



Vulnerability Assessment and Analysis Report

**Lesotho Vulnerability Assessment Committee
(LVAC)**

2 INTRODUCTION

The Lesotho Vulnerability Assessment Committee (LVAC) was established in 2002. It is a government led multi-disciplinary committee within the Office of the Prime Minister- Disaster Management Authority (DMA). Its membership consists of Government Ministries and Departments, United Nations Organizations, Non-Governmental organizations and the Private Sector. It is mandated to carry out livelihood vulnerability analysis and its aim is to provide timely analysis for emergency interventions as well as medium to long-term programming. The process of vulnerability assessment and analysis is currently centralized.

LVAC has been conducting annual vulnerability assessments (VA) of food security and livelihoods situation for rural population since 2003 to date. In Lesotho, like in most countries the VAA methodology is based on the Household Economy Approach (HEA) that takes a holistic approach to food security based on livelihood systems including all strategies that households apply to make their living and the external context that may support and/or restrain them.

This year, because of the El Nino phenomenon, the LVAC combined HEA methodology with household survey in order to understand in depth the impact of drought on different sectors.

OBJECTIVES

The overall objective for conducting the vulnerability assessment was to monitor food security situation throughout the country. This is done through monitoring of household livelihoods in order to understand access to food with the intention to inform decision makers on the

design and implementation of appropriate interventions.

Specific objectives

- ❖ Assess the impact of drought on water, agriculture and food security as well as health and nutrition.
- ❖ Integrate Nutrition, HIV and Gender into VAA.
- ❖ Identify capacities, vulnerabilities and opportunities of affected communities.
- ❖ Project the needs for the 2016/17 Consumption year.

2 THE INQUIRY PROCESS - METHODOLOGY

2.1 Study Design

The assessment was done using an integrated approach following guidance on [Integration of Nutrition, HIV and Gender](#) in Vulnerability Assessment and Analysis. The study made use of [Household Economy Analysis \(HEA\)](#) complimented by a household survey tool on gender, HIV and Nutrition. Secondary data review (literature), key informant interviews (community leaders and key stakeholders) and household questionnaires were used to collect a combination of quantitative and qualitative information regarding food security, nutrition, HIV and gender outcomes. As an overall guide, the analytical framework that informed the structure of the study and design of applied tools was the Food and Nutrition Security Conceptual Framework agreed between SADC member states for integrated assessment and analysis. This was the point of departure in the choice of information that was collected for the study as well as the type of analysis conducted to answer the assessment objectives.

2.2.0 Implementation Strategy

2.2.2 Primary data collection

Primary data for this study was gathered through individual household sample survey and focus group discussions with key informants providing a process through which data at household and associated analysis outcomes are linked to underlying livelihood system and strategies employed by different wealth groups, providing more disaggregated statistical analysis particularly for nutrition, HIV and gender outcomes. Data collection tools that were used are appended at the end of this report.

Household survey: The survey was carried out with individual sampled households from the study area. 144 villages were selected to be part of the study. These villages were different in sizes (in terms of the population of households) and therefore probability proportional to size was employed in sampling the households for the survey from each of the 144 villages. In terms of **Sample size determination**, a sample size of 3373 households and 2538 children were reached drawn based on SMART sampling procedure, sample size estimation procedure highlighted below:

Parameters for Anthropometry	Value
Estimated Prevalence of GAM (%)	3.5%
± Desired precision	2%
Design Effect (<i>if applicable</i>)	1.5
Children to be included	2,650
Average HH Size	5.9
% Children under-5	13.5%
Households to be included	3,261

All calculations were made using ENA Software for SMART (ENA for Nutrition 2011). The selection of clusters was done using probability proportion to population size and the household were selected using the systematic random sampling. In total 5 clusters were stratified using rural livelihood zones across the 10 districts. As the livelihoods and urban/rural distribution were different for the demographic health survey (DHS) compared to the LVAC, the national average was used for the calculation of the sample size. As we are currently in an extended lean season (compared to the DHS results when data was collected in August 2014), a 25% increase in GAM rates was anticipated (3.5%).

The household survey collected information on anthropometric measurements (weight (kg), height metres, MUAC (cm) and presence of oedema), livelihoods, and access to health, HIV, gender, water and sanitation. The anthropometric measurements data allowed the computation of current nutrition outcomes. With regards to livelihoods, it should be noted that livelihoods information collected at this stage was used to strengthen computing of **problem specifications** that were used to run an **outcome analysis** for the current consumption year (2016/2017). In addition, it should be noted that the household tool also contained several **wealth indicators** which were used to compute **wealth groups** and thereby linking the household survey data collected to HEA information, thereby correlating HEA outcomes with HIV, Gender and nutrition outcomes.

Focus group Discussions with key informants

A total of 144 interviews were done, one from each of the 144 villages. The group discussions were carried with 6 to 10 key informants who were mainly the community leaders and other key stakeholders especially government staff working in the area. The discussions with key informants provided in depth information about the livelihood key parameters which was used for calculating problem specification for; production, livestock herd sizes, labour availability, market prices/rates for income source and expenditures.

2.2.4 Field processes

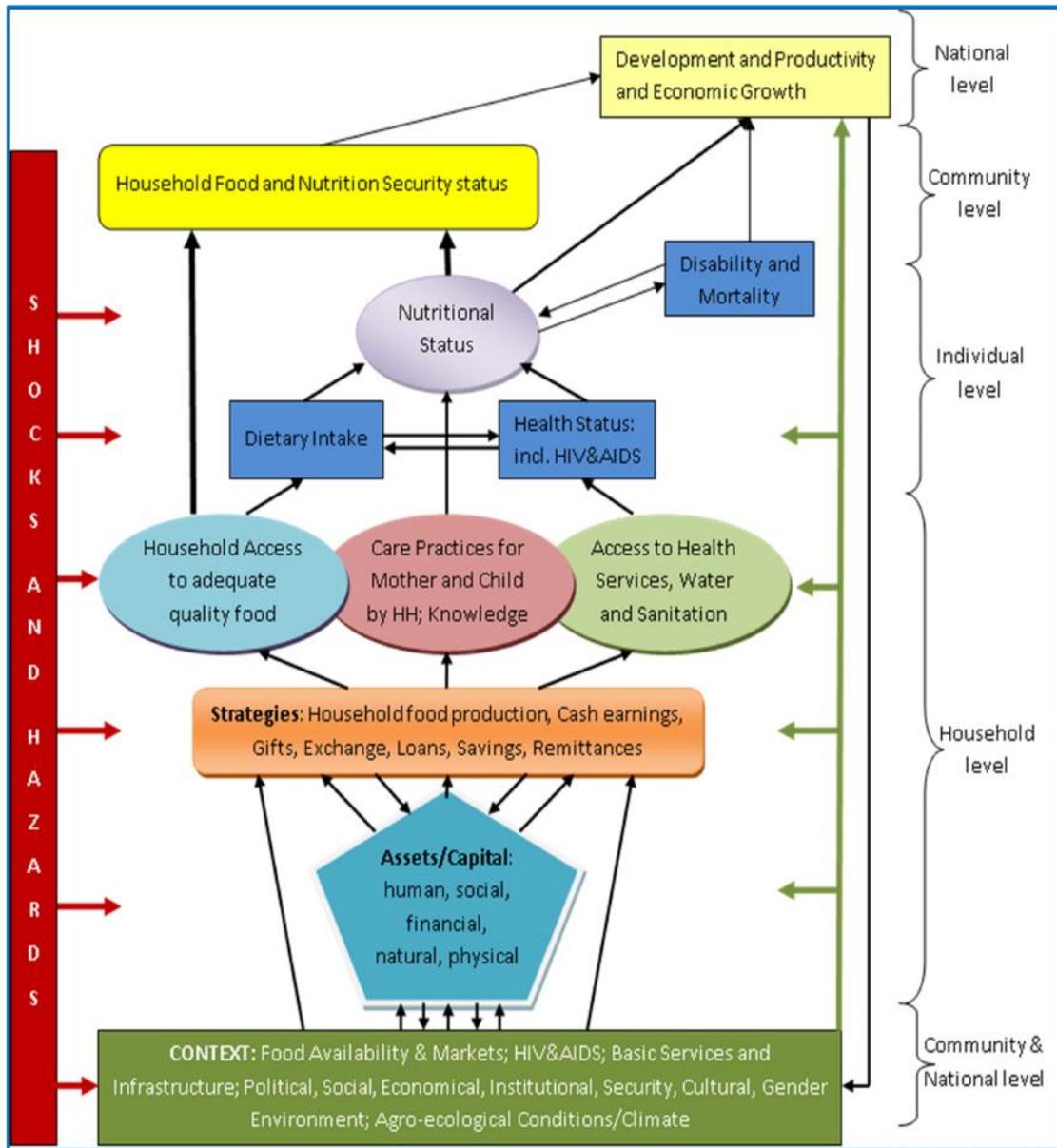
Training. A 6-day training workshop was held for 80 enumerators in Maseru. The topics covered included: HEA framework overview, Food and Nutrition security Conceptual framework and the link of the two frameworks for the study. Training also covered administering of the data collection tools and taking of anthropometric measurements.

Field Work Timing: The field work for the study was undertaken in May 2016. Trained participants were deployed to carry out the assessment with guidance from experienced practitioners.

2.2.5 Data analysis and report compilation.

The data analysis process involved developing analysis of household livelihood strategies and nutrition status for respective wealth groups. A peer review of the analysis and report writing was done by independent practitioners to improve on analysis quality. Household interview data was analysed using SPSS whilst livelihoods HEA data was analysed using HEA spreadsheets.

2.3 Conceptual Framework



3 Assessment findings

3.1 National Context

Lesotho is a landlocked enclave country surrounded by South Africa. The estimated area is 30,344m² of which three quarters is mountains and the population is estimated at 1.8 million. It is a lower middle income country ranked 167 of 187 countries on Human development index and 38 of 46 countries on the economic freedom scores in Sub-Saharan Africa Region. The [Central Bank of Lesotho](#) estimated that real Gross Domestic Product (GDP) grew by 3.4% in 2015. The cost of food increased by 11.5% in February 2016 over the same month in the previous year. Inflation rate has been unstable and increasing, for instance, in July 2015 it was 5.3% and in April 2016 was 14.8%.

The agricultural sector, which accounts for only 8.6% of GDP, is the main source of income for majority of rural population. In recent years, increasing foreign investments in textile industry and commerce have created more jobs and strengthened the economy. However, widespread poverty, estimated at 57%, youth unemployment (28%) and high prevalence rate of HIV (25%) remain the main obstacles to economic growth. Crop production in communal and block-shared cropping areas is predominantly rain-fed.

Lesotho experienced one of the strongest El Niño in 35 years which resulted in below normal rainfall in 2015/16 agriculture season and poor rainfall distribution. Further, there was late onset of rainfall which delayed the start of the season by 20 to over 40 days. Area planted dropped by 33.7% from last year and 45% from the 2009 reference season. Coupled with this, the occurrence of frost in April affected late planted crops and resulted in a drastic decrease in crop production, particularly for cereals that are estimated to be 62% below last year and 51% below reference season.

The decline in cereal production has contributed to increased need for importation to ensure stability in food availability as most households would have to depend on markets to meet their cereal requirements. Consequently, the staple food price is 333% (from M3.00 to M10.00 per kg) of the baseline year and it is expected to increase dramatically until next harvest in 2017. Cereal production accounts for 8.6% of annual cereal needs while opening stock accounts for 9.5%. This leaves the country with an import requirement of 81.9% or 292,990 metric tons for the 2015/16 marketing year. The vulnerability assessment indicates an increase in food insecure population from 463,936 last year to 709,394.

3.2 Household demographics

- ❖ **Household Size:** on average, household size was found to be 5 members.
- ❖ **Sex of household head:** 50.7% of sampled households were male-headed while 49.3% were female-headed.
- ❖ **Education level of household head:** majority of household heads had primary education (63.4%), 15.6% completed secondary level of schooling while 13.8% did not attend school.
- ❖ **Marital status of household heads:** majority of household heads were married and living together (44%), followed by those who were widowed (33%). Other households' heads were married living apart (14%), never married (6%) and divorced/separated (3%).
- ❖ **Disability:** 375 (11.1%) households had at least one disabled member, out of whom 49.1% were at productive age group of 18- 59 years.
- ❖ **Chronic Illness:** 29% of households hosted chronically ill members, with the southern lowlands recording the highest proportion of 33.5% and northern lowlands recording the lowest proportion of 24.7%.
- ❖ **Cell phone availability:** about 82.6% of households had a working cell phone. Out of these, 87.9% indicated that they had regular network service. The majority of households used Vodacom (75%), followed by Eco net (17%).

