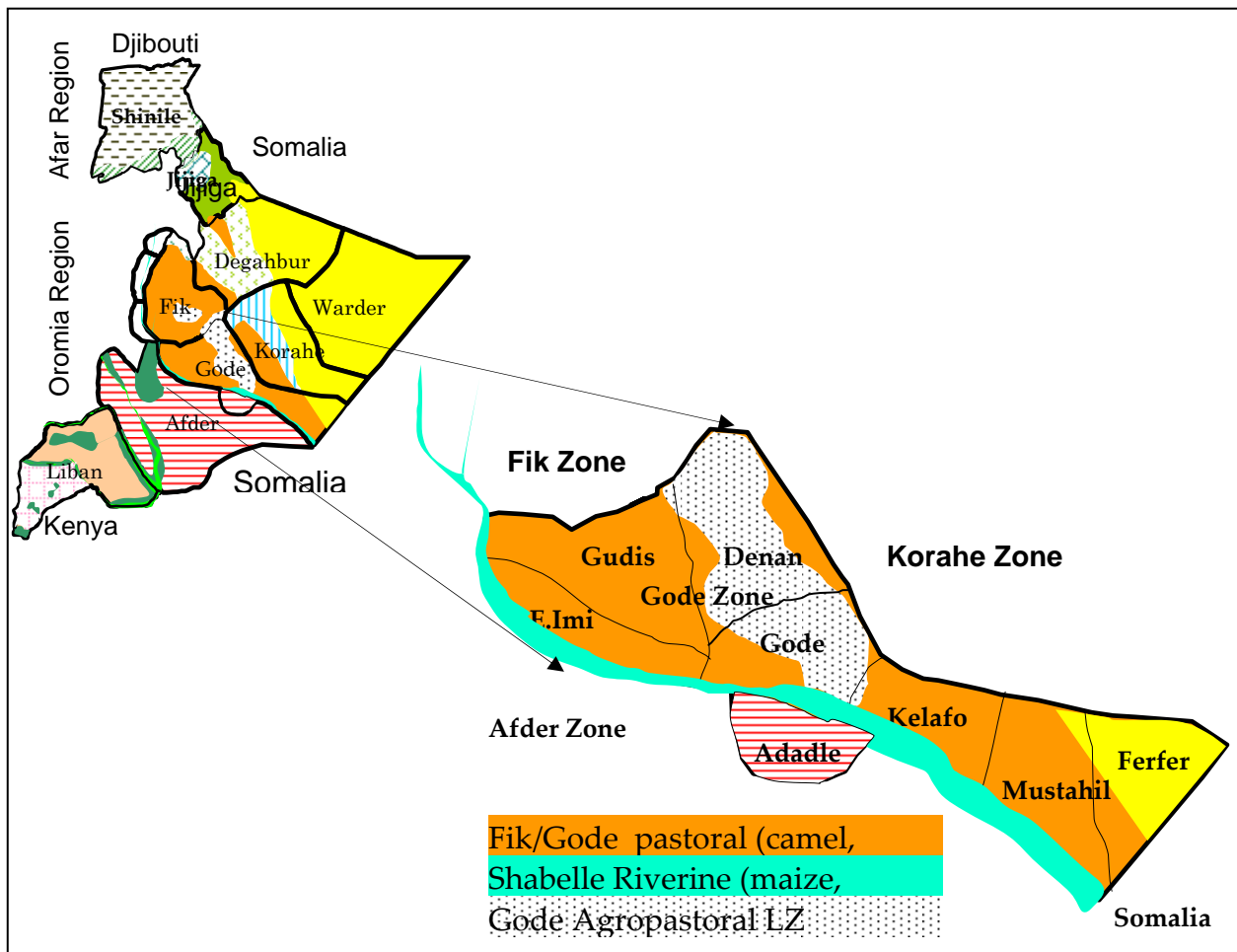


Gode Agropastoral Livelihood Zone

(Flood Recession/Rainfed Sorghum, Cattle and Sheep)

Gode Administrative Zone, Somali National Regional State, Ethiopia



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

Assessment Team

Ibrahim A. Salan	SC-UK (Afder)
Ali M. Gheddi	SC-UK (Jijiga)
Abdi S. Harun	SC-UK (Liban)
Ibrahim Abdi Mohamed	DPPD (Afder)
Khalif Ahmed	PCAE (Afder)
Ali Moallim Abdi	PCAE (Liban)
Abdi Salah	SC-USA (Afder)
Abdinasir O. Elmi	FSAU/FAO Somalia (Technical support)
Lesley Adams	FSU/SC-UK, Nairobi (Lead Trainer)

Table of Contents

Assessment Team.....	i
Table of Contents.....	ii
Figures, Tables & Maps.....	iii
Terms and Acronyms.....	iv
1. Executive Summary.....	5
2. Introduction.....	6
2.1 Purpose of the study.....	6
2.2 Methodology.....	6
3. Background.....	8
3.1 Gode Administrative Zone.....	8
3.2 Agro Ecology, Geology, & Water.....	8
3.3 Population.....	9
3.4 Infrastructure & Social Services.....	9
3.5 Livelihood Zones in the Administrative District.....	10
4. Food Economies.....	12
4.1 The Livelihood Zone.....	12
4.2 Historical Timeline.....	13
4.3 Seasonal Calendar.....	16
4.4 Other information particular to the LZ.....	17
4.5 Wealth Breakdown.....	20
4.6 Food Sources in the Reference Year.....	22
4.7 Income Sources in the Reference Year.....	23
4.8 Expenditure Patterns in the Reference Year.....	25
4.9 Current Situation (hagaa season – August-September 2001).....	26
5. Vulnerabilities, Risks & Coping.....	28
6. Indicators to monitor.....	32
7. Recommendations.....	33
7.1 Recommendations.....	33
8. References.....	34
9. Appendices.....	35
9.1 HEA Methodology.....	35
9.2 Note on Somali Traditional Calendar.....	38

Figures, Tables & Maps

Figure 1 - Location of the Gode Agropastoral LZ	8
Figure 2 - Seasonal/Activity Calendar for Gode Agropastoral LZ.....	16
Figure 3 - Wealth Groups in Gode Agropastoral LZ.....	20
Figure 4 - Food Sources for all Wealth Groups in Gode Agropastoral LZ.....	22
Figure 5 - Food Basket for all Wealth Groups in Gode Agropastoral LZ.....	22
Figure 6 - Income Totals for all Wealth Groups in Gode Agropastoral LZ	23
Figure 7 - Income Sources for all Wealth Groups in Gode Agropastoral LZ	24
Figure 8 - Expenditure Totals for all Wealth Groups in Gode Agropastoral LZ.....	25
Figure 9 - Expenditure Pattern for all Wealth Groups in Gode Agropastoral LZ.....	25
Figure 10 - Proportional Expenditure on Food for all Wealth Groups in Gode Agropastoral LZ	26
Table 1 - Estimation of Populations proportions in Gode Zone by LZ	9
Table 2 - Livelihood Zones in Gode Administrative Zone.....	11
Table 3 - Historical Timeline Gode Agropastoral LZ	15
Table 4 - Wealth Characteristics.....	20
Table 5 - Estimated Current year Livestock holdings (land size remains the same).....	21

Terms and Acronyms

ACF	Action Contra le Faim
<i>Aqal</i>	Temporary house
<i>Beerley</i>	Farmer
<i>Cadey</i>	Toothbrush tree
<i>Ceel fadhiisi</i>	Permanent water points
<i>Dadka ladan</i>	Better-off wealth group
<i>Danley</i>	Poor wealth group
<i>Deyr</i>	Rainy season between October and December
<i>Dhexdhexaad</i>	Middle wealth group
DPPB/D	Disaster Prevention and Preparedness Bureau/Department
ECHO	European Commission Humanitarian Office
LZ	Livelihood Zone
FS/EW	Food Security Monitoring/Early Warning
<i>Gu</i>	Rainy season between early April and June
<i>Hagaa</i>	Dry season between July and September
HCS	Hararghe Catholic Secretariat
<i>Irmansi</i>	gift of an animal in milk, usually to a poor relative (until it dries up)
<i>Jilaal/Qoraxeed</i>	Hot dry season between late December and March
<i>Luun</i>	Farmland length measure = "5 forearms" = 2.5 metres
<i>Miige</i>	Making holes using a pointed stick, and putting the seed in
<i>Nugul</i>	Weaker or more vulnerable herd animals that do not migrate far
OFDA	USAID Office for Foreign Disaster Assistance
OWDA	Ogaden Welfare and Development Association
OWS	Ogaden Welfare Society
PCAE	Pastoralist Concern Association Ethiopia
<i>Qaadhaan</i>	Contributions for the unfortunate
<i>Quintal</i>	A sack (usually 100kg of grain)
<i>Sariir</i>	Farmland area measure; 1 Sariir = 20 Tacab = 2/3 hectare
SC-UK	Save the Children-UK
SC-USA	Save the Children-USA
SNRS	Somali National Regional State
<i>Tacab</i>	Farmland area measure = 5 luun x 10 luun = 12.5m x 25m. 32 Tacab = 1 hectare
WFP	UN-World Food Programme
<i>Xammil</i>	Traditional material tied around male sheep's abdomen to obstruct mating
<i>Zako</i>	Religious gift (Obligation) by rich to poor (e.g. 10% of rainfall harvest)

