

Somalia Livelihood Baseline

Northwestern Agropastoral Livelihood Zone

| July 2022

Zone Description

The Northwestern Agropastoral Livelihood Zone¹ in the north-western part of the Somalia on the border with Somaliland in Ethiopia. The Northwest Agropastoral Livelihood Zone (SO03) is located in the Northwest Zone of Somalia and covers parts of Awdal and Woqooyi Galbeed regions, including Borama, Baki, Hargeysa and Gebiley districts. It is bordered by the West Golis Pastoral Livelihood Zone to the north, by the Hawd Pastoral Livelihood Zone to the east and south and by Ethiopia to the west. The most recent population estimate for this zone is 362,942 (UNFPA 2014) with a population density averaging 55 people per square kilometer.

This zone occupies approximately 6,590 km² and the topography ranges from 1050 meters above sea level to the south of West Galbeed to 1700 meters above sea level at the Ethiopian border. Soils are mainly loamy-clay, which supports rain-fed farming. The terrain is undulating, with scattered canopy and acacia trees throughout the zone. The northeast is more arid, with grasslands giving way to low brush and grass clumps. The livelihood zone receives relatively high rainfall compared to much of Somalia, ranging from 350 - 400 mm during an average year. As shown in figure 1, this livelihood zone has one extended rainy season with two distinct peaks. Unlike much of southern Somalia, where the first season occurs from April to June and the second from October to December, here the first period, known as gukaran spans April-August and the second rainy season, from January to mid-March, is known as the hays. Another brief period of rain typically occurs in November, and these rains are referred to as the deyr, but these are most likely to fall in the areas around the East Golis Mountains and Guban of the northwest. Temperatures in March-October range from 30-35oC and drop to 11oC from October to February.

Livelihoods in the zone are anchored on agropastoralism. Sorghum and maize cultivation, as well as cattle production are the main economic activities in this livelihood zone. Three crop harvests occur during the year, sorghum planted at the end of March to mid-April is harvested in October and maize planted in February-March and September and harvested in July and January respectively. Various methods of land preparation are used; tractors are the main method, along with oxen and hand ploughing used mainly by poor households. Seed broadcasting is the main sowing method. Harvested cereal crops are mainly stored in underground pits, making them susceptible to pests and variable soil moisture levels, contributing to post-harvest losses.



¹ Fieldwork for the current profile was undertaken in June of 2022. The information presented in this profile refers to the **reference year**, which was the **consumption year** that covered the period April- 2020 to March 2021. Provided there are no fundamental and rapid shifts in the economy, the information in this profile is expected to remain valid for approximately five to ten years (i.e., until 2031). All prices referred to in the document are for the reference year.

Livestock provide the most important source of cash income in this livelihood zone. Milk sales and live animal sales combined accounted for most of the cash income for all households in the reference year. Camels and cattle are the most valuable of the livestock raised in this zone; sheep and goats particularly vital for poorer households, who have very few cattle. Poorer households also depend on seasonal labor, self-employment, such as selling firewood and charcoal, and social support from relatives and neighbors. Historically, no major annual livestock migration occurs in the zone. However, in recent years, with decreased rainfall there has been some movement across the border into Ethiopia, where animals remain through the gukaran season. Continued ongoing shortages in annual rainfall may cause permanent shifts in livestock migration patterns in the zone in future years

The market infrastructure is relatively developed and links rural households to markets in Hargeisa, Borama and Gebiley. Trade in cereal commodities peaks after harvest, with maize sold at the Hargeisa market and Borama and Gebiley the primary markets for sorghum. Dry seasons see a peak in local livestock sales and export sales peak during the Hajj, particularly for goats. Milk sales are continuous throughout the year, with peaks in May-June and in October.

The most damaging intermittent hazards in this livelihood zone in order of severity are droughts and chronic water shortages, inflation, particularly of food products, insecurity due to clan rivalries, pests, diseases (both human and livestock) and environmental degradation. Livestock production is constrained by lack of veterinary services, with agropastoralists relying on indigenous knowledge to manage ecto- and endo-parasites. In some instances, agropastoralists purchase drugs from veterinary centers.

Markets

The main markets in this zone are Hargeisa, Borama, Wajale and Gebiley. These markets form the main demand for milk and livestock, as well as flow of food and other goods to local consumers. The market centres act as hubs for cross-border trade with Djibouti and Ethiopia. Roads in this zone are relatively good, compared to many other areas of Somalia, however, most remote villages are still connected to the main tarmac roads by dirt tracks that quickly become impassable during the rainy seasons. These roads, which run across riverbeds, hills and mountainous terrain, are difficult to traverse even at the best of times. In addition, most households do not have access to affordable transportation options. Village markets, therefore, tend to be the immediate connection that poorer households have to the larger market network, which puts them at a disadvantage in terms of both the price at which they can sell their goods, as well as the price they need to pay for food and other goods.

The main markets that provide cereals are Borama, Gebiley and Hargeisa markets who get inflows of maize and sorghum from Ethiopia. Local traders then obtain purchase food and carry it on east to the Burco village market and even further northwest into Djibouti. Like other parts of Somalia, the prices of imported items are linked to periodic monsoon tides that affect sea transport.

The northern Somali livestock trade is linked to the lucrative export of live animals through the ports of Berbera, Bosasso and Djibouti across the Gulf of Aden to southeast Asia. This part of the largest movement of live animal trade in the world. The ports are linked to the interior rangelands through a series of clan-based corridors through which the trade is managed.² The absence of storage and processing facilities for milk, restricts the demand for milk to local towns and households through sale of milk or ghee throughout the year.

The labor market for this zone is mainly comprised of local seasonal agriculture. Better-off and middle households cultivate fields of 2 to 3 hectares, requiring extra-household labor to manage during the peak labor season. Seed sowing, weeding and harvesting times are the most labor-intensive periods, and households on the upper end of the wealth spectrum hire extra help, sourced from members of poor households, to work on their farms. In a bad year when drought or flooding decrease agricultural labor opportunities, poor rural households may seek casual labor in urban areas or increase firewood and charcoal sales.

Timeline and Reference Year

The baseline assessment refers to a specific period called the 'reference year. For example, in the *Northwest Agropastoral Livelihood Zone*, the reference year covered the **consumption** period from April 2020 – March 2021. The consumption year refers to the 12-month period that follows the lean season. This is usually marked by the harvest of the primary crop produced in the livelihood zone. During community leader interviews, informants were asked to rank the last five years in seasonal

² Nisar Majid, Livestock Trade in Djibouti, Ethiopian, and Somali and Ethiopian Borderlands, Africa Programme, September 2010, AFP BP 2010/01

performance, with '1' indicating a poor season and '5' an excellent season. The table below, which summarizes the response of the community leaders, shows that food security is considered relatively stable and has not fluctuated much in the last three years.

The reference year April 2020 to March 2021 was considered an average year free from heavy rains or unseasonably long dry periods. Though households report crop and livestock diseases and pests, they were not significant or widespread enough to deviate from normal production levels. The availability of agricultural labor activities was stable throughout the 12-month reference period, which provided sufficient cash and in-kind payments for the poorer residents of the zone.

