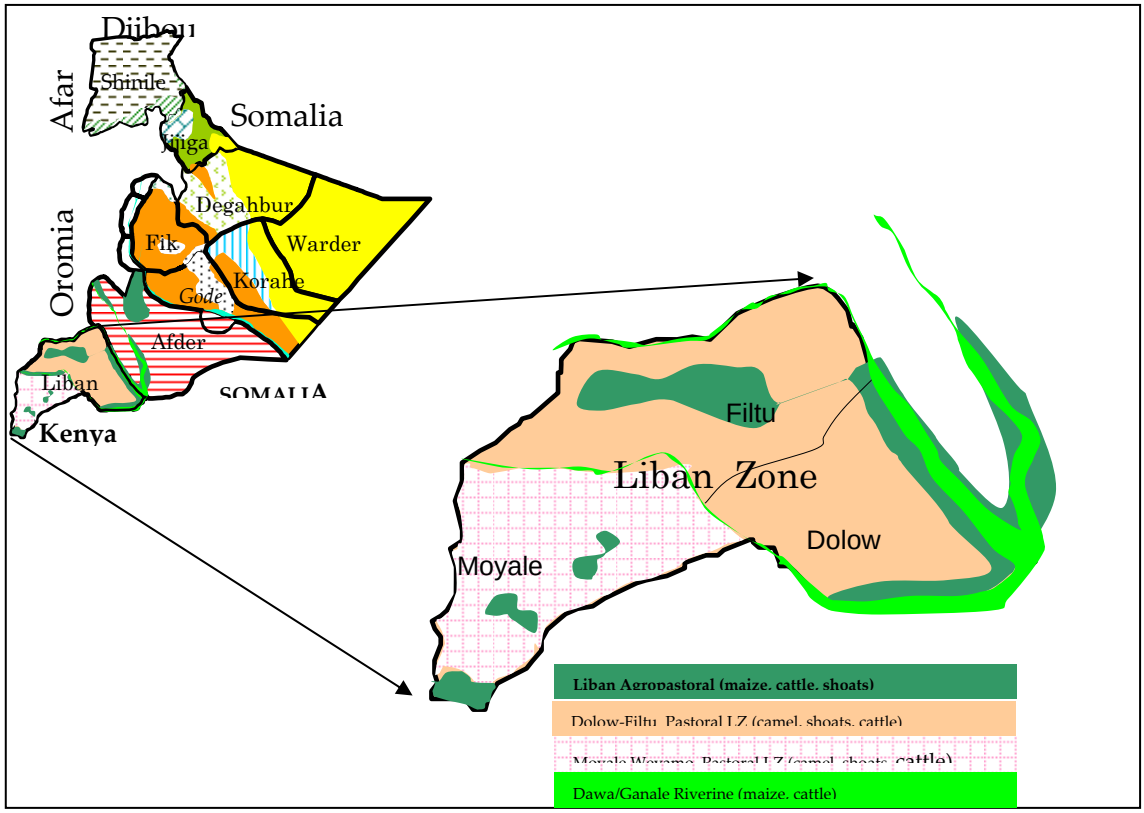
Liban (Afder) Agropastoral Livelihood Zone

(Maize, Camels, Cattle and Shoat)

Filtu District, Liban Administrative Zone
Somali National Regional State, Ethiopia



An HEA Baseline Study
By SC (UK), DPPB, and Partners
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Terms and Acronyms

ACF	Action Contra le Faim
Deyr	Rainy season between October and December
DPPB/D	Disaster Prevention and Preparedness Bureau/Department
ECHO	European Commission Humanitarian Office
ETB	Ethiopian Birr
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
Jilaal	Hot dry season between late December and March
Kamdi	A local measure of land – approx 6 *kamdi* = 1 ha
Madaal	Local measure for liquids – one *madaal* = approx 0.8 litres
OFDA	USAID Office for Foreign Disaster Assistance
OWDA	Ogaden Welfare and Development Association
PCAE	Pastoralist Concern Association Ethiopia
SC (Canada)	Save the Children Canada
SC (UK)	Save the Children-UK
SC (USA)	Save the Children-USA
SNRS	Somali National Regional State
WFP	UN-World Food Programme

1. Executive Summary

Liban Zone, in which the Liban Agropastoral Livelihood Zone is found, is one of the nine administrative Zones of Somali National Regional State (SNRS). The Zone is located in the extreme southwestern corner of the Region and has borders with Kenya to the south, Afder Zone to the east and Oromia Region to the north and west. The Zone has got three districts, namely Filtu, the capital, Dolow Ado and Moyale. There are five main Livelihood Zones (LZ) in Liban administrative Zone namely, Moyale-Wayamo Pastoral, which makes up 25-30% of the Zones population; Filtu-Dolow Pastoral (15-25%); Dawa-Ganale Riverine (15-20%); Liban Agropastoral (15-25%); and Urban groups (consisting mainly of Urban Poor) making up 10-20%.

The Liban agropastoral Livelihood Zone (LZ) is found mainly within Filtu district, although there are pockest of agropastoralists along Dawa and Ganale Rivers as well as in Moyale district. This study concentrates on the rain-fed agropastoralists found in Filtu district. Although rainfed crop production in this area does not have a long history (just a few decades old), agropastoralism is expanding rapidly, making it the largest livelihood pattern in Filtu district. Agropastoralism is increasingly being adopted mainly as a livelihood diversification measure.

Insufficient and unreliable rainfall as well as conflict with the Borana of the neighbouring Oromia Region are the major negative factors affecting production in this LZ. Conflict cuts off access to grazing area and grain and livestock markets in Negelle. Rainfall levels have to be judged carefully, as they may be sufficient for livestock production but not necessarily for the production of maize. In general rainfall levels in Filtu district are higher than in neighbouring Somali districts due to its higher altitude. As a result crop cultivation is made possible and pasture situation is often better than in these other districts. The better pastures attract livestock from neighbouring districts, often causing a quick depletion of pastures and water resources and raising the risks of spreading livestock diseases.

The LZ is close to the international boundaries with Kenya and Somalia and benefits from cross-border markets for both livestock and other commodities. However all cross-border trade is risky because most of it is carried out with the failed state of Somalia and there is a high risk of looting and extortion. Furthermore the trade does not have official sanction and constantly faces the risk of impoundment by customs authorities.

The LZ can be divided into three main wealth groups based on land cultivated and livestock holdings. The agropastoralists mainly grow maize and also rear all species commonly found in Somali inhabited areas – camels, cattle, goats and sheep. Cultivation occurs in both the *gu* and *deyr* rainy seasons although yields are frequently low with occasional crop failures due to moisture stress.

The main staple food within this LZ comes from own produced maize. Other important food sources are livestock products and purchased non-staple foods (mostly sugar). The poor and middle wealth groups also purchase staple cereals, while the poor get some food gifts (mostly as *zakat* maize after harvests). Main income sources are livestock and livestock product sales and cereal crop sales. The poor may engage in labour and self-employment

activities to supplement income and they also get some gifts from wealthier groups. Items of expenditure include mainly non-staple purchase (mostly sugar), household items (clothes, soaps, kerosene, etc), social services (education, health, clan tax) and veterinary inputs (drugs and salt). All wealth groups have some surplus of income over expenditure and this strengthens their initial ability to cope with stressful situations.

Main vulnerabilities come from drought, market and conflict-related risk factors. Households in this LZ have adopted a variety of risk minimising and coping strategies including selling more livestock, splitting households and herds, cutting expenditure, increasing self-employment, increasing migration, diversifying crop and livestock species, among many other actions.

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.

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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 Liban Administrative Zone and Filtu District

Liban Zone, in which this Livelihood Zone is found, is one of the nine administrative Zones of Somali National Regional State (SNRS). The Zone is located in the extreme south-western corner of the Region and has borders with Kenya on the south, Afder Zone (SNRS) on the east and Oromia Region on the north and west. The Zone has got three districts, namely Filtu, the capital, Dolow Ado and Moyale.

There are a number of NGOs active in Filtu district, namely COOPI (active in animal health and water development areas) and PCAE (is active in the whole Zone (working in the areas of animal health and education). There is also LVIA in Moyale district and SC-USA working in Dolow Ado.

Filtu district is one of the 3 districts in Liban zone, situated in the southern part of SNRS. The district is located in the northern part of the zone and is the headquarter of the zonal administration. It borders with Dolow district in the south and southeast, Afder zone in the east and northeast, Oromiya Region in the north and west and Moyale district in the southwest.

