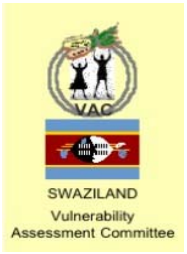

WFP
World Food Programme

Vulnerability and Food Insecurity in Urban Areas of Swaziland

An assessment of the impact of high prices on households in four regions

Swaziland Vulnerability Assessment Committee and the UN World Food Programme

December 2008

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Acknowledgments

The aim of the Swazi VAC is to incorporate a deeper understanding of livelihoods in the context of the Swazi society, both rural and urban. The opportunity to implement this study would not have come at an opportune time than now when there has been a phenomenal escalation of commodity prices including food.

While the Team acknowledges the difficulties in executing this study in the absence of key background information, we are grateful to have managed to initiate the process of understanding the impact of shocks in the urban context. We hope this work will go a long way in creating better understanding and informing decision making in response to challenges faced by the urban populace.

We are grateful to the WFP Country Office through the Regional Office in Johannesburg for providing support for this study to take place. All the agencies that released staff to participate in this study are acknowledged and in particular the Swazi VAC core team in the names of:

Choice Ginindza -– Central Statistics Office, Mduduzi Gamedze – MoPWT, Nathie Vilakati – SC-Swaziland, Benjamin Flomo – WFP/Swaziland, Martha Motsa – WFP/Swaziland, Thembumenzi Dube – MEPD, Thulani Maphosa - UNICEF/SNNC, Vakele Gama – NEWU/MOAC, Robert Fakudze – CSO, and Masitsela Mhlanga – MoHSW who ensured that this report gets to the stage of publication.

Special thanks are due to all the Municipal Authorities for understanding the need to carry out such work and the men and women from the cities and towns, who took part in the discussions and shared aspects of their life experiences with us. We hope we have represented their situation accurately.

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Choice Ginindza

Chairperson

Swazi VAC

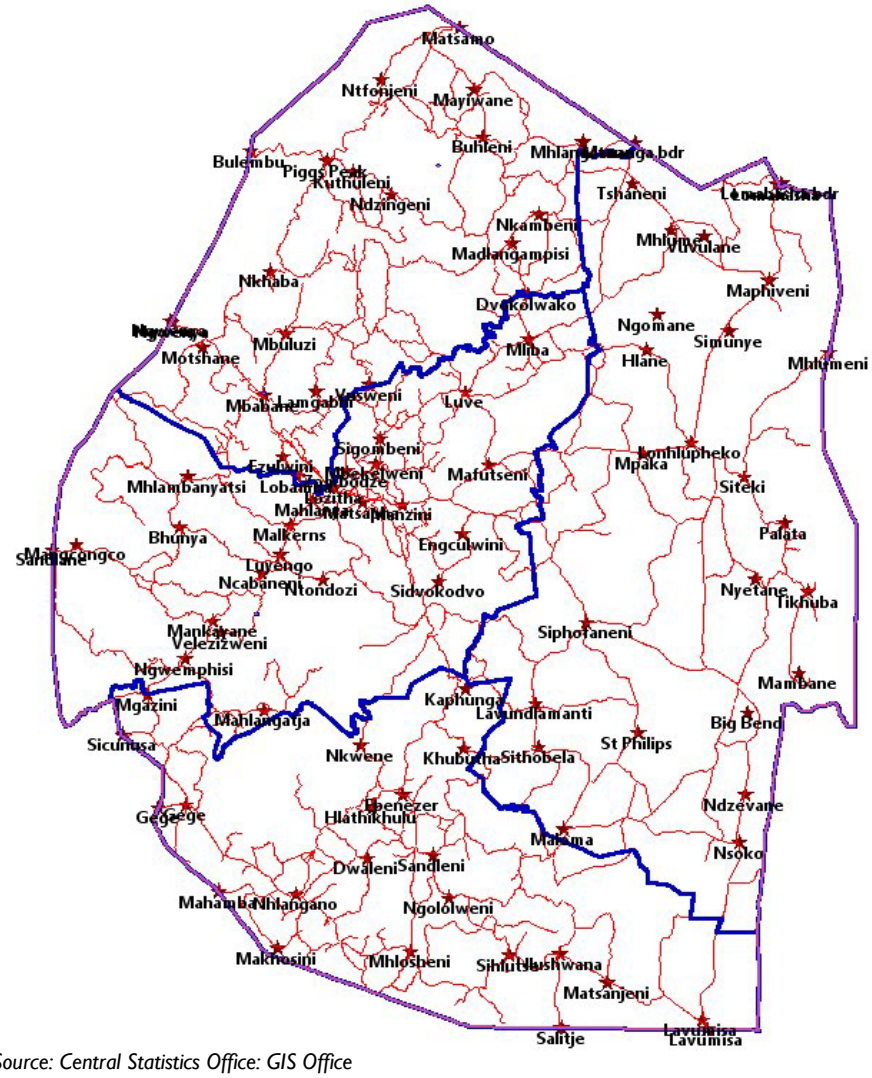
1.0 Background and Objectives

The Kingdom of Swaziland is a small landlocked country, with a total land area of 17,364 square kilometres and almost completely surrounded by the Republic of South Africa except to the east where it borders Mozambique. It is a predominantly rural society, with most of the population dependent on subsistence agriculture for their livelihoods.

The population of Swaziland is approximately **1,018,449** from the 2007 population census by the Central Statistics Office (CSO) which takes into account the impact of HIV and AIDS. The 2007 Swaziland Demography and Health Survey (SDHS) shows the national HIV prevalence rates at 25.9% for all people aged between 15 – 49 years, the highest in the world.

Swaziland is divided into four administrative regions (demarcated by blue lines) namely Manzini, Lubombo, Hhohho and Shiselweni as depicted in Map 1 below. Map 1 also shows the road network (red lines) that links communities and major town centres where trade in goods and services takes place.

Map 1 – Swaziland Administrative boundaries and roads



Source: Central Statistics Office: GIS Office

Swaziland is classified as a lower middle-income country with GNI per capita of US$ 2,430 (Atlas method, 2006). However, income distribution is highly skewed with an estimated 20% of the population accounting for more than 50% of national income. It is also estimated that about 43% of the population live in extreme poverty and 76% of the poor live in rural areas.

Since the beginning of 2008, the average inflation rate has steadily increased over the 10% mark, a level that was last observed in early 2003. This has largely been driven by increases in oil and food prices. Between then and now, inflation has never surpassed double-digit figures. The hike in inflation levels has impacted negatively on low-income households that depend mainly on purchase for consumption.

On the positive side, Swaziland has maintained a low level of external debt relative to its export earnings, and in 2007 saw a significantly improved international currency reserve position, with an amount adequate for over three months' worth of imports of goods and services. However, there are concerns that this favourable position may not last long as it relies heavily on customs duty revenues from the Southern African Customs Union (SACU), which currently contributes over 60% percent of government revenue but are forecast to fall in the coming years.

The staple food commodity in Swaziland is maize and this is closely substituted by rice and wheat products (bread and flour). Due to erratic weather patterns, staple food production has fallen short of meeting the domestic consumption requirement over the last decade while the country does not cultivate the substitute crops mentioned above. The Government plays a major role in the control of maize marketing in the country. Besides controlling the minimum producer price offered to farmers for the sale of maize after harvest, the National Maize Corporation (NMC) has enjoyed a monopoly on the importation of maize since 1985.

Rice is the second most important food crop and is a ready substitute for maize. However, this commodity is not grown locally and all local consumption is imported. The importation of rice requires an import permit from the National Agricultural Marketing Board which simplifies the monitoring of quantities into the country. A breach of the import regulation requirements results in the confiscation/impounding of illegally imported rice. Major sources of rice are Thailand, Taiwan and South Africa. There is no sole agent responsible for the importation of rice into Swaziland.

Up to 2007, one company had a monopoly on the wheat industry until a second miller began operations. This protection came about due to infant industry protection regulations which extended well beyond the infancy stage. There has never been any active production of wheat in the country.

The Swazi economy is closely linked to that of South Africa, from which it receives more than 90% of its imports and to which it sends around 70% of its exports. Other major trading partners are the United States and the EU, from which the country has in the past received trade preferences for apparel (US under AGOA) and sugar (EU). The Swazi currency, the *Lilangeni*, is pegged at par to the South African Rand, meaning that imports from South Africa are not constrained by lack of foreign exchange.

Since being established in 2002, the Swazi Vulnerability Assessment Committee has focused more on the livelihoods of the rural population. The annual Vulnerability and Livelihood assessment carried out by the Swazi VAC have been crucial in informing emergency and livelihood support programming, still with greater inclination towards rural households.

Although no formal study has been carried out to inform decision makers of ***urban livelihood*** patterns, there is general consensus of high dependency on earnings/income in the urban sector. The urban setting and periphery is considered to be a place of opportunity because of the high economic activity. As a result of diminishing opportunity in the rural countryside because of slow development and changes patterns of livelihood, there is more rural-urban migration and in Swaziland this is no exception. If the opportunity to make a meaningful gain in the urban setting does not come through entrepreneurship or employment of any other kind, people find themselves with more difficulties to cope as urban life is centrered around purchases for consumption. In the light of higher food and other commodity prices, the effects cannot be underestimated.

The effects of rising food prices are already being felt by consumers worldwide and Swaziland is no exception. Therefore, the food markets play an important role in household food security as changes in prices directly affects households with low purchasing power especially those households which spend a greater share of their income on food.

The overarching ***objective of this study*** is to provide an understanding of the impact of prevailing and future food prices on individual households in the urban areas of Swaziland while sub-objectives are to identify possible solutions and next steps to addressing the needs of this newly vulnerable segment of the population.

2.0 Methodology

In order to capture the impact of current and future price increases on urban households, a primary data collection activity was conducted across several urban areas in all four regions of the country. A household questionnaire was used to gather information on assets, urban agriculture, income sources and trends, expenditure and consumption patterns, shocks and household coping mechanisms.

2.1 Sampling

The study focussed on the country's main municipalities spread across all the four administrative regions. The selected enumeration areas covered the urban centres in Manzini Region (Matsapha, Mankayane and Manzini), Shiselweni Region (Hlatikulu, Nhlangano and Lavumisa), Hhohho (Mbabane, Ezulwini and Pigg's Peak), and Lubombo Region (Siteki and Vuvulane).

2.2 Scope and coverage

In each site One Enumeration Area (EA) was purposively selected, except in Mbabane, Manzini, Nhlangano and Siteki where two EA's were selected due to the larger size of these areas. In total 15 EA's were covered and nearly 450 households were interviewed.

2.3 Data collection and analysis

Enumerators participated in a three day training to better understand the questions and also on how to use of the PDA's. The questionnaire was programmed into Personal Digital Assistants (PDA's) for faster data capture and storage. Both basic data analysis and the multivariate analysis were done using SPSS software.

