

Poverty in a decade of slow economic growth: Swaziland in the 2000's

Preface and Acknowledgement

This publication presents an up-to-date analysis of the living conditions of Swazi households focusing on the poverty patterns and trends during the 2000's. The publication is based on the results of the last two rounds of the Swaziland Household Income and Expenditure Survey (SHIES), household surveys focusing on income and expenditure. It also covers more information thus permitting analysis of living conditions from another perspective other than just monetary poverty. The two rounds were administrated in 2000/01 and 2009/10 with each round covering a nationally representative sample of households spread over a period of 12-months.

The report is on three different dimensions of poverty: consumption poverty, lack of access to assets/services and human development. It should add to the policy debate and discussions in Swaziland on actions taken to reduce poverty so far and various programmes being implemented to chart the progress towards the attainment of the Millennium Development Goals (MDGs) and to monitor other policy initiatives such as the PRSAP. The comparison of the SHIES data from the previous round in 2000/01 with the most recent round of 2009/10 provides an opportunity to study trends in household well-being over the 10-year period and ensure evidence-based public policy decision-making in poverty reduction efforts.

A companion report uses the most recent Census and the latest SHIES to construct a poverty map. That report covers both monetary and non-monetary poverty indicators. In particular the monetary poverty indicators at Inkhundla level from the poverty map are fully consistent with the results of the survey-based poverty profile and therefore should be seen as an extension to the poverty profile.

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I. INTRODUCTION

This report examines poverty in Swaziland during the 2000s. It looks at both poverty trends and its decomposition between different groups: urban/rural, administrative region and socioeconomic. Over the last ten years Swaziland has experienced a series of socioeconomic challenges that led to a less than impressive economic growth averaging around 2 percent per annum. Reducing poverty in such economic environment is challenging. In this report we will attempt to answer the following questions: To what extent have Swazi households and communities benefited from this growth? Which groups have benefited most? Have the lives of poor Swazis improved as a result?

Poverty has many dimensions; it is characterised by low income and expenditure, but also by malnutrition, ill health, illiteracy, and insecurity. There could be also a sense of powerlessness and exclusion. These different aspects usually interact and combine to keep households, and at times whole communities, in persistent poverty. As evidenced by actions taken to effectively reduce poverty globally, policies must be comprehensive and based on timely information on the living standards of the population.

This report uses the most comprehensive household surveys available in Swaziland and focuses on three dimensions of poverty: consumption poverty; lack of access to services and limited human development. It brings to the policy debate in Swaziland the results of the latest two rounds of SHIES. These are nationally representative surveys, covering a wide range of household characteristics and behaviours. Although the questionnaires of these two surveys are rather limited in terms of coverage of non monetary issues, the availability of two comparable surveys provides an opportunity to track trends in household well-being over a 10 year period, i.e. from 2000/01 to 2009/10. These data have been subjected to careful analysis in order to establish trends in poverty, and to inform public policy.

A previous Poverty Profile (CSO, 2003) derived from the SHIES of 2000/01 found a high proportion of persons living in poverty. The authors established that 69 percent of the population was living in poverty¹. The present study updates the poverty figures based on a SHIES of 2009/10. The questionnaires of both surveys being very similar are particularly useful for studying poverty trends during the 2000s. Having computed consistent expenditure aggregates in real terms and using a fixed poverty line (also in real terms) for both surveys, we show a meaningful decline in poverty headcount of six percentage points between 2000/01 and 2009/10, i.e. a cut in poverty headcount from 69.0 to 63.0 percent. However, we also show that people living in extreme poverty have not seen much improvement in their standard of living over the same period.

The next section outlines the methodology that has been used for measuring consumption poverty. It should be noted that the methodology used here is the same as the one used in the previous poverty profile. Section III then describes the main results on consumption poverty.

¹ An independent computation of the poverty line by the authors of the current report yields similar results.

The analysis is done across regions, rural and urban areas, by socioeconomic groups and by gender of household head. Section IV analyses poverty in terms of household ownership of durable goods, an alternative to consumption-based measure of welfare. Of course, poverty is a multi-dimensional phenomenon and consumption-based measures need to be supplemented by other welfare indicators. The subsequent two sections of this report analyse poverty in terms of access to services (section V), and address progress in human development by looking at the use of health and education facilities (section VI). In these sections we restrict ourselves to measures of well-being that can be derived from the SHIES. Concluding observations are made in the final section².

² Our intention has been to avoid including too many tables and other technical detail in the main body of this report. This material is part of the appendix. Appendices 1-4 cover the main findings of both survey rounds. Appendix 5 discusses the sampling design of the surveys, Appendix 6 presents the data entry procedure and Appendix 7 provides details of the poverty indicators used.

II. CONSUMPTION POVERTY: METHODOLOGY AND MEASUREMENT

A report on consumption poverty is specifically concerned with those whose standard of living falls below an adequate minimum defined by a poverty line. In putting this into practice two important issues need to be addressed:

- the measurement of the standard of living; and
- the selection of a poverty line.

In this study, following common practice in many countries, a consumption-based standard of living measure is used. The poverty line will be set as that level of the standard of living measure at which minimum consumption requirements can be met.

Data sources

The data on which this study is based are those derived from the last two rounds of SHIES, conducted in 2000/01 and 2009/10 respectively. The SHIES is a multi-purpose survey of households in Swaziland, which collects information on the many different dimensions of the population's living conditions including, among others, education, health and employment. These data are collected on a countrywide basis. The questionnaires used for these two rounds were almost identical, meaning that the results can be directly compared. The sample size in terms of households and individuals is presented in Table 1.

Table 1: SHIES sample size, by area

		Urban	Rural	Total
2000/01	Number of Households	1,214	2,555	3,769
	individuals	4,421	14,544	18,965
2009/10	Number of Households	1,373	1,794	3,167
	individuals	4,199	9,946	14,145

Source: Computed from the Swaziland Household Income and Expenditure Survey, 2000/01 and 2009/10.

The SHIES collects sufficient information to estimate total consumption of each household. This covers consumption of both food and non-food items (including housing). Food and non-food consumption commodities may be explicitly purchased by households, or acquired through other means (e.g. as output of own production activities or food received from NGOs). The household consumption measure takes into account all of these sources, and the different questionnaires enable this to be done.

