HOUSEHOLD ECONOMY ANALYSIS (HEA)

SO11: SOUTHERN INLAND PASTORAL LIVELIHOOD ZONE
LOWER JUBA REGION

Submitted under the Project:
Household Economy Analysis (HEA) and Baseline assessment for the building resilience through Social Safety Nets in South-Central Somalia Project

For

SOMALIA RESILIENCE ACTION CONSORTIUM (STREAM)

(African Development Solutions (Adeso), ACTED and SADO)

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Technical Support/Contributions:

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Somalia Livelihood Baseline Profiles

Southern Inland Pastoral Livelihood Zone (SO11)

Introduction

Livelihood Baseline Profile Overview

The HEA livelihood baseline profiles provide an analysis of livelihoods and food security on a geographical basis. For newcomers to the country, the profiles offer a useful overview of food security conditions for a particular reference year (usually a recent year of fairly good rains). The profiles describe household economic activities at different periods in the year, and provide insights into annual livelihood strategies as well as seasonal patterns. The profiles are a useful resource for development planners because an important first step in creating poverty reduction and disaster risk reduction programs is to understand who is vulnerable, to which hazards, and why. Likewise, it is important to understand what it means to be poor in a particular agro-ecological context, and how poor households in different areas normally survive. The baseline profiles also describe how households adapt to economic stress, especially failed crop or livestock production, and how coping strategies differ by where one lives and what assets one has.

This baseline assessment was commissioned by ADESO and ACTED on behalf of the Somalia Resilience Action (STREAM) Consortium, to support the start-up of a safety net interventions in southern Somalia. KasmoDev Ltd. was hired to lead the baseline work. The work was carried out in partnership with the FSNAU and FEWS NET in May-July 2016. FEG Consulting provided technical support and direction

Methodolgy

The FSAU, FEWS NET and their partners use Household Economy Analysis (HEA) to identify how households make ends meet both under normal and stress conditions. HEA allows planners to analyze the effects of external shocks, such as drought or livestock bans, on household livelihoods in order to predict whether household resources will be sufficient to meet basic needs (defined in terms of survival and livelihood protection thresholds). The analysis is disaggregated by wealth group and by livelihood zone, and can be conducted annually or updated seasonally. As a result of this process, a dynamic picture is created that adds significant value to other food security indicators. The advantages of HEA are two-fold: (i) it focuses on food and income access rather than just food availability, and (ii) it underscores how risks and shocks have different potential impacts, depending on the socio-economic status of households and their ability to expand or extend existing food and income sources to meet food shortfalls. The HEA analytical framework has two main components:

Baseline analysis – the HEA baseline both quantifies and describes qualitatively the total food and cash economy of households, covering all food sources, cash income sources, and expenditure patterns across all seasons in a full one-year period. The analysis shows how people get by year to year as well as their connections to the people and the places that enable them to do so.

Outcome analysis – the HEA outcome analysis is an investigation of how baseline access to food and income might change as a result of a specific hazard such as drought, or as a result of a positive change, such as a beneficial price policy.

The baseline analysis relates to a specific **reference year** (In this case April 2015 to March 2016). For pastoral livelihood zones, the reference year usually starts with the main rainy season, when milk production is at its peak. Generally, but not always, the reference year will be a year that was neither especially good nor especially bad, but somewhere in the middle. The most important point about the reference year is not that it should be an average year, but that it should provide a good starting point for understanding how livelihoods will vary from one year to the next in relation to changes in key production factors.

SOUTHERN INLAND PASTORAL LIVELIHOOD ZONE (SO11)

General livelihood zone description

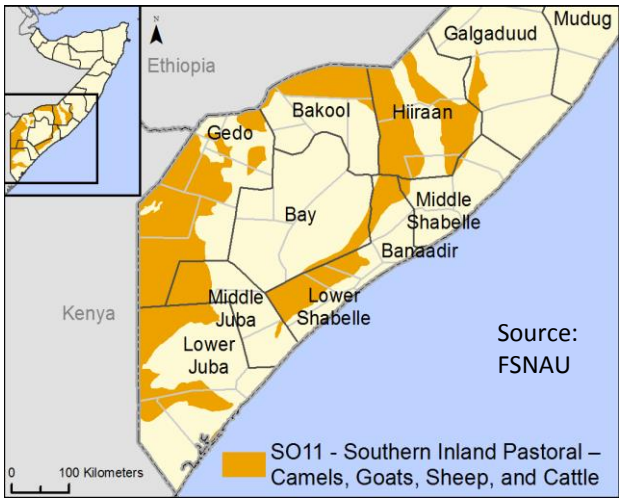
Table 1 Summary of data supporting the Southern Inland Pastoral livelihood profile

Field data collection	May 2016
Consumption year	April – March
Reference year	2015-2016
Initial estimated validity	Until 2021 or 2026

Source: The STREAM Consortium Study 2016

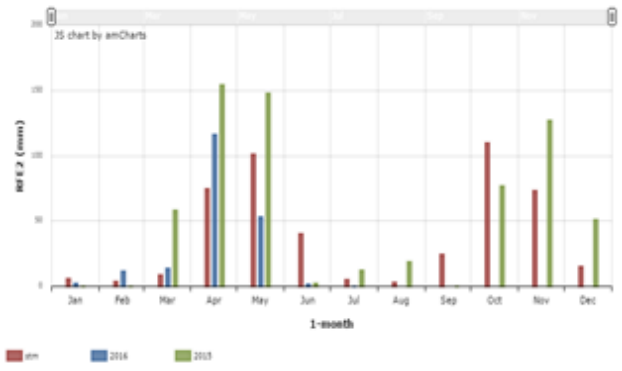
The *Southern Inland Pastoral Livelihood Zone* (SO11) covers much of southern Somalia (as well as a small portion of central Somalia), including Hiran, Lower/Middle Shabelle, Bay, Bakool, Gedo, and Lower/Middle Jubba Regions, as well as parts of Galgaduud Region. The most recent population estimate for this zone is 546,340 (UNFPA 2014), which makes it the **third largest** pastoral population after the *Northern Interior Pastoral* and the *Hawd* livelihood zones.

This semi-arid zone is made up mostly of flat plains. Natural woody vegetation containing sparse herbaceous, dense shrubs and acacia trees cover the landscape. Woody vegetation is interspersed with grazing areas comprised of savannah grasslands. These vital rangeland resources are declining due to extensive charcoal production, soil erosion and desertification. The different soils types that cover this zone are characterized by average moisture availability. The area is rich in wildlife though several species are under threat and many wildlife are thought to have crossed the Kenya border since the collapse of Said Barre regime due to extensive hunting and indiscriminating killing.



The movement of the Inter Tropical Convergence Zone (ITCZ) in a southward direction influences the winds in this area. In turn, these winds influence the onset of the *Gu* and *Deyr* rainy seasons. Based on an analysis of long-term (over 30-year) rainfall data, average annual rainfall ranges from 230 – 500mm in this zone although there is significant inter-annual variability. The central areas of the zone receive the lowest levels of rainfall whereas the highest levels fall in the Juba regions (400 - 600mm in general). For instance, in Lower Juba Region, parts of which fall in the Southern Inland Pastoral Zone, the estimated average cumulative rainfall is 444mm (see Figure 1 at right). Notably, rainfall amounts received in the reference year (April 2015 –March 2016) were significantly above the short term average, showing an increase of 38% (from 444mm to 615mm).

Figure 1: Estimated Short Term Mean (STM) monthly rainfall and monthly 2015-2016rainfall in mm in Lower Jubba Region



Source: USGS CHIRPS Data, FEWS NET GeoCLIM[1]

As shown in Figure 1, there are four seasons in southern Somalia. These four seasons are known as the Gu main rainy season (April-June) followed by a short dry period called Hagaa (July-September). The next season is the Deyr short rains (October-December), followed by the long dry season known as Jillal (January-March). Hot temperatures are common throughout the year. Daily mean temperatures in Afmadow District, for example, are 28.3^{0}C. The hottest months, when daily mean temperatures soar to 38- 39.5^{0}C, are January to March, while the coolest months, when average daily temperatures are 19.5 – 20.2^0 C, are June to September.

[1] Based on USGS CHIRPS data, a combination of satellite-based Rainfall Estimates (RFE) and station data, with data extending more than 30 years (1981-2014). Source, FEWS NET and USGS.

Dlf-Dobley- Bore hole-water source

Acute water shortages are prevalent during the two dry periods (Jilaal and Hagaa). Pastoralists have access to natural depressed water catchments locally known as *ballis* and to water from running streams which are replenished seasonally by Gu and Deyr rains. During the dry seasons, households typically buy water both for human and livestock consumption, sourcing water mainly from boreholes and private water catchments. Water prices are high during this period. For instance, during the 2015-2016 reference year, the cost to water one camel was SOS 5,000-6,000 per head. Herders paid a lump sum to water goat and sheep, and for human consumption, the price of one jerry can was SOS 1,000. Long distant travelling to water points and frequent livestock watering intervals are common for camel pastoralists. In the dry periods, for instance, watering intervals for camels are 5-6 times/month for about at least 4-5 months in a year while goat/sheep watering is 10-15 times/month. Herders spent the second highest income after food on water purchase.

Camels-Dobley

Livestock production is the basis of the local economy and camels in particular are the backbone of this livelihood. According to the previous livelihood baseline, camels, cattle, goats and sheep were all commonly reared in this livelihood zone. However, the 2011 famine led to the significant loss of cattle, and these herds have yet to recover. Hence, cattle are no longer typically kept in this zone. Instead, households rely on camels, goats and sheep to meet their food and cash needs. Camels are the most valuable livestock in the herd. They are a symbol of wealth and are the main source of income and basic food energy. For instance, three of four wealth groups – the poor, middle and better off -- all earned the most income from camel milk sales (62-75% of annual income in 2015-2016) even though a significant number of camels aborted in the reference year due to disease. This reflects that productive female camels produce large quantities of milk. Pack camels and donkeys are also important for transporting water and other household essentials during migration. These animals even carry calves and sometimes people during long treks. Goats and sheep also contribute to the local economy. In addition to their value derived from sales, goats and sheep are slaughtered during religious celebrations or to serve important guests, or sometimes just for household consumption. Herders share communal rangelands for grazing their livestock during normal rainy seasons. The area also has the capacity to host large numbers of livestock migrating in from other regions of Somalia as well as from the neighboring country of Kenya. However, when the rains fail or in times of insecurity, competition for these scarce rangeland and water sources can lead to clan conflict. To deal with these conflicts, traditional dispute resolution mechanisms are in place that can help bring about local agreements and restore peace.

Local rural settlements have not changed much over the last few decades. Most pastoralists in the livelihood zone live in traditional Somali huts made of natural products (poles and ropes) and covered with either grass, reeds or polythene bags. The condition of roads is chronically poor and local roads are not passable by vehicle (this hinders trade and transport in the zone). A few seasonal roads are functional but only during the dry seasons which is when commodity supplies are high and prices are relatively low. Health and education services and infrastructure are also very poor in this livelihood zone. Although without access to formal schools, children nonetheless attend mobile Quranic schools. Notably, in the reference year, each household in this zone paid a young (2-3 year) camel when their child reached a Quranic verse known as ***Walleylli***. Formal credit services are likewise limited. However, most wealth groups can get in-kind loans from traders and shopkeepers in their respective areas. However, one service that has improved in recent years is telecommunication. Mobile phones in particular play a vital role for information sharing, improving the surveillance of rainfall, pasture, sudden eruptions of clan conflicts, and market prices. Thus mobile phone use assists greatly in timely migration and livestock marketing. In general, government services in support of rural livelihoods are low although the local administration has recently been re-established in the main towns. There are several humanitarian agencies who work in the area, amongst which is ADESO who provide unconditional cash transfers and cash-for-work to poor households in parts of the livelihood zone. They also help with free food distribution to certain target areas. Other actors include SOLIDARITY and WASDA who provide WASH and veterinary services respectively.

Markets

Market centers are limited in this livelihood zone. The common market points fall just outside the *Southern Inland Pastoral Zone* and include Dobley and Afmadow. Poor roads and long distance traveling have a great influence on commodity prices and market access. For the most part, pastoralists travel by foot, using pack camels and donkeys to transport goods from markets, and to fetch water from long-distance water points.

Livestock Markets

Livestock and livestock products are the most important commodities sold in this livelihood zone. Pastoralists purchase food and non-food items from the market financed through livestock-based income. Although trading occurs throughout the year, most activities take place in the dry season when herders return back to the main towns and the peri-urban settlements in their respective areas. The primary markets for livestock are Dobley and Afmadow. From these primary livestock markets, trekkers transport camels either to Kenya (through Garissa) or to Mogadishu where demand for camel meat is always high. These central markets also provide the main link for households to purchase food and non-food items such as clothes, kerosene, salt and soap.

Cereal markets

Both local cereals (maize) and imported cereals (rice) are the main staple grains purchased for household consumption. These commodities flow into this zone from neighboring agropastoral areas and from Kismayo through the Kismayo port. However, the cross border trade of cereal with Kenya slowed down in the second half of 2015 due to terrorism related security operations (FSNAU seasonal report).

During the reference year, the terms of trade, as measured by the amount of grain that can be purchased with the income from the sale of a goat, was favorable for pastoralists. The average local goat price in the reference year was SOS 700,000, while maize and rice prices stood at SOS 10,000/kg and SOS 15,000/kg respectively. Hence, the terms of trade for goat/maize and goat/rice was 70 kg maize per goat and 47 kg rice per goat. According to the *FSNAU Post Deyr Technical Series Report,* in the key consumer markets of Afmadow, Dobley and Hagar, which serve the Lower Juba pastoral areas, the terms of trade was 73 kg/head (local quality goat to white maize). These rates were a slight increase of 3% and 4% compared to the July 2015 terms of trade and the five-year average respectively.

Market prices and terms of trade play a crucial role in the local economy. For instance, the poor and very poor households in this livelihood zone obtain 60-70% of their daily calorific intake from the market purchase through mainly one single source of income (livestock and livestock product sales). Hence, pastoral households – particularly the poor – are highly vulnerable to market price changes, and when prices of basic food items shift upwards and livestock-based income falls, they struggle to secure food. For instance, during the 2011 drought year, maize and rice prices were SOS 17,250/kg and SOS 24,000/kg respectively while the return on an average local goat was SOS 43,7500/goat. These drought year cereal prices, thus, exceeded 60-73% of reference year price whereas the local goat price dropped by 37% compared to the reference year. This resulted in a sharp decline in the goat/maize TOT and goat/rice TOT by 64% and 62% respectively.

Conflict

The collapse of the central government in 1991, when Siad Barre was ousted from Mogadishu by forces of the United Somali Congress (USC), began a period of conflict, instability, food crisis and severe food insecurity that continues to this day. In the months following the collapse, the country was torn apart by clan-based warfare and factions competing for what remained of the state's assets and power. Four months of fighting in Mogadishu alone in 1991 and 1992 killed an estimated 25,000 people; 1.5 million people fled the country; and at least 2 million were internally displaced. At the same time, a drought that year served to exacerbate the effects of the destruction of social and economy infrastructure, asset

stripping, 'clan-cleansing' and market disruption and by the end of 1992 an estimated 250,000 people had died. The worst-affected came from areas of the south where waves of invasions by armed militias occurred.[2]

From 2006 to 2012 the country became engulfed in the 'global war on terror' as various factions tried to consolidate power in the vacuum of leadership while at the same time a growing influence from Islamist military groups caused Ethiopia to invade Somalia, leading to increased radicalization of some members of the Union of Islamic Courts (ICU) and the emergence of *Al-Shabaab* as a major force in Somalia. This has caused increasing disruption throughout the country, especially in southern Somalia. The three years from 2006-08 were catastrophic for Somalis. Military occupation, a violent insurgency, rising jihadism and massive population displacement reversed the incremental political and economic progress achieved by the late 1990s. During 2007 alone, fighting between the Transitional Federal Government (TFG) and the insurgency resulted in the displacement of up to 700,000 people from Mogadishu. In 2011, the plight of the Somali people was exacerbated by the worst drought in six decades, which left millions of people on the verge of starvation and caused tens of thousands to flee to Kenya and Ethiopia in search of food.

The formation of a post-transition Federal Government brought back some stability to the country in 2012. However, fighting over territory in southern Somalia continues to this day as the National Armed Forces (with support from the African Union Mission in Somalia/AMISOM) try to regain strategic cities and towns from *Al Shabaab*. Frequent market disruptions have resulted from continued conflict as commercial supply routes are interrupted. In turn, supply shortages have led to price increases for local producers and consumers.

Throughout the conflict there have been ongoing contradictions between a centralized state authority, a fractious kinship system and the Somali pastoral culture in which power is diffused. Most areas in this livelihood zone have been directly affected by the conflict. Bay and Bakool Regions in general, and Baidoa in particular, were arguably the worst hit during the first and second decades of armed conflict.[3] For instance, in early 2009, the *Al-Shabaab* group launched a major offensive to take Bakool Region. Battles for control over Mogadishu and Baidoa, as well as battles for control over much of the territory in southern and central Somalia continued into 2010. Mogadishu itself remained the center of fierce battles until 2011 when the Transitional Federal Government and AMISOM troops won control of the city from *Al-Shabaab*.[4] Subsequently, *Al-Shabaab* retreated to Baidoa, which meant continued insecurity in Bay and Bakool Regions.[5]. Moreover, main roads were risky for traveling or for transporting goods due to continued attempts by allied troops to oust *Al-Shabaab*. Baidoa was eventually taken from *Al-Shabaab* in February 2012, and in 2015, AMISOM, with support from Ethiopian National Defense and Kenyan Defense Forces, carried out a major operation to force *Al-Shabaab* out of its last strongholds in southern Somalia, including Baardheere. However, *Al Shabaab* are still active in the area carrying out guerrilla style attacks in Baidoa and along the main Baidoa-Mogadishu road. Several administrations recently created by clan militias loosely allied to the TFG are fighting back against *Al-Shabaab* insurgents in several parts of Somalia including lower Shebelle, Lower Juba, Gedo and Bay and Bakool areas.

Food access history

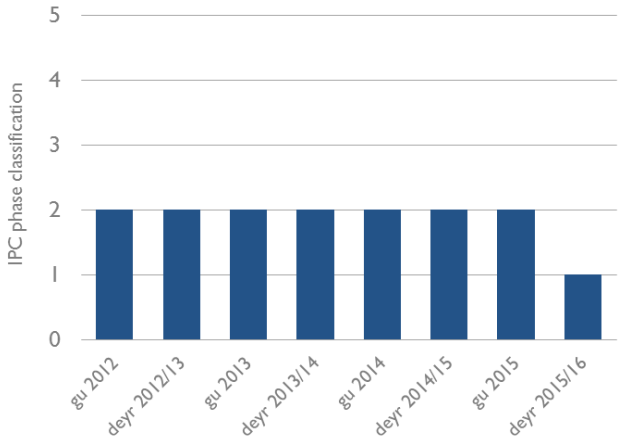
The effect of ongoing conflict has been devastating over the years. Conflict has meant the collapse of industries; the breaking down of infrastructure; the dissolution of state services; disruptions to trade, supply shortages, price hikes; population displacement; and violence against women. All these effects have had devastating consequences for the food and livelihood security of the local people. Throughout the conflict, timely and effective interventions have been severely constrained due to insecurity. A major international emergency effort ensued in response to the country-wide famines of 1991-1992, 2005-2006 and 2011. In 2008 and 2009 the country received the largest amounts of international food aid since the famine of 1992-1993.

[2] http://www.c-r.org/accord-article/endless-war-brief-history-somali-conflict, Sally Healy and Mark Bradbury
[3] OCHA. 2002: *Internally Displaced Persons. Combined Report on Somalia* 1. 1 August 2002.
[4] AMISOM stands for the African Union Mission in Somalia
[5] Al-Shabaab continued to lose territory over the next couple of years. In late 2012, for example, Kenyan troops assisted the Somalia National Army and AMISOM to take control of Kismayo from Al-Shabaab. This move cut off a major source of income for Al-Shabaab: the export of charcoal.

However, in late 2009, all US-funded food aid *to Al Shabaab*-controlled southern Somalia was halted. With continued insecurity in southern Somalia, the inability to provide adequate services and humanitarian support in times of drought has led to major displacements of populations and a major refugee crisis. For example, during the May to July 2011 period around 46% of the refugees who fled into Ethiopia are estimated to have come from Bay Region in Somalia.[6]

Post the 2011 famine, overall food security and nutrition in the *Southern Inland Pastoral Zone* greatly improved. From 2012-1015, conditions have been relatively good (see Figure 2 at right). During the reference year, the main two rainy seasons were classified as minimal food insecurity (IPC Phase 1) owing to average Gu rains followed by average to good Deyr rains (FSNAUPost Gu'15 and Deyr 15/16).

