural experts agree that the poor harvest is also attributable to the failure to diversify farming, lack of agricultural input, services and information, and a high infestation of stem borers and waves of attacking birds (Quella quela). Cereal purchases, the second largest source of food for poor agro-pastoralists, are severely constrained due to a near doubling in cereal prices since January (Figure 20).

**Expenditure:** Local and export commodity prices are placing tremendous pressure on already stretched basic expenditures of poor agro-pastoral households. Already, in 'normal' conditions between 70-80% of these household's total expenditure is on basic food needs, therefore there is very little ability to shift or accommodate doubling of prices within the basic expenditure.

#### **Coping Strategies**

Agro-pastoralists and pastoralists are expanding their coping strategies and developing new strategies for survival in response to the deteriorating food security situation. These strategies include migration to other towns on a large scale, mass livestock migration, production and sale of lime stones, and reducing meals taken to 1-2 per day. To cope with the livelihood stress, communities are also resorting to exploitation of natural resource through collection and sale of construction materials (sticks and poles), some charcoal production, and wild life hunting of Dik-dik and Guinea fowl.

#### **Nutrition Situation**

In Bakol region, a significant number of children screened in the health facilities in Bakol are identified with malnutrition (W/H<-2 z score or oedema). Most of the malnourished are admitted in the ongoing supplementary and therapeutic feeding centres in Hudur, Rab Dhure and El Barde Districts. The average number of beneficiaries range between 100 and 300 monthly in each of the supplementary feeding centres. A significant proportion of the beneficiaries in Isdorto come from the neighbouring Wajid District. Nutrition survey results in the past one year indicate serious to critical malnutrition rates (Tieglo, 17.2% GAM in Oct 2003, Wajid IDP 17% GAM in Jan 2004, El Barde District 15.7% GAM in March 2004 and Wajid District 18% GAM in May 2004). The disease prevalence, particularly diarrhoea, ARI and malaria has been high with the same being associated with most of the deaths among children. Beside food insecurity and disease, poor water, poor sanitation situation and limited food diversity are additional factors associated with malnutrition in Bakol. Supplementary feeding activities are constantly interrupted by the deteriorating security situation. In most parts of Hiran Region (with exception of Bulo Burti District) the malnutrition rates appear to be within the usual range of around 15%. Majority of the malnourished children admitted in the supplementary feeding programme in Belet Weyne come from the poor wealth groups in Belet Weyne town and families formerly from Radar and Sigalow IDP camps. The indications of deterioration in nutrition situation and mortality rates in some pockets have triggered increased monitoring activities in the area.

#### **Future Outlook**

Despite the coping mechanism there is an increasing number of destitute people in the area with out any means of livelihood completely relying on social support and distress coping mechanisms. The agropastoral livelihoods in the region are the effected the most. There is growing concern over the availability of food stocks as the season's harvest continues to be taken to Central regions and as far as Puntland where prices are higher. The community is concerned that the small stock that is locally available will be exhausted before the next season's harvest materializes.

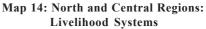


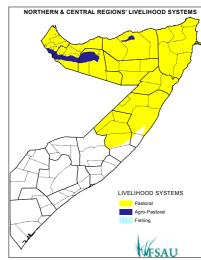
Huddur: Insect attacks have destroyed sorghum crops

#### 4.2 NORTHEAST AND NORTHWEST SOMALIA

#### **Overview of Events**

Northern Somalia is experiencing an environmental crisis of historic proportions that will have profound implications on pastoral livelihoods for years to come. While a 3+ year drought throughout Northern and Central Somalia has precipitated immediate needs for humanitarian assistance, severe environmental degradation-particularly since the collapse of the central government-is the underlying cause of the crisis and thus requires a long-term and strategic approach. Contributing factors include large-scale charcoal production, berkad proliferation, decline of lobster fishing due to poor management, tension between authorities, and a general lack of rangeland management. A majority of key informants consider the severity of the current drought at least as bad as the devastating drought of 1974. Lack of water and grazing has been particularly severe on camels, with upwards to 80% cumulative death rates in some areas. Without pack camels herders are unable to relocate to areas with rain or to ferry





water and supplies back and forth between the herds and water points/markets. Already there are large numbers of destitute pastoral "dropouts" who have lost their livelihoods and are displaced and dependent on social support systems. This trend is expected to increase, depending on the capacity of (already strained) social support systems and the degree of humanitarian support provided to the area.

#### **Effects on Livelihood Assets**

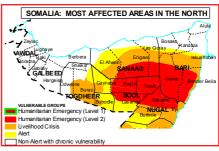
**Natural Capital:** The effects of the prolonged drought and resultant environmental crisis on the natural capital are manifest in lowered rangeland productivity, development of sand dunes, increased soil erosion, and loss of tree cover.

DISTRICT	District Population	Livelihood Crisis	Humanitarian Emergency (Level 2)	Total in Need as % of Total Pop
Bari				
Bender Beila	8,325	2,900	2,600	66
Bossaso	95,540	3,900	0	4
Calula	32,130	0	0	0
Gardo (includes				
Dangoroyo)	64,235	25,800	22,300	75
Iskushuban	44,580	4,900	0	11
Kandala	21,640	0	0	0
SUB TOTAL	266,450	37,500	24,900	23
Nugal				
Burtinle	37,190	1,000	0	3
Eyl	26,520	9,600	3,100	48
Garowe	49,555	13,200	7,100	41
SUB TOTAL	113,265	23,800	10,200	30
Sanag				
Las Qoray				
(includes				
Badhan)	92,050	26,800	22,300	53
Ceel Afweyn	38,080	9,400	0	25
Ceerigaabo	60,325	10,700	7,800	31
SUB TOTAL	190,455	46,900	30,100	40
Sool	í í			
Caynaba	45,990	3,700	0	8
Laas Caanood	90.110	9,400	8,800	20
Taleh	29,660	12,600	11,800	82
Xudun	28,900	7,500	7,000	50
SUB TOTAL	194,660	33,200	27,600	31
Togdheer				
Buhodle	35,800	11,000	0	31
Burco	202,770	55,000	0	27
Odweine	39,905	13,000	0	33
Sheikh	23,680	0	0	0
SUB TOTAL	302,155	79,000	0	26
TOTAL	1,066,985	220,400	92,800	29
Note: Population S		and UNICEF supp bers presented ar	olement immunisatio e estimates.	n activities (2002).

