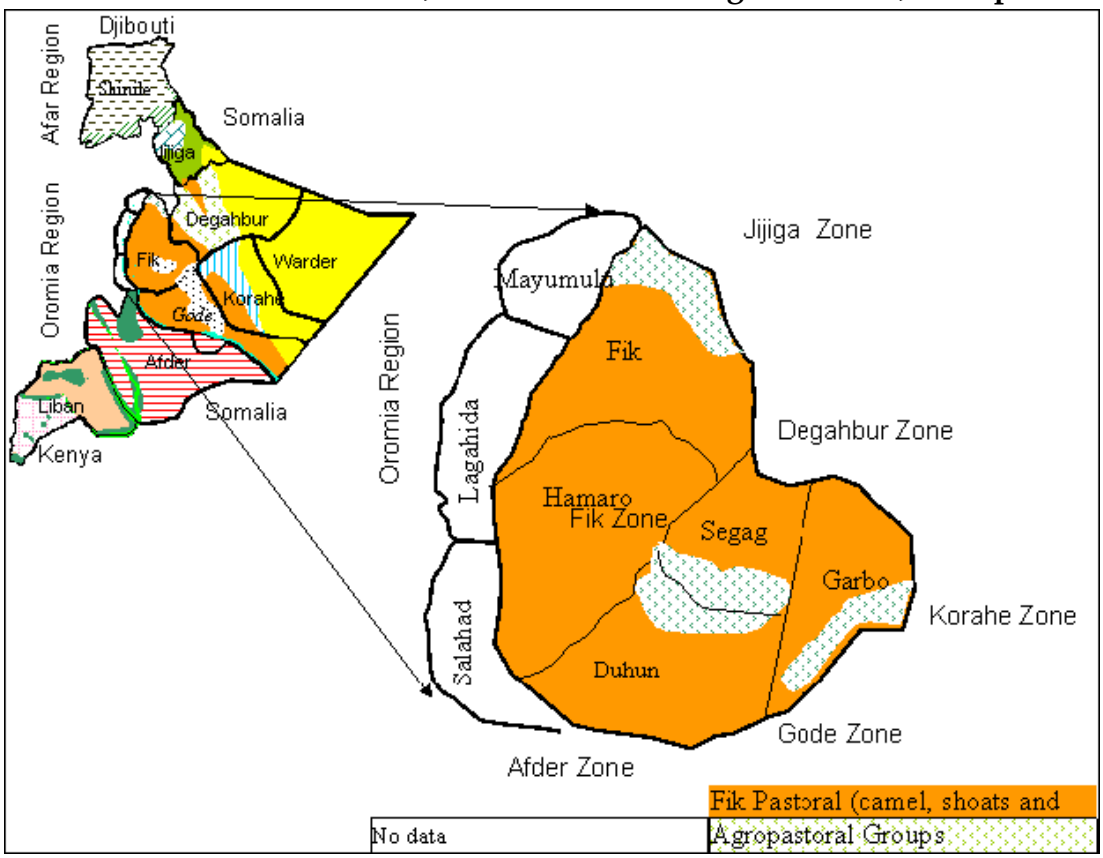
Fik Pastoral Livelihood Zone

(Camel, Goats/sheep; some Cattle)

Fik Administrative Zone, Somali National Regional State, Ethiopia



An HEA Baseline Study By SC (UK), DPPB, and Partners, October 2001

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Terms and Acronyms

ACF	Action Contra le Faim
Bogla	Delivery time for cattle (just before the main rainy season)
Deyr	Rainy season between October and December
dhane	(saline) water points.
Dhuug	Tse Tse fly
DPPB/D	Disaster Prevention and Preparedness Bureau/Department
ECHO	European Commission Humanitarian Office
LZ	Livelihood Zone
FS/EW	Food Security Monitoring/Early Warning
Gu	Rainy season between early April and June
Hagaa	Dry season between July and September
HCS	Hararghe Catholic Secretariat
Horwein	Livestock that are separated to be moved to distant places for water and pasture as opposed to those that remain behind with the family
IDP	Internally Displaced People
Irman	Milking animals
Irmansi	A Milking animal cow or camel given as gift to a poorer household (usually a relative) while it is in milk, and returned after animal dries.
Jilaal	Hot dry season between late December and March
Kaalmo	Charity
OFDA	USAID Office for Foreign Disaster Assistance
OWDA	Ogaden Welfare and Development Association
OWS	Ogaden Welfare Society
PCAE	Pastoralist Concern Association Ethiopia
Qaadhaan	Clan taxes
Sahan	Pasture surveying and observation before moving animals
SC-UK	Save the Children-UK
SC-USA	Save the Children-USA
sisow	A unit of measure for milk – about 0.75litres
SNRS	Somali National Regional State
TOT	Terms of Trade
WFP	UN-World Food Programme
Xaas	The family and all the animals that are left behind, after the *horwein* animals leave – mostly shoats, milking animals, weak animals, etc.
xamil	Tradition method to control mating of sheep.
Zaka	Islamic obligatory alms - a determined fraction of savings, livestock or crops, if these assets reach certain thresholds.

1. Executive Summary

The Fik Pastoral Livelihood Zone (LZ) covers almost the entire area of Fik Zone. Livelihood zones with similar characteristics are also found in norhtern Gode and western Degahbur and northwestern Korahe Zones. The agro-ecology of the LZ favors goats and camel more than cattle and sheep because it is mostly browse rich with pockets of good grazing. In these pockets, more cattle are found. The Pastoral LZ constitutes 70-80% of the population in Fik administrative zone; 15-25% are agro-pastoralists; while about 0-5% can be classified as Urban.

In years of good rainfall, many pastoralists practice opportunistic farming in the areas around their immediate neighbourhood on land that is temporarily cleared for this purpose. On an average area of one *Aslax*, (about half a hectare) such opportunistic farmers may harvest 2-3 quintals (200-300kg) of sorghum, which is used to supplement their cereal purchases for 1-2 months, depending on family size.

The normal migration of livestock is within the zone (the zone has many dry season grazing areas with water in a normal year). In bad years, abnormal migrations will take place to Babile district and other parts of Jigjiga Zone, E.Imey in Gode Zone, West Imey in Afder zone and parts of Oromia region.

The pastoral LZ has links with the agropastoralists and Riverine communties in Gode Zone, and the agropatoralists and sedentary farmers in Jijiga Zone for their crop purchase and alternative pastures. The northern districts of Fik and Hamero are closely linked with Babile district as it forms an important transit point for imported commodities. The southern districts (Segag, Duhun and Garbo) are more linked with Hartasheik through Degahbur. The Somali currency is common in the these southern districts while the Ethiopian Birr is the main medium of exchange in the northern districts.

More underground water (shallow wells) in many parts of the zone give more security from water shortages in the normal dry seasons. However, some areas with no shallow wells like Barmil of Duhun district are chronically water insecure SC-UK targeted some of these areas with chronic water shortage by developing some water points.

Wealth is determined by livestock holding, particularly camel and goat/sheep (shoats). Based on this the population of the pastoral LZ is categorized into three main wealth groups - poor (30-40% of total households), middle (45-55%), and better off (15-20%). There are very poor and very rich groups but these groups are not examined in this study since their number is not significant compared to the total community in the LZ.

The three wealth groups have similar food sources namely livestock products (milk and milk products), staple food purchases (maize and sorghum), and non-staple food purchases (mainly sugar). Household access to these food sources (quantity and quality) is largely determined by wealth status. For instance, livestock products are more important for the middle and better off as a food source than for the poor wealth group.

The main income sources are livestock sales, sale of animal products (milk and milk products) and bush/wild products. The former two are more important for middle and better off while the later is more important for the poorer groups.

The expenditure of the households is dictated by the food and non-food needs of the family. Households in all wealth groups generally spend income on similar items but in different quantities. The poor households tend to spend the highest proportion of their income on staple food purchases and less on non-staple, and household items (clothes, etc), unlike the middle and better off who spend relatively smaller proportion of their money on staple purchases and higher percent on non-staple and household items. Middle and Better off households spend some of their income on veterinary inputs (vet drugs, etc) and social services (gifts, education, medicine).

Due to their overwhelming dependence on livestock for food and income source, the Fik pastoral LZ is vulnerable to those factors (shocks) that negatively affect livestock production. These include rainfall failure (one or both wet seasons – *gu* and *deyr*; lack or shortage of pasture; market disruptions for livestock and grain; devaluation of the Somali shilling (Sosh.) in the Sosh districts; clan conflicts and general insecurity; poor road infrastructure; and crop failure in neighbouring LZs.

The following coping and risk minimising strategies are employed to reduce the impact of shocks; Livestock migration in search of pasture and water, increase of livestock sales to make up the household food deficit, and reduction of the household expenses are all general copping mechanisms true to all wealth groups although the intensity/extend of copping vary based on the asset (livestock) holding. Labour migration (for farm labour etc) to Jijiga, Babile and Djibouti, Bossaso (in Somalia) is also practiced. In addition, a host of risk minimising strategies are also employed to reduce the impact of risks.

Recommendations for long term development include: Improving veterinary services throughout the zone; improving livestock markets at national level and seeking for alternative international markets for export; improving social infrastructure such as human health, roads to improve accessibility, and water for both human and animals; strengthening traditional rangeland management practices. Specifically road access to connect other parts of Fik Zone with Selahad, Lagahida and Mayumuluka should be established, and there is a need to find innovative medium and longer term ways to rehabilitate IDPs in the zone.

2. Introduction

2.1 Purpose of the study

In the past there has been a chronic scarcity of socio-economic baseline information in Somali Region, which has made it very difficult for decision makers (Government, aid agencies and donors) to make decision on both short-term and long-term interventions. On occasions, such as the 1999/2000 drought, this inability to make quick decisions has had catastrophic consequences for the people of the Region. In an attempt to prevent such occurrences in the future, a project aimed at improving the Food Security Monitoring and Early Warning (FS/EW) capacity of the Region was established. This project is a joint effort by Save the Children–UK (SC-UK) and the Disaster Prevention and Preparedness Bureau (DPPB) of Somali National Regional State (SNRS), Ethiopia[1]. The objective of the pilot phase of the project was to collect baseline information on livelihoods and develop a workable model for food security monitoring that will be built into government structures throughout the Region in Phase II

This report is one of 13 other Household Economy baseline assessment reports that have been produced by the project, during the periods of September-October 2001 and January-March 2002. Participating organisations in these baseline assessments included: DPPB (together with all DPPD offices), SC-UK, WFP, SC-USA, ACF, HCS, PCAE, OWS, OWDA and Al-Najah Charity. The baseline exercise comprised of classroom training, three weeks of fieldwork and one week of analysis and write-up.