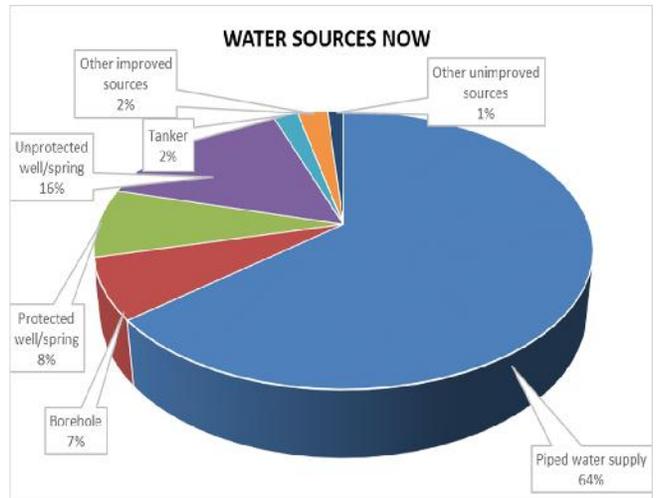
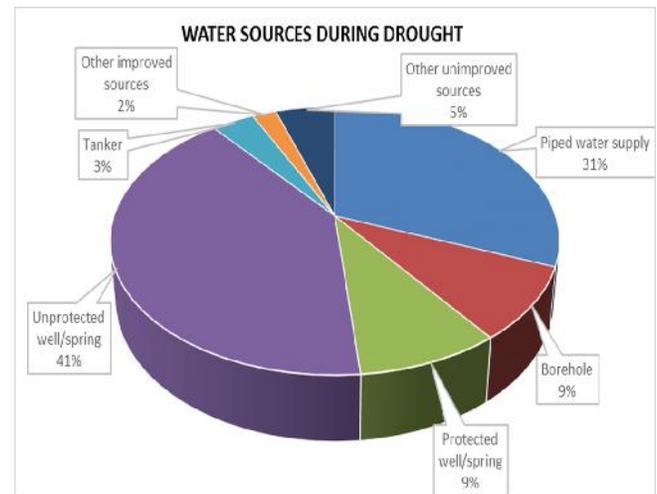
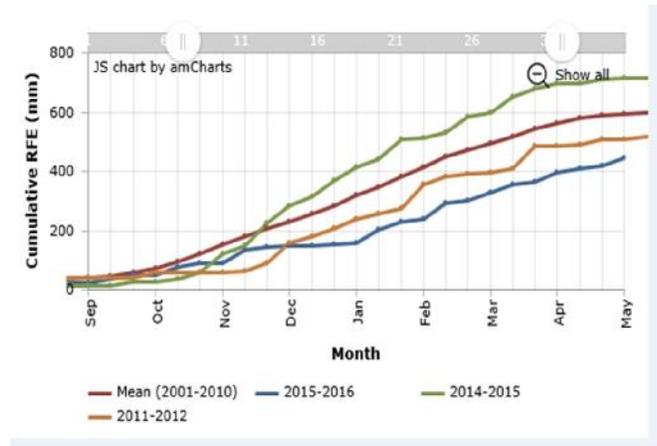
Water and Sanitation

The country experienced below normal rainfall during the 2015/16 rainy season. As a result there was significant decline in water levels in many catchment areas and groundwater as well as some water bodies dried up in December. Although the situation started to improve in January when rains were received, the water bodies are not fully recharged. According to Lesotho Highlands Development Authority (LHDA), as of 27th May 2016, Katse dam was 70.2% full and Mohale dam was 34.0% full.

Water sources: During drought (unusual) conditions, communities resort to unprotected springs (41% of households) because of increased demand and historical reliability of unprotected springs. Piped water sources were reported by 31% of households during drought period. The use of unprotected springs during drought boils down to the local customs and culture of anciently using unprotected springs for domestic use and many other uses.

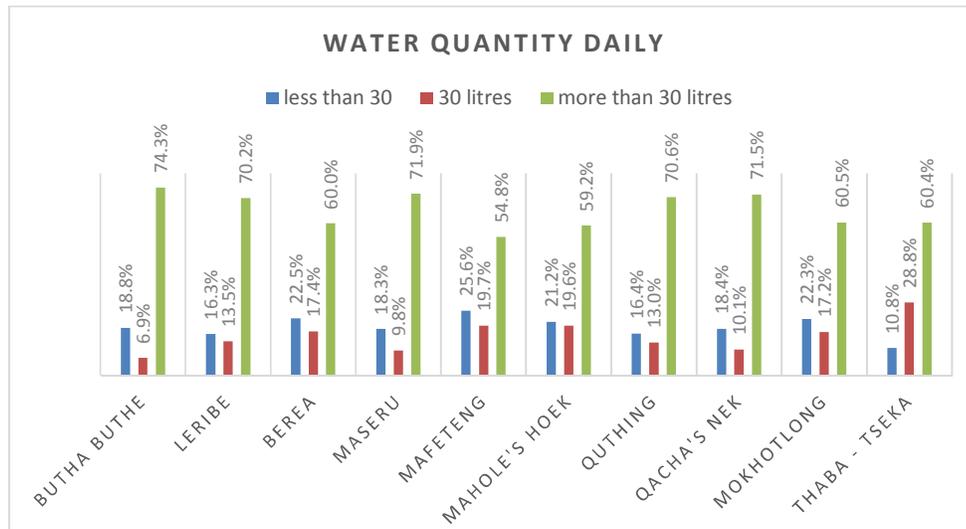
In normal times (i.e. in the absence of drought conditions) and at present, the main water sources are piped water (reported by 64% of households), followed by unprotected sources (16%). This is an indication that the water situation has improved. However, some communities still experience water shortage even during normal times. When piped water sources are not functional or when there are long queues at alternative water sources, resulting in long waiting times, water is rationed so that many households would be able to access it.

Time taken to collect water: while the vast majority of households reported that it took them less than one hour to collect water, Leribe, Mokhotlong and Thaba-Tseka stood out as having between 17 and 22 percent interviewed saying it took them 2 hours or more.



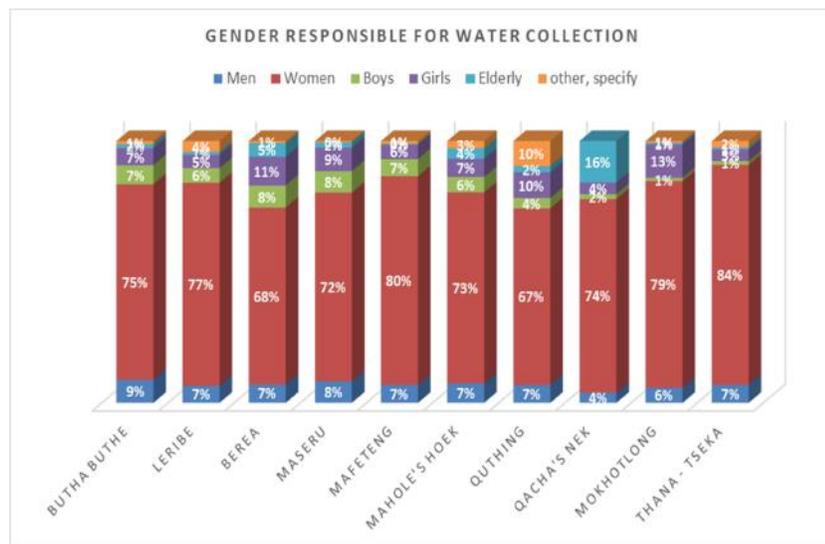
Water use: Overall, almost all households across different districts indicated that they use water mainly for domestic purposes with other uses very minimal.

Water availability/quantity: during the assessment, water seemed to be available but not sufficient. Butha-Buthe, Berea and Maseru had the highest amounts of respondents with around 40% indicating that domestic water supply did not meet the demand, followed by about 35% of households in Mafeteng and Thaba-Tseka, and Leribe (28%), Mohale’s Hoek (26%) and Qacha’s Nek (23%). About 25% of households in Mafeteng used less than 30 litres a day. Berea, Mokhotlong and Mohale’s Hoek also reported over 20% of households that used less than 20 litres a day and reporting that some level of rationing was taking place.



Water quality: the majority (71-91%) of households do not treat water. The most common method used by those who treated water was boiling. In Butha-Buthe, households used different methods of treating water, with nearly 11% sieve water through a cloth and nearly 18% let it stand and settle. Communities that are served from Metolong dam and WASCO (Water and Sanitation Company) have access to already treated water.

Water collection by sex and age: the majority of people who collect water were adults (74%). Women were the ones who collected water across all districts. More girls than boys collected water (7.5% girls vs 5.6% boys). This supports the local custom of females being the gender for collecting water at a

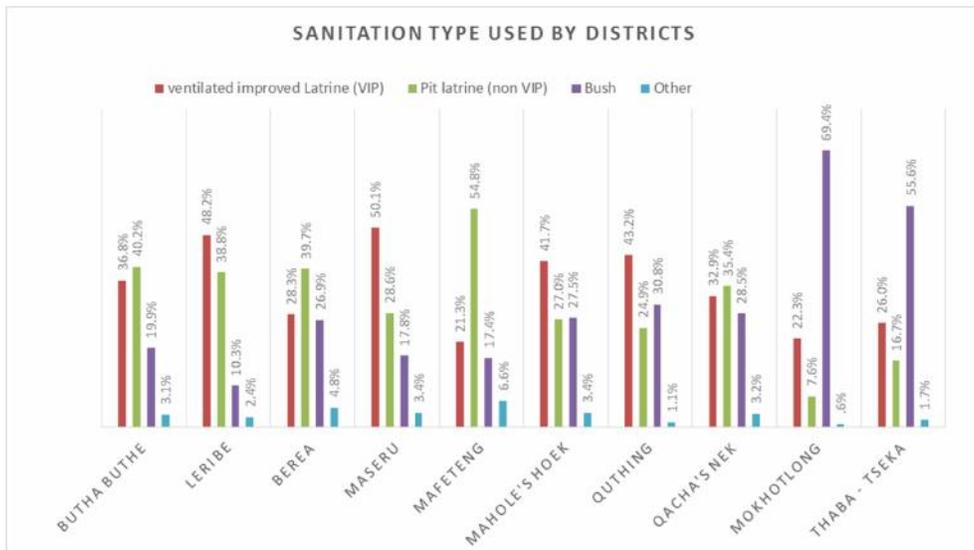
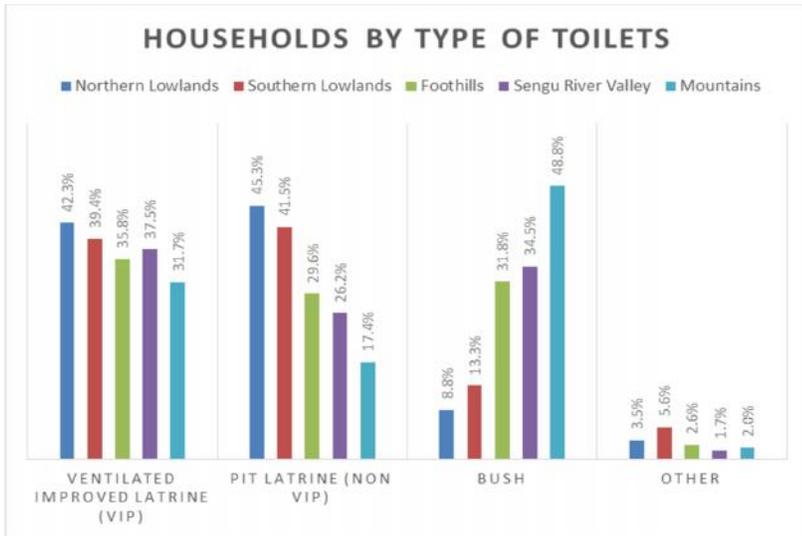


household level. In general few elderly people collected water, with the exception of cases in Qacha’s Nek where 16% of the elderly collected water.

Sanitation: there were no households that reported use of flush/pour toilets across all districts. The majority (37.5%) used Ventilated Improved Latrines (VIPs), 32.6% used non-VIP latrines and 26.7% used open defecation (bush).

High proportion of households in Mokhotlong (69.4%) and Thaba-Tseka (55.6%)

used open defecation. The mountain livelihood zone recorded more households using open defecation (bush) estimated at 48.8%, followed by SRV (34.5%) and foothills (31.8%). Majority of households that did not use bush seemed to own toilets. Few households (5%) had non-functional latrine, in most cases because it had become structurally unsound or the area is within the project areas that include promotion of proper sanitation in rural communities.