Construction of the standard of living measure

As in the previous poverty profile (CSO, 2003), the measure of the standard of living is based on household consumption expenditure, covering food and non-food (including housing).

The first step in constructing the standard of living measure is to estimate total household consumption expenditure³. Using SHIES questionnaires for both rounds, total household consumption expenditure has been measured from different modules. This consumption measure covers food, housing and other non-food items, and includes imputations for consumption from sources other than market purchases. These imputations include consumption from the output of own production (mostly agriculture, but also from non-farm enterprises) and imputed rent from owner-occupied dwellings.

Total consumption expenditure is estimated for a single month period based on information collected with the questionnaire. In the case of education, annual spending on fees, uniforms, boarding and books were divided by 12 in order to get a monthly average. In the case of health expenditure, the information had been already collected on a monthly basis. However, only small health expenditures have been taken into account in the computation of total health expenditure. Regular payments on such items as electricity or telephone expenses were collected through a separate module. Spending seen as capital account transactions (such as life insurance premium or repayment of loan) was excluded from the calculation. Apart from the above items, most of the consumption expenditures were collected in a series of diary modules that were filled daily by household members. We used diary modules for “daily expenditures”, “goods and services received” and “own-produce consumption”.

Following recommendation from Deaton and Zaidi (2002), purchases of durable goods were not included in this, and some other expenditure items deemed not to be associated with increases in welfare were also excluded such as expenditure on hospital stays. These are also lumpy items, and it would not be reasonable to regard a household as being significantly better off because it had to make a large expenditure say on an emergency operation. Otherwise everyday medical expenses were included in the consumption measure.

And finally, households renting their dwelling have the cost of rent included in total household consumption expenditure. In the case of owner occupied dwellings, imputed rents were estimated based on a hedonic equation, which relates rents of rented housing to

³ There are both theoretical and practical reasons that must be considered when making the choice to use income or consumption to measure living standards. Deaton and Zaidi (2002) argue that consumption-based welfare measures are better mainly for two reasons. First, because consumption is a better measure of long term well-being since households tend to smooth their consumption overtime compared to income. And second, experience has clearly shown that collecting income in developing countries is a daunting task, much more that collecting consumption data.

characteristics, and uses this to estimate rental values for owner-occupied dwellings based on their characteristics and amenities.

Table 2 presents the pattern of household expenditure based on both SHIES surveys. Over all, total household expenditure spent on food increased slightly from around 27 percent in 2000/01 to almost 31 percent in 2009/10. Almost all the increase in food share comes from a large increase in “food received”, mainly food baskets coming from different food aid schemes. On non-food component the most noticeable finding is the sharp decline in education spending which is clearly due to change in government public education pricing policies during the 2000s.

Based on the national Consumer Price Index the household expenditures have been corrected for variation in prices *over time* within and between the sample years. In this way, each household’s consumption expenditure is expressed in the constant prices of January 2010. In many cases, such household welfare index also takes into account price variations across different regions. For example, it might be reasonable to believe that staple foods would be cheaper in rural areas, particularly in producing regions. In such cases it is strongly recommended to correct for such spatial price variations. In many cases such spatial price variations can be very large. However in the case of Swaziland it can be shown that spatial price variations are very small if existent at all. Many reasons can explain that phenomenon: the small size of the country, the very good road infrastructure, the consumption of mainly branded products and the very small number of self-employed farmers. Each of those points ensures minimal spatial price variations.

Table 2: Household expenditure structure, 2000/01 and 2009/10

SHIES	2000/01	2009/10
<i>Food</i>	<i>27.2</i>	<i>30.7</i>
Food purchased	21.5	21.4
Food own produced and consumed	3.6	4.2
Food received	2.1	5.1
<i>Non-Food</i>	<i>72.8</i>	<i>69.3</i>
Education	18.5	8.9
Health	4.2	2.8
Monthly regular payment	10.8	11.0
Annual regular payment	0.8	0.6
Non-food purchased	19.2	23.6
Non-food own produced and consumed	0.4	0.3
Non-food received	1.9	2.3
Rent (actual and imputed)	17.0	19.9
<i>Total</i>	<i>100.0</i>	<i>100.0</i>

Source: Computed from the Swaziland Household Income and Expenditure Survey, 2000/01 and 2009/10.

Household size is measured as the number of equivalent adults, using a calorie-based scale from the 10th Edition of the National Research Council’s *Recommended Dietary Allowances* (Washington D.C.: National Academy Press, 1989). This scale has commonly been applied in nutritional studies in Africa. Measuring household size in equivalent adults recognises, for

example, that the consumption requirements of babies or young children are less than those of adults. The scale is based on age and gender specific calorie requirements, and is given in Table 3 below.

Each individual is represented as having the standard of living of the household to which they belong. It is not possible to allow for intra-household variations in living standards using the consumption measure, though some other indicators considered later do take into account intra-household variations.

Table 3: Recommended energy intakes

Category	Age (years)	Average energy allowance per day (kcal)	Equivalence scale
Infants	0 - 0.5	650	0.22
	0.5 - 1.0	850	0.29
Children	1 - 3	1300	0.45
	4 - 6	1800	0.62
	7 - 10	2000	0.69
Males	11 - 14	2500	0.86
	15 - 18	3000	1.03
	19 - 25	2900	1.00
	25 - 50	2900	1.00
	51+	2300	0.79
Females	11 - 14	2200	0.76
	15 - 18	2200	0.76
	19 - 25	2200	0.76
	25 - 50	2200	0.76
	51+	1900	0.66

Source: Recommended Dietary Allowances, 10th edition, (Washington D.C.: National Academy Press, 1989).

Setting the poverty line

Setting an absolute poverty line for a country is not a precise scientific exercise. Though an absolute poverty line can be defined as that value of consumption necessary to satisfy minimum subsistence needs, difficulties arise in specifying these minimum subsistence needs as well as the most appropriate way of attaining them. In the case of food consumption, nutritional requirements can be used as a guide. In practice, this is often restricted to calorie requirements, but even then there remains a difficult issue about which food basket to choose. In addition, specifying minimum requirements for non-food consumption is still more difficult.