Based on a reference or typical year, baseline reports were compiled for households belonging to the specific Livelihood Zone (LZ). The reports provide both qualitative and quantitative information on the normal mode of survival and the vulnerabilities of the different livelihood groups found in the Region, as well as information on how they respond to crises. These reports supply decision makers with useful information to make informed decisions, which will facilitate timely and appropriate responses and prevent possible disasters. The information also sheds light on longer-term food security issues and can therefore help in the planning of development initiatives.

2.2 Methodology

The Household Economy Approach (HEA) has been used as the assessment and analysis tool for the baseline studies. This Approach provides a rapid food security assessment technique and has been used by SC-UK for a number of years in parts of Africa and Asia. For a brief introduction to the Household Economy Approach please refer to Appendix 9.1. For further details refer to "The Household Economy Approach: A resource manual for practitioners" by John Seaman, Paul Clarke, Tanya Boudreau, and Julius Holt.

1 The Food Security Monitoring and Early Warning (FS/EW) Project, in Somali Region, Ethiopia, is a joint undertaking by Save the Children – UK and the Regional Disaster Prevention and Preparedness Bureau. USAID/OFDA and ECHO fund the pilot phase (Year 1) of the project. Additional financial support was received from SC-Canada and WFP. Partners in the baseline exercise included: WFP, ACF, SC-USA, HCS, PCAE, Al-Nejah Charity, OWDA, LVIA, and the Government Bureau of Livestock Environment and Crop Development.

3. Background

3.1 Fik Zone

Fik is located in the northern part of Somali region of Ethiopia bordering with Jigjiga zone in the north and north east, Degahbur and Korahe in the east, Gode and Afder in the south and Bale of Oromia in the west and north west. Fik administrative zone consists of 8 districts. Three of these districts (Salahaad, Lagahida and Mayumuluka) are isolated from the rest of the Zone by the Shabelle river - there are no roads or bridges - and often have border dispute problems with Oromia Region. The other five districts are Fik, Hamero, Duhun, Segag, and Garbo.

There are other livelihood zones in the neighbouring areas of Babile (Jigjiga Sedentary Farmers) and the riverine farming community along the Shabelle River in both Gode and Afder zones. The Shabelle River passes through some districts of Fik zone like Legehida and Mayumuluka that are disputed areas, parts of Hamero district and Ayun of Duhun district and riverine farmers are there also. However riverine farming is treated as a neighbouring livelihood zone not an inclusive one in this study.

3.2 Agro Ecology, Geology, & Water

Altitude & Climate

Rainfall & Water Sources

In normal years, since there are many water points, especially the seasonal rivers (run in rainy seasons only), which provide ideal locations for shallow wells most parts of the Fik zone do not have water problems that crisscross the zone. These shallow wells provide relatively better security from water shortages. The areas around these dry riverbeds or valleys (like Erer, Daakhato and Sulul valleys) also provide most of the dry season grazing in the Zone. The areas around Karijukod mountains also provide both water and dry season grazing. Many of these shallow wells are saline and water quality becomes poor in dry seasons. In the dry season, water levels in the shallow wells become very low and require more efforts to draw.

Shallow wells, many of which are saline, are found in/around Fik, Hiileye, Hamero, Gasangas, Segag, Duhun, Garasley, Ayun, and Malayko. Newly constructed shallow wells are found in Fik, Hamero, Gasangas, Segag and Garasley, Duhun and Ayun (most of them were constructed by the SC-UK and a few by OWDA). Some of them are equipped with hand pumps and are all new. Generally, in Fik zone Berkad construction is not practiced by the local communities, although SC-UK constructed some Berkads in several sites in Fik district namely Jeerinka, Holac, Aloosane and Dundumo-ad.

There are however areas in Fik Zone that have chronic water shortages because they are far from the seasonal rivers and cannot use shallow wells. These areas are more vulnerable to water shortages. In these areas people use natural ponds in which rain water collects. Water in these ponds usually last only during the wet seasons due to high percolation, evaporation and silting and is usually unclean. Chronic water shortage areas inlcude: Bermil in Duhun district, Gessanges in Hamero district, Yahob and Barqamah in Segeg district, Darasalam, Maramayd and Xidhyare in Garbo district and Dunduma-ad of Fik district.

3.3 Population

The Internally displaced in Fik Zone

Fik zone host considerable numbers of internally displaced persons (IDPs). IDPs in Fik Zone are of two main types (1) those displaced by clan conflicts or wars. These are either people who have moved into Fik Zone from other Zones or Regions (like Bale in Oromia Region) as a result of insecurity in their original homes, or those that 'returned' from Djibouti and Somalia, particularly after the collapse of the state in Somalia. (2) Those that have been displaced by drought, especially after the 1999/2000 drought. The latter form the majority of IDPs in Fik Zone. Please refer to table ….for IDP population figures.

Four districts of Fik Zone (Fik, Hamero, Segag and Duhun) house the majority of the IDP's. The most prominent IDP 'village' is Gassangas in Hamero district, where the IDP population outnumbers the original population. According to a survey carried out by SC-UK in April 2001, the IDP population in Fik was estimated to be 2,504 families (about 15,025 persons), found in these four districts (see table 1 below):

Table 1 - The distribution of IDP population in Fik Zone (April, 2001)

District	Name of area	Current Pop	% IDPs	No. IDPs	No. HH.
Fik	Fik	25,000	15 %	3,750	625
Fik	Dundumo'Ad	3,750	8 %	300	50
Hamaro	Hamaro	18,000	20 %	3,600	600
Hamaro	Gasangas	3,500	65 %	2,275	379
Dihun	Dihun	3,250	15 %	487	81
Dihun	Ayun	2,755	15 %	413	69
Dihun	Garasley	3,750	15 %	562	94
Dihun	Barmil	4,250	15 %	638	106
Segag	Segag	15,000	20 %	3,000	500
TOTAL		79,255		15,025	2,504

Source: SC-UK assessment April, 2001

3.4 Livelihood Zones in the Administrative District

Defining Livelihood Zones

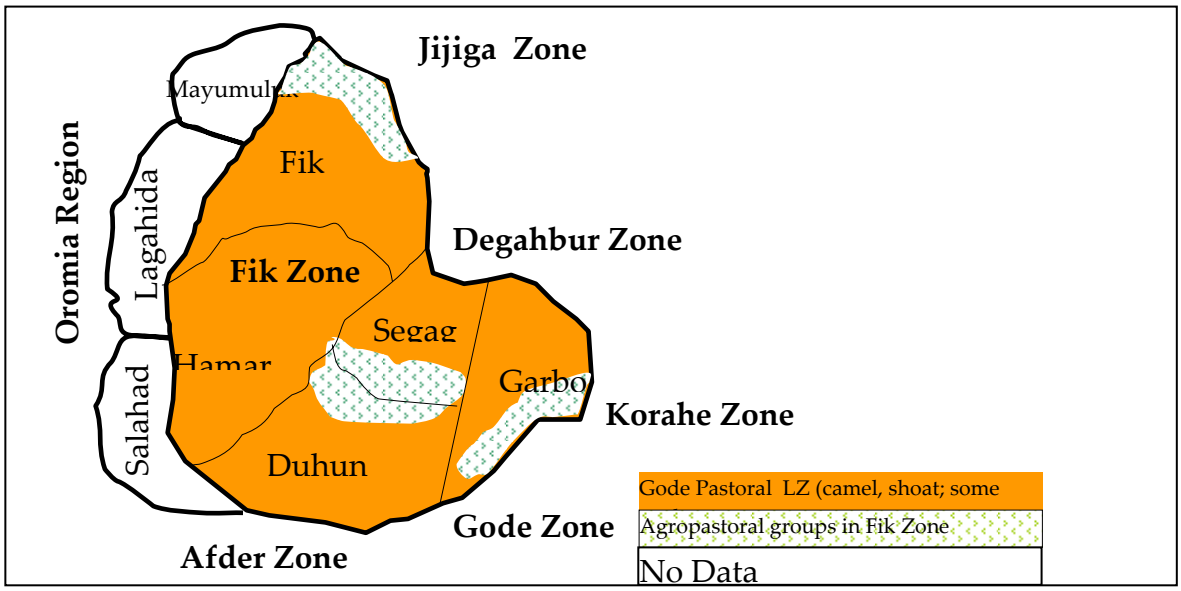
Central to the Household Economy Approach is the concept of Livelihood Zones (LZ). Different populations live by very different means depending on their ecological environment, their assets, culture, skills etc. Some may depend primarily on livestock or fishing, others on agricultural production. Because of rainfall, soil type or marketing possibilities, some areas will be suitable for cash crops (such as cotton or tobacco) and others will produce only cereal staples. As a result of these different circumstances

different population groups will adopt different approaches for survival. A group or population that obtains its food and income sources form a broadly similar combination of means and that have similar response to shocks is known as a Livelihood Zone (LZ).

There are two main Livelihood Zones in Fik Zone – Fik Pastoral LZ (70-80% of the population), and Agropastoral LZ (comprising 20-25%). There is also a small number of urban groups (2-5%), who are engaged in small business and service provision.

The pastoral LZ is the subject of this report. Within the pastoral groups are also found groups who try out opportunistic farming. Although it is practiced by an increasing number of pastoralists in recent years, opportunistic farming is not a very rewarding practice in terms of providing food and income. A short description of opportunistic farming is given under section 2.0.

Agropastoralists are found mainly in Segag (Sangal, Eabla'ad, Ali-Fandcad areas in south and central Segag), Barmil in northern Duhun district; and nothern parts of Fik Zone (towards Babile and Jijiga ditricts). In Garbo district, agropastoralists are found along the Fafan valley (Hiilay, Isdaba dega), which neighbour Korahe plains, and along the border with Gode. The Agropastoralists occupy less proportion (less than 20% of total landmass). The agropastoral population comprises 20-25% of the total Fik Zone Population. Agropastoralists mainly grow sorghum and to less extent maize, and rear cattle, shoats, and camel in that order of importance.



Map 1 – Livelihood Zones in Fik Zone

4. Food Economies

4.1 Fik Pastoral Livelihood Zone

Fik administrative zone is dominated by pastoral livelihood zone because of hilly and browse-rich agro-ecology. They rear camel, shoats and cattle in that order of importance (shoats are the most numerous). Concerning the livestock composition in Fik pastoral LZ, goats and camels are the most dominant because of the shrubby and browse rich agro-ecology of this hilly LZ. Shoats (mainly goats) are the most important 'liquid' livestock in the local markets, which are, in turn, important for cereal purchases. Camel are important for transport (pack camels) and milk production, both for consumption and income source. Normally cereal purchases are their main source of food followed by milk and milk products. Pastoralists also practice opportunistic farming with increasing frequency from which they may harvest some supplementary grain in good years.