#### Table 10: People in Need of Assistance - North Somalia

Physical Capital: The impact of the drought on physical capital is in the form of massive livestock deaths, especially pack camels. During 2002/ 2003, an estimated 24 and 31 percent of shoats and camels were lost, respectively. Livestock deaths escalated during the 2003/2004 period with 51 and 70 percent deaths for shoats and camels, respectively. The cumulative losses for shoats and camels are 62% and 79%, respectively (See Fig. 15). According to a Nutrition survey done in the Sool and Sanag Regions of the Sool Plateau in June 2004, about 50 percent of the sample

# Map 15: Somalia Most Affected Areas in the North



surveyed lost between 50-99 percent of their herd of camels, while about 40 percent lost all of their pack camels<sup>1</sup>. On the positive side, the dry conditions of the drought have led to a decrease in tick borne diseases.

**Social Capital:** While a strong social support system in the form of gifts, loans, remittances, and family support exists in the Northeast, Northwest, and Central Somalia, the heavy strain on the mechanism casts doubt on whether the support system will be able to continue in the future and for how long. In a sample of 68 households, about 24 percent received some form of support, and the prominent form of assistance is through provision of loans, which were received by about 15 percent of the respondents.

**Human Capital:** There has not been major outbreaks of human diseases in the region. Some areas have high levels of malnutrition. Children and adult nutritional status have deteriorated in the crisis areas in Northern Somalia. Worsening adult nutritional status is indicative of aggravating food security situation. Moreover, high adult malnutrition rates have negative impacts on labor productivity (See the nutrition situation in this section).

**Financial Capital:** The majority of households in the area are heavily indebted, with debts of up to \$1000 per household. A recent study indicates that almost 60 percent of respondents purchase food on credit<sup>2</sup>. Consequently, some shops have closed due to high debt burden which far exceeds the capital outlay of the shop owners. Water truckers are extending loans of water as part of their social responsibility and



Pastoral migration is one of the most important coping strategies. This pastoralist has migrated with his livestock eleven times in the last few years. He is likely to survive the current severe drought in northern Somalia despite having lost most of his livestock.

Figure 22: Average Price in North Region -Various Commodities (1998-2004)

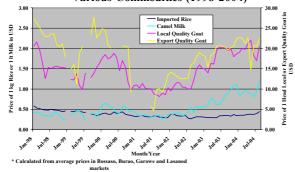
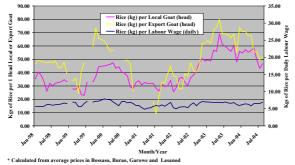


Figure 23: Terms of Trade in North - Rice to Local or Export Goat & Labour (1998-2004)





A camel carcass in Sool Plateau where an estimated 80% of camels have died over the last three years.

desperately hoping that pastoralists will some day be able to repay. If they cease water loans now, the likelihood of complete loan defaulting would be high.

#### **Effects on Livelihood Strategies**

**Income Sources:** The poor income group acquires 50-60 percent of their income from livestock sales, 20-30 percent from employment, and 15-25 percent from livestock products, while the middle income group obtains 55-65 percent of their income from livestock sales and 35-45 percent from livestock products. Pastoral income has dramatically reduced because of the lack of livestock products e.g. milk, lack of marketable animals, and poor purchasing power.

**Food Source:** The poor income group acquires 70-80 percent of food from purchase of cereals, sugar, and oil. About 20-30 percent of food is acquired from own production, which is mainly from milk. The middle income

group on the other hand obtains 60-70 percent of their food from purchases of cereals, sugar, and oil, while the rest of the food is from own production. Currently, this percentage is likely to increase because of the lack of livestock products like milk and poor incomes from livestock and livestock product sales.

**Expenditure:** Expenditure of pastoral households has increased significantly because of increased costs of water, foodstuff and livestock trucking. The main expenditure for the poor income group is on food items, which accounts for about 75-85 percent. Other items of expenditure include shoes and clothes (5-10%), livestock drugs (0-5%), and other needs (5-10%). The middle income group spends about 70-75 percent on food, 5-15% on shoes and clothes, 0-10% on livestock drugs, and 10-15% on other needs.

The price of imported rice fluctuates, but has remained stable in the last six years or so, while the price of export and local quality goat and camel milk shows tremendous fluctuations over the same period of time. While the supply and prices of livestock and livestock products are dependent on weather conditions to some extent, imported rice is not affected by changes in the weather conditions. The long-term terms of trade of goats for rice has improved for selected towns in the pastoral areas of the North (Figure 23).

#### **Nutrition Situation**

Critical areas in Northwest and Northeast include Sool plateau, Garowe, Dangaroyo, parts of Lasanood, Taleh and Hudun Districts. Nutrition information indicates deterioration on the situation in the critical areas from malnutrition rates of less than 10% to over 10%. In Garowe/Burtinle/Dangoroyo survey the global acute malnutrition rate (W/H<-2 z score) was 15.9% (ACF, March 2004), in Sool plateau of Sool and Sanag Regions the malnutrition rate was 13.7% (FSAU/MOHL/UNICEF/SRCS, June 2004) while in Goldogob the malnutrition rate was 14.2% (UNICEF/MOH/FSAU, April 2004). (Another vulnerable group is the IDPs mainly due to lack of reliable source of income and social network.) Overall, these serious and critical nutrition situations are mainly attributed to food insecurity, water shortage, limited access to health care, suboptimal childcare practices and morbidity. Humanitarian interventions in some areas and the strong social support network have however remained key mitigating factors positively influencing nutrition situation.