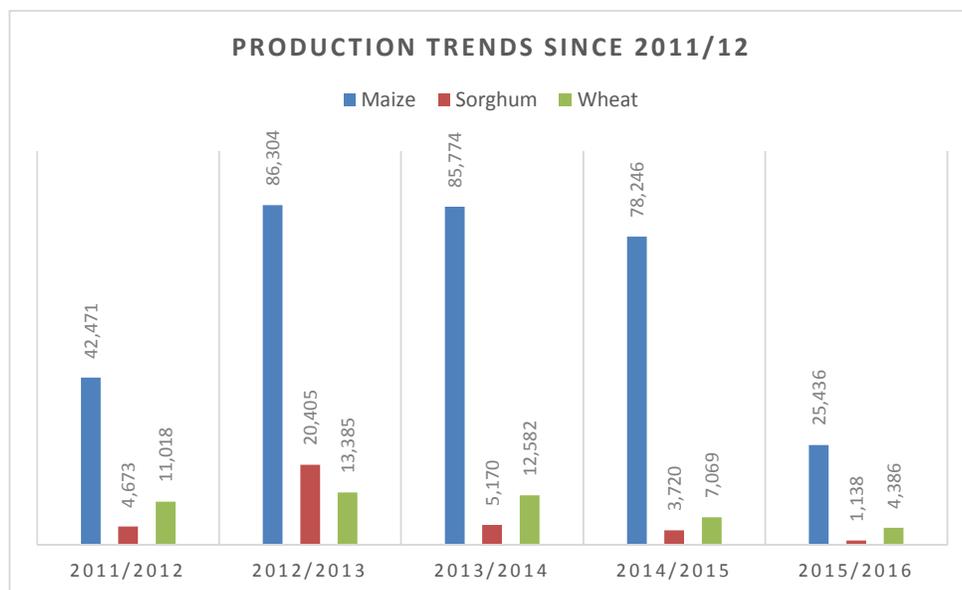
Hygiene: households were asked if they washed their utensils with clean water. Significant proportion of households in Thaba-Tseka (45%), Berea (36%) and Qacha’s Nek (32%) reported that they did not wash utensils with clean water. In many rural areas, households did not have rubbish pits for disposal, and instead had a place where rubbish is disposed and burnt. Over 70% of households did not wash hands after toilets. Hand washing after toilet was done using water from the house either because there are no hand washing facilities in their yards or the intended structure was broken.

Agriculture and Food Security

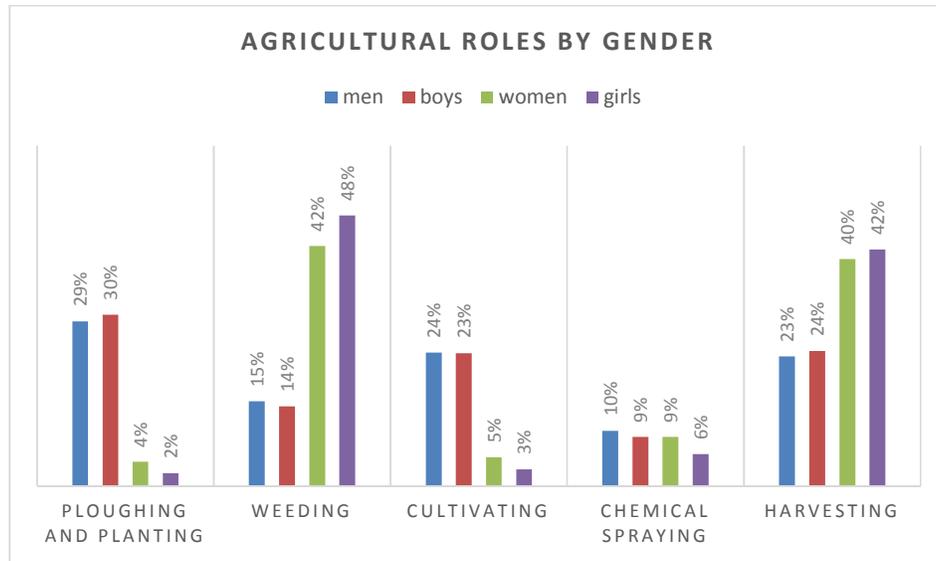
Crop production

The 2015/16 cropping season was characterized by poor rainfall, late onset of rains which delayed by 20 to 40 days. Area planted declined and crop production dropped significantly. Area planted to maize declined by 34% (111,639 ha to 73,509 ha) compared to last year and 65% (151,748 ha to 73,509 ha) compared to baseline year (2009/2010). About 55% of households had access to land, of which 56% are male-headed and 54% are female-headed. Only 34% of households indicated that they cultivated their fields, out of which 16% cultivated same land and another 16% cultivated larger land compared to 2014/15, while only 2% planted less land. The highest proportion of households which did not cultivate was reported in southern lowlands (84%) and Senqu river valley (81%).

Gross cereal harvest was estimated at 30,960MT. Maize production declined by 61% compared to last year, sorghum production declined by 88% and wheat production declined by 38%. Low cereal production was noted across all districts, with several districts recording a decline of about 50%. Leribe which is located in the productive area recorded a decline of 78% in maize production, and Thaba-Tseka recorded the lowest decline of 21%. Only Qacha's Nek recorded an increase of 306% compared to last year. This means that the majority of households in most districts will access the bulk of the staple food through purchases rather than own production. Even households which have some harvest will run out of food stock earlier than usual.

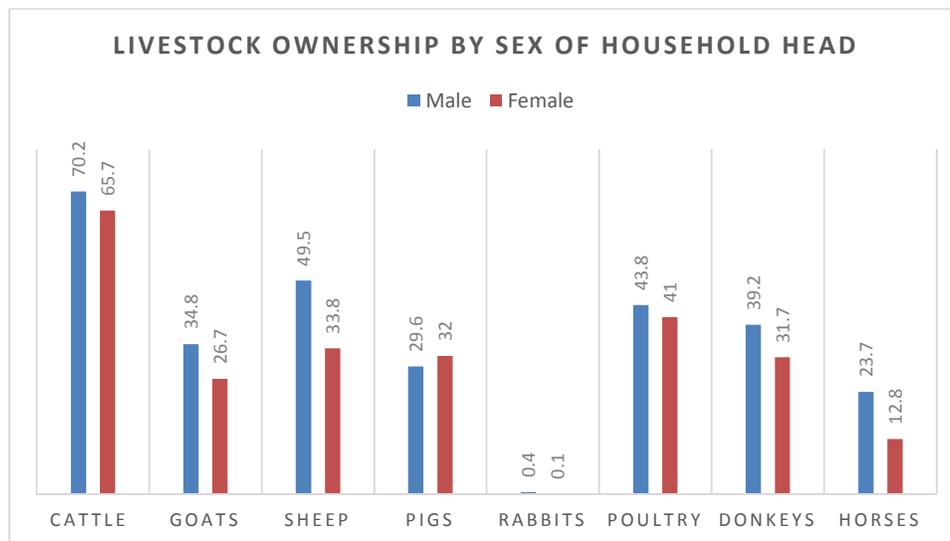


Roles in crop production by gender: ploughing, planting and cultivation seemed to be carried out by men and boys. These roles were in many cases done by use of draught animals. Women and girls participate more in weeding and harvesting. Chemical spraying did not seem to be common in majority of households, although it seemed to be carried out by all sexes, with slightly lower participation of girls.



Livestock production

Overall more than half of the respondents (55%) owned livestock, most of whom depend on sales of livestock and its products for their livelihood. More male-headed than female-headed households owned livestock across different types, with significant differences in ownership of horses and sheep. Female-headed households owned pigs than male-headed households.

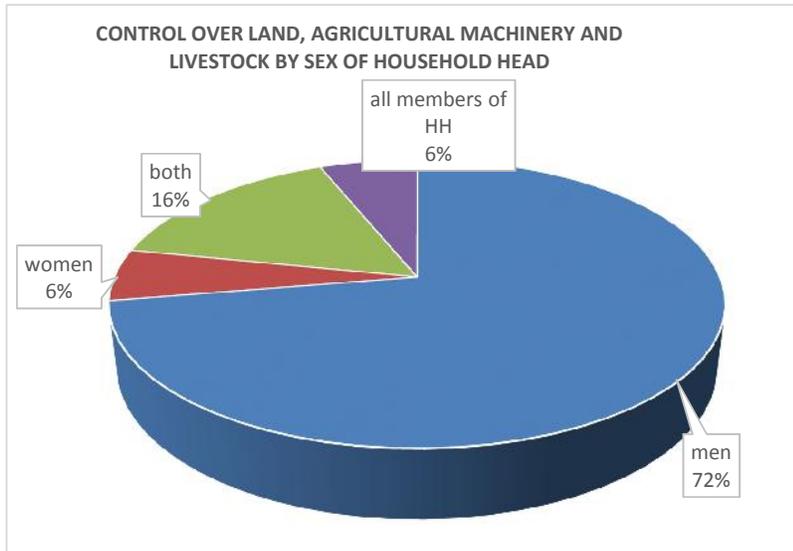


Livestock ownership is however threatened by frequent droughts, stock theft and disease outbreaks which result in reduction in herd sizes for some types of livestock. Some households reported loss of livestock due to drought conditions. On average, 1-3 livestock deaths were reported per household across the districts.

Cattle herd sizes declined across all the districts except in Mafeteng and Maseru where there is an increase of 25% and 3% respectively compared to baseline year. Average cattle

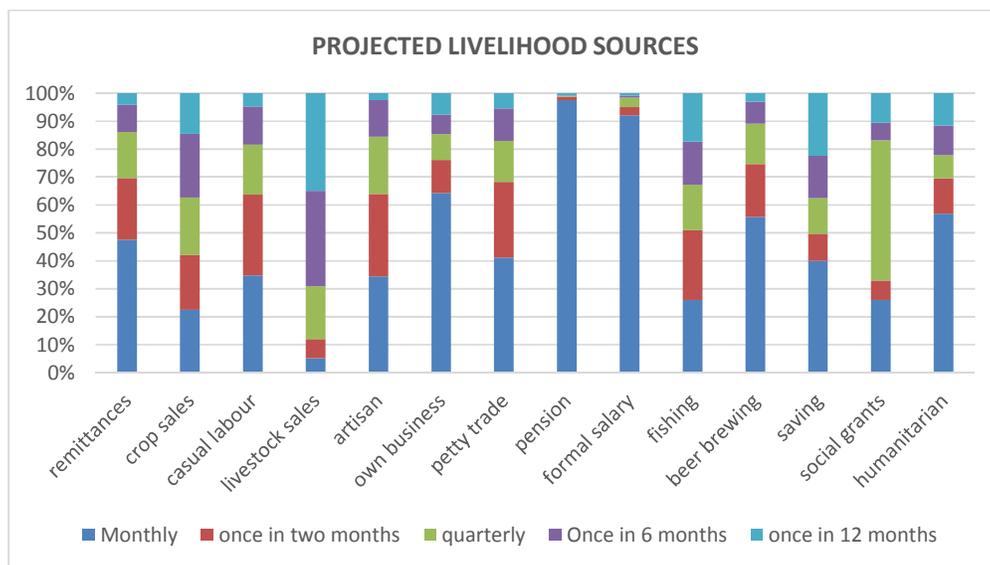
ownership is 3-6 per household, goats 7-17 per household and sheep 7-29 per household. On the contrary, 15% increase was noted in sheep and goats with majority of households reported in Thaba-Tseka (60%), Mafeteng (44%) and Mokhotlong (33%), except in Quthing that recorded a drop of 30%. Ownership of sheep is highest in Thaba-Tseka, Mokhotlong and Qacha's Nek with an average of more than 20 sheep per household.

Access and control over agricultural resources: about 55% of households had access to land, of which 56% were male-headed and 54% were female-headed. The majority of households indicated that men had more control over land, agricultural machinery and livestock. Only 6% of women had control over resources, while 16% households indicated that both men and women had control.



Income Sources

Most households cited casual labour and remittances as their main sources of livelihood at the time of the assessment. Remittances were mentioned by about 20% of households as the projected livelihood source in the next 12 months, although some are expecting to receive them quarterly or once in a while. Pension and formal salary were important on monthly income sources in that order. Casual labour remained one of the most important sources.



Income sources deteriorated due to drought conditions as most of them are agricultural based. Failure of the agricultural sector resulted in low income opportunities as little was generated from agriculture cultivation, weeding and harvesting as well as low income from crop sales. This is corroborated by the fact that 60.6% of male-headed households and 70.7% of female-headed highlighted that they did not cultivate.

Domestic work (e.g. washing) declined by 23%, however, there is a 15% increase in its labour rate. Berea recorded the highest decline of 78% compared to baseline year, while Mohale's Hoek had the lowest decline of 7%. Leribe and Mokhotlong recorded an increase in this activity of 9% and 7% respectively. Overall, gifts/remittances declined by 16%, with significant decline reported in Quthing (60%) and Qacha's Nek (51%). However, in Mokhotlong, Mafeteng and Maseru, remittances increased by 24%, 13% and 7% respectively.

Self-employment activities such as crafts making, and brewing were slightly higher than baseline year by 1%. However, opportunities especially for brewing are expected to decrease in the coming months. Cash for work have increased by 64%. Coverage of cash for work activities is stable, but the amount of income that households earn from it has increased. Non-agricultural based casual labour rates have increased by 43%. Salaried employment remain stable, although the rates for salaries have improved slightly.

Prices: prices of livestock and its products have generally increased, improving income for the 'middle' and 'better off' households. Cattle prices have increased by 17% to 67% and prices of goats and sheep increased by 15 to 60%.