Variations within the LZ

The Role of Opportunistic Farming

Pastoralists practise opportunistic farming especially when the rains are good. This opportunistic farming is characterized by *miigayn* practice – sowing using a sharpened stick, rather than hoes. Almost every pastoral family in this LZ tries *miigayn* whenever the situation is good. Households would cultivate one *aslax (*about 3-4 Qodi or about 0.5 ha.), usually around the satellite camps. Such farms would be abandoned after the season and the pastoralists would set up another farm in the next location if rainfall is good. Opportunistic farming is not a reliable occupation - pastoralists have reported two successful harvests in the last 10 years, despite regular trials. One of the harvests was in *deyr shuba* (elnino year) and the other in the *gu* of 1995 (nicknamed *qooq* - more marriages). Despite the regular crop failures more pastoralists have been attempting opportunistic farming in recent years, whether the rainfall is enough or not. This is due to significant reductions in herd sizes caused by recent consecutive droughts. The herd size reductions have meant that pastoralists got less livestock products from their animals and needed to purchase more and more grain, which meant that they had to sell more livestock (often at unfavourable prices) – reducing their assets further. This situation has been rather frustrating for the pastoralists, and they therefore preferred to keep trying out crop farming in order to increase food options. In fact there are many former pastoralists who turned agro-pastoralists or just joined the urban poor (or became IDPs) after after complete loss of their livestock – their only assets and livelihood. To describe their circumstance (of changing from pastoralism to farming) Pastoralists quote the Somali saying '*nin kufay dhuul cuskay'* meaning "A person who trips is forced to lean on the ground for support". Even in the best of years, opportunistic farmers would realise only a small harvest of 2-3 Quintals (100kg bags) from their land of one *aslax*, and this would keep their households of 7-9 persons for one to two months only.

Links with other LZ

The pastoralists of this LZ obtain some grains from the Agropastoralists within the Fik Zone, though this relationship is significant only in the good years. In return they sell milk and milk products to these groups. The riverine LZ along the Shabelle river also is a source of grain – mainly from West and East Imey in Afder and Gode respectively. Pastoralists also sell livestock (especially shoats) to riverine groups.

Babile sedentary farmers supply grains to most of Fik zone. Merchants from Babile farming area take truckloads and more commonly pack-camel loads of grain (as the terrain is rough and with bad roads) to Fik Zone. After the livestock import ban by Gulf States,which reduced the purchasing power of pastoralists. At the same time Babile market provides important outlet for oxen and camel milk, from Fik pastoralists. Fik and Hamero districts receive non-food items from Babile and some times from Hartasheik markets, while Segag, Duhun and Garbo receive non-food items from Hartasheik via Degahbur. The use of Ethiopian Birr is common in Fik and Hamero because of their connection with Babile. The other districts (Segag, Duhun and Garbo) use the Somali shilling because of their connection to Somalia in trade transactions.

Migration Patterns

Movement of livestock in search of pasture and water is a very important survival strategy for pastoral populations. The migration of the livestock is governed mainly by the distribution of seasonal pasture and water resources throughout the zone. In normal years livestock would not be moved far from home areas – usually going only as far as adjacent settlements and districts. In all wet seasons, unless rainfall is poor, only young men or the father would move animals to wet season grazing areas – usually not far from homes - and most of the family would be staying at home, being left with small ruminants and milking animals. Homes are usually within villages, near permanent water points or near towns. In normal dry seasons, livestock would be moved nearer permanent water points, but if the season is difficult (like have been many dry seasons in recent years), animals would be moved to distant places in adjacent districts, Zones or even Regions like Oromia. Only in drought situations will whole families move with the livestock. After the dry season is over and rains are received in home areas, livestock would return to these places.

Since normal migration occurs mainly during dry seasons it is important to indicate the dry season grazing areas and main water sources of the zone (water is dealt with in a separate section). The main dry grazing areas include Erer (Fik and Hamero), Daaqato (Segag and Hamero), Sulul (Segag, Duhun and Hamero), Karijukod Mountains (Duhun) and Fafan (Garbo). All these areas either represent valleys or shrubby depressions, in which run-off water passes through or collects. Other areas are near the Karijukod Mountains. These valleys provide good pastures, but also water, as most of the shallow wells are found within these dry riverbeds (most of them tributaries of the Shabelle river).

In abnormally dry seasons, livestock may be moved outside the Zone to Babile in Jigjiga zone, West Imey in Afder and East Imey in Gode, and to areas in Oromia Zone. There is a local saying of the pastoralists in Fik area which helps to understand migration patterns in an abnormally bad season, i.e. *gu la waayey galbeed loo raac, deyr la waayeyna doola loo raac*. Which means, when the *gu* fails, migration is to the west; when the *deyr* fails migration is

to Dollo. According to local communities, "west" means towards Babile (although Babile lies to the north of Fik) and "Dollo" is lands to the south, including the riverine areas like Imey. The saying also points to the importance of seasons in making migration decisions. Another Somali saying *nafi kor bay u baxdaa* (the soul goes up), is also given a local meaning in Fik Zone, i.e. in bad times migration is 'upwards' meaning north towards Babile and Jijiga.

There are also livestock from other neighbouring Zones that migrate into Fik zone, mainly as part of an abnormal migration. In the bad years livestock migrate from Gode, Korahe, Warder, Afder, Degahbur and even from Gedo of Somalia in search of water and pasture. Sometimes camels from other zones come for the *dane* (salty) water found in Fik shallow wells. Both body condition and mineral balance in animals of the animals improves when they take salt or salty water. There are different shallow wells with salty water found throughout the zone like, Sulul riverbed (in Segag district), Malayko and Gerigo'an (in Garbo) and Hiileye (in Fik).

Normal and abnormal livestock migrations are discussed by districts below:

Fik District

Camel in Fik district and northern parts of Segag normally migrate to Babile because of the Karan rains received in Babile areas and the Tin plantations, which attract camels. Camels do not migrate from Fik areas only in dry seasons but also in the first month of wet seasons because of *Dhuug* (tse tse fly). This time camels migrate towards Segag areas like Sulul valley and Hiileye areas within Fik district. However, they come back to Fik areas after a month when the *Dhuug's* disappears. Pastorals in Fik have other normal dry grazing areas which are Erer valley and Qubi(towards Legehida). Cattle normally migrate to Muli of Jigjiga zone, Mayumuluka, Fafan and Qubi since these areas are grazing areas. Oromia and far parts (north and east) of Babile are abnormal migration destinations for livestock of Fik districts.

Hamero District:

Hamero has the following dry grazing areas; Erer, Karijukod and Qubi. Oromia and Babile are abnormal destinations for livestock in Hamero.

Segag District:

Normal dry grazing areas for livestock of Segag district are Daakato valley, Sibi plains (between Segag and Garbo districts) and Sulul within the district. However, camel in the north of the district normally migrate to Babile, which received karan rains (July-September) and also has edible cactus (tiin) plants. Camels in the west and northwestern parts normally migrate to Karijukod mountains of Duhun district. Segag livestock also abnormally migrate to Erer, Fafan valleys and Imey area.

Duhun District:

Daakato valley and Sulul of Hamero and Segag districts and Karijukod of Duhun are normal grazing areas. In addition the southern parts of the district normally migrate to Imey, but this is considered abnormal migration for livestock from the northern part of

the district. Livestock in Ayun area of Duhun district may migrate to Erer valley and Lagahida in the bad times – this is not normal.

Garbo District:
The normal migration destinations include Fafan valley, Sibi plains and around Malayko and Gerigo'an water points. Imey (west and east) are abnormal pasture destinations for the livestock of the district. Karijukod areas are also both normal and abnormal migration destinations depending on where in Garbo the livestock moved from. Those livestock in the eastern parts can easily migrate to Karijukod while those from east and north cannot normally arrive with ease. Instead they prefer to go to Mulli, and Babile in the north, both of which are considered abnormal destinations.

4.2 Historical Timeline

Selection of the Reference Year

Household food economy analysis considers many different ways of recalling years. There are "traditional" years, "production" years and "consumption" years and the "reference" year.

In coming up with Historical timelines, the *deyr* season (which starts in October) is used as the start of the Somali traditional year. The traditional Somali year therefore spans across two Gregorian calendar years, starting with the *deyr* (October) and ending with the *hagaa* (September).

Household food economy analysis ranks years using the traditional system of recall (the *deyr* season followed by the *gu* season for each traditional year) – since this is how people recall the past – but focuses on a "consumption year" for discussions with communities on how they lived during the year. This year is taken as the "reference year". It runs for 12 months from the time of major food production (the *gu* rains) through to just before the following *gu* rains (i.e. the end of the long, dry *jilaal*/*qorahxeed* or *jilaal* season). The "consumption" year therefore covers two Gregorian calendar years. Household economy interviews (with representatives from each wealth group) gather information about a specific year, and this provides a "benchmark" or set of reference values and behaviours against which to compare any other year.

The "reference" year chosen for review is one which is within recent memory (since production and prices will have to be remembered) and which was neither very good nor very bad (extremes can be misleading when we are trying to describe a livelihood system). For convenience we will call this year the "normal" year, but this should not be interpreted necessarily as being either "frequently-occurring" or "typical" as is often the case in agricultural societies. A "normal" year from a pastoral perspective might be a year where there is adequate rainfall in terms of intensity and distribution, livestock production is adequate in both seasons, animals and milk fetch good prices and grain is not too expensive. There is little migration or little insecurity. It could be argued that this description represents a "good" year than an "average" year. For this reason it is often

more useful to talk of a "reference year" which allows us to describe typical households in a particular year.

For information on the Traditional Somali Calendar System please refer to Appendix 9.2.

Based on information from respondents, most of the last ten years were poor or below normal in terms of rainfall, pasture and water availability and there were considerable abnormal migrations.

Unstable terms of trade due to livestock ban, inflation of the Somali Shilling, and livestock diseases were the common problems that feature prominently in the historical timeline of the zone.

