

## Bakool Agro-pastoral

### HISTORICAL TIMELINE

Year	Events	Key Outcomes
2008/09 Below-average to Average Year	Very poor <i>Gu</i> rains but average to good <i>Deyr</i> rains. Hyperinflation.	Rangeland conditions poor in <i>Gu</i> , improved rangeland conditions in <i>Deyr</i> . Slightly reduced cereal prices, after period of significant inflation, and improved terms of trade during the <i>Deyr</i> .
2007/08 Bad Year	Drought during the <i>Gu</i> season, below average to average rains during <i>Deyr</i> , unknown camel disease, hyperinflation.	Mixed crop production levels, poor livestock productivity, normal livestock migration to Bay region and high cereal and other food prices.
Reference Year		
2006/07 Average Year	Average <i>Gu</i> rains in grazing areas, good <i>Deyr</i> rains and unknown camel disease.	Poor <i>Gu</i> crop production but good <i>Deyr</i> crop production and rangeland conditions.
2005/06 Bad Year	Drought in both <i>Gu</i> and <i>Deyr</i> seasons and clan conflict in El Berde and Rabdhure.	Abnormal internal and external livestock migration.
2004/05 Average Year	Good rains in <i>Gu</i> and <i>Deyr</i> seasons Clan conflict in Hudur, Elberde and Rabdhure	Inaccessibility to grazing areas due to insecurity.
2003/04 Bad Year	Drought in most of the livelihood zone and civil insecurity in Tieglow	People and livestock migration into Bay region for better water and pasture.

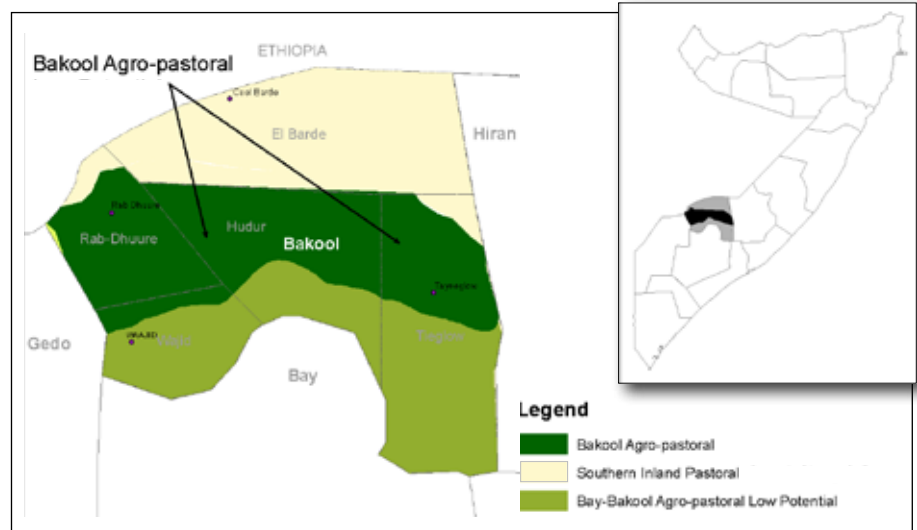
### BASELINE YEAR DESCRIPTION

- April '06-March '07 (*Gu* through *Jilaa*) was selected as the reference year because it was the most recent full consumption year in which individuals' recall of events was good.
- The reference year followed a year-long drought (*Gu* '05 to *Deyr* '05/06), which caused crop failure and livestock herd depletion.
- The reference year was characterized by a near-normal *Gu* season and an above-average *Deyr* season, which partly alleviated drought conditions by improving rangeland and livestock conditions, crop production, livestock marketing and prices and overall food and livelihood security.

### Average Commodity Prices and Purchasing Power during Reference Year

• Sorghum price:	2,400 SoSh/kg
• Local goat price:	235,000 SoSh/head
• Cattle milk price:	7,700 SoSh/litre
• Camel milk price:	7,600 SoSh/litre
• TOT (labour/sorghum)	6 kg/daily labour
• TOT (local goat/sorghum)	155 kg/1 goat
• Exchange rate	13,700 SoSh/USD

### BAKOOL AGRO-PASTORAL LIVELIHOOD ZONE (LZ) AND SURROUNDING AREAS



Region/District	UNDP Population	% of population	Livelihood population
<b>BAKOOL</b>			
Rabdhure	31,320	85	26,620
Hudur	73,940	50	36,970
Tieglow	64,830	48	31,120
Wajid	55,255	40	22,100
<b>Total</b>			<b>116,810</b>

Source: UNDP Somalia, 2005 Population Estimates.