Figure 2: Recent trend in IPC phase classification, with 1 as best and 5 as worst



Source: FSNAU

Seasonal Calendar

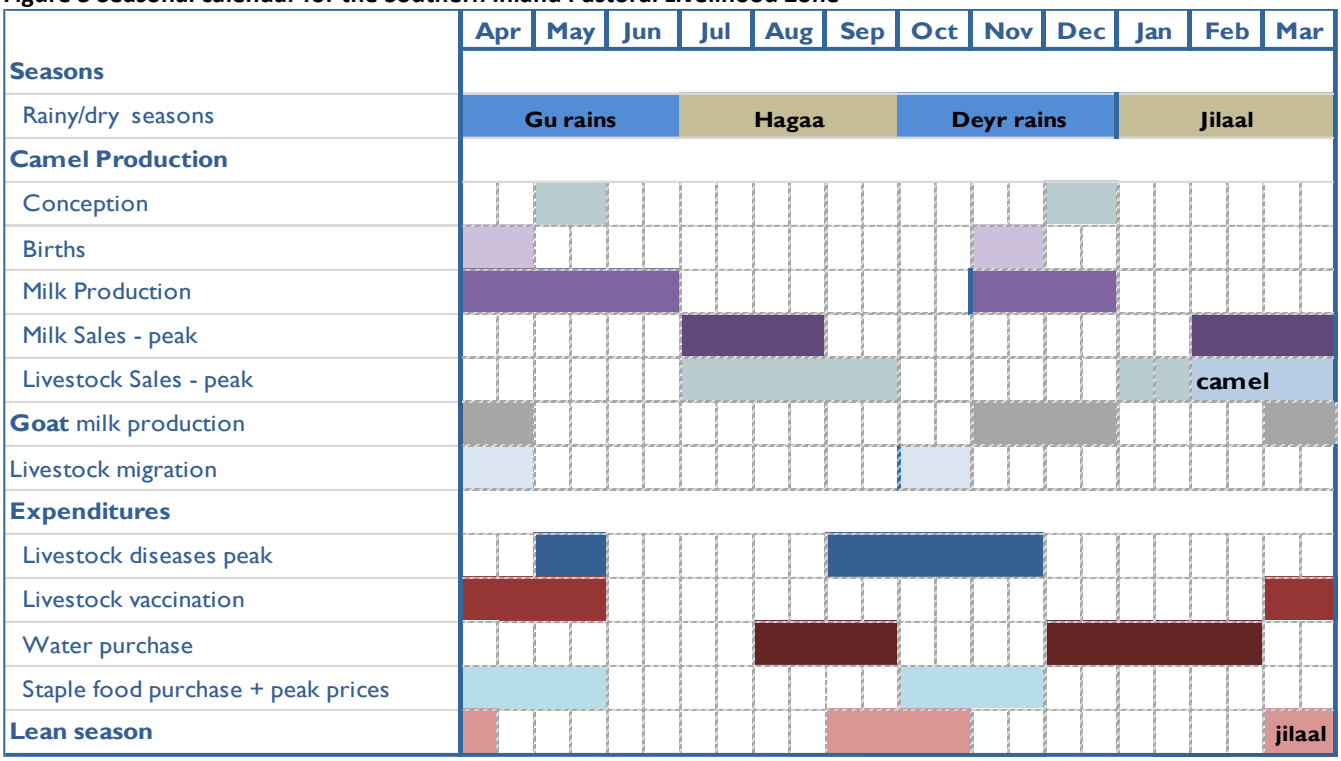
Pastoral livelihood systems are mainly determined by geographic location, type of species reared, and seasonal rainfall patterns. They depend on their mobility in order to move between areas where pasture and water are available. The rational of the pastoral economy is to build up herds and re-stock in good years so as to be resilient to the losses that occur in bad years. However, in the past decades, livestock recovery has been interrupted due to frequent droughts; global climate change; environmental degradation; insecurity; and lack of proper governance.

Figure 3 below indicates seasonal production and expenditures for the *Southern Inland Pastoral Zone*. The consumption year for this pastoral zone starts at the beginning of the main rainy season when most species give birth, milk is widely available and the hunger period ends. There are two rainy seasons in the zone: Gu (April-June) and Deyr (October-December). There are also two dry seasons: Jilaal (January-March) and Hagaa (July-September) which come after Deyr and Gu respectively. Water availability in the livelihood zone determines much of the seasonal movements. Surface water peaks in May and October in Gu and Deyr seasons respectively which leads to increased pasture and browse. Livestock births are at their highest during the peak rainy seasons as water and fodder are available. However, the number of births normally depends on the performance of the rains in the season of conception as well as during the period when the animals are pregnant. Milk supplies are also determined by the number of animals that conceive and give birth as well as by the quality of the pasture and water sources during the lactation period.

Milk, therefore, is available throughout the year depending on species type, although yields are higher in the wet seasons. Milk consumption is high during the rainy seasons, while milk sales and prices are low, due to livestock migration to areas that are far away from the markets. Milk availability is lower during the dry season but the amount of milk sold increases during the dry period when milk prices are higher and households are closer to markets. Prices of staple foods peak during the two rainy seasons due to impassable roads. In a normal year, the migration pattern of animals is to pastures within the livelihood zone. Livestock are moved to wet-season rangelands during the rains and camels in particular are taken to distant rangelands, returning back to the water points and areas close to the main markets during the dry seasons. It is at this time when people need to purchase more food to supplement waning milk supplies.

[6] FEWS NET, *Internal and External Displacement among Populations of Southern and Central Somalia Affected by Severe Food Insecurity and Famine during 2010-2012*, 2014

Figure 3 Seasonal calendar for the Southern Inland Pastoral Livelihood Zone



Source: The STREAM Consortium Study (Adeso, ACTED-SADO), FSNAU, FEWS NET)_SIP HEA Baseline 2016.

Livestock and human diseases are high during the wet seasons. In particular, malaria and pneumonia are prevalent during the rains. This means that the wet seasons are when the family budget is stretched to meet both food and medical needs. The long dry season (the Jilaal) is also especially difficult, and it is a time when pastoralists have high expenses on food and on water. Formal schools are not available in most parts of the livelihood zone. Despite this, children attend mobile Quranic schools which are considered mandatory for every household, regardless of wealth. Previously, pastoralists were highly dependent on milk consumption during the rainy season and purchased limited amounts of foods even in the dry season. This pattern is changing and in current times pastoralists are purchasing staple food throughout the year financed in great part through milk sales notably during the dry seasons.

Wealth Breakdown

In HEA, "wealth group" is a relative term for classifying the economic situation of community members in the same livelihood zone. During field work, the wealth breakdown is determined on the basis of community knowledge. In this zone, the family structure differs by wealth group as wealth is related to household size to a certain extent. Better off households own larger herds which require labor and management. Hence, they are mainly polygamous, composed in general of 2 wives with extra dependents. Poorer households and most middle households are monogamous, consisting of 6-8 family members. Most wealth groups have at least 2-3 household members who are capable of working and bringing in some income.

Table 2 Determinants of wealth in Southern Inland Pastoral

	V Poor	Poor	Middle	Better-off
Household percentage (%)	7	30	48	15
Household size (#)	6	7	8	10
Typical livestock holding (#)				
Camels	0 – 5	5-23	40 - 55	70 - 90
Cattle	0 - 6	0	0	0
Goats	4 - 17	20 – 25	40 - 45	60 - 70
Sheep	5 - 8	5 – 15	15 - 25	10 - 30
Donkeys	0 - 1	1 – 2	1 - 2	1 - 2
Pack camels	0	0 – 2	1 - 2	2 - 4

Source: The STREAM Consortium Study_BSSsummary SIP 2016
Note-Household (HH) percentage and HH size figures are the mid-point of a range

In this zone, the pastoral population is divided into very poor (*Mucsir*), poor (*Danyar*), middle (*Dhaxdhaxaad*) and better off (*Ladane*) wealth groups. In the 2015-2016 reference year, the poor were approximately 23-35% (30%) of the total population; the middle wealth group were 40-55% (48%) and the better off comprised 10-20% (15%). The fourth category is the very poor. This category made up 5-10% (7%) of the total population in the zone in the baseline year.

Self-employment – Sales of firewood and construction poles

The very poor are mostly concentrated in and around the village settlements and main towns due to their limited livestock holdings. Consequently, the very poor rely heavily on self-employment activities, casual labor and social support. These activities accounted for 48% of annual income in the reference year, compared to 44% from livestock-based earnings. Their livestock holdings typically include 0-5 camels; 0-6 cattle and 10-20 goat/sheep.

The other wealth groups have much larger livestock holdings. The main livestock owned are camels, goats and sheep as cattle herds have not yet recovered from the 2011 drought. In the reference year (April 2015 –March 2016) a typical poor wealth group owned 15-23 camels and 30-40 goats/sheep while middle and better-off households have larger holdings consisting of 40-55 camels and 60-75 goats/sheep; and, 70-90 camels and 90-110 goats/sheep respectively.

Social support networks are strong in the pastoral economy. The most common form of social support is the livestock loan to the poor for milking (*Irmaansi*). These loans are made on the basis of friendship, extended family ties and/or neighborly relations. Households in need may ask for support from neighbors even during relatively good times. Clan tax is very prevalent in this livelihood and even poor households must pay according to their assets and/or income level. Another form of social support is *zakat* – gifts of live animals (usually goats and sheep) given during the first month of the Islamic calendar (January). These gifts are not a guarantee, however, and depend on better off households having surplus animals to offer. Thus, in years following a drought, when conception rates have been poor, gifts are reduced and sometimes eliminated. Traditionally, *zakat* payments were at the personal discretion of the giver to decide to whom it was given. However, insurgents ordered pastoralists to pay through their administration. This caused many pastoralists to move to government zones. *Zakat* is an obligatory gift given to poor households but in some cases even the poor pay *zakat* to poorer household. For instance, if the camel holding is 5-25 head, goat(s) are given as *zakat*. Due to increased *zakat* seekers from both rural and urban areas, poorer households mostly share animals given as *zakat* and divide cash among them. Other kinds of social support are food *zakat* which is a special form of obligatory *zakat* (based on household size) and which is given at the end of every Ramadan month to the neediest households in the community. Remittances are generally not common in this livelihood zone.

Sources of food and income, and expenditure patterns

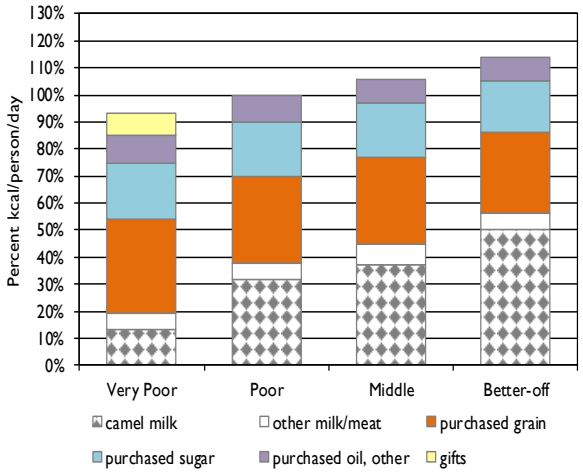
The total sum of food, income and expenditures make up people's livelihood strategies. Livelihood strategies are composed of activities that generate the means for households to survive. The more choice and flexibility that people have in their livelihood strategies, the greater their ability to withstand, or adapt to, shocks.

The two main sources of food for most wealth groups in this livelihood are own-livestock products (milk and meat) and market purchases. During the reference year, market purchases provided the most energy needs for the majority of household in this livelihood zone – between 60% to 64% of annual kilocalorie needs (see Figure 4 below). This heavy reliance on food purchases makes them vulnerable to food price hikes and other market shifts. Milk and meat from households' own herds provides an important source of protein and also important source of food energy, ranging from 40-60% of annual food needs for poor, middle and better off households (but significantly less for the very poor).

The very poor wealth group are at greatest risk of food insecurity due to the severe asset loss experienced after successive droughts, particularly the devastating 2011 drought. Market purchases, therefore, provide the largest contribution to their annual food energy requirements (70 %), followed by milk/meat (8%) and food gifts from the community (7%). In total, this

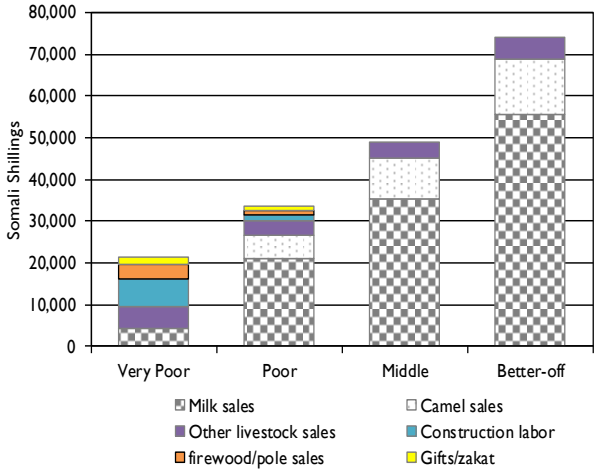
adds up to 93% of the minimum food energy required per person per year which reflects their level of poverty and chronic food shortages.

Figure 4 Food sources by wealth group, Southern Inland Pastoral Zone



Source: The STREAM Consortium Study_BSS SIP, 2016

Figure 5 Cash income sources by wealth group, Southern Inland Pastoral Zone



Source: The STREAM Consortium Study_BSS_SIP, 2016

For the poor, own milk and meat along with food purchase are their two main sources of food. On average, poor households had access to 4 milking camels and 10 goats during the reference year. Milk consumption peaks and wanes seasonally and is typically highest during the rainy season. In the reference year, milk provided 27% of the poor's annual food energy in the wet seasons and 12% in the dry seasons, yielding a total of 39% of annual kilocalories from own-milk consumption. A little additional food energy came from own meat consumption. A diet of milk, small amounts of meat, grain purchased from the market, and oil and sugar is standard in this livelihood zone. Out of a total of 60% annual kilocalories from food purchase, 32% came from the purchase of staple grains (maize and rice) while 28% came from non-staple food items (namely beans, sugar and oil).

Middle and better off households also had two main sources of food: own milk/meat and food purchase. The difference compared to the poor is the number of milking animals. Middle and better off households owned 12 and 20 lactating camels, and 16 and 20 milking goats throughout the year respectively. Excluding milk sold for cash income, camel milk contributed 37-50% of annual calorie requirements for these households; and goat milk provided an additional 3-5% of annual food energy. Meat from 6- 8 goats and 1 small camel – animals who either died of natural causes during the year or were slaughtered for festivals or celebrations – contributed a few additional calories.

Food purchased from the market covered 62% of annual kilocalories for middle and 57% for the better off wealth groups in the reference year. Maize and rice are the staple grains in much of the zone and these two grains provided 32% and 28% of annual food energy to middle and better off households respectively. The amount of grain purchased is partly a function of how much milk is available. In bad years, households buy more grain to make up for declines in milk production. Moreover, oil is typically purchased more heavily during the dry season to offset milk shortages at these times. However, households buy and consume sugar in high quantity regularly throughout the year. The total amount of energy received from non-staple foods (sugar, oil and beans) was 30% for middle and 29% for better-off households during the reference year.

Livestock are the primary source of cash income in this zone. In particular, camels' milk provides the bulk of income for most wealth groups. Livestock sales of camels, goats and sheep are the second main source of income.

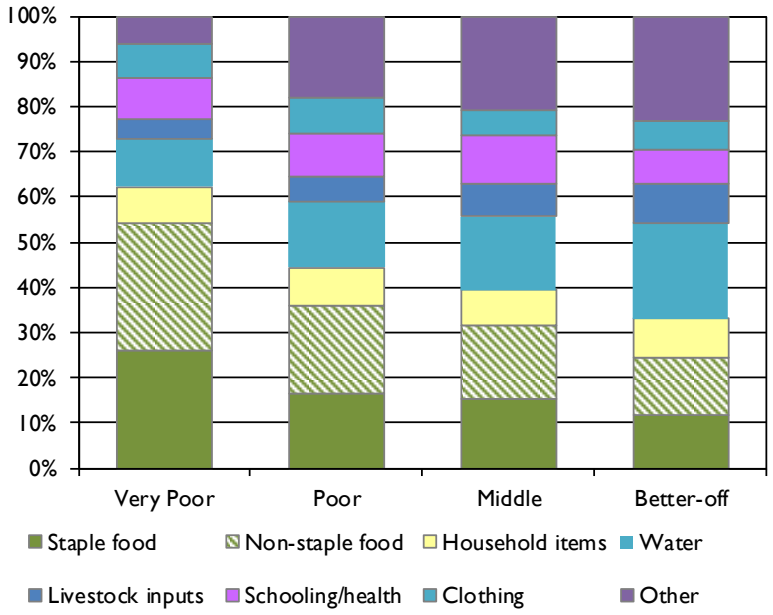
The annual household income of very poor and poor wealth groups amounted to on average SOS 22,000,000 and SOS 33,500,000 respectively in the reference year. This income came chiefly from livestock and livestock product sales. For the poor, income from camel milk sales (62% of annual income) was much more important than livestock sales (27%). Goats

(male bucks) and sheep (male rams) are nonetheless an important income source for poor households, who sell around 4 goats and 4 sheep per year. Goat and sheep sales combined comprised around 20-25% of the total cash income of poor households. By contrast, for the very poor, cash earned from livestock sales and milk sales was each roughly 23% of their annual income. Thus, the very poor in particular had to supplement their livestock-based income with cash earned from casual labor, self-employment (mainly sales of firewood, charcoal and poles), and gifts. Of these, cash earned from casual labor was the most important (almost 30% of annual income) followed by sales of bush products and then gifts which are given to the very poor from other wealth groups through kinship support.

In this zone, middle and better off households depend entirely on cash generated from their own herds. In 2015-2016, their yearly income amounted to SOS 49,060,000 and SOS 74,213,000 respectively. Overall, better off household cash income in the reference year was more than three times higher than the annual income of the very poor and two fold the annual income of the poor. For the middle and better off households, milk sales contributed the bulk of their annual cash earnings, yielding 72-75% of the reference year total income. Camels are important not just as providers of milk which is both consumed and sold but also because they are sold directly for cash income. Better off households sold around 3-4 camels of 2-3 years of age (*qurbac*) which brought in SOS 13,300,000 from camel sales alone, with sales of 6-7 goats and 2 sheep bringing in additional cash. By comparison, middle households sold 2-3 camels, 4 goats and 2 sheep during the reference year. Cash earned from these livestock sales accounted to around 28% and 25% of the annual income of middle and better off households respectively. Cattle are occasionally sold but only by the very poor when an urgent cash need arises.

