The reference year is typically the most recent full year. The reference year selected for this livelihood analysis followed a year-long drought (Gu’06), which caused crop failure and livestock herd depletion. Rains were near-average during the Gu’06 season and good during the Deyr 06/07 season, with some pockets in Bakool experiencing poor rainfall.

Bay-Bakool Agro-Pastoral Low Potential Livelihood Zone (LZ) and Surrounding Areas

Livelihood Zone (LZ) Description

- Bay-Bakool Agro-pastoral Low Potential Livelihood Zone (LZ) is equally dependent upon crop production and livestock to sustain its livelihood.
- This livelihood receives an annual rainfall of 400-500 mm in Bay region and 300-350 mm in the Bakool region.
- Livestock holdings are the major determinant of wealth within this livelihood, followed by agricultural land holdings.
- The dominant species of animal are cattle (nagsa, which means ‘the weak’), which frequently require water and are highly vulnerable to drought, followed by camel and sheep/goats.
- Livestock sales provide considerable income for this livelihood, followed by agricultural labour.
- The farming system is rain-fed agriculture with limited flood recession (run-off water from higher land to depressed areas) in localized areas.
- The majority of Middle and Better-off households’ food needs are met through own production of sorghum and milk. All three wealth groups are dependent upon food purchase for approximately 21-37% of their minimum basic food needs.
SEASONAL CALENDAR

<table>
<thead>
<tr>
<th>Seasons</th>
<th>Apr</th>
<th>May</th>
<th>Jun</th>
<th>Jul</th>
<th>Aug</th>
<th>Sep</th>
<th>Oct</th>
<th>Nov</th>
<th>Dec</th>
<th>Jan</th>
<th>Feb</th>
<th>Mar</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gu wet season</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Low</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hagaa dry season</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>High</td>
<td></td>
</tr>
<tr>
<td>Deyr wet season</td>
<td></td>
<td></td>
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<td></td>
<td></td>
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<td></td>
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<td></td>
<td>High</td>
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<tr>
<td>Jilaal dry season</td>
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<td></td>
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</tr>
</tbody>
</table>

**MARKETS AND TRADE**

- The main markets for this livelihood are Baidoa, Hudur, Dinsoor, Burhakaba, Tieglow and Wajid.
- Markets are considerably important as agro-pastoralists in this LZ purchase one-third of their annual food requirements (both staple and non-staple foods), and derive over 70% of their annual income from the sale of livestock and livestock products.
- The most important income sources for the Poor households are agricultural labour and livestock sales. For the Middle and Better-off groups, most income is derived from the sale of livestock and livestock products.
- The terms of trade cereal to labour for Bay and Bakool in the reference year indicate the same pattern. However, the terms of trade in Bay in both the reference year and the five year average are almost double of that of Bakool due to relatively low cereal prices (see adjacent graphs).

**ROLE OF WOMEN IN THE BAY BAKOOL AGRO-PASTORAL LOW POTENTIAL LZ**

- In agro-pastoral areas, decisions related to crop production are equally shared amongst men and women in poor households.
- Approximately 70% of the household’s total crop sales are conducted by the women of the household (poor).
- In agro-pastoral areas, where agriculture is dominant, approximately 30-35% of the household’s required agricultural labour is performed by women.
- Women and children tend to smaller livestock such as sheep, goats and cattle if available, while men care for the camel.
- Men and women share in the decision-making regarding the sale of livestock, but women alone maintain full control of livestock production (poor households).
**SUMMARY OF LIVELIHOOD ASSETS**

### Human Capital
- **Education:** There is no formal education available for all wealth groups in this livelihood. Koranic education is both widespread and affordable for most; therefore, it is the most common form of schooling for children.
- **Health:** Health facilities for the rural population are few, and the number of Maternal Child Health (MCH) Centres is limited to one per district. Families must travel long distances to reach these facilities.
- **Nutrition:** The nutrition situation in Bay and Bakool regions, determined through representative nutrition surveys, indicated persistent Critical (15-19.9%) levels of Global Acute Malnutrition (GAM) during the reference year. In addition, meta analysis of nutrition survey data from 2001 to 2007 shows Bay Region to have the highest median rates of underweight (i.e. 40.1%) and stunting (39.4%) in Somalia.

### Social Capital
- **Remittances:** Access and levels of remittance for this livelihood are fairly limited although a few families receive money from relatives in urban areas.
- **Donations or gifts (zakat):** Zakat is an obligatory 10% payment made by the wealthy to the poor, which is fairly common in this LZ. Zakat is 2.5% of annual savings, 10% of rainfed crop harvest and 5% of irrigated crop harvest.
- **Other social support:** Gifts and other support for wedding and funeral ceremonies are also common in this livelihood. In addition, community members will assist each other with agricultural activities such as weeding.