### LIVELIHOOD ZONE DESCRIPTION

- The Bakool Agro-Pastoral Livelihood Zone (LZ) is located in the central part of the Bakool region, covering the northern parts of Wajid, Hudur, Tieglow and most of Rabdhure district. It borders the Southern Inland Pastoral to the north and the Bay-Bakool Low Potential Agro-pastoral to the south.
- This livelihood was previously part of the Southern Agro-pastoral (Bay and Bakool regions), which has now been split into two livelihood zones (Bakool Agro-Pastoral and the Low Potential Agro-Pastoral livelihood zones).
- This livelihood is comprised of a mixture of pasture and rangeland, suitable for livestock grazing and marginal farming.
- The climate is mostly hot and dry during the year with erratic and unreliable rains and follows a bi-modal climate pattern typical in semi-arid areas. Annual amount of rainfall ranges between 300-350 mm, two-thirds of which usually precipitate during the primary season of *Gu* (April-June), with the remainder received during secondary rainy season of *Deyr* (October-November). In recent years, there has been a notable change in rainfall patterns as the LZ has received more rainfall during the *Deyr* than it has during the *Gu*.
- Bakool agro-pastoralists are predominantly pastoral, engaging in only minimal crop production.
- Livestock (camel, cattle, sheep and goat) serve as the main economic resource in this livelihood. Livestock and livestock product sales provide about 80% of poor households' annual income and 15% of poor households' annual food needs in the form of milk, ghee and meat.
- During a bad year, camels are moved to the Bay region, parts of Lower Shabelle and areas neighbouring Ethiopia in search of better pasture and water.
- The livelihood's agro-pastoral subsistence farming system (providing 23-25% of annual food needs during the reference year) is completely dependent upon seasonal rains. The main cereal crop is sorghum; however, cowpea and a very small amount of maize, particularly in Hudur and Tieglow districts, are also produced.
- Cultivated land is generally characterised by poor soil fertility, high salinity, low moisture retention and a low yield.

**For full report see:**  
FSNAU Bay Bakool  
Technical Series Report  
No. VI.19, May 20 '09 or  
contact [info@fsnau.org](mailto:info@fsnau.org)  
[www.fsnau.org](http://www.fsnau.org)

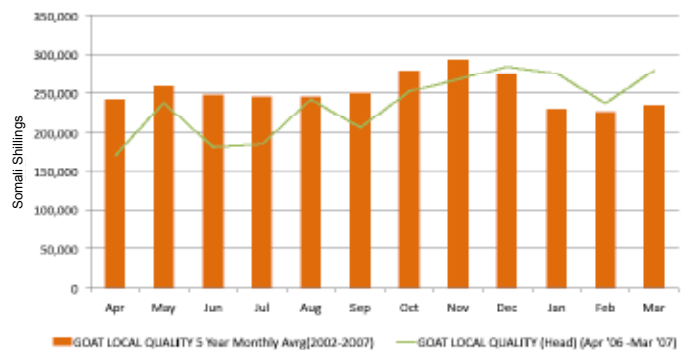
## SEASONAL CALENDAR

	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar
<b>Seasons</b>	<b>Gu wet season</b>			<b>Hagaa dry season</b>			<b>Deyr wet season</b>			<b>Jilaal dry season</b>		
Water availability										Low		
Crop harvest				High					High			
Livestock conception	High						High					
Milk production	High						High					
Cereal purchase	High						High					
Hunger period	Hunger						Hunger					
Cereal price				High						Low		
Livestock price							High			Low		
Livestock sales				High								
Agricultural Labour	High						High					
Bush products				High						High		
Diseases	Peak						Peak					