1. Executive Summary

Livelihoods in Gode Agropastoral LZ are dependent on crop production and animal rearing. People rear *nugul* species - animals that required water frequently and are highly vulnerable to drought – cattle and sheep. The existing crop production system is flood recession farming (run-off water from higher land areas) combined with rain-fed agriculture. In normal times, most of the LZ receives direct rainfall as well as flood recession. These two water sources encourage the rearing of *nugul* livestock species in an otherwise drought-prone area. The LZ also prefers to keep these species due to their higher economic value - Cattle provide milk and ghee which are of high economic value, while sheep fetch good prices. Normally, sorghum production and livestock exchange provide the major sources of food and income respectively. Livestock products are also important for both consumption and sale. The reliance on less drought resistant livestock species makes the LZ more vulnerable to drought. When droughts occur, like in 1999/2000, both the areas dependent on direct rainfall and those that also have flood recession are badly affected, registering heavy loss of livestock.

In the last 5-6 years, 1996 was the only year that could be ranked as average. This was the nearest year, which was thought suitable to be used as a reference year. Since the very good conditions of 1997/early 1998 (El Nino related) the years have been poor. 1999/2000 was extremely poor and recovery has been limited since.

Livestock, especially cattle was the major determinant of wealth, followed by land under cultivation. Livestock levels were high in 1996. For all groups the majority of food needs are met through their own production – sorghum and milk products. Sugar is the only significant purchased item. For the poor the most important income sources are from sorghum and livestock sales. For the middle and better-off groups, most income comes from the sale of livestock and livestock products.

The major risk factors/vulnerabilities for this LZ were, prolonged drought (or successive rain failure); crop pests and diseases; livestock pests and diseases; and a poor livestock market.

The major coping strategies that are used by the households in this LZ include increased livestock sales; increased engagement in self-employment activities (collection of gums, resins, firewood, etc); reducing non-essential expenditure and migration.

Current Situation Summary

This LZ was very badly affected in the drought of 1999/2000. Heavy, though undetermined, livestock losses took place. Significant levels of destitution have also taken place. Asset recovery will be a long process. Another 'shock' to the area is the loss of livestock earnings as a result of the Gulf livestock ban.

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), Ethiopia¹. 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.

Livelihood Zone (LZ) Definition

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 from a broadly similar combination of means and that have similar response to shocks is known as a Livelihood Zone (LZ).

3. Background

3.1 Gode Administrative Zone

Gode is one of the 9 administrative zones of the Somali National Regional State (SNRS) of Ethiopia, and is located in the southern part of the region. The zone comprises 7 districts: Gode, Denan, Adadle, Kelafo, East Imi, Mustahil, Ferfer.

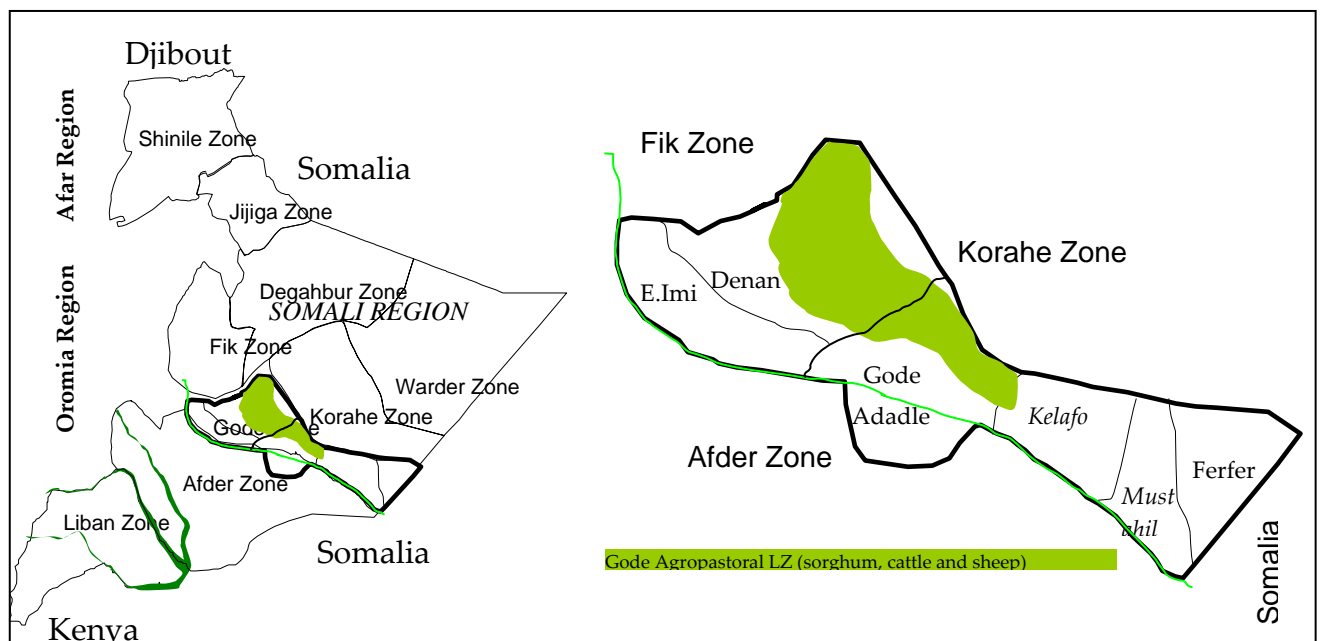


Figure 1 - Location of the Gode Agropastoral LZ

3.2 Agro Ecology, Geology, & Water

Altitude & Climate, Rainfall & Water Sources, Soil/Vegetation

The climate is arid with two rainy seasons. The main rains are the *gu* rains from late March to late June; the *deyr* rains fall between mid-October and mid-December.

Gode Zone is 105,000 km², 95% of which is grazing land. Arable land, both irrigated and rainfed, constitutes the remaining 5%. This arable land is equivalent to 5,250 km². Only 20% of the arable land is currently under cultivation (1,050 km² or 102,400 Ha), most of which is under irrigation along the river. The agropastoral area under discussion forms part of this arable land, but most of it is found within the grazing area.

The altitude of the LZ is generally low, 300-500m above sea level. The mean annual rainfall is estimated at about 300mm. The soil is red, sandy soil. Vegetation varies: grassland in cattle and sheep areas – using hand-dug shallow wells (permanent water sources, sustainable, all year round). In other areas where camels are more the area is shrubland with browse suitable for camel and goats. Plants are locally called *geednugayl*, literally ‘soft plants’ (and include *foox*, *malmal*, *dhamaaje* – local names), which can be cut and are good for camel. *Cadey* (the toothbrush tree) also grows in the area and is

evergreen and good for camels. Goats and camels also browse on thorny shrubs like (*adaad* – *Accacia Nilotica*; *galool*, *Accacia Memosaecia* - camels only – and *bilcil* – *Accacia Senegalensis*).

Water is salty in Denan area (the name means “salty”), and this is good for camels.

Farming depends on flood recession and rainfall in this area which gives the population two alternatives of getting water for their farms – where they can cultivate their farms even if there is no rain in their area – if the higher areas receive rains (Degahabur and Korahe – seasonal streams from Degahabur and along the Fafen valley. The farming system of the area is called *miige* (making holes using a pointed stick, and putting the seed in). It needs at least 2 persons – 1 dips the ground with a pointed stick and the other goes behind the former putting the seed in the holes. A minority of villages practice shifting cultivation, where they move with the rain and are less dependent on fixed farms. The other villages depend on fixed farms and have a very long history of farming (1 century) e.g Denan Bargun, Burqoyar. The population of this area are called *beerley* (farmers). Sorghum is the most common and preferred cereal cultivated and is more suited to lower rainfall areas than maize. Sorghum is at risk of bird attack and if they experience bird attack in the *gu* they might shift to maize for the *deyr*.

The main water sources for the Agropastoral LZ are shallow wells.

3.3 Population

Table 1 - Estimation of Populations proportions in Gode Zone by LZ

Woreda	Pop-ulation	Riverine %	Agro-pastoral %	Pastoral %	Urban %
Imey	59,800	70	15	13	2
Adadle	46,661	10	28	60	2
Gode	55,975	30	40	25	5
Kelafo	80,083	70	20	6	4
Musta-hil	49,153	70	20	7	3
Ferfer	31,871	45	18	35	2
Denan	30,008	-			
Gode Zone	353,551	40-50%	25-30%	20-30%	0-5%

Source: Population figures from the most recent Population Census; % from fieldwork (October 2001)

3.4 Infrastructure & Social Services

Markets and Currencies

The Agropastoralists depend mainly on Gode, Denan, Garbo (in Fik Zone) and Degahbur (in Degahbur Zone) as the nearest market outlets for their livestock and crop products. Garbo is important for camel trade, while Degahbur is important for sheep and cattle sales). Locally, the most important market is Gode.