Plan for nutrition surveys in Hawd of Togdheer, Taleh/Hudun Districts, Qardho, and Allula/ Kandala/ Iskushuban districts are underway to establish the extent and the magnitude of malnutrition.

#### **Coping Strategies**

Coping strategies include an overwhelming reliance on social support, severe indebtedness, migration to urban areas in search of jobs, slaughtering of weak and young animals to save mothers, and reducing the number of meals per day. About 50 and 60 percent of respondents switched from high quality to low quality food types and borrowed food or relied on help from relatives, respectively. (See the FSAU/ MOHL/UNICEF/SRCS Sool Plateau of Sool and Sanag Regions, Nutrition Survey, June 2004). Extraordinary controlled breeding (commonly in sheep) is also used in the area as a coping mechanism.



Qardho: A pastoral family migrated to live with the assistance of their relations in town.

#### **Future Outlook**

Range resources that are currently available in the northern part of Sanag may not last until the *Deyr* rains. In addition to being inadequate for full pasture regeneration, those areas that received rainfall are currently experiencing excessive pressure from immigrant pastoralists. As the drought persists and environmental resources continue to be stressed, more movement of livestock is expected until a satisfactory *Deyr* is received. The region is experiencing more strain on the social support system—the big question is: when will the social support system start to collapse? The general impact of these scenarios will be increasing rates of destitution and malnutrition throughout the region. Even with good *Deyr* rains (October to December), destitute pastoralists will continue to strain the social support system; and a scenario of bad *Deyr* rains will almost certainly lead to a marked increase in destitution and deepening of the humanitarian emergency that is currently underway.

# 4.3 CENTRAL AREAS OF GALGADUD AND MUDUG Overview of Events

Central regions of Mudug and Galgadud are experiencing one of the worst humanitarian crises in over a decade as a result of drought, civil insecurity, deteriorating terms of trade and environmental degradation. It is estimated that 44,000 people are in a state of Humanitarian Emergency and in need of assistance and a further are facing an acute livelihood crisis (Table 11). Pastoralists in the region are experiencing a third year of successive drought, which has lead to limited pasture availability and severe water shortages. Surrounding regions, in northern Somalia and to the west in Ethiopia's Zone V (See Zone V highlights, page 29) are also facing severe drought and stress, thus limiting options of alternative pasture and water

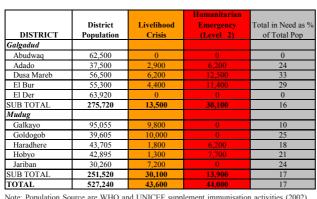
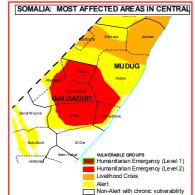


Table 11: People in Need of Assistance - Central Somalia

Map 16: Somalia Most Affected Areas in the Central Region



Note: Population Source are WHO and UNICEF supplement immunisation activities (2002). The numbers presented are estimates.

access. Livestock productivity and reproduction rates are low and overall livestock conditions are poor. Frequent inter-clan conflicts within the central region, is worsening the food and livelihood security situation by restricting options for livestock migration, inhibiting resource sharing, and leading to increased prices due to transit problems. Food access is difficult and worsening as the result of unfavorable terms of trade, border closures due to illegal trade, and high food prices.

#### Gu 2004 Rainfall Performance

*Gu* 2004 rains were not significant, except in some pockets in Western parts of Ciid Pastoral Livelihood Zone of Abudwaq, Herale and Balan-balle, which received slightly near to normal rains in the 2nd-dekad of April followed by a long dry spell. In other parts of the region, like Addun Pastoral Livelihood Zone and parts of Ciid Pastoral Livelihood Zone, *Gu* rains were poor and scattered and caused early livestock migration to Dusa-Mareb, El-bur, and Addun Livelihood Zones causing early pasture depletion. Parts of Adado (Western) remained dry and pastoral households migrated to Abudwaq, and Addun Pastoral Livelihood Zone. The cumulative impact of rain deficit over several seasons has overstretched pastoralist's abilities to cope with drought. Focal groups with pastoral households interviewed revealed that this is the worst *Gu* season in the history of the region, coupled with accumulated effects of successive droughts since 2001. Similarly, poor *Deyr* rainfall seasons have been recorded since 1987 season and are locally referred named "Abaar-madow", meaning black drought. Both human and livestock water consumption has already become critical and is worsening.

#### **Effects on Livelihood Assets**

**Natural Capital:** Water availability and accessibility for human and livestock consumption remains very scarce in the region and water prices have skyrocketed. Berkads and water catchments are dry in many areas contributing to the scarcity of water availability and accessibility. Water prices are now \$2.2/drum, which is a 400% increase as compared with normal average baseline price of \$0.6/drum. Water prices are predicted to deteriorate in the following months due to the severity of the drought and continually rising fuel prices. In many parts of the region, watering livestock using water tankers is already occurring. The rangeland is under tremendous stress due to successive drought and overgrazing. Environmental degradation is evident as sand dunes are encroaching on to grazing lands and fertile areas, leading to a high level of loss in palatable plants.

**Physical Capital:** Roads and transport infrastructure is generally limited and deteriorating, leaving the central regions as one of the most isolated and inaccessible regions in Somalia. Livestock, pastoralist's primary asset, are in a poor state as livestock body condition, production and reproduction is low and is

continuing to deteriorate due to prolonged drought and stress. Veterinarians in the region reported reduced milk yield and infertility among camels due to the shortage of pasture and water. Milk production is extremely decreased, thus camel milk prices have increased sharply (see Figure 24) to \$1.13/lt. (73.45%) compared with the normal average baseline price of \$0.3/lt. Goat milk prices have also increased, "a litre of milk that used to cost SoSh 2000, now goes for SoSh 6000". Increased camel and goat milk prices are attributed to low calving rates and extremely poor pasture condition following successive below normal rainfall in the area. An increasing number of cows are failing to become pregnant after mating, due to inadequate feeding and high environmental temperatures. Livestock mortality is reported to be increasing as livestock body condition of all species are extremely weak and are therefore unable to trek long distances for watering or pasture. Unconfirmed livestock diseases, mainly contagious Caprine Pleura-Pneumonia (CCPP) for the goats (shoats) has been reported in Western parts of El-bur agro-pastoral zones.