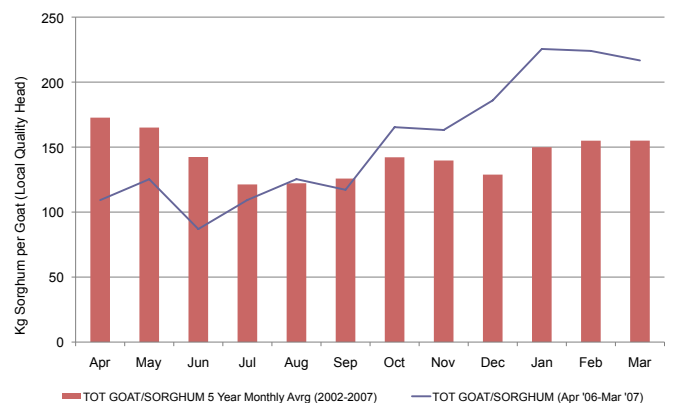
### MARKETS AND TRADE

- The main markets for the Bakool Agro-pastoral livelihood are Hudur, Tieglow, Rabdhure, and Burdhunle markets. However, there are several small markets in key villages within the livelihood.
- These markets are within distance of the livelihood and are highly accessible throughout the year.
- Households within the livelihood supply livestock, milk and ghee to the markets, and in return, purchase staple (sorghum or maize) and non-staple foods (63% of annual calories) as well as non-food items.
- Poor households also collect and sell bush products (firewood, construction sticks and poles, etc.).
- Market activity in the reference year (sales livestock and livestock products) was highest during the *Deyr* season, when livestock and milk production are best.
- Food purchase in the reference year remained high throughout much of the year, except during the period immediately following the *Deyr*.
- Periodic civil insecurity among the livelihood's population and between the livelihood and other livelihoods limits market access.

**Hudur: Trends in Local Quality Goat Prices**



**Hudur: Trends in Terms of Trade (Goat to Sorghum)**



*Women transporting water*

### THE ROLE OF WOMEN IN THE BAKOOL AGRO-PASTORAL LZ

- In Bakool's Agro-pastoral LZ, where livestock production is dominant, women from all wealth groups care for smaller livestock species (sheep and goats) while men care for camels and have full control of their management.
- Women in the poor families have an equal share in decisions regarding the management of household assets (livestock) and also conduct approximately 50% of the household's livestock sales.
- During the family split and times of migration, when men move livestock in search of water and pasture, women take on full care and control of the family and any remaining assets, including livestock. This often times results in a 12-16 hour work day for both women and children.
- With regards to agricultural activities, decisions related to crop production are equally shared amongst men and women.