In practice, calorie requirements are generally used as the basis for an estimated poverty line. Given information about quantities of foods consumed by households, and about the calorie contents of these foods, there are two common ways in which this can be done.

Our method of choice is to examine the average consumption basket of the bottom x percent (say 50 percent) of individuals ranked by the standard of living measure, and computing how many calories this basket provides per adult equivalent. The quantities of each item consumed can then be scaled up (or down) in the appropriate proportion to compute the basket with this composition, which would provide the minimum calorie requirements (2100 kilocalories per capita in the current study). This provides an estimate of the food expenditure required to attain 2100 kilocalories, based on the consumption basket of the poorest x percent of the distribution. Obviously, an issue in this is the choice of x . Like in many other other countries we used 50%, taking into account that non-food needs vary from household to household and are also subjective and more difficult to predict. Following common practice in other developing countries, what is set here is based on the expenditure devoted to non-food items of those whose total consumption expenditure is at the level of the food poverty line. This is based on the principle that these non-food consumption items are essential for households, so that they will even forgo meeting their calorie requirements (or consume an “inferior” basket) in order to purchase them.

During the construction of the last SHIES-based poverty profile (CSO, 2003) such a nutrition-based poverty line was used. The computed poverty line in constant terms of January 2010 is E461 (four hundred and sixty one emalangeni) per month per equivalent adult. The food poverty line or extreme poverty line is set at E215 (two hundred and fifteen emalangeni) per month per equivalent adult. That poverty line yielding a poverty rate of 69.0 percent in 2000/01 was kept in real terms for the current poverty profile, for both 2000/01 and 2009/10.

III. PATTERNS AND CHANGES IN CONSUMPTION POVERTY

By applying the poverty line to the distribution of the standard of living measure, we are able to obtain measures of poverty in Swaziland. Two aspects of poverty are of particular interest:

- the *incidence* of poverty, or the proportion of a given population identified as poor;
- the *depth* of poverty, or the extent to which those defined as poor fall below the poverty line.

These aspects can be examined for the country as a whole, and for appropriately defined groups of the population.

Various poverty indices are available which are combinations of one or both of these dimensions. These include the widely used P_α class of poverty indices, tables for which are presented in Appendix 1 (see also Appendix 7 for more information on these indices). The results reported in this section are based on the standard of living measure and the poverty line referred to above.

Poverty Trends

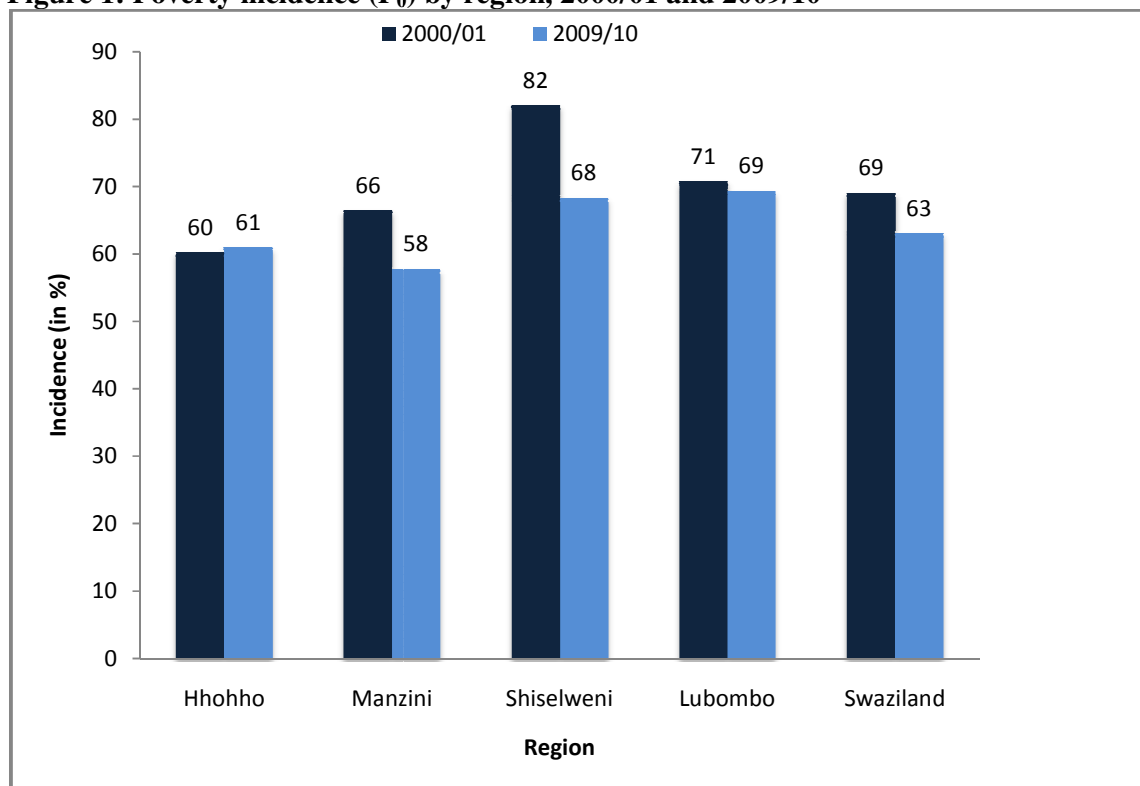
Our objective in this section is to examine the poverty situation from 2000/01 to 2009/10. The analysis covers rural and urban areas, administrative regions as well as various socio-economic groups.

For the country as a whole, the proportion of the population of Swaziland defined as poor fell from 69.0 percent in 2000/01 to 63.0 percent in 2009/10 (Figure 1). That modest but still significant decline in poverty incidence over a decade has nevertheless led to lowering the absolute numbers of poor people from around 678,500 individuals in 2000/01 to 641,000 individuals in 2009/10.