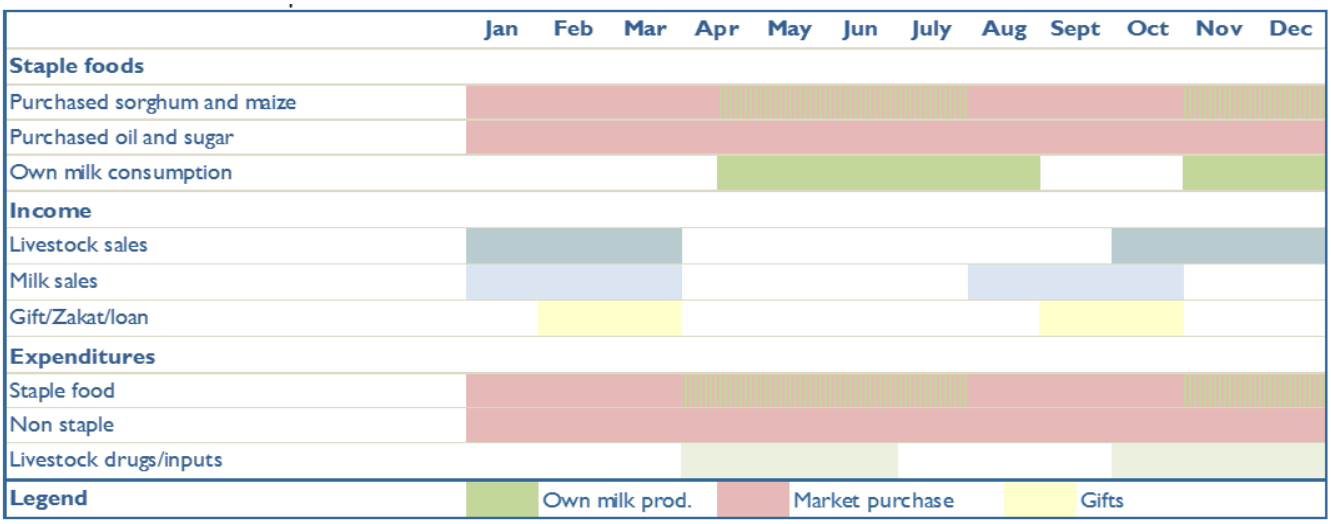
Out of their total annual expenditures, the very poor spent the highest proportion on food (both staple and non-staple). Proportional expenditure on food decreased across the wealth groups. For instance, food spending comprised 54% of annual expenditures of the very poor; 37% for the poor; 31% for the middle; and 25% for the better off. This pattern inversely reflects the contribution of own-milk to the diet with better off households accessing the most own-milk and the very poor accessing the least. Water for human and livestock consumption, and payment for veterinary services were the second largest expenditure for most wealth groups. The better off proportionately spent the most on water and livestock inputs (30% of annual expenditures) followed by middle (25% of annual expenditures). This pattern of spending reflects their larger herds and bigger household size. The third largest expenditure category was social services. Apart from very poor, all wealth groups spent roughly the same amount per capita on Quranic school in the reference year as formal education is not available in most pastoral areas. There are some exceptions as a very small number of middle and better households sent 1-2 children to relatives in Kenya or in the refugee camps where formal schooling is available. Clothing and non-essential items (shown in the 'other' category in Figure 6 above) are the two additional categories of expenditure. The other category includes spending on taxes, gifts, festivals, tobacco, *qat* and other miscellaneous items. This represents the amount of cash that could potentially be reduced in a bad year, highlighting the greater surplus that better off households can draw on.

Figure 6 Allocation of expenditures by wealth group, Southern Inland Pastoral



Source: The STREAM Consortium Study_BSS_SIP 2016

Figure 7 Consumption and income calendar for the Southern Inland Pastoral Livelihood Zone



Source: FSNAU

Calendar of major sources of food and income for poor households

In this livelihood zone, people survive on a combination of purchased food and milk from their own herds. Staple food is purchased throughout the year but there are two periods of peak purchases: January to April and August to October (which is when milk is less available for consumption as it is the dry season). From April through August and November until January, milk supplies are high, allowing households to cut back somewhat on their staple grain purchases.

Cash income from livestock sales peaks from October through March. Milk sales are highest during the two dry seasons. At these times households keep their livestock closer to peri-urban markets, providing access to the clients who purchase their milk. In November and again in April, milk sales decrease because people migrate to wet season grazing areas away from these peri-urban settlements. Households use the cash from livestock and milk sales to help fund their livestock drug and input purchases, which usually occur during the rainy seasons.

Hazards, Response and Monitoring Variables

The main hazards experienced in this livelihood zone are drought, insecurity, market disruption, human/livestock diseases and environmental degradation.

Drought is the most frequent hazard in this livelihood zone. A drought is defined as the failure of 1-2 rainy seasons which severely reduces livestock productivity and hence milk consumption, cash income and access to purchased grain. The consequence of a severe drought event is that hundreds of poor households usually lose their livelihood through the loss of their herds. These households fall into destitution and are forced to settle in the periphery of main towns, joining other poor peri-urban dwellers.

Civil insecurity and market closures have been major hazards in southern and central parts of Somalia. Sporadic fighting between the Federal Government of Somalia forces supported by the African Union Mission in Somalia (AMISOM) forces on the one hand, and anti-government insurgents on the other hand has at times restricted the flow of food and other basic items, which in turn has increased food prices and the cost of living. For instance, routes between source markets in Kismayo and Mogadishu have often been cut off in southern Somalia and this has greatly affected pastoralists in surrounding zones. In sum, disrupted trade flows, restricted movement of nomadic pastoralists to pasture and water points, and the loss of assets have seriously undermined local livelihoods. Displacement to neighboring regions within Somalia or to Kenya due to civil insecurity has also been common.

Livestock disease is another major problem. Tick-borne diseases and Contagious Caprine Pleura Pneumonia (CCPP) cause significant losses in income since they undermine livestock body conditions in the dry seasons and reduce viable livestock sales. Lack of grazing combined with the long trekking distance to water points and poor forage quality, predispose livestock to diseases such as internal parasites (*gooriyan*), diarrhea (*shuban*), lumpy skin disease, and *diif* (a respiratory disease affecting shoats).

Environmental degradation caused by an ever-widening search for firewood and materials to make charcoal is another critical concern. Deforestation and overgrazing leads to soil erosion and more rapid rates of evapotranspiration, which further dries out an already-dry vegetative base.

The main coping mechanisms employed in this livelihood zone include:

- ✓ Increase livestock sales, starting with small ruminants and young camels (*Qurbac*)
- ✓ Increase milk sales and reduce milk consumption
- ✓ Seek casual labor
- ✓ Increase collection and sale of bush products
- ✓ Increase in-kind loans
- ✓ Rely on community support and support from relatives
- ✓ Migrate to areas less affected by the shock and which offer security and access to rangeland resources
- ✓ Decrease non-food purchases

The type of coping mechanism employed by a household depends on their level of assets and their social connections. In general, there is a certain pattern of coping by the very poor and poor which differs from the coping patterns of the middle and better off households. These differences are summarized in Table 3 below.

Table 3 Coping strategies in response to shocks in Southern Inland Pastoral Livelihood Zone

Very poor/poor	*Middle/better off*
Increased reliance on social support/gifts as well as in-kind loans	Increased livestock sales
Increased collection of firewood, construction materials and charcoal for sale	Increased milk sales
Increased work in urban areas (portering and domestic labor)	Increased migration of livestock
Reduce non-food purchases	Reduce non-food purchases

Source: The STREAM Consortium (ADESO, ACTED) Study_BSummary Southern Inland Pasotral 2016.

The key parameters listed in Table 4 below are food and income sources that make a substantial contribution to the household economy in the *Southern Inland Livelihood Zone*. These should be monitored to indicate potential losses or gains to local household economies, either through on-going monitoring systems or through periodic assessments.

Table 4: Key Parameters to monitor in the Southern Inland Pastoral Livelihood Zone

Item	Key Parameter – Quantity	Key Parameter – Price
Animal production	Camels' milk – yields (seasons 1 & 2) Camels – herd size Cattle – herd size Goats – herd size Sheep – herd size	Camels' milk – price (season 1 & 2) Camels – local price Cattle – local price Goats – local price Sheep – local price
Other	Firewood – amount sold Construction work – availability Gifts/zakat – frequency received	Firewood – prices Construction work – daily wage rate Gifts/zakat – amount received
Expenditure		Maize – consumer prices Rice – consumer prices Sugar – consumer prices Oil – consumer prices

Source: The STREAM Consortium Study_BSummary_Southern Inland Pastoral 2016

Estimated population for the Southern Inland Pastoral Livelihood Zone (SO11)

Zone	Region	District	Livelihood	Population 2014 UNFPA
Central	Galgaduud	Dhuusamarreeb	Southern Inland Pastoral	4,127
Central	Galgaduud	Ceel Buur	Southern Inland Pastoral	2,185
South	Hiraan	Belet Weyne	Southern Inland Pastoral	18,973
South	Hiraan	Bulo Burto	Southern Inland Pastoral	32,437
South	Hiraan	Jalalaqsi	Southern Inland Pastoral	58,419
South	Shabelle Dhexe (Middle)	Jowhar	Southern Inland Pastoral	2,689
South	Shabelle Dhexe (Middle)	Adan Yabaal	Southern Inland Pastoral	612
South	Shabelle Dhexe (Middle)	Cadale	Southern Inland Pastoral	1,295
South	Shabelle Hoose (Lower)	Kurtunwaarey	Southern Inland Pastoral	26,306
South	Shabelle Hoose (Lower)	Qoryooley	Southern Inland Pastoral	25,537
South	Shabelle Hoose (Lower)	Sablaale	Southern Inland Pastoral	802
South	Shabelle Hoose (Lower)	Wanla Weyn	Southern Inland Pastoral	11,324
South	Bay	Buur Hakaba	Southern Inland Pastoral	16,024
South	Bakool	Ceel Barde	Southern Inland Pastoral	51,503
South	Bakool	Tayeeglow	Southern Inland Pastoral	1,943
South	Bakool	Waajid	Southern Inland Pastoral	4,855
South	Gedo	Garbahaarey	Southern Inland Pastoral	29,718
South	Gedo	Baardheere	Southern Inland Pastoral	49,671
South	Gedo	Belet Xaawo	Southern Inland Pastoral	38,184
South	Gedo	Ceel Waaq	Southern Inland Pastoral	36,561
South	Gedo	Doolow	Southern Inland Pastoral	19,089
South	Gedo	Luuq	Southern Inland Pastoral	22,925
South	Juba Dhexe (Middle)	Bu'aale	Southern Inland Pastoral	4,182
South	Juba Dhexe (Middle)	Jilib	Southern Inland Pastoral	15,365
South	Juba Dhexe (Middle)	Saakow/Salagle	Southern Inland Pastoral	11,390
South	Juba Hoose (Lower)	Kismaayo	Southern Inland Pastoral	14,517
South	Juba Hoose (Lower)	Afmadow/Xagar	Southern Inland Pastoral	38,059
South	Juba Hoose (Lower)	Badhaadhe	Southern Inland Pastoral	7,646
SO11 Population 2014 total				**546,340**

Source: Population figure base: UNFPA; proprtions: FSNAU

HOUSEHOLD ECONOMY ANALYSIS (HEA)

SO18: JUBA CATTLE PASTORAL LIVELIHOOD ZONE LOWER JUBA REGION

Submitted under the Project:
Household Economy Analysis (HEA) and Baseline assessment for the building resilience through Social Safety Nets in South-Central Somalia Project

For

SOMALIA RESILIENCE ACTION CONSORTIUM (STREAM)
(African Development Solutions (Adeso), ACTED and SADO)

By: KasmoDev Consulting Ltd

Technical Support/Contributions:

The Food Economy Group

Technical Support:, Assessment tools, analysis, BSS, LIAS, Dashboard Development & final reporting

Food Security & Nutrition Analysis Unit/FAO Somalia
Technical support: Field Assessment, analysis;
reporting

Famine Early Systems Network – Somalia;
Technical support: Field assessment, analysis, reporting *(Kismayo Urban)*

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Somalia Livelihood Baseline Profiles

Juba Cattle Pastoral Livelihood Zone (SO18)

Introduction

Livelihood Baseline Profile Overview

The HEA livelihood baseline profiles provide an analysis of livelihoods and food security on a geographical basis. For newcomers to the country, the profiles offer a useful overview of food security conditions for a particular reference year (usually a recent year of fairly good rains). The profiles describe household economic activities at different periods in the year, and provide insights into annual livelihood strategies as well as seasonal patterns. The profiles are a useful resource for development planners because an important first step in creating poverty reduction and disaster risk reduction programs is to understand who is vulnerable, to which hazards, and why. Likewise, it is important to understand what it means to be poor in a particular agro-ecological context, and how poor households in different areas normally survive. The baseline profiles also describe how households adapt to economic stress, especially failed crop or livestock production, and how coping strategies differ by where one lives and what assets one has.

This baseline assessment was commissioned by ADESO and ACTED on behalf of the Somalia Social Safety Nets Program consortium, to support the start-up of a safety net interventions in southern Somalia. KasmoDev was hired to lead the baseline work. The work was carried out in partnership with the FSNAU and FEWS NET in May-June 2016.

Methodolgy

The FSAU, FEWS NET and their partners use Household Economy Analysis (HEA) to identify how households make ends meet both under normal and stress conditions. HEA allows planners to analyze the effects of external shocks, such as drought or livestock bans, on household livelihoods in order to predict whether household resources will be sufficient to meet basic needs (defined in terms of survival and livelihood protection thresholds). The analysis is disaggregated by wealth group and by livelihood zone, and can be conducted annually or updated seasonally. As a result of this process, a dynamic picture is created that adds significant value to other food security indicators. The advantages of HEA are two-fold: (i) it focuses on food and income access rather than just food availability, and (ii) it underscores how risks and shocks have different potential impacts, depending on the socio-economic status of households and their ability to expand or extend existing food and income sources to meet food shortfalls. The HEA analytical framework has two main components:

Baseline analysis – the HEA baseline both quantifies and describes qualitatively the total food and cash economy of households, covering all food sources, cash income sources, and expenditure patterns across all seasons in a full one-year period. The analysis shows how people get by year to year as well as their connections to the people and the places that enable them to do so.

Outcome analysis – the HEA outcome analysis is an investigation of how baseline access to food and income might change as a result of a specific hazard such as drought or as a result of a positive change, such as a beneficial price policy.

The baseline analysis relates to a specific **reference year** (In this case April 2015 to March 2016). For pastoral livelihood zones, the reference year usually starts with the main rainy season, when milk production is at its peak. Generally, but not always, the reference year will be a year that was neither especially good nor especially bad, but somewhere in the middle. The most important point about the reference year is not that it should be an average year, but that it should provide a good starting point for understanding how livelihoods will vary from one year to the next in relation to changes in key production factors.

JUBA CATTLE PASTORAL LIVELIHOOD ZONE (SO18)

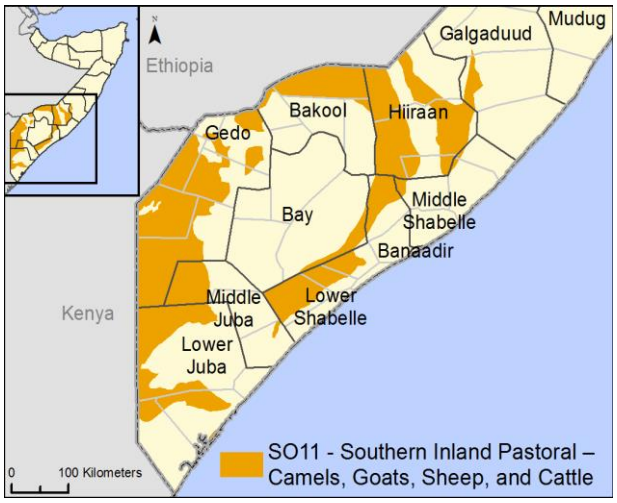
General livelihood zone description

The Juba Cattle Pastoral Livelihood Zone (SO18) is located in southern Somalia. It encompasses parts of Middle Juba and Lower Juba Regions, including parts of Jiib, Bu'aale, Kismaayo, Afmadow, and Badhaadhe districts. The 2014 population estimate by UNFPA for this zone is 100,211.

Table 1 Summary of data supporting the Juba Cattle Pastoral livelihood profile

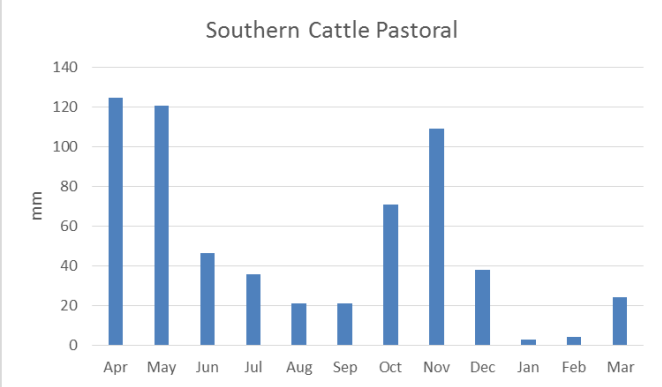
Field data collection	May 2016
Consumption year	April – March
Reference year	2015-2016
Initial estimated validity	Until 2021 or 2026

Source: The STREAM Consortium HEA Study 2016



This zone consists of flat savannah and includes the area that extends southwest of the Juba River to Kenya which is all low pastureland. The clays are mostly vertisols which have a higher water-holding capacity than the generally sandy soils found elsewhere. The heavy texture and unstable behavior of these vertisols prevents the growth of forests. The weather is hot throughout the year, with mean maximum temperatures of 30–40° C (86–104° F). In a normal year, this livelihood zone receives some of the highest rainfall levels in Somalia. Based on the long term average, annual precipitation is around 618mm[1]. This can be compared to less than 500mm of rainfall received annually throughout the rest of Somalia. This rainfall is concentrated in two distinct seasons, as shown in the rainfall graph (Figure 1 below). The combination of relatively high rainfall and extensive grasslands makes this a good area for raising cattle and goats, and because of the proximity to the Kenyan market, which has a heavy bias towards cattle, this creates a further incentive to concentrate on cattle.

Figure 1 Estimated average monthly rainfall in mm in the Juba Cattle Pastoral Livelihood Zone



Source: USGS CHIRPS Data, FEWS NET GeoCLIM

In this zone, pans and seasonal pools are major sources of water in the wet seasons while in the dry seasons, shallow wells and boreholes are used. Grazing areas are communal and for the most part are shared peacefully. In drought years, however, conflict often erupts as the competition for scarce resources increases.

The number of livestock owned is the main determinant of wealth. Large livestock herds take many people to manage; better off households, with more livestock are also typically larger, with more productive members. These households often hire additional labor to help with herding. Poorer households tend to have fewer productive members, and in turn smaller herds. All wealth groups derive the majority of their food through a combination of market purchases and the production of milk and milk products. Poor households also rely on gifts and food aid. The sources of income for middle and better off households are entirely from their livestock, through selling live animals and milk. The poor wealth group draws on additional source of cash, most notably casual employment (including water pan digging, herding and construction) and gifts.

[1] Based on USGS CHIRPS data, a combination of satellite-based Rainfall Estimates (RFE) and station data, with data extending more than 30 years (1981-2014). Source, FEWS NET and USGS.

Garissa, across the border in Kenya, is the major livestock market for this zone. Kenyan traders contract local Somali trekkers to bring cattle to Garissa, where they are loaded into trucks bound for Nairobi and Mombassa. Local market towns offer up a source of demand for milk and ghee, which provide significant income for the rural population. The labor market is entirely local, with poorer household members working as herders for better off households.

Drought is the most damaging intermittent hazard in the zone but border closures and food price spikes cause enormous hardship as well. Livestock and human diseases are additional burdens for the local population, causing serious losses in both in economic and human terms.

Local rural settlements have not changed much over the last few decades. Most pastoralists in the livelihood zone live in traditional Somali huts made of natural products (poles and ropes) and covered with either grass, reeds or polythene bags. The condition of roads is chronically poor and local roads are not passable by vehicle (this hinders trade and transport in the zone). A few seasonal roads are functional but only during the dry seasons which is when commodity supplies are high and prices are relatively low. Health and education services and infrastructure are also very poor in this livelihood zone. Although without access to formal schools, children nonetheless attend mobile Quranic schools. Notably, in the reference year, each household in this zone paid a young, 2-3 year-old heifer when their child reached a Quranic verse known as ***Walleylli***. Formal credit services are likewise limited. However, most wealth groups can get in-kind loans from traders and shopkeepers in their respective areas. However, one service that has improved in recent years is telecommunication. Mobile phones in particular play a vital role for information sharing, improving the surveillance of rainfall, pasture, sudden eruptions of clan conflicts, and market prices. Thus mobile phone use assists greatly in timely migration and livestock marketing. In general, government services in support of rural livelihoods are low although the local administration has recently been re-established in the main towns. There are several humanitarian agencies who work in the area, amongst which is ADESO who provide unconditional cash transfers and cash-for-work to poor households in parts of the livelihood zone. They also help with free food distribution to certain target areas. Other actors include SOLIDARITY and WASDA who provide WASH and veterinary services respectively

Markets

The livelihoods of the people in the *Juba Cattle Pastoral Livelihood Zone* depend entirely on selling two main commodities for cash: livestock and milk/ghee. The road infrastructure in this livelihood zone is not well developed. There are two main roads connecting Kismayo to Garissa in Kenya. The first takes a northern route from the coast via Bilis Qooqaani and then on to Garissa. The second route is more direct, following a southern path from Kismayo to Garissa. Neither road is well-maintained and neither is used by the average pastoralist. Seasonal flooding and a general lack of maintenance due to the war, have led to the deterioration of road conditions. Most people walk to markets using well-worn foot-paths and dirt roads or they hire professional trekkers to take their livestock to market for them. Pack camels and donkeys are used for transporting grains and other commodities from the market.