**Social Capital:** Social networks of sharing and support are strained due to the extent of the humanitarian and livelihood crisis in the region. It is believed, however, that this region has stronger support networks, both internal to Somalia and externally, compared to other regions, e.g. stronger support networks than Lower/Middle Juba and the current crisis area in the north (Sool Plateau and Nugal Valley). Further assessments on the extent and state of this social support are needed.

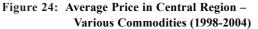
**Human Capital:** The prevailing vulnerability in the Central regions is likely to undermine the population wellbeing of the area. Indications of mortality directly affect the human availability and potential to work.

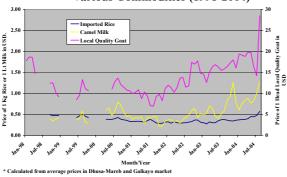
**Financial Capital:** Income from livestock production and sale has declined due to low body condition, low productivity of livestock products, and increased livestock deaths. This combined with rising water and food prices is pressing many pastoralists into high levels of indebtedness due to prolonged borrowing of money from traders and better off wealth groups.

#### **Effects on Livelihood Strategies**

Like most pastoralists in Somalia, pastoralists in Galgadud and Mudug region (Addun Pastoralists and Hawd Pastoralists) rely on livestock and livestock products sales for income (65% to 75% of total cash income), except for the poor whose livestock income (35-45%) is supplemented by self-employment and employment (40-50%). All pastoralists, however, consistently purchase most of their food needs, i.e. rice, sugar and oil (65%-75%), irrespective of their wealth group, with own livestock products of meat and milk making up the balance (15-35%). Pastoralists, therefore, are hard hit by the current crisis as their primary income source is reduced and they are incurring higher production costs, i.e. due to high water prices for watering livestock, while at the same time they face increased cereal and food prices in the market because they are dependent on market purchases for their food needs.

**Income Sources:** Income is heavily constrained due to reduction and loss in income sources through livestock, meat and milk sales, low livestock productivity and high mortality as a result of the drought. The price of local quality goat and milk is dramatically increased over the last five months, primarily as result of limited availability in the markets (see Figure 24).





**Food Sources**: Both local cereals (sorghum) and imported rice price show a continued increase over the past year (see Figure 25). Food availability in the local markets declined sharply making its accessibility extremely difficult for the poorer and middle pastoral. Currently, there is limited cereal in the regions markets due to poor crop production in the south. Sorghum supply from Ethiopia Zone V has stopped due to closure of border trade and sorghum from the South has not yet reached the area. Overall, low supply and high demand (local cereal as well as imported commodity) continue to affect and increase prices in the season.

#### **Nutrition Highlight**

Increased vulnerability and resultant deterioration in nutrition situation has been noted in Galgadud Region and a nutrition survey in Dusa Mareb and Adado Districts is currently underway to confirm the declining nutrition situation and mortality. Recent nutrition information points at critical nutrition and mortality situation. Further, in normal times, the population consumes a diet consisting of animal products and cereals but currently is dependent on cereals, fats and sugar as the only foods available. The area is faced with food insecurity and the water condition is fast deteriorating. This has the potential to greatly affect the population wellbeing in the Central Somalia regions. Additional assessment will be conducted in the regions to determine the extent of the current nutritional challenges

#### **Coping Strategies**

Coping strategies currently reported include: reliance on loans and remittance from traders and relatives, migration to urban and agricultural areas in search of employment, family splitting to minimize household food requirements. Others cited are increased collection of wild fruits for sustenance, reducing the number of meals, and reduced purchase of non-staple items.

#### Figure 25: Terms of Trade in Central Region -Rice to Goat & Labour (1998-2004)



#### **Future Outlook**

Livestock productivity will take many seasons to recover due to the high level of rangeland degradation and required breeding time. Poor pastoral households will likely 'drop out' of pastoralism. This change of livelihood patterns will result in rural-urban migration, which will further strain the already poor social services and create higher demand for already limited employment. Malnutrition rates among children and women are likely to continue deteriorating.

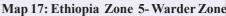
#### 4.4 SOMALI REGION, ETHIOPIA

#### Food Insecurity in Warder Zone

The food security situation in Warder Zone is poor and deteriorating due to a poor performance of the *Deyr* 2003 and *Gu* 2004 rains, a continued presence of large numbers of livestock from Somalia, and water shortages due to borehole breakdowns. There are serious pasture and water shortages in most parts of the zone, particularly in the eastern districts of Galadi and Bokh and Eastern parts of Warder district, where livestock concentrations are higher than normal. Most of these areas

which are berkad dependent are currently running out of options for accessing water, and frequent and confused stress migrations are being seen. Expensive private water trucking has already started and in the worst hit areas one 200lt drum costs 30,000 SoSh (up from 5000 normally). Areas that initially received better Gu rains in April, have started to face water shortages as well. This early exhaustion of available water is mainly attributed to the high livestock in-migrations from other parts of the zone as well as from Dagahbur Zone. Initial reports pertaining to the mortality of nugul species (Cattle and Sheep) are just coming from the worst affected areas of the Zone. The security situation seems to be improving under the on-going reconciliation and negotiation efforts. Displaced households are beginning to return home, but pastoral resource sharing has not yet started in the rural areas, indicating that the situation is still fragile.