The LZ also benefits from exportation of animals when there is no livestock ban. The main export market for cattle is Hartasheikh in Jijiga Zone (destined for Berbera port), and Jijiga market (for the Ethiopian highlands). Most sheep are usually sold for export.

In the reference year (1996) livestock sales were dominated by sale of sheep for export – particularly during the Muslim Hajj season. The main routes and destinations for animals sold outside the Zone are:

- Outlet: Gode, Degahbur and Garbo for mainly cattle and male sheep destined for Jijiga and Ethiopian highlands
- Outlets: Gode, Degahbur and Hartasheikh for male sheep and cattle destined for Hargeisa, Berbera mainly for export to Gulf countries. Most cattle are exported to Yemen while most of the sheep and goats go to Saudi Arabia.
- Outlet: Gode and Denan for sheep, cattle and goats for destinations in Somalia - Mogadishu (export), Beledweyn (local slaughter), Galkacyo (export).

The main medium of exchange is the Somali shilling and is very unstable as it keeps its value relative to the dollar and Ethiopian birr, in response to paper money imports by different merchants in Somalia.

3.5 Liveliness Zones in the Administrative District

See earlier definition of a Livelihood Zone (section 2.2).

Agro-Pastoral (rainfed/flood recession; cattle, sheep, goats)

This LZ is the subject of this report. The zone includes populations in the northern part of Gode district and most of Denan district and is linked to the Agro-Pastoral areas in Korahe zone (the Fafen valley of Kebri Dehar and Doboweyn districts). The livelihood of the population in these areas depends on livestock rearing and land cultivation. Cattle and sheep are dominant and the area is described as *nugul* (because of the predominance of animals vulnerable to drought). The area was highly dependent on export of animals to the Gulf (mainly sheep and cattle) and are now selling to local markets for local consumption and some to Kenya. Goats are the third dominant species of livestock in the area. A minority of households in a few locations own camels, but these are better described as Pastoral with opportunistic farming. An example is the area around Hadawe. The LZ comprises 25-30% of the population.

Shabelle Riverine LZ (see separate study)

The Shabelle River passes through most districts of the zone – East Imi, Gode, Kelafo, Mustahil and Ferfer. This enables the population of these districts to practise irrigated as well as flood recession farming. This group forms between 40-50% of the population.

Pastoral (camel/cattle/shoats; opportunistic farming for some)

This zone lies to the northwest and north east of Gode zone, towards Fik and Degahabur zones and in the east towards Korahe zone. The LZ is characterised by predominance of camel and shoats, fewer cattle, and mobile populations, the poorest of whom may

cultivate land in years when there is sufficient moisture (opportunistic farming). This LZ comprises about 20-30% of the population.

Name of LZ	Districts covered in LZ	% of Administrative Zone's population Source: % from fieldwork (October 2001)	Number of people Source: Population figures from the most recent Population Census
Pastoral		20 - 30	70,710 – 106,065
Agro-pastoral	Denan, Gode	25 - 30	88,388 – 106,065
Riverine		40 - 50	141,420 - 176,776
Urban		0 - 5	0 – 17,678
TOTAL		100	353,551

Table 2 - Livelihood Zones in Gode Administrative Zone

4. Food Economies

4.1 *The Livelihood Zone*

Location/Coverage

This LZ includes villages where rain-fed farming is practised in areas with seasonal streams. In the rainy season these streams flood land on either side and provide irrigation in addition to the direct rainfall that these areas receive. This LZ covers almost the whole of Denan district and northern and western parts of Gode District. The LZ is similar to the Agropastoral LZ of Korahe Zone, which border Gode Zone to the north and northeast. The information for this baseline study was gathered from two villages in Denan and one in Gode district of Gode zone, namely Burqoyar, Bargun and Shinille.

Population

Social System

Clan and Family

The inhabitants of the LZ are the Ogaden-Somali clan.

Polygamy is common for households in the better-off wealth group, while in the other wealth groups one wife is the most common. Family size is on average around 7 (five children, two parents). Families live in nuclear households (mother, father, and children). The better-off households are often larger because of the presence of 1-2 labourers (herders and/or farm labourers) and perhaps an elderly relative. Conversely poorer households might have one member living away from home (an older child who is herding for a better-off family).

Like in other Somali groups, social support systems exist unless disrupted by conflict or drought. The most common are *Zako* (religious obligation), *qaadhaan* (contributions) for the unfortunate, and others. Poorer families may also send one or two children to stay with wealthier relatives. The poor households may also receive a milking animal from wealthier relatives in the wet seasons.

Responsibilities within the household

(see seasonal calendar for details)

a) Men

Families live in a temporary house (*aqal*) and each family is usually headed by the father, who manages the household and controls the main assets (livestock sales/purchase, migration decisions etc.). Livestock are used to purchase expensive items which are required occasionally (e.g. clothes - purchased once a year, usually in the dry season). The man manages and undertakes farming and livestock activities, and makes decisions on the use of production. He will make and repair fences for the livestock, and will repair the underground grain storage pits. The man is also responsible for surveying pasture at the beginning of the rainy seasons to decide where the herd will go, particularly during the *deyr*. The man is also responsible for representing the family on social and political issues, particularly relating to clan issues and taxes.

b) Women

The woman's main responsibility lies in caring for the children and the family. The woman is responsible for making the mats for the *aqal* and she, together with her neighbours, repair the

house. Women control income from livestock products and exchange this income in the market for other items required by the household.

Women are responsible for fetching water, and the mother and her daughters do this in normal years (they are assisted by males in a bad year). Most areas in this Livelihood Zone have good water even in bad years. Denan town is an exceptional case and has chronic problems with access to drinking water.

c) Children

Older sons and girls are the main cultivators, with women helping with weeding, and all members of the family helping out at particular times. Children are also responsible for collecting gums and resins, which are sold by the woman and older children in the main towns.

Links with other LZ

There is a strong link between this group and Shabelle riverine LZ (particularly Kelafo district): the agro pastoralists buy cereal from the riverine populations when they have a shortage and sell their own crop production to the urban areas in Gode. Farm labourers for the agro-pastoral zones near Gode come mainly from the settled population in the riverine LZ, mainly from the *reer baare* clan. Kelafo area is relatively reliable for maize production since it is supported by irrigation, so it is a useful source of grain for the agropastoralists when their crops fail. Kelafo also provides opportunities for migration in bad years. The Agro pastoralists move there in the dry season and purchase fodder, which has been cut and stored by the riverine farmers. In such years, these farmers cultivate maize especially for fodder – selling the crop early before maturity as fodder since it fetches a better price than the maize cob. The agro-pastoral populations also have links with the adjacent camel pastoralists; the pastoralists buy grain from the agro-pastoralists who in turn buy camel milk from the pastoralists.

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.

Table 3 - Historical Timeline Gode Agropastoral LZ

Year	Year name	Deyr	Gu	Comments
2001	Saturday Sabti	0	2	The streams flooded well; stalk borer caused significant crop losses; overall livelihoods not bad; livestock ban in place. In-migration from Kelafo, Denan to some areas (e.g. Bargun).
2000	Friday Jimce	1	3	Good livestock condition; good food production in gu season (flood recession). Some pest infestation in the deyr (probably armyworms). Large food aid was distributed, low food prices. Livestock ban imposed in September 2000.
1998	Thursday Khamiis	1	1*	Drafting of soldiers and livestock contributions made to the Ethiopian-Eritrean border war; severe drought, great livestock losses, high child mortality. Late 1999 limited food relief started.
1997	Wednesday Arbaca	1#	2	Below average gu. Good livestock condition continuing from previous year. Humans healthy. Livestock ban; very low livestock prices; very bad deyr rains. Insecurity in the area. Horoweyn (larger stock) animals moved away quite far – Babile, and Jijiga districts, etc.
1997	Talada Tuesday	5	3	Gu season produced good crops; good condition and market for livestock. Heavy rains in deyr, water-logging in some areas
1996	Shiin Monday	2	3	Gu – good animal and crop production; cattle suffered from “kud” disease (anthrax); camel suffered from “garduf” camel cough/nose bleed. During the deyr: immigration from Korahe, Degahabur, Garbo (Fik). High insecurity (clashes between military and armed groups)

* *odeykawayn* (worse than the oldest person can remember)