Livestock market

Livestock are the driver of the local economy, with cattle being an especially important commodity. The main livestock market is across the border in Kenya, and thousands of cattle make their way every year into the Garissa market where they are sold to other areas in Kenya. Cross-border trade between Ethiopia, Somalia and Kenya has taken place for hundreds of years. In the decades before the civil war, most livestock were sold to the Gulf States, collected in Kismayo or Mogadishu and then transported by ship to Saudi Arabia and other Gulf countries. This trade began to decline in the early 1980s, when competition from Australia and other cattle exporters squeezed out the Somalia exports. The market towards the east was further constrained by the livestock ban imposed by the Gulf States in the late 1990s. After the collapse of the central government in 1991, exports via the Kismayo port virtually came to a halt, leading to a large expansion of trade to the west. Traders inside Somalia had already established a link with the Garissa market before the government in Mogadishu collapsed in 1991, and Garissa has since then grown into a key regional market, with cattle sales increasing by around 600% in the eleven-year period from 1989 to 1998[2].

[2] Hussein Mahmoud, *Livestock Trade in the Kenyan, Somali and Ethiopian Borderlands*, Chatham House, September 2010/02

Livestock make it to market along well-established routes which start in remote areas where 'bush traders' buy up animals from pastoral households in local village markets. These animals are then trekked to the Garissa market where they are loaded into trucks and taken to the terminal markets of Nairobi and Mombasa. Large-scale Kenyan traders who – before the civil war - used to wait for animals to be brought to Mandera before buying them now have immediate trading relationships with Somali traders, and purchase livestock directly from pastoralists in the *Juba Cattle Pastoral* zone. Livestock are sold in Garissa throughout the year but volumes slow down during the rainy seasons when pastoralists invest in fattening their livestock in order to get a better price.

Terms of trade in this zone fluctuate throughout the year. Cattle prices fetch the most grain at the beginning of each dry season and fetch the least grain in the middle of the rainy seasons. In January, for instance, when the Jilaall season begins, a head of cattle brings in just under 750 kg of maize on average. In June, on the other hand – the last month of the Gu rainy season – the same head of cattle typically garners only around 400 kg of maize[3].

Aside from seasonal changes in the terms of trade, there are inter-annual variations in livestock prices as well. The value of livestock depends on a range of factors that affect the body condition of livestock, including pasture and water conditions within the livelihood zone; access to traditional grazing and watering points; and the incidence of livestock disease. But it is not just what happens within the livelihood zone that matters. Political instability and insecurity have led to recent border closures, and regional droughts can also cause serious local harm. For example, livestock prices were negatively affected by the poor Deyr rains in 2010/11 which caused inadequate pasture and critical water shortages along the livestock trekking route to the Garissa market. By the time cattle made it to market they were in such bad condition that the prices they received were far below normal.

Milk market

Milk sales depend on people having ready access to local towns and urban centers where the demand for milk is high. There are no storage facilities in the zone, and milk products can easily spoil in the high temperatures, so the market for milk is entirely local, with transactions occurring in towns like Kismayo, Badhadhe, Bu'aale and Afmadow. Milk sales are especially high during the Gu season when new pastures bring the highest milk yields of the year.

Cereal market

The cereals purchased in this livelihood zone are sourced from the Juba riverine areas, where maize is grown, and the Sakow agropastoral areas, where sorghum is grown. Some grain is also imported from Kenya. District towns such as Bu'aale, Jilib, Jamaame, Kismayo, Badhadhe and Afmadow all have their own market centers and open markets also exist at the village level. Changes in global food prices, taxation on commercial imports, and failed local cereal production can all influence the price of local staple grains. Price spikes, like the one that occurred at the end of 2010, when prices rose to 550% of the five-year average, have devastating consequences for local livelihoods. People here rely on purchased grain to cover the vast majority of their food needs, and when prices go up, access to food can be severely constrained.

Labor market

The labor market for this zone is entirely based on digging water catchments and livestock herding, and transactions occur between better off and poorer households. Better off households have large herds that require a good deal of labor to manage. Boys and young men from poorer households are hired to help with watering and herding, especially during periods of long migration in the dry season. Young productive labor is a valuable local resource, and competition for it is high. Recruitment into local militias is a serious threat for pastoral systems that rely on the labor power of young men, and this threat has grown in recent years with the emergence of *Al-Shabaab*.

[3] FSNAU, FEWS NET, Deyr 2010/11 Presentation, Juba Regions, Slide 24

Conflict

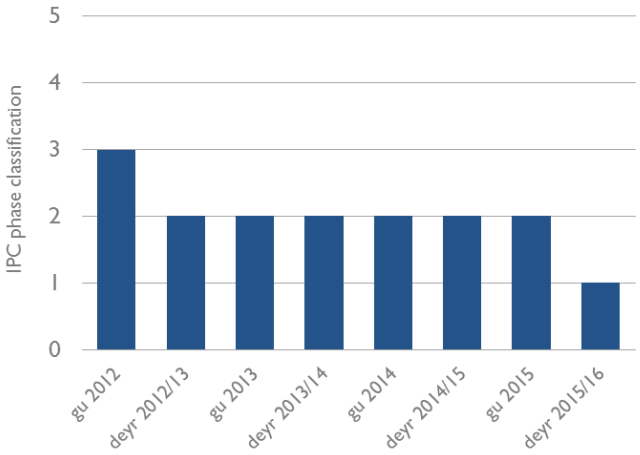
The collapse of the central government in Somalia in 1991 began a period of conflict, instability, food crisis and famine that continues in parts of Somalia today. In the months following the state collapse, the country was torn apart by clan-based warfare and factions competing for what remained of the state's assets and power. In 1991 and 1992, four months of fighting in Mogadishu alone killed an estimated 25,000 people, and caused 1.5 million people to flee the country, furthermore displacing within the country an additional 2 million people. At the same time, a drought that year added to the effects of the conflict and by the end of 1992, an estimated 250,000 people had died. The worst-affected areas were in the south where waves of invasions by armed militias occurred.[4]

From 2006 to 2012, the country became caught up in the 'global war on terror'. Islamist military groups swept into the vacuum of leadership which led to an invasion by neighboring Ethiopia. The subsequent strengthening of the Union of Islamic Courts (ICU) and the emergence of *Al-Shabaab* have been major forces in Somalia over the past decade. Southern Somalia has been especially affected by the violence and disruption related to the conflict between *Al Shabaab* and the Transitional Federal Government (TFG), which has been supported at different times by a number of external countries (Kenya and Ethiopia being the most prominent). Echoing the devastation of 1991 and 1992, the three years from 2006 to 2008 were catastrophic in Somalia. Military occupation, a violent insurgency, rising jihadism and massive population displacement reversed the minimal political and economic progress achieved in the late 1990s. During 2007 alone, fighting between the TFG and the insurgency resulted in the displacement of up to 700,000 people from Mogadishu. In 2011, the plight of the Somali people was exacerbated by the worst drought in six decades, which left millions of people on the verge of starvation and caused tens of thousands to flee to Kenya and Ethiopia in search of food.

The formation of a post-transition Federal Government in 2012 brought back some stability to the country. However, fighting over territory in southern Somalia continues to this day as the National Armed Forces (with support from the African Union Mission in Somalia/AMISOM) try to regain strategic cities and towns from *Al-Shabaab*. Frequent market disruptions have resulted from continued conflict as commercial supply routes are interrupted. In turn, supply shortages have led to price increases for local producers and consumers.

This livelihood zone has been especially affected by the recent conflict related to *Al-Shabaab*. The main roads are risky for traveling and for transporting goods and sporadic violence creates an environment of continued insecurity. Border closures with Kenya threaten the livestock trade which is so essential to the local economy. And although advances have been made over the last few years in driving out *Al-Shabaab* from its strongholds in southern Somalia, the group is still active in the area, carrying out guerrilla style attacks along the main roads between Kismayo-Afmadow via Dobley and between Kismayo-Badhaade. *Al-Shabaab* militias also levy illegal taxes and *zakat* collections on pastoralists throughout the zone, which causes significant hardship for cash-constrained households. Several regional administrations recently created and loosely allied to the TFG are fighting back against *Al-Shabaab* insurgents in Lower Juba and Middle Juba regions, where this livelihood zone lies.

Figure 2: Recent trend in IPC phase classification, with 1 as best and 5 as worst



Source: FSNAU, FEWS NET 2016

[4] http://www.c-r.org/accord-article/endless-war-brief-history-somali-conflict, Sally Healy and Mark Bradbury

Food access history

The effect of ongoing conflict has been devastating over the years. Inter-annual drought compounds the many negative outcomes of war, which include a collapsed industrial base, the breakdown of infrastructure (especially roads), the loss of state services like schools and health clinics, lawlessness which results in violence towards women, supply shortages, price hikes, population displacement, disrupted trade, and impeded movement to seasonal grazing areas. Fields have been abandoned and livestock diseases left untreated as pastoralists lacked access to veterinary care. All these effects have had devastating consequences for the food and livelihood security of the local people. Over the years this has meant that parts of Somalia, and especially southern Somalia, where so much of the conflict has centered, have witnessed over twenty years of food and livelihood insecurity.

In recent years, however, the food security situation in this zone has been relatively stable, as shown in Figure 2. The 2015/2016 Deyr season saw the lowest level of food insecurity in the past three years, with none of the population facing an emergency. Indeed, since 2013, food insecurity has been minimal (IPC phase classification 1 and 2), pointing to improved conditions in the *Juba Cattle Pastoral Livelihood Zone*.

Table 2 Determinants of wealth in Juba Cattle Pastoral Livelihood Zone

	V.Poor	Poor	Middle	Better-off
Household percentage (%)	12	30	40	18
Household size (#)	6	6	7	10
Typical livestock holding (#)				
Cattle	5 - 7	22 - 30	55 - 65	110 - 124
Goats	5 - 7	10 - 20	25 - 40	40 - 80
Sheep	7 - 9	15 - 30	35 - 50	60 - 100
Donkey	0 -2	0 - 2	1 - 3	2 - 4

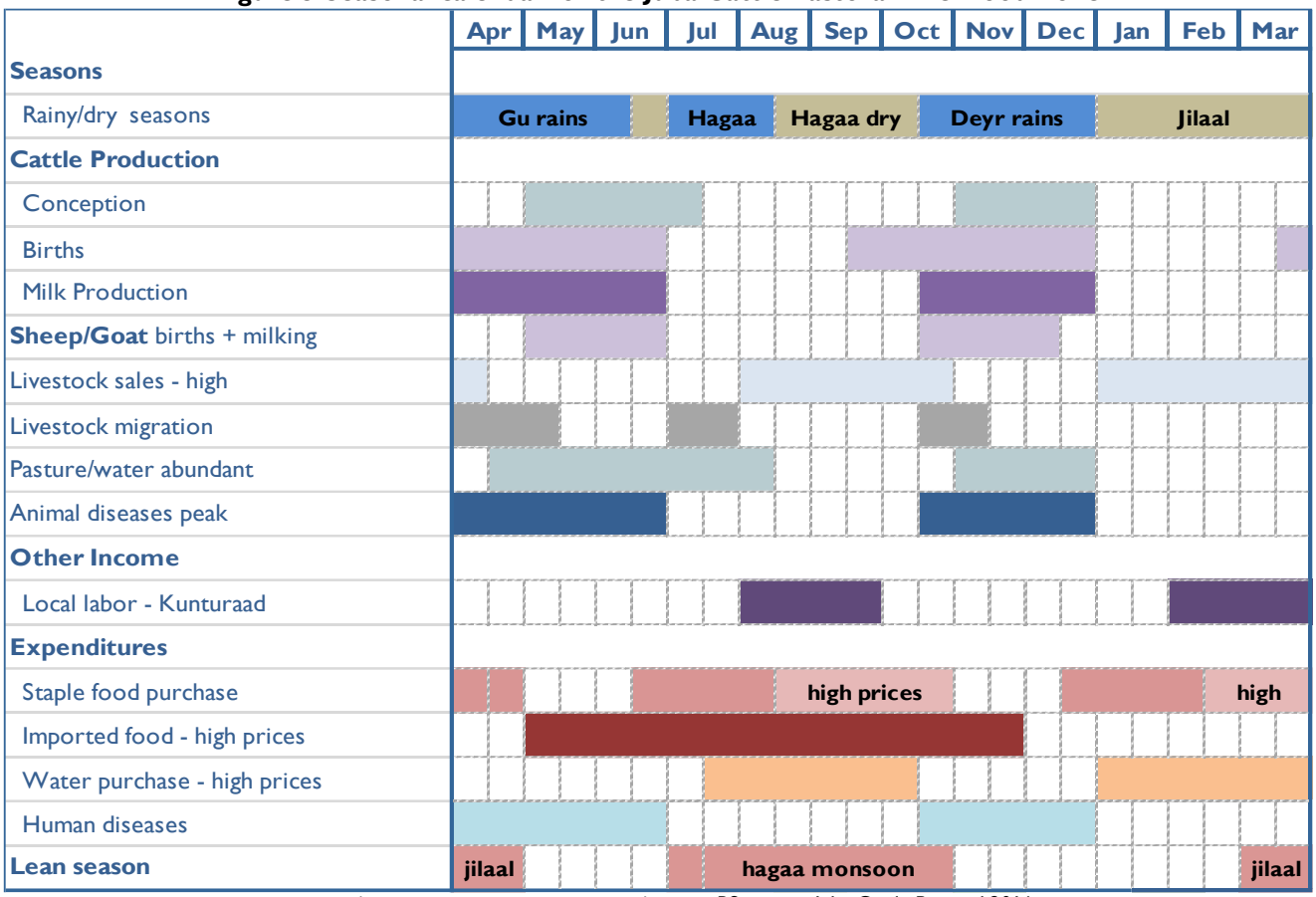
Source: The STREAM Consortium HEA Study 2016_ Juba Cattle Pastoral, 2016
Note: The household percentage and household size figures are the mid-point of a range.

Seasonal calendar

The rains in the *Juba Cattle Pastoral Livelihood Zone* come in two distinct periods: the first season, from April through June, is called the Gu and more precipitation tends to fall during this quarter; the second, lasting from October through December, is called the Deyr. The Deyr has historically been less reliable and less productive, but in recent years surprising amounts of rain have fallen during this second season. Two dry seasons – the Hagaa, from July through September, and the Jilaal, from January through March – interrupt the rains, bringing with them a set of challenges that pastoralists in this area have coped with by migrating seasonally with their livestock and maintaining a highly mobile way of life.

The rainy seasons are a time of relative plenty, and pastoralists depend more heavily on the milk from their cattle in these months. Livestock are usually born at the beginning of the wet seasons, when pasture conditions start to peak, providing sufficient fodder for lactating animals. Milk production reaches a high point in April, May, and June and then again in October, November and December. During these seasons, water is plentiful, and animals do not require much care. Clans assemble and numerous social functions occur: marriages are contracted, and outstanding disputes are settled. On the flip side, this is also a time when malaria tends to peak and during the Deyr season, animal diseases are most prevalent.
The Jilaal season – a long harsh dry period -- is a difficult time of year. Milk yields are low, water is scarce and animals are trekked to permanent water points and pasture areas. This is a time of year when livestock sales are high because many livestock are gathered around water points close to market centers, making it a convenient time to sell. However, because of the high supplies on the market, livestock prices are also low at this time. During this long dry season water is hard to come by and people need to walk long distances to find it. This is also a time when Acute Respiratory Infection (ARI) is highest, and diarrhea in children peaks. People need to buy more staple grain than during the rainy season in order to make up for a steep decline in milk availability. Oil is also more frequently purchased at this time to make up for the loss of ghee.

Figure 3 Seasonal calendar for the Juba Cattle Pastoral Livelihood Zone



Source: The STREAM Consortium HEA Study 2016_BSummary Juba Cattle Pastoral 2016.

Wealth breakdown

Livestock numbers are the most important determinant of wealth in this pastoral economy. The number of cattle owned is a critical indicator because cattle provide the most milk, which provides both calories and cash from milk/ghee sales. Moreover, the sale of cattle (on the hoof) provides the most income.

Cattle and sheep/goats are the most commonly owned livestock. As one moves up the wealth spectrum, there is an increase in the number of livestock owned as well in the household size. Better off men, for instance, are more likely to have multiple wives. Very poor and poor households comprise around 12% and 30% respectively of total households, and these households have the smallest household sizes (typically around 6 people per unit). The middle and better off constitute 40% and 18% of the total households with a household size of 7 and 10 people per unit respectively. Multiple wives are common. Given that better off households have bigger family sizes and multiple wives, the percentage of the population falling into the better off wealth group is actually higher than the household wealth breakdown suggests.

Middle and better off households own more livestock in part because they have more productive household members within the homestead. Maintaining large herds requires a lot of labor. This labor is further split during the dry season, when men and older children migrate with the larger livestock to permanent water sources and pasture. Women tend to stay behind with the goats, lactating animals and smaller children. Poorer household members are often hired by better off households to help with herding during migration times.

Sources of food and income and expenditure patterns

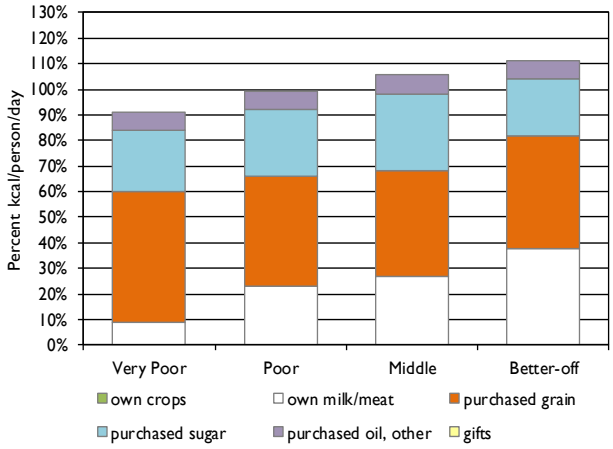
In the *Juba Cattle Pastoral Livelihood Zone*, households (almost all wealths groups) are highly dependent on markets, where they purchase cereals (maize, rice, and wheat flour), oil and sugar – the basics of the pastoral diet. In years of adequate rainfall – the current year and previous season were good for instance -- when pastures are plentiful and calving and kidding are medium to high, milk contributes a significant percentage of annual calories for most households, specifically cattle milk, and to a lesser extent, goat milk. In addition, families eat the meat of slaughtered animals, especially during the wet seasons when milk availability peaks. Very poor and poor households have less access to milk than the other two wealth groups, as their herd sizes are smaller and include less lactating cattle.

During the reference year (April 2015-March 2016), households in the very poor wealths groups received about 9% of their annual food needs from own-milk consumption. The poor wealth group received nearly 23% of their annual food requirements from own-milk, while the middle and better-off obtained 27% and 38% respectively. This came primarily from their 2, 5, 6 and 9 milking cows respectively although milking goats (on average around 2, 4, 5 and 9 milking goats for the very poor, poor, middle and better off respectively) also contributed to own-milk consumption. With an approximate yield of 2 liters per cow over six months in the wet seasons (Gu and Deyr) and 1 liter per cow over 2 months in each dry season (Hagaa and Jilaal) the quantity per household in one year was quite substantial. For instance, very poor households obtained nearly 660 liters of milk annually; poor households accessed 2,400 liters; middle households had 2,880 liters; and the better off obtained 4,320 liters of milk in the year. Out of their total milk production, the very poor sold 165 liters (25%) and the poor sold 897 liters (37%). Interestingly, middle households sold lesser amounts of milk (about 469 liters which was only 16% of their total production). The better off did not sell any milk but this did not mean that they consumed 100% of their milk yield because better off households gave gifts of milk to the poor. They also gave free milk to herders and visitors.

Thus, as a general statement, milk and meat account for 10 – 40% of the annual calorie needs of households in this livelihood zone in a year like the reference year. The proportional importance of milk and meat as a food source rises by wealth group. The proportional share of milk and meat typically decreases in drought years, when pastures are poor and milk production declines. Reliance on cattle makes this economy especially vulnerable to drought because cattle are less dought resistant than camels who can better withstand water shortages.