Production Year		Rank	Critical Events
2022	GU	2	Erratic rains
2021	DEYR	3	Rainfall performance was fair
	GU	3	Rainfall performance was fair
2020	DEYR	2	Rainfall performance was fair
	GU	3	Rainfall performance was fair
2019	DEYR	2	Drought
	GU	3	Rainfall performance was fair
2018	DEYR	1	Rainfall performance was fair
	GU	3	Rainfall performance was fair
2017	DEYR	1	Drought

Seasonal Calendar for Reference Year

This livelihood zone has one extended rainy season with two distinct peaks. The first season occurs from April to June and the second from October to December, here the first period, known as gu-karan spans April-August and the second rainy season, from August to October, is known as the Karan. Another brief period of rain typically occurs in November, and these rains are referred to as the deyr, but these rains are fickle, and they are most likely to fall in the areas around the East Golis Mountains and Guban of the northwest. Overall, the zone receives between 350 to 400 mm of precipitation per year.

Land preparation begins in late March before the gu-karan rains and in October before the deyr rains. Sorghum and maize are the main crops grown in the livelihood zone. Sorghum is a long duration crop grown for 6 months while maize is short season grown for 3 months. Sorghum and first maize crop are mostly harvested in gu-karan. Weeding occurs from mid-March to June, and crop pest and disease outbreaks coincide with these periods. Crop pests and diseases coincide largely with the weeding period, from mid-March to June. The lean season occurs from mid-February to mid-June. Consumption of households' own food peaks from July-August, mid-September to November and mid-December to February, following the harvests. Trade in sorghum and maize happens mainly in August-September and November-December, with some trading in February.

Sale of livestock and livestock products provide the main cash income for agro-pastoralists. Livestock sales occur throughout the year even during the dry season. However, local livestock sales peak in March and export sales peak when demand around the Hajj is high in November to December. Milk sales peak in May-June and October. Opportunities for casual labor peak from March to mid-July. Peak trade in cereal commodities occur after every harvest, while labor opportunities coincide with the peak of agricultural activities particularly land preparation, weeding and harvesting.

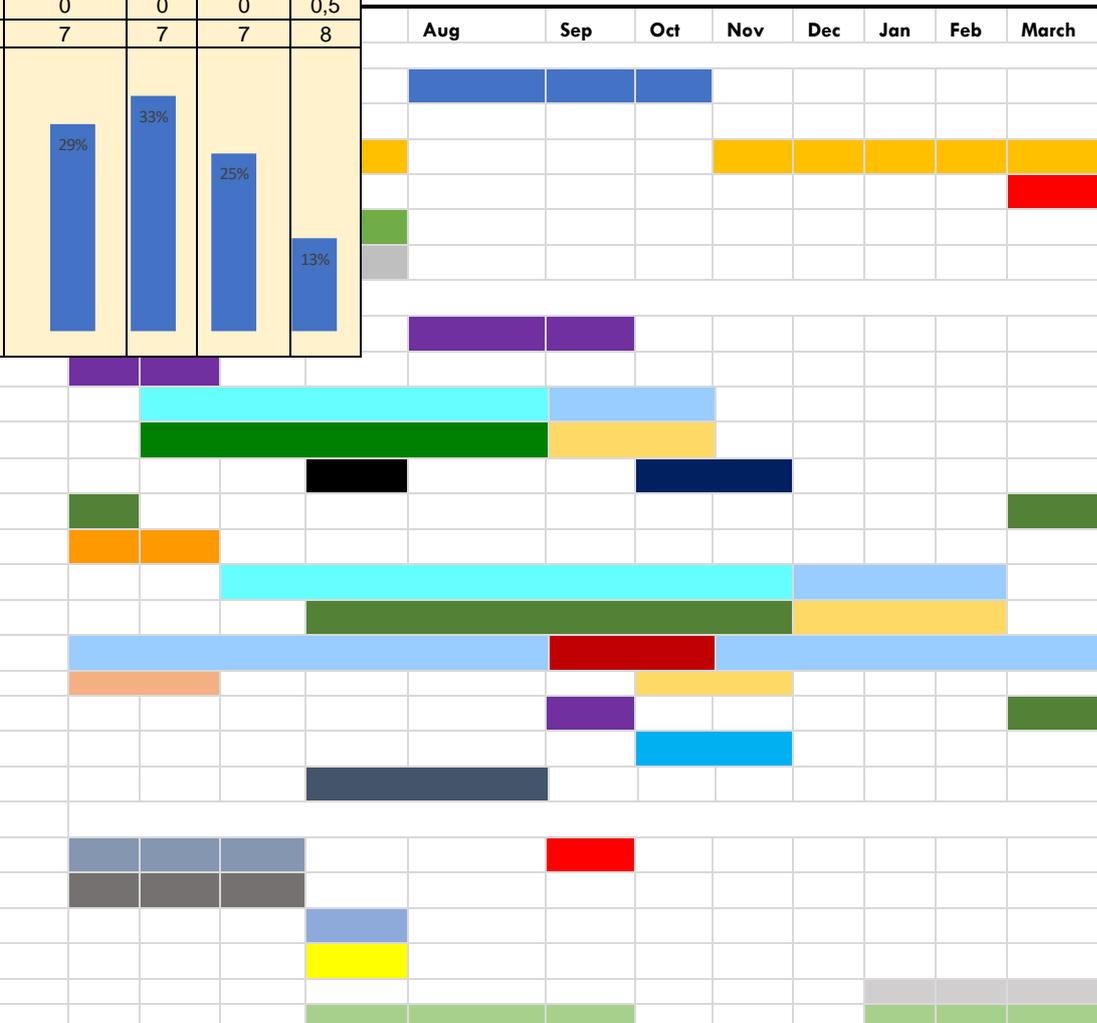
Wealth Breakdown and Productive Assets

Productive Assets	Very Poor	Poor	Midd-le	B/Off
Land area owned (ha)	2	2	3	5
Land area cultivated (ha)	1	1,5	2	3
Camel	0	1,5	4	8
Cattle	2	4	7	10
Goats	4	6	13	18
Sheep	2	6	13	22
Donkey	0,5	1	1	2
Tractor	0	0	0	0,5
HH size	7	7	7	8

The table below summarizes the types and numbers of productive assets that typical households within each wealth group own and the percentage of households within the zone that falls into each wealth group.

Wealth is determined both by the number of livestock owned

Wealth Breakdown



and by the amount of land cultivated. Species of livestock owned, productivity of land and other livelihood activities also determine wealth. Cattle and goats are the most commonly owned livestock, with camels being the most valuable animals. Ownership of these determinant factors increase with wealth – wealthier households own more animals and cultivate more land than poorer households and hence can earn more cash and food from their assets. Very poor households and Poor households comprise about sixty percent of the households.

Better-off households make up around 13% of the households in this livelihood zone, and those in the middle wealth group make up 25% of the households. Most households are male-headed; however, the proportion of female-headed households is slightly higher among the poor wealth group (10%) compared to the middle and better-off (5%). Most poor households and middle groups are monogamous, while better-off have 1-2 wives.

Households here typically own more land than they cultivate. Lack of time due to working for cash on other farms and livestock management, lack of resources to pay for hired labor, as well as inferior land quality, and poor seasonal performance are reasons why farmers may not cultivate all the land they own. Middle and better off households cultivate more land, in part because they have more productive household members within the homestead; and can employ more labor by hiring poorer household members in exchange for cash, food or access to their oxen and ploughs. These households are also able to maintain larger herd sizes, effectively balancing household labor between herding and cropping activities.