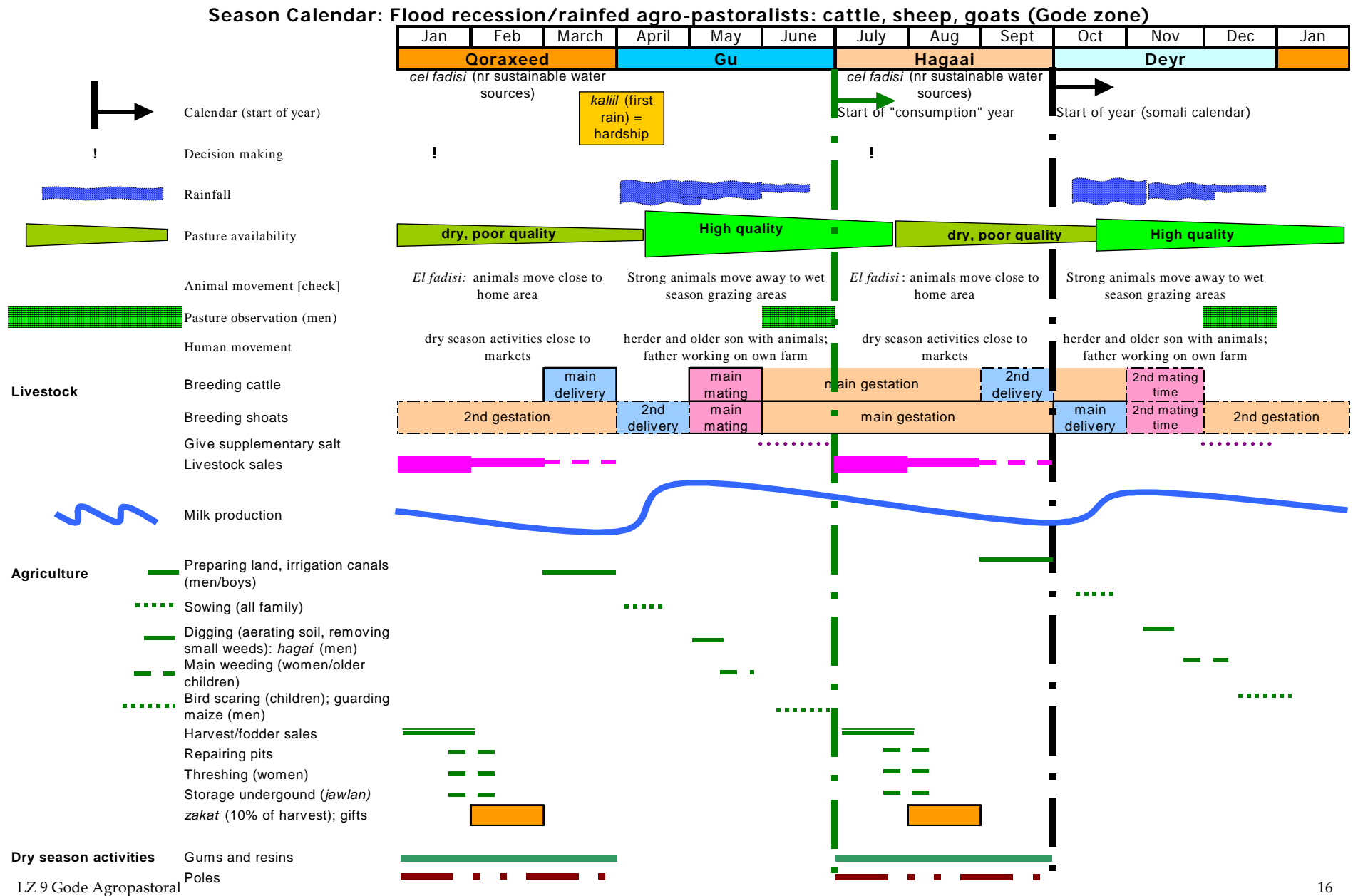
kalayaac (scattering – widespread migration starts)

1996 was the year, which was selected as the reference year. The year was characterised by good production although there were some diseases, which affected livestock production. There was also some in-migration from other areas but this did not over-stress resources. Looking at the historical timeline it might appear that the year 2000 is also “average”. However, this year followed the drought year of 1999/2000, in which herd sizes greatly reduced, and there was also considerable food aid distribution.

The area experienced a very severe drought in 1999 with a great loss of human lives (particularly children) and livestock. The population calls this drought *odeykawayn* which means “bigger than the oldest person” – worse than even the oldest person can remember. Worse even than the drought around 1973-4 which they call *garigarisar* (which means cars arriving on top of cars (water trucks)). 1996/1997 was a very good year for this area in terms of rains, livestock and crop production when heavy rains were received in both seasons, especially the *deyr*. 1995/6 and 1998 were relatively “normal” but 2000 and 2001 were below average with limited crop production. The most recent *gu* rains – 2001 - were below normal, with crop pests (stalk borer) reducing yields.

4.3 Seasonal Calendar

Figure 2 - Seasonal/Activity Calendar for Gode Agropastoral LZ



Gums and resins

Gums, incense and myrrh are collected and sold throughout the area during the dry season. These products would normally be collected by children and other persons charged with the responsibility of herding. Getting a good market for these products is the major problem, and the prices are normally low.

4.4 Other information particular to the LZ

Access to Land

Land is privately owned and ownership is controlled/managed by the sub-clan. In areas of flood-recession cultivation there is a shortage of good farmland. The dependency on stream cultivation means constraints to the amount of land they can use; extra land can be used in areas not fed by streams, which carries increased risk of crop failure due to inadequate rain. This is likely to be a problem for the future when existing farms are sub-divided for the families of the current generation of sons.

Area of land cultivated is limited by the household's ability to cultivate the area. This depends on the number of active members in the household and/or the ability of the household to employ others. For some areas the better-off are unable to access the labour market, which is far, and so are unable to cultivate much more land than the other groups. The main labour source in a normal year comes from outside the village. Within the village even poor farmers tend to focus on their own farms.

Land holdings and the characteristics of the different wealth groups within the communities are discussed under 'wealth breakdown', below.

Crop production

Farm land is measured in *luun* (length) and *sariir* and *tacab* (area):

- 1 *luun* is equivalent to "5 forearms" (the length of a forearm is approximately 0.5m and is represented by a stick of this length). 1 *luun* is therefore 2.5m.
- 1 *tacab* is 5 *luun* x 10 *luun* which is therefore equivalent to 12.5m x 25m (there are approximately 32 *tacab* in 1 hectare. 10 *tacab* are therefore equivalent to approximately 1/3 hectare.
- 1 *sariir* = 20 *tacab* = 2/3 hectare

Average yields are as follows: (1 *quintal* = 100kg)

Normal year: *Gu*: 50kg per *tacab* (15 Quintal / ha); *Deyr*: 30kg per *tacab*

Bad year: 20kg per *tacab*

Very good year: *Gu* season - 1 Quintal per *tacab* (30 Q/ha); *Deyr* - 70kg per *tacab*

The main market for grain is Gode.

Livestock Production

Livestock Composition, Dynamics and Access to Pasture

The area is equally dependent on both livestock and farming for their livelihoods. The major livestock reared are, in order of importance, cattle, sheep, goats. Camels are rare. Movement in a normal year is not so important since they move around the original settlements. During the wet season in a normal year, livestock would move to pastures away from home areas to utilise far off pastures and natural water ponds first. This will help reserve the pastures near home areas for the dry season and for the milking animals. Herds of middle and better off households might be split and some will move away (strong, lactating, young) in the wet season and return in the dry season to permanent water points (*ceel fadhiisi*) and pastures closer to home area. Left behind with the household will be few lactating livestock. Poor households have too small herds to do this and they usually keep all their animals together, to get maximum benefit from them. Cattle and sheep do not move far from the households because fodder and grasses are reserved, so there is little need to migrate to far areas in a normal year. Those who have camel (few areas) move far distances in the rainy season (more in Shinile area and Hadawe, for example) and return in dry season. An employee-herder and one son from the family are involved in the normal year's migration, while the father is busy on the farm. In bad years, the father and most members of the household go with the animals. Movement may be to Fik, Babile, Jigjiga, and Kelafo). Camels may migrate to as far as Belet Weyne in Somalia.

Milk and ghee production

Only cattle and goats are milked; sheep are not. Cattle milk is very important for the household as it can be made into ghee, which is a high-value product when sold. Ghee is both consumed and sold. Ghee is only produced during wet season (particularly in the *gu* season) and because there are limited milk marketing opportunities, households usually make ghee. The ghee is usually stored and sold at good prices in the dry season. In the dry season, milk production decreases by about 50% therefore no ghee is made. Butter is consumed; ghee is stored and sold. Ghee production depends on the number of lactating cows – the poor sell 2/3 of ghee produced and consume the rest. For middle and rich who produce more ghee, they give some away in gifts, consume a higher proportion and sell less.

One kilogram of ghee is made from about 30 litres of milk. The skimmed milk is given as gifts and is not sold.