2.4 Limitations

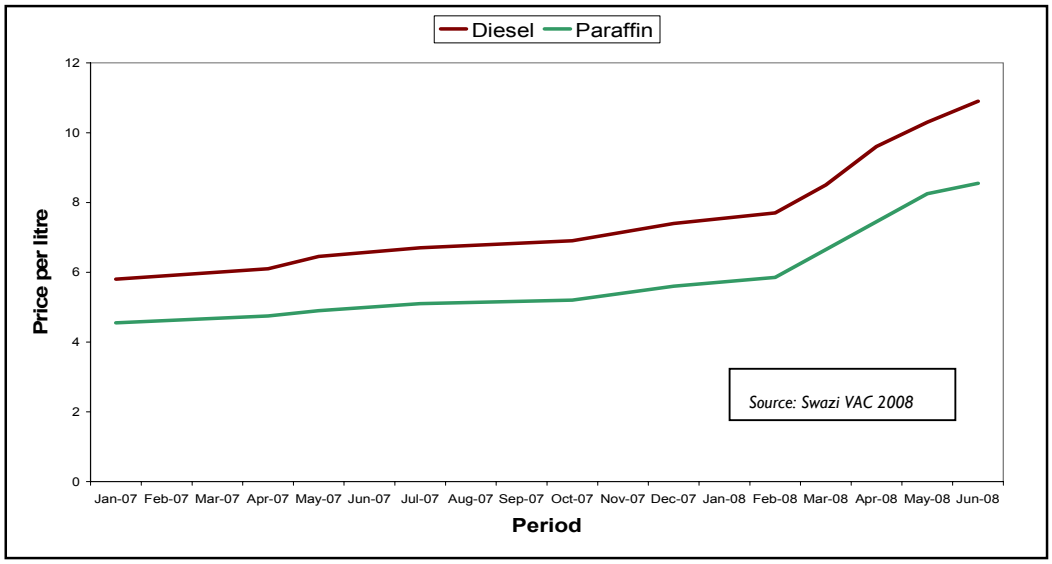
While rigorous standards were applied to the analytical process, the following limitations must be acknowledged:

- The urban centres with no recognized municipalities were excluded from the study and thus the sample represents the majority of the urban population but not all. Also, due to time and financial constraints the overall sample size was too small to allow for stratifying findings beyond the regional level.
- The time frame for executing the study coincided with major national events such as the Independence celebrations and the general elections so there were difficulties in finding people at home to be interviewed.

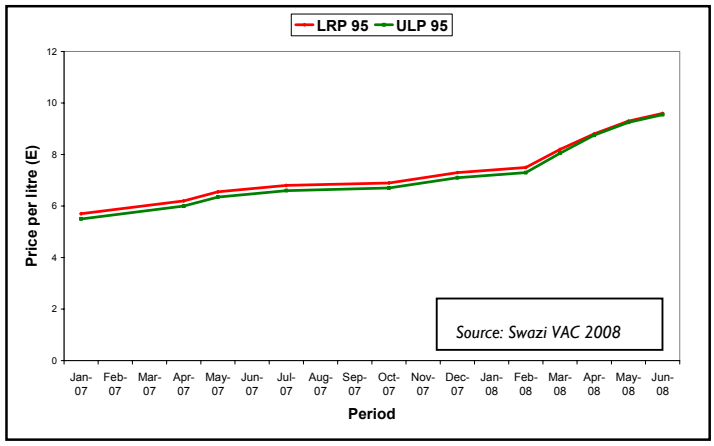
3.0 Markets and Prices

The rising trend in international food prices that affect the rest of the world is attributed to a wide range of factors that Swaziland alone cannot deal with successfully unless drastic changes occur at a global level. However, in the short to medium term, locally designed and suited adaptation strategies could minimize the impact on human livelihoods especially the poor. Some of the reasons advanced for the escalation of food prices are growing demand in developing economies, increasing crude oil prices and the utilization of food crops for bio-fuel.

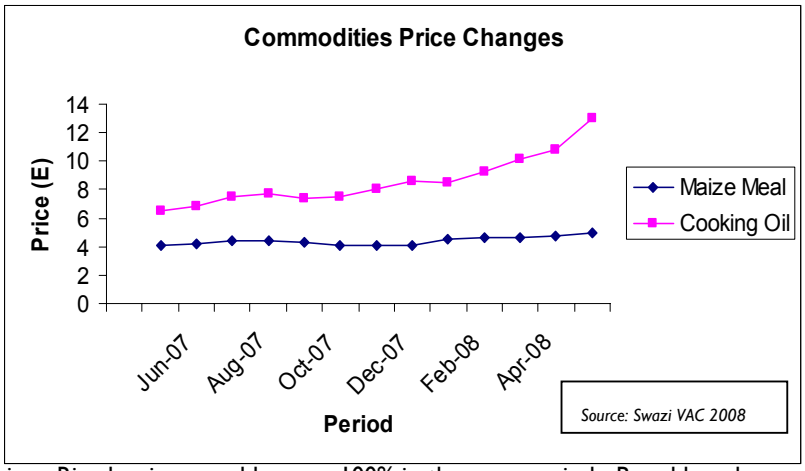
The impact of price rises has been experienced across a wide spectrum of goods and services. A detailed illustration of the trend in price hikes over the last twelve (12) months is illustrated below. The effect of price increases is shown across a range of commodities particularly those that constitute the typical household food basket. Commodities such as cooking oil, rice, maize meal, meat and chicken show a steep increase in price. Also illustrated is the cost of the different energy sources such as paraffin, petrol and diesel. Paraffin is mainly used as a source of energy for many poor households for cooking and illumination. Petrol and diesel are mainly used for locomotives and provide for transportation and draught power. An escalation in the price of these commodities easily translates to the cost incurred by consumers.



The above graph shows the increase in diesel and paraffin prices between July 2007 and June 2008. Diesel which is mainly used by transportation vehicles has increased by 67% in the period under consideration. Indications are that this kind of trend may be observed way into the near future and the cost of transportation will likely go up as well. Draught power for agricultural production and haulage will also result in increased costs of production, further worsening the impact on food commodities. Poor households rely on paraffin for domestic energy and this also depicts increases of over 70% in the period under review. The rising costs for such commodities have a bearing on household disposable income.



The surge in the price of fuel has a huge impact on commuters. Petrol (Lead Replacement and Unleaded Petrol) has increased by close to 60% in the period under review. This further reduces households' disposable income.



Cooking oil shows an over 100% price increase in the period under review and forms a major component of relief packages for food insecure households. The per kilo (E/kg) price of maize meal has been steady over the period under review but compares poorly with the next best substitute which is rice. Rice has increased by over 100% in the same period. Bread has also seen drastic increases and affordability among poorer households is likely to be a thing of the past.

4.0 Findings by Urban area

4.1 Household demographics

The average household size was four persons for the entire sample, ranging from 3.9 in Hhohho to 4.3 in Manzini, 4.4 in Lubombo and 5.0 in Shiselweni urban. The median household size was 3 persons for Hhohho and 4 persons for the other regions.

Overall, 18% of the surveyed households had an elderly head (60+ years), with households in Hhohho the most likely to have an elderly head (22%), followed by Manzini and Shiselweni (18% each) and lastly Lubombo (15%). Forty six percent of the sampled households were headed by women, with significantly more *($p < 0.01$)* found in Shiselweni (65%) compared to Manzini and Lubombo (both 40%). The percentage of female headed households was 46% in Hhohho.

Only 8% of the sample households had a chronically ill member, ranging from 11% in Hhohho to 6% each in Manzini and Lubombo. Eleven percent of the sample households had a disabled member, with significantly more *($p < 0.01$)* found in Hhohho (19%) compared to Lubombo (5%) and Shiselweni (4%), while 11% of the households in Manzini had a disabled member.

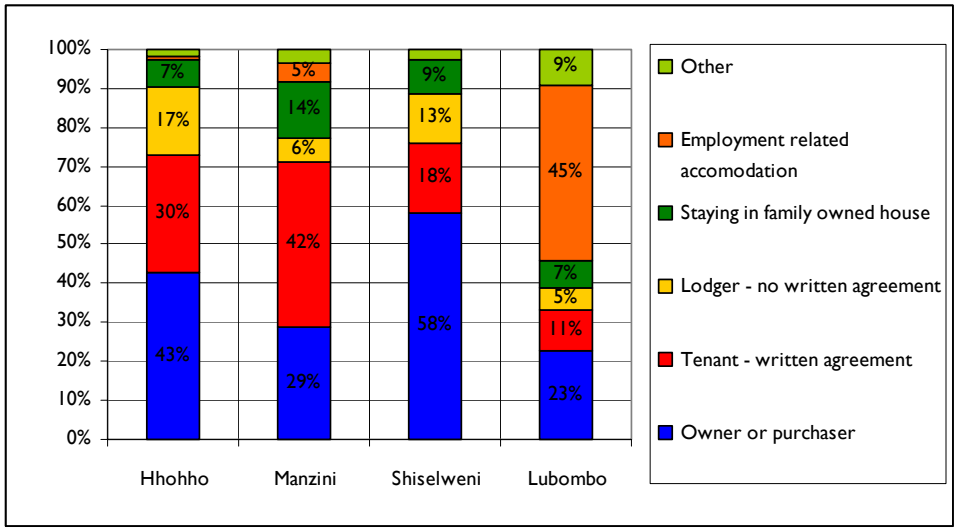
Overall, 24% of the households were hosting orphans – significantly more *($p < 0.05$)* in Shiselweni (34%) compared to Manzini (18%). Both Hhohho and Lubombo samples had 24% of the households hosting orphans.

The recent death of a household member was reported by 5% of the total households with the highest found in Shiselweni (8%) and the lowest in Lubombo (1%). Six percent of households in Manzini reported a recent death compared to 5% in Hhohho.

At the household level, the percentage of dependents[1] was calculated and it was found that 9% of the households were found to have a high percentage of dependents to earners (80% and above). Households from Hhohho were more likely to have a high percentage of effective dependents (14%) than the others. The lowest was found in Manzini and Shiselweni (6% each).

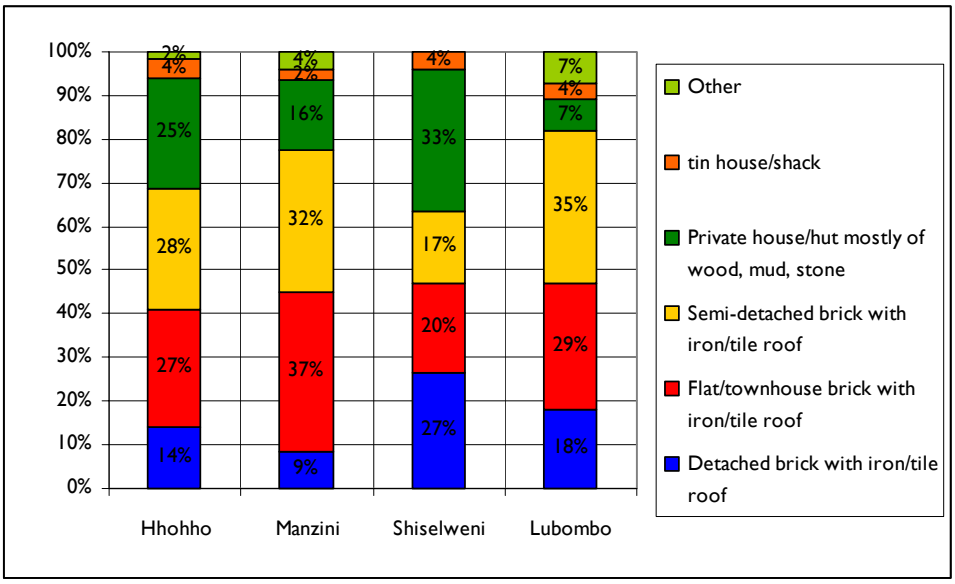
4.2 Housing and amenities

About one-third of the sampled households owned their homes while another 27% were tenants with a written agreement. The chart below shows tenure status by region for the sampled households.