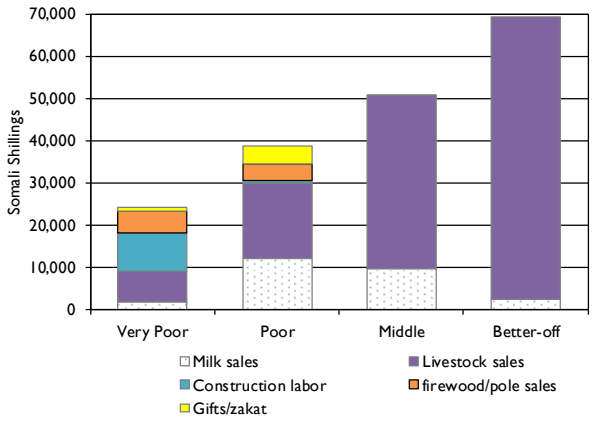
Although milk is important culturally and nutritionally, providing a crucial source of proteins and fats, the market is where the majority of all wealth groups' calories come from. Staple grains (mostly maize and rice) were purchased throughout the year but especially during the two dry seasons, when milk production waned. For very poor households, the purchase of staple grains accounted for over 82% of their required annual calories (of which 51% was on staple food, including maize, rice and wheat). Purchased sugar and oil (the non-staple food) also contributed substantially to their annual calorie intake (about 31% annual calories). In all parts of southern Somalia, sugar intake is high, averaging around 1 kg per day for better off households and around 0.75 kg per day for poorer households. The poor obtained 76% of their annual food reguirement from market purchase (staple food was 43% and non staple food was 33%); middle households acquired 79% through purchase (41% on staple food and 38% on non-staple food); while the better off wealth group obtained 73% of their annual food energy from the purchase of staple grains (44%) and non staple food (29%).

Figure 4 Food sources, Juba Cattle Pastoral Zone



Source: The STREAM Consortium HEA Study _ JubaCattlePast, 2016.

Figure 5 Cash income sources Juba Cattle Pastoral Zone



Source: The STREAM Consortium HEA Study _ JubaCattlePast, 2016.

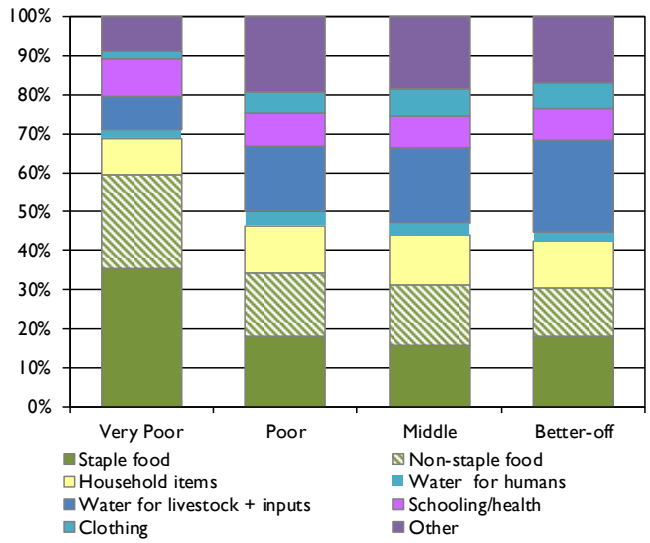
Food is not the only thing people in this zone require to live; they also need cash in order to purchase essential goods and services. As shown in Figure 5 above, livestock are the main driver of the local economy for poor, middle and better off households. For these three wealth groups, livestock and livestock product sales cover the majority of cash needs. Livestock-based income (mainly livestock sales) increases in significance towards the upper end of the wealth spectrum, reflecting their larger herd sizes. By contrast, casual labor, gifts and safety net cash transfers, in addition to livestock-based income, are important cash sources for the very poor and poor households whose herd sizes are relatively small.

Milk and ghee are key local resources that are sold by most households to obtain cash. Interestingly, unlike the other wealth groups, the better-off did not need to sell fresh milk for income. For instance, in the reference year, the very poor and poor households sold about 25% (165 liters) and 37% (897 liters) of their own milk. On average per household, milk sales brought in about SOS 1,980,000 (8% of annual income) for the very poor and SOS 12,020,000 (31% of annual income) for the poor. By contrast, middle households sold only 16% of their annual milk production (469 liters) which netted them on average SOS 9,757,000 (19% of annual income). Better off households did not need to sell milk although they did sell some ghee, earning on average SOS 2,400,000 per household per year. This amounted to only 3% of their annual income. Thus, very poor households earned the least income from milk/ghee sales due to few livestock whereas better-off households earned little milk income as they did not need to sell but could consume their mik instead (or give it as gift/payment).

The chief income source of almost all wealths groups in this zone -- except the very poor who rely more on labour income -- is livestock sales (namely cattle and sheep/goat sales). During the baseline refrence year, the very poor earned only SOS 5,988,000 from livestock sales. Given relatively low annual income overall, livestock sales actually represented about one-third (29%) of their total annual income. However, this compared with the SOS 17,850,000 earned by the poor (46% of their annual income). Middle and better off wealth groups earned significantly more from livestock sales, securing 81% (SOS 40,960,000) and 97% (SOS 66,900,000) of their annual income respectively from the sale of livestock.

Making up the rest of their annual income, the very poor earned nearly 39% (SOS 9,360,000) from labor (i.e., digging of water catchments) and 21% (SOS 5,040,000) from self employment (i.e., collection and sale of firewood and construction poles). The poor wealth group also secured some 10% (SOS 4,000,000) of their income from self-employment in addition to 11% (SOS 4,132,000) from safety net transfers (mainly cash based interventions). Ironically, the poor wealth group received more cash transfers (humanitarian assistance) than the very poor. This is because most very poor households come from minority groups who do not have clan immunity. Thus, they are overshadowed by the dominant clans. As a result, the very poor are highly dependent on labor-based income soures. Interestingly, poor households by contrast only earned 2% of their total annual income (SOS 700,000) from labor.

Figure 6 Allocation of expenditures for four wealth groups, Juba Cattle Pastoral



Source: The STREAM Consortium HEA Study 2016 _ Juba Cattle Pastoral 2016.

Cash income is used to cover a range of expenses, including food, household items, production inputs, and other items. During the reference year, the proportion of cash spent annually on food (both staple and non staple) for the very poor and poor wealth groups was 60% (very poor) and 34% (poor). Breaking this total down, non staple food items alone constituted about 24% and 16% of the total annual expenditures for the very poor and poor respectively whereas staple food was 36% and 18% of annual expenditures respectively. During the baseline year, the other essential expenditure items for the very poor and poor were general household items (10% for the very poor and 12% for the poor), and water for livestock and domestic use (9% for very poor and 15% for the poor). These patterns show that food is the clear priority expenditure in this zone, in part because it is mainly a livestock and labur-based economy but also because the very poor earn very litte income overall and hence food expenses are proportionally very high. Non staple food expenditures, which in this zone means sugar and oil, are an especially large component of expenditure even for the very poor and poor because of the cultural preference for these food items in the diet.

Proportional to total annual expenditures, food spending by middle and better-off households followed a similar pattern to the poor (see Figure 6 expenditure graph at left). Specifically, for middle households, 31% (16% staple and 15% non staple) of their annual expenses was on food whilst for the better off, the proportion was around 30% (18% on staple and 12% on non staple). However, in terms of absolute spending, middle and better off households spent more cash on food than poor households given their larger household size and higher income. Their higher consumption of sugar alone, which is a high-cost commodity, pushed their food budget to at least twice as much as that for poor households. However, as better off and middle households have more income to spend overall, the relative amount that food takes out of their annual budget is lower.

A major expenditure for the two upper wealth groups was water for livestock (17% and 20% respectively). For all wealth groups, expenditure on other livestock inputs (such as livestock drugs and vaccinations) stood at around 6% of their annual budget in relative trerms but in absolute terms it increased directly with wealth. Better off and middle households have more livestock to take care of than poor households, and hence they spend more money on animal drugs, salt for animals, and, most importantly, water. Households on the upper end of the wealth spectrum also hire poorer households to help with herding, and these labour expenses were also a part of their production inputs expenditure.

The category called 'household items' in Figure 6 includes tea, salt, soap, kerosene, payment for grinding, and utensils. Spending on these items accounted for just over 13% and 12% respectively for the middle and better off households' annual cash expenditures.

During the reference year, expenditure on social services was on average 8-9% of annual spending for all four wealth groups. In absolute terms, cash spending on services was higher for middle and better off households than for poorer households. Higher spending was on health not education. On a per capita basis, wealthier households do not in fact invest more on schooling than poor households because the opportunities for schooling outside the *madrasas* (Quaranic schools which are free) are limited. However, when it comes to spending on health, better off households typically spent significantly more than poor households in the reference year.

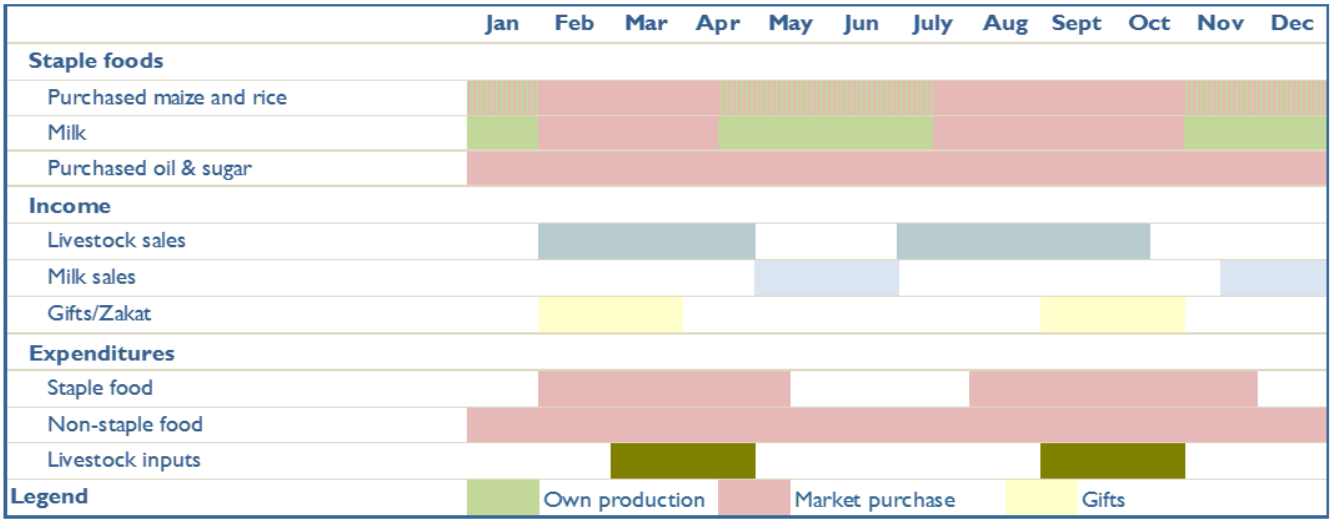
The 'other' category for expenditures includes items such as taxes, gifts, clan contributions, transportation and other non-essential expenditures. In a bad year, these items are often reduced to help cover the higher cost of food and essential livelihood-related items. The "other" category of expenses, both in absolute and relative terms, usually increases with wealth.

Calendar of major sources of food and income for poor households

The calendar above provides an illustration of households' seasonal access to food and cash income, as well as the periods in the year when there are heavier expense demands. As discussed above, households in this zone survive on a combination of food that they purchase from the market and milk from their own herds. Households purchase staple grains (mainly maize for poorer households, supplemented by rice for better off households) throughout the year, but they typically reduce their grain purchases during the high milk production periods which occur during the rainy seasons, from April to July (the Gu season) and from November through January (the Deyr season).

Cash income from livestock sales is generated from February through April and again from July through October, corresponding to the last months of the two dry seasons and into the first month of the rains. Households use the cash from livestock sales to fund their expenditures on livestock inputs, which take place around these same time. Milk income is

Figure 7 Consumption and income calendar for the Juba Cattle Pastoral Livelihood Zone



Source: The STREAM Consortium HEA Study 2016 & FSNAU/FEWS NET_BSummary_ Juba Cattle Pastoral LZ

available in the rainy seasons, from May through June and then from November through December. Poorer households also depend on gifts/*zakat* in February/March and in September/October.

Hazards, response, and monitoring variables

Heavy dependency on food purchases from local markets means that the slightest **change in market prices and/or physical market access –** from severe weather events or from conflict -- has serious implications.

Heavy dependency on livestock for both food and income means that large shocks affecting the livestock sector such as **drought,** or even small shocks such as **disease** -- given the complete absence of public veterinary services -- will drastically affect household access to both food and income. In addition, the sole dependence on livestock means a lack of income diversification as well as a lack of dietary diversity.

Inadequate domestic water sources lead to public health risks. Moreover, the purchase of water by households both for livestock and domestic use is a cost buden for households and may increase the health risks for poor households who cannot afford to pay for sufficient water.

Recurring conflict and insecurity are a major hazard in this zone.

The disconnect between rural communities and urban-based decision-making structures can lead to a lack of support for rural livelihoods.

In bad years, households in general aim to reduce their consumption of non-essential goods; increase cash income where possible; and change their expenditure patterns. The specific ways to cope differ by wealth group (see Table 3 below).

In particular, better off and middle households have more assets and more diverse sources of income than the poor which enable them to recover much faster from shocks like droughts. Poor households often split up, sending men to far-away urban areas in search of work, while women and children go to smaller villages or towns to seek help. They also increase their collection and sale of bush products and sell as many livestock as they can while still retaining a core breeding herd. Given the already low livestock numbers in this area, this strategy is limited for poor households. These households also try to seek additional support from better off households in the form of gifts. Sometimes, the poor send some household members to live with other families although as drought does not discriminate between households, in the worst years, the ability of better off households to give gifts or take on dependent relatives is much reduced. Middle and better off households typically try to sell livestock and also move their livestock to areas where pasture conditions are more favorable although this requires having sufficient labor-power. Migration to distant pasture lands often leads to heightened conflict over scarce resources due to the increased numbers of people and livestock converging on the same pasture and water sources.

Table 3 Coping strategies in response to shocks in Southern Cattle Pastoral Livelihood Zone

Very Poor/Poor	*Middle/Better off*
Shift expenditure to essential items, especially cheaper staple grains, and reduce expenditure on non-essential items.	Shift expenditure to essential items, especially cheaper staple grains, and reduce expenditure on non-essential items.
Split families up with men migrating to far away locations either to graze livestock or to seek labor opportunities; other family members will migrate to small villages and towns in order to sell bush products or to seek additional employment opportunities.	Increase migration of livestock and herders to areas where water and pasture are better; Where possible, truck in water to save animals from long treks. Note that these strategies are not always effective because many pastoralists pursue migration and hence resources are quickly depleted. Conflict is also likely to erupt due to competition for scarce resources increases.
Increase collection and sale of bush products.	Increase livestock sales, with males sold in higher numbers at the early stages of the crisis, and females increasingly sold as the crisis continues.
Increase sale of livestock and milk.	Increase milk sales by middle households only.
Seek increased gifts and social support.	Seek increased remittances and loans (to be repaid when the situation improves).
Seek humanitarian support.	

Source: The STREAM Consortium HEA Study 2016_BSummary_Juba Cattle Pastoral.

The key parameters listed in the table below are food and income sources that make a substantial contribution to the household economy in the *Juba Cattle Pastoral Livelihood Zone*. These should be monitored to indicate potential losses or gains to local household economies, either through on-going monitoring systems or through periodic assessments.

Table 4 Key parameters to monitor in the Juba Cattle Pastoral Livelihood Zone

Item	Key Parameter – Quantity	Key Parameter – Price
Animal production	Cows' milk – yields (seasons 1 & 2) Goats' milk – yields (season 1) Cattle – herd size Goats – herd size Sheep – herd size	Cows' milk – producer price (seasons 1 & 2) Cows' butter – producer price (season 1) Goats' milk – producer price (season 1) Cattle – local price Goats – local price Sheep – local price
Other	Herding labor – availability of seasonal jobs Construction labor – availability of jobs Bush products – amount sold Gifts/zakat – amount given	Herding labor – wage rates Construction labor – wage rates Bush products – prices
Expenditure		Maize – consumer price Rice – consumer price Sugar – consumer price Oil – consumer price

Source: The STREAM Consortium HEA Study 2016_BSummary_Juba Cattle Pastoral.

Development Priorities and Recommendations

- Promote and/or improve water access and water sources
- Imprrove rainwater harvesting
- Improve the road and market infrastructure, and the transportation system

- Strengthen veterinarian services, e.g. through private sector engagement and through mobile teams; provide more veterinary training
- Support livestock marketing by strengthening livestock product value chains and by addressing market failures
- Strengthen market linkages through private sector engagement
- Promote appropriate income generating activities and income diversification
- Promote access to formal education and human health services
- Provide awareness raising in marginal, rural communities to empower them to better link to and influence the largely urban-based decision-making.

Estimated population for the Juba Cattle Pastoral Livelihood Zone (SO18)

Zone	Region	District	Livelihood	Population 2014 UNFPA
South	Middle Juba	Bu'aale	Juba Cattle Pastoral	12,555
South	Middle Juba	Jilib	Juba Cattle Pastoral	34,602
South	Lower Juba	Kismaayo	Juba Cattle Pastoral	7,259
South	Lower Juba	Afmadow/Xagar	Juba Cattle Pastoral	27,572
South	Lower Juba	Badhaadhe	Juba Cattle Pastoral	18,224
SO18 Population 2014 total				**100,211**

HOUSEHOLD ECONOMY ANALYSIS (HEA)

SO19: KISMAYO URBAN LIVELIHOOD ZONE
LOWER JUBA REGION

Submitted under the Project:
Household Economy Analysis (HEA) and Baseline assessment for the building resilience through Social Safety Nets in South-Central Somalia Project

For

SOMALIA RESILIENCE ACTION CONSORTIUM (STREAM)
(African Development Solutions (Adeso), ACTED and SADO)

By: KasmoDev Consulting Ltd

Technical Support/Contributions:

The Food Economy Group

Technical Support:, Assessment tools, analysis, BSS, LIAS, Dashboard Development & final reporting

Food Security & Nutrition Analysis Unit/FAO Somalia
Technical support: Field Assessment, analysis;
reporting

Famine Early Systems Network – Somalia;
Technical support: Field assessment, analysis, reporting *(Kismayo Urban)*

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Somalia Livelihood Baseline Profiles

Kismayo Urban Livelihood Zone (SO19 Kismayo)

Introduction

Livelihood Baseline Profile Overview

The HEA livelihood baseline profiles provide an analysis of livelihoods and food security on a geographical basis. For newcomers to the country, the profiles offer a useful overview of food security conditions for a particular reference year (usually a recent year of fairly good rains). The profiles describe household economic activities at different periods in the year, and provide insights into annual livelihood strategies as well as seasonal patterns. The profiles are a useful resource for development planners because an important first step in creating poverty reduction and disaster risk reduction programs is to understand who is vulnerable, to which hazards, and why. Likewise, it is important to understand what it means to be poor in a particular agro-ecological context, and how poor households in different areas normally survive. The baseline profiles also describe how households adapt to economic stress, especially failed crop or livestock production, and how coping strategies differ by where one lives and what assets one has.

This baseline assessment was commissioned by ADESO and ACTED on behalf of the Somalia Social Safety Nets Program consortium, to support the start-up of a safety net interventions in southern Somalia. KasmoDev was hired to lead the baseline work. The work was carried out in partnership with the FSNAU and FEWS NET in May-July 2016.

Methodolgy

The FSAU, FEWS NET and their partners use Household Economy Analysis (HEA) to identify how households make ends meet both under normal and stress conditions. HEA allows planners to analyze the effects of external shocks, such as drought or livestock bans, on household livelihoods in order to predict whether household resources will be sufficient to meet basic needs (defined in terms of survival and livelihood protection thresholds). The analysis is disaggregated by wealth group and by livelihood zone, and can be conducted annually or updated seasonally. As a result of this process, a dynamic picture is created that adds significant value to other food security indicators. The advantages of HEA are two-fold: (i) it focuses on food and income access rather than just food availability, and (ii) it underscores how risks and shocks have different potential impacts, depending on the socio-economic status of households and their ability to expand or extend existing food and income sources to meet food shortfalls. The HEA analytical framework has two main components:

Baseline analysis – the HEA baseline both quantifies and describes qualitatively the total food and cash economy of households, covering all food sources, cash income sources, and expenditure patterns across all seasons in a full one-year period. The analysis shows how people get by year to year as well as their connections to the people and the places that enable them to do so.

Outcome analysis – the HEA outcome analysis is an investigation of how baseline access to food and income might change as a result of a specific hazard such as drought or as a result of a positive change, such as a beneficial price policy.

The baseline analysis relates to a specific **reference year** (In this case April 2015 to March 2016). For pastoral livelihood zones, the reference year usually starts with the main rainy season, when milk production is at its peak. Generally, but not always, the reference year will be a year that was neither especially good nor especially bad, but somewhere in the middle. The most important point about the reference year is not that it should be an average year, but that it should provide a good starting point for understanding how livelihoods will vary from one year to the next in relation to changes in key production factors.