Table 2 - Historical Timeline Fik Pastoral LZ

Year	Deyr	Gu	*Comments*
2001	2	2	In both seasons, rains were below average with some pasture and good livestock condition. There was in and out migration. In migration: from Gode, Afder, Gedo, Korahe, and Degahbur. Out migration; to Babile and Erer valley. There was good TOT (1goat: 1bag) at the first half of the year due to relief distribution. it was nicknamed *Duufaan* "storms".
2000	1	2	Little rains and less pasture together with weak livestock condition in the *gu*. *deyr* was bit better in terms of rains (below normal also) with improved pasture and livestock condition. Shoats and cattle suffered death due to diseases. Out migration occurred to Qubi, Erer and Babile. TT; 2 goats: 1bag (relief was going on).
1999	1	1	Very poor rains in both wet season's lack of pasture, livestock diseases (mass death of cattle and shoats. Full of out migrations. Very poor TT. It was nicknamed as *Dabargo'a* "Perishing".
1998	3	2	Average rains with normal pasture together with good livestock condition in the *gu* while *deyr* condition was below normal on average. Livestock had good prices in the year although grain prices were as high as well (Terms of trade (TT) 2 SHOATSto 1BAG). Livestock import ban by gulf states started in this year.
1997	3	5	Average rains with normal pasture together with good livestock condition in the *gu* while *deyr* condition was much above the normal in terms of plenty rains, pasture and quick recovery of livestock condition. There was good harvest from their Aslax (3-4 Qodi land which they cultivate in good years). No migrations were reported. Good TT: 1goat: 2bags, Diseases were reported for both human and livestock as a result of the heavy rains. *deyr* was nick-named as *Shuba* "Pouring rain"
1996	3	2	Average rain with normal pasture and livestock condition in gu. deyr was below average in terms of rain and pasture but with normal livestock condition. No abnormal migration. There was good TT: 1shoat: 1 bag. This year was nick-named as *Gororduuf* because camel had a disease called Gororduuf (the name expresses the symptom of the disease which is nasal discharge). This is the reference for Fik Pastorals who practice opportunistic farming.
1995	3	2	Average rain with good pasture in *gu*. *deyr* had less rains but pasture, livestock condition were on average/normal. No abnormal migration in the year and good TT;1goat: 2bags. It was nicknamed as *Qooq* "more marriage".
1994	3	2	Average rains, pasture and good livestock condition in *gu*. Armyworm infestation was high which damaged pasture and crops on opportunistic farming. Condition in *deyr* was below normal in terms of rain, pasture but normal livestock condition. The year was nicknamed as *Diir* "Army Worm".
1993	2	2	Condition was poor and bellow average in terms of rain, pasture in both wet seasons. There were both in and out migration. In migration from Gode (Danan). Out migration to Babile, Bale (Oromia) and Erer valley. It was nicknamed as *Galelaab* "folding of the mats" as the migration was intense.
1992	2	1	Rains were below normal in the *gu* and *deyr* was worse in all the aspects. Out migration to Bale and Abakorow (Gode and Afder). Poor TT: 2 shoats: 1bag.

4.3 Seasonal Calendar

At the beginning of the wet season, pastoral households (usually the father or elder son) survey and assess rainfall distribution and pasture availability around the settlements or in neighbouring areas. If home areas do not have sufficient pasture, livestock would then be moved to alternative sites that have better pasture. This type of movement is normally short but can be long if the situation is abnormal and rainfall distribution is very poor. Surveying and movement is even more pronounced in the dry seasons because both water and pasture become issues of concern that determine the direction of movement and duration of staying away from home areas. Mostly dry camels with some milking (wet) camels go separately to far off pasture areas leaving shoats, cattle and some milking camels (*irman*) behind. This batch of separated camel is called *Horwein*, which can move more frequently and to distant places unlike the *xaas* (it is a name for women, children, shoats, and cattle left behind). During dry seasons animals are salted by taking them to *dhane* (saline) water points.

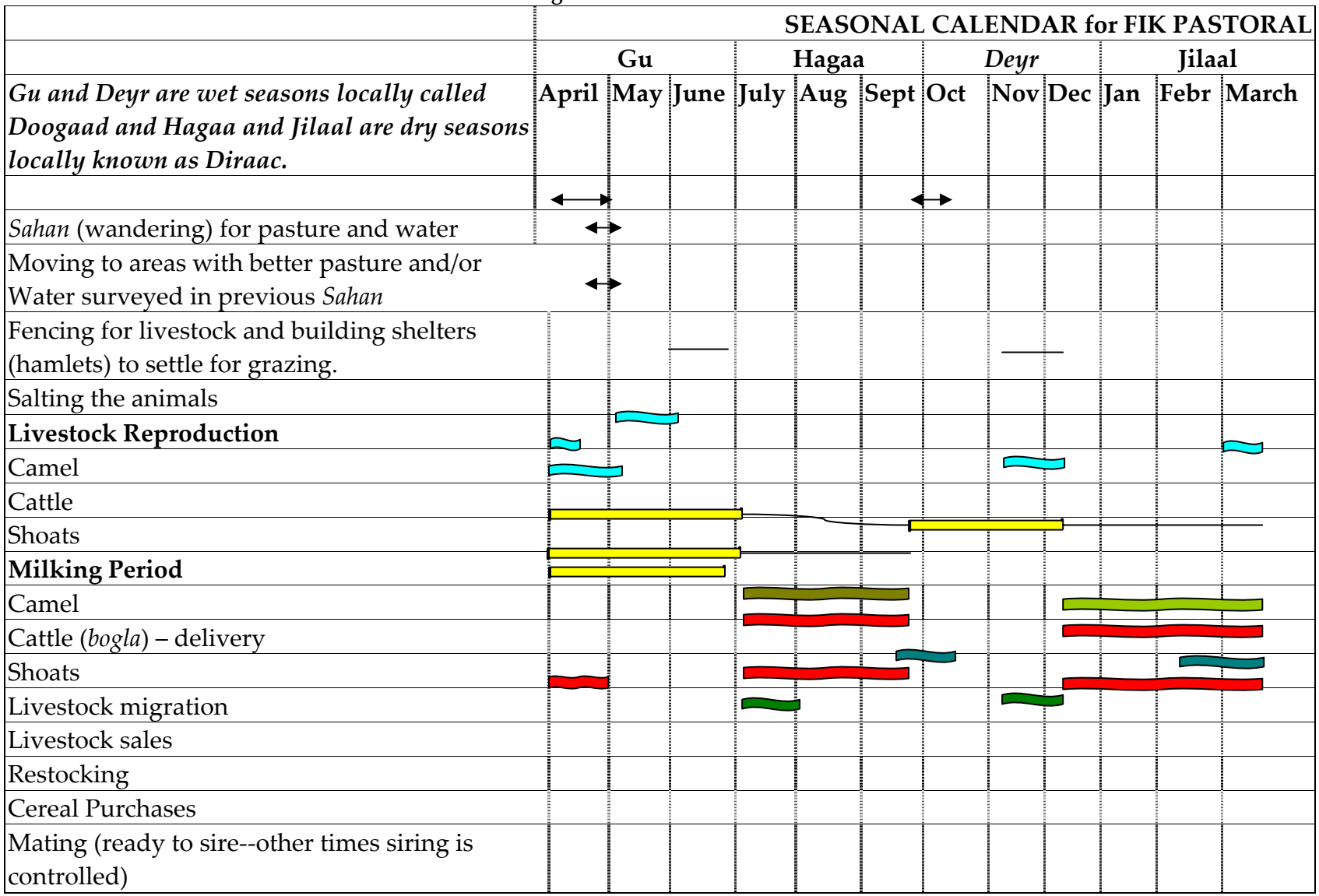
Camel and cattle reproduce once a year whereas shoats reproduce twice a year. All livestock species reproduce in the wet season mainly *gu*. Cattle reproduce at the end of *Jilaal* (long dry season), this period is called *Bogla*.

Sheep reproduction is managed in such a way that they will deliver (give birth) only in the wet season (the time of plenty) when the mother is strong enough to feed the young one. This is done by controlling the mating using a traditional method called *xamil*, which physically blocks mating. If the household has many males that are capable of siring, this group of male are separated and kept as a sub-herd near homesteads looked after by children, in order to minimise chances of mating

Milk production is high during wet seasons and different animal species do have different yields. For instance, camel in wet season gives 3 s*isow* (2.25litters) per day; cattle 2 Sisow (1.5liter) per day and shoats deliver 0.25 litters a day (1/3 of *sisow*). Women milk shoats and cattle while men milk camel. Livestock sales are done in all the seasons of the year but for different purposes. In dry seasons, they sell livestock exclusively for food purchases (mainly cereals) while they do sell in the wet seasons for other purposes like clothing, dia-payment, clan taxes, etc.

During *hagaa* and *jilaal*, livestock migration is common to their respective or alternate dry grazing areas. Restocking occurs in the middle of the dry season when livestock prices go down because of high supply. Young female animals are normally bought for restocking.

Figure 1 - Seasonal Calendar for Fik Pastoral LZ



4.4 *Other information particular to the LZ*

Infrastructure

Main Markets for the LZ

The main livestock markets of the zone are Babile, Garbo and Degahbur. When livestock migrate from Fik Zone to Babile, it boosts livestock and livestock product supply in this market. Babile is an important market for oxen and camel milk. Garbo was main market of camel, which is exported to Hargeisa through Degahbur. The external demand that used to drive the Garbo Market is non-existent these days (since September 2000) due to the livestock ban.