It has to be noted that the national decline of six percentage points was not evenly distributed across the four administrative regions. Figure 1 shows that while Shiselweni experienced a very large decline in poverty headcount of 14 percentage points, two regions (Hhohho and Lubombo) have seen no real change in poverty. The fourth region – Manzini – has experienced a significant decline from 66 percent at the beginning of the decade to 58 percent nine years later. Since the poorest region in 2000/01 (Shiselweni) has also seen the largest decline in poverty, the gap between the poorest and the richest regions has been halved from 22 points to only 11 percentage points. That as it may Shiselweni, along with Lubombo, remains the poorest regions. Figure 2, which presents the breakdown of poverty incidence by area, shows that the decline in poverty headcount also occurred in both urban and rural areas i.e. from 80 to 73 percent in rural areas and from 36 percent to 31 percent in urban areas.

Households in urban Shiselweni experienced the largest decline in poverty headcount i.e. from 68 percent to 39 percent.

Figure 1: Poverty incidence (P₀) by region, 2000/01 and 2009/10

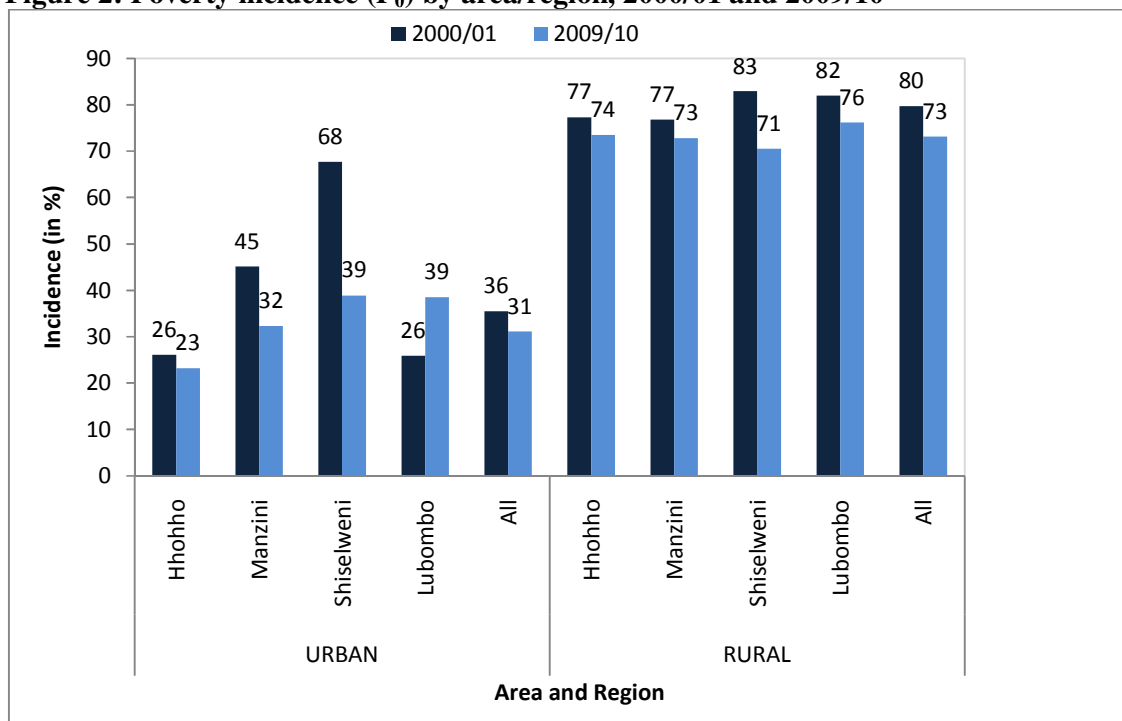


Source: Table A1.1

Extreme poverty better known as food poverty refers to a condition in which individuals are unable to meet their minimum daily nutritional requirements, as specified by the adult equivalence scale. Figure 3 shows that on the overall nearly 3 in 10 persons fall short of meeting their daily nutritional needs and that the situation remains the same as the beginning of the decade. Over the last decade, Lubombo experienced a significant increase in the proportion of persons who are food poor (i.e. an increase from 32 percent to 37 percent). On the other hand, Shiselweni realised a real decline (11 percentage points) in the proportion of persons who are food poor.

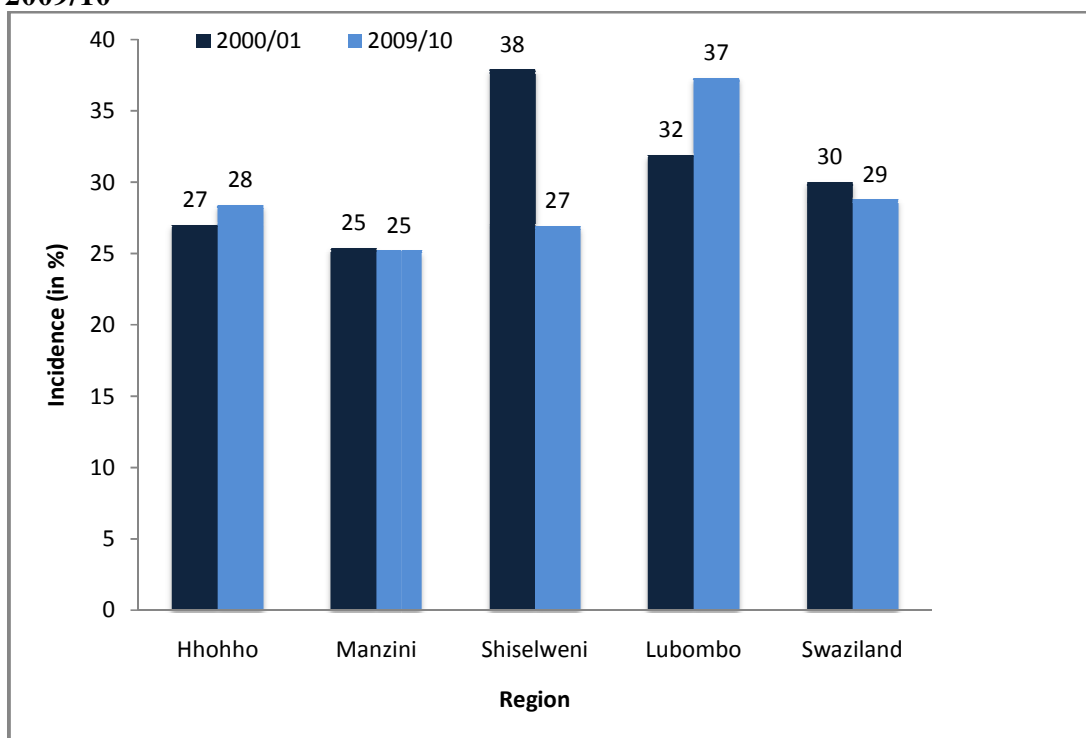
It is worth pointing out that 1 in 2 persons who are poor in Swaziland is also food poor.