Districts	Gifts/ Remittances	Self Employment	Cash for work	Domestic Work(Washing/Smearing)	Average
Butha- Buthe	-9%	-60%	82%	-51%	-10%
Leribe	-30%	12%	86%	9%	19%
Berea	-9%	62%	20%	-78%	-1%
Maseru	7%	-23%	216%	-33%	42%
Mafeteng	13%	50%	62%		31%
Mohale's Hoek	-1%	-17%	44%	-7%	5%
Quthing	-60%	62%	25%	-20%	2%
Qacha's Nek	-51%	-43%	72%	-29%	-13%
Mokhotlong	24%	-19%	25%	7%	9%
Thaba- Tseka	-39%	-13%	7%	-27%	-18%
Lesotho	-16%	1%	64%	-23%	7%

Social Protection

Due to high rate of chronic poverty and vulnerability, 30 -70% of district population benefit from existing safety nets such as pre-school and school feeding, cash for work (Fato-Fato), cash grants for elderly, OVC, destitute and people with disabilities which are designed to

cover a wide array of social risks and vulnerabilities. The safety nets contributes significantly to the sources of cash and food for households covering a significant portion food and non-food requirements.

The vulnerability condition of households has been exacerbated by the negative impact of drought induced by the El Nino phenomena. The coverage of safety net is stable, but the increasing food prices over time might impact on household purchasing power and humanitarian assistance has to be scaled up. Proper targeting for some safety nets has to be ensured in order to assist the most vulnerable. Thus, lack of targeting in some of the interventions limit their contribution to poverty reduction.

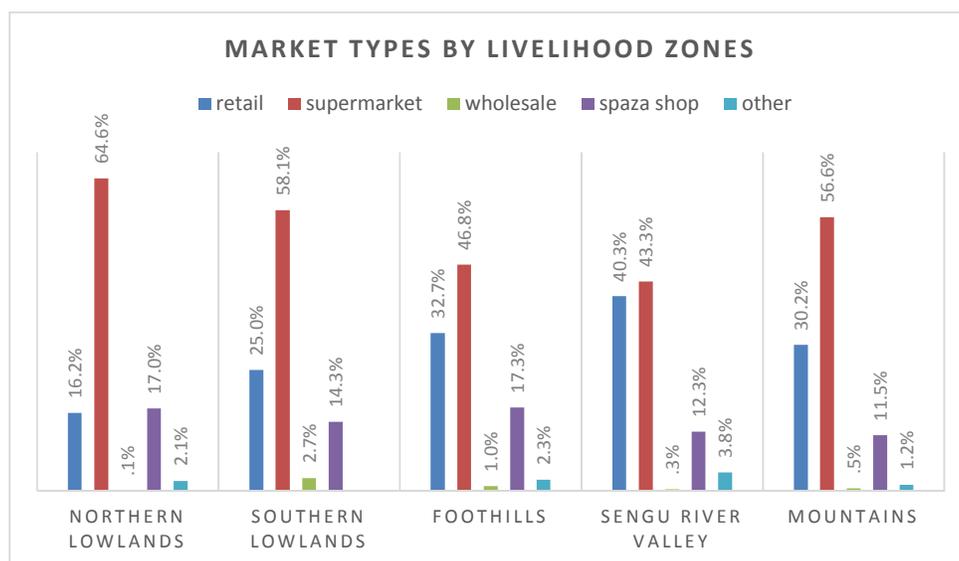
Staple food prices

Maize meal prices have increased and are expected to continue increasing as influenced by low production, increasing demand, high import prices from South Africa. The price increased from M3 to M9.90 per 1kg ~ M37.50 to M100/12.5kg compared to reference year. It is projected that average maize meal prices will likely be higher than those of five year average and the previous years'. However the current government price subsidy of 30% is expected to stabilize the prices of maize meal.

Terms of Trade: Low production, increasing cereal prices, declining income opportunities, slight increase in other income opportunities will impact negatively on purchasing power of households. All incomes are below the rate of increase of food prices, hence the overall purchasing capacity of households has declined due to the effect of the severe drought.

Access to markets

Most households (54%) bought their food from supermarkets, and the majority of them live in the lowlands. Retail shops were used by 28% and spaza shops (15%). The study determined that many households obtained maize meal, cooking oil and pulses through purchases most of the time. At least 45% of households bought maize meal throughout the year, 44% bought pulses and 82% bought cooking oil. More than half of households (65%) mentioned that maize meal, pulses and cooking oil were available in the markets all the time, 19% said they were often available, while 12% said they were rarely available.



Generally, many households (71%) walked to the market and reach the markets in less than one hour and 25% used public transport and paid cash. Only 2% used donkey or horses to reach the market and another 2% used private transport.

Household food consumption

The Consolidated Approach to Reporting Indicators of food security (CARI) was used to classify households into different food security index groups. CARI uses food security indicators to measure the current status and household coping capacity. The current status is measured using **food consumption score (FCS)**¹, which looks at the adequacy of household current food consumption, while the coping capacity is measured based on a combination of **livelihood coping strategies** and **food expenditure share**. Based on these three indicators, each household was assigned to a food security index group; 1) food secure, 2) marginally food insecure, 3) moderately food insecure and 4) severely food insecure.

Food consumption score was calculated using the frequency of consumption of different food groups consumed by a household during the 7-day period, categorising households into 'poor', 'borderline' and 'acceptable' food consumption groups. Further analysis was done to measure food consumption score nutrition (FCS-N) to determine household intake of vitamin A, protein and iron rich foods in order to provide a linkage between household food consumption and nutritional outcomes. In addition to FCS-N, analysis of Household Dietary Diversity (HDDS)² over 7-day period was done to determine the quality of foods consumed. Household Hunger Scale (HHS) was also analysed to assess households' perception of their hunger at the time of the assessment. This section will therefore presents the current status of food consumption looking at **FCS, FCS-N, HDDS and HHS, and the coping capacity based on coping strategies and food expenditure share**.

Overall, the findings indicate that 36.4% of households had acceptable food consumption, 44.6% had borderline and 19% had poor consumption and were assigned to food security index groups as per the table below.

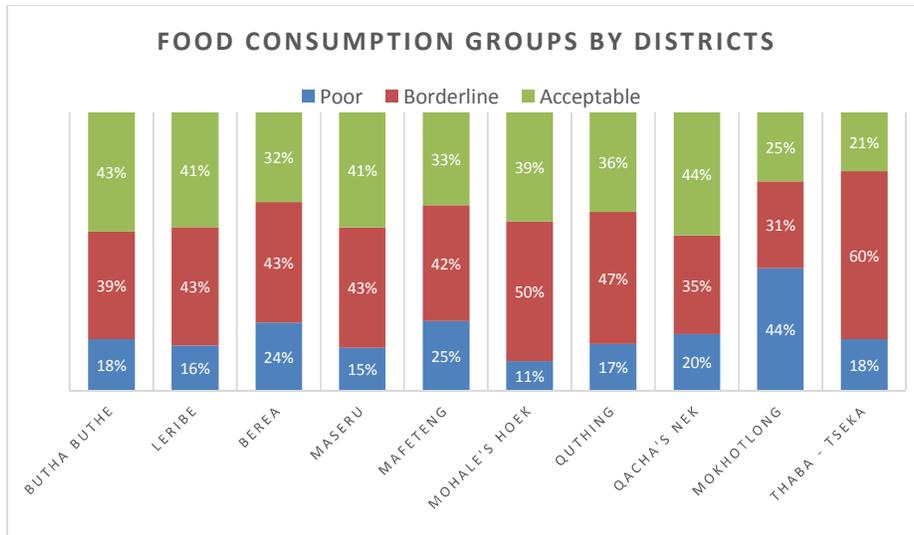
Domain		Indicator	Food secure (1)	Marginally food insecure (2)	Moderately food insecure (3)	Severely food insecure (4)
Current status	Food consumption	Food consumption group	36.4%		44.6%	19%

By districts, Mokhotlong had the highest proportion of households with poor food consumption (43.9%), followed by Mafeteng and Berea with 24.9% and 24.5% respectively. Thaba-Tseka and Mokhotlong had a high proportion of households that had either poor or borderline food consumption. The mountain livelihood zone had the highest proportion of

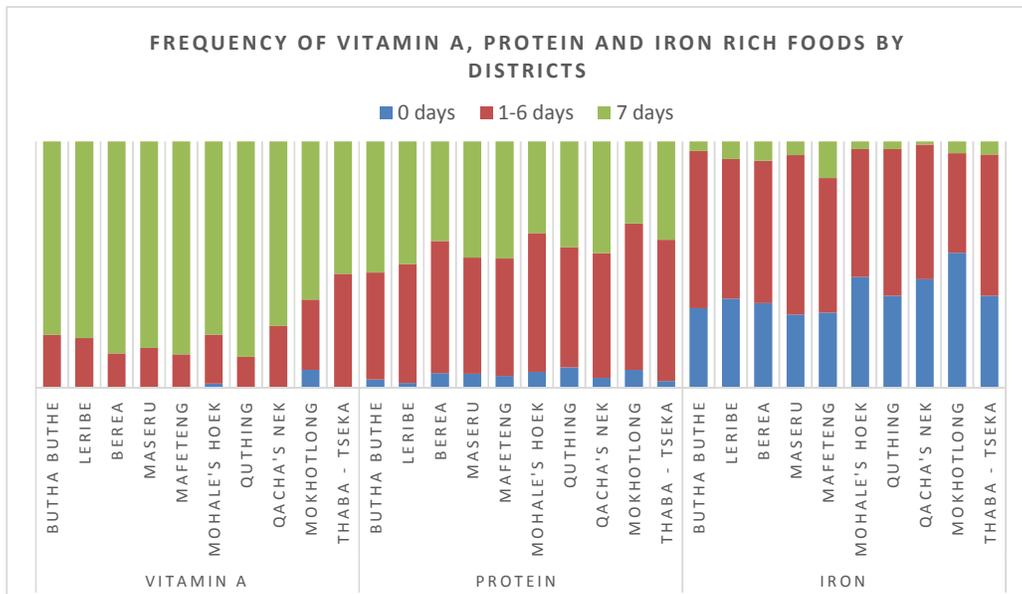
¹ 'Poor' food consumption is generally regarded as a sign of extreme household food insecurity. It refers to a diet composed mainly of maize on a daily basis and vegetables for a maximum of four days per week. 'Borderline' food consumption is classified as a diet made up of cereals and vegetables on a daily basis plus oils/fats for five days and sugar/sugar products for three days per week. 'Acceptable' food consumption is classified as daily intake of cereals, vegetables, oil and sugar, and at least one day consumption of foods rich in protein.

² **Dietary diversity** measures food consumption with emphasis on the quality of food consumed by household members over a period of 7 days. Households are classified as having low, moderate and high dietary diversity.

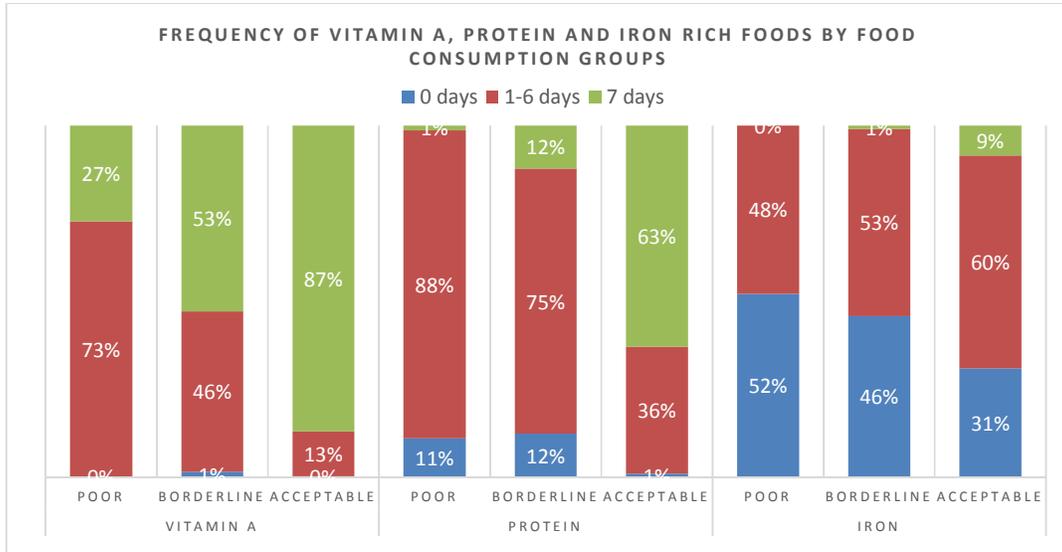
households (23.6%) with poor food consumption, while Senqu River Valley recorded the lowest proportion of 15.6%. When poor and borderline food consumption groups were combined, the mountains had the highest proportion of 68.5% followed by foothills with 66.9%, while northern lowlands recorded the lowest proportion (57%).