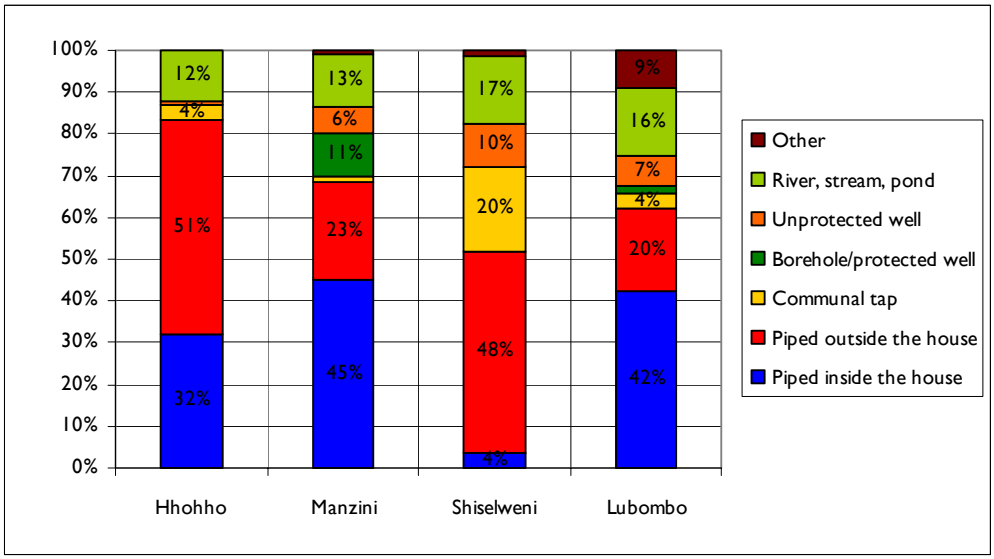
There were quite a few differences by region with the most prominent being in Lubombo where 45% of the sample was living in houses provided by their employers and thus only 23% of the households in that region owned their own homes. The highest levels of ownership were found in Shiselweni (58%) and Hhohho (43%).

[1] Percentage of dependents is calculated based on the number of dependants (children [less than 15], elderly [60 and over], and chronically ill persons) divided by the number of adults in working age (15-59), but excluding the chronically ill.



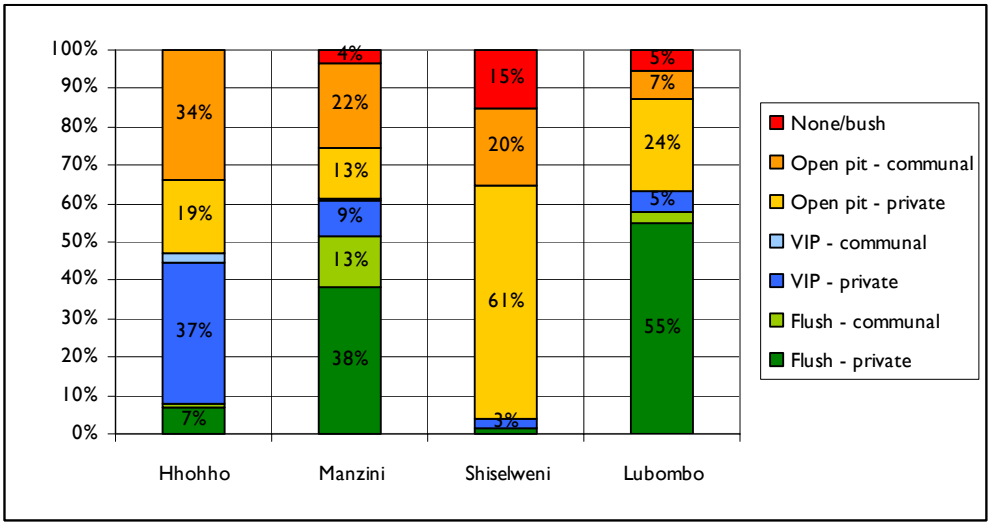
Most of the households live in houses made of brick with iron/tile roof – either detached, semi-detached or flat/townhouse. Households in Shiselweni are the most likely to live in a private house/hut made of wood, mud or stone plus tin house/shacks.

Just over 40% of the households indicated they had to pay to live in their homes – 49% each in Hhohho and Manzini followed by 32% in Lubombo and only 29% in Shiselweni. Households most likely to pay were living in semi-detached brick houses (62%). Almost all paid in cash.



Overall, 77% of the households accessed their drinking water from improved sources which include piped water, communal taps and boreholes/protected wells. As illustrated in the chart above, Lubombo urban areas were the least likely to access drinking water from improved sources (68%), followed by Shiselweni (72%). Households in the two regions also had the poorest access to water piped inside the house.

Access to good sanitation was low in the sample, with only 48% of the households using flush toilets or Ventilated Improved Pit (VIP) latrines. The rest used open pits or the bush. Households in Shiselweni had the least access to good sanitation (4%) with more than 80% using open pit toilets and 15% without any facility at all. Households in Lubombo were the most likely to have flush toilets (58%), followed by Manzini (51%).



The main sources of cooking fuel were wood (36%), electricity (35%), gas (15%) and paraffin (13%) for the entire sample. Between 50-60% of households in Hhohho, Manzini and Lubombo were using electricity or gas for cooking compared to only 18% in Shiselweni where 60% were using wood and 19% cooked with paraffin.

More than half of the households in every region used electricity for lighting with the exception of Shiselweni where only 15% had electric lights. Candles were used by more than one-third of the households in Hhohho, Manzini and Lubombo but by 66% in Shiselweni. The remaining households were using gas or paraffin for lighting.

4.3 Livelihoods[2]

Sampled households were asked to name their three most important livelihood activities and to estimate the contribution to overall household livelihood for each activity. The main livelihood activities named by households were salary/wages (51%), small business (22%), cash crop production and sales (13%), remittances (13%) and petty trade (12%). There were differences between regions with 62% of Manzini earning income from salary/wages compared to 57% in Lubombo, 47% in Shiselweni and 35% in Hhohho. Households in Hhohho were the most likely to rely on cash crop production and sales (35%) while Manzini (26%) and Lubombo (23%) had the most households relying on small business activities for income. Remittance was most often reported in Shiselweni (20%), followed by Lubombo (12%), Hhohho (11%) and lastly Manzini (10%).

The estimated contribution of each activity to total was analyzed using multivariate techniques in order to group households on the basis of the combination of their main activities. 10 distinct main livelihood groups were identified and are described below.

1. **Miscellaneous (3%)** – This group includes those relying in skilled trade, fishing, food assistance, and other activities. This group has a median household size of 5 persons. Half are headed by women and 8% have either a chronically ill or disabled member. One-third is hosting orphans but they have a low percentage of effective dependents. Per capita expenditure is only E 106 per month compared to a reported per capita income of E 488 per month.
2. **Remittances, non-agric wage labour (7%)** – These households have a median size of 4 persons with 28% headed by an elderly person and 63% headed by women. They have the second highest percentage (19%) with a chronically ill member but only 3% with a disabled member. In addition, 9% have reported the recent death of a household member. They have the lowest per capita expenditure (E 88/month) of all groups and reported a per capita income of E 133 per month.
3. **Pension, gifts and remittances (6%)** – This group has the largest median household size at 5 persons and 71% are headed by elderly persons – nearly 3 times higher than the second highest. In addition, 68% of the households are headed by women. One-quarter are hosting a disabled

[2]This is not a comprehensive livelihood analysis, which includes, but it is not limited to, economic activities. The main goal is to identify and group households based on a common set of economic activities and their relative importance for risk analysis.

person and more than half are hosting orphans – the highest of any group. Consequently, 32% of the households have a composition of 80% or more effective dependents. In addition, 18% have experienced the recent death of a member which is 2 times higher than any other group. These households also have the highest share of monthly expenditure for food (67%) and one of the lowest per capita expenditures (E 94/month). Their reported per capita income is E 121 per month.

4. **Cash crop production and sales (11%)** – This group has the smallest median household size at 3 persons. However, 28% are headed by elderly and more than half have a female head. Although 8% have a chronically ill member and 20% have a disabled member, only 16% are hosting orphans – the lowest of any group. None reported the recent death of a member. They have a fairly low share of expenditure for food but the highest share of monthly expenditure for transport and fuel (17%). They have the highest per capita expenditure at E 355/month with a reported monthly per capita income of E 504.

5. **'Other' and agric wage labour (4%)** – These households also have the largest median size at 5 persons but only 12% are headed by elderly persons while 59% are headed by women. Twelve percent have a chronically ill member, 6% have a disabled member, 35% are hosting orphans and 6% reported the recent death of a member. More than half of their monthly expenditure is for food and they have the lowest share of expenditure for transport and fuel (3.7%). They have a per capita expenditure of E 123 per month which is higher than their reported per capita income of E 33 per month.

6. **Food crop production and sales and salary (4%)** – The median household size is 4 persons with 26% headed by elderly and 47% headed by women. Only 5% had a chronically ill member but 42% had at least one disabled member in the household which is much higher than any other group. Only 21% were hosting orphans and none had reported the recent death of a member. Forty-three percent of the monthly expenditure was for food compared to 13.2% for transport and fuel. The per capita expenditure was E 240 per month with a monthly reported income of E 500 per capita.

7. **Brewing (2%)** – This is the smallest group but is very different from the others. They have a small median household size of only 3persons with 22% being headed by an elderly person but 78% are headed by women. One-third have a chronically ill member which is much higher than any other group. None of the households reported the recent death of a member. Only 44% of their monthly expenditure is for food. Their per capita expenditure is E 202 per month which is much higher than their reported per capita income of E 86 per month.

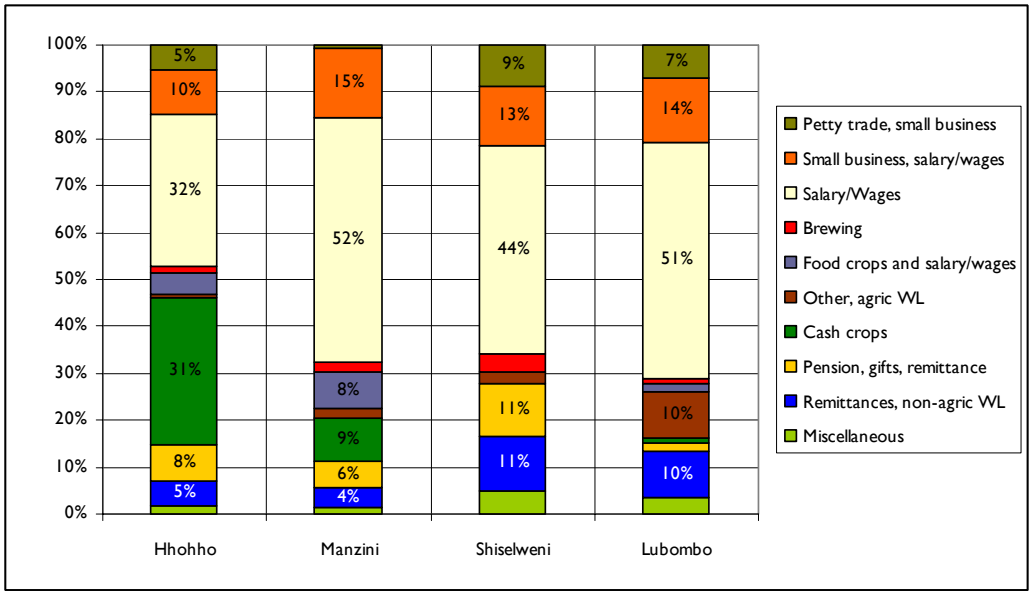
8. **Salary/wages (45%)** – This is by far the largest livelihood group in the sample. It is characterised by households with a median size of 3 members but with only 7% headed by elderly and 35% headed by women – the lowest for all groups. These households are also the least likely to have a chronically ill (3%) or disabled member (3%) and one of the least likely to be hosting orphans (17%). Only 3% had experienced the recent death of a household member (3%). They are also characterised by having the lowest share of monthly expenditure for food (42%) and one of the highest share expenditure for transportation and fuel (16.7%). They have the second highest per capita expenditure at E 338 per month and the highest monthly reported income at E 714 per capita.