KISMAYO URBAN LIVELIHOOD ZONE (SO19 Kismayo)

General livelihood zone description

Table 1 Summary of data supporting the Kismayo Urban livelihood profile

Field data collection	July 2016
Consumption year	April – March
Reference year	2015-2016
Initial estimated validity	Until 2021 or 2026

Source: The STREAM Consortium Study 2016

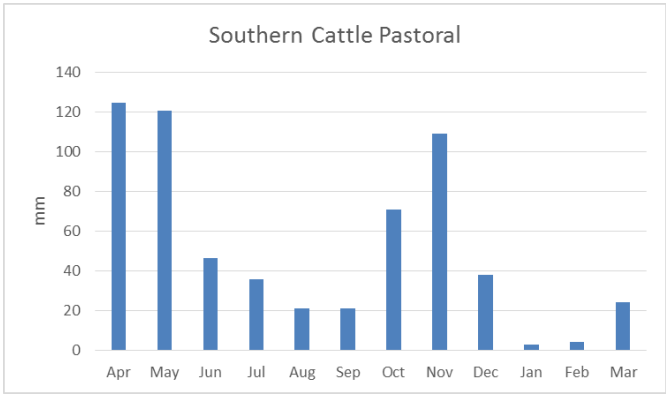
Kismayo is the capital of Lower Juba region of Southern Somalia. It is also the seat of the Federal Somali State of Juba. The port city is located along the Indian Ocean and lies 528 kilometres southwest of Mogadishu, the capital city of Somalia. The local environment is semi-arid but Kismayo itself is an urban settlement of 116,440 people. The city is a key source of amenities such as a seaport, hotels, schools, mosques, health facilities, airstrips, telecommunication facilities, *Hawala* centres and municipal services. The city also houses government services for other urban and rural settlements in the Juba regions. The city is divided into five broad sections, namely Calanley, Faanoole, Far Jano, Shaqaalaha and Guulwade

Map 1: Kismayo town

The local climate is hot year-round with seasonal monsoon winds and irregular rainfall. The main wet season is the Gu, characterized by southwest monsoons occurring between April and June. The dry Hagaa season (July-September) falls inbetween the Gu and the secondary Deyr wet season of October and December. The Deyr is followed by the long and harsh dry Jilaal season from January to March (see Figure 1).

The Kismayo economy is labor-based, supporting significant trading activity as well as a bit of a peri-urban livestock keeping. Various economic sectors provide the bulk of employment and other income opportunities. These sectors include commerce (including the livestock trade and the Qat [*miraa*] trade), fishing, seaport and docklands activities, water services, public service, private industry and others. With the third largest seaport in the country, Kismayo is an economic hub linking urban and rural areas. For example, the Kismayo market supplies food and non-food products imported through the seaport to the other urban and rural areas of Lower Juba, Middle Juba and parts of Gedo Region as well as parts of north-eastern Kenya. In addition, agricultural produce and livestock from neighbouring rural areas are traded in the Kismayo market.

Figure 1 Estimated average monthly rainfall in mm in the neighbouring Juba Cattle Pastoral Zone



Source: USGS CHIRPS Data, FEWS NET GeoCLIM

Conflict is the most damaging intermittent hazard in the zone as it creates so many other knock-on effects, such as market closures, food price inflation, lost employment, and loss of life. Disease outbreaks are another serious problem caused by poor water quality, poor sanitation, population displacement and lack of medical services. All of these issues cause serious hardship and are also costly in both economic and human terms.

Markets

The Kismayo market is served by the seaport through which food and non-food commodities are imported. Imported staple foods include rice and wheat flour, whilst the non-staple foods include sugar, vegetable oil, powder milk, tea leaves, dates, confectionaries and other goods. Non-food products that are imported include a wide range of consumer goods, including, but not limited to, electronics, textiles, construction materials, furniture, household products, animal and human drugs, vehicles and machinery. Locally produced foods are also found in the Kismayo market, including sorghum, maize, beans, vegetable, fruits and various milk products. These local goods come from neighbouring riverine, agropastoral and pastoral zones located in districts within the Juba regions (Jilib, Jamame, Buale and other settlements).

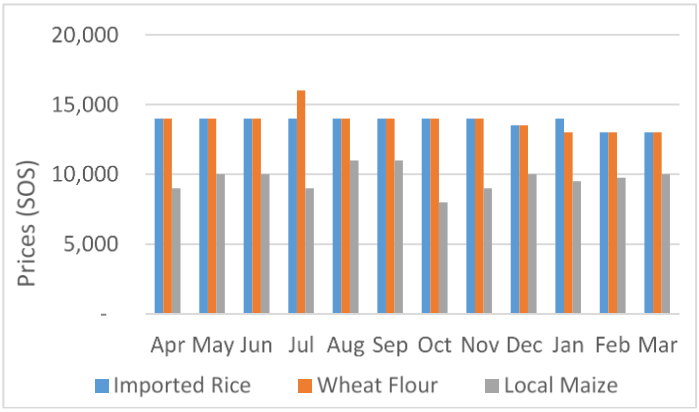
This trade signifies a strong link between rural and urban livelihoods. Therefore, changes in climate and environmental conditions which affect the production of basic food items in rural areas will affect the supply of these products to Kismayo, and hence will influence urban food security. Kismayo market is also a hub for the livestock trade in the Lower Juba region, especially small ruminants (sheep and goats). The Kismayo market is also the second largest market for cattle after the Afmadow market.

The Kismayo market is accessible throughout much of the year, serving both rural and urban areas of Lower and Middle Juba as well as parts of Gedo Region. However, the exception is periods of high sea tides which make it dangerous for small commercial boats. To avoid trade disruptions, traders tend to stockpile commodities in advance. Some traders also hire big ships that can sail during high sea tides. Periods of conflict also severely disrupt market access. For example, in the past two decades of political instability, the city has experienced recurring conflict in which various warring factions[1] have fought for control. Such incidences have disrupted port activities and trade, leading to higher prices and reduced supply of foods and other essential commodities. Excessive rainfall is also a factor that disrupts the trade of local produce such as milk, cereals, vegetables and fruits from rural areas to the urban Kismayo market.

Cereal market

Kismayo residents enjoy lower imported commodity prices due to proximity to the seaport. In the reference year, prices of rice and wheat flour (the two staple foods) were stable, ranging between SOS 13,000-14,000 per kilogram (kg) which was equivalent to US$ 0.58-0.62/kg. This stability, however, could change as prices in Kismayo are influenced by changes in global food prices. Conversely, the price of locally produced maize fluctuated between SOS 9,000 and SOS 11,000 during the reference year. This fluctuation was attributable to the normal seasonality of production and supply in the rural areas (Figure 1).

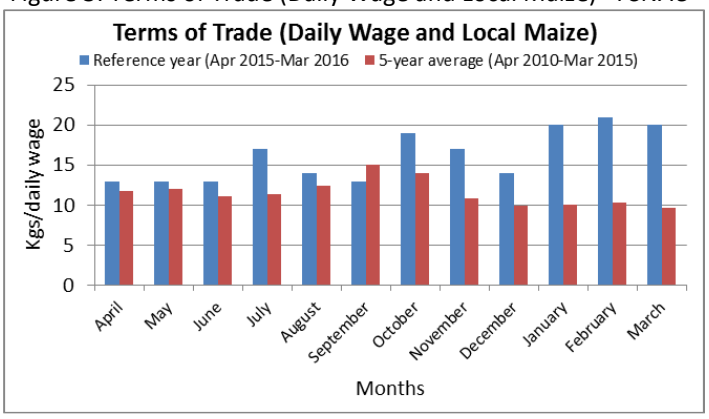
Figure 1: Imported and Local Cereal Prices April 2015-March 2016



Labor market

Due to the formation of Juba federal state and improved stability in the last three to four years, the city's economy has been thriving. The major sources of employment in the town are the seaport and businesses that are involved in food and non-food commodity trading as well as construction, transportation and water supply. Hotels, restaurants and schools in addition to local municipality and federal state institutions also provide some employment. Notwithstanding these clear improvements, there is currently no mechanism in place to monitor the labor market due to its complexity. However, the FSNAU's market monitoring system does provide some labor market data, including monthly trends in casual wage rates (porterage or construction labor); and, locally produced cereal prices and terms of trade (ToT) between wage and cereal prices. This data acts as a proxy indicator of the purchasing power of the urban poor. For instance, in the reference year, the ToT between the casual labor wages and maize indicated an improving trend in relation to the 5-year ToT average due to the doubling of the ToT in the last quarter of the reference year (see Figure 3 above).

Figure 3: Terms of Trade (Daily Wage and Local Maize) - *FSNAU*



[1] Freelance militias (1991-1998), Juba Valley Alliance (1999-2005), Union of Islamic Courts (2006-2007), Al Shabaab (2008-2012), Ras Kamboni/Juba Interim Administration (2012/13)

Conflict

1991 marked a period of extreme, nation-wide turmoil with long-lasting repercussions that are still evident today. Notably, in 1991, the Somalia central government collapsed and with this collapse began a period of conflict, instability, food crises and famine. In the months following the state collapse, the country was torn apart by clan-based warfare with factions competing for what remained of the state's assets and power.

Since 1991, a significant number of battles for control between various factions occurred in Kismayo city itself. Given the city's importance as a seaport, one of the most negative effects of the conflict was the disruption of seaport activities. This had numerous knock-on effects including job losses, market disruption and livelihood disruption. Moreover, fighting within the city led to significant property damage, population displacement and, in the extreme, a massive loss of lives.

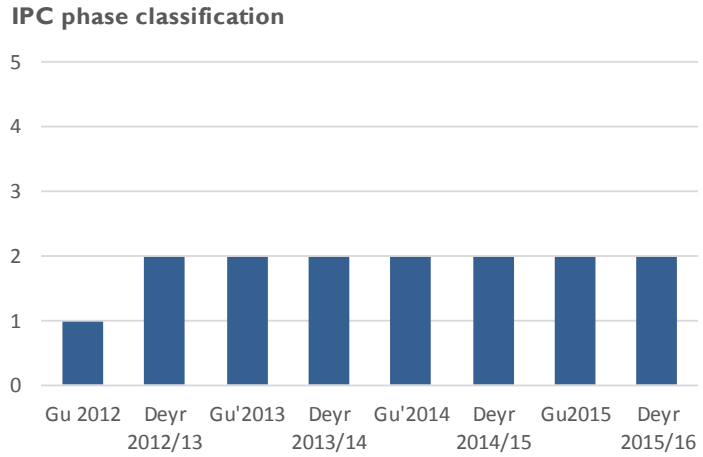
The formation of a post-transition Federal Government in 2012 brought back some stability to the country. However, fighting over territory in southern Somalia (including Kismayo) continued to affect the area as the National Armed Forces (with support from the African Union Mission in Somalia/AMISOM) tried to regain strategic cities and towns from *Al-Shabaab*. Frequent market disruptions resulted from the continued conflict as commercial supply routes were interrupted. In turn, supply shortages led to price increases for local producers and consumers

This grim picture has recently improved, and in current years there has been some signs of progress with greater political stability in the city and the re-opening of the Kismayo seaport in 2008 (see Figure 4 below). In 2013, the port was brought under the Juba Administration although by agreement, the newly formed Federal Government was to assume management of the facility by 2014. However, this progress is not assured and any renewed conflict would derail ongoing livelihood recovery. The recovery process itself has seen the rebuilding of the regional administration as well as a return of the Somali diaspora. The latter in particular has boosted the local economy through private sector investment in reconstruction.

Food access history

War has many negative outcomes and southern Somalia, including Kismayo, has felt them all, including: a collapsed industrial base; the breakdown of infrastructure (especially roads); the loss of state services like schools and health clinics; lawlessness which results in violence towards women; supply shortages; price hikes, population displacement, disrupted trade; and loss of life. All these effects of war have had devastating consequences for the food and livelihood security of the local people. Over the years this has meant that parts of Somalia, and especially southern Somalia, where so much of the conflict has centered, have witnessed over twenty years of food and livelihood insecurity.

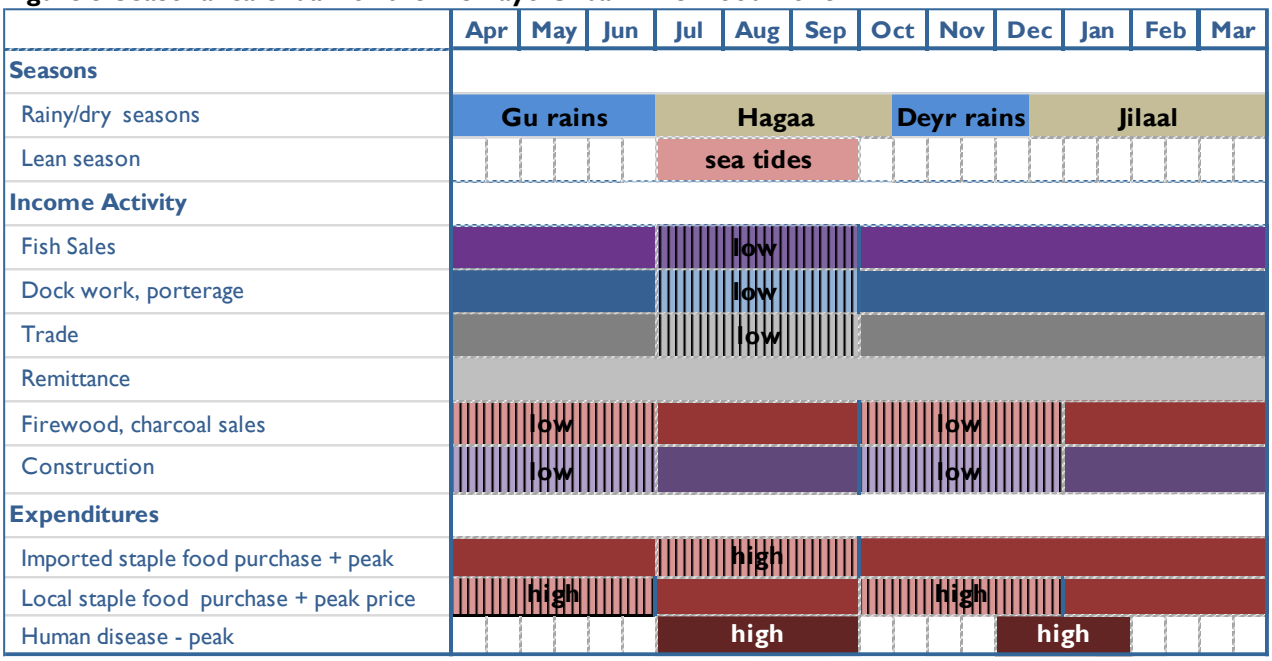
Figure 4: Kismayo Urban - Recent trend in IPC phase classification, with 1 as best and 5 as worst



Source: FSNAU, FEWS NET 2016

However, the baseline analysis relates to a specific reference year, in this case, April 2015 to March 2016. April is the usual the start of the Gu season which in southern Somalia marks the start of any consumption year. The 2015-2016 year was selected because it was a recent year of relatively good market conditions with reasonable job access, wage rates and staple food prices (see Figure 4 above).

Figure 5 Seasonal calendar for the Kismayo Urban Livelihood Zone



Source: The STREAM Consortium Study_Kismayo Urban HEA Baseline 2016.

Seasonal calendar

The seasonal calendar (Figure 5 above) shows the timing of economic activities and the seasonality of prices as well as the timing of the main hazards that may affect households' food access. Trade is a major source of income for a large part of the urban population. Trade and trade-related (port) activities are ongoing throughout the year. However, trade tends to slow during peak sea tides (July-September) as these are the months when commodity imports reduce and prices tend to rise. Fishing, which provides an income for a portion of poor households, is also a year-round activity but, as with trade, fishing drastically slows down during the peak of sea tides thus reducing income access for poor households at this time.

Employment is a significant source of income for urban residents. Casual labor, such as porterage and construction work, upon which about 20 % of the urban poor depend as a source of cash income, is continuous throughout the year. Porterage, however, is linked to port activity. Thus, during high sea tides (July-September) when port activities slow down, porterage work likewise slows down. By contrast, construction work is lower during the wet seasons (April-June and October-November). Firewood collection and sale, another source of cash income for the poor, continues throughout the year, peaking in dry seasons.

Although staple food prices were relatively stable during the reference year, prices tend to increase in during the slow-down of imports (June-September) and start falling after the resumption of port activities. Prices of locally produced staples (maize and sorghum) tend to rise in wet seasons.

Outbreaks of human diseases also negatively affect household food access. For example, outbreaks of malaria and diarrhoea, which occur after the two wet seasons (July-Sep and Nov-Dec), lead to illness and low labour availability as well as to reduced income and less cash for food and higher cash demands for the payment of health costs.

Wealth breakdown

Nearly half or 47.5% of the households in the *Kismayo Urban Livelihood Zone* were considered very poor or poor in the reference year. Middle and better off households accounted for 37.5% and 10% of households respectively. Household sizes vary according to their level of wealth. For example, poor households comprised 6-7 people whereas middle and better off households had 8-9 and 9-11 members, respectively. Households in the poor category tended to have a slightly higher dependency ratio than wealthier households, i.e., 2-5 members per adult compared to 2-4 members per adult.

Table 2 Determinants of wealth in Kismayo Urban Livelihood Zone

	V.Poor	Poor	Lower Middle	Upper Middle	Better-off
Household percentage (%)	20	27.5	25	17.5	10
Household size (#)	6-7	6-7	8-9		9-11
Sources of income	Fish sales, casual labour (porterage, construction work), petty trade		Small businesses, remittances, salaried employment		Medium to large businesses, high salaried employment

Source: The STREAM Consortium, FSNAU, FEWS NET_BSS_Kismayo Urban, 2016
Note: The household percentage and household size figures are the mid-point of a range.

Sources of food and income vary by wealth group. Poor and very poor households draw their income from unstable, unskilled and low paid work such as fish sales and casual construction work as well as petty trade. Both lower middle and upper middle households rely on relatively stable income sources, mainly small business, petty trade, remittance and some wage (lower middle) and salary (upper middle) employment. The better-off households draw their income from medium to large businesses and high salaried employment.

The *Kismayo Urban Livelihood Zone* is home to an unusually large number (nearly 50%) of households who are considered to be poor and very poor. One reason for the high incidence of poverty in the city is the effects of more than two decades of conflict. This led to weak access to employment and other livelihood opportunities due to the destruction of infrastructure and the collapse of private investment and the public sector, as well as to violence on the city streets. Poor access to war-torn social services (health and education) limited skill acquisition and job access too. Consequently, many households lost their productive assets. Moreover, work knowledge, on-the-job skill training and work-place social connections were also lost during the long period of conflict. As a result, many households fell into poverty and these days the large number of poor tend to depend on unstable and low-paying income options.

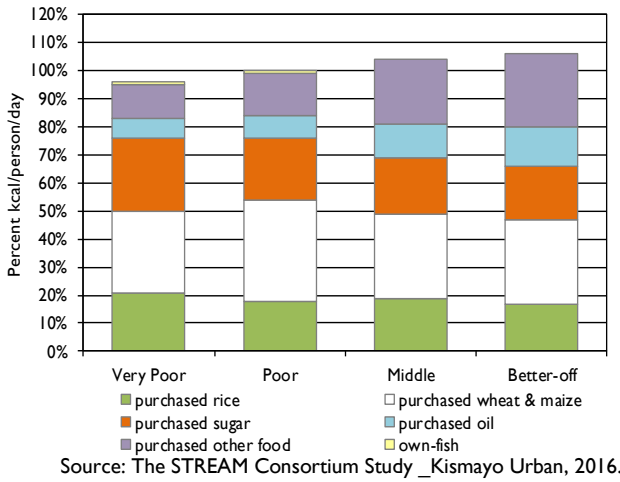
Sources of food and income and expenditure patterns

During reference year (April 2015 to March 2016) households from all four wealth groups met their food needs without external aid. Almost all of their food was accessed through market purchase. A very small portion (less than two %) of annual food energy came from fishing and this applied to the poor and very poor households only. In terms of the adequacy of their food access, very poor households were able to afford only 96% of their minimum food needs while households in the poor category accessed 100% (see Figure 4). By contrast, households in the two upper wealth groups accessed a surplus of 4-6% over and above their minimum annual food needs

About 50-54 % of the food consumed during the year by poor and very poor households were staple foods, such as maize, wheat flour, rice and occasionally spaghetti. The rest (46-50%) were non-staple food items such as sugar, meat, beans and vegetable oil. Amongst the middle wealth group, staple foods accounted for 47% and non-staple foods were around 57% of annual food needs. In short, the pattern was very similar across the wealth groups. Milk and beans are the main protein sources purchased by all wealth groups (meat accounted for less than 1% of annual food needs) but these protein foods added only 6-10% to annual food energy. Vegetables, which are good sources of minerals and vitamins, contributed less than 2% for all wealth groups.