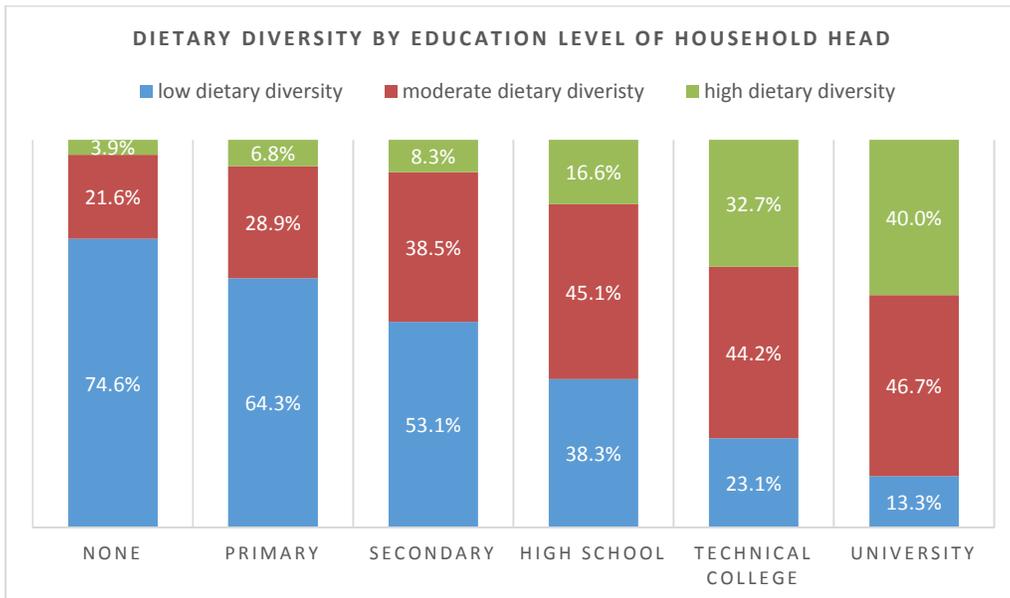
Dietary diversity was poor for majority of households across all districts with 61.8% of households recording low dietary diversity, 30.5% recording moderate dietary diversity and only 7.7% recording high dietary diversity. Food consumption nutrition (FCS-N) analysis indicated that majority of households (ranging from 54% to 88%) had high intake of vitamin A rich foods as opposed to other food groups. Majority of households consumed vegetables from own production. Protein-rich foods were either consumed sometimes (48%- 60%) or almost daily by 33%-50%. Iron-rich foods were not consumed by majority (30%-55%), while 41%-65% consumed them sometimes and only 3%-15% consumed them sometimes. Most of the foods consumed were obtained through purchases.



Households with poor FCS recorded high intake of vitamin A rich foods either sometimes or on daily basis. The majority of these households (88%) consumed protein rich foods sometimes, while about half did not consume iron-rich foods. Low intake of iron-rich foods was noted across all food consumption groups.

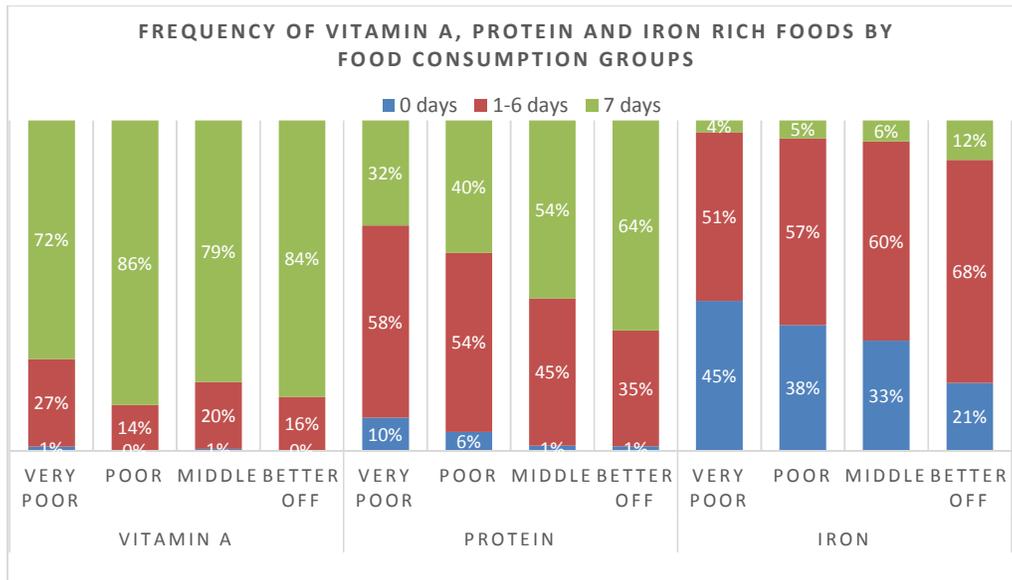


Education played an important role as poor food consumption was recorded more in households headed by those with either no education (25.9%) or primary education (19.8%). Although 20% of households headed by university graduates recorded poor food consumption, the majority in this category (60%) and graduates from technical college (75%) had acceptable food consumption. Households headed by those with higher education also had high dietary diversity compared with households whose heads had no or low education.



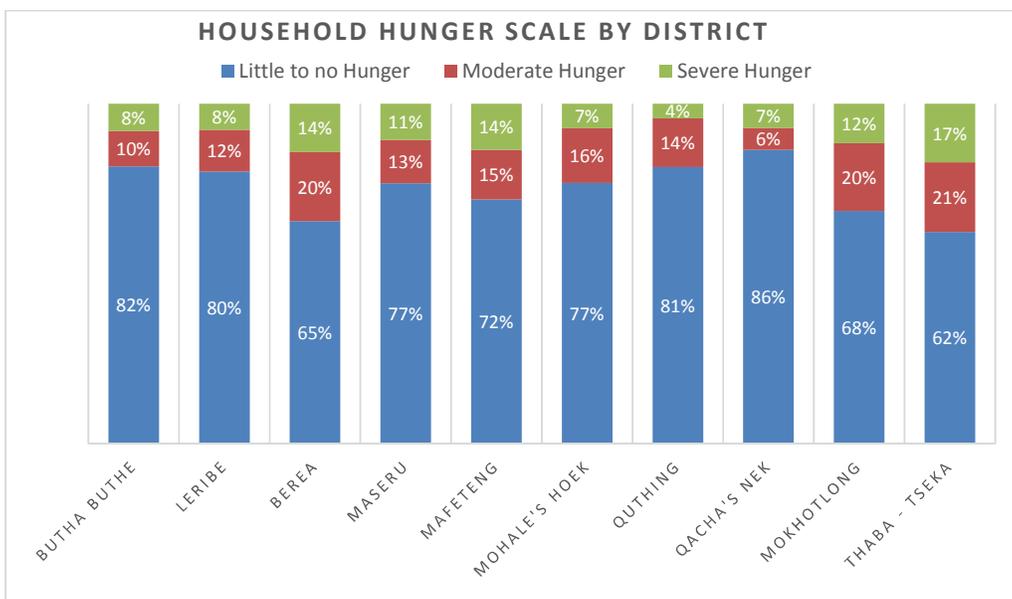
By wealth groups, the very poor (26.3%) had poor food consumption, followed by poor households (21.3%). The very poor (74.7%) and the poor (66.3%) had low dietary diversity and recorded low intake of iron-rich foods and protein-rich foods. The majority of better

off (70.2%) and middle (52.1%) recorded acceptable food consumption although a significant proportion (21%-33% respectively) also had low intake of iron-rich foods.



There was no significant difference in the food consumption of male and female headed households. However, male headed households slightly had better dietary diversity than female headed households with 63.7% of female headed households estimated to have low dietary diversity compared to 59.9% of male headed households.

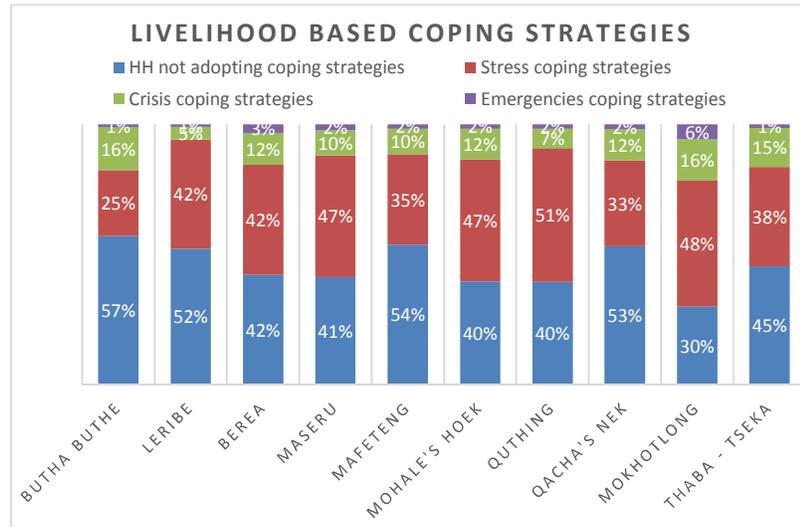
Household hunger scale: across all districts, majority of households had little or no hunger, with Thaba-Tseka (62%), Berea (65%) and Mokhotlong (68%) recording the lowest proportion of households. This implies that the majority of households had not yet felt hunger and low dietary diversity may be associated with chronic food insecurity. Most households which indicated that they felt moderate (20%) to severe hunger (16%) were among the poorest.



COPING STRATEGIES

The coping capacity dimension was measured using livelihood-based coping strategies. This indicator attempts to determine the household capacity to withstand potential shocks. It is derived from a number of questions focusing on household's experience with livelihood stress and asset depletion during the 30 days prior to study.

Livelihood coping strategies are classified into three groups³ including stress, crisis and emergency strategies. Households that did not employ any of these strategies are considered to be **food secure on this indicator**. Based on the type of livelihood coping strategies, households were classified into different food security groups as presented in the table below.



The results indicate that 45.5% of household did not apply any of the coping strategies, 41.9% applied stress strategies, 10.7% applied crisis strategies and 1.9% applied emergency strategies.

Domain		Indicator	Food secure (1)	Marginally food insecure (2)	Moderately food insecure (3)	Severely food insecure (4)
Coping capacity	Asset Depletion	Categories based on type of livelihood coping capacity	None	Stress strategies e.g. purchase food on credit	Crisis strategies e.g. consumed seeds saved for next season	Emergency strategies e.g. sale of last female animals
			45.5%	41.9%	10.7%	1.9%

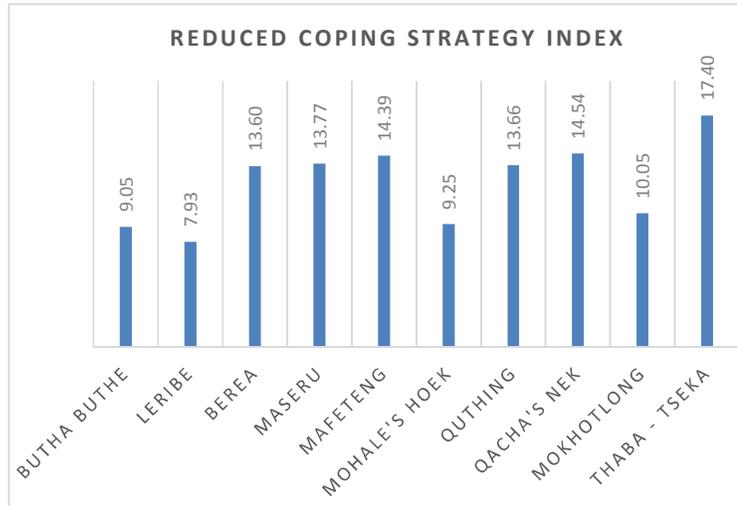
At least 30-57% of households across different districts did not employ any livelihood coping strategies, while 25-51% employed stress strategies, 7-16% employed crisis strategies and 1-

³ **Stress strategies**, such as borrowing money, selling more animals than usual, purchasing food on credit or borrowing food are those that indicate a reduced ability to deal with future shocks due to a current reduction in resources or increase in debts. **Crisis strategies**, such as consuming seeds that were saved for the next season, cutting down on the expenses on fertilisers, animal feeds etc. directly reduce future productivity. **Emergency strategies**, such as selling land or last female animals affect future productivity, but are more difficult to reverse or more dramatic in nature.