The district is located between the two rivers, Genale and Dawa, and the distance between the two rivers varies between 140 and 200kms. These two rivers which make the southern and northern boundaries of the district are relatively closer in the western part and further apart in the central and eastern areas. Administratively, the district is divided into 35 Kebeles (PA).

The lack of permanent water sources is one of the main problems of the area, particularly for the sedentarised agropastoral and urban populations in the central areas of the district.

3.2 Agro Ecology, Geology, & Water

Altitude & Climate
The climate is semi-arid and arid, the temperature varying between 19C and 38C at noon.

Rainfall & Water Sources
Annual rainfall in the district is estimated at 300-1000mm (COOPI, Filtu). The rainfall is higher alongside the river where there are small mountain ranges. Altitude in Liban zone ranges from 300-1500m. Rainfall is bi-modal rains following the typical *Gu* & *Deyr* pattern: *Gu*, mainly April, May and June, and *Deyr*, mainly October, November and December. It is thought that there have been more irregularities in rainfall levels in the last 5 years, with less annual rains falling in aggregate.

Pre-cambrian basement rocks and mesozoic-cenozoic and quarternary continental formation, which are not good aquifers, are common and hence the groundwater is very deep (COOPI Filtu). Water is a very serious problem in Filtu in dry periods, especially in central areas where the urban and agropastoral, sedentary, populations live. Rainfall levels are relatively high in the district in general, particularly compared to neighbouring Somali districts. However the majority of water is obtained from rainfed ponds where the water quality is very poor. Permanent sources of water are very few: Seru, which has the main borehole for district and 2 new boreholes in the Kura-bul area. There is a very small borehole at Ayinle (for human and to some extent livestock use). There is also currently drilling for a borehole at Haydimtu.

The Genale river is perennial while the Dawa is seasonal.

Introducing permanent water sources, whether boreholes or berkads, must be evaluated against the potential for over-grazing and environmental degradation over time. Dry season water trucking happens frequently and is organised and run by government and NGOs. Water prices often are very high in the dry seasons – up to 4-5Birr/20lt, when ponds dry up. Leeches also found in and around the Filtu ponds.

Soil/Vegetation
There are different soil types including: black soil (containing clay) which is relatively fertile and found along the river, and at Haydimtu at Masajid; red soils scattered throughout the district; Bakool type soil found in Seru and part of Ayinle. Black-reddish mixes are found in different areas.
The vegetation is grasslands, shrubs, bush and forests. There are a variety of common shrub trees and acacia trees, with occasional riverine forests along the two rivers. Very little soil erosion was noticed during the fieldwork despite current (due to recent dry conditions in neighbouring districts) high livestock concentrations. There used to be a lot of wild-life but this has now reduced, due in particular to periodic conflict.

3.3 Population

The district's total population is 112,465 people (Ethiopia Population and Housing census, 1997). There are 35 villages (or Kebeles) in the district. See Appendix 9.3 for a list of Villages (Kebeles) in the district listed according to LZ. The population of the district is composed of mainly two Somali sub-clans – The Dogodia who make up the majority of the district's population, and the Marehan. Filtu town is about 1,300km southwest of Jijiga and 800km south of Addis Ababa. Conflict is periodic though ongoing with the Borana.

3.4 Infrastructure & Social Services

Infrastructure
The most pressing needs for the district are permanent water sources and roads.
There are no tarmac roads in the Zone, except for the Moyale-Addis stretch that only links Moyale to Addis Ababa but not to other parts of Liban Zone. In general the main

Dolow-Filtu-Negelle is passable most of the year. Within Filtu district, and most other parts of the Zone, camels are used a lot for transportation.

Small health centres and dispensaries are found within the district with poor human resources.

The veterinary service in Filtu district is better than in the other neighbouring districts due to mainly the presence of NGOs.

There are reasonable schools in Filtu town, as the zonal capital, and in surrounding villages. This is also in part attributable to the presence of NGOs. Nevertheless education infrastructure is generally poor.

Livestock Marketing

The main markets serving Liban Zone are Negelle (Borana), Mandera and Moyale in Kenya. Due to instability in the security situation, market access is very variable. Conflict may hinder access to Negelle market but access to Mandera is usually possible with only occasional interruptions resulting from border closures.

Currently, the impact of the Gulf livestock ban reaches even Filtu as exports of shoats went through Mandera to Mogadishu and then to the Gulf. Shoat prices have therefore been low.

Itinerant traders (*Hagaayow* – young boys) often come to Filtu particularly for shoats, and usually take them to Mandera.

Market routes:

Mandera is the market for livestock bound for Mogadishu, Garrissa, Nairobi and Belet Weyne (for Berbera and Bosasso). Moyale is also the main market for Nairobi-bound livestock (cattle, shoats and more recently, camel).

Due to recent drought conditions in the Mandera area, camels from the Moyale-Filtu border area, around the Dawa river (near Golbo), are being taken to Moyale for onward sale to the various destinations.

In general it is cheaper to transport livestock from Moyale rather than Mandera, to other parts of Kenya.

Camel

Transported through Mandera to Mogadishu, in Somalia and markets in Kenya. Moyhale is also an important transit market for camels, for markets in Kenya and also to Mogadishu.

Market routes:
Mandera – El Wak – Mogadishu; Mandera – Nairobi and Moyale-Elwak-Mogadishu. Also Moyale-Isiolo-Nairobi (and other Kenyan markets) is increasingly becoming important.

Cattle
The most important market for cattle is Kenya and is marketed through both Mandera and Moyale. Negelle Borana is also an important cattle market for the Zone.

Goats
Filtu as a district is not a major goat area. It is too cold and the altitude too high for shoats. Shoats are sold locally and to Kenya.

Trade – food and non-food items
Normally the Zone would get seasonal harvests of maize and sorghum from the riverine and rainfed agropastoral zones and this would provide most of its cereal needs. Main markets of exchange for these cereals are Dolow and Filtu.

Cereals from Oromia and other Ethiopian highlands also reach Moyale and Filtu through the main tarmac road and would transit through Shasamene and Negelle. Other items that are obtained from within Ethiopia (transiting through the same centres) are wheat flour, paraffin/kerosene, some soaps and candles.

Many items are obtained from Somalia, through either Mogadishu or Hartisheikh (the latter via Gode). From Mogadishu clothes, food items (rice, pasta, sugar) and *bagash* (small household items like soap, etc) are obtained. Hartisheikh provides clothes and other non-food items. Goods from Mogadishu are not taxed but are relatively risky to bring in. Hartisheikh is less risky but more likely to be taxed. Goods from Somalia and Mandera/Kenya have the risk of being confiscated by Ethiopian custom authorities. Kenya (Mandera and Moyale) provides mosquito nets, omo soap, tea leaves, stationary and edible oil and plastics. Goods from Kenya are often brought into Liban Zone by donkey.

Filtu sits at a crossroads: Negelle (also to Moyale); God-usbo, Gode (to Hartisheikh and Mogadishu) and Dolow (to Mandera). Filtu and Dolow Ado are therefore important markets for food and non-food commodities from all three countries.

Currency
Unlike some other border areas in SNRS, the Ethiopian Birr is the main currency used for Most of Liban Zone. The Kenya shilling is also used in parts of Moyale and Dolow Ado districts.

3.5 Other Activities in the Zone

Gums/Resins
These are generally not significant sources of income for any population groups. *Fooh* and *Habag* are mainly found in Bander, Ayinle and Usubye.

Wild Foods
Wild foods are not significant as a food or income source but are available in normal years, and their collection will be increased in bad years. They include: *Hohob*, *Muranyo* and *Marer*, which are tasty edible fruits. In bad years, the seed of the *Garas* tree is cooked and eaten.

Handicrafts
Handicrafts are made throughout the area, but on a small scale, with relatively few people within any one area having the necessary skills.

Gold
Gold is found in parts of Filtu and Moyale districts, and mainly collected by pastoralists and returnees from Somalia.

Remittances
Unlike in many Somali-inhabited areas, remittance is very low or insignificant in Liban Zone.

Relief Food
Relief food is not a normal source of food, although since the 1999/2000 drought, it has become more common. The food aid has had the characteristic of being poorly targeted and the blanket distributions act as a disincentive for the farmers.