4.5 *Wealth Breakdown*

Wealth is determined by livestock holding, particularly camel and shoats. Based on this the population of the pastoral LZ is categorized into three main Wealth Groups (WG) – the Poor that make up 30-40% of total households, the middle who make up 45-55%, and Better off households who make up 15-20%. There are very poor and very rich groups within the LZ, but these groups are not examined in this study since they only form a tiny fraction of the total population of the LZ. Wealth groups and their characteristics are outlined in the table below:

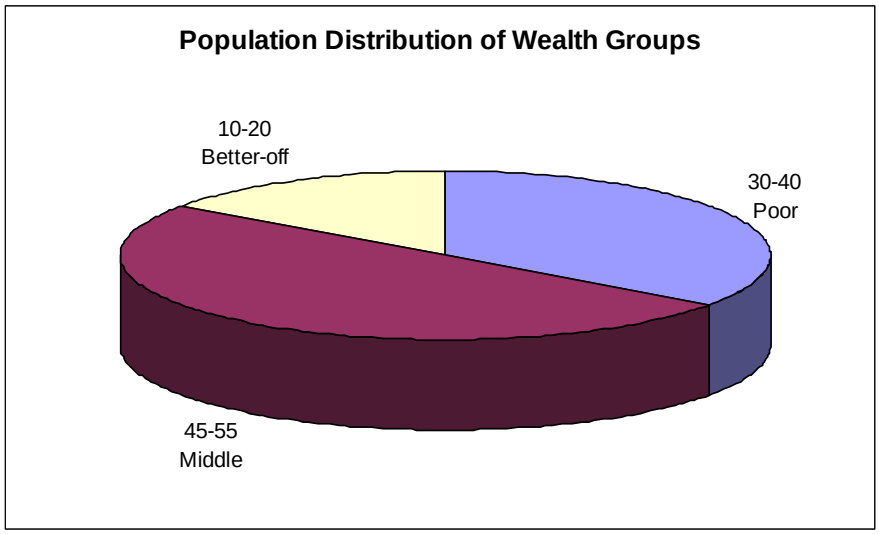


Figure 2 - Wealth Groups in Fik Pastoral LZ

Table 3 - Wealth Characteristics

Wealth Group name & vernacular name	Poor	Middle	Better off
Characteristics			
number of wives			
Household size	7-9 commonly 7	7-9 commonly 8	7-9 commonly 9
Number of members living away & where	1	0	0
Number of members from other family(ies)	0	0	1
Number of members earning income & who (in order of importance)			
LIVESTOCK			
Owned Shoats	30-40	60-80	100-150
Borrowed Shoats			
Female Shoats			
Male Shoats			
Lactating Shoats			
Owned Cattle	0-6	0-20	0-40
Borrowed Cattle			
Female Cattle			
Male Cattle			
Ox(en)			
Lactating Cow(s)			
Owned Camel(s)	5-10	20-30	45-55
Borrowed Camel(s)			
Female Camel(s)			
Male Camel(s)			
Lactating Camel(s)			
Pack Camel(s)			
Donkey(s)/Ass(s)	1	1	1-2
Mule(s)/Horse(s)			
LAND			
Land cultivated for opportunistic farming	3-5 tacab	5-10 tacab	20-30 tacab

The Poor Wealth Group

About 30-40% of the total population in this Pastoral LZ belongs to the poor wealth group. This group is the most vulnerable to any changes in access to food and income. They have limited coping strategies owing mainly to their low asset base. Usually a medium sized shock is enough to make them dependent on external assistance. Since they form over one-third of the total pastoral population, it is difficult for the other wealth groups to support all of them in time of crisis. It is this group that would normally become IDPs in case of a serious shock to livelihoods (like a drought).

The poor households have a small herd size of mostly shoats (30-40 shoats (mainly goats), 5-10 camels, and 0-6 cattle. The majority of the poor have no cattle. Household size is 7-9, with one member staying away, mostly with a richer relative or works as a herdsman, making it a net average of 7 members. In general there is no major difference

in family sizes among wealth groups; the only difference being that the rich have an extra member staying with them and the poor have one staying away.

The poor WG is less mobile than other wealth groups for a number of reasons (1) they are usually involved in collection and sale of bush products and have to remain near the market centres; (2) they also do not have enough large stock to warrant movement and the small ruminants are normally not moved to far-off pastures; and (3) only a small proportion of the poor households own a pack camel, without which mobility is very difficult. The poor mostly own one donkey to transport water, food items, and firewood collection for the market.

Poor households may receive *irmansi* (gift of a milking cow or camel while in milk) depending on if the poor household has a close relative that is richer living nearby. Most of the *Zaka* (Islamic obligatory alms) and other are usually given to the very poor and destitute and thus the poor wealth group do not usually get these gifts. This is because they usually have lactating animals in a normal year.

The middle wealth group is the largest in the Fik pastoral livelihood zone and constitutes 45-55% of the LZ population, with a household size ranging from 7-8 people. The livestock holding is considered 'medium' at 60-80 shoats (mainly goats), 20-30 camel and 0-20 cattle. A considerable proportion of the middle households do not have cattle and those without cattle were seen to have higher camel numbers. Middle households have one pack camel and 0-1 donkey (about 50% do not have donkeys). Households in the middle WG do not have any members staying away nor staying with them, unlike the Poor and Better off

The better off households comprise the smallest group of the Pastoral LZ population - 15-20%. Their livestock holding is 100-150 shoats, 45-55 camel, and 0-40 cattle.
Some of the better off may not have cattle and tend to have more shoats and camel, compensating for the overall number of livestock units owned . Household size of better off is normally 7-9 plus one person staying with them (the net household size is 9 persons). The extra person is usually from poorer relatives within the LZ, and may be helping in looking after the animals.

4.6 Food Sources in the Reference Year

The poor households produce little milk and milk products due to their small number of animals (normally they have no ghee production). They therefore depend on cereal purchases for most of their food, which makes them very vulnerable to market disruptions and a rise in cereal prices. Purchased staple cereals (mainly maize) make up 65-75 of their food sources while non-staple purchase (essentially sugar) makes up 5-15% of food sources. The remaining 15-25% of their annual food needs are covered from milk consumption from own animals.

The middle households cover the highest proportion (50-60%) of their annual food needs from staple cereal purchases, while milk and milk products (ghee) constitute the second largest food source which covers 25-30% of the annual food needs (of this only about 3%

is from ghee). Unlike the Poor wealth group, the middle obtain a relatively high amount of energy from non-staple entirely made up of sugar purchases, which covers about 15-20% of their annual energy requirement.

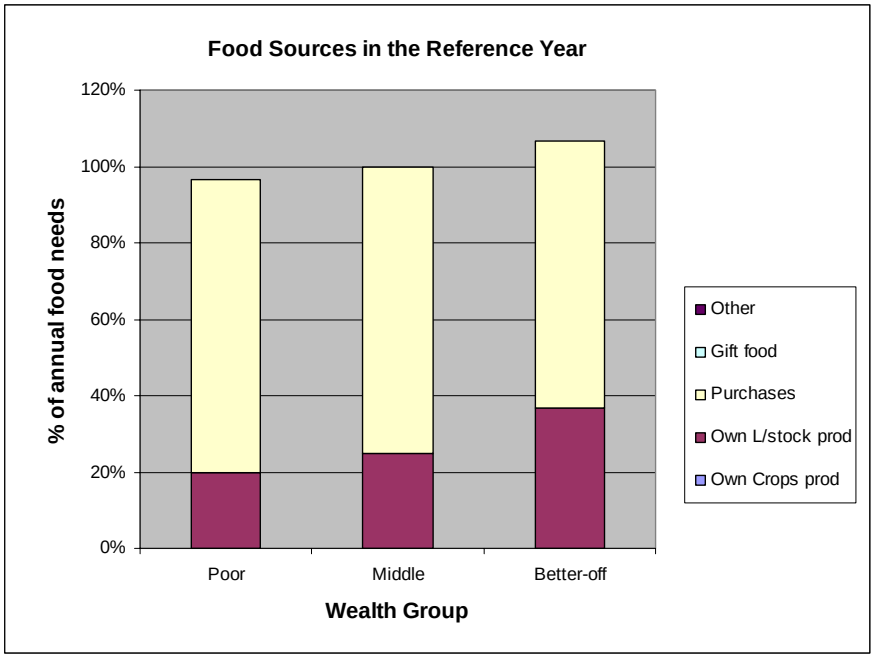


Figure 3 - Food Sources for all Wealth Groups in Fik Pastoral LZ

Despite the relatively larger livestock holdings, the most important food source remains purchased cereals, which provide 40-45% of food. Dependency on purchased staple foods (mainly maize) is, however, still much lower than that of poor and middle households. This is because the rich have higher milk and milk product production and can afford to purchase more non-staple (sugar) foodstuffs to supplement cereals consumption. These provide 30-40% and 15-25% of energy requirements, respectively. Ghee production does not constitute much as a food source since the little amount produced is sold because it fetches a high cash income per unit, compared to milk. The bulk of the consumed milk is from camels (providing about 25% of annual food needs), cattle and shoat milk provide about 6% and 3% respectively. Cattle milk includes skimmed milk. A little ghee is consumed, providing about 2% of food as most is sold.

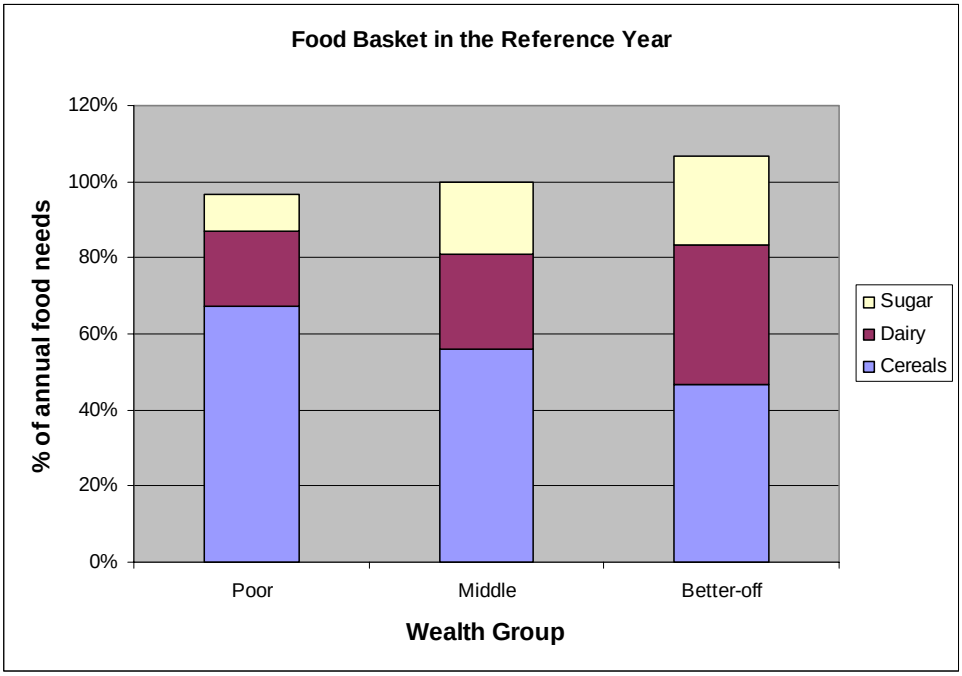


Figure 4 - Food Basket for all Wealth Groups in Fik Pastoral LZ

4.7 Income Sources in the Reference Year

Livestock sales are the main income source of the poor wealth group and makes up 70-80% of their annual income. Normally, livestock income is mainly from the sale of two camels and about 10-15 shoats per year, making up 40-45% and 25-35%, of total income respectively. Cattle are not important as an income source for poor households.