(**Source**: Monthly Food Security Highlights-Ethiopia August 2004; produced by Food Security Bureau, DPP/FSB and SC-UK)





#### **Appendix 1** Explanation of the Food and Livelihood Security Phase Classification

To enable strong linkages between information and response, the FSAU is developing a standardized scale to integrate multiple facets of food and livelihood security information into a simple statement indicating levels of severity and general implications for humanitarian response. The **Food and Livelihood Security Phase Classification** classifies food and livelihood security conditions into four main categories: *Humanitarian Emergency, Livelihood Crisis, Alert,* and *Non-Alert.* Affected areas are mapped using the same color scheme, and accompanying tables indicate estimated populations in each category by district. The standardized scale has a number of benefits: consistent comparability for various places, consistent comparability over time, a simple means to integrate complex information into a single statement, and a common platform upon which multiple stakeholders can discuss humanitarian situations.

In addition to the important aspect of utilizing explicit and consistent standards, the scale uniquely incorporates the phase of *Livelihood Crisis*, which allows for the distinction from a *Humanitarian Emergency* while clearly advocating for urgent responses to support rapidly deteriorating livelihoods. Classifying information in this manner should facilitate appropriate interventions directed at saving lives as wells as livelihoods.

In as much as possible, each phase is described using objective indicators and internationally accepted thresholds (e.g. SPHERE standards, WHO guidelines, etc.). Where objective indicators either do not exist or there is inadequate data, general descriptions are used (e.g., widespread destitution). The FSAU is currently working to incorporate additional objective indicators such as the Coping Strategies Index, an "entitlement gap" based on Household Economy Analysis, and a Livelihoods Index to be developed as part of a new monitoring system. Note that to be classified in a particular phase, an area may be experiencing one or more of the indicators listed, but not necessarily all of them.

The Food and Livelihood Security Phase Classification draws on recent work from IDS and the ongoing global system of FEWS NET to consistently categorize humanitarian situations. This work is still under development and as such technical input is welcome.

Phase		General Characteristics and Key Indicators	Implications
	Level 1	<ul> <li>CMR: &gt; 5 deaths / 10,000 / day</li> <li>Wasting: &gt; 40 % (W/H z-score)</li> <li>Large scale, concentrated destitution</li> <li>Widespread civil conflict</li> </ul>	<ul> <li>Critically urgent resource transfer (e.g., food or cash assistance)</li> <li>Critically urgent assistance on basic needs (e.g., health, shelter, water, etc.)</li> </ul>
Humanitarian Emergency	Level 2	<ul> <li>CMR: &gt; 2 / 10,000 / day</li> <li>Under 5yrs death rate: &gt; 4 / 10,000 / day</li> <li>Wasting: &gt; 15 % (W/H z-score)</li> <li>Widespread, diffuse destitution</li> <li>Near complete asset depletion</li> <li>Credit limits nearly exhausted</li> <li>Large scale natural resource degradation</li> <li>Acute or widespread civil conflict</li> </ul>	<ul> <li>Urgent resource transfer (e.g., food or cash assistance)</li> <li>Provision of water, health services, etc.</li> <li>Preventative interventions</li> <li>Environmental protection and rehabilitation</li> </ul>
Livelihood Cr	isis	<ul> <li>CMR: 1-2 / 10,000 / day</li> <li>Under 5yrs death rate: 2-4 / 10,000 / day</li> <li>Wasting: 10 - 15 % (W/H z-score)</li> <li>Large and increasing debt</li> <li>Natural resource degradation</li> <li>Critical Asset Depletion</li> <li>Unusual large scale human migrations</li> <li>Acute civil conflict</li> </ul>	<ul> <li>Urgent livelihood support (e.g., food / cash for work, water supply assistance / rehabilitation, transportation assistance, health services support, education, etc.)</li> <li>Preventative interventions</li> <li>Environmental protection and rehabilitation</li> </ul>
Alert		<ul> <li>Wasting: 5 - 10 % (W/H z-score)</li> <li>CMR: 1-2 / 10,000 / day</li> <li>Lack of access to credit</li> <li>Declining terms of trade</li> <li>Livelihood shock</li> <li>Civil conflict</li> <li>Increased attendance at health clinics</li> </ul>	<ul> <li>Careful monitoring</li> <li>Preventative interventions</li> </ul>
Non-Alert		<ul><li>Near normal conditions</li><li>Includes areas of chronic vulnerability</li></ul>	<ul><li>Longer term development</li><li>Sustained assistance to vulnerable groups</li></ul>

#### Food and Livelihood Security Phase Classification

#### Appendix 2

#### 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.

#### Name of the Organization

AAH Action Internationale Centre la Faim (ACF) American Friends Service Committee (AFSC) Africa Rescue Committee (AFREC) AGROSPHERE CEFA Somalia European Committee for Agricultural Training Communities of Warberi, Hamrwein and Hamar Concern Worldwide Cooperazione Internazionale (COOPI) COSV CISP Famine Early Warning Systems -FEWS-NET Horn of Africa Relief and Development Agency - Horn Relief International Medical Corps (IMC) Inter SOS Jabjab Gedo Health Consortium **KISMIA** Ministry of Health Somaliland (MoHL) MOSA Puntland Medecins Sans Frontieres (MSF)-Belgium Medecins Sans Frontieres (MSF)-Holland Medecins Sans Frontieres (MSF)-Spain Muslim Aid UK UN Office for the Coordination of Humanitarian Affairs (UNOCHA) SAS Save the Children Fund UK (SCF-UK) Shilcon Somalia Red Cross Society (SCRS/ICRC) Somalia Red Cross Society (SCRS/IFRC) Somali Volunteer organization (SVO) UN International Children Fund (UNICEF) VETAID (Health Animal - Health People) Veterinaires Sans Frontieres (VSF-Suisse) World Concern World Food Programme World Health Organization World Vision WVI Zamzam Foundation