9. **Small business and salary (13%)** – The median household size is 4 persons, with only 18% headed by an elderly person but 54% headed by a woman. Compared to the other groups, they are less likely to have chronically ill or disabled members or to be hosting orphans. They do have a fairly high share of monthly expenditure for food (60%). The monthly per capita expenditure is E182 while the reported per capita income is E 200 per month.

10. **Petty trade and small business (5%)** – This group is characterised by having a median household size of 4 persons, with only 14% being headed by an elderly person and 36% by a woman – one of the lowest. Only 5% have a chronically ill member but 18% have a disabled member and 28% are hosting orphans. However, 9% reported the recent death of a household member. Just over half of their monthly expenditure is for food but only 9% for transportation and fuel. Monthly per capita expenditure is E 104 while reported monthly income is E 127 per capita.

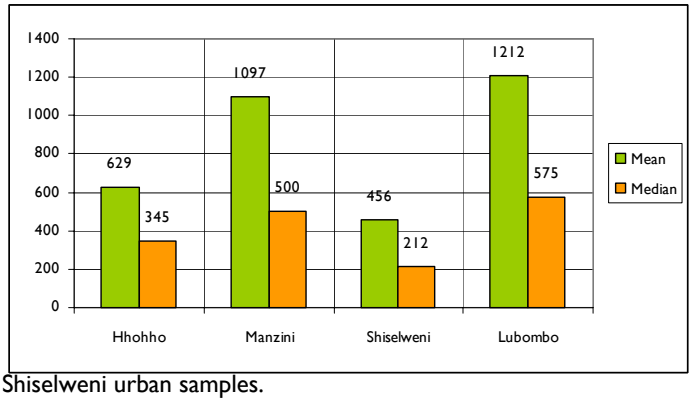
The chart below shows the distribution of the livelihood groups within each region. Households in the Hhohho urban sample are mostly in the *Salary/wages* and *Cash crops* groups with some also in the

Small business, salary/wages and *Pension, gifts remittance* groups. Manzini has the highest percentage of *Salary/wages* households followed by *Small business/salary wages*, *Cash crops* and *Food crops and salary/wages households*. For Shiselweni, the predominant livelihood group is also *Salary/wages*, followed by *Small business and salary/wages*, *Remittances and non-agric wage labour* and *Pension, gifts, remittances*. Lastly, besides *Salary/wages*, the main livelihood groups in Lubombo are *Small business and salary/wages*, *Remittances and non-agric wage labour* and '*Other' and agric wage labour*.



4.4 – Income and income changes

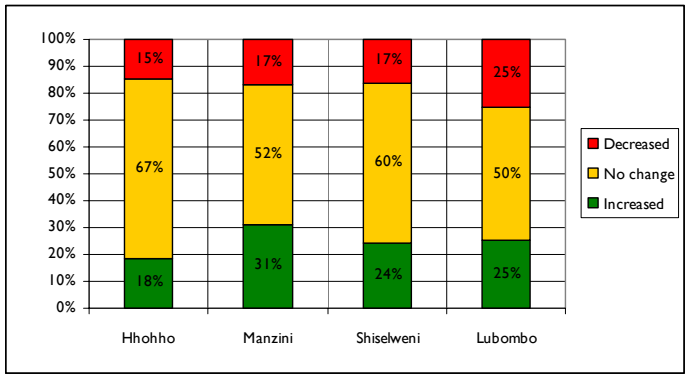
Households were asked to estimate their income in the past month. The responses ranged from zero to E 40,000 with the average being E 2,688 while the median was E 1200. With this information, the per capita reported monthly income was calculated for each household. The graph on the left presents the mean and median per capita incomes by region. The highest per capita incomes were found in the Lubombo urban areas, followed by Manzini while Shiselweni had the lowest of all four regions. However, the large differences in mean and median per capita incomes in Lubombo and Manzini indicate greater variation in income than what was found in the Hhohho and Shiselweni urban samples.



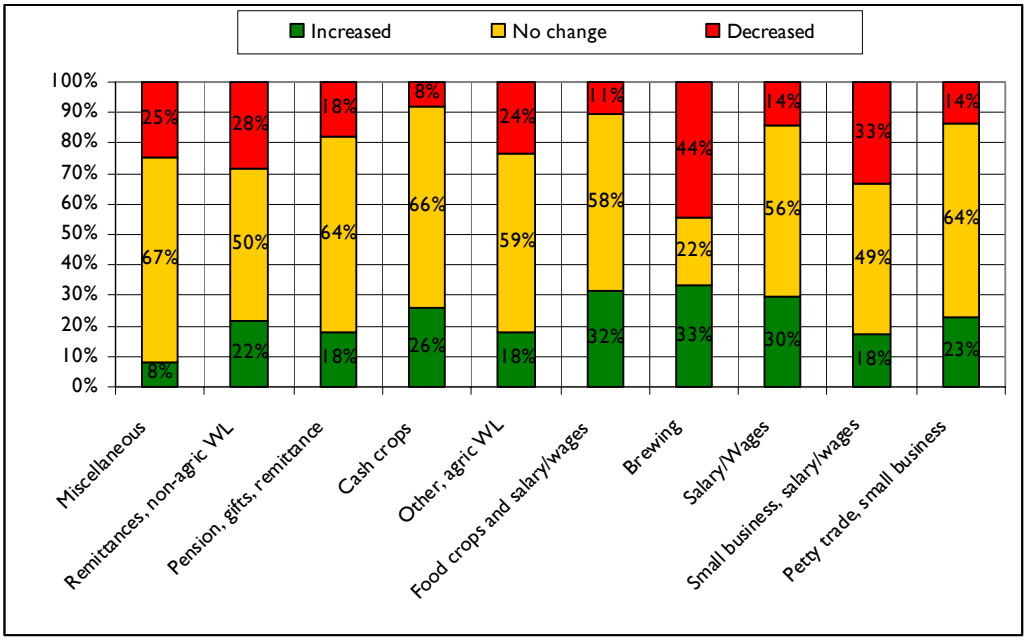
When comparing mean per capita incomes by household characteristics there were significant differences found which are highlighted in the table below.

	Elderly head	Female head	CI member	Disabled member	Orphans
No	E 992	E 1,061	E 944	E 956	E 1,050
Yes	E 437	E 688	E 235	E 330	E 382
Significant	*< 0.01*	*< 0.01*	*< 0.01*	*< 0.01*	*< 0.001*

The households were asked how their income had changed over the past 6 months. Overall, 57% said there had been no change in income, 25% had experienced an increase while only 18% said their incomes had decreased in the past 6 months. The changes by region are presented in the graph on the right. A higher percentage of households in Lubombo reported a decrease in income compared to the other regions while a higher percentage of households in Hhohho reported no changes. Manzini households were the most likely to report an increase in income over the past 6 months. None of these differences are statistically significant.



The chart below shows changes in income by livelihood group and indicates that 44% of the households in the *Brewing* group experienced a decrease in income but 33% also had an increase. Other groups with a high percentage of households with decreased income were the *Small business and salary/wages* and *Remittances/non-agric wage labour* groups. In fact the percentage of households in the Small business and salary/wages reporting a decrease in income is significantly higher *(p <0.05)* than the *Cash crops* and *Salary/wages* households.

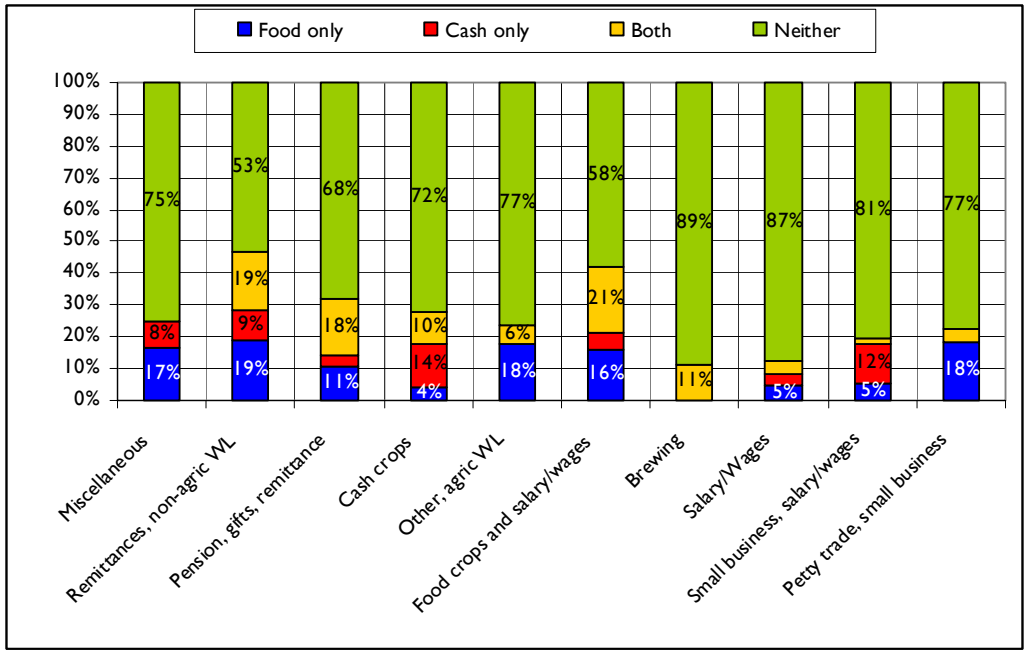


Besides the *Brewing* group, the groups with the highest percentage of households reporting increases in income over the past 6 months were the *Food crops and salary/wages*, *Salary/wages* and *Cash crops* households.

Households were also asked if they were receiving support from within and outside the country. In all, 21% of the households were receiving food, cash or both from friends/relatives inside the country while only 10% were receiving support from outside the country. Households in Hhohho were the most likely to receive support from inside Swaziland (30%), followed by Shiselweni (26%) and Manzini (20%) while those in Lubombo were the least likely (9%). Households in Hhohho (17%) were again the most likely to have received assistance from friends/relatives by those living outside Swaziland. They are followed by Manzini (12%), Lubombo (6%) and lastly Shiselweni (4%).

The chart below summarizes the support received from within Swaziland by type and livelihood group. As expected the *Remittances/non-agric wage labour* livelihood group were the most likely to be

receiving assistance (47%) with most being either food or both food and cash. The *Food crops and salary/wages* (42%) households and *Pension/remittance/gifts* (32%) households also were more likely to receive support from within the country. The *Brewing* (11%) and *Salary/wages* (13%) households are the least likely to have received support from within the country.



The livelihood groups with the highest percentage of households receiving food and/or cash assistance from outside Swaziland were the *Cash crops* (24%), *Brewing* (22%) and the *Pension/gifts/remittance* (21%) groups while the *Petty trade/ small business* group had the lowest at only 4 percent.

On the other hand, 46% of the sample households indicated that they were supporting friends and/or relatives with food and/or cash at the time of the survey. Households in Manzini were most likely to be providing external support (55%), followed by those in Hhohho (44%), Lubombo (43%) and lastly Shiselweni (39%). By livelihood group, the *Salary/wages* (60%) and *Cash Crops* (50%) households were the most likely to be providing external support while the *Other/agric wage labour* (12%), *Petty trade/small business* (14%) and *Remittance/non-agric wage labour* (16%) were the least likely.