Figure 2: Poverty incidence (P_0) by area/region, 2000/01 and 2009/10



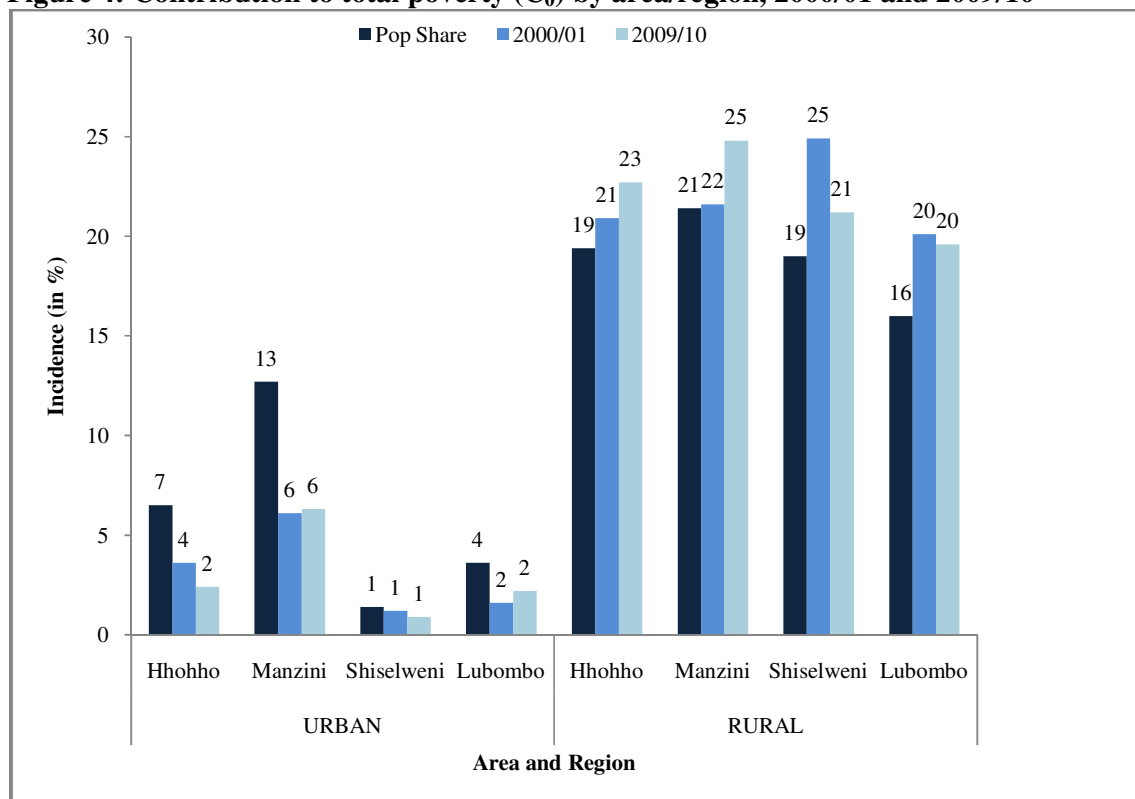
Source: Table A1.3

Figure 3: Extreme Poverty incidence (Food Poverty) (P_0) by region, 2000/01 and 2009/10



Source: Table A1.2

Figure 4: Contribution to total poverty (C_0) by area/region, 2000/01 and 2009/10