Unlike other wealth groups, the poor households do not produce enough milk and milk products to allow for sales and they therefore consume almost all the milk they obtain from their animals. Instead the poor households exploit bush product collection (firewood, myrrh, poles and gums) which covers 20-30% of total annual income. Out of these bush/wild products mentioned, gums are the least important while the other items have more or less equal importance depending on the location of the household and the season.

Because of their higher herd sizes, the middle households enjoy higher income from livestock sales. They are mainly dependent on livestock sales for income, and this fetches 75-80% of the annual household income. Out of this figure, 20-30% is from shoat sales, 25-30% from camel sales, and another 20-30% from cattle sales). Milk sales are common among the middle households. 20-25% of their total income is from sales of milk and milk products like ghee (out of this15-20% is from sales of camel milk). The ghee is mainly from cattle. Goat milk is mostly consumed but may also be used to produce ghee, which is sold.

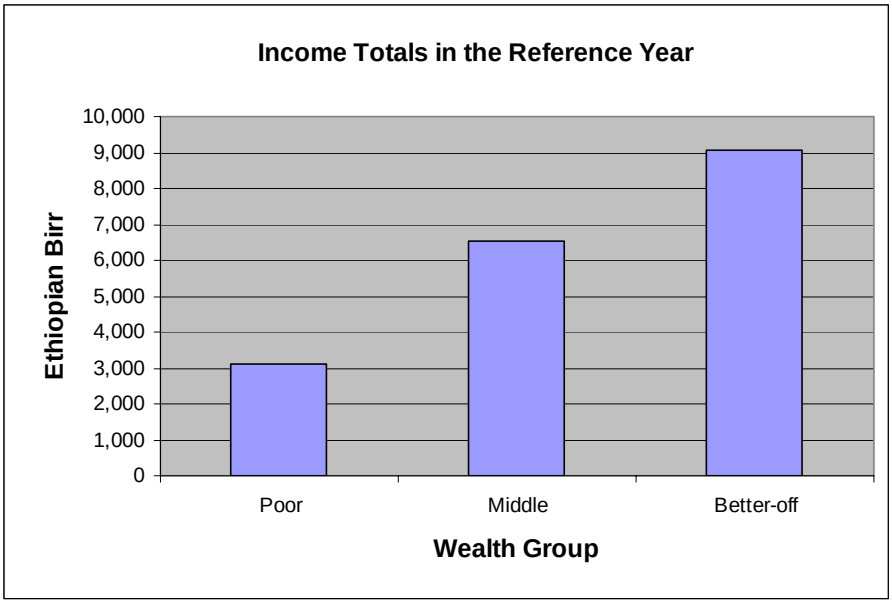


Figure 5 - Income Totals for all Wealth Groups in Fik Pastoral LZ

Income options for the better off are all livestock-dependent – live animal sales and milk/milk product sales. More than half or their income (55-65%) comes from the sale of live animals. Camel sales are the most important in terms income generation, followed by shoats, while the least important is cattle sales. They generate about 25-35%, 15-20% and 10-15% of total household income, from camel, shoats and cattle respectively. The better off households sell significant amounts of milk, which contributes 35-45% of total income. This is made possible by the relatively bigger number of livestock owned, the availability of pack camels and the ability to move closer to market centres/near permanent water points during dry seasons. Camel milk provides about 25-35%, cow milk about 6-8% and ghee about 2-4% to total income for better off households.

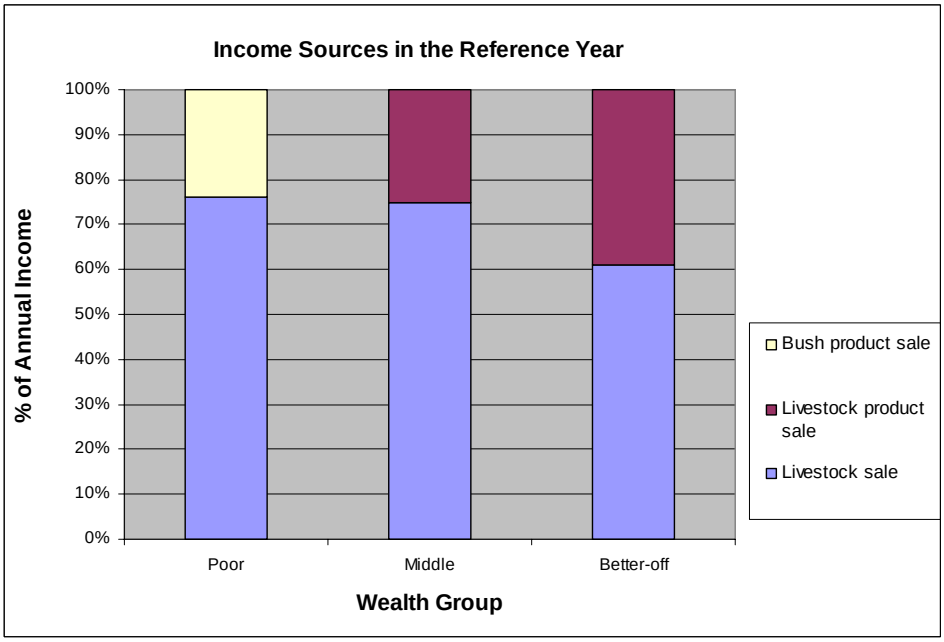


Figure 6 - Income Sources for all Wealth Groups in Fik Pastoral LZ

4.8 Expenditure Patterns in the Reference Year

The poor spend a high amount of their income (35-45%) on staple purchases (mainly maize). Non-staple food is the second-most important expenditure item for the poor wealth group on which they spend 20-30% of their total annual cash income. Social services (mainly education/Quranic teaching of 2 two children) take up about 10-15% of the expenditure. In most of the observations, the Quranic teachers are paid in kind, mainly in shoats, not cash. For the purpose of computation this payment is expressed in cash equivalent. Social services of the poor do not include *Qaadhaan* (clan taxes) and *Kaalmo* (charity). Poor households do not normally restock and hence have no input expenditure except a little on drugs and human medicine unlike middle and better off households, which have relative higher expenditure on restocking and drugs/medicine. Food purchases (staple and non-staple) takes up 60-70% of the total expenditure budget. Household expenditure, while household items take up 15-20%, out of which 13-15% is on clothes the remaining 5-7% is on soap, batteries and torches. Pastoralists in this LZ use little or no kerosene, and instead use torches for lighting.

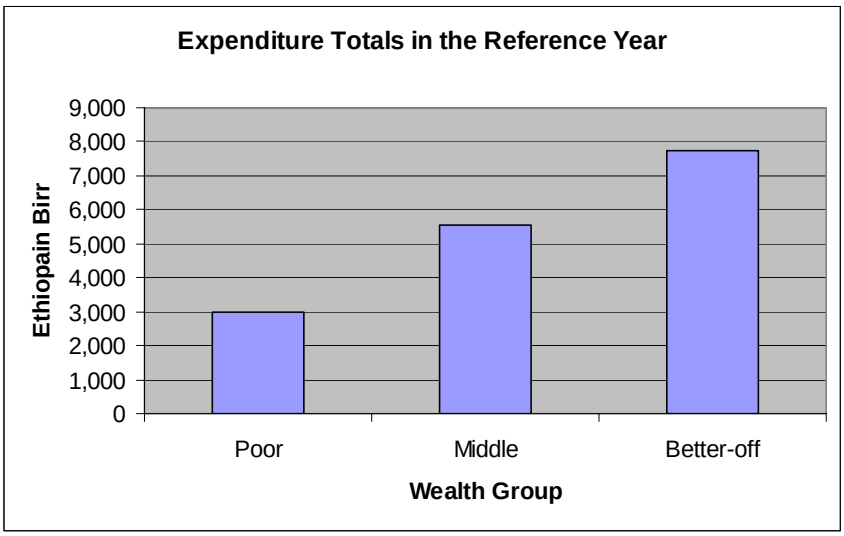


Figure 7 - Expenditure Totals for all Wealth Groups in Fik Pastoral LZ

The middle households, unlike the poor wealth group, spend the highest proportion (25-35%) of their income on non-staple purchases (sugar being the dominant item). Staple purchases (20-25%) are the second largest budget item of the middle household. Although it seems that expenditure on social service is the same in proportion for both poor and middle (10-15%), but the 'social service basket' of the middle is more varied, including components like *Qaadhaan*, *Kaalmo* and *Zaka*. Livestock inputs take up 5-15% with and mainly comprises of animals bought for restocking (about 7-9%) and veterinary drugs (about 0-2%). Household items are also important expenditure items; they include clothes, soap, dry cells, etc, and these make up the remaining 10-20% of the total annual Expenditure of the middle households. Clothing is the biggest component of the 'household items' category – taking up 13-15%.

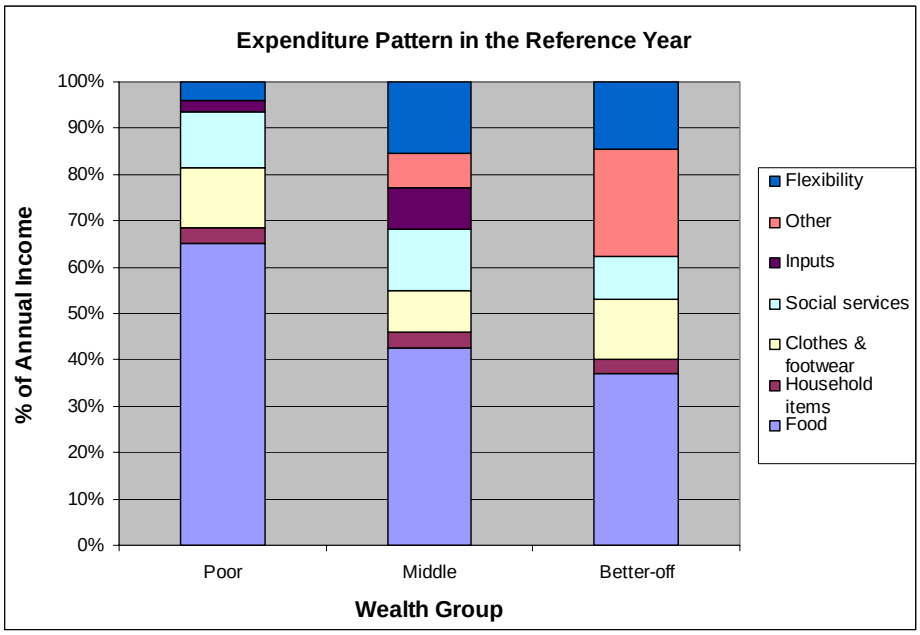


Figure 8 - Expenditure Pattern for all Wealth Groups in Fik Pastoral LZ

Just like the other wealth groups, the better off groups spend their income on a variety of items/item categories. The largest expenditure item is non-staple food purchase (which is mainly sugar) making up 25-35% of total expenditure. Social services are the next most important expenditure item categories and this make up 20-30% of total expenditure. Social consist of *zaka* (taking 10-15%), clan tax and gifts-*kaalmo* (6-8%), and Quranic education (3-5%). The next most important expenditure is on household items (15-25%), which is mainly clothing (10-20%) and other smaller items such as soap, dry cells. The least important in terms of budget allocation is staple foods an livestock inputs, each taking up 10-20% of total expenditure. The expenditure pattern shows that the richer WG spend more on 'relative luxuries'(80-90%) with staple cereals taking up only about 15% of total expenditure budget. This gives them room for flexibility in times of shock and therefore makes them less vulnerable to these shocks.