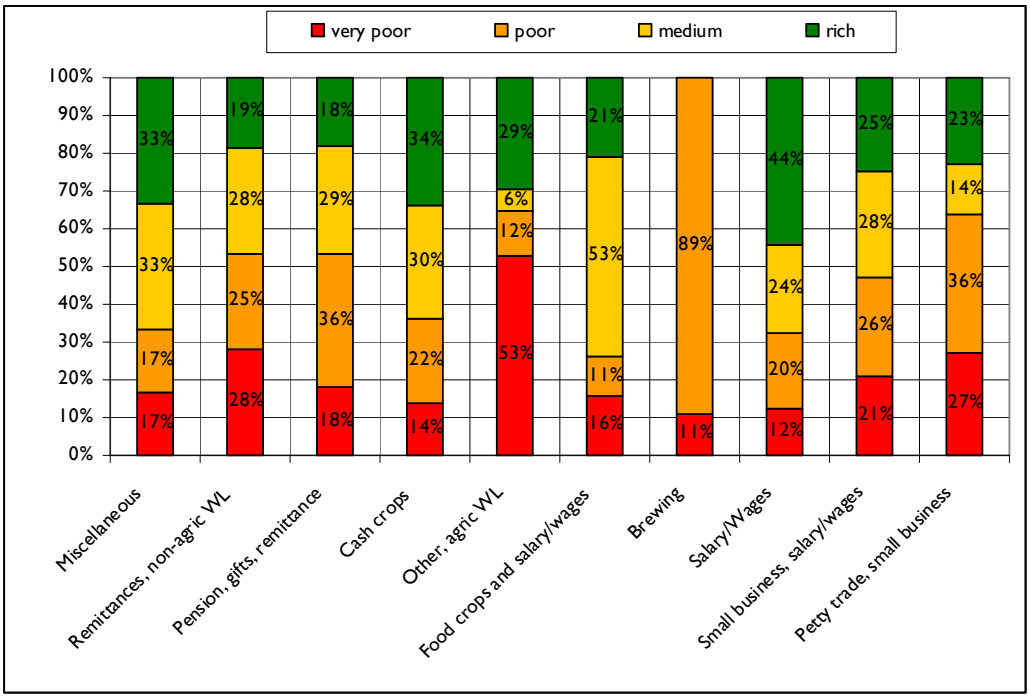
4.5 Asset wealth and livestock ownership

Asset wealth was determined by counting the number of different types of assets a household owned and then creating categories of: 'asset very poor' (0-2 different types), 'asset poor' (3-4 different types), 'asset medium' (5-7 different types) and 'asset rich' (8 or more). For the sample, 18% of the households were asset 'very poor' while 24% were 'poor', 25% were asset 'medium' and 33% were 'rich'.

Asset wealth correlates well with reported income for the previous month. The median per capita income for the 'very poor' and 'poor' households was E 200/month and increased to E 363 for the asset 'medium' and E 1,000 for the asset 'rich' households.

By region, the highest percentage of asset 'very poor' households were found in Lubombo (25%), followed by Hhohho (19%), Shiselweni (18%) and lastly Manzini (11%). However, Lubombo also had a high percentage of asset 'rich' households (36%) but the most were found in Manzini (43%) and the least in Shiselweni (15%).

By livelihood, the highest percentages of asset 'very poor' households were found among those relying on *Other/agric wage labour* (53%) while all of the *Brewing* households were either asset 'very poor' or 'poor'. In addition, 63% of the *Petty trade/small business* households were 'very poor' or 'poor' as well as more than half of the *Remittances/non-agric wage labour* and *Pension, gifts, remittance* households. The highest percentage of asset 'rich' households was found in the *Salary/wages* group followed by the *Cash crops* and *Miscellaneous* households. These are all highlighted in the graph below.



Households were asked if they had sold any assets in the three months prior to the survey. Only 5% of the households had done so and mostly to purchase food or pay fees and levies. Households in Shiselweni (10%) and Hhohho (7%) were more likely to have sold assets than those in Lubombo (2%) or Manzini (1%).

As in many urban contexts, livestock ownership is low: on average, 13% of the sampled households owned cattle, 11% owned sheep or goats and 36% owned poultry. By urban area, cattle ownership was highest in Manzini (18%), followed by Shiselweni (14%) and Lubombo (14%) and lowest in Hhohho (7%). Goat/sheep ownership was highest in Manzini and Shiselweni (14% each), followed by Lubombo (10%) and Hhohho (5%) while more than half of the households in Shiselweni owned poultry compared to about one-third each in Manzini and Lubombo and only one-quarter in Hhohho.

4.6 Urban Agriculture

Only 20% of the surveyed households indicated having a home garden, of which 82% indicated having cultivated less than 0.5 acres on average and 80% planning to cultivate the same amount this coming season. Over 40% of the Lubombo households had a home garden compared to only 17% in Hhohho, 15% in Shiselweni and 9% in Manzini.

Overall, 25% of the surveyed households indicated having cultivated "other land" apart from the home garden, of which, 38% indicated having cultivated more than an acre. Sampled households in Shiselweni urban were more likely to have cultivated other land (39%), than the rest of the urban regions, followed by 33% in Manzini, 20% in Lubombo and only 10% in Hhohho. In Lubombo, households cultivating a home garden had a significantly higher food consumption score than those without (see Section 5.8).

Over 90% of the farming households indicated that they did not normally sell their cereal from own production. Likewise, for this current agricultural season, 92% of the sampled households did not intend to sell their cereal, an indication that cereal production is mostly for domestic consumption.

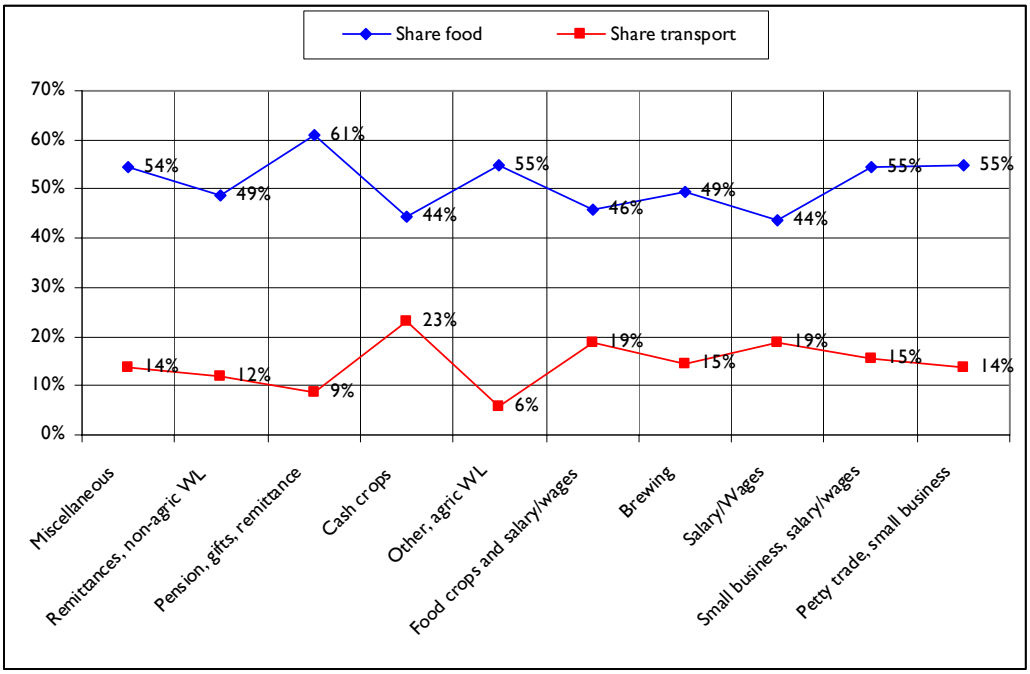
4.7 Expenditures

Information on expenditure was collected on food and non-food items. A 30-day recall period was used for foods and non-food items that were thought to be purchased more frequently by households. For other non-food items that are less frequently acquired (e.g. medical care, social events, etc.), a 6 month recall was used. The disbursements were then converted to average monthly

expenditures. The data are used to investigate patterns of expenditures comparing results between groups.

The share of monthly expenditure for food is an indicator of wealth as research shows that as income increases, the share of total expenditure for food decreases as households can afford to spend money on a variety of things. From the expenditure information, the share of total monthly expenditure for food and transport was calculated as well as the total per capita monthly expenditure.

Median per capita monthly expenditure ranges from E 102.50 in the very poor households to E 516 for the asset rich households. Median per capita expenditure was highest among households in Manzini (E 348), followed by Hhohho (E 248), Lubombo (E 197) and lastly Shiselweni (E 146). By livelihood group, the highest was among the *Cash crop* (E 355) and *Salary/wages* (E 337) households and lowest in the *Remittance/ non-agric wage labour* (E 88) and *Pension, gifts, remittances* (E 94) households.



The chart above shows the share of monthly expenditure for food and for transport by livelihood groups. In many cases there is an inverse relationship between the two where for a group with high share of expenditure for food has a low share for transportation. The *Pension/gifts/remittance* group has the highest share of expenditure for food, followed by *Other/agric wage labour*, *Small business and salary/wages* and *Petty trade/small business* households. The lowest share of expenditure for food is found among the *Cash crop* and *Salary/wages* households.

In reverse, the group with the highest share of expenditure for transportation was the *Cash crop*, followed by *Food crops and salary/wages* and *Salary/wages groups*. The lowest share of expenditure for transportation was in the *Other/agric wage labour* and the *Pension, gifts, remittance* groups.

By region, households in Shiselweni had a significantly higher *($p < 0.001$)* share of monthly expenditure for food than any other region (59% vs. 44-48%). Households in Manzini had a significantly higher *($p < 0.01$)* share of expenditure for transport (20%) than those in Shiselweni (14%) and Lubombo (12%).

Households were asked if their expenditures had changed over the past year for key expenditure categories. Almost every household in the sample (94%) reported that their **food** expenditures had increased with a few differences between regions and livelihood groups. Fewer households in Shiselweni indicated an increase in food expenditures (86%) compared to the other regions. For livelihood groups, all of the *Miscellaneous* households indicated increased expenditure for food compared to only 77% of the *Petty Trade/small business* households.

Similarly, an increase in **energy** costs (cooking, heating and lighting) was indicated by 89% of the sampled households. Only 84% of the households in Hhohho and Lubombo indicated increases compared to more than 90% of the households in the other regions. Again, all of the *Miscellaneous* households indicated an increase compared to 77% of the *Other/agric wage labour* households.

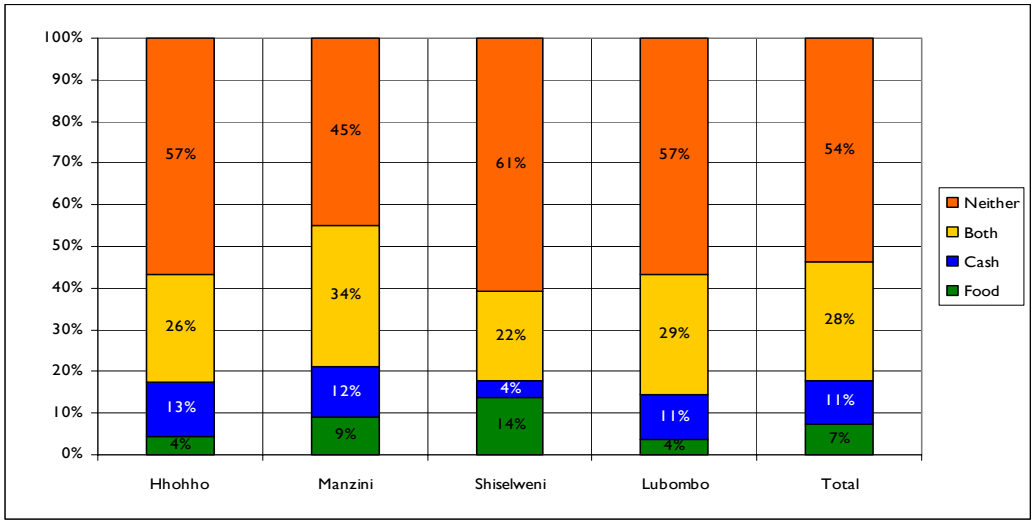
For **transport**, 91% of the sampled households reported an increase in related costs with households in Manzini most likely to be affected by increased transport expenditures (96%) compared to 88% in Hhohho. By livelihood groups, 97% of the *Small business/salary* households and 95% of the *Food crops/salary* households reported increased expenditure on transport compared to 84% of *Cash crops* households.