3.6 Other issues in the Zone

Conflict
In Filtu district, fighting between the Dogodia and the Borana is periodic but ongoing. It is mainly due to pasture and water access and territorial claims. Currently (early 2002) there is an area, 120kms long and 60-70kms wide of prime rangeland (in the Wala Saleiman and War'ade areas) that is abandoned due to insecurity. In the neighbouring Moyale district there are also frequent outbreaks of fighting for similar reasons between the Somali groups (Garre) and neighbouring Oromo tribes (mostly the Borana)

Conflict also affects access to Negelle market, which, in peaceful times, is the main market for livestock sales and cereal access for Filtu, Moyale and the rest of the Zone.

3.7 Livelihood Zones in the Administrative District

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).

Liban Zone has a diverse livelihood system. The major livelihood groups (Livelihood Zones) identified are:

- *Liban Agropastoral LZ*
  The subject of this study - 15-25% of Zonal Population
- *Moyale-Wayamo Pastoral LZ*
  25-30% of Zonal Population – This LZ is found in Moyale district and all four species are reared although camels and goats are more dominant. (see separate study).
- *Filtu-Dolow Pastoral LZ*
  15-25% of total Zonal Population – this group occupies the largest area in Dolow Ado and Filtu districts although the population is not high (see separate study)
- *Dawa-Ganale Riverine LZ*
  15-20% of Zonal Population – this group grows crops along the rivers Dawa and Ganale and also keep some livestock. The major crop grown is maize while the main livestock species are goats and sheep (shoats). The farming areas along the rivers are at Golbo on the Dawa river and Bander on the Genale river. Upstream of Golbo on the Dawa river and upstream of Bander on the Genale river there is no cultivation due to the rocky terrain. (See separate study)
- *Urban LZ*
  10-20% of total Zonal population. The urban population is mainly found in Dolow Ado, and Moyale, with small trading groups in Filtu and other villages across the Zone. There are also significant numbers of Urban poor across the Zone – mainly around Moyale, Filtu and Haysuftu. These poor mainly comprise of families displaced by war (mainly tribal/border conflicts with the Oromo neighbours) and returnees from Somalia in 1992/93.

Overall, about 50% (45-50%) of the population of Liban Zone is Pastoral, while 35-40% are agropastoralists (either riverine or rain-fed agropastoralists). The remaining 10-20% is urban.

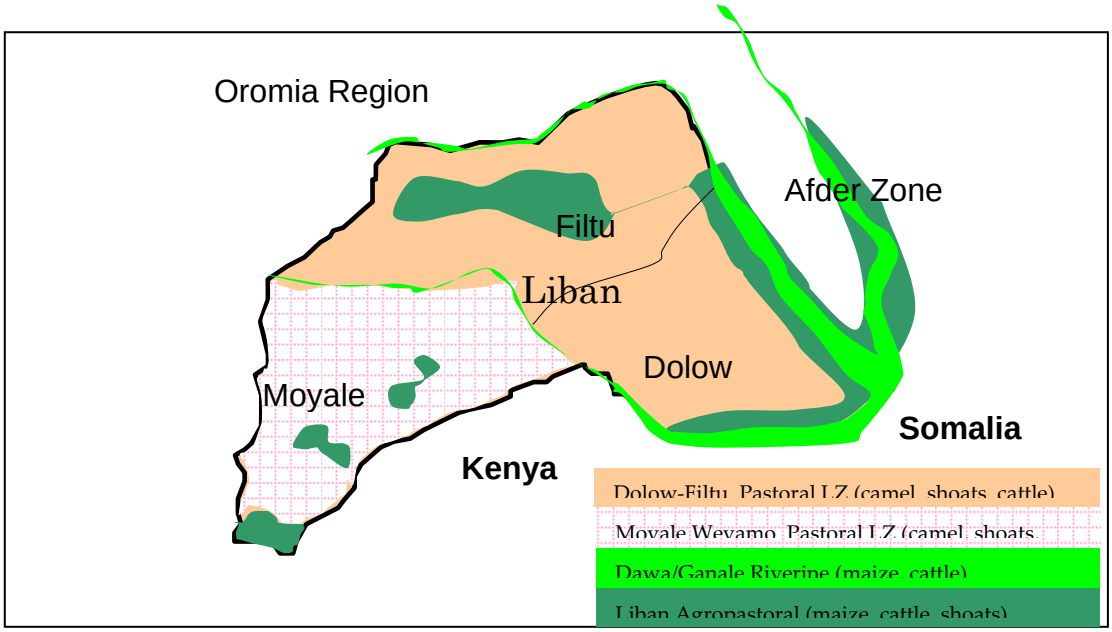
Name of LZ	Districts covered in LZ	% of Administrative Zone's population
Moyale Wayamo Pastoral	Moyale	25-30%
Filtu-Dolow Pastoral	Filtu, Dolow-Ado	15-25%
Dawa-Ganale Riverine	Dolow Ado	15-20%
Liban Agropastoral	Mainly in Filtu; some in Dolow Ado and Moyale	15-25%
Urban	Moyale, Dolow-Ado, Filtu (and smaller villages)	10-20%
TOTAL		**100 %**

Table 1 - Livelihood Zones in Liban Administrative Zone

LZs, within the Filtu district

Filtu district is divided into three LZs as follows:

- 65-75% agropastoralists (50-60% rainfed and 10-20% riverine along Ganale River)
- 25-35% pastoralists
- 5% urban (includes those in towns that are engaged in crop and/or livestock production).



Map 1 - Location of Liban Agropastoral LZ

4. Food Economies

This section will only discuss the Liban (Afder) AgropastoralAgropastoral Livelihood Zone. Liban Zone has got scattered agropastoral groups, which can be loosely categorised as 'Riverine' or 'rain-fed'. The Agropastoralists discussed here are the rain-fed groups as those that live along the rivers are classified as Riverine. The Rainfed agropastoral group is mainly in Filtu district and in some areas nearer to the Ganale and Dawa rivers. Moyale district has a small group of agropastoralists scattered within the district. The study was carried out for the Agropastoralists around Filtu district. See Appendix II for Agropastoral villages/Kebeles in Filtu district.

4.1 The Livelihood Zone

Population

Kinship, family & household systems

75% of the Filtu district population are Dogodia sub-clan; 25% are Marehan (mostly in Haysuftu and Wala Saleiman areas). Other Somali groups are also scattered within the Zone, but in insignificant numbers. Migrating pastoralists will pass through at time, from other clans. Somali is the main language spoken.

The Dogodia are also found in neighbouring Mandera and Wajir districts of Kenya. They have an ongoing dispute and therefore conflict with the Borana in Oromia Region. Conflict and negotiations are periodic but ongoing between the two clans.

Respected traditional leaders (*Wabers*) are strong and lead the community. The community can be mobilised easily. This is partly due to clan homogeneity. The conflict against the Oromo keeps the clan united.

Family structure

Families are both monogamous and polygamous and family sizes differ only slightly with respect to wealth groups. Typical poor household have 6 members; typical middle households have 7 members, while typical better off households have 9 members.

Responsibilities within the household

The father is the main decision-maker, assisted by the elder son. He is the owner of all livestock (and other resources). He is responsible for herd management. The father greets and hosts guests – e.g. slaughtering goat. When long distances are use pack camels to collect water. Men do most agricultural activities, except weeding which is largely done by women.

The wife, assisted by an elder daughter manages the household food consumption and the children. Older girl children also help in managing younger children. The women look after the pack animals, calves and kids. They also organise and build the homestead. Camel milking is usually done by the elder son. Cattle and shoat milking is

done by women. Water fetching is carried out by women and children when distances are relatively small, such as in the wet season. Weeding is usually done by women.

The children engage in water collection in the wet season, when distances are relatively short. Looking after younger children (especially girls) and shoat kids. Children collect gums and resins while herding and also carry out the scaring of birds and small animal that feed on the crops.

Variations within the LZ
The higher potential crop land is found in the central parts of the LZ, with land quality deteriorating outwards, towards the two rivers. Recent conflict has particularly affected Haysuftu and Wala Saleiman areas, causing displacement and an area of no-mans land which is of high grazing potential (used by agropastoralists and pastoralists).

This land is very fertile and results in high crop yields when there is sufficient rain. As one moves from the centre towads the two rivesr the land grows uneven and more mountains appear, making it more suitable for grazing.

Links with other LZ
The Dogodia form the vast majority of the population within the district. This allows for the people from one LZ to assist those from another when times are difficult (given that different LZs will be affected to a different extent by the same shock). This assistance may, for example, be in the form of gifts or labour.