**SUMMARY OF LIVELIHOOD ASSETS**

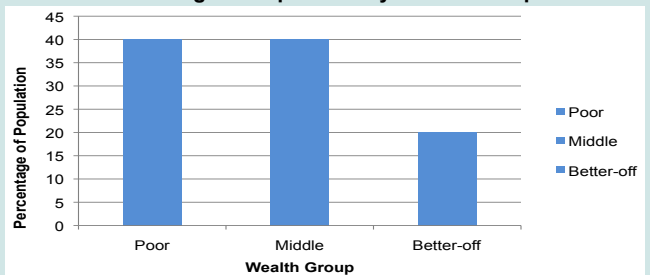
<p><b>Human Capital</b></p>	<ul style="list-style-type: none"> <li>• <b>Education:</b> There are no functional primary schools, except for a few privately owned schools, which charge fees. Access to Koranic schools is free and good for all livelihood wealth groups</li> <li>• <b>Health:</b> Access to health services are limited or non-existent. Some health services (MCHs and SFPs) are available in a few main towns and villages.</li> <li>• <b>Nutrition:</b> The nutrition situation was <b>Critical</b> in some areas but <b>Serious</b> in others during the reference year. Historically, the nutrition situation, assessed using representative nutrition surveys, indicated persistent <b>Critical</b> (15-19.9%) levels of Global Acute Malnutrition (GAM) in Bakool region since 2000. The chronically high levels of acute malnutrition were attributed to seasonal illnesses associated with consumption of poor quality water, the lack of sanitation services and continuing sub-optimal child care practices.</li> </ul>	<p><b>Trends in Levels of Acute Malnutrition in Bakool Agro-pastoral (WHZ&lt;-2 or Oedema), 2001-2007</b></p> <table border="1"> <caption>Data for Trends in Levels of Acute Malnutrition</caption> <thead> <tr> <th>Month</th> <th>GAM (%)</th> <th>SAM (%)</th> </tr> </thead> <tbody> <tr> <td>Sep'01</td> <td>~19</td> <td>~3</td> </tr> <tr> <td>Sep'02</td> <td>~15</td> <td>~2</td> </tr> <tr> <td>Jan'06</td> <td>~16</td> <td>~2</td> </tr> <tr> <td>Sep'03</td> <td>~11</td> <td>~2</td> </tr> <tr> <td>Nov'07</td> <td>~12</td> <td>~2</td> </tr> <tr> <td>Oct'03</td> <td>~17</td> <td>~4</td> </tr> <tr> <td>Oct'07</td> <td>~14</td> <td>~2</td> </tr> </tbody> </table>	Month	GAM (%)	SAM (%)	Sep'01	~19	~3	Sep'02	~15	~2	Jan'06	~16	~2	Sep'03	~11	~2	Nov'07	~12	~2	Oct'03	~17	~4	Oct'07	~14	~2
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<p><b>Social Capital</b></p>	<ul style="list-style-type: none"> <li>• <b>Remittances:</b> Access to remittances is generally poor for all households. Limited local remittances are received by the poor from relatives in main urban centres throughout the country. During the reference year, the monthly average number of households receiving remittances in the rural towns of Burdhunle (Wajid district) and Ceel Garas (Tieglow district) was 71 and 38, respectively.</li> <li>• <b>Donations or gifts (zakaat):</b> Poor households receive gifts (zakaat) in the form of food, live animals and cash from Middle and Better-off households and relatives living in main towns. During the reference year, access to financial coping mechanisms was low due to previous seasons of drought.</li> </ul>																									
<p><b>Physical Capital</b></p>	<ul style="list-style-type: none"> <li>• <b>Road infrastructure:</b> The main roads are earthen roads, which tend to be impassable during the rainy seasons (1-2 months), restricting transport and commodity flows.</li> <li>• <b>Water sources:</b> The most common source of water for rural populations are shallow wells. Rain-fed water catchments, which are seasonal, are the second main water sources. There are also a number of boreholes in all the districts of this livelihood. Approximately 65% of the population's water supply is derived from shallow wells.</li> <li>• <b>Telecommunications:</b> Telecommunication services are typically only available in each district's capital towns. However, there are HF (High Frequency) radios available in major towns and villages, facilitating the transfer of remittances and other social support mechanisms.</li> </ul>																									
<p><b>Financial Capital</b></p>	<ul style="list-style-type: none"> <li>• <b>Livestock assets:</b> Livestock and livestock product sales (camel, sheep, goat and cattle) are the main sources of income in this livelihood. During the reference year, sales of livestock and livestock products provided 80% of Poor households' total annual income and almost 100% of Middle and Better-off households' income.</li> <li>• <b>Loans and credit:</b> Access to loans and credit is common for all wealth groups within the livelihood. Level of access varies between wealth groups, as it is determined by their asset holdings. The main sources of loan are traders in the main towns and villages.</li> <li>• <b>Debt:</b> Poor households typically accumulate the greatest debt during hunger period, usually at the end of the rainy seasons (May/June and December), when livestock prices are lowest and crops are not mature for harvest and income is the least.</li> </ul>																									
<p><b>Natural Capital</b></p>	<ul style="list-style-type: none"> <li>• <b>Rainfall levels and water supply:</b> During the <i>Gu</i> of the reference year, the zone received rains approximately 80-120% of the long-term average. During the <i>Deyr</i>, the northern part of the zone received 150-200 mm of rainfall and the southern half received 200-300 mm of rainfall, approximately 150-300% of the long term average. Water resources are available all year round; there are a significant number of permanent deep wells, some boreholes and multiple seasonal water catchments. Water is rarely sold; however, community members are required to pay a small fee when using boreholes, which goes towards their maintenance.</li> <li>• <b>Environmental resources:</b> Environmental degradation and deforestation are widespread within the livelihood. Recurrent drought, constant overgrazing, charcoal and lime production are the primary factors of these environmental problems. The overall average to above average performance of rainfall during the reference year facilitated widespread recovery of pasture and replenishment of water sources from the previous drought. NDVI levels during <i>Deyr</i> (Dec. '07) indicated considerable recovery, reaching levels more than 100% above the mean for that period.</li> </ul>																									

## WEALTH BREAKDOWN

### Household Structure and Wealth

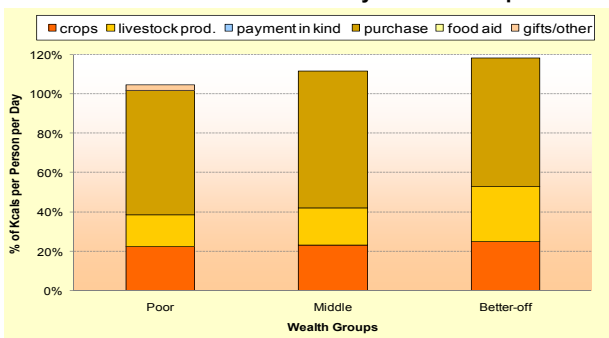
	Poor	Middle	Better-off
% of population	40	40	20
No. of wives	1	1	2
Household size	5-7	6-8	8-10
Cultivated land (ha)	5	6-8	8-10
Livestock holdings:			
Camel	4-8	9-25	25-55
Cattle	3-6	10-12	8-12
Sheep/Goat	30-40	45-65	80-120