Just over 60% of the households experienced increased **health** expenditures in the past year, ranging from as high as 74% in Manzini, followed by 63% in Lubombo, 57% in Hhohho and 42% in Shiselweni. The *Remittance/non-agric wage labour* households were the most likely to have increased health expenditures (78%), followed by the *Other/agric wage labour* households (71%) while the *Food crops/salary* households were the least likely to report increased health expenditures.

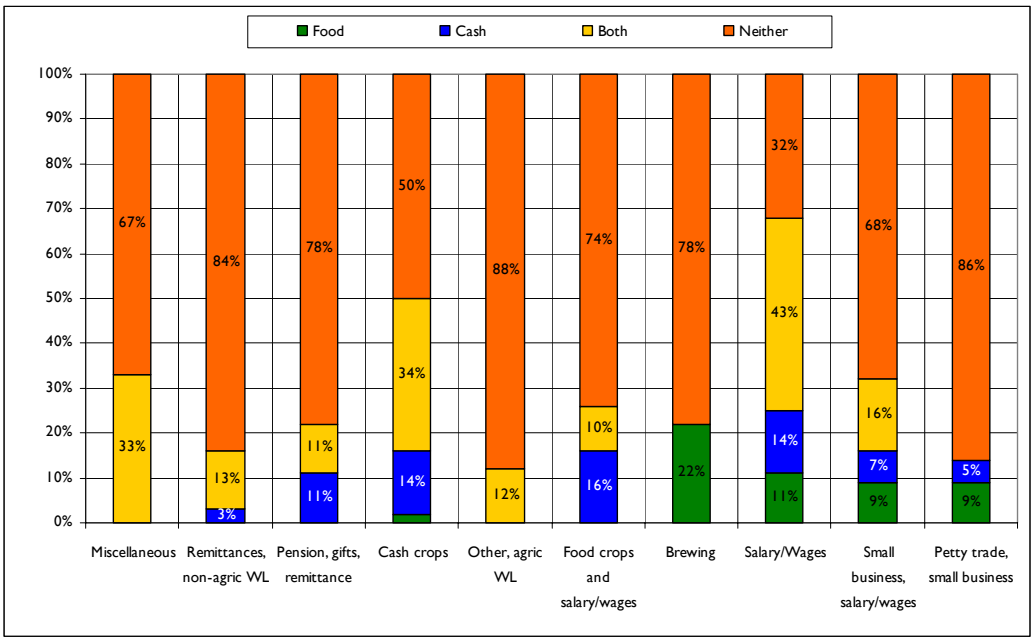
For **housing**, 66% of the sampled households reported increase of expenditure, while the rest reported no change. By urban area, households in Manzini were most likely to report increased housing expenditures (76%) while the households in Lubombo were the least likely (59%). The *Remittance/non-agric wage labour* (84%) and *Petty trade/small business* (82%) households were most likely to report increased housing expenditures compared to only 46% of the *Pension/gift/remittance* households.

Lastly, 69% of the sample indicated an increase of **education** expenditure, ranging from 62% in Hhohho to 77% in Lubombo households. The *Small business/salary* group were the most likely to report increased education expenditure (79%) while the *Brewing* households were the least likely (33%).

Households were also asked if they were providing food or cash support to friends or relatives. In total, 46% of the households were providing external support, with 7% providing food only, 11% providing only cash and 28% providing both. The differences by region are presented in the graph below which shows that households in Manzini are the most likely to be providing external support (55%) while those in Shiselweni are the least likely (39%). Interestingly, households in Shiselweni are the least likely to provide cash but the most likely to provide food support.

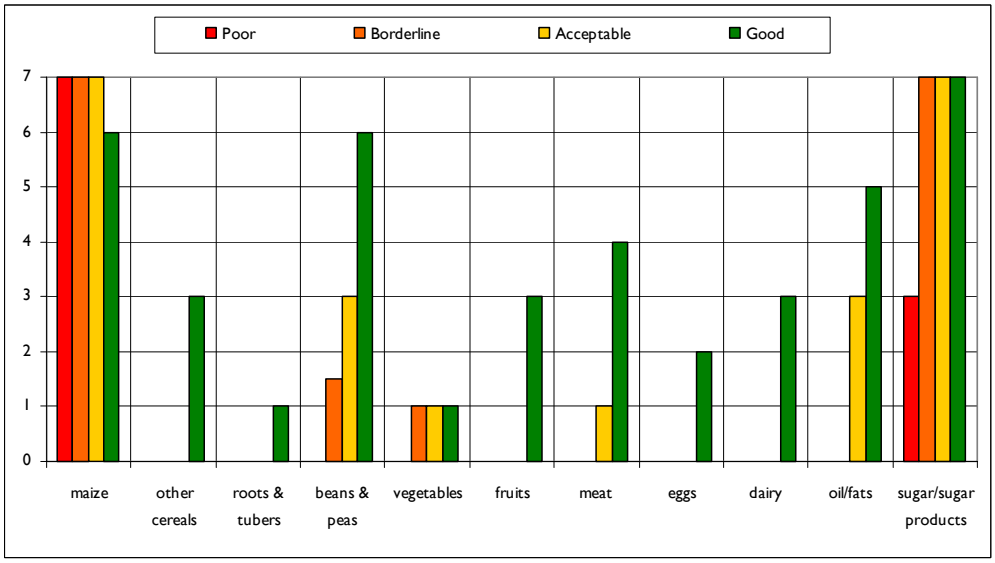


There were some important differences by livelihood group as illustrated in the following graph. As expected, the *Salary/wages* households were the most likely to be providing external support (68%) followed distantly by the *Cash crops* households (50%). The *Food crops/salary* (16%), *Salary/wages* (14%) and *Cash crops* (14%) households were the most likely to provide cash only while the *Brewing* households were the most likely to provide food only (22%). The *Other/agric wage labour* (12%), *Petty trade/small business* (14%) and *Remittance/non-agric wage labour* (16%) were the least likely groups to be providing external support which can be an indication of the lack of resources available to these households.



4.8 Household Food Consumption

Research has shown that dietary diversity[3] and frequency are a good proxy measure of food consumption and food security at household level. Food consumption data was collected and analyzed using the standard WFP methodology: the variety and frequency of different foods and food groups consumed over a 7-day recall period was recorded to calculate a weighted[4] food consumption score. Weights were based on the nutritional density of the foods. WFP standard cut-off points or thresholds were used to classify households having 'poor', 'borderline' or 'acceptable' consumption while the classification criteria for 'good' consumption was derived from the analysis of this urban data. The median number of days of each food/food group was determined and a score of 50.5 was calculated, indicating the threshold for 'good' consumption.



For this sample of urban households in Swaziland, the 'poor' consumption households were eating on average, daily consumption of maize and sugar only 3 days per week. The consumption for

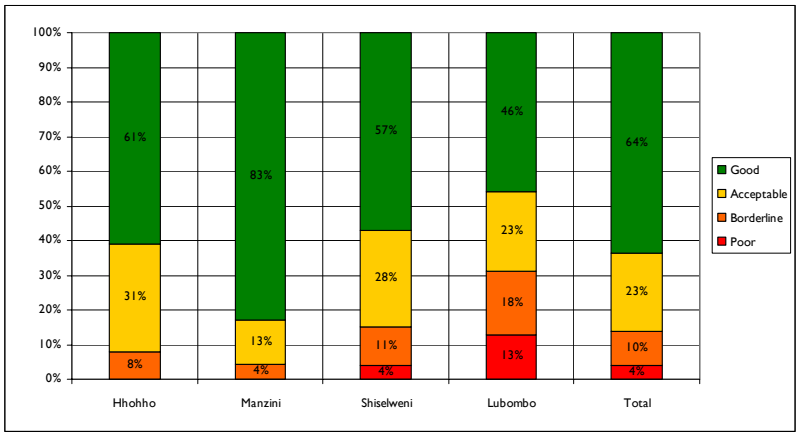
[3] Dietary diversity and food frequency is defined as the number of individual foods or food groups consumed over a given period of time.

[4] Animal proteins = 4; pulses =3; fortified blended foods (CSB) = 2.5; cereals, roots & tubers = 2; fruits and vegetables = 1; sugar and oil = 0.5

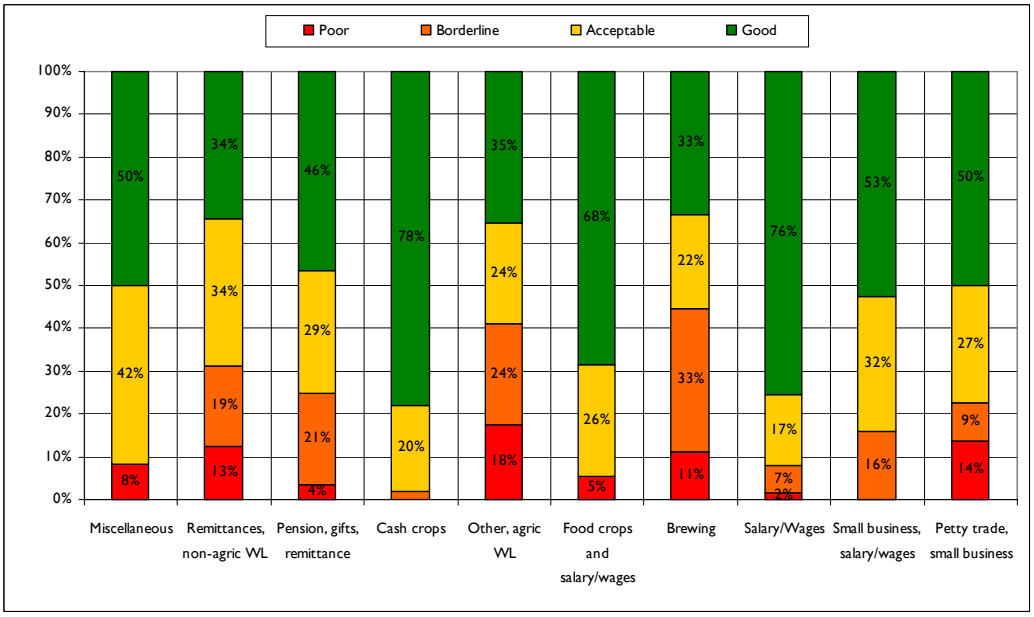
'borderline' households improved only to daily consumption of maize and sugar and then beans/peas 1-2 days per week and vegetables only 1 day per week. Households with 'acceptable' consumption similarly ate maize and sugar 7 days per week, oils/fats and beans/peas 3 days per week and then vegetables and meat only 1 day per week.