In good years pastoralists may (opportunistically) grow crops, obtaining seeds and tools from their agropastoral or riverine kin. The Dogodia, originally pastoralists, have relatively recently diversified into irrigated and rainfed agriculture. This may be a result of a natural process of diversification and sedentarisation as well as due to asset loss.

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.

The Historical timeline is presented in the table next page. The circles above are representation of stones, used as a PRA (participatory rural appraisal) technique. A scale of 1 – 5 is used, where 1 stone represents the worst type of season (in overall terms, not just rains), 5 the best, 3 normal or average, and 2 and 4 in-between levels.

The last 5 seasons have in general been poor due to both drought and conflict. The *Deyr* rains in particular have been very poor. Reasonable rains in some seasons have been spoiled by conflict. Late 1997 and 1998 were heavily influenced by the heavy El Nino rains, which brought both good and bad events: good pasture and water conditions well in to 1998, but also the spoiling of crops and diseases.

Rains in this FEG, are judged more by their impact on crops than livestock. Therefore good rains for livestock may not be good enough for crops. Localised differences in rainfall can make a big difference in cropping areas but for pastoralists livestock migration can even out these variations.

The Reference Year 1995 - 1996.
1995/96 was chosen as the reference year for this LZ. This is supported by other Agencies reports. This is due to the number of very different years since then. This baseline year is to a certain extent an average over the whole agropastoral population - different timelines in different villages will indicate localised differences.

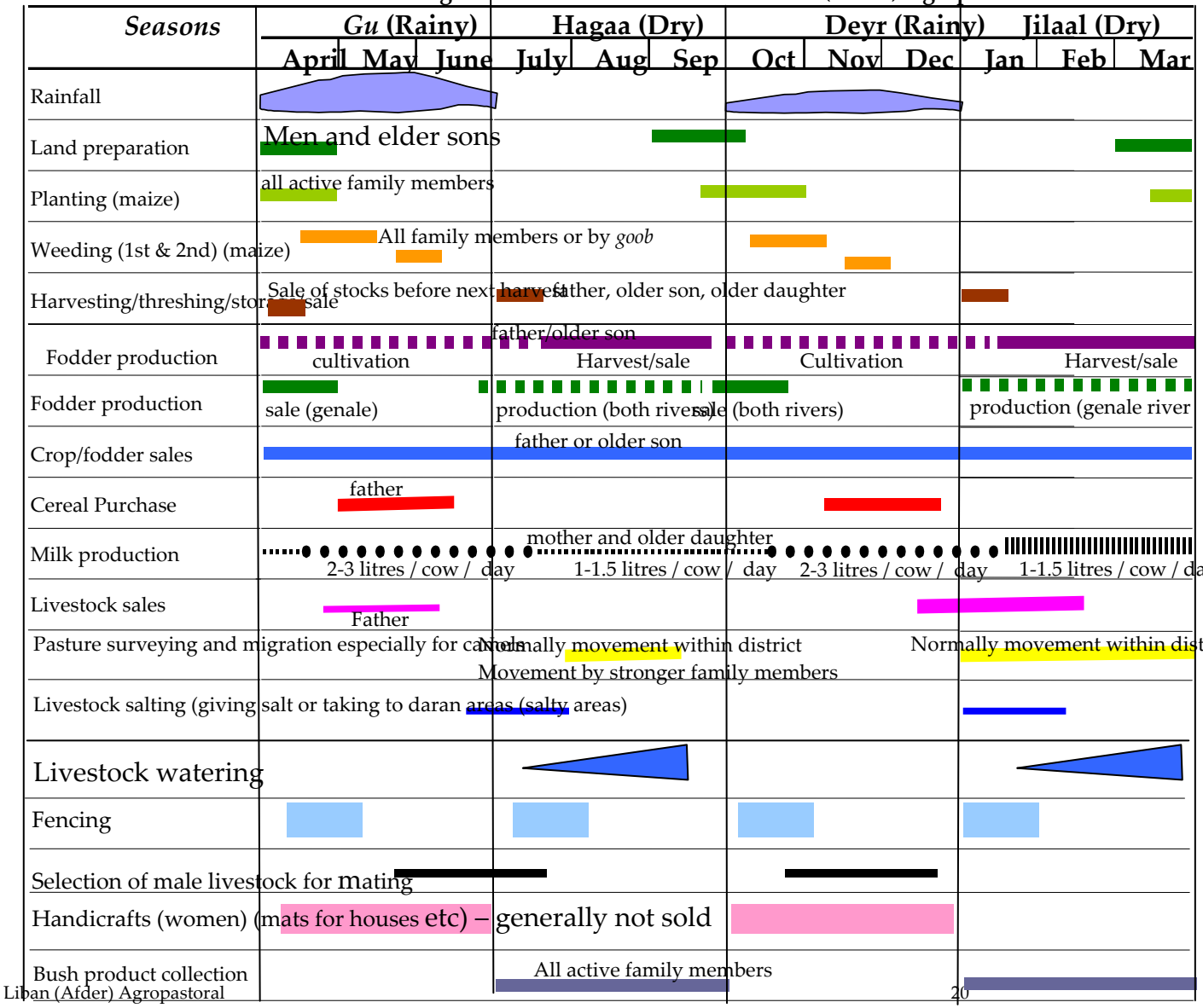
In a normal year, in the dry seasons, 1 shoat will buy or be exchanged for 60-80kgs of maize and in the wet season, 1 shoat will have the equivalent value to 1 Quintal (or 100kgs) of maize.

Table 2 - Historical Timeline for Liban (Afder) LZ

Year	*Deyr*	*Gu*	Explanation
2001/2002 Axad	○ ○	-	Poor rains. Poor crop production and pasture. 100kg maize : 1 shoat. Normal livestock condition. Below normal water availability. Somali-Oromo conflict
2000/2001 Sabti	○○	○ ○ ○	*Deyr*: poor rains, pasture and crop production- migrations to different areas. Displacement due to conflict. Livestock diseases – *Butaal* (camel), *Hoto* (cattle). 20-35kg maize :1 shoat. *Gu*: Normal rains & production. Small army worm out-break. Negelle livestock market negatively affected by Somali-Borana conflict. 50-75kg cereal : 1 shoat.
1999/2000 Jimce	○	○ ○	*Deyr*: very poor rains, production & water availability. In-migration due to Somalia-Borana conflict. Worst *Deyr* season. 25kg maize : 1 shoat. *Gu*: Normal rains. Crop pest infestation. Somali-Oromo conflict, caused in-migration. 50kg maize : 1 shoat.
1998/1999 *Khamis*	○ ○	○ ○ ○ ○	*Deyr* (*Deyr Siraay* or *Oon*). Poor rainfall and production. Poor livestock market. Migration to Dawa river. Peace. Camel disease (*Hargab*). 35kg maize : shoat. *Gu* (*Gugii Dabaysha*): Good rains & production. Negelle livestock market open. 100kg cereal: 1 shoat. Peace.
1997/1998 *Arbaca* El Nino year.	○○ ○	○○ ○ ○	*Deyr* (*Deyr Shuba* or *Deyr Biyo Badan* (pouring) or *Deyr Boran*): Good rains & production. Start of Somali – Oromo conflict. Foot rot (shoat), *Bural* & diarrhoea (camel). Some flooding and water-logging caused damage to early maturing crops. 150kg cereal : 1 shoat. *Gu*: Good rains and production. 100kg cereal : 1shoat.
1996/1997 *Talaada*	○ ○	○ ○ ○	*Deyr* (*Deyr* Cabeeb - sore lips; symptom of foot & mouth), *madaxtaag* (madness-camel disease symptom) or *Duba-orod* (same as previous): Poor rains and production. Normal livestock conditions. 75kg cereal : 1 shoat. *Gu*: near normal rains and production. ToT: 85 – 100kg cereal : 1 shoat.
1995/1996 *Isniin* Normal Year	○ ○ ○	○ ○ ○ ○	*Deyr*: normal rains & production. 85 – 100kg : 1 shoat. *Gu* (Gugii *Hargabka* - respiratory disease of camel). Good rains and production. Camel disease - *Hargab*. 75 – 100kg : 1 shoat.
1994/1995 *Axad*	○ ○ ○	○ ○ ○ ○	*Deyr*: good rains and production. Camel disease (*Madaxtaag*). ToT: 100 – 150 kg : 1 shoat. *Gu*: Good rainfall and production. Some small army worm infestation. 100 kg : 1 shoat.
1993/1994 *Sabti*	○	○ ○ ○	*Deyr* (*Deyr Dahab* (goldrush) or *Rarandhig*?): very poor rains and production. Migration to Dawa river for gold mining. 50kg maize : 1 shoat. *Gu*: below average rains and production. 75kg maize: 1 shoat.