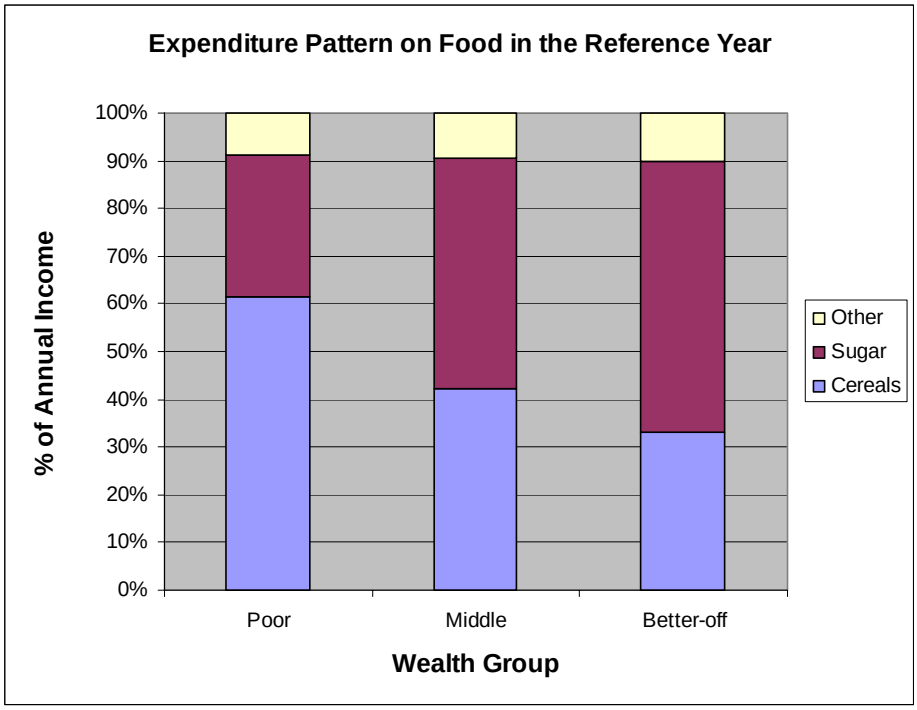


Figure 9 - Proportional Expenditure on Food for all Wealth Groups in Fik Pastoral LZ

5. Vulnerabilities, Risks & Coping

Vulnerabilities and risk factors

The people in the Fik administrative zone are dominantly pastoralists who derive their livelihood from the their animals (shoats, camel and cattle), therefore this pastoral group is vulnerable to those things that negatively affect livestock health, condition and market. These include:

- Rainfall failure of one or both wet seasons (gu and deyr), reducing pastures and water availability, and consequently a deteriorating body condition and productivity.
- Lack or shortage of pasture and water causes widespread movement, worsening body condition, productivity an market price. Extensive migration may also cause mortality of weaker animals and may cause conflict, especially when moving into other groups' territory.
- Market shocks: These population depends, to a large extent, on livestock and milk markets, and any disruptions in these, like oversupply of livestock, devaluation of currencies, particularly of the Somali shilling in the southern districts of the Zone, which use the currency. The livestock import embargo by the Gulf countries is a major such shock.
- Insecurity: clan conflicts disrupt the normal migration routes and hence weaken the coping strategies of concerned parties. Fik has has a number of clan conflicts in the last 5 years.
- Inaccessibility/poor accessibility. The imported goods such as sugar, tea leaves, etc, become expensive during wet season because of muddy roads which either cut access or reduce supply. Fik administrative Zone has only one muram road, which itself needs rehabilitation particularly between Fik and Babile districts.

Risk Minimizing Strategies

- Assess the grazing status of different areas by collecting information about rainfall distribution and its productivity (pasture) throughout the zone and then prepare the family to move/migrate to areas surveyed even in the wet season. Before the household moves, the head (the father, elder son, or uncle, etc) makes a survey (*sahan*) to see the destination before the household moves to the new area.
- Old and weak animals are either sold or slaughtered for meat, before their body condition worsens
- Slaughtering the offspring (young animals) to save the mother in the hard times. They do this with cattle and sheep since they are the most susceptible animals (*nugul*) in times of droughts.
- Slaughter one quality camel for household to reduce the stress and provide protein and other foods to the household in times of drought. The meat is kept fresh for a long time using traditional means.

Coping Strategies

Poor Wealth Group:

- Increase of livestock sales

- Slaughter the old and weak of the herd (shoats) for consumption by the household in hard times.
- Labour migration to towns (Djibouti, Bossaso) –this is employed in bad years.
- Seeking agricultural labour/employment in farming areas of Babile and Oromia (E.Hararghe).
- Petty trade activities: - petty trade in villages/towns by selling sugar, maize, etc- The small initial investment needed is normally obtained by selling some livestock.
- Collecting firewood and other bush products. This is normal income source for the poor but the number of people involved get increased which in turn deteriorates the market value of these products since supply becomes high.

Middle Wealth Group:

- Since this wealth group has relatively bigger livestock numbers, they tend to sell their productive animals at low cheap prices, which would be unacceptable in normal times.
- Reducing/postponing expenses on clothes and other household items.
- Livestock migration and herd splitting (sending camel and cattle as *Horwein*) in search of pasture and water. In the normal years, only one strong man (mainly the elder son) goes with *Horwein* and other family members stay behind in the original areas/locations with shoats, cattle and *irman* (wet) camels. *Horwein*, which consists mainly of stronger camels and cattle with some milking animals, would normally graze in areas nearer homes, but when the season gets harder, they move farther away.

Better Off Wealth Group:

- In addition to the strategies applied by the middle, the rich would also be be involved in the following coping strategies:
- Increase livestock sales
- Increase of milk sales (milk normally reduces in quantity in dry seasons, but its price usually rises. Richer households, would normally take advantage of the high prices and sell most of the milk.
- Selling some of the livestock to save the others by buying drugs, fodder and necessary needs.

6. Indicators to monitor

- Rainfall situation for the two rainy season – sufficiency, distribution, amount, etc
- Pasture and water conditions – sufficiency, how long it will last, alternative pastures, etc
- Migrations-normal or abnormal for livestock and for humans- who, where and why?
- Market conditions (prices of livestock and grains, Cereal availability and terms of trade).
- Livestock conditions; disease outbreaks, body condition, etc.
- IDPs movement and their conditions.
- Human health and nutrition situation (disease outbreaks etc).
- Coping strategies (degree of resorting to and sequence)

7. Recommendations

7.1 Recommendations

- Improving veterinary services throughout the zone. This could be done through: training para-vet personnel, encouraging private veterinary clinics by providing revolving funds/loan. Also the improvement in extension service and training of more vet professionals is essential.
- Improving livestock markets at national level and seeking for alternative international markets for export. It would help greatly if trade is made more free across the Ethio-Somali border, which would allow for improved flow of goods and livestock.
- Establishing livestock health certification bodies that are internationally recognised. These would help to certify that animals are healthy by the time they are being exported. The government can help set up such a centre and also go into agreements with livestock importing countries in order to make this possible.
- Improving social infrastructure such as human health facilities, roads to improve accessibility, water for both human and animals and education, etc.
- Re-establishing traditional rangeland management practices in which certain parts of the zone is protected from grazing in wet seasons so as to enhance the pasture availability in dry seasons.
- Roads should be constructed to improve accessibility to the three isolated districts of Selahad, Legehida and Mayumuluka.
- Rehabilitation of the drought and conflict displace persons (IDPs) in the zone through various innovative ways. A survey of the IDPs should be carried out to determine what the IDPs would like to do - return to pastoralism or do other things. They should then be encouraged and supported to take on these activities. Rehabilitation programmes should be mainly self-employment-oriented, like petty trade support, restocking (sufficient number of animals and other support), gum and resin collection and marketing, re-stocking and other development programmes.

8. References

SC (SAVE THE CHILDREN) UK (2000) *The Household Economy Approach: a resource manual for practitioners.* Save the Children, London.

Famine Early Warning Systems Network; Update on Tanzania
http://www.fews.net/current/updates/ visited 11/2003

9. Appendices

9.1 HEA Methodology

The Household Economy Approach[2]

The Household Economy Approach helps to provide a detailed picture of the many ways that households meet their food and income needs in a 'normal' year and the many strategies they employ to lessen the consequences of crises (selling or consuming assets, migration for employment, eating wild foods, etc.). It therefore provides a picture of the household economy and its relationship to markets and employment opportunities.

produce a coherent picture about how people live and the options open to them in a normal year
identify the types of risk which households are vulnerable to
give an estimate of the likely effect of a 'shock/hazard' on household income
explore the extent to which coping strategies can cover a household's deficit
identify which population groups are most at risk of not coping with change
predict the likely impact of a range of intervention options and identify the most effective in reducing short-term and long-term vulnerability

HEA is useful for answering the question "what constraints prevent households from prospering", or "what will be the effect of a "shock" or combination of shocks, on the economy of various types of households in different livelihood zones?" It provides analysis that can be used both for prediction and to make more informed interventions. The approach is reproducible and incorporates sufficient mechanisms to cross-check information internally for users to be confident of the validity of findings and subsequent recommendations. It can be used in a rapid or a comprehensive form, depending on the question of study, time and money available.

This approach is participatory in nature and does not follow conventional statistical sampling methodology. The method employs RRA tools such as seasonal calendar, time line, normal year, proportional piling, pair wise ranking and so on. Interviews focus on groups that represent specific livelihood zones. Within this zone interviews are held with representative key informants and wealth groups (socio-economic groups). The approach is based on the understanding that it is the quality of the information collected that is important rather than the number of interviews conducted. However, every attempt is made to ensure that the information collected is representative. Thus site selection is done in coordination with technical officials at Regional, Zonal and District levels.