Milk yields:

	Yield (wet)	Yield (dry)
Cow's milk	3 litres / day (4 cups)	1.5 litres / day (2 cups)
Goat's milk	0.5 litres / day (2 Bakeers)	
<i>For cows, the lactating period used is 5 months. For goats the lactating period used is 3 months.</i>		

Livestock Management

Livestock management varies from time to time. In the wet season female sheep and cattle (especially the sheep) are prepared for mating with selected male animals which have a good genetic quality. Delivery occurs 15-20 days prior to the rains, in order to increase the survival chances for the young ones. Those born at the beginning of the dry season have less chance of survival (particularly sheep). Sheep breeding is thus strictly controlled using traditional material - *xammil* (tied around abdomen to obstruct mating).

In normal times, the poor do not receive *irmansi* cattle (gifts of lactating animals) as they have enough cattle. Poorer, destitute people or households with no cattle would receive *irmansi*. The middle and the better-off lend both cattle and goats as *irmansi*.

Livestock selling and restocking takes place during the early part of the dry season when livestock condition is good and when owners come to water points (during *ceel fadhiisi*), or to main markets (Gode or Garbo in Fik). Clothes are bought at this time. The money obtained for the same quality of livestock may vary as the wealthier a household is the more it is able to wait and sell when prices are higher.

Livestock movements

In normal years, livestock make short movements around their home base and usually within the radius of the same clan territory (not limited to sub-clan). During the rainy seasons livestock will move away from home areas in order to utilise pastures and water in natural ponds away from home. This will allow for the preservation of water and pastures around home to be utilised in the dry season. The movements are relatively more during the *deyr* rainy season than in the *gu* rainy season. Pasture observation is very important and the father or elder son would normally monitor and search around for places with better pasture and water, relying for information on various sources – other pastoralists, news from different grazing areas and by observing rainfall patterns.

In normal dry seasons animals return to their home bases and concentrate around permanent water points which are usually nearer to their bases. This is known as *ceel-fadhiisi*, literally, "sitting around the wells".

In difficult years, distant migration may be practised, entering other clan territories, but this is not usually a source of conflict as reciprocal arrangements of access are part of the pastoral system. Areas to move to include Kelafo in Gode Zone, Erer and Fafan valleys in Jijiga and Babile, Fik Zone, and Elbarde in Somalia. In such times, children will go with the herd where milk is obtainable and reduce the consumption burden on the remaining household.

Issues and field observations

Recent problems

- The livestock ban has had a serious negative impact on the area: terms of trade have declined (1 sheep was formerly equivalent to around 1-2 bags; now 1 sheep is equivalent to around ½ - 1 bag). Now the main demand is for local slaughter, with some sales to traders coming from Somalia.
- The drought of 1999/00 also had a negative impact on these people: they lost livestock due to disease and drought, and were forced to sell some at low prices to buy food and other items. The overall effect was a big erosion of assets.

4.5 Wealth Breakdown

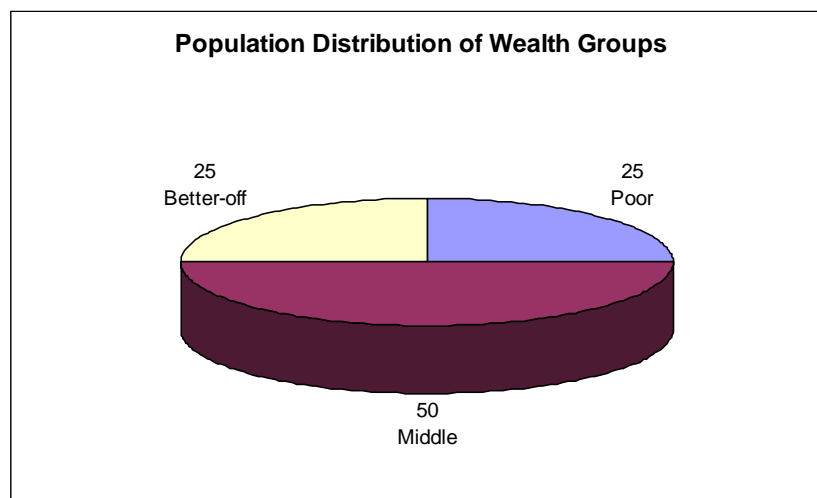


Figure 3 - Wealth Groups in Gode Agropastoral LZ

The main determinant of wealth among the Gode Agropastoral LZ is livestock holding (mainly cattle), and this is followed by land under cultivation. The poorer groups are locally referred to as *danley* (literally 'those having something to do' meaning they are always struggling to survival), the middle group are called *dhexdhexaad* (literally 'the middle'), while the wealthier groups are locally called '*dadka ladan*' meaning 'those who are better-off'. Details of the wealth breakdown and the asset holdings among the different wealth groups are given in the following table. Note: this wealth Breakdown was for the reference year – current year asset holdings are shown below.

Table 4 - Wealth Characteristics

Wealth Group name & vernacular name	Very Poor	Poor	Middle	Better off
Characteristics				
number of wives		1	1	1 - 2
Household size		7	7	9 - 12*
% of population		20 - 30	40 - 60	20 - 30
LIVESTOCK				
Owned Shoats		30 - 60	100 - 130	200 - 300
Borrowed Shoats				
Female Shoats				

Wealth Group name & vernacular name	Very Poor	Poor	Middle	Better off
Characteristics				
Male Shoats				
Lactating Shoats		5	8	12
Owned Cattle		10 – 15	50 – 70	90 – 100
Borrowed Cattle				
Female Cattle				
Male Cattle				
Ox(en)				
Lactating Cow(s)		4	10	16
Owned Camel(s)		0	0	0 - 20
Borrowed Camel(s)				
Female Camel(s)				
Male Camel(s)				
Lactating Camel(s)				
Pack Camel(s)				
Donkey(s)/Ass(s)		1 – 2	2	2 - 3
Mule(s)/Horse(s)				
LAND				
Land owned				
Land borrowed/rented for cultivation		20 tacab (2/3 hectare)	20 tacab (2/3 hectare)	25 - 50 tacab (1 – 1.5 hectares) (typical 2/3 hectare)**
Total size of land cultivated ²				
Rainfed area				
Irrigated area				
OTHER ASSETS				
Activities		Sell animals Sell milk products Crop sales Bush products Agricultural labour Shepherding Gums and resins	Sell animals Sell milk products Crop sales	Sell animals Sell milk products Crop sales

* households of the better-off may include 1-2 labourers and perhaps the widowed mother of the married son

** land cultivated is inversely proportional to distance from Gode riverine farming area since this area is the main source of labourers. Moreover, the better-off are likely to prioritise time looking after their animals and in some areas (e.g. Shinile) those with large herds cultivated smaller farms.

Table 5 - Estimated Current year Livestock holdings (land size remains the same)

	Cattle	Shoats
Poor Wealth Group (WG)	-	10-20
Middle WG	5-7	20-30
Better-off WG	10-20	50-70

² For types of crops cultivated in area land need to describe this in section in section on land cropping patterns