As illustrated in the graph on the previous page, only the households with 'good' consumption appear to have truly diverse consumption with sugar 7 days per week, maize and beans/peas 6 days, oils/fat 5 days, meat 4 days, other cereals, fruits and dairy 3 days, eggs 2 days and roots/tubers and vegetables 1 day per week.

The chart on the right compares levels of consumption by region and for the total sample. In all, only 4% of the households had 'poor' consumption and these were found only in Shiselweni (4%) and Lubombo (13%) regions. Another 10% of the households had 'borderline' consumption and 23% had 'acceptable' consumption. In all, the best consumption was found in Manzini while the worst levels were found in Lubombo where only 46% of the sample had 'good' consumption.

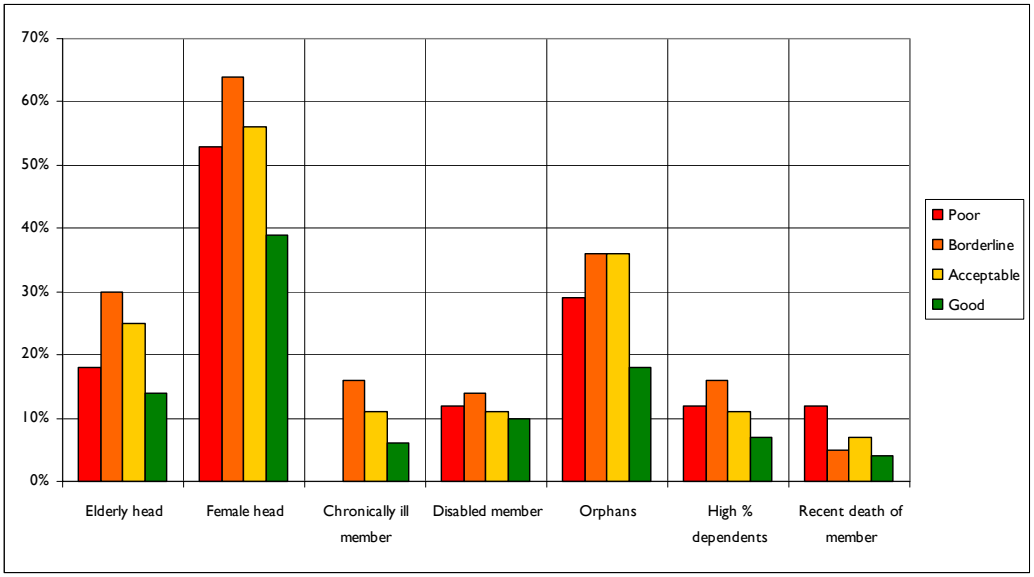


By livelihood group there were several differences in consumption with the *Other/agric wage labour* group having the highest percentage of households with 'poor' consumption, followed by *Petty trade/small business* and *Remittance/non-agric wage labour* households. When considering 'poor' and 'borderline' consumption together, the *Brewing* and *Other/agric wage labour* households are the worst off. The *Cash crops* and *Salary/wages* households have the best consumption of all livelihood groups while the *Remittance/non-agric wage labour* households are the least likely to have 'good' consumption.



It is also important to understand the characteristics of households by food consumption levels. The main distinguishing feature of the few households with 'poor' consumption is that they tend to be headed by women and are likely to be hosting orphans. However, they are the most likely to have experienced the recent death of a member compared to the other groups. The fact that households

with 'borderline' consumption are the most likely to have an elderly head, a female head, a chronically ill member, a disabled member, to be hosting orphans and to have 80% or more dependents in the household links these household demographic characteristics to inadequate consumption. The opposite is found for households with 'good' consumption – they are the least likely to have these household characteristics, again indicating the negative impact of these proxy indicators of HIV and AIDS on household food consumption.



Households were asked about main and secondary sources of the different items they consumed. As expected in urban areas on the whole sample, purchase accounted for about 70% of all the responses on sources of food; own production/garden for about 17%; and gift for about 9 percent. Food items that were more commonly coming from own production were vegetables, eggs and dairy. However, these two last items were not widely consumed by sampled households.

4.9 Shocks and Coping

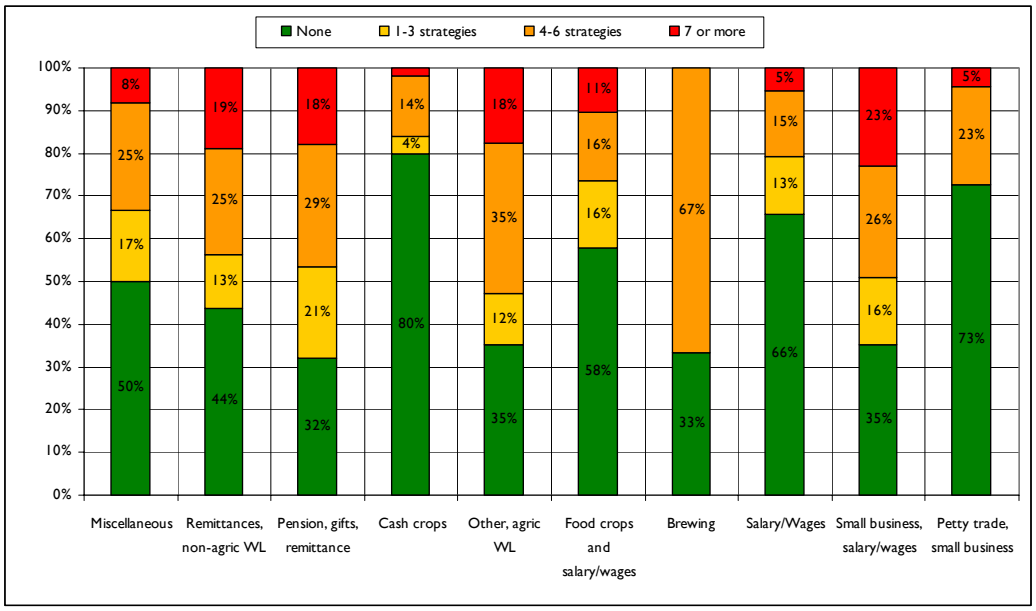
Of the sampled households, 44% reported that they had experienced occasions when they were not able to buy enough food or to cover other essential expenditure during the 30 days previous to the survey. This percentage was significantly *($p < 0.001$)* higher among households in Shiselweni (65%) when compared to Manzini (43%), Hhohho (38%) and Lubombo (35%).

The most common coping strategies adopted to manage food or money scarcity in the past 30 days were:

- Rely on less expensive or less preferred food (81%);
- Reduce number of meals eaten in a day (72%);
- Limit portion size at meals (68%);
- Borrow food or rely on help from friends and relatives (66%);
- Restrict adult consumption to allow small children to eat (46%);
- Seek alternative or additional work (29%);
- Skip entire days without eating (23%).

An index was created to summarize the level of stress felt by the households as measured by the number of different coping strategies used over the month previous to the data collection as a result of struggling to afford food or other basic needs. Generally, assisted households experienced a higher level of stress in each surveyed urban areas compared to non-assisted households.

The graph below displays the level of stress, as measured by that index, by livelihood groups.



Households with highest level of stress were in the *Small business/salary/wages* group, followed by *Pension/gifts/remittance* and *Other/agric wage labour* households. Households engaged in *Cash crop production*, *Petty trade/small business* and *Salary/wages* had the lowest levels of stress.

Households were also asked to name the 3 main shocks that affected their ability to access food or other basic needs in the past 6 months. Most (82%) households reported being affected by unusually high food prices, followed by unusually high fuel prices (51%), loss or reduced employment of HH member (17%), serious illness or accident of a household member (12%), reduced income of a HH member (11%), electricity or gas cuts (10%), drought/irregular rains (9%), and the death of a working HH member (8%).

By region there were differences in the types of shocks reported:

- More than 90% of the households in Hhohho reported being affected by ***high food prices*** compared to 87% in Manzini, 81% in Shiselweni and only 66% in Lubombo.
- Households in Manzini were the most affected by ***high fuel prices*** (67%), followed by Hhohho (56%). Only 38% of the households in both Shiselweni and Lubombo were affected by high fuel prices.
- ***Loss of or reduced employment of a household member*** was reported by 24% of the households in Lubombo, compared to 22% in Shiselweni but only 15% in Hhohho and 12% in Manzini.
- ***Serious illness or accident of a household member*** was named by 18% of the households in Shiselweni and 17% in Lubombo but only 11% in Hhohho while it was not reported as a serious shock by the households in the Manzini sample.

Reported shocks by livelihood groups varied by type of shock:

- Unusually high food prices: All of the households in the *Brewing* group were affected, followed by *Cash crops* (92%) and *Pension/gifts/remittance* (89%) households. Those least affected were the *Miscellaneous* (75%) and *Other/agric wage labour* (77%) households.
- Unusually high fuel prices: Nearly 70% of the *Food crop/salary* and *Petty trade/small business* households were affected by this shock while the least impacted group was the *Pension/gifts/remittance* group where only 29% reported this shock.
- Loss of or reduced employment of HH member: The most impacted groups are *Other/agric wage labour* (35%) and the *Remittance/non-agric wage labour* (31%) households.

5.0 Conclusions and Recommendations

5.1 Urban Food Security and Vulnerability

The analysis has shown that at the time when the survey was conducted there was an average of only 4% of sampled households that had 'poor' food consumption, 10% with 'borderline' food consumption and 23% with 'acceptable' consumption. Only 64% of the urban sample had what is considered to be 'good' food consumption in terms of dietary diversity and food frequency. As food consumption has been widely accepted as a proxy for food security, Food Consumption Groups could be considered proxies for Food Security. However, this proxy is only based on current consumption, and does not take into account seasonality or vulnerability to future shocks which could threaten future consumption and food security status.

Nevertheless, the consumption analysis indicates that there is a problem of food security among vulnerable households in urban areas of Swaziland, especially in Lubombo where more than 30% of the households had 'poor' or 'borderline' consumption and, to a lesser extent, in Shiselweni where 15% had less than 'acceptable' levels of consumption. Levels of consumption were best in Manzini where it is assumed people have better access to a variety of foods due to higher purchasing power.

By livelihood groups, overall the *Brewing* and *Other/agric wage labour* households were the most likely to have 'poor' or 'borderline' consumption, followed by the *Remittances/non-agric wage labour* households. The *Cash crops* and *Salary/wages* livelihood groups had the best levels of food consumption.

Some level of incidence of food insecurity can found in every livelihood group and those households are most likely the chronically poor households as they have lower purchasing power to access food and other basic needs. The high food price issue adds to this already existing problem.

5.2 Effects of High Prices

Nearly all the sampled households reported that they had increased expenditure for food over the past months with almost all reporting increased expenditure on fuel and transport. Households in Shiselweni were the least likely to have increased their food expenditure while those in Manzini were the most likely to have increased their fuel/transport expenditures. In general increased expenditure for fuel and transport seems to be more common amongst the better-off livelihood groups such as *Small business/salary* and *Food crops/salary* households.

The main differences in shocks by Region and livelihood group are:

- Unusually high food prices: Around 90% in Hhohho and Manzini were affected by this shock compared to only 81% in Shiselweni and 67% in Lubombo. Households in the *Brewing*, *Cash crops* and *Pension/gifts/remittance* groups were most affected.
- Unusually high fuel prices: Households in Manzini and Hhohho were much more affected than households in Shiselweni or Lubombo. Households in the *Food crop/salary* and *Petty trade/small business* households were most affected by this shock while the least impacted group was the *Pension/gifts/remittance* group.