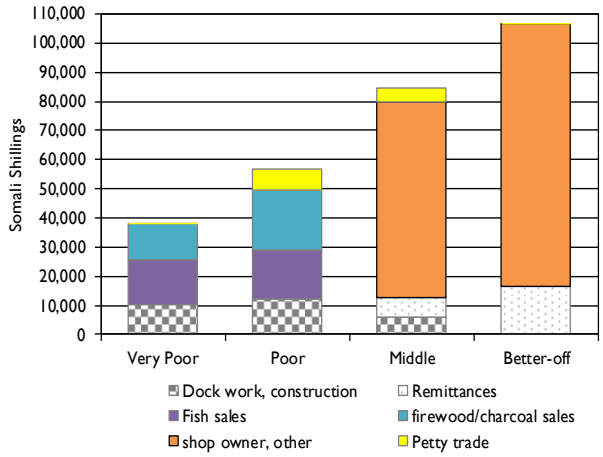
Given the heavy reliance on food purchases during the year, all households, but in particular the poor, are vulnerable to changes in food prices and wage rates as well as casual labour opportunities which can place them at risk of food insecurity.

Figure 6 Food sources, Kismayo Urban Zone



Source: The STREAM Consortium Study _Kismayo Urban, 2016.

Figure 7 Cash income sources Kismayo Urban

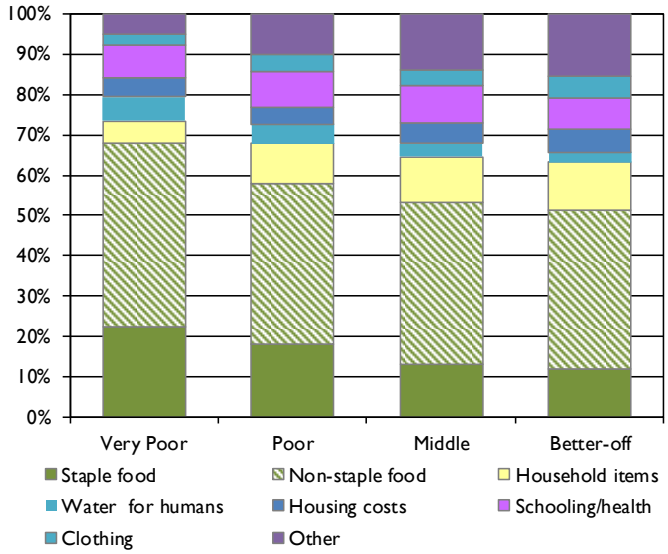


Source: The STREAM Consortium Study_Kismayo Urban, 2016.

Income sources are diverse in this urban setting but most of them revolve around labor and trade. For example, very poor and poor households made 27-40% of their annual income from fish sales in the reference year whilst firewood and charcoal sales accounted for an additional 40-60%. By comparison, casual labor (such as dock work and porterage) contributed less than 20%. Households in the middle and better off wealth groups made most of their income from operating small businesses, and this accounted for over 60-70% of their annual cash earnings in the 2015-2016 reference year

Overall, households in this livelihood are vulnerable to shocks that affect wage rates and/or changes in commodity prices and market access. In particular, poor and very poor households are at a greater risk of food insecurity because they rely on low paid work or on selling low value goods so that any rise in food prices can lead to less food purchased for the family meal.

Figure 8 Allocation of expenditures Kismayo Urban Zone

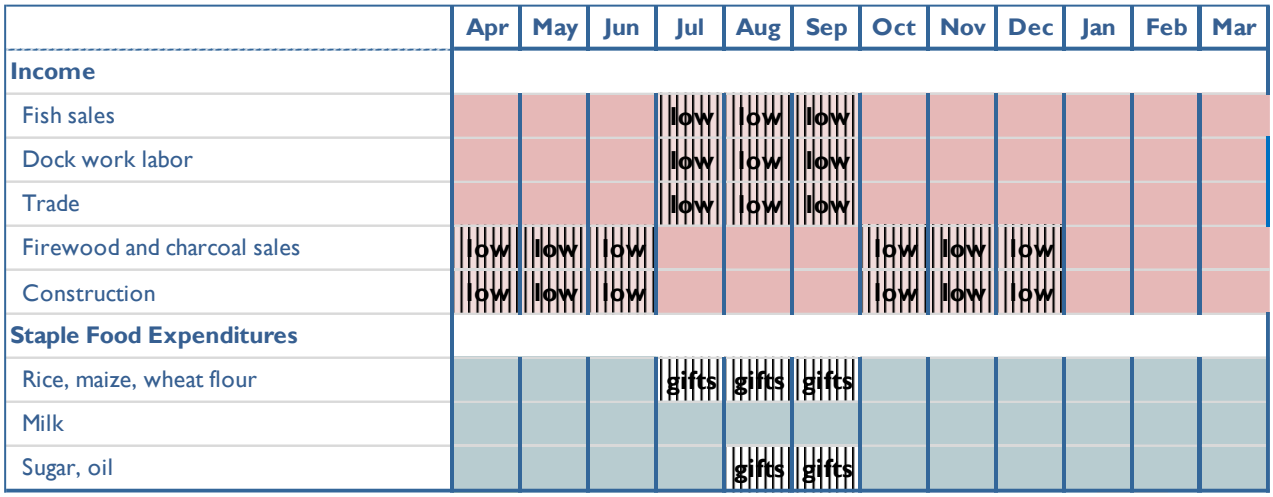


Source: The STREAM Consortium Study _Kismayo Urban 2016.

A significant amount of money is spent on basic survival items which take up over 70-90 % (SOS 30 million to SOS 55 million) of total household annual income across the four wealth groups. Overall, about 65-86% of annual expenditures were on food (20-22% on staple and 40-65 % on non-staple). Other expenditures – such as clothes, household items, health and education -- accounted for less than 10% each across all wealth groups. Given the high proportional expenditure on food by the poor and very poor households, changes in food prices and wage rates or in casual labour opportunities, put these households at greater risk of food insecurity.

Calendar of major sources of food and income for poor households

Figure 9 Consumption and income calendar for the Kismayo Urban Livelihood Zone



Source: The STREAM Consortium Study, BSummary_ Kismayo Urban-2016

The urban poor and very poor purchase food throughout the year. Hence, changes in their food access relate to peaks and lows in their income opportunities and in staple food prices rather than to seasonality in production. The period in the year when food access is most insecure is when their two chief income sources – fish sales, and firewood and charcoal sales – are at their lowest. Fortunately, these income sources do not dip at the same time. Fishing, and hence fish sales, are lowest during the Hagaa season of high sea tides (July-September) but this drop in income is in part compensated by firewood sales, which tend to be relatively high during the Hagaa dry season. Firewood sales usually drop in the Gu and Deyr wet seasons but this is when fish sales are at their peak. The counter-balancing seaonality of firewood sales and fish sales is mirrored in the other two main income sources: construction and porterage. Construction work is lowest in the Gu and Deyr wet seasons but these are the months when porterage in the docklands can be found. Dock work dips during the Hagaa high sea tides but this is the dry season period when construction work is available.

However, shifts in the price of staple foods is another important part of the picture. Prices for imported staple foods, such as rice, rise during the Hagaa high sea tides which is when fish sale income drops. This dry season, which follows the Gu main rains, is also a time of higher health expenditures, particularly on malaria treatment medication. Although local foods (such as maize) are less expensive during the Hagaa months, nonetheless, this period from July-September is typically the most trying for poor and very poor households who are trying to just make ends meet.

Hazards, response, and monitoring variables

The Kismayo Urban Livelihood Zone faces various hazards regarding access to food and income.

Civil insecurity and conflict is a key hazard for the livelihood and has been since 1991 when the Somalia central government collapsed. Recent reconstruction work notwithstanding, any renewed conflict would derail ongoing livelihood recovery that is finally taking place after the past decades of conflict, and would affect livelihoods at every level.

Price shocks and market inaccessibility are also a key hazard in this urban zone. Given the urban population's heavy dependency on market purchases for food and other products, changes in prices as well as any barriers to physical access to markets could have grave consequents for food access, particularly among poor households. Food price inflation undermines poor households' purchasing power, leading to food insecurity. Barriers of physical access to markets would also lead to low food supplies and increases in food prices thereby affecting residents' food security.

Disease outbreaks and other public health risks due to poor health and water service distribution are both a chronic and periodic hazard in this urban zone. The existing health facilities in the city are limited and suffer from shortages of professional staff and knowhow as well as a limited supply of drugs and equipment. Likewise, safe water sources are limited, and most people rely on unprotected water sources such as shallow wells. Local water sources are often contaminated because of poor water handling and supply which occurs, for instance, when water is ferried on donkey carts or through the use of poor storage facilities. Disease outbreaks include diarrheal diseases and malaria. Disease outbreaks impact household food access through the sickness of active household members leading to the loss of income. Illnesses of household member(s) also often shifts expenses from urgently need food to medicine and other health related items.

In bad years, households in general aim to reduce their consumption of non-essential goods; increase cash income where possible; change their expenditure patterns; and use other strategies to maximize food and income, and reduce risk. The specific ways to cope differ by wealth group (see Table 3 below).

Table 3 Coping strategies in response to shocks in Kismayo Urban Livelihood Zone

Very Poor/Poor	*Middle/better off*
Shift expenditure to essential items, especially cheaper staple grains, and reduce expenditure on non-essential items.	Shift expenditure to essential items, especially cheaper staple grains, and reduce expenditure on non-essential items.
Increase collection of wild food (fishing).	Increase trading activities if possible.
Increase work (casual labor/construction) and self-employment.	Seek increased remittances and loans (to be repaid when the situation improves).
Seek loans.	Migrate away to protect lives and livelihood (in times of conflict).
Migrate away in search of additional labor opportunities	Sell off valuable assets (gold, land, livestock, etc.)
Seek increased gifts and social support.	
Seek humanitarian support.	
Migrate away to protect lives and livelihood (in times of conflict).	

Source: The STREAM Consortium Study_BSummary_Kismayo Urban 2016

Better-off and middle households have more assets and more diverse sources of income than the poor which enable them to recover much faster from shocks. For example, they can obtain remittances from their family members abroad or alternatively they can sell valuable, liquid assets such as gold, land, houses, livestock or any other valuable assets that they own. By contrast, poor households have fewer assets and they typically rely on employment or self employment activities. Thus, in the event of a shock -- and depending on the magnitude of the shock -- they resort to increasing work if possible, as well as labor migration, increased seeking of social support, gifts, loans and humanitarian aid, and, in extreme cases, they will flee to other neighboring areas.

The key parameters listed in the table below are food and income sources that make a substantial contribution to the household economy in the *Kismayo Urban Livelihood Zone*. These should be monitored to indicate potential losses or gains to local household economies, either through on-going monitoring systems or through periodic assessments.

Table 4 Key parameters to monitor in the Kismayo Urban Livelihood Zone

Item	Key Parameter – Quantity	Key Parameter – Price
Income Sources	Fish – quantity of daily or weekly catch Construction labor – availability of jobs Portage and dock work – availability of jobs Firewood/charcoal – amount sold Remittances – availability Small business – access to work Petty trade – access to work Water sales – access to work Matatu/taxi business – access to work Gifts/zakat – amount given	Fish sales - prices Construction labor – wage rates Portage and dock work – wage rates Firewood/charcoal – prices Remittances – amount given
Expenditure		Maize grain – consumer price Rice – consumer price Wheat flour – consumer price Sugar – consumer price Oil – consumer price

Source: The STREAM Consortium Study _BSummary_Kismayo Urban 2016.

In addition to the key parameters listed in Table 4 above, there are additional indicators or situational factors that greatly affect livelihoods and that need to be monitored. These factors include:

- Human disease outbreaks
- Conflict, population displacement and market closures
- Influx of displaced rural households into the city leading to a stress on resources and competition for casual work
- Drought, flood or other shocks in neighbouring rural zones leading to poor production and reduced staple food supplies

Development Priorities and Recommendations

- Strengthen income generating opportunities and employment
- Increase water access and water quality
- Imprrove sanitation facilities and infrastructure
- Strengthen education services and improve school infrastructure
- Strengthen health services and improve medical clinic and hospital infrastructure

Estimated population for the Kismayo Urban Livelihood Zone (SO19 Kismayo)

Zone	Region	District	Livelihood	Population 2014 UNFPA
South	Lower Juba	Kismayo	Urban	116,440
SO18 Population 2014 total				**116,440**

Source: UN sources

HOUSEHOLD ECONOMY ANALYSIS (HEA)

STREAM BENEFICIARY SELECTION CRITERIA
LOWER JUBA LIVELIHOOD ZONES

(Southern Inland Pastoral, Juba Cattle Pastoral and Kismayo Urban Livelihood Zones)

Submitted under the Project:

Household Economy Analysis (HEA) and Baseline assessment for the building resilience through Social Safety Nets in South-Central Somalia Project

For

SOMALIA RESILIENCE ACTION CONSORTIUM (STREAM)

(African Development Solutions (Adeso), ACTED and SADO)

By: KasmoDev Consulting Ltd

Technical Support/Contributions:

The Food Economy Group
Technical Support:, Assessment tools, analysis, BSS, LIAS, Dashboard Development & final reporting

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ANNEX

Guidance for targeting beneficiaries for inclusion in the Safety nets Program

ADESO and ACTED-SADO sho form the (SSNP) Consortium (renamed STREAM Consortium) are planning to implement a safety net programme in the Lower Juba of southern Somalia as a way of protecting and alleviating chronic vulnerabilities to the most common shocks, particularly drought. This will be achieved through providing a long-term predictive transfer to qualifying households. As part of the preparation the consortium commissioned a livelihoods baseline study to understand people's livelihoods and wealth profiles and vulnerabilities, and this would enable it to identify household types to be targeted for inclusion in the programme. Assessments led by KasmoDev were done using the HEA framework in two pastoral livelihood zones and one urban area. Based on the findings of the assessments, selection/targeting criteria were identified, which would help guide the SSNP Consortium in selecting beneficiaries for the safety net programme. The criteria are summarized in the table below.

Overall, due to the limited resources, only households from the poorest households defined as the "Very Poor" using the HEA analysis are recommended for inclusion as beneficiaries of the safety net programme – as these have the least asset base and are frequently using damaging coping strategies; their livelihoods strategies also depend to a significant extent on labour opportunities and other engagements from wealthier groups, and this makes them vulnerable to more hazards than even those households classified as 'Poor Wealth Group".

That said, the assessment has identified that even wealthier groups, particularly among the pastoralists, are not resilient and neither do they have a stable food security and livelihood systems. This is because of their overdependence on very few sources of incomes and food and their overdependence on livestock and the markets. This analysis is presented separately. KasmoDev's assessment is that the livelihood strategies and resilience of wealthier groups can be supported using community-level interventions, such as markets support.

Table: Summary Criteria for the selection of the SSNP programme beneficiary households:

		SO11 Southern Inland Pastoral – Camel, Goats and Cattle	SO18 Juba Pastoral – Cattle, Goats and Sheep	Kismayo Urban
Who to Target?		**Very poor**	**Very poor**	**Very poor**
Proportion of HH Population		5-10% (7%)	5-7% (6%)	10-30% (20%)
Livestock Ownership	Camel	0-5	0	0
	Cattle	0-6	5-7 (less than 8)	0
	Goats	4-17 (less than 2o)	5-7 (less than 8)	0
	Sheep	5-8 (less than 10)	7-9 (less than 10)	0
Income levels		~SoS 21,260,000/annum ~SoS 1,778,000/month	~SoS 24,118,000/annum ~SoS 2,010,000/month	~SoS 38,040,000/annum ~SoS 3,170,000/month

Income Sources	**'unstable, infrequent work with low earnings:** unskilled and casual labour, livestock product sales (milk), livestock sales, natural product sales , cash transfer	**unstable, infrequent work with low earnings:** unskilled and casual labour, livestock product sales (milk), livestock sales, natural product sales	**'unstable, infrequent work with low earnings:** unskilled and casual labour, fish sales, and construction labour
Dependence Ratio (Number of dependence per working adult)	2-3	2-3	2-4

Selected candidates will in nearly all cases have the above attributes.

In addition to the wealth characteristics please prioritise households with presence of following group vulnerability characteristics

- ❑ **Combine vulnerable group criteria**
- Female headed households (widowed and with young children)
- Orphan hood
- Chronic illness including presence of malnourished children
- Labour poor households
- Elderly
- Disability
- High dependence ratios
- ❑ **Urban can add use of wealth index**
- Asset ownership both productive and non-productive
- Weighting measure of assets and select those with low wealth index

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This summary criteria is presented by KasmoDev to the SSNP Consortium, which includes Adeso and ACTED. The submission is one of the products of the HEA analysis. July 15, 2016

HOUSEHOLD ECONOMY ANALYSIS (HEA)
LIVELIHOOD BASELINE PROFILES
LOWER JUBA LIVELIHOOD ZONES

EXECTIVE SUMMARY

(Southern Inland Pastoral, Juba Cattle Pastoral and Kismayo Urban Livelihood Zones)

Submitted under the Project:

Household Economy Analysis (HEA) and Baseline assessment for the building resilience through Social Safety Nets in South-Central Somalia Project

For

SOMALIA RESILIENCE ACTION CONSORTIUM (STREAM)
(African Development Solutions (Adeso), ACTED and SADO)

By: KasmoDev Consulting Ltd

Technical Support/Contributions:

The Food Economy Group Technical Support:, Assessment tools, analysis, BSS, LIAS, Dashboard Development & final reporting	*Food Security & Nutrition Analysis Unit/FAO Somalia* Technical support: Field Assessment, analysis; reporting	*Famine Early Systems Network – Somalia;* Technical support: Field assessment, analysis, reporting *(Kismayo Urban)*

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Other KasmoDev Team members including Yusuf M.Haji, the assessment team members and advisors.

EXECUTIVE SUMMARY

Objectives of the Study

The STREAM Consortium comprising of ADESO and ACTED-SADO NGOs, has plans to implement pilot Social Safety Net Programme (STREAM) in urban and rural areas in Lower Juba region of Somalia, and use the impact of programmes to advocate for use of safety nets to address long-term poverty challenges among the poorest households. Southern Somalia where Lower- Juba is located has high poverty and is hard to reach particularly the most vulnerable households. Compounded by insecurity access to services is limited with many people who require assistance due to chronic poverty not receiving services.

It is in this back drop that the STREAM Consortium instituted (i) a livelihood study using the household economy analysis (HEA), to build robust evidence to understand the functioning of local livelihoods; an understanding that would guide appropriate design of STREAM programmes to build household and community resilience, and (ii) a baseline assessment of the household

The specific objectives of the study are the following:

1. Help provide a clear and accurate representation of the inside workings of the livelihoods of the Lower Juba communities' household economies at different levels of a wealth continuum – by conducting a livelihoods assessment and analysis using the household economy approach (HEA) among selected pastoral and urban livelihoods groups. The analysis will help establish livelihood parameters, provide livelihood mapping, establish socio-economic grouping of the three livelihood zones; establish household food, income and expenditure strategies as well as their coping strategies in time of adversity; and provide selection criteria for the beneficiaries of the Consortium's social safety nets programme.
2. To undertake (After the selection of beneficiaries/targeting has been completed based on the HEA analysis), a comprehensive baseline assessment, which will serve as benchmark against which impact results will be measured at the end of the project in the project areas of Kismayo, Afmadow and Dhobley in Lower Juba Region. This is to ensure proper orientation of the social safety nets programme to be implemented by the STREAM Consoritum. Also to produce indicators for monitoring progress and a monitoring framework.

Methodology for Phase 1 of the study

This report covers only the findings of the first phase (HEA study) of the study, which is concerned with the first objective (above). The second objective (baseline assessment) will be covered in the Phase II assessment.