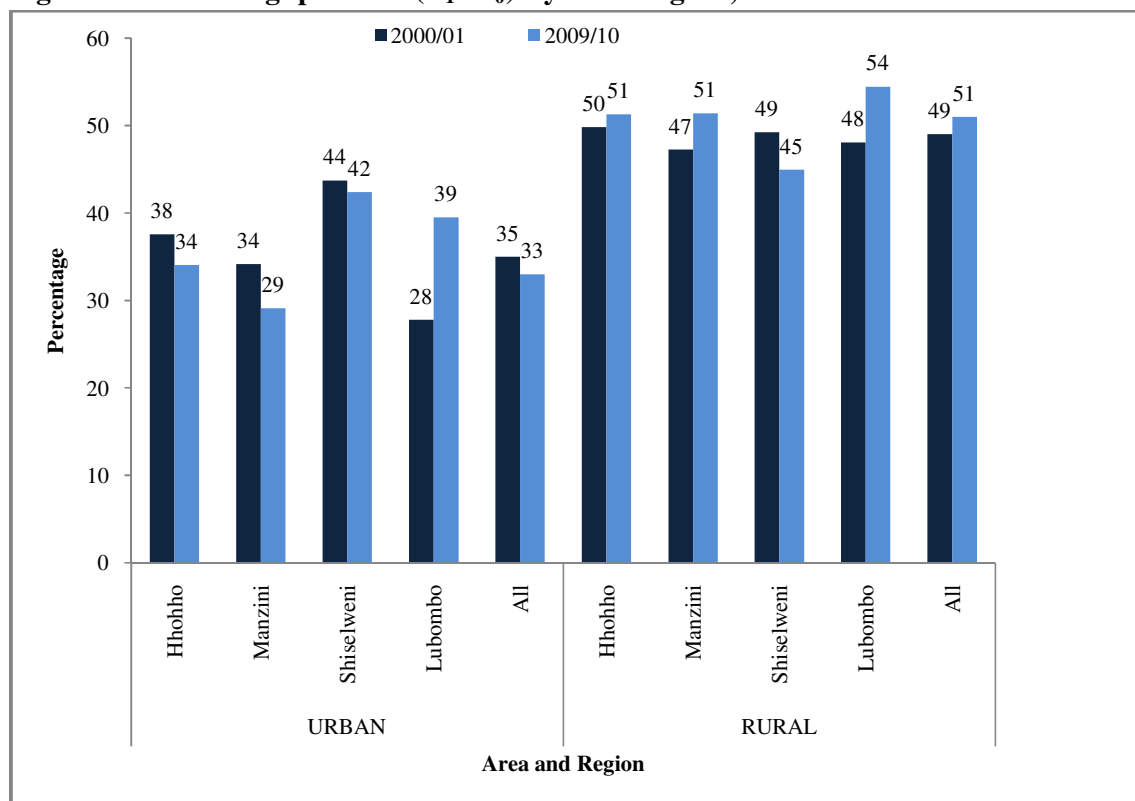
Source: Table A1.3

Figure 2 shows that poverty in Swaziland has remained a disproportionately rural phenomenon since poverty headcount was estimated at 73 percent in rural areas in 2010 while at only 31 percent in urban areas. Given that difference in poverty headcount between urban and rural areas and that around 75 percent of the Swazi population lives in rural areas, it is not surprising that 89 percent of poor individuals are living in rural areas (Figure 4). Poverty in Swaziland is essentially a rural phenomenon.

The depth of poverty

The information considered so far only concerns the numbers classified as poor, without considering the extent of poverty. The income gap ratio, the proportion by which the average consumption level of poor households falls below the poverty line, gives some indication of just how intense poverty is in Swaziland (Figure 5). The average consumption among poor individuals in urban Swaziland is about 33 percent below the poverty line in 2009/10 and 51 percent in rural areas. We have already seen that poverty is essentially a rural phenomenon in Swaziland. The income gap ratio figures further reveal that the poor individuals in rural areas are even poorer than the urban poor. The results indicate that although poverty has declined during the ten-year period, those that remain poor have not experienced any improvement in their standard of welfare.

Figure 5: Income gap ratios (P_1/P_0) by area/region, 2000/01 and 2009/10



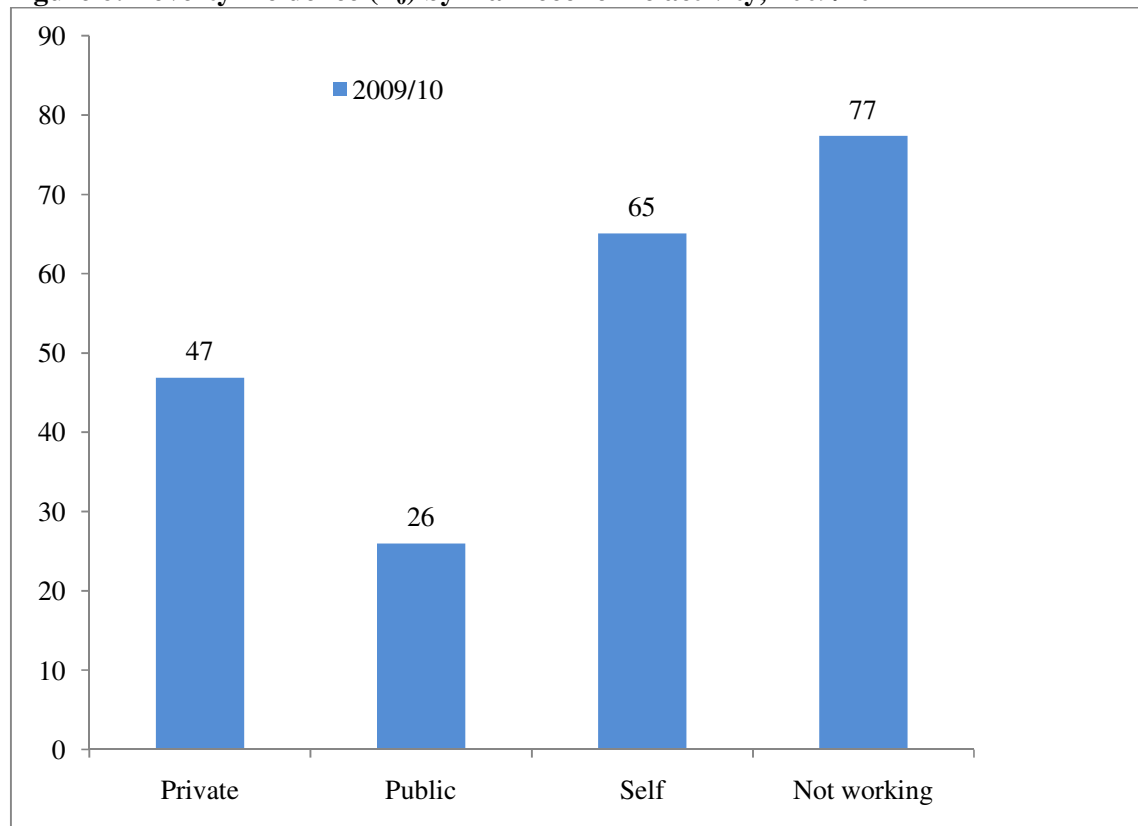
Source: Table A1.3

Poverty by main economic activity

The work status of head of household is important in shaping the social and economic welfare of other household members. Figure 6 shows that the poverty incidence is highest among households where the head of household is unemployed (77 percent). The same is also true of households where the head is self employed (65 percent). This may indicate that conditions around self employment do not fully provide a conducive environment for this activity to be economically viable. Hence, returns derived from this activity are not sustaining for the majority of households. The 2000/01 questionnaire did not permit analysis of poverty by main economic activity.

The incidence of poverty is also significant among heads of households who work in the private sector.