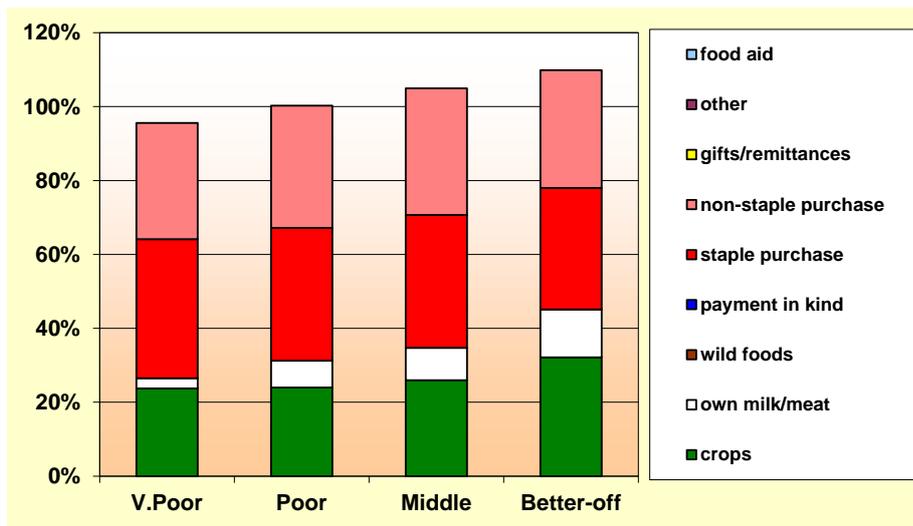
There is a strong social support network through neighborhood support for the most vulnerable, food gifts, kinship support and religious obligation. The better-off and some middle households receive remittances and access loans in times of crises. Obligatory Zakat is normally given annually by the better-off in the form of livestock and crops to poor households alongside other gifts in cash and in kind. Additionally, the middle and better-off households donate meat and milk to poor households.

Sources of Food

The graphs below present the food sources for households in different wealth groups in the livelihood zone from April 2020 to March 2021. April represents the start of the consumption year because the main harvest of staple crops begins, marking the end of the hunger period. Therefore, food is presented as a percentage of 2100 kcal per person per day for the 12 months. This was considered an average year.

There are three main sources of food in this zone and one minor source. The main sources are own crop production, purchased food, and milk and meat own livestock production.

Food purchase is the most important source for all wealth groups, accounting for over 60 percent of annual energy needs. Food purchase decrease with wealth due to the less reliance on purchases by wealthier households who harvest more crops. The better off obtained 65% of their food from markets compared to 69% to 70% for very poor, poor and middle respectively.

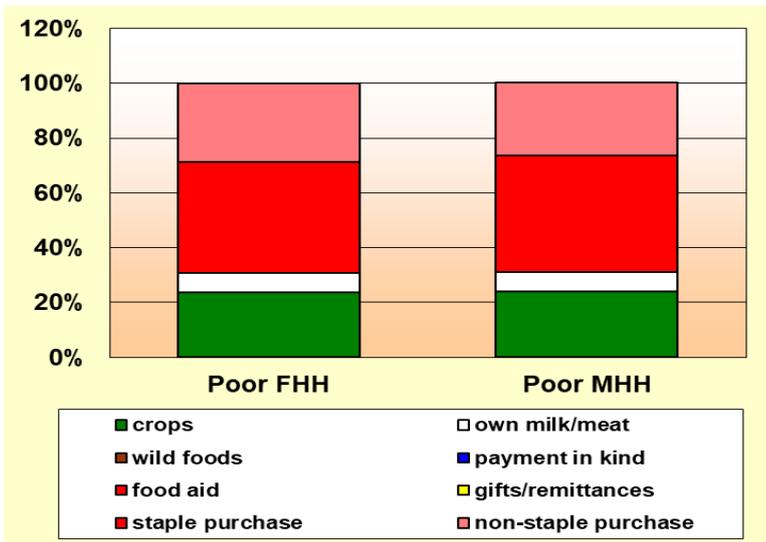


In the graph, food access is expressed as a percentage of minimum food requirements, taken as an average food energy intake of 2100 kcals per person per day.

The second most important strategy for all households in this livelihood zone is crop production. Very poor and poor households produce a quarter of their annual energy needs respectively. In contrast, middle households get 26% of their food from production while the better off produce close to a third of their annual food needs.

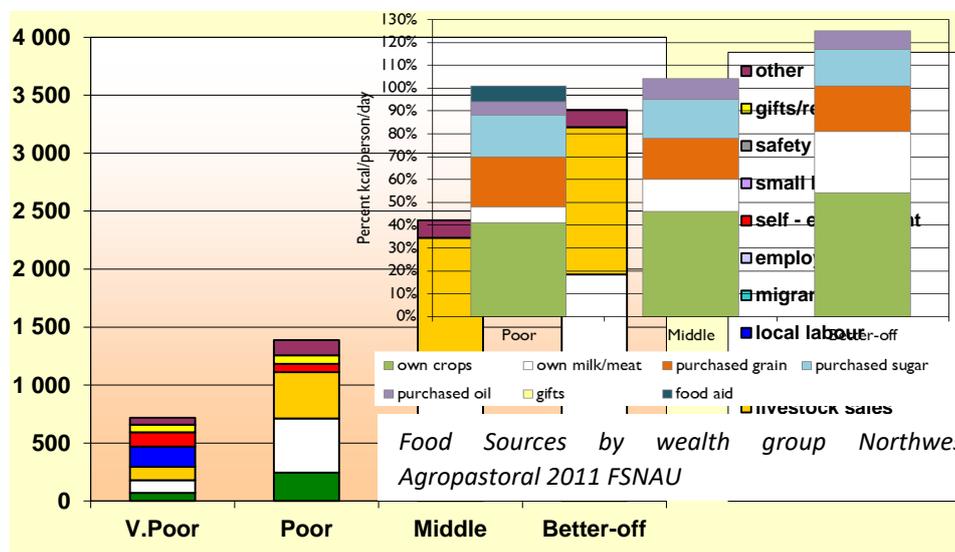
Own milk and meat covered around 3-7% of minimum calorie needs for the bottom two wealth groups and 9-13% of minimum calories for the top two groups. Very poor households fell short of meeting 100% of the annual energy requirement during the reference year. Despite using all able-bodied household members to work, this wealth group is at risk of food insecurity especially in the face of production-based hazards and increased food prices.

Poor female-headed households and poor male-headed households had a similar pattern of food access in the reference year (see graph at right). Both types of households cultivated almost similar amount of land and number and type of animals and subsequently secured 24% and 7% of their minimum food needs from own production and cow and goat milk. Importantly, poor male headed households benefited from meat from slaughter of goats which female households did not access. Both types of households purchased similar staple cereals, that is rice, wheat flour and pasta, which met 40% (FHH) and 42% (MHH) of their minimum annual food needs. Sugar and cooking oil contributed a further 29% (FHH) and 27% (MHH) of annual food needs. They're very marginal differences in the source of food considering gender dimension between poor female and male headed households.



The graph shows sources of food for poor female-headed and poor male-headed households.