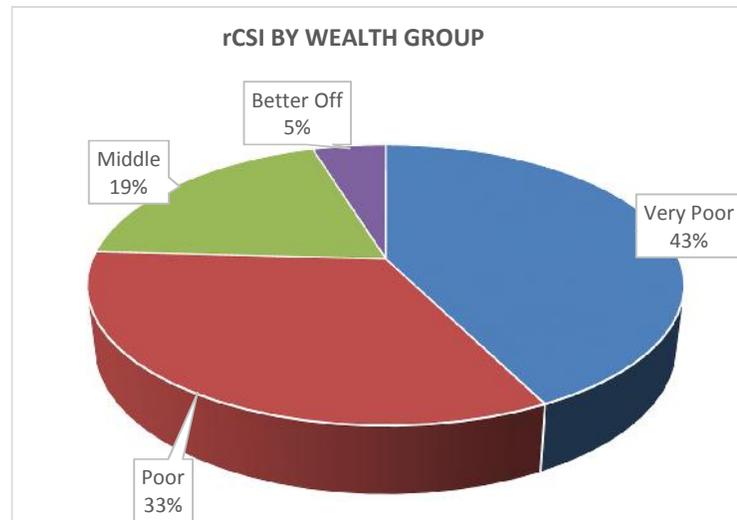
6% employed emergency strategies. *Based on this indicator alone, 12.6% of households are already experiencing food insecurity.*

Reduced consumption-based strategies

rCSI: Consumption-based coping strategies⁴ were used to generate *reduced coping strategies index* (rCSI) - an indicator that is used to measure the frequency and severity of food consumption behaviours or strategies that households engaged in when they were faced with shortages of food. Comparative to other districts, Thaba-Tseka employed more strategies than other districts, while Leribe had the lowest consumption-based strategies.



The majority of households that employed more consumption based coping strategies were among the very poor, followed by the poor. The middle and better off households employed fewer consumption based coping strategies. This is an indication that the poorest households were already experiencing food consumption gaps and they need immediate assistance.



⁴ Examples of consumption-based strategies are as follows;

1.	Relied on less preferred, less expensive food
2.	Borrowed food or relied on help from friends or relatives
3.	Reduced the number of meals eaten per day
4.	Reduced portion size of meals
5.	Reduction in the quantities consumed by adults/mothers for young children
6.	Sent household members to eat elsewhere
7.	Went an entire day without eating

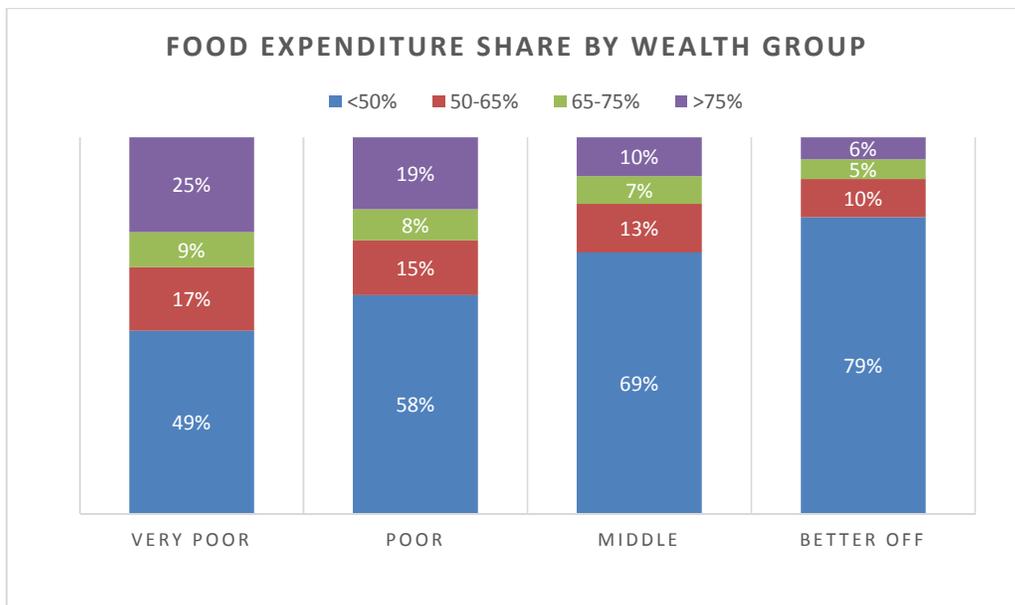
HOUSEHOLD EXPENDITURE PATTERNS

The food expenditure share was calculated to measure the household economic vulnerability. This indicator estimates the expenditure on the food purchased in the last 30 days prior to the assessment. It also estimates cash value of the foods that were not purchased, but were consumed by households. The total cash value of the food purchased and non-purchases is used to determine how important the food is relative to the household budget. Households were also asked to estimate the amount of cash they spent on non-food items. The expenditure period was split into 30 days and 6 months depending on the type of items.

Domain		Indicator	Food secure (1)	Marginally food insecure (2)	Moderately food insecure (3)	Severely food insecure (4)
Coping capacity	Income status	Food expenditure share	<50%	50% - <65%	65% - <75%	≥ 75%
			59.4%	14.5%	8.2%	17.9%

On average, 59.4% of households spent less than 50% of their money on food, 14.5% spend 50-65%, 8.2% spent 65-75% while 17.9% spent over 75%. Based on this indicator alone, 8.2% of households were moderately food insecure and 17.9% were severely food insecure.

The very poor and poor households spent more than 50% of their income on food as opposed to the middle and better off.



PREVALENCE OF FOOD INSECURITY

The food security index⁵ (FSI) combines the results of the food security indicators; food consumption group, food expenditure share and livelihood coping strategy categories that have been discussed in the previous sections. Food security index uses two dimensions of food security, namely; the current status domain and the coping capacity domain. The average of the scores of the current status and coping capacity domains, rounded up to the nearest whole number, is derived to get the summary index of food security index. The percentage of food insecure population using CARI is derived by summing up the two most severe categories (severely and moderately food insecure).

Overall, of the total sampled households, 24% were food secure, 36% were marginally food insecure, 38% were moderately food insecure and 3% were severely food insecure. *Therefore, based on an analysis of a combination of food consumption score, livelihood coping strategies and food expenditure share, 41% of households were food insecure.*

Domain		Indicator	Food secure (1)	Marginally food insecure (2)	Moderately food insecure (3)	Severely food insecure (4)
Current status	Food consumption	Food consumption group	36.4%		44.6%	19%
	Economic vulnerability	Food expenditure share	59.4%	14.5%	8.2%	17.9%
Coping capacity	Asset depletion	Livelihood coping strategy categories	45.5%	41.9%	10.7%	1.9%
	Food Security Index		24%	36%	38%	3%

⁵Food Security Index

- **Food secure:** Able to meet essential food and non-food needs without engaging in atypical coping strategies
- **Marginally food secure:** has minimally adequate food consumption without engaging in irreversible coping strategies; unable to afford some essential non-food expenditures
- **Moderately food insecure:** Has significant food consumption gaps, OR marginally able to meet minimum food needs only with irreversible coping strategies
- **Severely food insecure:** Has extreme food consumption gaps, OR has extreme loss of livelihood assets will lead to food consumption gaps, or worse.

Each household's FSI classification is determined by an algorithm which considers the scores (1 to 4) it registered for each indicator. Within both dimensions (i.e. Coping Capacity and Current Status) the 4-point scale outcomes for the available indicators are averaged. In turn, a simple average is taken of the two dimension scores; this determines the household's final CARI score (which will fall between 1 and 4).

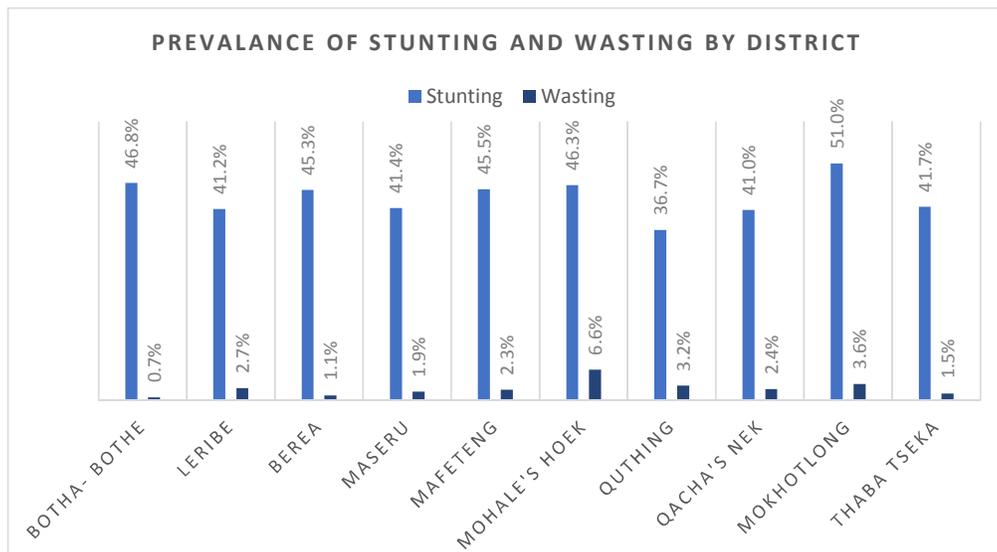
HEALTH AND NUTRITION

A total of 2,538 children aged 6 to 59 months from 3373 sampled households were assessed for nutritional status.

Global malnutrition: The findings estimated low levels of Global Acute Malnutrition (GAM) at 2.7% among children aged 6 -59 months. Severe acute malnutrition was estimated at 1.4% among children aged 6-59 months. Moderate acute malnutrition was highest at 2.3% (above the global threshold for emergency response for severe acute malnutrition) in children aged 6-17 months. Underweight national prevalence was 12.2% whilst moderate underweight was 10.3%. Obesity was also estimated at 8.8% among children aged 6-59 months old.

The prevalence of stunting or chronic malnutrition was estimated at 42.9 %, exceptionally high rate according to WHO classification. Severe stunting was estimated at 17.3% with boys recording the highest prevalence of 21.3%. Age disparities in stunting prevalence was observed, with severe stunting being most prevalent in children aged 18-29 months (25.9%) whilst moderate stunting was high in children aged 30-41 months (29.9%). High stunting levels are typical of the Lesotho nutrition profile.

The figure below presents the prevalence of acute and chronic malnutrition by districts, indicating that stunting remains a major health problem with the highest prevalence observed in Mokhotlong (51%). The prevalence of wasting was within the acceptable standards in all districts except in Mohale’s Hoek where it was estimated at 6.6%. Global thresholds for emergency response for acute malnutrition and severe acute malnutrition are 5% and 2% respectively. Mohale’s Hoek district is therefore of public health concern based on the GAM rate of 6.6% and SAM rate of 2.5%. Mafeteng had also a SAM rate of 2.3%.



Vitamin A and Deworming Supplementation: on average, the coverage of vitamin A supplementation amongst sampled households was estimated at 63.5%, with the highest coverage reported in Qacha’s Nek (68%). Overall, vitamin A coverage ranged from 58% in

Butha-Buthe to 68% in Qacha's Nek. The highest coverage by age group was 72% in children aged 6-24 months. In all districts and livelihood zones, deworming tablets supplementation was estimated to be average at 50%.

Infant and Young Child Feeding Practices

Breastfeeding and Complementary feeding: on average majority of children were breastfed for 16 months. The findings further indicated that 71.5% of children were introduced to complementary foods during the recommended age of 6 months, thus implying that exclusive breast feeding is being practiced.

Food consumption: on average the highest proportion of children ate four (4) times in the previous day. Dietary diversity seemed to be a major problem as 90% of children consumed low variety of food groups all districts.

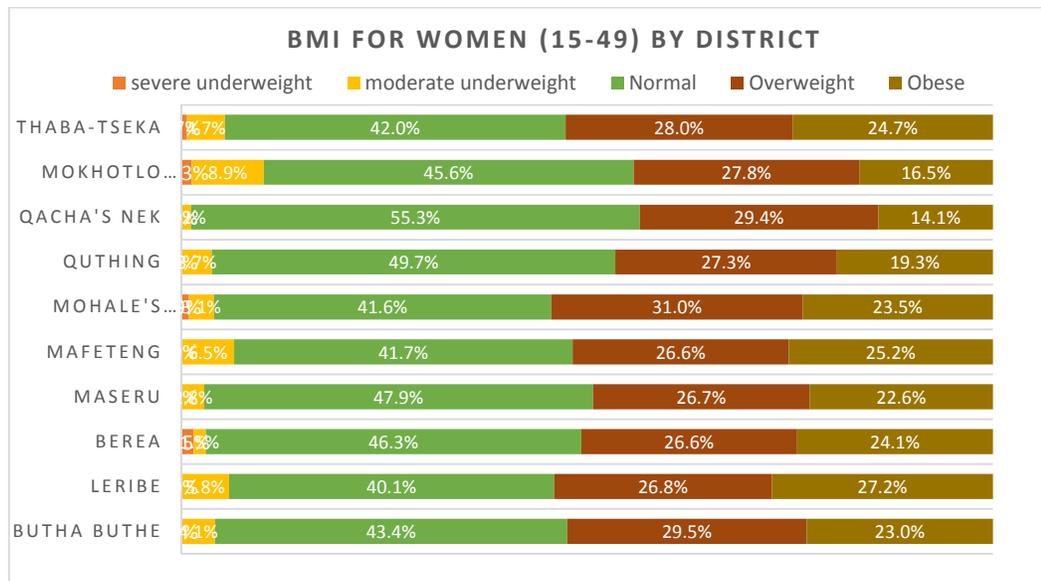
Child illnesses: the three (3) common illnesses among children at the time of the assessment were diarrhoea, fever and cough. The proportion of children who were ill with cough was 53.3%, fever 39.3% and diarrhoea 15.5%. Around 73% of total children who were ill were treated at health centres.