4.3 *Seasonal Calendar*

Figure 1 - Seasonal Calendar for Liban (Afder) Agropastoral LZ



4.4 Other information particular to the LZ

Access to Land and Water
Farmland is individually owned. Grazing land is communally owned and accessible to all within the clan – the Dogodia. There is generally no limitation on agricultural land. In some villages grazing reserve areas are kept.

Shallow wells are both communally and privately owned. Boreholes are government owned. Ballis / ponds are communal. No boundaries exist between the sub-clans of the Dogodia.

Crop production
The major crop cultivated in this LZ is Maize. Pockets of wheat, sorghum and beans are also found. Sesame has been recently introduced and groundnuts newly introduced in Haydimtu. Crops are entirely rain-fed in this LZ. Maize is stored in raised cribs – *Gotara,* which do not provide good protection against storage pests (e.g. beetles). Early maturing varieties of maize – 3 month cycle – have also recently been introduced. Common crop diseases are soil born diseases/pests and vertebrate pests (birds, rats etc).

The poor households borrow or hire oxen and ploughs from middle and better-off households in order to cultivate their land. In return they provide agricultural labour (where they may also be paid in food). Ownership of oxen and plough is common in the better-off but more sporadic in the middle and scarce for the poor. Land is un-limited supply. The ability to cultivate it is the limiting factor. Agricultural activities may be done in groups called a '*goob*' – where farmers assist each other in weeding, planting and harvesting - usually the farmer being assisted would provide food to those assisting him/her, for that day.

Maize is often densely planted in order to compensate for poor quality seeds, which will not germinate. In the last 5 seasons crop production has been poor. In a normal or good year, surpluses are generated and sold to neighbouring areas. In such cases peripheral areas of this LZ can obtain better prices than those in the central areas due to their proximity to different markets. Within the rainfed areas, Haydimtu and Masajid areas are the most fertile. Much of the cropped land is surrounded by small hills, whose drainage in rainy times assist with irrigation.

The local unit of crop land measurement is the *Kamdi* , 6 of which are equal to 1 hectare.

The fodder from maize production is generally used for household's own livestock, not sold.

Livestock:
Species reared
All the four livestock species reared by the Somali are found in this LZ – cattle, camels, goats and sheep. Cattle are mainly of the Borana type, while camels and shoats are the Somali types.

Milk production:

Milk sales and income are significant, with both cattle and camel milk being sold for cash. As the agropastoral group comprises of sedentary villages surrounding Filtu town there is a guaranteed market for milk sales. Prices follow expected seasonal trends according to production – high in the dry season, low in the wet. Ghee production is a normal activity and takes place in most year types. Oil consumption is relatively low and replaced by local ghee sales and consumption.

Table 3 – Daily Milk Yields

	Wet	**Dry**	**Milking Duration**
Camel	3lts	1.5lts	12 mnths
Cattle	2lts	1lt	6 mnths
Goats	0.5lt		3 mnths

Local units used for milk are: One madaal = 0.8lts; One bakeri = 0.25lts

Migration.
In the wet season movement is within the Zone – mostly within the district. In the dry season and in drought years, animals move closer to either of the two rivers or around the few existing boreholes. Livestock rarely leave Filtu district which is higher and its rainfall is historically more reliable than in neighbouring Somali districts. In a normal dry season livestock will usually move within the clan radius. In a very bad year livestock may have to move across clan borders.

Diseases:
Most common livestock problems are from ticks and tick-born diseases. CCPP, CBPP, Black leg, *Garab-goy* are common diseases. *Dabar-Jabiye* ('that which breaks the back') is a very serious endemic disease which affects cattle.

Note: The *Ciin* plant is a common poisonous plant in the area, particularly affecting shoats.

4.5 Wealth Breakdown

The Liban Agropastoral LZ can be divided into three wealth groups – the Poor, the Middle and the Better off. Wealth is determined by livestock holdings and cultivable land ownership. All the livestock species are kept although camels and shoats are the most important. As expected livestock ownership and land under cultivation increases as one moves up the wealth levels. Similarly, so does the average number of wives, and therefore the size of the family.

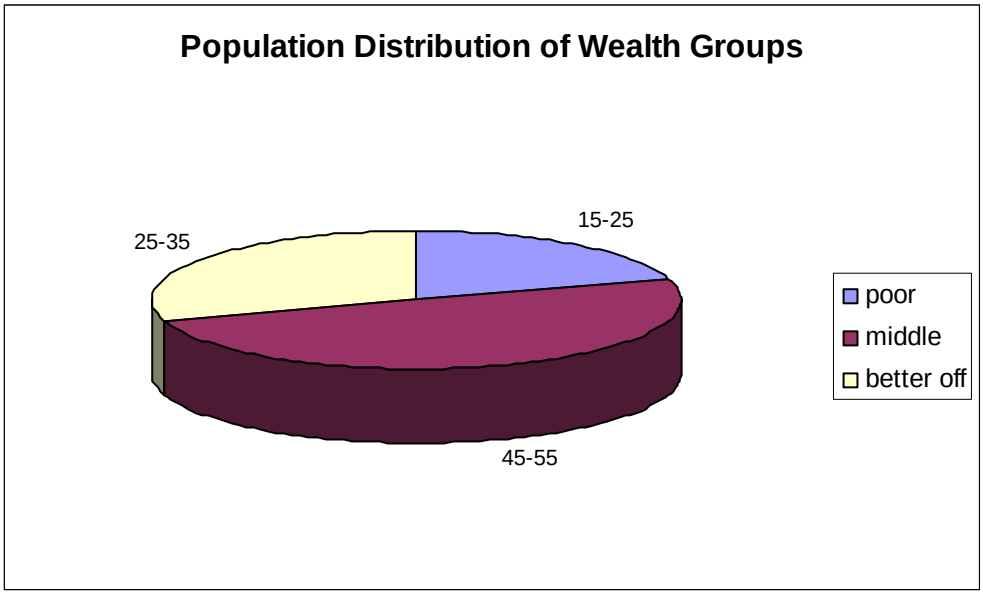


Figure 2 - Wealth Groups in Liban (Afder) Agropastoral LZ

The poor will receive a loan of an *irmansi* (milking) animal over the course of the year. This may be a shoat, a cow (most common) or a camel. The poor will also carry out agricultural labour for the middle and better-off in exchange for food and/or the use of their oxen and plough. The poor are more likely to have female headed households and households with few productive members.

Table 4 - Wealth Characteristics

Wealth Group name	Poor	Middle	Better off
Characteristics			
number of wives	1	1-2	1-3
Household size	6	6-8	8-10
Number of members living away & where			1-2 live away
Number of members from other family(ies)			
Number of members earning income & who (in order of importance)			
LIVESTOCK			
Owned Shoats	10-15	20-30	35-50
Borrowed Shoats			
Female Sheep	1-3	4-5	6-8
Male Sheep	1-2	1-2	2-4
Lactating Sheep			
Female goats	5-7	10-20	20-30
Male goats	2-3	4-6	6-9
Lactating goats	2-3		7-10
Owned Cattle	2-5	10-12	15-35
Borrowed Cattle			
Female Cattle	1-3	7-8	11-27
Male Cattle	1-2	3-4	4-8

Wealth Group name	Poor	Middle	Better off
Characteristics			
Ox(en)			
Lactating Cow(s)	1	1-3	3-6
Owned Camel(s)	2-5	10-15	25-40
Borrowed Camel(s)			
Female Camel(s)	1-3	7-11	20-32
Male Camel(s)	1-2	3-4	5-8
Lactating Camel(s)	1	2-3	4-6
Pack Camel(s)	0-1	1-2	2-3
Donkey(s)/Ass(s)	0-1	0-1	0-1