When we compare the new HEA baseline (reference year April 2020 – March 2021) with the old HEA baseline (reference year April 2010–March 2011), there are several changes to note. First, in the 2010/11 reference year, crop and livestock production provided the majority of the energy requirements for the poor, middle and better-off in the livelihood zone – 49% to 80% (see graph of food sources by wealth group in 2010/11 at right). In the new baselines, crop production contributed almost half of the earlier baselines between 31% and 45% of annual food energy for all wealth groups. Second, food aid was present in old baseline but absent in new baselines.³



Food Sources by wealth group Northwest Agropastoral 2011 FSNAU

The third important difference is that contribution of purchased food has increased in the new baseline from previous range of 42% to 45% for all wealth groups in old baselines to over 60% for all wealth groups. Additionally, for better-off households, milk and meat from own livestock production declined from about 25% of annual food needs in the old baseline to about 13% in the current assessment. This may reflect their decline in livestock holdings following impact of recurring droughts since 2010/11 reference year.

Sources of Cash Income

Agriculture is the main driver of this livelihood zone's economy. All households benefit from crop production, whether from selling their own crops or working for other households throughout the year in various aspects of the production cycle. Livestock production is the most important cash income source for all wealth groups accounting for 31% of very poor's annual income, 63% for poor and 81% and 84% for middle and better off respectively.

For very poor households, cash income from agricultural labor is second most important cash income source making up 25% of their total annual earnings. Agricultural labor is mostly land preparation, sowing, weeding/pruning, and harvesting. Self-employment is third most important source of income for poorer households making up 17% of annual cash income. Very poor households earn about 10% of their annual cash from selling crops, 9% from gifts and remainder 8% from credit.

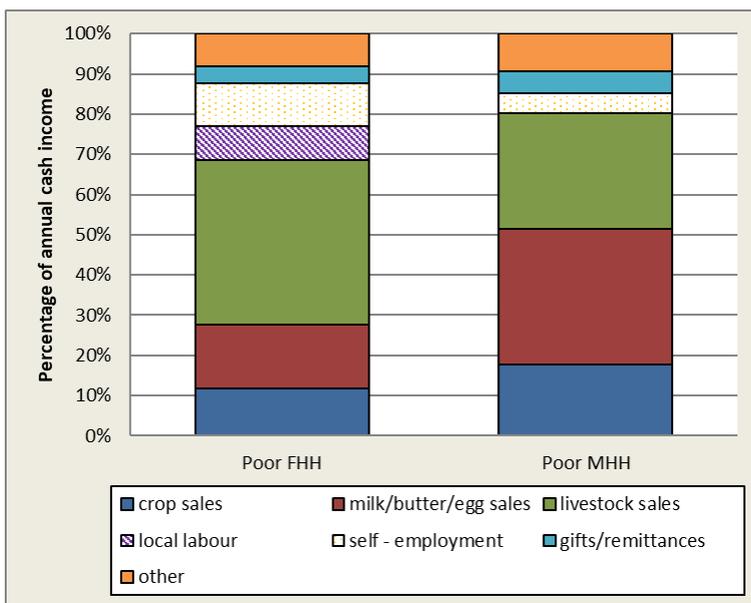
³ In the old baseline, food aid was received by the poor wealth group.

Since poor households have access to more land, they can produce more crops for consumption and sale. Poor households sell food and cash crops, though coffee and cotton sales make up nearly three-quarters of annual crop sales. The third most important income source for poor households is livestock sales. Poor households earn up to 16% of their income from selling livestock, mostly pigs, goats, and chickens. Lastly, some poor households earn cash from brick production and household construction. However, this income source only accounts for 6% of their total income.

Middle and better-off households get the bulk of their annual earnings from crop sales. Like their poorer neighbors, most of the income from crop sales, obtaining 18% from selling some of their food. Significantly larger incomes from livestock allow middle and better off households to dedicate most of their production to consumption only selling surpluses which contribute about 12% of their incomes respectively.

There is a huge gap in wealth between the very poor and better off populations, suggesting income inequality. The income for the very poor is 5 times lower than that of the better off.

In terms of cash income, poor male-headed and poor female-headed had similar sources of income (see graph at right). **However, poor male-headed earned SLSH 1,387,000 or 42% more than the poor female-headed households.** Poor female headed households on average received more cash from livestock sales than poor male headed households. By contrast, poor male-headed households earned more income from milk sales. Crop sales accounted for 18% of poor male headed households compared to 12% for female headed households. Poor female headed households earned more income from casual labour and self-employment activities which accounted for SLSH 185,000 or 20% of their total annual cash income. Poor male headed households on average did not earn any income from casual labour activities and only less than 5% (SLSH 70,000) of their annual income from self-employment. The poor male-headed households have the advantage of having one or more males in the household and have relatively lower dependence ratio compared to female headed households. This additional labour translates in more income compared to poor female-headed households.

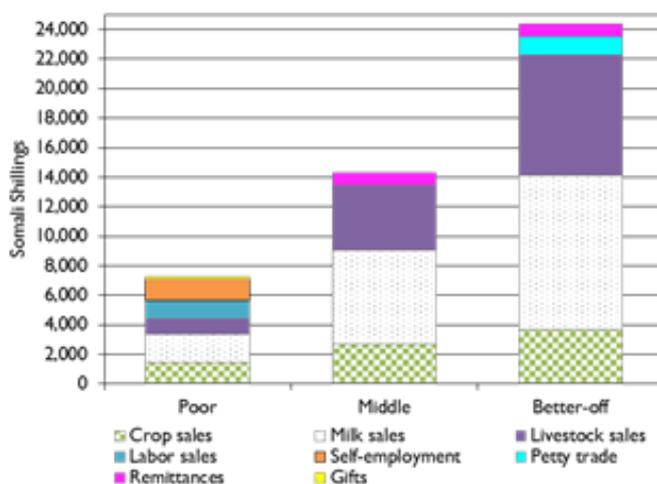


Sources of cash income for poor female-headed and poor male-headed households.

When we compare the new 2020/21 HEA baseline with the old 2010/11 HEA baseline there are several similarities to note. First, in 2020/21 households obtained most of their incomes from milk and livestock sales contributing over 50% of annual incomes for all households. While there are heard size losses livestock remain an important income source. Secondly crops remain second important income source although it has declined considering recurring hazards.

Third, self-employment remains an income for poor household as well as casual labour contributing similar proportions to as in old baseline.

There are two major differences noted. First, the absence of petty trade income among the better off in current baseline. Second, the middle and better off no longer have access to remittances and the poor now receive gifts that were absent in old baseline.



Cash income by wealth group, Northwest Agropastoral 2011, FSNAU

Expenditure Patterns

The graph presents expenditure patterns for the reference year April 2020 – March 2021. While absolute expenditure increases with wealth in line with total cash income, this graph's expenditure breakdown by percent shows the *relative* amount of income spent on different categories.

Households in this livelihood zone need to cover a range of essential expenditures over the year. These include staple food, non-staple food, household items (like salt, soap, tea, lighting, grinding services, etc.), productive inputs, social services (which include school and health), clothes, and other miscellaneous items.