4.6 Food Sources in the Reference Year

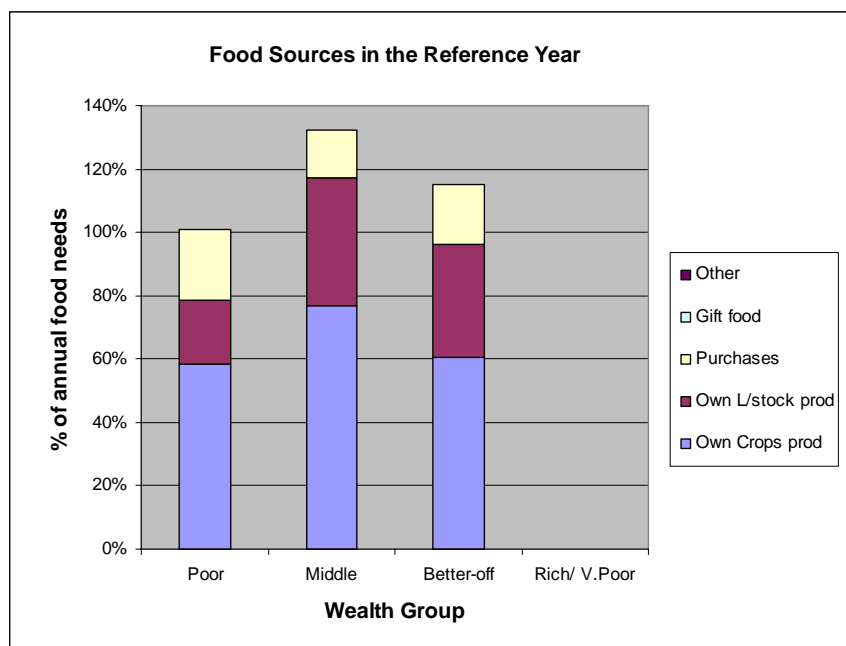


Figure 4 - Food Sources for all Wealth Groups in Gode Agropastoral LZ

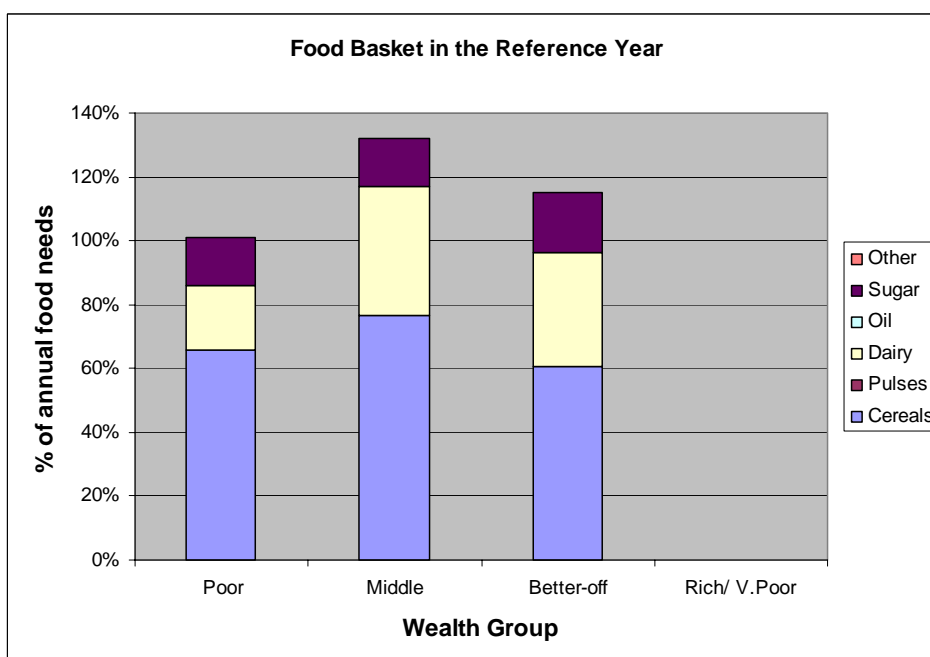


Figure 5 - Food Basket for all Wealth Groups in Gode Agropastoral LZ

The Poor

In a normal year the poor obtain over half of their food needs from the production of sorghum, consuming about 8 quintals (800kg), from their total production of 17. Their four lactating cow and 5 lactating goats produce another 20% of their food needs. This is obtained in the form of milk, ghee and skimmed milk. In the *gu* season all of the goats milk is consumed and 40% of the cattle milk is consumed directly. The remaining cattle milk is used to produce ghee. In the dry season all of the milk is consumed directly.

Remaining food needs are met through the purchase of about 2 bags of sorghum (usually bought in the *gu*) and the daily consumption of sugar. The proportions of kilocalories obtained from these different sources changes from season to season within the year, according to the availability of milk.

The Middle

Normally about 2/3rds of annual food needs are obtained from their sorghum production. Of about 17 quintals produced over 10 are consumed (1000kg+). The poor and the middle groups cultivate similar areas. 2-3 bags are given as *zakat* at harvest time and the remainder is sold. No cereal is purchased, only sugar (about 1/2kg per day on average). The other major source of food is dairy products. The typical middle household obtain 3 litres of cattle milk per animal per day in the wet season and 1 litre in the dry season. They have 10 lactating cattle. 2 they have lent out as *irmansi*. In the *gu* season over half of the milk would be used to make ghee, the remainder being consumed. In the dry season over half would be consumed and the remainder sold. A small proportion in both seasons is also given away as gifts. Goat milk is only significant in the *gu* season when 2/3rds is consumed and the remainder sold or given away as gifts.

The Better-off

About 13 quintals of the 20 quintals of sorghum harvested are consumed. This is enough to provide this large household of 11 people about 60% of their annual food needs. Cattle and goat milk and ghee products provide the majority of the rest of the household food needs. The seasonal pattern of milk consumption, ghee consumption and milk and ghee sales is similar to that of the middle. On average about 1kg of sugar is consumed on a daily basis by this type of household.

4.7 Income Sources in the Reference Year

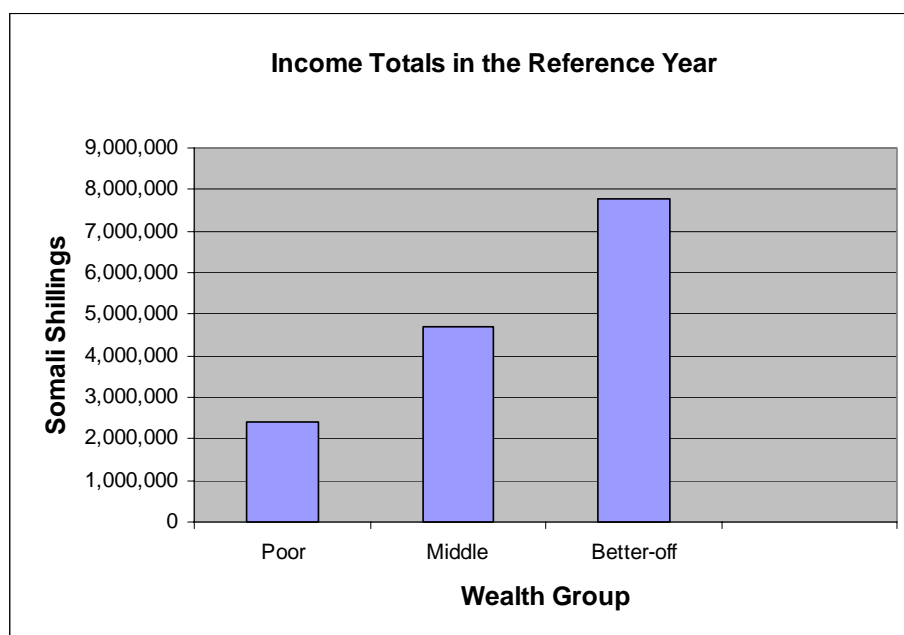


Figure 6 - Income Totals for all Wealth Groups in Gode Agropastoral LZ

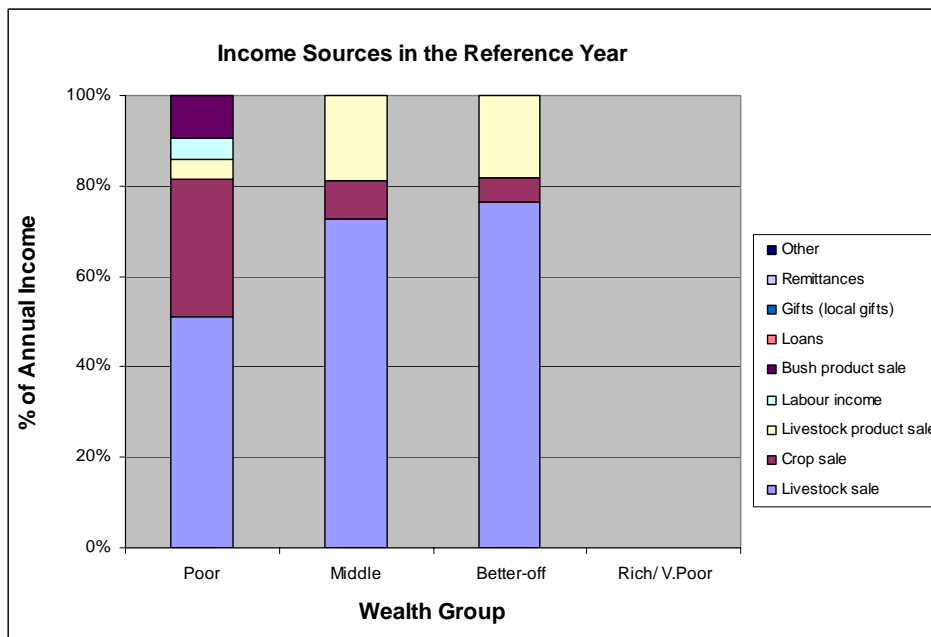


Figure 7 - Income Sources for all Wealth Groups in Gode Agropastoral LZ

The Poor

Roughly two thirds of the income of the poor comes from the sale of live animals and of sorghum. 1 cattle and 5 shoats and 7 quintals of sorghum are sold. The poor usually sell on a needs basis and therefore cannot take advantage of seasonal price fluctuations. Therefore, for example, a majority of the sorghum sales are soon after the harvest. Small proportions of income come from the sale of ghee, incense (2kgs per day for 75 days) and agricultural labour (10 *tacabs* per year). Children collect incense as they herd animals or when they go to collect firewood.

Middle

Nearly three quarters of the income of this wealth group comes from the sale of cattle and shoats. In the reference year 4 cattle and 10 shoats were sold. The prices obtained for these livestock vary according to the seasonal price and the type of animal sold (young, mature, export or local qualities). The other major source of income is from the sale of cattle and goat milk and ghee. A higher proportion of milk is sold in the dry season when the price is higher and the returns in the form of kilocalories are better. 4 quintals of sorghum are also sold annually.

The Better-off

A similar pattern to the middle exists with the major proportion of income gained through live animal sales, of different quality cattle and shoats. 6 cattle, 15 sheep and 5 goats are sold over the course of the year. Milk and ghee are also sold, with the remaining income coming from sorghum sales.