4.6 Food Sources in the Reference Year

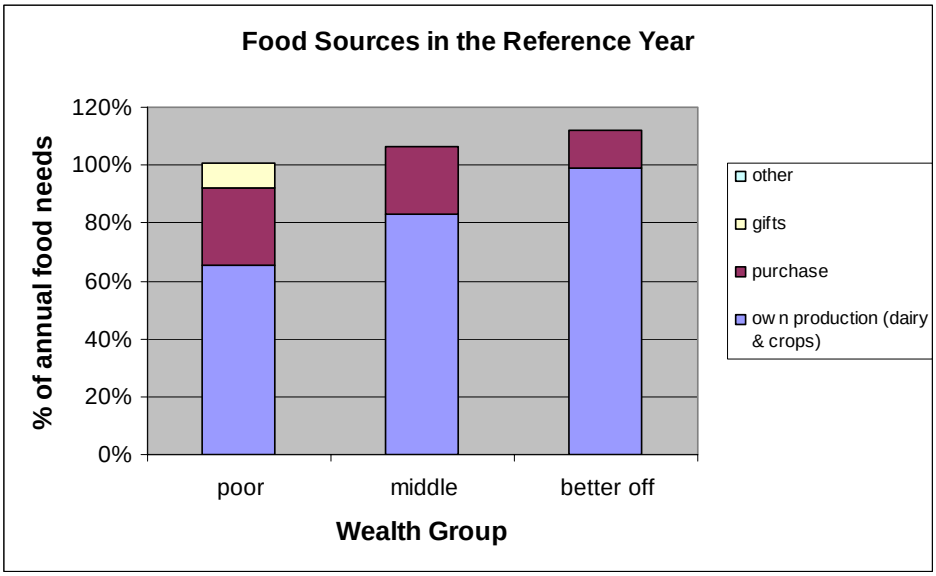


Figure 3 - Food Sources for all Wealth Groups in Liban (Afder) Agropastoral LZ

Poor

Based on 1900kcal[2], the poor households can obtain 100-105% of their total kcal needs annually. This is obtained mainly from own maize harvest which provides 50-55% of total food intake per year (less than 10% of the 5.5 quintals harvested is consumed as green harvest). Staple purchase (maize) provides 10-20% of food while livestock production contributes 10-15% of food intake. The livestock production consists mainly of milk with insignificant amounts of meat and ghee consumed. The milk comes from 1-2 milking camels, 1-2 milking cows, and three goats. Smaller contributions to food intake are gifts (usually 100kg of *zakat*) and non-staple purchases (Mainly sugar). Most of the staple cereals and sugar are purchased in the dry seasons when livestock production declines due to a shortage of both pasture and water (see Figure 5 below).

[2] 1900kcal is the minimum average energy requirement per person per day (pppd) for a family consisting of the young, elderly, active persons, etc

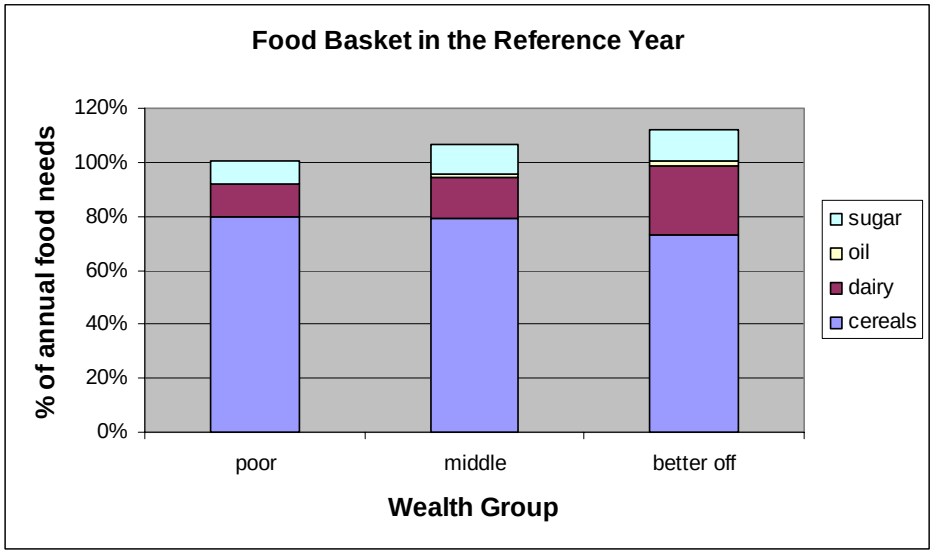


Figure 4 - Food Basket for all Wealth Groups in Liban (Afder) Agropastoral LZ

Middle

The most important food source is own harvest (of maize) which provides 60-70% of food consumed annually. This is followed in importance by livestock products (10-20%), Staple purchase (5-15%) and non-staple purchase (5-15%). The Middle WG obtain about 105-110% of minimum needs of 1900kcal per person per day (pppd), from all their food sources.

This typical household of 7 consumes 8.5Q from its own maize harvest, with a small additional amount consumed green. 1 ½ quintals of maize are bought to make up the remainder of cereal needs. The 3-4 milking camels and 3-4 milking cattle provide milk and ghee. About 134kg of sugar is consumed over the whole year and this makes up most of the non-staple purchase. Daily consumption is higher in the dry season and lower in the wet season, according to the availability of milk. 1 litre of oil is consumed per month, for 6 months of the dry seasons.

Better Off

This household type, of 9 people, consumes 12 quintals of its own maize harvest, obtaining 60-70% of food from this source. The 5 milking camels, 4 milking cattle and 9 milking goats give a significant amount of milk and ghee for consumption (and sale). The milk makes up the largest part of the 'livestock production' component. Non-staple food purchase is mainly sugar and oil. About ½ kg of sugar is bought per day all year around with the daily amounts varying by season – rising when milk availability declines. 1½ litres of oil is also bought per month for 6 months of the dry seasons. The Better off households do not purchase staple foodstuffs as their own sources are sufficient for them. Better off households obtain 110-115% of the minimum energy requirements of 1900kcal pppd.

4.7 Income Sources in the Reference Year

Poor

Normally the sale of livestock and livestock products together account for over two-thirds of annual income. About 3 ½ quintals of maize are also sold making up a small but significant income source (10-20% of income). Small amounts of income are also derived from agricultural labour, self-employment and *zakat*.

The income from animal products comes mainly from the sale of camel milk, although cattle milk is also important; ghee sales contribute an insignificant fraction to total income). Agricultural labour consists of weeding (2 persons involved) and land clearing (1 person). The poor would sell one head of cattle and three shoats to contribute to their annual income. Self-employment mainly consists of the collection of bush products (mainly firewood and charcoal). The cereals sale component is mainly from the sale of a small amount of maize). Total income for middle households is about ETB 2200-2300.

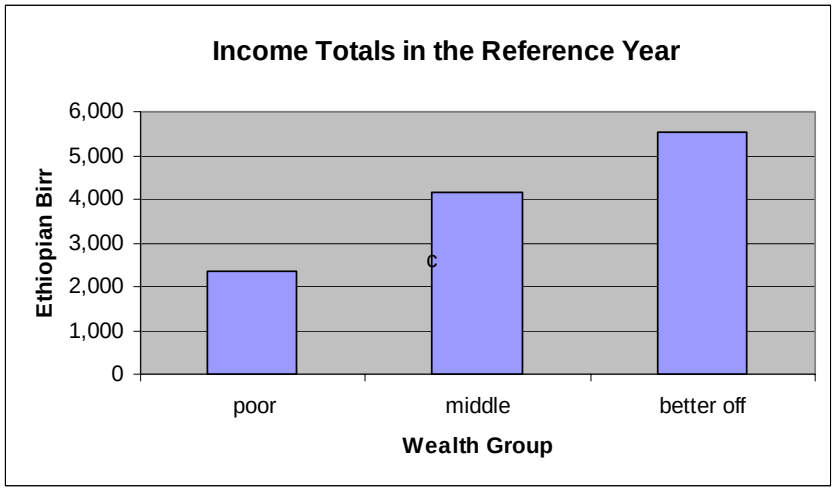


Figure 5 - Income Totals for all Wealth Groups in Liban (Afder) Agropastoral LZ

Middle

The highest income earner is livestock product sales (mainly camel and cattle milk) and it provides 50-60% of total income. Livestock sales provide 30-35% of income while the sale of own cereals (maize) provides the least income 5-15% of annual income. 5 quintals of maize are sold per year, as well as 2 cattle and 4 shoats. Total annual income for the middle households is ETB 4100-4200.