In terms of types of coping strategies employed by the sample, the most common involved change in consumption habits with less preferred foods and reducing both the amount of food eaten and the number of meals. Households also tended to borrow more or receive remittances from friends or relatives to cope. Other households are seeking additional work or alternative employment to cope with high prices.

5.3 – Vulnerable groups

In order to determine who the most vulnerable are and where they are living, additional analyses of the data that includes variables related to current food security status based on food consumption, potential to access food (income and asset wealth) and current stress (reported shocks and number of coping strategies) was done using multi-variate analysis. From the analysis, five groups of households were identified: Highly food secure, food secure, food secure with high stress, food secure but poor with no stress and food insecure. Each group is described below.

Food insecure (21%) – These households are characterised by having an average size of 4 persons with 65% headed by women and 30% with an elderly head – the highest of any group. They are also

the most likely to be hosting orphans (35%), to have a chronically ill member (16%) and to be hosting a disabled member (14%). Only 6% have experienced the recent death of a member.

Their median per capita income is only E 105 per month. Nearly 30% reported a decrease in income over the past 6 months which is the highest of any group. Ten percent have 'poor' food consumption and 27% have 'borderline' consumption. More than 80% are 'very poor' or 'poor' in terms of asset wealth. Although they are also the most likely to receive food or cash assistance from relatives inside the country (30%), 27% of these households reported borrowing money in the past 3 months which is the second highest of all groups.

All of these households reported being affected by a shock that prevented them from accessing enough food and 83% have used 4 or more different coping strategies to deal with this. Just over 85% of the households were affected by unusually high food prices while only 35% mentioned unusually high fuel/transport costs. This group was the most likely to mention serious illness or accident of a household member as a shock (21%). While all other groups had high percentages of households that spent their savings to cope with the shock, these households could only change their eating habits or borrow food with only 20% spending savings.

Food secure but poor with no stress (33%) – These households also have 4 members on average with 43% being headed by women and 18% with an elderly head. Twenty-seven percent of the households are hosting orphans, 6% have a chronically ill member while only 3% have experienced the recent death of a member. They are the most likely to be hosting a disabled member (14%).

Their median per capita income is E 300 per month. One-fifth of the households reported a decrease in income over the past 6 months. In total, 5% have 'poor' food consumption and another 13% have 'borderline' consumption. More than half are asset 'very poor' or 'poor'. Only 18% are receiving food or cash assistance from relatives inside the country and 20% have borrowed money over the past 3 months.

Only 14% of these households also reported being affected by a shock that prevented them from accessing enough food and only 12% are using 1-3 coping strategies to deal with that shock. Around 86% mentioned that they were impacted by unusually high food prices while another 53% experienced unusually high fuel prices. Although these households are poor, 44% still spent savings to manage these shocks while others chose less preferred foods. Borrowing food or cash was also more common in this group to manage the effects of shocks.

Food secure with high stress (15%) – The average household size is only 3 persons with more than half headed by a woman and 18% with an elderly head – the second highest of any group. They are also the second most likely group to be hosting orphans (29%) or to have a chronically ill member (12%) while only 9% have a disabled member and 6% have experienced the recent death of a household member.

Their median per capita income is E 350 per month. One-quarter of these households experienced a decrease in income over the past 6 months. Nearly all have 'good' consumption while none have 'poor' or 'borderline' consumption. However, 40% are asset 'very poor' or 'poor' while nearly one-quarter are receiving assistance from relatives inside the country. This group has the highest percentage of households that have borrowed money in the past 3 months (34%).

All of these households also reported experiencing a shock that prevented them from accessing enough food and 86% of them used 4 or more coping strategies to manage that shock. Other shocks experienced by households in this group are unusually high food (86%) and fuel (59%) prices with another 25% experiencing the loss of or reduced income of a household member. More than 60% of the households spent some savings to manage the effects of the shock while others changed eating habits or borrowed from friends or relatives.

Food secure (24%) – These households also have 4 members on average with one-third headed by women and only 12% with an elderly head. Only 12% are hosting orphans, 2% have a chronically ill household member, 7% with a disabled member and 4% had a member die recently.

Their median per capita income is E 875 per month. Only 9% reported a decrease in income over the past 6 months while 34% had increased their incomes during the same period. Nearly all have 'good' consumption with only 2% having 'acceptable' consumption while only 5% are asset 'very poor' or 'poor'. In addition, 19% are receiving food or cash support from relatives inside the country but only 16% had borrowed money in the previous 3 months.

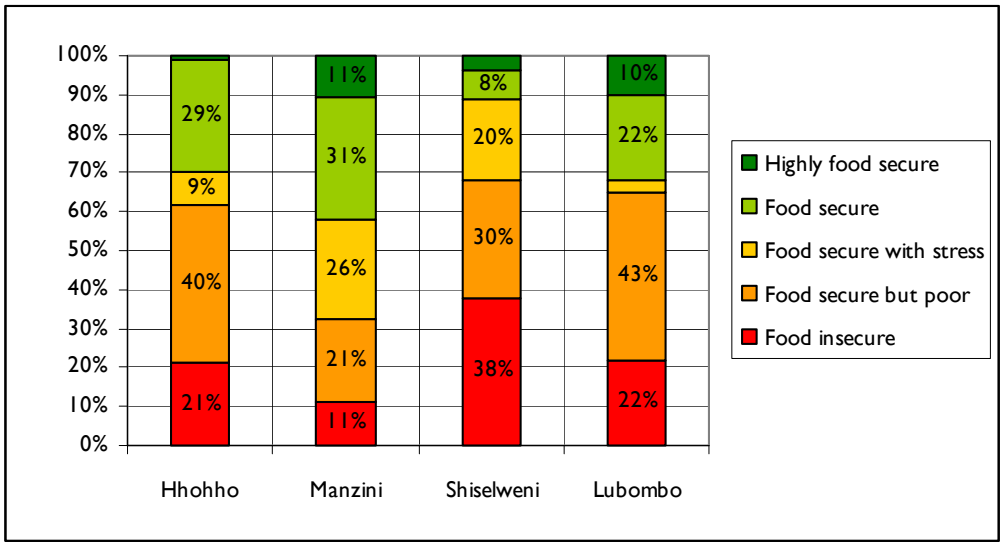
Only 14% of these households also reported being affected by a shock that prevented them from accessing enough food and 11% are using 1-3 coping strategies to deal with that shock. Three-quarters of these households had experienced the shock of unusually high food prices while another 60% reported unusually high fuel prices. Most spent savings (66%) or borrowed money (29%) to manage the effects of the shock.

Highly food secure (7%) – The average household size is only 2.5 persons with only 33% headed by a woman and 7% with an elderly head. Only 10% are hosting orphans and 2% with the recent death of a member while none are hosting chronically ill or disabled family members.

The median per capita income is E 4325 per month. Only 7% reported a decrease in income over the past months while 56% experienced increased incomes. Almost all have 'good' consumption with 7% having 'acceptable' food consumption while 80% are asset 'rich'. Only 14% are receiving food or cash support from relatives inside the country and only 13% had borrowed money in the past 3 months.

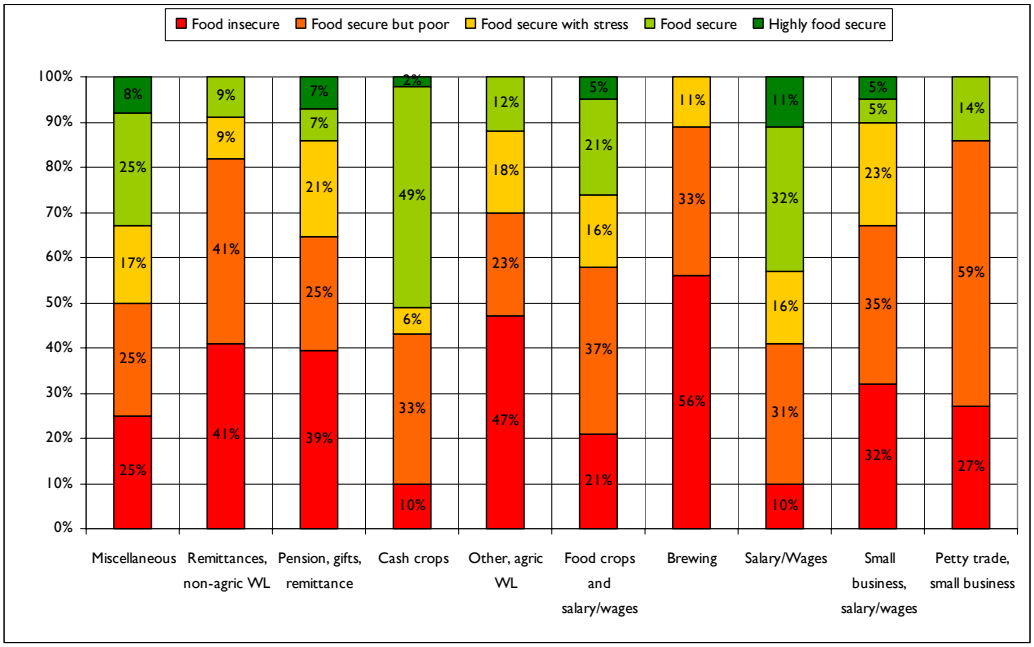
None of these households reported a shock that prevented them from accessing enough food. In addition, this group is the least likely to have experienced the shock of unusually high food prices (57%) and second least likely for unusually high fuel prices (47%). They mostly used their savings (70%) to manage the shock with some also consuming less preferred or less expensive foods (33%).

As shown in the chart below, the highest percentage of *highly food secure* and *food secure* households were found in Manzini, followed by Lubombo and Hhohho urban areas. The *food secure but with stress* group was mostly found in Manzini (26%) and Shiselweni (20%) – these are the households that may be most impacted by the higher food prices.



The highest percentage of *food insecure* households was found in Shiselweni (38%), followed by Lubombo and then Hhohho. Overall, the urban areas of Shiselweni can be described as the worst off because of the high percentage of *food insecure* and *food secure but with stress* households.

By livelihood group, the highest percentages of *food insecure* households are in the *Brewing*, *Other/agric wage labour*, *Remittances/non-agric wage labour* and *Pension/gifts/remittance* groups as illustrated in the chart below. When including the *food secure but with stress* households, the most affected groups are *Brewing* (67%), *Other/agric wage labour* (65%), *Pension/gifts/remittance* (60%), *Small business/salary/wages* (55%) and *Remittances/non-agric wage labour* (50%) groups. The groups with the highest percentage of *highly food secure* and *food secure* households are *Cash crops* (51%), *Salary/wages* (43%) and *Miscellaneous* (33%) households.



5.4 – Conclusions and Recommendations

The study has shown that the causes of food insecurity and vulnerability in urban areas are different that those found in rural settings. Urban households that rely on activities such as brewing, agricultural wage labour, small business and petty trade tend to be more vulnerable. Some of those relying heavily on transfers such as pension, gifts and remittances are also particularly vulnerable.

In terms of location within Swaziland, the most food insecure and vulnerable households tend to be concentrated more in Shiselweni urban areas. The groups that appear to be food secure but are dealing with shocks and stress are more likely to be found in Manzini urban areas.

The study has provided the basis for additional activities to both monitor and address the needs of the urban population who is poor and vulnerable to food insecurity. Some recommendations for follow-up include:

- Further profiling of the food insecure and vulnerable households, especially in Shiselweni and Manzini areas.
- Additional qualitative research of poor, urban households affected by HIV and AIDS in light of the high food prices and global financial crisis as many of these households appear to be the most vulnerable.
- For longer-term monitoring an urban livelihoods profiling activity should take place to provide a baseline for monitoring the impact of shocks in these areas.