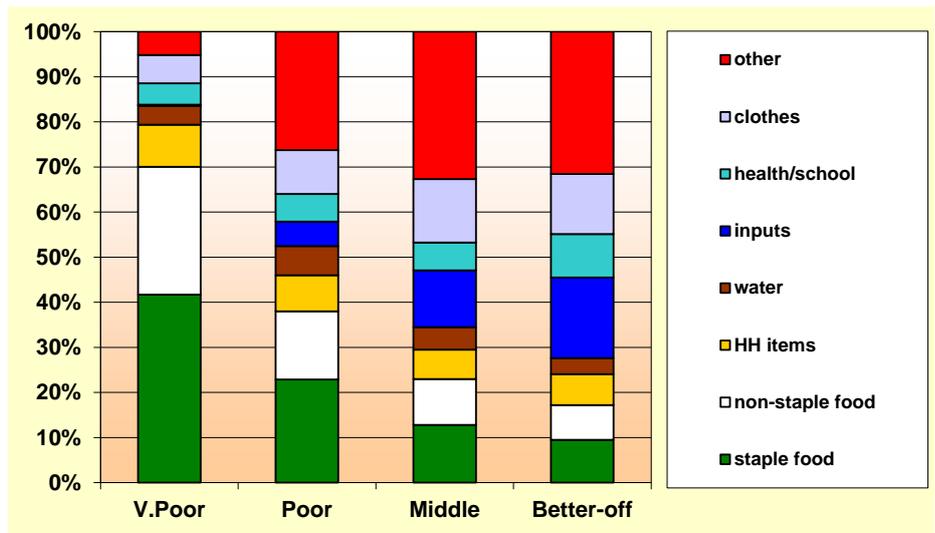
The expenditure information reveals a few important points. For example, all wealth groups had to dedicate a portion of their cash to buying staple food; this ranged from around 22-42% of annual expenditure for the poorer households to around 10-13% for middle and better-off households. Most of the staple food category comprises Rice, wheat, and pasta. These staple foods are ubiquitous within the zone; therefore, the internal supply is quite high; they are typically less expensive. Spending on non-staple food, like oil, sugar, dried and fresh fish and meat, accounted for an additional 8-28% of annual expenditure. The trend shows that the poorer a household is, the more they spend on staple and non-staple foods. This is directly correlated to the amount households can produce for households' consumption. Once harvested stocks are depleted, households will rely more on the market to purchase essential and non-essential foods.

The relative expenditure on household items such as tea, salt, soap, cooking fuel, grinding, and utensils takes up less than 10% of annuals expenses made by all households. Productive inputs investments consist of animal drugs, plowing costs, seeds, pesticides, labor, and livestock restocking. The very poor households did not have the economic capacity to invest in productive inputs, whereas poor households spent about 5%. Middle and better-off households spent around 12-18% of the total cash income, respectively.

The proportion households spent on social services, including health and education, increased with wealth. This accounted for 4-5% of annual expenditure among the very poor and poor households. Aside from food purchases, the amounts spent on social services represent the second highest among middle and better-off households, with middle households spending nearly a quarter and the better-off spending a third of the total annual income on this category. This may be attributed to the costs associated with secondary and university-level education.

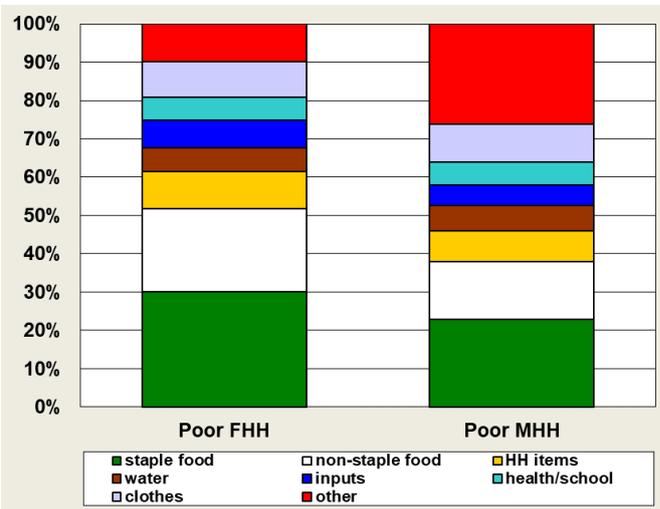
Clothing made up 5-12% of expenditure across the board in the reference year, with absolute expenditure increasing as you move up the wealth group. 'Other' items included non-essential items like tobacco, festivals, transportation, gifts, and other discretionary expenditure that can be reduced or eliminated in a bad year. This category accounted for 6% of very poor expenditure, 26% for poor and 31-32% for middle and better-off household expenditure in the reference year respectively.

PFHH expenditure on staple and non-staple foods was approximately SL\$ 504,000 or 52% of their total annual spending. In terms of the actual cash spent on food, this amount was less than what poor male-headed households SL\$ 527,000 spent but proportional to annual expenditure it was higher by almost 14%. Indeed, overall spending patterns



The graph provides a breakdown of total annual cash expenditure according to category of expenditure.

were proportionally almost the same although poor male headed households spend relatively more in absolute amounts and proportional (see graph, right). For poor female headed households, as for male headed households, household items accounted for 10% and 11% respectively of their annual spending; social services were 6% and 9% and clothing expenditures accounted for 9 and 14% respectively. Expenditure on airtime and transport was 10% of annual spending for poor female households compared to 37% for male headed households. Compared to poor male-headed households, the main differences were that male-headed households spent slightly more proportionately on transport and airtime whereas poor female-headed households spent proportionately a more on food items.



Annual expenditure for poor female-headed and poor male-headed households.

Hazards

The main chronic hazards affecting households in the Northwest Agropastoral Livelihood Zone are, in order of importance: drought, inflation, civil insecurity (clan rivalry), pests, Quelea birds, diseases (human & livestock), chronic water shortages, and environmental degradation.

Drought is a common and damaging hazard. A failure of either of the seasonal rains negatively affects pasture and water availability as well as crop and livestock production. With successive failures household economies are devastated as crop yields plummet, livestock lose body condition, leading to a reduction in conception and birth rates, losses in milk production and much reduced prices per head of livestock. Labor demand on local farms goes down and wild food yields are negatively affected as well. At the same time that incomes decline, the need to spend money increases as people are forced to buy more food and water, and they typically need to spend more money on human and animal health costs as opportunistic diseases take hold in malnourished people and animals. Persistent droughts in zone ruin investments in crop production and livestock and hinder access to household basic services including school, clothing and health services.

Pests and Diseases Crop pests, human and livestock diseases as well as quelea birds, which attack sorghum and maize crops, are the additional hazards here. Major livestock disease outbreaks, such as tick-borne disease and Contagious Caprine Pleura Pneumonia (CCPP), can cause significant deterioration in livestock body conditions and deaths, reduce income from livestock sales and deplete livestock herds. Limited availability of and access to veterinary drugs and services means that households have few options for preventing these outbreaks. Malaria and upper respiratory diseases are also common, leading to losses in labor – the most critical livelihood capital that poor households possess.

Market Disruption is not as high as it is in pastoral zones, but reliance on the market for food is still quite high, and several disruptive factors including rough monsoon winds that hinder shipping activities, bans on livestock export trade, border closures and flooding on local roads and local conflicts occasionally disrupt the flow of commodities and access to labor, goods and services.

Environmental degradation due to increasing variability and changes in climatic conditions are the main threat to the sustainability of the rain-fed agropastoral production systems here as well as in many other parts of the Horn of Africa. At the same time, poorer households in the Northwest Agropastoral Livelihood Zone have few options for meeting their cash needs and turn to collecting firewood and/or burning and selling charcoal to earn cash. Indiscriminate tree cutting and charcoal burning, beyond just contributing to rangeland degradation, are responsible for generating potential long-term impacts that result in a declining productive base for future generations.