The Household Economy Approach (HEA) – was used for collecting and analysing field-based livelihood information on, wealth breakdown, seasonal calendar for main events and activities,

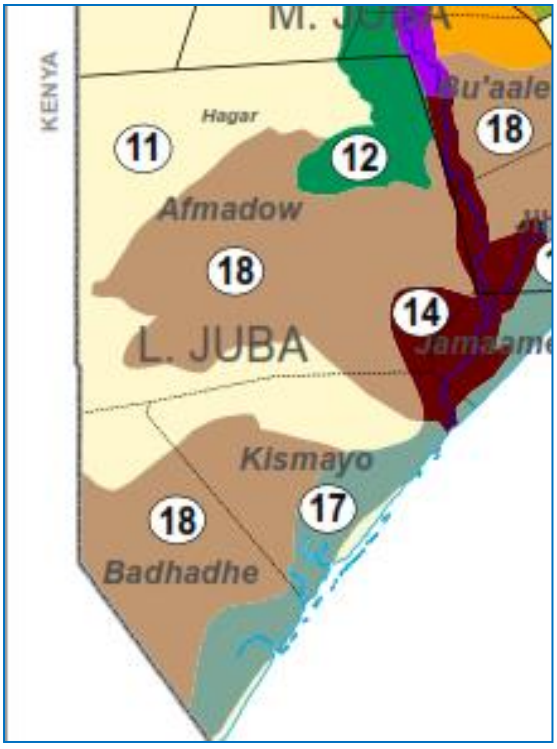
and the profiling of livelihood strategies, which include sources of food and cash income, expenditure patterns, and household coping strategies. Livelihood strategies are a range or a combination of activities that people or households engage in to achieve their livelihood goals. They also cover how people manage and preserve assets and how they respond to shocks (i.e. coping strategies employed). This methodology allows for a holistic approach to understanding the way people live. It provides a good starting point for objectively demonstrating change in people's access to food and cash due to multiple changes by allowing analysis of the impact of changes in individual livelihood strategies as well as its contribution to total livelihood access. To understand livelihoods, the assessment identified April 2015 to March 2016 consumption year as the reference period for which all livelihood information refers.

Based on the principle and understanding of ways to make ends meet for people, the Household Economy Analysis (HEA) is an essential framework to assess how community livelihoods will be impacted by their economic or ecological change; with the results helping the STREAM Consortium refine, re-design and plan interventions that will support households copying strategies.

Results

The HEA uses a principle that, livelihoods are best understood when analysed in their context so as to provide appropriate responses that supports existing livelihood systems. In doing this the assessment defined livelihood zones –geographic units within which a particular population broadly share the same livelihood structure as defined by geography, production systems and access to markets. The assessment was done in two livelihood zones in lower Lower-Juba and one Urban site.

Fig.1. Somalia Livelihood Zones – Lower Juba (SO11, SO18 and SO19 (KU1) represent, Southern Inland Pastoral, Juba Passtoral, and Kismayo Urban



Southern Inland Pastoral (SO11) livelihood zone, whose economy is based on keeping of Camels, sheep, goats and cattle under free grazing characterized by seasonal migration. Other incomes include casual work, sell of natural products, zakat and transfers

Juba Pastoral (SO18) – Livelihood zone is a pastoral economy based on keeping of cattle and Shoats characterised by seasonal migration. Other incomes are similar to (SO11). The difference with SO11 is that camels are not kept in this zone.

Kismayo Urban SO19, This is not a defined livelihood zone, for the purposes of the study the assessment covered peri-urban and poor urban blocks in Kismayo city precincts. The economy is largely labour based with trade and a bit of peri-urban livestock keeping the main income activities. Source: STREAM Study corroborates FSNAU detailed zone descriptions

The local social and economic structure in the rural zones is largely typical of pastoral economies the only difference is in type of large stock kept and potential in production.

Unskilled labour (mainly non-agriculture) from the nearby markets in the form of daily wages and seasonal employment supplements incomes for the poorest households.

NOTE: The reference period used for the assessment April 2015 to March 2015 was judged to represent average to good conditions with regard to food security. Since the 2011 drought the area has not received any major hazards and thus this year need to be interpreted as having been good after 4 years of recovery from the drought.

Wealth Groups: In HEA, "wealth group" is a relative term for classifying the economic situation of community members in the same livelihood zone. The HEA study established the different wealth groups of each livelihood zone that was assessed. During field work, the wealth breakdown is determined on the basis of community knowledge. In the study livelihoods, the family structure differs by wealth group as wealth is related to household size to a certain extent. The key determinants of wealth in the two pastoral areas was livestock ownership and the availability of labour and number of economically active household members. In the Kismayo Urban wealth is determined by mainly presence of labour in the household and the types and reliability of income activities done as well as access to remittances. The table below summarizes the different wealth groups, their population proportions and household sizes, among the livelihood groups.

SO11: Southern Inland Pastoral	**V Poor***(mucsir)*	**Poor** *(danyar)*	**Middle** *(dhexdhexaad)*	**Better-off** *(ladane)*
Household percentage (%)	7	30	48	15
Household size (#)	6	7	8	10
SO18: Juba Pastoral	**V Poor**	**Poor**	**Middle**	**Better-off**
Household percentage (%)	12	30	40	18
Household size (#)	6	6	7	10
SO19: Kismayo Urban	**V Poor**	**Poor**	**Middle**	**Better-off**
Household percentage (%)	20	27.5	25	10
Household size (#)	6-7	6-7	8-9	9-11

Table 2 Determinants of wealth in Southern Inland Pastoral
Source: The STREAM Consortium Study_BSummary SIP 2016
Note-Household (HH) percentage and HH size figures are the mid-point of a range

Household Strategies – Food, income and expenditure patterns

The STREAM Consortium's HEA Analysis was concerned with identifying the most vulnerable socio-economic/wealth groups within the three selected livelihood groups, namely (i) SO11: Southern Inland Pastoralists_camels (SIP) , (ii) SO18: Juba Cattle Pastoralist, and (iii) SO19: Kismayo Urban. The STREAM Consortium would then use the findings to identify beneficiaries and guide its safety nets programme. The study analysed and presented findings for all the major wealth groups (Very Poor, Poor, Middle and Rich) in all three livelihood zones in order to provide the whole picture and enhance understanding of these livelihood groups. However a focus on the Very Poor wealth group is presented – summarized in this Executive Summary, and also in the Beneficiary Selection Criteria Annex.

Defining Wealth in the Livelihood Zones:

In the SO11: Southern Inland Pastoral livelihood group, the main determinants of wealth is camel and goat ownership, with ownership of cattle being very rare. The livelihood zone is divided into four wealth groups. The very poor category made up 5-10% (7%) of the total population in the zone in the baseline year. In the SO18: Lower Juba Cattle Pastoral livelihood group, the main determinants of wealth are cattle and sheep and goat ownership. Ownership of camel is rare. There are also four wealth groups and the V.Poor being about 5-10% of the population. The SO19: Kismayo Urban livelihood group, wealth is determined by income sources and amount, household labour availability and other activities like access to petty trade. All three LZs are divided into four wealth groups for this study - V.Poor, Poor, Middle and Rich defined. These are commonly referred to locally as: very poor (*Mucsir*), poor (*Danyar*), middle (*Dhaxdhaxaad*) and better off (*Ladane*).

The Very Poor Wealth Group - Food and Income Sources and Expenditure Patterns

Food Sources:

The food sources in the pastoral zones are similar with Food purchases and animal products (milk and meat) being the major sources. However, the very poor who have less animals have purchases as the main source of food. This makes them vulnerable to price changes and changes in access to cash income for meeting basic needs. In Kismayo urban all the food is accessed through market purchases with minor contributions from fish consumed.

In both urban and rural areas, the diet of the very poor is carbohydrate-heavy contributing over 75% of annual diet. Foods that are protein sources provided less than 10% of annual food needs in rural/pastoral zones ,compared to almost 20% in Kismayo among the very poor. This lack of diet diversity can cause/worsen malnutrition – levels are already high among the Kismayo Urban children, the only area with a recent nutrition assessment completed.

Among the Kismayo urban households, all the food is accessed through market purchases with minor contributions from fish that is caught by the household members.

There was no emergency food assistance provided in the reference year except food gifts through Zakat and Eid distributions. These social gifts contributed 3% of annual food needs during the reference year, among the very poor wealth group. Without these gifts the very poor wealth group would have failed to meet their minimum annual food needs.

Income Sources

Even among the pastoral livelihood zones, the very poor categories are mostly concentrated in and around the village settlements and main towns due to their limited livestock holdings and need to supplement their incomes sources through unskilled labour-based engagements. Consequently, the very poor households tend to diversify their income sources, with self-employment and casual labour activities being the most important. For those with livestock, they also sell some, particularly sheep and goats, for income. On average the non-livestock income sources accounted for 48% of annual income in the reference year, compared to 52% from livestock-based earnings.

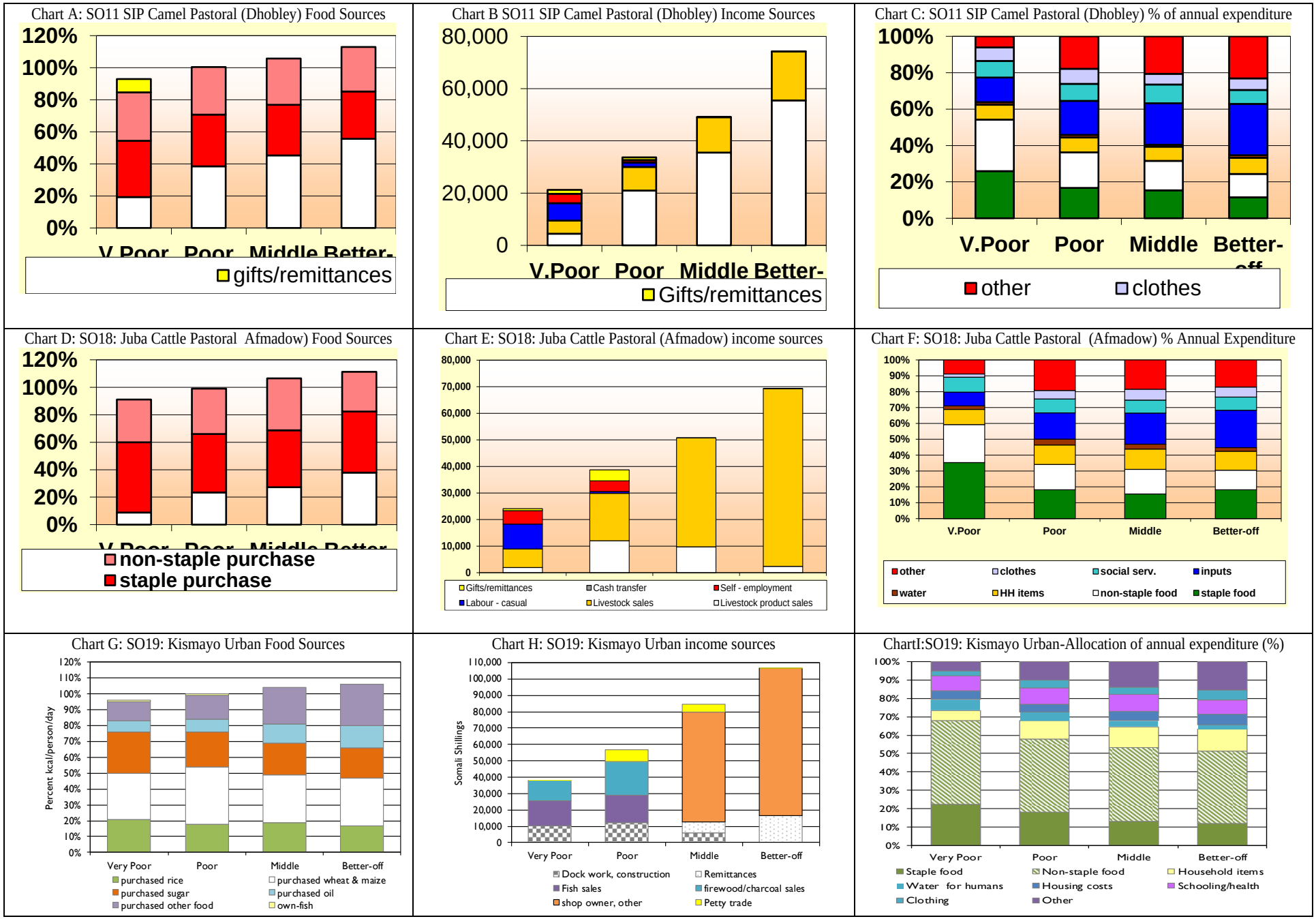
The bulk of the income for the very poor and poor households in the pastoral zones comes through sale of small livestock – goats and sheep as well as casual labour activities among the richer households. Self-employment activities in sale of natural products (firewood and building poles) supplement their incomes. Some cash transfers were received among the poorest in the reference in whose absence they would have struggled to meet their needs. In Urban Kismayo the very poor and poor make most of their income through casual labour, petty trade and some fishing activities.

The analysis has shown that there is generally limited diversity in the income options for the very poor with a huge dependence on highly fluctuating and sometimes less predictable opportunities in casual work which makes them highly vulnerable to fluctuations in labour markets. Diversity of income and stable sources are therefore important to sustain income generation for households in the poorer categories.

Expenditure Patterns

The bulk of the very poor and poor household's income is spent on basic survival items such as food and essential non-food items such as soap, grinding, kerosene/torches and water for human consumption. These basic items accounts for over 50% and 56% of the annual income for the very poor and poor. Percent expenditure on food is a proxy measure of poverty and this analysis demonstrate how the very poor and poor are simply making enough to survive and less on other expenditure items. In contrast the middle and better off households spent significant amounts on their productivity. It is imperative to improve investment in livelihood by the poorer households to improve their asset wealth to enhance their ability to break the poverty cycle.

Fig. 2: Food, Income and Expenditure profiles of the four wealth groups for the three Livelihood Zones (SO11, SO18 and SO19) are summarized below:



The Very Poor Wealth Group as Beneficiaries and Estimating Entitlement

The aim of Safety Nets programme is providing a predictable transfer to most vulnerable populations. Following a review of the asset ownership and analysis of the food, income and expenditure patterns of the different socio-economic/wealth groups (summarized above and detailed in the accompanying HEA baseline profiles), this study recommends selecting households from the Very Poor Wealth Group of each of the three livelihood zones as beneficiaries of the planned cash transfer/safety nets programme (see Annex: Beneficiary Selection Criteria). In summary, the Very Poor wealth groups have the following characteristics: (i) Livestock wealth ownership: 0 - 5 camels; 0 - 6 cattle and 10-20 goats/sheep; (ii) Other criteria for identifying the very poor/most vulnerable groups include: Female headed households (widowed and with young children), orphan hood, chronic illness including presence of malnourished children, labour poor households, elderly, disability and high dependence ratios. In urban areas, asset ownership and incomes are the most important characteristics, with those with the lowest asset and income levels being considered the poorest (see profiles).

Deficits and Entitlements

***Survival and Livelihood Protection Thresholds*:** The HEA analysis allows us to estimate two thresholds for household incomes and food access levels in the reference year in order to understand whether these levels are acceptable or if households face deficits in the reference year. These are: (i) Survival Threshold - that is if households have sufficient access to incomes to cover the *cost of 2100 Kilocalories and that associated with food preparation and consumption*; and (ii) Livelihood Protection Threshold – that is, if household total incomes can cover the costs associated with maintaining existing livelihood assets, expenditure on social services and maintaining a locally acceptable standard of living. In the baseline year, all wealth groups' resources were assessed to be adequate to cover both their survival threshold and their respective livelihood protection thresholds (See Fig. 3 and 4). This is associated with the fact that all three livelihood zones did not face major droughts or serious shocks since the 2011 drought, and that they were considered to be on a recovery path, although the chronic insecurity and weak/non-existent social services and institutions perpetuate the existing widespread poverty. These threshold levels confirm the need for interventions to be focussed on strengthening existing livelihoods and strategies in order to build the resilience households to external shocks. However, households in the Poor and Very Poor Wealth Groups were only able to meet these thresholds through access to social support and Loans without which they will fall below these thresholds.

Figure 3: Total income Baseline – Pastoral

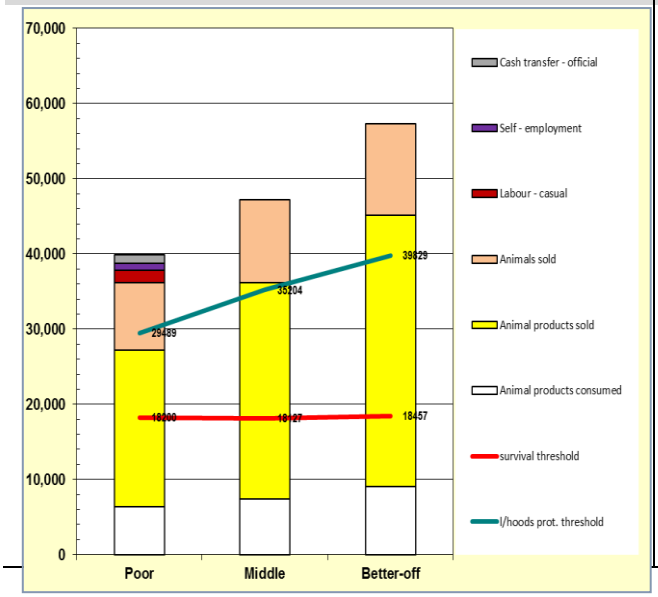


Figure 4: Total income Baseline – Urban

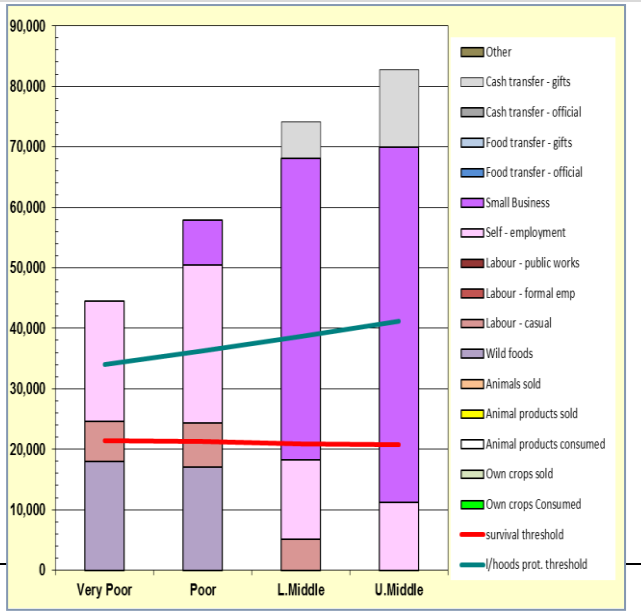


Figure 3 and 4 are a comparison of households' income with the survival and livelihood protection thresholds. This analysis indicates that the all wealth groups were able to generate enough resources to meet their basic food and non food needs without the safety nets support in the reference year. The very poor on the other hand cannot meet these basic costs without getting the loans and cash transfers, which implies that the very poor are able to survive because of these arrangements. To promote self sustenance, it is crucial to consider this reality and use this information as targets for amount of resources required to for households to sustain themselves.

Estimating entitlements

The analysis of typical shocks and adverse events on livelihood groups and wealth groups can be useful in determining level and duration of safety nets support (such as cash transfers). An illustrative scenario analysis was done based on the drought year information in 2011. The analysis shows that the poor households would need a total of SOS 22,418,000 (about $1000), throughout the year to cover the significant food deficits that would be experienced during the drought year. This translates to about SOS ~1,870,000/month ($85) for 12 months to meet both survival thresholds (SoSh. 506,000/month, about $25) and livelihood protection thresholds of (SoSh.1,362,000/month, about $60). The 2015/2016 reference year was considered a normal year. However, at the time of writing the report – 2016 – the year turned to be a drought year with the failure of the *deyr* rains. However, this year is not considered as bad a year as 2011 (which was a famine year in some areas of Somalia). Therefore, both survival and livelihoods protection deficits would be lower than those of 2011. Further time-series research and a determination of the nature of the 2016/2017 year would be required to get a more accurate determination of the deficits, but the estimate based on the 2011 situation provide a useful guide

The analysis also shows that in the months of Jan, Feb, Mar, Aug and Sep, the deficits are the lowest, while the in the remaining seven months, the deficits are the highest (Figure 6). In all 12 months, the Very Poor households would require both emergency and resilience support in a bad year.

These thresholds can be used as a guide for setting cash transfers in safety nets programmes. As a guide, the STREAM Consortium will provide (i) under $85 per month to the households in Very Poor Wealth Groups ($85 being the estimate for the even more difficult drought year of 2011). In the months of January, February, March, August and September, the amounts will be lower. Maintaining this level of cash transfers for a number of seasons (a few years) will help protect livelihood assets and maintain sufficient access to food, and is expected to help households build more assets and therefore allow them limit the damage (mitigate) from shocks/adverse events, recover quickly and more easily from the effect of such shocks (i.e. become more resilient)

Fig. 5: Deficits and seasonality