#### **Appendix 3**

#### Tools Used for Assessment in Areas Identified as Hot Spot Areas

- I 2004 Gu Season Crop Production Survey for Southern Somalia
- II Livestock Production and Dynamics
- **III** Rapid Food Security and Nutrition Assessment Key Guiding Questions *for North and Central Pastoral Areas*
- **IV** Rapid Food Security and Nutrition Assessment Key Guiding Questions *for Riverine and Agro-pastoral Areas*
- V Riverine, Agro-pastoral & Pastoral Market Questions Supplement to Normal Gu Assessment

#### **Timeline for Assessment**

July 9th 2004	Planning Meeting
July 13 <sup>th</sup> 2004	Planning Meeting
August 28 <sup>th</sup> 2004	Regional level Meeting in Hargeisa
August 31st 2004	Regional level Meeting in Belet Weyne
September 6 <sup>th</sup> 2004	Regional level Meeting in Hudur
August 10 <sup>th</sup> 2004	SACB Presentation
August 18th 2004	Initial Findings issued with monthly report

#### I 2004 Gu SEASON CROP PRODUCTION SURVEY FOR SOUTHERN SOMALIA

1. Crop Condition

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

2.1 For each field you planted this Gu season, indicate the size of unit of measurement:

Cr	rop	Field No.1	Field No.2	Field No.3	Other Fields	Total Area
Maize	Irrigated					
	Rainfed					
Sorghum	Irrigated					
	Rainfed					
Beans	Irrigated					
	Rainfed					
Sesame	Irrigated					
	Rainfed					

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

Crop Maize	Harvest
Maize	
Sorghum	
Beans	
Sesame	
Other	

2.3 How does this season's production compare with a normal Gu season? [Present Jarmer 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			

#### 3. Livestock

- 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?
- Were there any livestock death
   Yes 2. No (Skip Q3. 4)
- 1. Tes 2. NO (Skp Q3. 4)
   3.4 How many livestock died due to abnormal disease outbreaks (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 04/05
- 4.3 If your food stock do not last until the Deyr 04/05 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

П	Livestock Production and Dyna	mics
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District	sge Name Livelihood Zone rict Field Analyst o of livestock owner											
Time Period	Species	Total # of animals in herd	Total # of females	Total # of female calves	Total # of female breeders	Total # of males	Total # of male calves	Total # of male breeders	Total died	Total stolen	Total sold	Total loaned
During	Cattle											
2003/2004	Goats											
	Sheep											
	Camels											
During	Cattle											
2002/2003	Goats											
	Sheep											
	Camels											
During	Cattle											
2001/2002	Goats											
	Sheep											
	Camels											
If there were h	rge livestock	deaths, what w	ere the major o	causes?								

<sup>3.1</sup> How were pasture conditions this *Gu* season? 1. Bad 2. Normal 3. Good

#### Ш RAPID FOOD SECURITY & NUTRITION ASSESSMENT KEY GUIDING QUESTIONS Pre-identified Hot Spot Areas and Areas of Concern in North and Central Pastoral Areas

Date: Region	Interviewer's Name: : District: Livelihood Zone: Village:	
Inform	ant/Focus Group/Household:	
	Event/ Hazard/Shock	Indicative Evidence/Source
•	How do this years' <b>rains</b> compare with last year? With the last 10 years? How do <b>field reports</b> of the	satellite imagery
•	rains compare with the satellite imagery (indicate differences on the satellite imagery map)? What is the <b>spatial extent</b> of the areas that have not had good rains? Where are the <b>pockets</b> of places	focus groups with loca authorities
•	that had <b>good</b> rains? For those places that had good rains, will it be enough for <b>rangeland recovery</b> ? Will it be enough to <b>support</b> the livestock from the area until the <i>Deyr</i> season?	<ul> <li>focus groups with villa leaders</li> <li>focus groups with</li> </ul>
•	If not for how long? Any in migration?	<ul> <li>focus groups with pastoralists, especially around boreholes and</li> </ul>
-	To what degree is <b>civil insecurity</b> disrupting livelihoods in the area, and how?	trading centers Indicative
	Effects on Livelihood Assets	Evidence/Source
Physica	<ul> <li>What is the status of the main water sources in the area? What is the price of water and how does it compare with last July as well as the price before 2001?</li> <li>Does charcoal production lead to land degradation in your area? If yes, to what degree have charcoal production? What is the future expected trend?</li> <li>To what degree have rangeland degradation in your area? Where are the most severe pockets of charcoal production? What is the future expected trend?</li> <li>To what degree have rangelands been degraded due to successive years of below normal rainfall? What is the condition of the main grazing areas? What is the future expected trend? What are the possible causes of land degradation?</li> <li>To what degree has rangeland management, both formal and informal, mitigated or contributed to the drought effects?</li> <li>Are there private land enclosures in your area? What are the effects of private enclosures on the resources?</li> <li><b>1 Capital</b></li> <li>What are the estimated <b>livestock losses</b> since 2001? Not including distress sales or long term out migration? Specify for various species: camel, shoats, cattle. What is the future expected <b>trend</b>?</li> <li>What is the estimate <b>total loss of herd</b> (due to death and distress sales) since 2001? What is the future expected <b>trend</b>?</li> <li>What is the current and anticipated <b>migration pattern of livestock</b> in the area (including Zone V of Ethiopia)? What parts of that migration are considered <b>normal</b> and what parts are not? Indicate with arrows on a <b>map</b> for the whole are the points of origin and destination for the migrations. Related, what is the current <b>transport cost</b> for avainals and how does it compare with pre-drought costs? How much do you pay? When do you pay?</li> <li>What are the factors that have limited mobility?</li> <li>Is there lack of pack animals in your area? If yes, give reasons.</li> <li>What is the current <b>transport cost</b> for water</li> <li>What is the current <b>transport cost</b> for yeaple?</li> <li><b>al Capital</b></li></ul>	<ul> <li>satellite imagery</li> <li>focus groups with local authorities</li> <li>focus groups with villa, leaders</li> <li>focus groups with pastoralists, especially around boreholes and trading centers</li> <li>Key informant intervie with livestock traders</li> <li>Livestock market price</li> <li>Livestock export trend</li> <li>Key informant intervie with money vendors</li> <li>Key informant intervie with Sheiks at Mosque</li> <li>Key informant intervie with health care worked</li> </ul>
Social C	coming months until the <i>Deyr</i> season? <u>Sapital</u> To what degree are poor pastoralists relying on relatives and friends for <b>livelihood support</b> ? How long	
•	can this support continue? Ask an Imam of a mosque whether or not there has been an increase in the number of people seeking	
•	assistance. Do destitute pastoralists receive social and financial support from the <b>diaspora and local sources</b> ?	
• Human	How much can poor pastoralists rely on <b>sadaka (gifts, cash, kind)</b> in times of great need? <u>Capital</u>	
•	What are the current levels of <b>malnutrition</b> among adults and children? What have the <b>trends</b> been over the past year and what are the future expected trends?	
•	To what extent does malnutrition cause splitting of families? What is the access to and availability of <b>health services</b> in the area?	
•	Have there been any major <b>human disease</b> outbreaks? What factors affect <b>education</b> attendance over the past year in the area? What are the future expected	
•	trends? What factors does <b>gender</b> have on education attendance in the area?	
	Coping Strategies	Indicative Evidence/Sou
•	What are the main ways that pastoralists have <b>coped</b> with the drought conditions <b>last year</b> ? What are the main <b>coping strategies currently</b> used by pastoralists from various wealth groups?	<ul> <li>focus groups with loca authorities</li> <li>focus groups with villa leaders</li> <li>focus groups with pastoralists, especially around boreholes and trading centers</li> </ul>
•	Food Security Outcomes Are there destitute people in the area (i.e., people without any means of livelihood and who are almost completely relying on social support and distress coping mechanisms?). If so, where are they located and approximately how many are they? What is the expected future trend of destitution in the area? To what degree have families split up beyond what is considered normal for pastoral societies? To what degree are pastoralists aggregating in <b>urban areas</b> ? If so, which towns are receiving the most,	Indicative Evidence/Sou focus groups with loca authorities focus groups with villa leaders focus groups with
•	and approximately how many migrants are there? To what degree do recent migrants receive social support in the urban areas? What are the current <b>malnutrition</b> rates among adults and children in the area? What have been the next trends? What are the main currents of the there until the <i>Devrainse</i> ? What are the <b>main currense</b> of	<ul> <li>pastoralists, especially around boreholes and trading centers</li> <li>rapid MUAC</li> </ul>