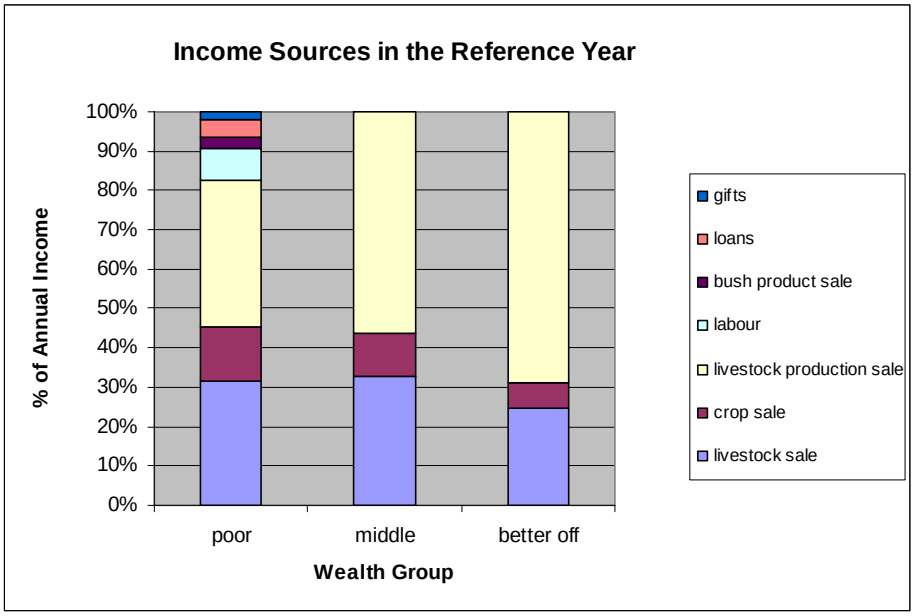


Figure 6 - Income Sources for all Wealth Groups in Liban (Afder) Agropastoral LZ

Better Off

The majority of income comes from the sale of livestock products (cattle and camel milk and some ghee). This category provides 65-75% of income. Livestock sales is the second most important source of income with 1 camel, 1 head of cattle and 5 shoats being sold in a normal year. Cereal sales is the least important source of income, and this is mainly due to the fact that the crop production is not high potential and harvests are too small to allow sufficient surpluses for sale. 3-4 quintals of maize are sold by the richer households in the reference year. The Better off have an annual income of ETB 5500-5550.

4.8 Expenditure Patterns in the Reference Year

Poor

Expenditure is on a variety of items, most of which have similar importance. Household items and non-staple foods are the biggest expenditure items each taking up 20-30% of annual expenditure. This is followed by, Social services (10-20%), veterinary inputs (drugs and salt), and staple purchases in that order (the last two both about 10%) - see Fig 3 below. Remarkably, poor households have some 'flexibility' i.e. some surplus of income over expenditure, which would be useful in times of hardships, when incomes decline. The fact that staple purchases takes up so little of total income implies that households have a high degree of flexibility in normal years.

The specific expenditure items under each category are as follows: 'Staple purchases' includes only maize; Household items include mainly clothes, soap, kerosene and tealeaves; 'Social services include health, education, gifts and clan tax; 'Non-staple purchase' includes only sugar.

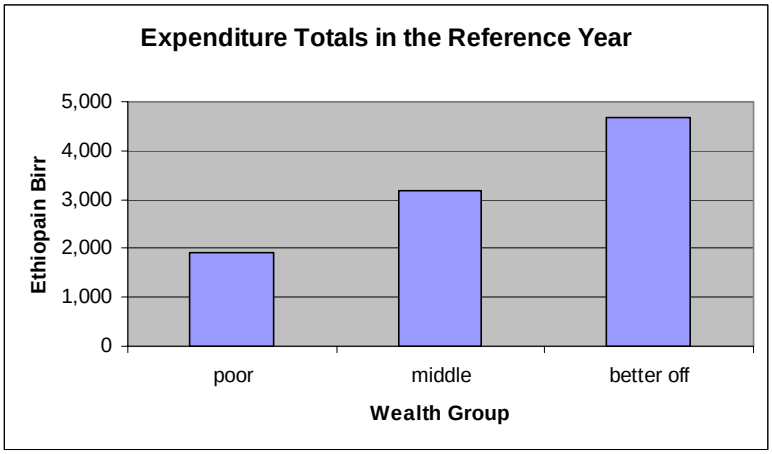


Figure 7 - Expenditure Totals for all Wealth Groups in Liban (Afder) Agropastoral LZ

Middle

Expenditure on non-staple food (sugar, tea leaves and oil) is the highest, take up 20-25% of total income. Social services (clan tax, education, health, and *zakat*) are the second most important expenditure category (15-25%). Household items (clothing, soaps and detergents, kerosene) take up 15-20% of annual income. Veterinary inputs make up 10-15% while staple cereal purchase is the least important expenditure item (3-5%). Notably expenditure on necessities are very little and relative 'luxuries' are high. There is also a significant amount of 'flexibility' suggesting that middle households could adjust to certain levels of 'shocks' without even altering their normal pattern of expenditure.

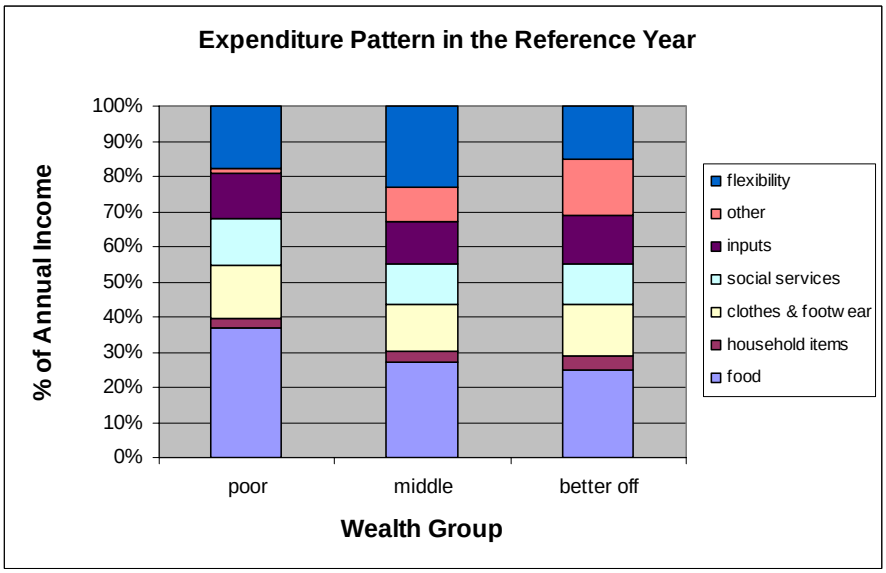


Figure 8 - Expenditure Pattern for all Wealth Groups in Liban (Afder) Agropastoral LZ

Better Off

As in other WGs, the expenditure pattern is varied with higher proportions of income spent on relative 'luxuries' like non-staple foods (oil, sugar, tealeaves), social services (clan tax, education, health, *zakat*), household items (clothing, soap, kerosene, loans, ceremonies), and vet inputs (drugs and salt). The Better off do not purchase staple

cereals. Again the 'flexibility' is significant (about 17%) and this shows households can initially cope well with shocks.

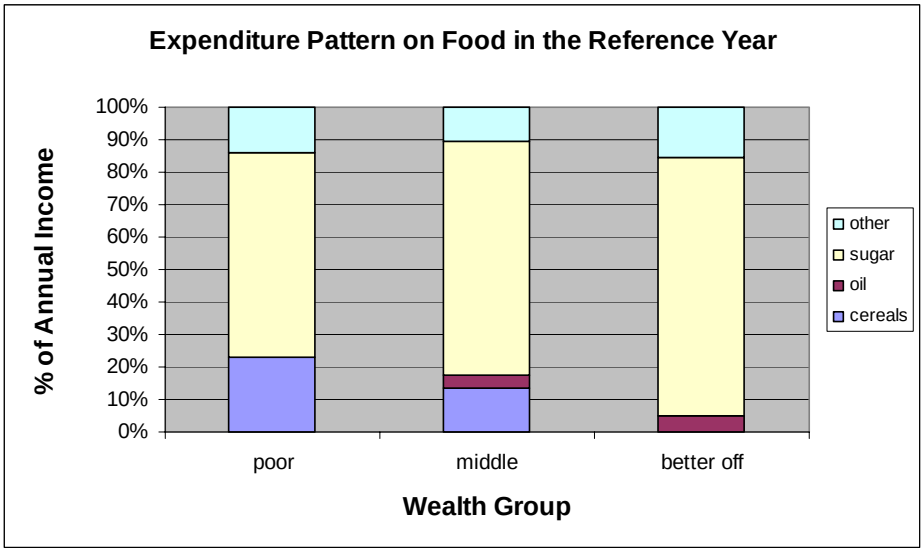


Figure 9 - Proportional Expenditure on Food for all Wealth Groups in Liban (Afder) Agropastoral LZ

4.9 Current Situation

As a result of the fact that Filtu district receives more rainfall than its neighbouring Somali districts, in Ethiopia and Kenya, there is often heavy in-migration over many seasons. While this is historically the case it has been particularly notable in recent seasons where north Kenya has been very dry. This puts pressure on natural resources. Filtu also has a very few permanent water sources in normal times, so water has been particularly stretched. The major water sources are water ponds, which are now drying up more quickly. 2 new boreholes have very recently been completed which helps the situation. Previously there was only 1 main borehole. The concentration of livestock also causes more diseases to be spread. There are also currently many weak animals in the district, especially those from neighbouring districts. This makes the *Gu* rains particularly important this year.