### Physical Capital
- **Water sources:** Main sources of water for this livelihood are water catchments, shallow wells and a few boreholes. During the reference year, rainfall levels were mostly normal, making access to water unproblematic for most.
- **Telecommunications:** There is little coverage and access in terms of telecommunication services. Some telephone lines are available in rural villages located near urban centres, but more remote villages still rely heavily on HF (High Frequency) radios to communicate. HF radios are used mostly for trade purposes and to obtain security updates.
- **Road infrastructure:** Road infrastructure in this livelihood is extremely poor due to more than a decade of neglect. All the roads are earthen and inaccessible during the wet seasons.

### Financial Capital
- **Loans:** Access to loans and credit is common for all wealth groups but the level of credit issued depends upon a household’s asset holdings (land and livestock). Credit is typically provided by traders to all wealth groups in the LZ. Debts are typically repaid at the beginning of the dry seasons, after crops have been harvested and are ready for sale and when livestock and livestock product marketing is at its peak.
- **Livestock and land holdings:** Livestock and cultivated land are key assets for this livelihood. Middle and Better-off households have more land and animal holdings than Poor households. Subsequently, cereal stocks are more common amongst the Middle and Better-off households.
- **Other financial capital:** Over 50% of the Poor’s income comes from employment and self-employment activities (livestock product sales and the collection and sale of bush products).

### Natural Capital
- **Rainfall:** Rainfall is the main determinant of crop and livestock production levels. Average annual rainfall levels in the Bay and Bakool regions are 400-500 mm and 300-350 mm, respectively. During the reference year, rainfall performance was mixed. However, Deyr rains were exceptionally above average, improving rangeland conditions and crop production.
- **Environmental degradation:** Significant charcoal production continues to destroy grazing areas. Seasonal rivers (bohol) also cause alluvial erosion in some farming areas. NDVI levels during the first part of the reference year were mixed with some areas reporting low levels (Bakool). However, as a result of above-average Deyr ’06/07 rainfall, NDVI in Dec. ’07 demonstrated considerable recovery to rangelands.
Livelihood Baseline Profile - Bay Bakool Agro-pastoral Low Potential

WEALTH BREAKDOWN

Household Structure and Wealth

<table>
<thead>
<tr>
<th></th>
<th>Poor</th>
<th>Middle</th>
<th>Better-off</th>
</tr>
</thead>
<tbody>
<tr>
<td>% of population</td>
<td>30-40</td>
<td>40-50</td>
<td>15-25</td>
</tr>
<tr>
<td>No. of wives</td>
<td>1</td>
<td>1</td>
<td>1-2</td>
</tr>
<tr>
<td>Household size</td>
<td>6</td>
<td>8</td>
<td>9</td>
</tr>
<tr>
<td>Cultivated land (ha)</td>
<td>2.5</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>Livestock holdings Camel</td>
<td>0</td>
<td>7</td>
<td>7</td>
</tr>
<tr>
<td>Cattle</td>
<td>3</td>
<td>10</td>
<td>17</td>
</tr>
<tr>
<td>Goat/sheep</td>
<td>5</td>
<td>17</td>
<td>30</td>
</tr>
<tr>
<td>Donkey</td>
<td>0</td>
<td>1</td>
<td>0</td>
</tr>
</tbody>
</table>

Livelihood Baseline Profile - Bay Bakool Agro-pastoral Low Potential LZ, particularly in Bakool, is vulnerable to food insecurity due to recurrent drought as it affects crop and livestock production, which are the two main livelihood sources.

Agro-pastoralists in Bay region were less affected over the period due to favourable climatic conditions, and collection and sale of bush products, such as construction materials. In times of drought, loss of crops and agricultural labour diminish poor households ability to cope.

Since 2006, the number of agro-pastoral population seasonally identified in Humanitarian Emergency (HE) and Acute Food and Livelihood Crisis (AFLC) has ranged between 10% and 62% and between 30% and 72%, respectively.

Agro-pastoralists in Bay region were less affected over the period due to favourable climatic conditions, favourable rangeland conditions and average crop production. The exception was the 2005 drought during which about 92% of Southern Agro-pastoralists were placed in AFLC and HE.

Coping Strategies

- Increased livestock sales.
- Increased engagement in self-employment activities (collection and sale of bush products such as construction sticks, poles and firewood).
- Reduction of non-essential expenditure.
- Labour migration.
- Seeking social support.

RISK FACTORS

- Drought
- Conflict
- Livestock disease
- Hyperinflation
- Unsafe water
- Poor hygiene and sanitation facilities
- Environmental degradation

IMPLICATIONS FOR RESPONSE

- Increase diversity of livestock herds (camel).
- Expand areas under cultivation by increasing use of additional farming tools/devices.
- Improve crop production techniques (ploughing, pest control and storage).
- Establish additional stocks for grain and improve market access.
- Develop animal health services, which includes training community animal health workers and improving availability and access to private veterinary services.
- Rehabilitate road infrastructure to facilitate access to larger markets.
- Implement income generation projects that target poor households; these include promotion of handicraft creation and sale, water catchment de-silting projects and improved livestock trade.
- Increase educational opportunities by providing greater availability and access to schools.