A typical Household economy baseline assessment includes the following steps:

[2] For any additional questions please contact Suleiman Mohammed the Early Warning and technical coordinator for Save the Children's food security project in Jijiga, Ethiopia. Telephone +251 5 752775/6/7 or send an email to ewtc.jijiga@telecom.net.et. Alternatively visit the Save the Children (UK) website www.savethechildren.org.uk/foodsecurity .

Step 1: Identifying Livelihood Zones (LZ)s and populations

The first step therefore is to identify population groups within which most households obtain their food and cash by broadly similar combinations of means (known as a livelihood zone, food economy area, group or zone). A livelihood zone may be at one extreme a refugee camp and at the other a large part of a country.

Step 2: Identifying Wealth Groups and a 'reference' year.

As it is not possible to investigate and generalise across all households, we gain insights into the lives of representatives from the major wealth groups identified by key informants; usually the 'rich', 'middle', 'poor' and 'very poor'. A profile is developed of the distribution of wealth which will relate to land and/ or livestock holdings, household labour availability, income generating activities, asset ownership and so on. These characteristics are identified by the community themselves and thus vary per LZ.

This profile usually portrays the household economy in a 'reference' year. While in reality years vary. In order to allow for comparisons to be made when conditions are significantly different, a 'reference' year is chosen which is relatively 'normal' or 'typical'. This reference year is also referred to as the 'baseline' year[3].

Step 3: Describing Household access to food and cash income

Within each LZ we need to understand how typical households access their food and other income and how this varies for each wealth group. This information is obtained by interviewing groups of women or men from each wealth group who identify the various options households employ to secure access to food. These will explore all possible sources of food. In order to purchase food and other basic needs such as health & education, income is derived from various sources, and all are explored. Information is also gathered on all household expenditure.

For each of these three areas, food production, cash income & expenditure, the information is displayed in graphs which illustrate the current situation and show us the options available to each wealth group. Estimates are made of the extent to which a household can expand each option in times of stress. All these interviews are about the previously identified 'reference year'.

Multiple interviews are conducted and information is triangulated to ensure internal and external consistency. For instance, payment for labour reported by labourers should tally with payment rates given by employers.

Step 4: Understanding links to markets

Most households in most parts of the world depend in some way on the marketplace to obtain some of their food. The 'better-off' may increase the value of their crops by specialising production or selling when their value is highest, the poor may be obliged to sell crops directly after harvest and purchase later using income from employment.

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[3] The term "baseline" is used differently than how it is understood in monitoring longitudinal change. It is, rather, a set of reference information which can be compared with similar information gathered at a future time.

Without an understanding of 'normal' links between households and markets in procuring both food and cash income it is not possible to understand options open in times of crisis. The interviews clarify which markets are of greatest importance and therefore where observed price changes (e.g. staple food prices) or reduced access (e.g. due to hostility) will have greatest impact on households in a given LZ.

Step 5: Clarifying risk-minimising strategies and potential coping strategies
Poor households are constantly aware of the risks to their livelihoods and income and to a large degree anticipate and prepare for this. When broadly predictable, (such as in semi-arid areas where rainfall and crop production alter greatly from year to year) successful strategies will include storing crops and accumulating livestock in years of surplus production, and increasing use of wild foods and selling livestock and other assets in shortfall years. In years of extreme 'shock' other strategies may be available such as sending members of the household to fish, to find employment further a field, to increase the collection of firewood or claiming customary kinship support. As most of these are an extension of the usual coping mechanisms of the poor, interviewees are able to identify the options most likely to be pursued first.

Understanding these options is crucial to understanding how households will manage in a given change and what kind of support is necessary for them to access their food and cash income.

9.2 Note on Somali Traditional Calendar

Somali communities, mark their traditional years by giving them names that correspond to the days of the week; years are known as Monday year, followed by Tuesday year, etc, and after the seventh year (i.e. Sunday), the cycle begins again with Monday. Years with the same name would be differentiated by a nickname related to a major event (droughts, floods, war, regime change, epidemics, etc), that took place during particular year; for example *Arbaca Shuba* (meaning the "Pouring Wednesday") referred to the el-nino year of 1997/98, which was a Wednesday year. Whereas year names are the same across all Somali groups, nicknames may be different in the different agro-ecologies and geographic locations, as events affecting them will be different.

In coming up with Historical timelines, the *deyr* season (which starts in October) is used as the start of the Somali traditional year. The traditional Somali year therefore spans across two Gregorian calendar years, starting with the *deyr* (October) and ending with the *hagaa* (Septmber)

The Somalis use two types of calendar years (i.e. two ways of counting years). It is very important for researches studying production, seasonal related areas among the Somali, to distinguish these two calendar types because the Somali community uses them for different purposes[4].

1. The *nairus* or *naurus* calendar: This calendar is related to the movement of the sun and other celestial bodies and therefore is used to determine seasonal patterns. The calendar year is kept orally with incredible accuracy and followed closely by the rural communities, particularly pastoralists, as it determines when to expect rainfall, and whether or not to move livestock to different location. This type of year is exactly the same as the Gregorian year (i.e. has 365 days) but does not start with January. The beginning of the year is marked by 'the positioning of some star(s) into specific locations in the sky', known as *kalawereega nairuuska*. This usually coincides with start of the *deyr* rainy season for most Somali groups and is marked in a variety of ways by some rural communities. The *nairus* year is divided into four main seasons in the most Somali inhabited areas – *deyr*, *jilaal*, *gu*, and *hagaa*. *Deyr* and *gu* are rainy seasons while *hagaa* and *jilaal* are dry seasons.

   The number of days in each of the seasons in the *nairus* year are numbered, each about 90, although with some seasons (like the *hagaa*) being a few shorter and others slightly longer. The total number of days would then fit in exactly with the Gregorian calendar days. Therefore the start of the seasons is normally easily identified with a specific Gregorian date like *Gu* (the main rains) starts around 12-14 April in most of the Somali inhabited areas (except the *karan* belt). Similarly the other seasons start at specific dates (*hagaa* in July, *deyr* in October, and *Jilaal* in January).

[4] The order in which the season will appear in the assessment will depend on how a given community identifies their 'consumption' year. Therefore a reference year could start in the *jilaal* season followed by the *gu, hagaa & deyr* or in the *gu* followed by the *hagaa, deyr & jilaal* etc.

There are parts of the Somali inhabited areas that have slightly different seasonal patterns, but still use the *nairus* system to keep track of the seasons. These are the northern part of Somali Region (Jijiga and Shinile Zones), the northwestern part of Somalia (mainly Woqooyi Galbeed, Awdal and parts of Sanaag Regions) and Djibouti. These areas do not receive *deyr* rains but instead receive *gu* (or *diraa'*) and *karan* rains.

2. The Islamic Calendar (Lunar Calendar) – This calendar uses the moon's movements instead of the sun's movement. The number of months is 12 but the year is normally around 355 days. This calendar started with the migration of Prophet Mohamed and his followers from Mecca to Madina, which marked a turning point in the history of the Islamic faith, and is therefore known as *Hijriya* (Migration) calendar. The Somali have local names for each of the Islamic months 'or moons' (but this names differ slightly among the different geographic locations) and they use these months for all religious obligations, rites and worship – like fasting, *zakat*[5] payment, *Hajj*[6], etc.

[5] *Zakat* is the obligatory payment by wealthier Muslims to poorer ones, once their wealth (usually savings or assets) reaches a specific threshold known as *nisaab. Zakat* is 2.5% of savings; 10% or rainfed crop harvest; 5% of irrigated crop harvest; one shoat for every the first 5 camels owned, etc.

[6] *Hajj* is a compulsory pilgrimage to the *Ka'ba* (the first house of worship established by prophet Abraham), at least once in a lifetime for Muslim individuals who can afford the journey while still being able to maintain their families.

9.3 Herd Dynamics

Camel

Camel gestation period is 13 months.

Herd size	**Male**			**Female**							
	Total	*Waylo* very young	*Dibi* Reprod. male	Total	*Waylo* very young	*Qaalin* young	*Irman* in milk	*Gudhan* Dry	No births/yr/ herd	No. deaths /yr	Net herd size
5	1	1		4		2	1	1	1	1	5
10	2	1	1	8	1	3	2	2	2	1	11
20	5	2	3	15	3	3	3	6	3	2	21
50	10	3	7	40	10	10	10	10	10	5	55
100	30	10	20	70	15	10	25	20	25	8	107

Cattle

Length of gestation: 10 months; Lactation period: 7 months; Period between calving: 17months;

Herd size	**Male**						**Females**							
	Total	*Qurbac* very young	*Qaalin* young male	*Baarqab* reprod male	*Raray* pack	*Coron* castrated	Total	*Nirig* very young	*Qaalin*	*Irman* in milk	*Gudhan* dry	No. births/yr/herd	No. deaths/ yr/herd	Net herd size
5	1		1				4	1	1	1	1	1		6
10	2		2				8	2	2	2	2	2	1	11
20	4		2	1	1		16	4	4	4	4	4	2	22
50	10	3	3	1	1	2	40	10	10	10	10	10	5	55
100	20	5	5	2	3	5	80	20	20	20	20	20	8	112

Goats

Length of gestation: 5.5 months; period between kidding 10 months; lactation period 5 months mainly 3 Months

Herd size	Male			Females							
	Total	*Waxaro* Very young	*Orgi* Reprod male	Total	*Waxar* very young	*Ceesaan* young	*Irmaan* in milk	*Gudhan* dry	No. births/yr/ herd	No. deaths/yr/ herd	Net herd
10	2	1	1	8	2	2	2	2	2	1	11
20	4	2	2	16	2	4	4	6	4	2	22
50	8	4	4	42	11	8	15	8	15	5	60
100	16	8	8	84	17	12	25	30	25	8	117
200	35	20	15	165	30	35	50	50	50	20	230

Sheep

Length of gestation: 5 months. Period between kidding: 11 months. Lactation Period: 6 months. Mainly 3 Months

Herd size	Male				Females							
	Total	*Baraar* very young	*Wan (Sumal)* Reprod. male	*Wan tuman* castrated	Total	*Baraar* very young	*Sabeen* young	*Lax irman* in milk	*Gudhan* dry	No. births/yr /head	No. of death/yr	Net herd
10	2	1	1		8	1	2	2	3	2	-	12
20	4	2		2	16	3	4	5	4	5	2	23
50	10	5		5	35	5	10	10	5	10	5	55
100	30	15	2	13	70	15	20	30	5	30	10	120
200	50	20		30	150	40	30	60	20	60	15	245