Figure 6: Poverty incidence (P_0) by main economic activity, 2009/10

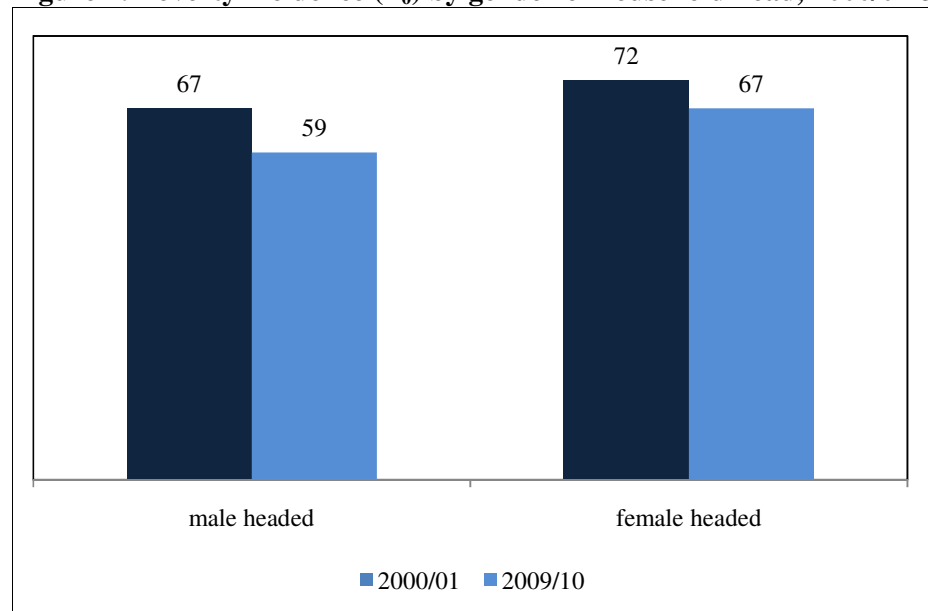


Source: Table A1.4

Poverty by sex of household head

A final set of tabulations is constructed to examine the poverty level according to the sex of household head. Figure 7 shows that male-headed households are on average less poorer than female-headed households. Furthermore, the male-headed households seem to have benefitted a bit more from the poverty decline during the 2000's.

Figure 7: Poverty incidence (P_0) by gender of household head, 2000/01 & 2009/10



Source: Table A1.5

Robustness of observed poverty trends

The results so far give mixed indications of trends in poverty in Swaziland. A significant decline in poverty has been observed if one considers the main poverty line, but the decline is much smaller if the extreme poverty line (actually the food poverty line) is used. It seems that the choice of poverty line is critical in determining the outcomes described above.

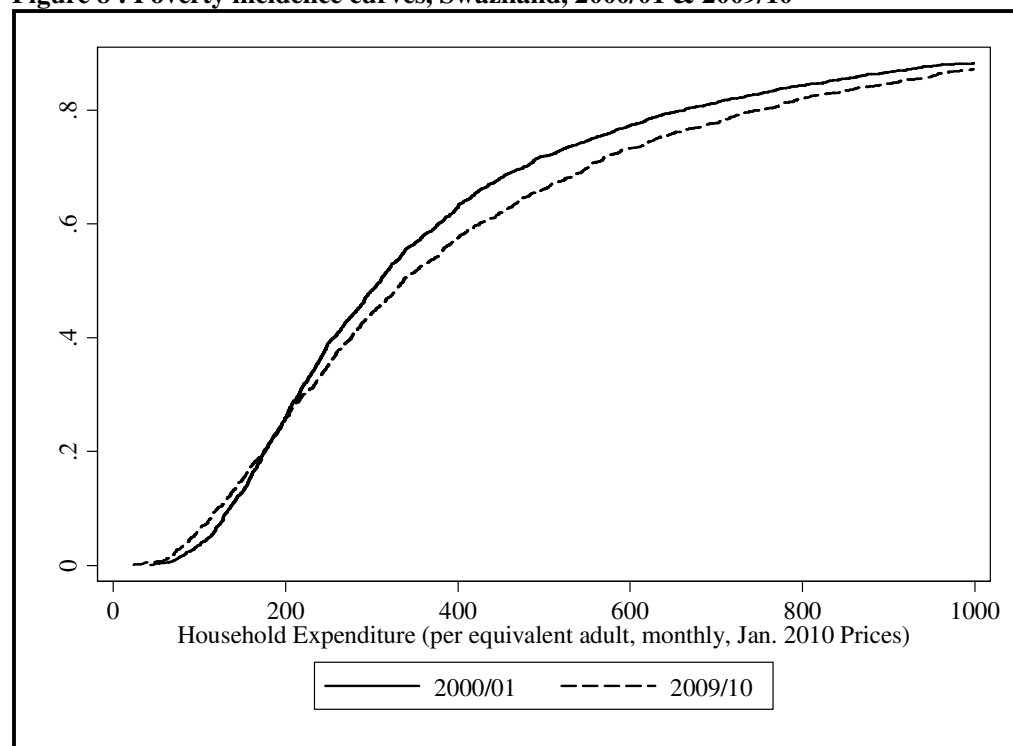
The issue of sensitivity to the poverty line has already been considered to some extent by the analysis of extreme poverty above. A more sophisticated and thorough assessment of sensitivity to the poverty line would consider a wide range of possible lines. This can be examined using poverty incidence curves.

This is a means of assessing the robustness of poverty comparisons, which may be comparisons between different groups at a point in time or comparisons of the same group at two or more points in time. The poverty incidence curve plots the proportion of the population at different values of y , where y refers to some measure of the standard of living. If such a curve is drawn for two different groups, say group A and group B, then if one curve (say that for A) lies always below that of the other group (B say), then the property of first order dominance is said to hold. This means that poverty is unambiguously lower for group A than for group B, irrespective of where the poverty line is drawn.

Often the curves will cross, in which case outcomes of poverty comparisons would depend on where the poverty line is drawn relative to the point(s) where the curves cross. In this case, setting the poverty line below a crossing point may give the opposite conclusion about poverty trends to setting it above the crossing point. In these circumstances poverty comparisons may not be robust.

Applying this at the national level (Figure 8) shows indeed that the curves crossed slightly below 200 Emalangeni per equivalent adult. Therefore any poverty lines higher (lower) than the crossing point would yield a decline (increase) in poverty. That result confirmed the previous statement that using the extreme poverty line (at 215 Emalangeni) was yielding a very small poverty decline during the 2000s. If that extreme poverty line had been at, say, 180 Emalangeni poverty we would have seen an increase in poverty. Applying the same procedure at the area level (figures not presented here) shows the same pattern in rural area but a first order dominance in the case of urban areas. In summary, the choice of poverty line does affect the conclusions of this analysis.