4.8 *Expenditure Patterns in the Reference Year*

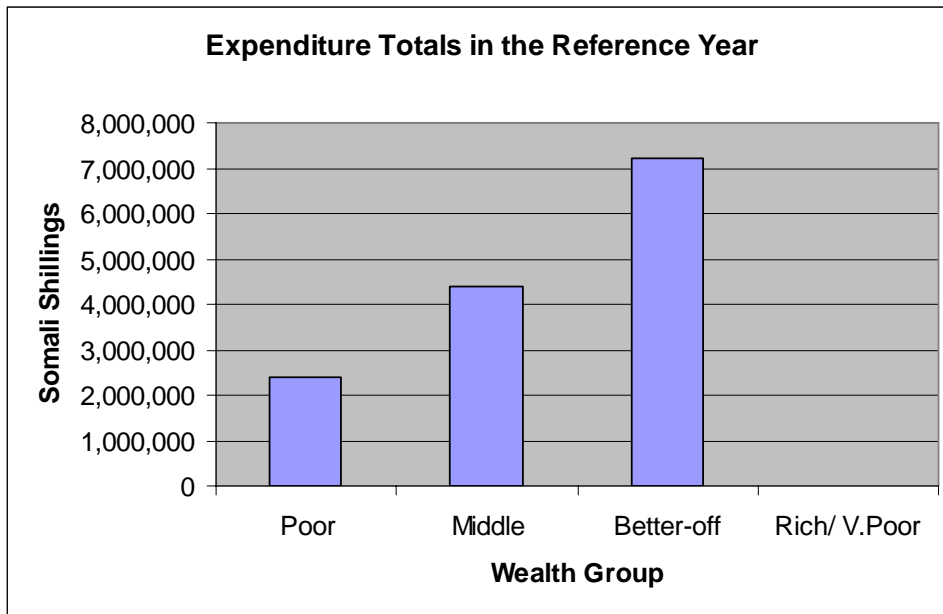


Figure 8 - Expenditure Totals for all Wealth Groups in Gode Agropastoral LZ

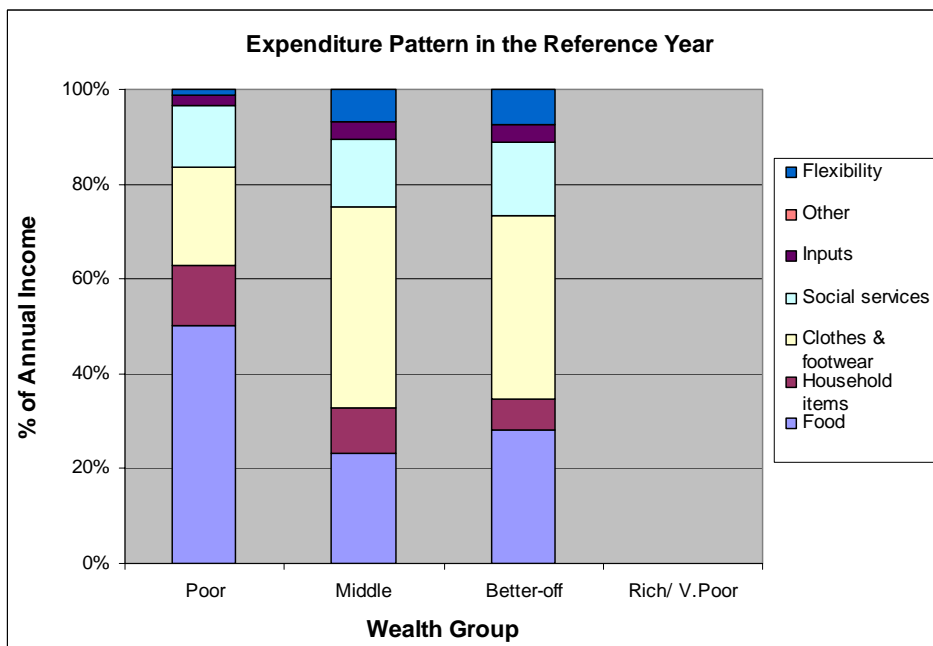


Figure 9 - Expenditure Pattern for all Wealth Groups in Gode Agropastoral LZ

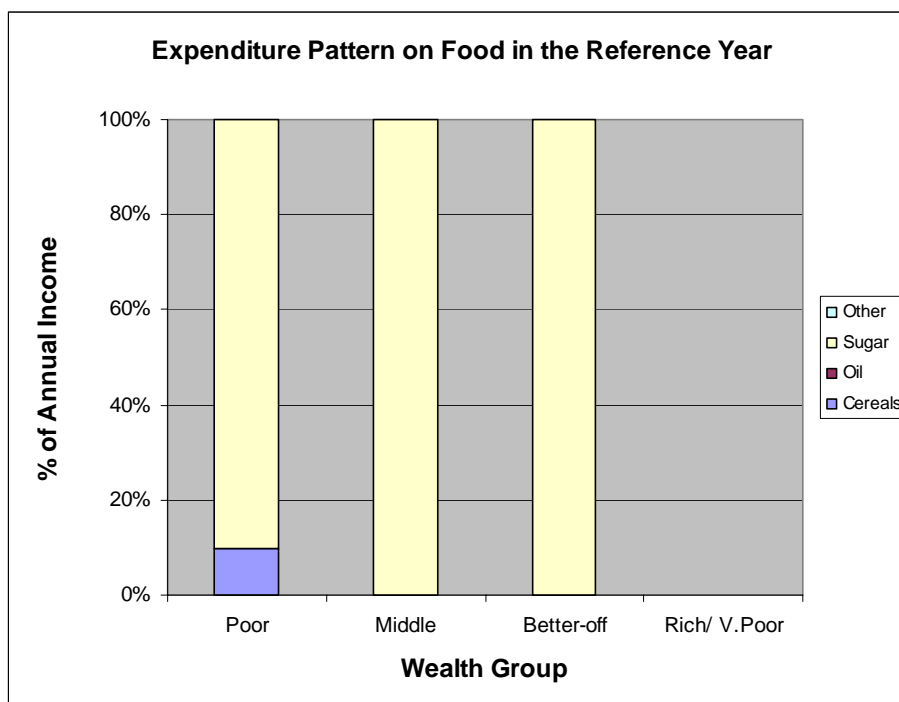


Figure 10 - Proportional Expenditure on Food for all Wealth Groups in Gode Agropastoral LZ

The Poor

Over half of annual expenditure is spent on food items, including 2 bags of cereal, and ½ kg of sugar per day. The purchase of this cereal will usually occur in the *gu* season when their own-produced cereal stocks are low or finished. Clothes are a significant proportion – 20% of annual expenditure, which could be foregone, in a bad year to purchase more cereal.

The Middle

About one quarter of household expenditure is spent on sugar (1/2 kg per day on average) and just less than one half on clothes. Clan tax, health and Koran education each account for about 5%. Basic household items (soap, salt, tea) account for the remainder. The middle group has a slight surplus of income over expenditure in a normal year.

The Better-off

About 30% of household expenditure is spent on sugar (1kg per day on average – this will vary from season to season according to milk availability). Another 40% is spent on clothes. Health costs, Koran schooling (normally paid in live animals) and basic household items (salt, tea) account for the remainder.

4.9 Current Situation (hagaa season – August-September 2001)

The last *gu* rains (April-June 2001) were poor compared to a normal year's rain and consequently crop and pasture production have been poor. However, noticeably migration was not widely noted, probably due to the availability of food aid.

The livestock ban seriously affects people in this LZ. Shoats and cattle were commonly sold for the export market in the Gulf. Now only the local consumption market is available. Real (as opposed to nominal) prices are therefore low.

Inflation: The area widely uses the Somali Shilling as the main medium of exchange. The shilling has been losing value (relative to the dollar and Ethiopian Birr), due to uncontrolled importation of paper money in Somalia. In 2001, the shilling value reduced several times and causing an immediate increase in the prices of imported commodities. In the short run this nominal increase does not affect the locally produced commodities like milk, bush products and livestock prices and therefore forces the terms of trade of pastoralists and agropastoralists to deteriorate.

Past asset loss, due to the severe drought of 1999/2000, means significant numbers of destitute populations are found in all main towns and larger villages. These people have a heavy reliance on food aid and on self-employment activities. The rest of the population lost a lot of livestock and recovery is a long way away as it requires consecutive normal to good rains.

5. Vulnerabilities, Risks & Coping

Vulnerabilities and/Risks

Households within this Livelihood Zone are vulnerable to the following:

- Drought (shortage of rains resulting in pasture and crop production deficits). They are particularly vulnerable to drought because the animals reared are the *nugul* (vulnerable) species (cattle, sheep) which are the first to suffer in rainfall/pasture failure.
- Crop diseases and pests
- Animal disease and pests

Constraints to Production

Poor Access to Markets

The LZ's production systems and ability to cope in bad years would be considerably enhanced by an improved access to markets for livestock, livestock products and crop products. Households in this LZ have been particularly affected by the Livestock Export ban since their economy was geared towards export of male sheep and cattle to the Gulf States. Likewise with cereal harvests they are forced to sell immediately after harvest period at low prices and buy later at high prices. This is because their income options are limited.