What are the current **malnutrition** rates among adults and children in the area? What have been the past trends? What is expected in the future until the Deyr rains? What are the main causes of malnutrition-food intake, public health, disease??

appendix

rapid MUAC Key informant interviews with health care workers

# IVRAPID FOOD SECURITY & NUTRITION ASSESSMENT KEY GUIDING QUESTIONSPre-identified Hot Spot Areas and Areas of Concern in Riverine and Agro-pastoral Areas

		rn in Riverine and Agro-pastoral A	
n: nant/Focus (	Interviewer's Name: District: Livelihood Zone: Group/Household:	Village:	
	Event/ Hazard/ Shock		Indicative Evidence/Source
•	How do this year' <b>rains</b> compare with last year? With the the rains compare with the satellite imagery (indicate diffe What is the <b>spatial extent</b> of the areas that have not had g places that had <b>good</b> rains? For those places that had good rains, will it be enough and Will it be enough to <b>support</b> the crop and livestock from th To what degree is <b>civil insecurity</b> disrupting livelihoods in	erences on the satellite imagery map)? ood rains? Where are the <b>pockets</b> of improve <b>crop production and pasture</b> ? e area until the Dery season?	<ul> <li>satellite imagery</li> <li>focus groups with local authorities</li> <li>focus groups with village leaders</li> <li>focus groups with farmers, pastoralists, especially around boreholes and trading centers</li> <li>agencies report who are working in the area</li> </ul>
	Effects on Livelihood Ass	ets	Indicative Evidence/Source
Financia Social Car Human (	What is the estimated <b>cumulative livestock death rate</b> sind long term out migration? Specify for various species: came expected <b>trend</b> ? How is the accessibility of existing <b>road network</b> in this liv What is the estimate <b>total loss of herd</b> (due to death and d future expected <b>trend</b> ? Have there been any major outbreaks of <b>crop pests and liv</b> and what pest and diseases? What is the current and anticipated <b>migration pattern of I</b> migration are considered <b>normal</b> and what parts are not? whole are the points of origin and destination for the migra- <b>U Capital</b> To what degree have people <b>accumulated debt</b> since 2001? indebtedness? What is the future expected trend for indeb To what degree are <b>remittances</b> assisting riverine and ager Are remittance levels expected to continue, decline, or incr Deyr season? <b>pital</b> To what degree are poor riverine and agro-pastoral relying <b>support</b> ? How long can this support continue? Ask an <b>Imam of a mosque</b> where or not there has been an <b>assistance</b> . Do poor riverine and agro-pastoral rely on <b>Sad</b> of great need?	el, shoats, cattle. What is the future elihood? What is trend? istress sales) since 2001? What is the estock diseases in the area? If so where ivestock in the area? What parts of that Indicate with arrows on a <b>map</b> for the ations? What is an estimate of the average vill it take for people to come out of tedness? or relatives and friends for livelihoods? ease in the coming months until the con relatives and friends for livelihood increase in the number of people seeking cial support from the <b>Diaspora and</b> <b>aka</b> , gifts and in kind or in cash in times le in each Household in this livelihood and children? What have the <b>trends</b>	<ul> <li>satellite imagery</li> <li>focus groups with local authorities</li> <li>focus groups with village leaders</li> <li>focus groups with farmers, pastoralists, especially around boreholes and trading centers</li> <li>Key informant interview with crop and livestock traders</li> <li>Cereal market price</li> <li>Livestock market prices</li> <li>Livestock export trends</li> <li>Key informant interview with money vendors</li> <li>Key informant interview with Sheiks at Mosques</li> <li>Key informant interview with health care worker</li> </ul>
• •	What is the access to and what are the lattice expected to Have there been any major <b>human disease</b> outbreaks? What effects on <b>education</b> attendance can be seen over the expected trends? What factor does <b>gender</b> have on education attendance in t	the area? past year and what are the futures	
•	Indicative Evidence/Source		
•	What are the main ways that riverine and agro-pastoral h <b>last year</b> ? What are the main <b>coping strategies currently</b> used by rive wealth groups?		<ul> <li>focus groups with local authorities</li> <li>focus groups with villag leaders</li> <li>focus groups with farmers, pastoralists, especially around boreholes and trading centers</li> </ul>
	Food Security Outcomes		Indicative Evidence/Source
•	Are there <b>destitute</b> people in the area (i.e., people without almost completely relying on social support and distress co they located and approximately how many are they? What destitution in the area? To what degree have <b>families split up</b> beyond what is cons To what degree are riverine and agro-pastoral aggregating receiving the most, and approximately how many migrant migrants receive social support in the urban areas? What are the current <b>malnutrition</b> rates among adults and	ping mechanisms?). If so, where are t is the expected future trend of idered normal for pastoral societies? in <b>urban areas</b> ? If so, which towns are s are there? To what degree do recent	<ul> <li>focus groups with local authorities</li> <li>focus groups with villag leaders</li> <li>focus groups with farmers, pastoralists, especially around boreholes and trading centers</li> </ul>