Response Strategies

In response to hazards and years with bad production, households attempt to meet their minimum food needs and cash requirements through several strategies. These strategies are detailed for this livelihood zone below:

Very poor/poor	Middle/better off
Shifting of expenditure to essential items, especially cheaper staple grains, and reduction of expenditure on non-essentials.	Shifting of expenditure to essential items, especially cheaper staple grains, and reduction of expenditure on non-essentials.
Increased self-employment activities, including firewood collection/sale, charcoal burning/sale, and construction poles	Consumption of crop surpluses rather than sale
Increased search for local agricultural labor opportunities	Increased sale of livestock and slaughter of livestock
Increased sale of livestock, although this is limited for poorer households due to small herd sizes	Increased loan taking
Increased reliance on social support/gifts	Increased reliance on remittances
Migration over border into Ethiopia	Men in the middle wealth group increase short-term seasonal labor migration
	Increased petty trade activity by women in better off wealth group

In bad years, households employ a number of survival strategies in order to make ends meet and to find ways to reduce their non-essential consumption, increase cash income where possible and change their expenditure patterns. The better-off and middle households have more assets and diverse sources of income than the poor, which enable them to recover much faster from shocks like droughts. Better off households are able to shift expenditure away more effectively from non-essential items and they can consume surplus crops that would otherwise have been sold. They also have larger herds so can sell more livestock. Better off households are more likely to have relatives outside the zone who send remittances and are also able to increase the amount of loans they take as they are seen as more credit worthy.

Poor households try to expand their reliance on labor, sending male members to urban areas or other agricultural zones to find work and also increase their sale of firewood/charcoal. These households receive additional support from better off households in the form of gifts. In the worst years, people migrate across the border into Ethiopia in hopes of finding better conditions.

Key Parameters for Monitoring

The key parameters listed in the table below are food and income sources that substantially contribute to the household economy in the *Northwest Agropastoral Livelihood Zone*. Therefore, these should be monitored to indicate potential losses or gains to local household economies through ongoing monitoring systems or periodic assessments.

Item	Key Parameter – Quantity	Key Parameter – Price
Crop production	Sorghum – amount produced Maize – amount produced Mixed vegetable crops - amount produced	Sorghum – producer price Mixed vegetable crops - producer price
Animal production	Camels' milk – yields (season 1 & 2) Cows' milk – yields (seasons 1 & 2) Camels – herd size Cattle – herd size Goats – herd size Sheep – herd size	Camels' milk – producer price Cows' milk – producer price Camels – export price Cattle – export & local price Goats – export & local price Sheep – export & local price
Other	Cultivation labor – availability of seasonal jobs Harvest labor – availability of seasonal jobs Remittances – frequency of transmissions Petty trade – amount of petty trade	Cultivation labor – wage rates for planting/weeding Harvest labor – wage rates Remittances – amount per transmission Petty trade – returns on petty trade
Expenditure		Wheat flour – consumer price Rice – consumer price Sugar – consumer price

Program Implications

The longer-term program implications suggested in the table below include those highlighted by the wealth group interviewees themselves and those made by the assessment team following detailed discussions and observations in the field. All of these suggestions require further detailed feasibility studies.

Proposed project		Beneficiary wealth group
1.	Provision of veterinary services and drugs	All wealth groups
2.	Livestock restocking	Very poor and Poor households
3.	Putting in place facilities to ensure access to health services	
4.	Construction and stocking of more Schools	All wealth groups
5.	Provide portable (safe drinking) water for household use	All wealth groups
6.	Provision of interest free loans	Middle and better off households
7.	Provide pesticides to farmers at no or subsidized cost	Very poor and poor households
8.	Provide social protection or safety net programs aimed at building household resilience. Either direct cash transfers or mixed food and cash transfers	Very poor and poor households

MEB Threshold

What is a MEB?

A Minimum Expenditure Basket, or MEB, is the cost of those goods and services needed to meet minimum standards of health and wellbeing. MEBs can be calculated on a gradient from a survival MEB at the lowest level to a sector standard MEB at the upper level. The *survival* MEB represents the barest **minimum** cost to feed, house and clothe a family for survival. By contrast, a *sector standard* MEB represents the cost to meet minimum standards of wellbeing in key sectors (health, education, WASH, shelter and NFI, social inclusion, protection, and food security/nutrition). The sector standard MEB is often viewed as aspirational (i.e., what households should be able to afford to meet basic living standards not what they currently can afford). All MEBs are considered a *consumption* or *expenditure* threshold as they comprise a basket of goods and services that is purchased on the market. The cost of the MEB is typically compared to the income generated by local households to assess the gap between what how much is needed and how much is earned. Income gaps are usually taken as a measure of local poverty.

The MEB in Somalia

For over a decade there has been an operational MEB in Somalia, established and run by the FSNAU. To allow for comparability from north to south, the Somalia MEB is calculated in USD from regional market prices using a standard household size of 6. The cost is updated on a monthly basis to track seasonal price fluctuations.⁴ The Somalia MEB is essentially a survival MEB, reflecting an energy dense food basket supported by items to cook food and maintain hygiene (soap, firewood, kerosene, and grinding fees) as well as small lump sum amounts for education, health, clothing, community contributions, and contingencies. Water is an important component of the Somalia MEB (second in cost to food).⁵ To complement this survival MEB, in 2020, a sector standard MEB (by zone) was calculated alongside HEA baseline work in the northern pastoral livelihood zones for SCI Somalia.⁶ The sector standard MEB resulted in a relatively high expenditure threshold but provided SCI with a useful target for measuring outcomes of development interventions. In 2021, the Somalia Cash Consortium commissioned a revision of the Somalia MEB to better reflect the concerns and priorities of key sectors (WASH, health, education, food security, nutrition, and shelter/NFI).⁷ This led to the calculation of a Basic MEB (one each for rural, urban and IDPs) as well as a new sector standard MEB that included a nutritionally dense food basket and an aspirational education basket.⁸ Currently, the Basic MEB is being used to inform humanitarian cash transfer values within a scalable safety nets programme.

To avoid the application of too many different MEBs in one country, the new Basic Rural MEB will be used in SO03 to measure income gaps, poverty and resilience. Note that although the composition of the rural MEB baskets is the same for all rural areas, the actual cost differs to reflect regional price discrepancies.⁹ The SO03 MEB is calculated from prices from 2 northern regions (namely Awdal and Woqooyi Galbeed Regions).

Composition of the SO03 MEB

⁴ The value of the initial Somalia MEB was based on poor household expenditure data collected in the Baidoa **urban** HEA baseline assessment and as such it reflected urban spending patterns. It was calculated as a **monthly** minimum expenditure basket using prices from March 2007 (the reference year). There have been some adjustments to the Somalia MEB since 2009. These changes have taken place in consultation with local stakeholders, principally the Interagency Cash Consortium Group (ICCG) and the Cash Working Group. This means that all stakeholders use the same MEB (tailored by region to reflect regional prices) which guide their cash-based programming

⁵ (1) At the recommendation of the WASH sector partners, the water component in the MEB was increased from 5 to 9 drums to reflect Sphere standards (Somalia Cash and Markets Working Group, 2017: Recommended transfer values for cash-based interventions in the 2017 drought response). (2) In 2017, concerns that cash transfer values were high led to a review of the composition of the MEB. These discussions prompted a reduction in the diversity of the food basket. For example, the new MEB comprises a very limited number of food items (red sorghum, cowpeas, vegetable oil and sugar) which are all items that are all relatively low cost than nonetheless meet basic energy needs.

⁶ One difference between the survival MEB in Somalia and the sector standard MEB is that livelihood inputs are not included. In part, this reflects that it was initially set up as an urban MEB. However, it is also in line with how MEBs are calculated elsewhere in the world (i.e., livelihood inputs are generally not included).