Poor crop production technology

Farming systems are under developed and arable irrigated land is limited. The sowing method (dipping by a stick) is very basic – no households use animal traction to plough and there is little farmers can do against crop disease and pests.

Poor Animal Health services

There is very limited access to animal health facilities. There are no equipped health veterinary health facilities, there are very few qualified veterinarians and para-veterinarians.

Unpredictable rainfall system

Livestock herding and rainfed crop production are the only major livelihood systems. Both are highly dependent on a rainfall system that is neither predictable nor reliable.

Insecurity

The security situation within the LZ or in nearby areas can sometimes cause displacement and discourage the involvement of development/relief agencies. The insecurity could be caused by clan conflicts over resources or by armed groups that are opposed to the government.

Environmental/Range management

Lack of sound range management plan and uncontrolled grazing practices results in undue pasture and water shortages and environmental degradation.

Risk Minimising Strategies

Risk minimisation strategies sometimes vary by wealth group. These include:

Diversification of herds (species)

All wealth groups diversify their herd composition according to species, with the rich more likely to include camels in their herds for their ability to be drought resistant). Few middle or poor households own camels.

Farming drought-resistant crops

Sorghum is the main crop cultivated (rarely is any other crop grown) and this is particularly drought tolerant.

Diversification of income sources

Since the poor have limited asset levels they minimise risk by diversifying their income generating activities in normal and bad years to reduce the need to sell animal assets. They collect gums and resins, bush products, and are more likely to undertake labour for others if they need to.

Managing Resources

- The middle and rich practise underground storage of grain, and these stocks are held until the outcome of the next season is known. If the following season is good the stocks will be sold and if bad the stocks will be kept for consumption. Stocks can be kept underground from August to November following the *gu* harvest and from February to May from the *deyr* production. On average 2 quintals could be stored by the better off and some of the middle households, after a normal harvest.
- All groups manage animal reproduction such that animals deliver in the less risky periods. At other times male animals are prevented from mating with a barrier method.
- Animals are moved around during the rainy season to prevent overgrazing and depletion of pasture.
- Milk is stored as ghee to enable it to be used over a longer period. Ghee is therefore preferred since it has a longer shelf life than butter.

Coping Strategies in bad years

All wealth groups increase or decrease some activities in bad years in order to minimise the negative effects of the bad year. These strategies include:

Increased livestock sales

Animal sales are important source of income for all groups in a normal year. Takes place every year regardless of type of year. Difference is the number and the nature (quality, usage and sex of animals) that are to be marketed. In a normal year animals are sold to finance regular household expenditure on food (sugar, and in some cases e.g. the poor, cereal purchase), clothing health and household items. Animals sold in this case (cattle and shoats) are mostly male with good condition. Hence the effect of such animal losses on the household livelihood is insignificant in terms of reproduction and milk production.

During a bad year animals are mainly sold to cover a deficit in household income resulting from the decrease in milk and crop production. In such a case animals marketed in the early stages are mainly males, like the normal year pattern but with higher than normal volumes. In later stages, females dominate the animals that are sold. Since these are important for reproduction and milk production the effects of losing such animals through sales has significant negative impact on household access to food in times to come. The most affected will be poor households, which have limited stocks. Sales of livestock for the poor are for household survival during a bad year; for the middle and rich, however, they are more likely to be selling livestock to rescue the rest of the herd as much as to provide for their household's needs. Animal sales are often need-driven for the poor in a normal and bad year but the intensity of the need differs. Livestock sales are often market-driven for the middle and the rich in a normal year and need-driven in a bad year. Livestock sales take place early in the dry season (*ceel fadhiisi*) in a normal year but in the middle and later stage of dry season in a bad year.

At community level animal sales in a particular year are affected by, a) nature of year and levels of crop production; b) condition of livestock market. At household level animal sales are affected by the fore-mentioned factors as well as the situation of each particular household.

In a normal year the poor sell around 5 shoats. In a bad year they might be able to expand these sales to an additional 5 animals (sheep first) plus a more expensive ox.

Increased collection of natural gums and incense

This is important for the poor in a normal year and for a large segment of middle in a bad year. For the poor, in a bad year the household will increase the number of people involved in collection and sales, the time taken, the distance that has to be travelled from the household base. In a normal year 2 children are engaged in this activity out of a typical household of 6-7 people. The children will not usually stay away in the bush and the duration of incense collection is usually limited to 1.5 to 2 months per dry season (each child collects around 1kg per day). The distance travelled is also less (taking milk and sugar with them and returning in the afternoon). During a bad year there will be more members of the household involved in this activity. Household members will travel together to far distances and will spend some nights in the bush, take their food with them and take pack animals to transport the incense back. They can collect 2 or 3 times the quantity of a normal year. They will go to virgin areas where gums and resins are not usually collected. The duration of the period where gum is collected can be longer – 5-6 months and from 5 to 20 kg can be collected each day.

Change in Food consumption habits

Households will decrease their overall food consumption through decreasing the number of meals per day and quantity eaten at each meal time. This extends the period of consumption but reduces food intake per day. This is particularly bad for the poor who buy cheaper and less balanced foods to enable them to buy more.

As the supply of cereals to the market reduces prices will increase and the poor will find the foods increasingly difficult to buy. Sugar is a food that is often increased in the dry

seasons and in bad years. The price does not fluctuate with seasons (but it remains more costly than sorghum or maize per unit). Households are likely to take more sugar in their tea to get extra energy during bad years, when grain gets scarce and expensive.

Splitting the household

Household sizes among the poor is largest in normal years and smallest in bad years – men migrate to far places with their livestock; other family members migrate to small villages and towns and sell water, bush products, labour.

Wild food consumption

Wild food is often consumed in normal years (particularly by children), but is not a significant source of food. As the situation worsens households increase consumption of wild foods e.g. *jinaw* (wild leaf), *garas* (*Dobera galabra*); The outer coat of *garas* seeds is removed, and a thin sweet film is sucked leaving the bean. The beans have to be cooked for a whole day before they become tender enough to be eaten.

Self employment

Self-employment constitutes an important coping strategy for the poor and some of the middle households in bad years. In normal years, some the poor usually engage in these activities to a small extent. The activities include:

- ❑ Collecting and selling construction materials – construction poles
- ❑ water selling – especially in Burkayar and Hadawe
- ❑ gum and incense collection
- ❑ firewood collection
- ❑ grass collection

In a bad year some of the middle will be forced to involve in self-employment activities, particularly incense collection. For the poor, in a bad year, more of their number will be involved and will devote more time for these activities.

Rural-Urban movement

Migration of younger and stronger members of the LZ to towns like Gode is common in bad times. People would take some of these bush products for sale to the towns.

Livestock movements in a bad year

In a bad year, livestock of this LZ would be moved to any of these areas, depending on pasture and water availability:

- ❑ Dakhata and Erer valleys in Babile and Jijiga districts of Jijiga Zone;
- ❑ Ceelbarde, in Bakol Region of Somalia;
- ❑ Mustahil and Kelafo in eastern Gode zone;
- ❑ Dolow bay in Afder zone; and to
- ❑ Garbo in Fik zone.

6. Indicators to monitor

- Rainfall – timeliness, sufficiency, distribution;
- Crop situation – condition and stand;
- Pasture and water situation;
- Crop pests and diseases;
- Livestock pests and diseases;
- Coping strategies, type and intensity and effectiveness;
- Human and livestock health (disease outbreaks, etc);
- Income generating activities;
- Livestock market and access;
- Commodity markets and access (especially staple cereals).

7. Recommendations

7.1 *Recommendations*

Recommendations for long term development

- Increasing diversity of animal herds (less dependence on *nugul* animals and increased herding of camel);
- Expanding areas under cultivation by use of animal traction;
- Improving the crop production technology – ploughing, pest control, and storage;
- Improving market access and/or establishing buffer stocks for grain. This will reduce undesirable price fluctuations for cereals. Establishment of the stocks will enable agropastoralists to sell at relatively higher prices after harvest and buy at lower prices in dry season;
- Improvement in animal health facilities such as training community animal health workers, promotion of private veterinary clinics and improving extension services;
- Improve crop protection by improving extension services;
- Improvement of road infrastructure to facilitate access to larger markets;
- Improve income generation projects that are targeted towards poor households. These include promotion of handicrafts, incense collection, and livestock trade;
- Working towards the lifting of the livestock export embargo by gulf states (the livestock ban), and the avoiding future bans.

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 Approach³

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:

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.

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' year⁴.

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.

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.

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* (September)

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 purposes⁵.

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 these 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% of 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.