RIVERINE AGROPASTORAL AND PASTORAL MARKET QUESTIONS SUPPLEMENT TO NORMAL  ${\it GU}$  ASSESSMENT

Region: Village/Area:			
Unit	Current Prices	Expected Change in 6 months	Reason
1 Kg			
1 I.t			
Per day			
Per day	Ì		Ì
Per day			
Per day			
Per day			
Bundle			
Bag			
1 Kg			
1 Lt			
1 Lt			
Per head			
	1 Kg 1 Kg 1 Kg 1 Kg 1 Kg 1 Lt 1 Kg Per day Per day Per day Per day Per day Per day Per day	Regin       Unit     Current Prices       1 Kg     1       Per day     1       Per day     1       Per day     1       Bandle     1       Bag     1       1 Kg     1       1 Lt     1       1 Lt     1       1 Lt     1       1 Lt     1       Per head     1       Per head     1       Per head     1       Per head     1	Village/Area:       Unit     Current Prices     Expected Change in 6 months       1 Kg

## Appendix 4

V

Nutrition Surveys Planned for Somalia

Dates		Area	Organisations	Status:
July 2004	Bari	Bossaso IDPs	UNICEF/MOH/FSAU	Analysis ongoing
Sept 2004	Galgadud	Dusamareb District	FSAU/SRCS	Planning in progress
Sept 2004	Bari	Alula/Kandala/Ishkushban	UNICEF/FSAU/MOH	Planning in progress
Oct 2004	Bari	Qardho	FSAU/MOH/UNICEF	Planning in progress
Oct 2004	Sool	Huddun/Taalex	FSAU/MOHL	Planning in progress
Oct 2004	Bay	Baidoa	UNICEF/FSAU	Proposed
2004	Gedo	Belet Hawa	FSAU/GHC/UNICEF/CARE	Proposed
2004	Hiran	Belet Weyne	IMC/FSAU/UNICEF	Proposed
2004	Bay	Dinsor	IMC/FSAU/UNICEF	Proposed
2004	Galbeed	Togdheer	UNICEF/FSAU/MOHL	Proposed
2004	Galbeed	Hargeisa IDPs	UNICEF/FSAU/MOHL	Proposed

## Appendix 5

Region	District or Town	Estimated	Low	High
		number of		
Northanget Comple	Ilensie	IDPs 4 200		
Northwest Somalia	Hargeisa	4,200		
	Burca	360		
	Berbera	360		
6 h 4 4 d	Yirowe	900	5 020	5 920
Sub-total		5,820	5,820	5,820
Northeast Somalia	Bosasso	28,140		
	Baadweyn	2,400		
Sub-total		30,540	30,540	30,540
Central Somalia				
Galgaduud	Dhuusamarreeb/ Cbudwaq	5,250-7,000	5250	7000
Southern Somalia				
Hiran	Beledweyne	3500		
	Bulo-Burte	6420		
	Jalalqsi	1800		
	· ·	11720	11720	11720
Bakol	Rabdhure	1,500		-
	Hudur	1,200		
		2,700	2700	2700
Bay	Baidoa	5,000		
	Dinsor	2,000		
	Burhakaba	1,800		
	Qansah-Dhere	230		
	Quintan Ditere	9,030	9030	9030
Gedo	Luq	7000-9000	2000	2000
0000	Belet Xawo	5,000		
	Bradhere	1,400		
	Diduliere	13,400-15,400		
		10,400-10,400	13400	15400
Middle Shabelle	Jowhar	420		
	Balad	1800		
	Adale	2100		
	Mahaday	1500		
	initial day	5820	5820	5820
Lower Shabelle	Qoryoley	2700	5020	5020
Lower Shabene	Shablale	3000		
	Afgoye	7200		
	Merka	3000		
	Kurtunwarey	4200		
	Brava	Large number		
	Diava	20100	20100	20100
Lower and Middle Juba	Kismayo	15,000	20100	20100
	D 1 1			
	Bu'ale	2,000		
	Jilib	500		
	Sakow	1000	40	
		18,500	18500	18500
Sub-total	1		81270	83270
Mogadishu	Mogadishu	250,000	250,000	250000
Total without Mogadis		122,880	126,630	
Total IDPs			372,880	376,630

#### Table 12: Estimated Internally Displaced Persons (IDP's)

Source: SOMALIA Office for the Coordination of Humanitarian Affairs (OCHA) Estimates updated as of April 2004

#### **Appendix 6**