⁷ The process of composing the rural, urban and IDP MEB baskets involved (i) interview sector heads to determine their priorities and confirm sector standards; (ii) based on sector priorities, draw up a list of key items, allocate prices and calculate the initial cost by basket; (iii) analyse expenditure data by wealth group from 13 rural and 3 urban HEA baselines and calculate average spending; (iv) compare poor and middle household spending patterns with the draft MEB cost (by sector basket) to determine the reasonableness of the cost against local preferences and local market availability of goods and services; and (v) finalise the composition of the baskets and the quantity of items in each basket for the rural, urban and IDP Basic and sector standard MEBs. Calculate the final cost by region and zone.

⁸ One reason why separate MEBs were calculated for rural and urban areas is that in rural areas, some items like charcoal, grinding fees, and rent/shelter, are not typical expenses (i.e., not purchased in the market).

⁹ To update the value of the MEB over time, the FSNAU carries out monthly market monitoring of 43 essential items and 5 currency exchange rates in 70 markets across Somalia. With these regular price updates, the cost of the MEB can be re-calculated on an ongoing basis by region and the transfer value discussed, confirmed or modified as needed.

Details of what is in each of the sector baskets is described below. Note that although the composition of the sector baskets in the Basic MEB is the same across all rural zones in Somalia, the actual cost by region and by livelihood zones differs depending on regional prices in a specific month or quarter.

Food sector basket: The MEB food basket is reasonably diverse. It includes 8 different food items plus salt and meets basic energy requirements of 2100 kcal/day/person. All food items are locally specific and the basket includes wheat flour, rice, sorghum, cowpeas, camel milk, goat meat, vegetable oil, sugar, and salt.¹⁰ Some of these items are not typically purchased by local households but are produced (such as sorghum, milk and meat) but the MEB food basket is composed to reflect the local consumption patterns. There are some differences to the local diet (notably the addition of cowpeas and no pasta in the MEB food basket) because at the national level, the nutrition sector advocated for a more nutritionally sensitive MEB food basket.

WASH sector basket: The WASH sector basket includes the minimal items identified by the WASH cluster to maintain basic hygiene. Soap and water are the priority items as well as items to collect and store water (jerry cans and a bucket) and women's sanitary pads. In terms of the quantity of soap and water, the MEB reflects Sphere standards for soap @ 2 bars of soap/person/month for all washing needs (in this case, soap is divided into 1 x 150gr bar soap/person/month and 1 x 100gr laundry powder/person/month) and @ 10.5 litres of water/person/day for drinking and washing. Other basic hygiene items include 2 x 10 litre jerry cans for hauling water and 1 x 20L bucket with lid. Water sterilising tablets are not included due to the poor quality of tablets available in rural markets.

Shelter & Home NFI sector basket: The basket includes a lump sum amount to reflect the repair and replacement value of essential home NFI (non-food items). The shelter cluster includes 7 items in the essential package including lighting (torch + batteries and/or solar lamp and charger); sleeping items (bedding + sleeping mats); a kitchen set (cooking pot, kettle, utensils), jerry can and mosquito net. The lump sum amount allocated for repair and replacement is on par with average poor household expenditures (+ 15% contingency) across 18 rural livelihood zones. It also works out to about one-third of the average purchase price of the 7 essential items package. A plastic sheet, or tarpaulin, is has been added as a separate item because it typically needs to be replaced new every year. The shelter cluster also includes a jerry can in their essential package, but this item is covered in the WASH basket. Notably, there is no allocation for firewood or charcoal in the rural basic MEB as rural households usually collect firewood for free rather than pay for it.

Clothes basket: The sector standard is 1 set of new (or gently used) clothes for each member of the household per year. This includes basic top and bottom as well as footwear. However, in the basic rural MEB as applied in SO03, a lump sum amount based on 50% of average poor household spending has been used to reflect the cluster's recommendations.

Education sector basket: On average, it is assumed that 2 children per household attend school with expenses reflecting spending on primary school education.¹¹ The rural Basic MEB education cost is a lump sum amount based on average poor household spending (+ 15% contingency) across 18 rural livelihood zones. The amount reflects the "unmet" needs spending, that is, spending by households over and above what is provided for free in the public sector.

Health sector basket: The Sphere Humanitarian standard is that households should at minimum be able to pay for 1 x medical consultation and 1 x treatment per person per year. As the northern regions are working toward a "provider-pays" model of universal health care, the health cluster recommended that only the unmet needs portion of health spending should be included in the MEB. The unmet needs portion of health costs are best captured in poor household spending. The rural Basic MEB used average poor household spending (+ 15% contingency) across the 18 rural livelihood zones.

Transport & Communication: Transport costs to school and health clinics are already included in the education and health sector baskets (i.e., the 15% contingency covers transport costs). Thus, in the transport and communication sector basket itself, airtime credit for 1 x mobile phone/household has been added with an average cost of USD 3/phone/month. The recent baseline expenditure data from SO03 point to higher spending by poor households (about USD 90/household/year) on internet and mobile phone costs, hence the amount allocated in the Basic MEB may be too low. Notably, 2 phones/household is typical for the very poor and poor in this zone.

Community Contributions: *Zakat* payment and contributions for *Ramadan* were included in the SCI pastoral sector standard MEBs calculated based on average livestock assets of middle households. However, in the national exercise, no amount for community contributions was added to the rural Basic MEB to reflect that it constitutes more of a *survival* MEB.

¹⁰ Note that the MEB food basket is not a comprehensive LACON diet (Save the Children, 2012: *A Cost of the Diet analysis in Bari District of Somalia*, December 2012). In 2012, Save the Children estimated that the LACON diet, in their model, would cost 1,452% of the annual income of poor households (based on 2012 HEA data).

¹¹ Although an itemised education basket is a sound alternative approach to estimating the education sector basket, the potentially large number of items in the basket makes it burdensome to monitor. For this reason, the expenditure-based approach was adopted in the rural Basic MEB.

Livelihood inputs: Whether to include a minimum amount for livelihood costs in a MEB is a question of debate. In most MEB calculations, livelihood input costs are not included on the basis that there is no consensus of the minimum required and inputs vary widely by wealth group depending on their assets. Moreover, input expenses vary widely by livelihood mega-zone making an average cost difficult to determine. Another point is that livelihood expenditures can be accounted for by subtracting the cost of the inputs from total household income and then comparing net income to the MEB benchmark. For this reason, no amount is allocated for livelihood inputs in the rural Basic MEB.

Contingency: No separate contingency amount has been added to the value of the MEB although an amount for extra expenses (i.e., for transport) has been included in the education and health sector baskets separately.

How much does the SO03 MEB cost?

The value of the SO03 rural Basic MEB for the Apr20-Mar21 reference year is US \$149/HH6/month or US \$1,788/HH6/ year. This includes a food basket consisting of 9 items as well as 6 non-food sector baskets (see table below).