Conflict in October and November 2001 in Haysuftu and Wala Saleiman has cut off important grazing land. Disruption of livestock market at Negelle also due to conflict – happened for a while. Not so serious as the Kenya market is often used anyway, has good prices and is usually easy to switch to.

5. Vulnerabilities, Risks & Coping

Households within this Livelihood Zone are vulnerable to or as a result of, the following:

- Drought – causing livestock and/or crop failures, inter and inter-annual rainfall variation and low rainfall, resulting in pasture and water shortages
  - However this seems to be a relatively low risk in comparison to other areas, as it is often a district for in-migration from neighbouring districts.
- High levels of in-migration putting stress on water and pasture resources, and increasing disease risks
- Conflict (especially with the Borana, which makes important grazing areas and markets inaccessible)
  - Population displacement occurs on an ongoing basis due to long-term conflict and drought
- Livestock and crop disease outbreaks, this can have disastrous effects especially because there are very limited veterinary disease and pest control and prevention services.
- Market shocks – e.g. (border closures and unfavourable terms of trade)
- Lack of income diversification: few alternatives for food and income generation exist.
- Poor government services (although better than the rest of the Zone)
- Poor infrastructure – transportation, health, education and other infrastructure is very poor.
- Lack of development: poorly developed private and public sector
- Expansion of water sources – berkad introduction could increase environmental problems in the future (livestock concentration), if not linked to environmental awareness
- Poor water accessibility and quality (leeches also found in some water sources) This has negative consequences for both livestock and humans.

Risk Minimizing Strategies
Risk minimising strategies are strategies adopted prior to expected shocks in order to minimise the impact of these when they occur. These strategies may vary by wealth group and include:

Diversification of activities
Having both crop and livestock activities means there is already a diversification in practice.

Early maturing varieties
These have been introduced relatively recently and are a means of improving the prospects of a harvest even if the rains are poor.

Early sowing
Known as *Jilaal-duug*, sowing takes place about 1 week before the rains, in order to capture the earliest rains.

Some of herd given to pastoral relatives
These agropastoral households may give some of their livestock to their pastoral kin to manage, when water and pasture are difficult to find close to the home.

Social insurance / support system
Kaalmo (gift seeking/giving) and *zakaa* (Islamic requirement) are very important normal and bad year coping and risk minimising strategies for the poor and those effected by a shock.

Making ghee for the dry season.
Making ghee during the wet season, when milk is abundant, and storing it for the dry season is practiced. Ghee is high if kilocalories.

Exchanging higher value animals for lesser value
Selling older, bigger/fatter and therefore more valuable animals and buying younger ones, and using the price difference profit to buy basic necessities is commonly practiced, without reducing the overall herd size.

Bad year Coping
Animal Sales
Increased sales of animals is a normal coping strategy, in order to increase income and access to food, particularly as milk production falls in a bad year.

Change in Food consumption and Cutting expenditure
Households can switch to cheaper cereals, if available, particularly by comparing prices in Kenya with those in Ethiopia. Switching from sugar to cheaper cereals is an option. Foregoing the purchase of non-essential for a time.

Moving and splitting the household
Poor may move closer to the roads, to gain better access to relief. There is relatively little migration for work due to the lack of employment opportunities in the district. The poor may move closer to their richer relatives in order to be assisted or may just send their children to them.

Increasing the proportion of milk sold
Where the kilocalorie terms of trade are higher for selling milk than consuming it (which is normally the case), more milk may be sold to buy cereals. This may have a cost on the quality of the diet however.

Increasing collection of gums and resins in a bad year.
This may be carried out but is not expected to yield significant additional income.

Gifts and Loans

Kaalmo (gift seeking/giving) and loans will be increasingly sought in a bad year. Gifts will mainly be from relatives and loans from relatives and shop owners.

Self employment

Firewood, poles and charcoal can be increasingly collected and sold, but prices will fall. There is an increasing demand from sedentarisation and expansion of settled farming areas.

6. Indicators to monitor

Table 5 - Monitoring Indicators for Liban (Afder) LZ

Indicator	Components	Why	Frequency
Rainfall	• Water • Pasture • Browse • Alternative pastures • Water sites & conditions		
Conflict	• Who • Why • When • Impact on access to pasture • Impact on access to markets • Impact on prices		
Crop production	• stage • Diseases • Pest • Prospects • Opportunistic farming among pastoral groups (is this relevant for this LZ?)		
Prices	• cereals • sugar • livestock • milk • local crops		
Livestock	• physical condition • disease outbreaks • production • reproduction		
Coping Strategies	• the degree of resorting to (e.g. increased livestock sales, migration)		
Migration (in & out)	• Why? • To where • From where		
School attendance	• Formal • Quranic • If increase – it's a sign of settlement – less mobility, possibly less stress		
Loan repayment	• if this is happening?	• Indication of a good year	

Marriages, Religious and other ceremonies	• if this is happening	• indication of good situation	
Changes in household size	• increase • decrease • who from where/to where	• increase usually sign of a good situation	

7. Recommendations

7.1 Recommendations for long-term development

1. Improvement in road conditions – for both major roads and feeder roads;
2. Improvement in human and animal health facilities – establishment of health centres, and equiping them with qualified staff and medical supplies; (you have said very little about health care and now you are recommending it
3. Development of safe sustainable water sources in the central parts of the district – this should be done in consultation with the local community;
4. Improvement in access to education in areas outside Filtu town – build more schools and equip them with educational materials and qualified staff;
5. Promotion and support to income generating activities, like handicrafts, mining and other activities; This can be done through the creation of co-operative societies;
6. Introduction of short-maturing crop varieties and treated seeds (to reduce loss to pests and diseases)
7. Encourage and promote current efforts to do intercropping;
8. Introduction of safer grain storage methods to prevent post harvest losses
9. Rehabilitation of IDPs and Urban poor who lost their assets (mainly livestock) due to conflict and/or drought. This should start by assessing their needs and exploring sustainable options.
10. Introduction of credit providing schemes targeting the poor so as to prevent asset depletion in bad times
11. Effective early warning and food security systems to prevent loss of assets to natural disasters
12. Establishment of a permanent Somali-Oromo peace body to maintain peace and stability
13. Removal of trade restrictions in order to promote easy flow of livestock and other commodities to and from Somalia and Kenya. This would encourage individual enterprise and make people explore more options for survival.

8. Appendices

8.1. HEA Methodology

The Household Economy Approach[3]

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.

[3] 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 .

A typical Household economy baseline assessment includes the following steps:

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[4].

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

[4] 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.

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.

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.

8.2. 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[5].

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).

[5] 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*[6] payment, *Hajj*[7], etc.

[6] *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.

[7] *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.

8.3. List of Kebeles in Liban (Afder) Agropastoral Livelihood Zone

Agropastoral Rainfed	**Pastoral**	**Agropastoral Riverine**
Filtu 01	Bagaaga	Garebgel (riverine)
Filtu 02	Boodbood	Bander (riverine)
Filtu 03	Harabali	Kalayeh (riverine)
Malka-labi	Ahmadow Aamin	Golbo (riverine
Melkakuuto	Hirin	
Heyadimtu	Dibi	
Akosame	Higli	
Usubay	Hayasuftu	
Wlo?	Dheeka	
Biifato	War-aday	
Masajid	Wala Saleiman	
Kulan	Gaaluun	
Sero	Icanbarde	
Gunweyn	Soora (opportunistic farming)	
	Ayinle (opportunistic farming)	
	Kura'ale (opportunistic farming)	
	Kuley (opportunistic farming)	