Maternal health and nutrition

Antenatal care: a total of 94.2% women indicated that they attended antenatal care, out of whom 81.4% were attended by nurses.

Iron supplementation and anti-tetanus immunization during pregnancy: out of sampled women of child bearing age, 87.3% reported that they received iron supplementation during pregnancy and 89.8% reported that they received anti-tetanus.

Maternal nutritional status: the findings indicated that 0.4% of women were severely underweight and 4% were moderately underweight. Normal BMI was prevalent in 44.7% of women, while 27.9% of women were overweight and 22.9% were obese. By district Mokhotlong had the highest percentage of moderate underweight at 8.9% and the lowest was found in Qacha's Nek at 1.2%. The highest percentage of obesity was found in Leribe at 27.2% while Qacha's Nek had the lowest at 14.1%. By livelihood zone severe underweight ranged from 0.3% to 0.6%.



HIV and AIDS

About 29% of sampled households had chronically ill members, while 20% hosted people living with HIV and AIDS (PLHIV). Of PLHIV, 77% were aged between 18 and 59 years. Of female headed households, 23% hosted PLHIV while 17% of male-headed households hosted PLHIV. More than half (56.2%) of these households have PLHIV and have chronically ill member.

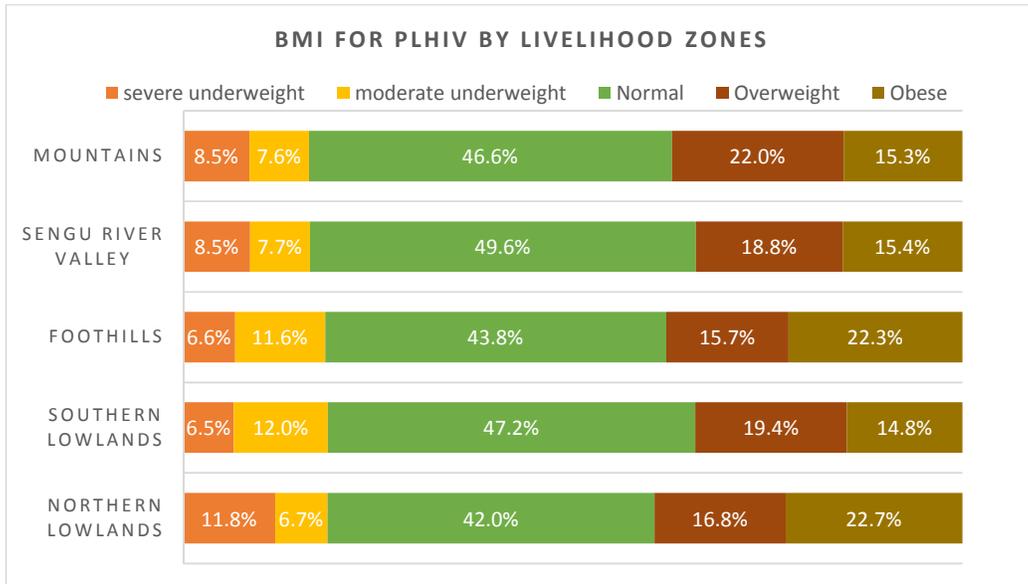
Of the PLHIV who are on ART treatment, about 90% reported that they missed 1-2 doses of their Antiretroviral in the past 3 days and in the past 30 days. There were more men (96%) than women (93%) who missed doses in the past 3 days, but more women (93%) than men (88%) who missed doses in the past 30 days. The most common reasons mentioned by the majority for missed doses were that they failed to follow instructions, were not at home, they were avoiding side effects, they did not have transport to collect these drugs or there were no drugs in the health facilities.

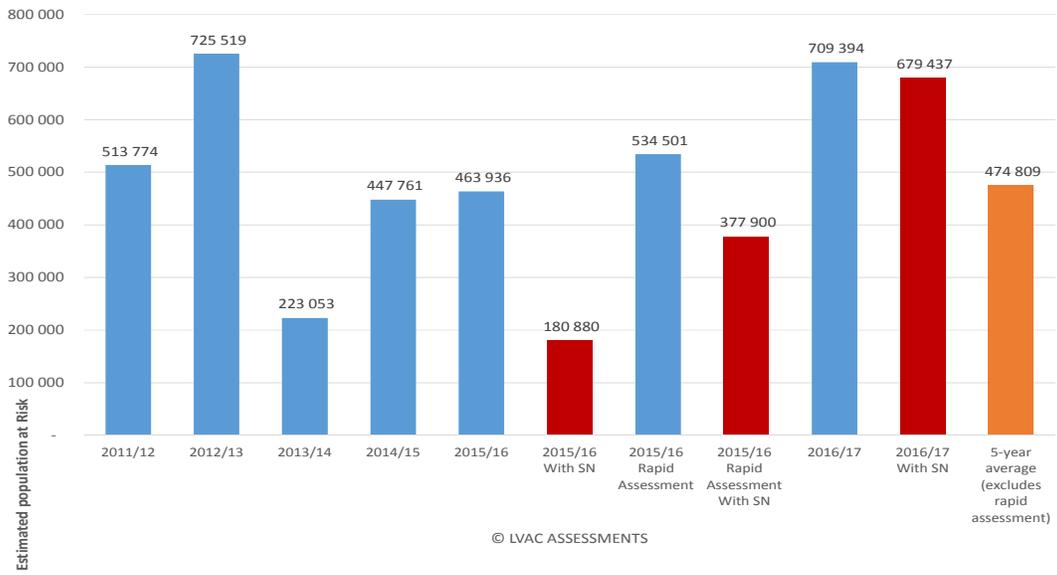
At least 20% of households with PLHIV had poor food consumption, 46% had borderline and 33% had acceptable. The majority of these households (82%) consumed vitamin A rich foods on daily basis. Consumption of protein-rich foods was either sometimes or on daily basis for 53% and 43% respectively. About 39% did not consume iron-rich foods.

Twenty-eight (28%) spent more than 75% of their income on food, indicating that these households are poor. Seventeen percent (17%) were already employing crisis and emergency coping strategies. Based on CARI, 43% of households hosting PLHIV were either moderately or severely food insecure, out of which 43.8% were male-headed and 37.8% are female headed.

The findings showed that 9.1% of PLHIV were moderately underweight and 8.4% severely underweight. Moderate underweight among PLHIV and TB ranged from 3.4% to 12.8% across the districts with Maseru recording the highest moderate underweight prevalence of 12.8% (above the acceptable WHO threshold) whilst Qacha's Nek had the lowest moderate underweight prevalence of 3.4%. Across livelihood zones, moderate underweight ranged

from 6.7 % to 12.0 % whilst severe underweight ranged from 6.5 % to 11.8%. The highest severely underweight prevalence was found in the Northern Lowlands and the Southern Lowlands recorded the highest moderate underweight prevalence of 12.0%. Interesting, was the prevalence of obesity among PLHIV and TB that ranged from 8.2% to 29 % across the districts. About 18.5%of PLHIV and TB were overweight while 18.2% were obese. An estimated 45.8% of PLHIV and TB had normal weight with the highest normal weight prevalence found in Qacha’s Nek (62.1%) followed by Thaba Tseka with 53.2%.





Butha- Butha: The population which is likely to face deficit in this district is estimated at 41,425 (about 8,285 households) and constitutes 50% of the district rural population. The population at risk are from FTH at 20%, 53.6% from MNT and 26.4% in the NLL 26.4%. About 1,657 people (331 households) are facing livelihoods protection deficit from the foothills.

Leribe: An estimated 44% about 109, 683 people (21,937 households) are indicated as likely at risk of not meeting their minimum food and non-food needs. This population is among the very poor and poor population who represent about 49% of district population. About 1, 022 (1% of the district rural population) of the middle from the foothills also face livelihoods protection deficit.

Berea: About 84,292 people (16, 858 households) which is 48% of the district rural population are facing food shortages from June 2016 to May 2017. This population is among the very poor and poor population who represent about 49% of district population.

Maseru: The number of people estimated to face deficits is 126,143 (about 25,229 households) which are about 57% of the district rural population. This population is among the very poor and some of the poor in SSL - 43%, FTH - 11% and 4% in MNT.

Mafeteng: An estimated 84,743 people (16,949 households) about 57% of the district rural population will likely face deficits from June 2016 to May 2017. The analysis indicates that this population constitute all the very poor and poor population in the district. The population at risk are mainly from Southern Lowlands

(SLL) constituting over 63% of the population at risk and the rest is from Foothills (FTH) livelihood zone. The middle households are also at risk of food insecurity since their livelihoods has also been affected by poor production coupled with high staple food price.

Mohale's Hoek: An estimated 50% of the district's rural population which is 75,610 people (about 15,122 households) are likely to face challenges in meeting their minimum food needs. The population at risk is among the very poor and poor. 33% of the district rural population which is likely to face food gaps comes from the SLL and 6% and 5 % is from FTH and MNT livelihood zones with 6 % from SRV. These people are expected to face food gap from May 2016 until the next harvest in 2017.

Quthing: The very poor and poor wealth groups from SRV and MNT are at risk of facing deficits in meeting their food and non-food needs. The analysis indicated that an estimated 45% of the rural population, representing 51,164 people (10,233 households) from May 2016 until the next harvest. About 2% of district population from the middle wealth group are likely to face livelihoods protection deficit.

Qacha's Nek: The analysis indicated that an estimated prevalence of population likely to be facing deficits is 45% of the district population facing survival and livelihood protection deficits. This represents an estimated 23,839 people (about 4,768 households). The deficits are mostly in the MNT 31% and 14%% in SRV. This population is expected to face the food gaps from May 2016 until the next harvest.

Mokhotlong: An estimated 33% which is about 31,578 people (6,316 households) are

likely to be at risk of not meeting their minimum food and non-food needs. This population is among the very poor and poor population who represent about 46% of district rural population. The food gap is estimated to start from July 2016 until the next harvest.

Thaba-Tseka: The district has about 42% of population facing both survival and

livelihoods protection deficits which is about 50,960 (about 10,962 households). The deficits are mostly for the very poor and poor wealth groups in MNT at about 31% and SRV at about 10% of the district rural population. Food gaps are expected to start from May 2016 until the next harvest.

Correlation ANALYSIS -

In an effort to derive statistically valid conclusions on the correlation of outcomes and causal factors, bivariate and multivariate analysis was conducted. Against the background that this assessment integrated nutrition, HIV and Gender analysis into one study, all relevant nutrition, gender, HIV and food security variables were included to perform a multivariate analysis and thus to make conclusions about the predictor of malnutrition; interaction of gender and HIV with food security. This kind of analysis was an opportunity of identifying how food security, nutrition, gender and HIV variables correlated. With specific interest the nutrition correlation were further explored to explaining the likely causes of malnutrition. A chi-square test was used for the bivariate analysis whilst logistic regression was used for the multivariate analysis. The results are discussed below.

NUTRITION Bivariate analysis

A bivariate analysis was done using the chi-square test a screening process to the

multivariate model. The bivariate analysis tested the correlation between wasting and stunting with each of the 23 independent variables shown in the table above (*Error! Reference source not found.*). The independent variables, also called explanatory variables help to explain the

Table 1: Correlation analysis of wasting and stunting with several variables (bivariate analysis)

Independent variables	Acute Malnutrition		Chronic Malnutrition	
	Significant	p-value	Significant	p-value
1. Wealth status	No	-	No	-
2. Sex of Household head	No	-	No	-
3. Education level of Household head	No	-	No	-
4. Marital status of HH head	No	-	Yes	0.161*
5. Chronic ill HH member	Yes	0.143*	No	-
6. Receiving nutrition support	No	-	No	-
7. Source of drinking water - Now	No	-	Yes	0.043***
8. Source of water alternative usual	No	-	Yes	0.11**
9. Source of drinking water unusual	Yes	0.033***	No	-
10. Unusual alternative sources	Yes	0.129*		
11. Treatment of drinking water	Yes	0.055***	No	-
12. Type of sanitation used	No	-	No	-
13. Waste management	No	-	No	-
14. Household Hunger Scale	No	-	No	-
15. Coping behaviour	No	-	No	-
16. Food expenditure share categories	No	-	Yes	0.148*
17. Food Security class (Cari)	Yes	0.037***	No	-
18. Has child been ill with fever	Yes	0.154*	Yes	0.22*
19. Has child been ill with coughing	No	-	Yes	0.151*
20. Has child been ill with diarrhoea	No	-	Yes	0.097**
21. Child breast feeding	Yes	0.001***	Yes	0.080**
22. Child dietary diversity	No	-	No	-
23. Household Dietary diversity	No	-	Yes	0.183*
***significant at 5% level		**significant at 10% level		
level		*significant at 25% level		

likely causes of either wasting or stunting, the assumption being they determine any changes in the response variable, i.e. child being malnourished or not. The results of bivariate analysis show that out of the 23 variables, 7 were found to correlate significantly with wasting and 9 with stunting. In this assessment in the absence of other variables, these are the likely predictors of malnutrition and hence were selected for inclusion in into the multivariate model.