Annual				Monthly			
Household of:		6		Household of:		6	
Rural Basic MEB - TOTAL ANNUAL COST Apr'20-Mar'21				Rural Basic MEB - TOTAL ANNUAL COST Apr'20-Mar'21			
Sector	USD	SLSH		Sector	USD	SLSH	
WASH	188	1,603,122		WASH	16	133,593	
Shelter & Home	75	640,718		Shelter & Home	6	53,393	
Clothing	60	510,845		Clothing	5	42,570	
Education	42	357,592		Education	4	29,799	
Health	36	306,507		Health	3	25,542	
Livelihood inputs	0	0		Livelihood inputs	0	0	
Transport & Communication	36	306,507		Transport & Communication	3	25,542	
Food MEB + nutritional add on	1,350	11,493,915		Food MEB + nutritional add on	112	957,826	
TOTAL	1,788	15,219,205		TOTAL	149	1,268,267	
Total Non-food items (NFI MEB)	438	3,725,290	24%	Total Non-food items (NFI MEB)	36	310,441	
Total Food MEB	1,350	11,493,915	76%	Total Food MEB	112	957,826	

Price and exchange rate data in the table above comes from FSNAU and REACH/JMMI market monitoring.

The largest component (76%) in the SO03 rural Basic MEB is the **food basket**. The energy dense food basket contains two nutritional add on items (milk and meat) which adds to the cost. The proportionately high value of food compared to non-food expenses in the basic MEB is reasonable when compared to spending patterns in this pastoral zone. In the 2020/21 reference year, about 70% of household annual food energy was purchased. Moreover, for the very poor, about 70% of their annual expenditure was on food. Food spending by poor and middle households was not as high as the MEB food basket cost because about 31-37% of their annual household food energy was produced (not purchased), of which 25% was locally grown maize and sorghum. In other northern pastoral zones where there is no cropping, food expenditures in the baseline year were 70% and 60% of total expenditures for poor and middle households, respectively.

Annual			
Household of:		6	
Rural Basic MEB - TOTAL ANNUAL COST Apr'20-Mar'21			
Sector	MEB USD	Ave Poor spending	Ave Middle spending
WASH	188	118	154
Shelter & Home NFI	75	54	84
Clothing	60	116	291
Education	42	43	51
Health	36	30	77
Livelihood inputs	0	64	261
Transport & Communication	36	133	214
Other	0	208	695
Food MEB + nutritional add on	1,350	453	477
TOTAL	1,788	1,219	2,307
Total Non-food items (NFI MEB)	438	766	1,829
Total Food MEB	1,350	453	477

The total value of the non-food sector baskets is USD 438/HH6/year or USD 36/HH6/month. In the table below, household spending by poor and middle households is shown in the two columns at far right. Expenditures were adjusted to a household size of 6 for comparative purposes with the MEB. The results show that in the 2020/21 reference year, poor households spent USD 766/year or USD 64/HH6/month on non-food items.¹² In particular, in the reference year, pastoralist households spent proportionately high amounts on water and soap (WASH), clothes, transport and communication, and *other* (a miscellaneous category in the baseline expenditure data including spices & condiments, qaat, tobacco, torch & batteries, jerry cans, pain relief and so on). The differences in the basic MEB composition and value, and household

expenditure patterns – particularly in the case of clothing and transport/communication – reflect the difference between the

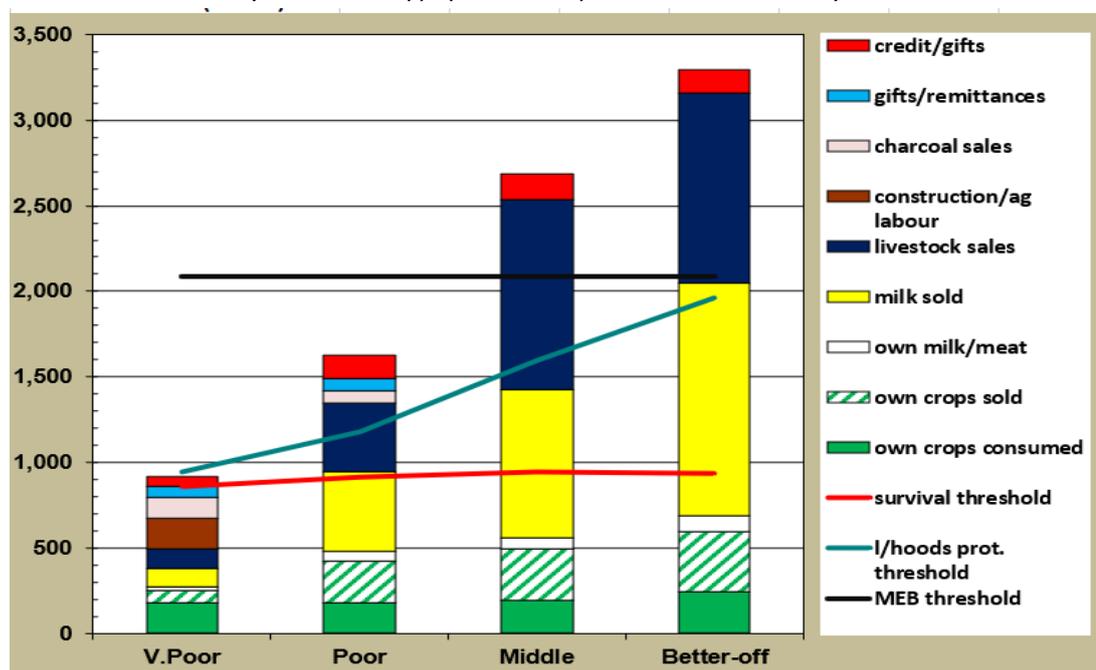
¹² There are challenges in making direct expenditure comparisons for some of the baskets because the expenditure figures do not include in-kind contributions such as from own production. This issue obviously affects food basket.

basic and the sector standard MEB. Notably, in the sector standard MEB, clothing is set at a higher amount (USD 120/HH6/year).

The MEB, Total Income and Poverty analysis

An analysis of the MEB expenditure threshold against total household annual income helps answer the question *do households earn enough to meet the cost of their basic needs?* Which wealth groups can afford the basic MEB basket of goods, and which are too poor? The graph shows that a Basic MEB based on Awdal and Woqooyi Galbeed regional prices in the reference year and adjusted for a household of 7 costs USD 2,086/HH7/year (or USD 0.8/person/day). By comparison, total income was USD 919/HH7/year (USD 0.4/person/day) and USD 1,624/HH7/year (USD 0.6/person/day) for the very poor and poor respectively, a level well below the cost of the MEB. Middle and better-off households produced and earned USD 2,684/HH7/year (USD 1.1/person/day) and USD 3,294/HH7/year (or USD 1.3/person/day) respectively which falls above the Basic MEB threshold. See graph below. The results indicate that over half of the population (62% of households) would be considered poor by this standard.¹³

Total Income in USD by Wealth Group, Apr20-Mar21, SO03. Cash income adjusted to HH Size 7



The reference year gap analysis shows that households face an income gap of USD 97 and 39/HH7/month (or USD 1,167 and USD 462/HH7/year) for the very poor and poor households respectively. To put this in perspective, households on average earned USD 35/goat sold and USD 45/sheep sold in the 2020/21 reference year. To fill the gap, very poor and poor households would roughly need to sell 33 and 13 goats in the year to make up the income gap. This is currently beyond their means as the very poor and poor only have 6 and 12 shoats per household respectively. This shows the level of poverty faced by many households in the Northwestern Agropastoral livelihood zone.

¹³ One important point to bear in mind, and that is that in pastoral economies, limited household spending may in part reflect a choice and is not simply a function of poverty. For example, households may have significant savings "on the hoof." Thus, total income does not truly reflect the limits of household income and expenditure but rather it reflects household needs and spending priorities.