### Percentage of Population by Wealth Group

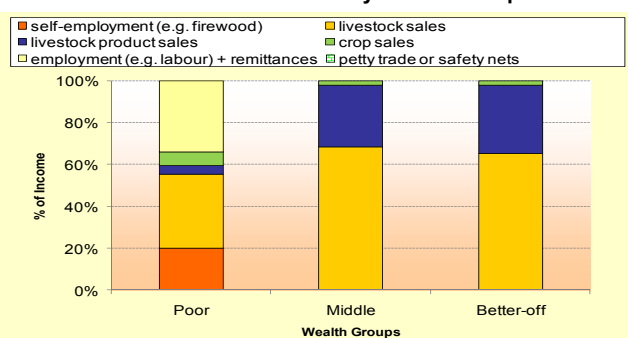


## LIVELIHOOD STRATEGIES

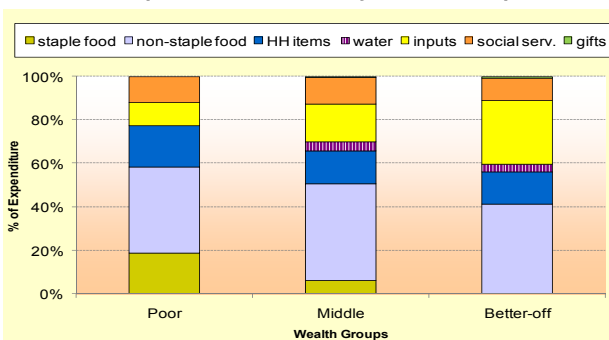
### Annual Food Sources by Wealth Group



### Annual Income Sources by Wealth Group



### Annual Expenditure Patterns by Wealth Group



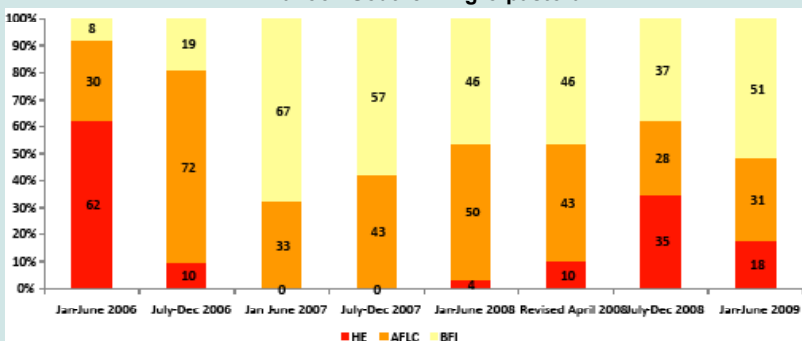
### Coping Strategies

- Livestock migration.
- Increase of livestock sales including the sale of breeding animals.
- Reduction of non-food expenditure to purchase more food items (all wealth groups).
- Increased collection and sale of bush products by poor households.
- Seeking of social support, such as loan, credit, remittances, etc.
- Reduction of food in-take (skipping meals).
- Migration from insecure area to other secure areas.

### VULNERABILITY AND IPC PROGRESSION SINCE 2006

- The population of this livelihood (formerly Southern Inland Pastoral and Southern Agro-pastoral livelihoods) is highly vulnerable to drought, livestock disease, civil insecurity and other shocks.
- Due to recurrent drought since 2006, which has resulted in low livestock productivity and low crop production, Poor and some Middle households in this livelihood have remained in crisis.
- Depending on the severity of drought, the number of people identified in **Acute Food and Livelihood Crisis (AFLC)** and **Humanitarian Emergency (HE)** since 2006 has ranged between 35% and 80% of the livelihood population.

### Bakool: Southern Agro-pastoral



### RISK FACTORS

- Drought
- Civil Insecurity
- Livestock Disease
- Unsafe water and poor hygienic and sanitation facilities
- Environmental degradation

### IMPLICATIONS FOR RESPONSE

- Improved veterinary services, such as livestock drugs, enhanced animal husbandry, and other livestock related services.
- Provide farm inputs such as good quality seeds and farm tools, improve farming practices, and introduce integrated pest management (IPM).
- Develop education and health infrastructure.
- Implement income generating projects, which build livelihood assets.
- Rehabilitate and develop water sources.
- Improve hygiene and sanitation services.



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