For the purposes of this analysis, it should be noted that only variables that were significant at the 25% level of confidence for the bivariate analysis were included in the multivariate model as this was a screening process and the rest were thrown away. The 25% is acknowledged to be a higher margin of error but this was meant to accommodate more variables in the model and not risk leaving any variables that may not be significant at this point but may turn to be important for the model in the presence of others. The value of 25% was used based on the recommendation by Bendel and Afifi (1997) as well as Mickey and Greenland (1989) who stated that the use of the traditional level such as 0.05 often fails to identify variables known to be important. In this regard, the study used this approach to allow more variables into the model.

Multivariate analysis -Logistic Regression for the predictors of Wasting and stunting

Table 2: Final Model fitted after the stepwise process of removing variables from the model

Variable	predictor	Multivariate effect	p-value
		Odds ratio	
WASTING	Treatment of drinking water	1.96	0.025**
	Child breast feeding	3	0.0001**
	Child illness	1.6	0.083*
Variable	predictor	Multivariate effect	p-value
		Odds Value	
STUNTING	Child Illness	1.35	0.021**

** Statistically significant at the 5% level of significance
 *significant at the 10% level of significance

The model in *Error! Reference source not found.*, shows a multivariate approach to the analysis of the variables likely to influence wasting and stunting. As highlighted in the bivariate analysis above, the variables presented in this model are the ones which were rated to be fit for inclusion in the multivariate analysis after a screening process. In terms of fitting the model, a stepwise process was selected which removes variables at each step until the final model is fitted. In this case, the process resulted in 9 iterative steps in the process of selecting the variables that best fits the model or rather the most significant contributors to wasting and stunting. In

this step by step process, the model removes variables which are not very important in the presence of others and only leaves the most important variables.

Despite having 7 and 9 variables that correlated significantly with wasting and stunting at the bivariate level respectively, the final model fitted after the iterative process of removing variables suggest that only 3 variables were statistically significant in predicting wasting in the presence of others while only 1 variable is significant for stunting. These are the variables that the model identified to be mostly important in influencing malnutrition in the presence of

other variables. The variables found to be significant in this regard were **child illness**, **breast feeding** and **treatment of drinking water**. In the variables collected in this study, the analysis suggest that these **true predictors of malnutrition** given the statistical results. Looking at the **child illness**, the odds ratio of 1.6 and 1.4 (as shown in the multivariate analysis) means that a child who is ill is one and half times more likely to be malnourished compared to those that are not ill. This was found to be statistically significant at the 10% level of significance for wasting but 5% for stunting, giving a 90% and 95% confidence in the conclusion. With regards to **treatment of water**, the results show that children from households who do not treat water are almost twice likely to have a child who is wasted in comparison to those who treat their water regardless of source of water. This is not surprising given the link of potentially unclean water with illness in children. The results are significant at 5% giving a confidence level of 95% that clean water/treatment is a predictor of wasting. **Breastfeeding** was one of the clear reason why children could be wasted as comparison with children who never breast fed indicated that non-breast fed children are 3 times more likely to be wasted than children who are breastfed. There is a very high significance with 1% level of significance showing a 99% confidence that breast feeding is a predictor of wasting.

It is clear from the model that all the other variables failed to be significant in the multivariate analysis which suggest that there is no valid statistical evidence that they are predictors of either wasting or stunting. However, it should be noted that despite failing to be significant, these variables remain important in the causal analysis of malnutrition. One of the things to bear in mind is that the model tests for statistical significance of each variable in the presence of others. This means that the variables that failed are not significant predictors of stunting in the presence of others but were found to be significant at the bivariate level (in the absence of other variables) and therefore they remain important to the causal analysis and are worth being considered in the recommended interventions to reduce acute and chronic malnutrition. The fact that they were significant at the bivariate analysis, this reflects that to a certain extent, they have an influence on malnutrition. In this regard, the recommended interventions to reduce malnutrition should primarily focus on the variables identified to be statistically significant in this model and also the rest of variables that were significant at the bivariate level. **A proper causal assessment is essential to include other non-traditional variables in data collection especially around child care practices and caregiver information.**

Conclusions and Implications

ROLE OF SAFETY NETS

The assessment revealed that most households rely on safety nets to make ends meet in whose absence they will not be able to meet their needs. The analysis also indicate that even in the presence of safety nets some households among the very poor and poor households in different locations face deficits in presence of shocks as indicated in the districts that show deficits. In addition the analysis also show that there are some households among some poor, middle and better off households that still can afford to meet their needs even if safety nets are removed.

The above observations point to the need for consideration of optimal ways of making safety nets achieve more impact among the population:

- Policy makers need to consider graduated response for different households based on need based targeting. This entail that the amount of transfers for different households need not be the same among all but equitable as guided by the deficits faced by these households. This could be achieved by introduction of a need based transfer for very poor and poor households.
- While constitutional transfers are not possible to target, the cash for work programmes (fato-fato) are possible to target for labour endowed vulnerable households who can engage in productive related works with objectives of graduating out of safety nets in future.
- The amount of the cash transfers should be increase in period of sharp increases of food prices. This temporary increase of cash transfers would be needed to maintain purchasing power of recipient families and ensure the intended protection level.

The government should consider a continuation and expansion of targeted safety nets to ensure adequate coverage in numbers and intervention packages provided using identified survival and livelihood protection deficits in the next 9 months.

Recommendations

Water and Sanitation				
Issue	Recommendations			
	Immediate Relief Response (short term -next 3 months)	Rehabilitation and Recovery (medium-term- 3 months to 1 year)	Development and mitigation (long term/ resilience building -beyond 1 year)	Early Warning (Strengthening preparedness)
Communities have inadequate access to clean drinking water from protected water sources	<ul style="list-style-type: none"> - Community education on water treatment 	<ul style="list-style-type: none"> - Repair leaking water tanks and pipes - Promote roof water harvesting 	<ul style="list-style-type: none"> - Construction of dams and water tanks - Rangeland management for recharging water table - Drilling of bore holes 	continuous monitoring on water levels
Households have poor sanitation which improves chances of bacteria as well as viruses	<ul style="list-style-type: none"> - Community education and mobilization on proper hygiene and sanitation practices 	<ul style="list-style-type: none"> - Address poor sanitary conditions through latrine construction and education 		Continuously monitor sanitation and hygiene
Health and Nutrition				
Chronic malnutrition remain unexceptionally high above the global threshold.	<ul style="list-style-type: none"> - Causal analysis study to identify the key drivers of chronic malnutrition. 	<ul style="list-style-type: none"> - Develop and implement a stunting prevention strategy 		<ul style="list-style-type: none"> - Continuous monitoring of the variables related to chronic malnutrition.
Poor dietary diversity	<ul style="list-style-type: none"> - Strengthen the capacities of caregivers to improve on infant and young child feeding practices through the provision of nutrition education, promotion of social behavior change. 	<ul style="list-style-type: none"> - Promote inclusion of nutrition in social safety nets to improve food consumption and Dietary Diversity. - Develop and implement the social behavior change and communication strategy and the messaging package. 		<ul style="list-style-type: none"> - Close monitoring of the nutrition situation

	Promote diversified agricultural production to enhance access to diverse diets.		
Limited health and nutrition capacity to provide quality nutrition services	<ul style="list-style-type: none"> - Strengthening nutrition capacity for both nutrition and health workers to actively screen and identify malnutrition and refer for management - Procurement of anthropometric equipment and establish a service plan for the equipment. 		Continuous monitoring of the nutrition situation in the country, through strengthening of the surveillance system.
Agriculture and Food Security			
Crop failure is a reality in many areas and therefore decreased household food and cash income	<ul style="list-style-type: none"> - Food/cash assistance to the most vulnerable households - Protect livelihoods with provision of agricultural inputs for summer crops Provision of vegetable seeds to vulnerable households - Training in conservation agriculture, improved home gardening and other water harvesting technologies that maximize utilization of available moisture for crop growth. 	<ul style="list-style-type: none"> - Establish irrigation facilities that will avoid wholesale failure of crops (including demos in schools). - Develop small scale household irrigation cropping that has a low water demand - Promotion of horticulture farms in areas that are feasible with availability/provision of irrigation 	<p>Rain forecasting</p> <p>Monitor area planted</p>
Insufficient grass which most likely does not sustain livestock. Feed availability is challenge	<ul style="list-style-type: none"> - Destocking to maintain productive heard size. 	<ul style="list-style-type: none"> - Protect rangelands and introduce management systems protecting feeding sources in rangelands and agricultural fields. - Strengthen the agricultural extension services to enhance access to services. 	<ul style="list-style-type: none"> - Establishment of Agriculture bank for guarantees/ insurance - Monitor livestock mortality- in particular update excess mortality rates. - Monitor herd sizes and prices of livestock and wool and mohair

<p>Households Unable to meet their Survival and livelihood protection needs until March 2017.</p> <p>Prices are increasing above inflation rate</p>	<ul style="list-style-type: none"> - Initiate a food/cash transfer to cover the identified deficits - Targeted food/cash assistance among eligible households (very poor and poor households) - Scale up targeted cash transfers to compensate loss of purchasing power due to increased food prices. 	<ul style="list-style-type: none"> - Asset for work projects so as to rebuild very poor and poor households' resilience. - Integrate resilience into different programmes. 	<ul style="list-style-type: none"> - Regular monitoring and updating of Key vulnerability indicators - strengthen monitoring and reporting of changes in safety nets
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Annex 1

The tables below depict the **survival and livelihoods deficits** as well as their requirement in monetary terms for the very poor and poor people by livelihood zones and districts. For instance, In Botha Buthe the very poor people in the Foothills have the survival and livelihoods protection deficits of **46%** and **2%** respectively. The total amount of money which is required to fill their gap/deficit is **M5, 413.00**. The drivers of food insecurity in the zones are mainly decrease in staple food harvest, limited income opportunities, high food prices and low coverage in safety nets.

Percentage of population facing both survival and livelihoods protection deficits;

	Livelihood Zones	Wealth Groups	Survival Deficits	Livelihood Protection Deficits	Cash required/HH in Maluti
Butha-Buthe	Foothills	Very Poor	46%	2%	5 413
		Poor	44%	3%	5 337
	Mountains	Very Poor	41%	8%	4 587
		Poor	17%	13%	3 320
	Northern lowlands	Very Poor	49%	4%	3 863
		Poor	40%	12%	4 792
Leribe	Foothills	Very Poor	37%	2%	5 019
		Poor	14%	2%	2 025
	Northern lowlands	Very Poor	37%	3%	3 314
		Poor	27%	10%	3 867
Berea	Foothills	Very Poor	28%	0%	2 038
		Poor	5%	8%	953
	Northern lowlands	Very Poor	25%	11%	1 662
		Poor	7%	23%	1 756
Maseru	Foothills	Very Poor	39%	2%	5 286
		Poor	25%	2%	3 397
	Mountains	Very Poor	42%	7%	4 910
		Poor	14%	12%	3 063
	Southern lowlands	Very Poor	24%	7%	4 192
		Poor	27%	11%	6 160
Mafeteng	Foothills	Very Poor	38%	3%	5 995
		Poor	39%	1%	5 501
	Southern lowlands	Very Poor	17%	7%	3 394
		Poor	15%	10%	4 266
Mohale's Hoek	Foothills	Very Poor	41%	2%	5 386
		Poor	42%	2%	4 290
	Mountains	Very Poor	34%	7%	4 359
		Poor	5%	11%	2 013

	Livelihood Zones		Wealth Groups	Survival Deficits	Livelihood Protection Deficits	Cash required/HH in Maluti
	Southern lowlands		Very Poor	23%	7%	4 127
			Poor	23%	11%	5 519
	Senqu Valley River		Very Poor	37%	2%	6 061
			Poor	20%	4%	3 779
Quthing	Senqu Valley River		Very Poor	46%	2%	7 893
			Poor	34%	3%	6 250
	Mountains		Very Poor	37%	6%	4 850
			Poor	18%	10%	6 197
Qacha's Nek	Mountains		Very Poor	33%	7%	4 243
			Poor	14%	11%	3 189
	Senqu Valley River		Very Poor	46%	2%	7 429
			Poor	36%	4%	6 161
Mokhotlong	Mountains		Very Poor	32%	7%	3 870
			Poor		12%	1 426
Thaba-Tseka	Senqu Valley River		Very Poor	47%	1%	8 445
			Poor	42%	3%	7 814
	Mountains		Very Poor	19%	6%	2 966
			Poor	19%	9%	4 109

More graphs presenting food insecure population based on CARI