Figure 8 : Poverty incidence curves, Swaziland, 2000/01 & 2009/10



Source: Computed from the SHIES, 2000/2001 and 2009/2010

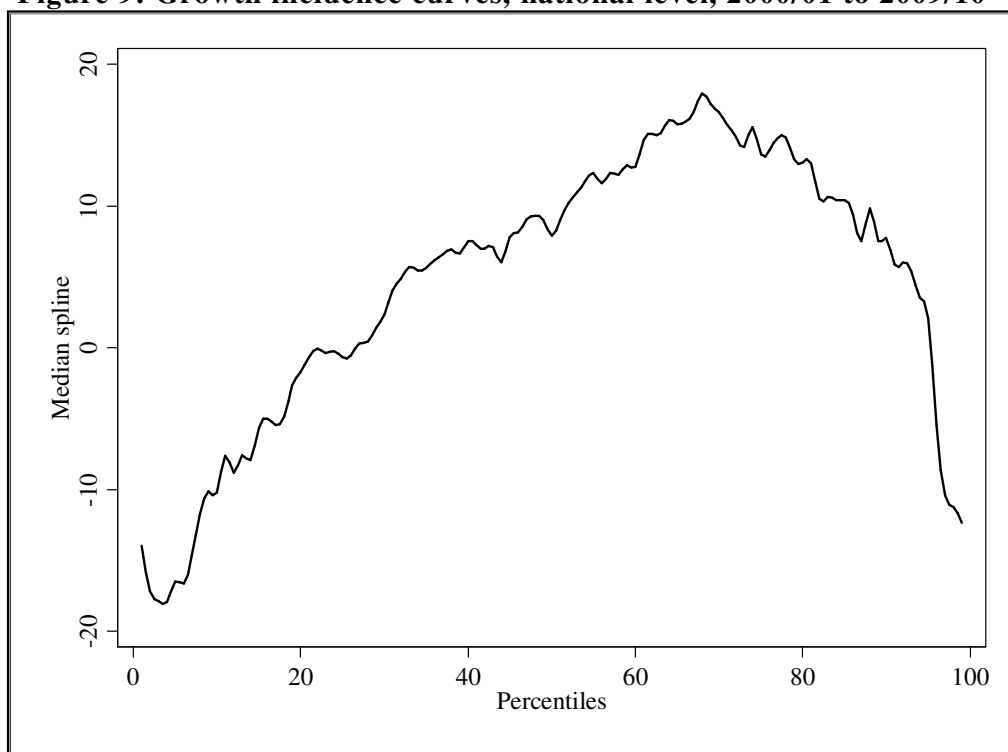
Has Swaziland had pro-poor growth?

The question of whether economic growth is pro-poor or not is an interesting one and has sparked debate in the last few years. The concern is whether the poorest households have really benefitted from the economic growth enjoyed by Swaziland over the last ten years.

The use of growth incidence curve is one approach to answer this question (Ravallion 2003). These curves graph the growth rates in consumption at various points of the distribution of consumption, starting from the poorest on the left of the horizontal axis to the richest on the right. The growth incidence curve shows the percentage increase in consumption obtained for various groups of the population according to their consumption level. Clearly, as shown in

Figure 9, the growth rates in consumption have been significantly higher in the middle part of the population while the bottom 30 percent of the distribution experienced a reduction of income and hence a rise in poverty. Has economic growth been pro-poor in Swaziland during the last 10 years? The economic literature does not provide a clear cut explanation on what should be defined as pro-poor growth. On the one hand, some researchers advance that economic growth should be faster for the poor than the richer households to classify it as pro-poor growth (to result in a decline in inequality) while on the other hand some economists are pleased with any growth that raises the welfare level of all households as measured by percentiles. Taking any of the two definitions, Swaziland has clearly not experienced pro-poor growth in the 2000's.

Figure 9: Growth incidence curves, national level, 2000/01 to 2009/10



Source: Computed from the SHIES, 2000/01 and 2009/10

IV. HOUSEHOLD ASSETS

Poverty is a multi-dimensional phenomenon and consumption-based measures need to be supplemented by other welfare indicators. This section of the report measures poverty of households based on ownership of key consumer durable goods. To complement consumption-based measures, a measure that captures changes in household ownership of such assets can be considered as an indicator of changing living standards of households⁴. It can be argued that this measure depends on many factors outside the control of households, such as whether or not they have access to electricity and other location and cultural attributes that shape lifestyles but cannot be changed easily by households. Nonetheless, this measure can still be thought of as a good proxy indicator of the standard of living.

Information on the proportion of households owning different consumer durable goods in 2000/01 and 2009/10 is presented in Figures 10 up to 12 for Swaziland as a whole and for urban and rural areas respectively. The data presented in the figures refer to ownership of at least one of such items, so it does not directly portray the total number of the items that are in the possession of households in the survey periods. The proportion of households owning about half of these assets shows reasonable increases over the ten year period. This is particularly the case for items like refrigerators, television sets, cars and computers, with the most increase occurring in the possession of mobile phones. Worth noting is that proportionately more rural households than urban, experienced most of the increase in the ownership of cars, refrigerators and television sets. On the other hand, the results indicate that the importance of a grinder, a typical rural asset used for processing maize cereal into mealie-meal, is slowly diminishing. Households may be opting for the use of communal grinding mills.

More information can be provided by examining specific durable goods in greater detail. Figures 13, 14 and 15 examine ownership of three such goods, one being a useful productive asset for the households (refrigerator) while the television set is more for pleasure and information and the mobile phone serves as an effective communication device for both personal and commercial use. The figures present the changes in ownership of these assets for different quintile⁵ groups of households defined according to their standards of living.

⁴ Note that the tables presented are based on changes in the proportion of households in a given group owning an asset, rather than acquisition of assets by individual households (which is harder to measure from the questionnaire).

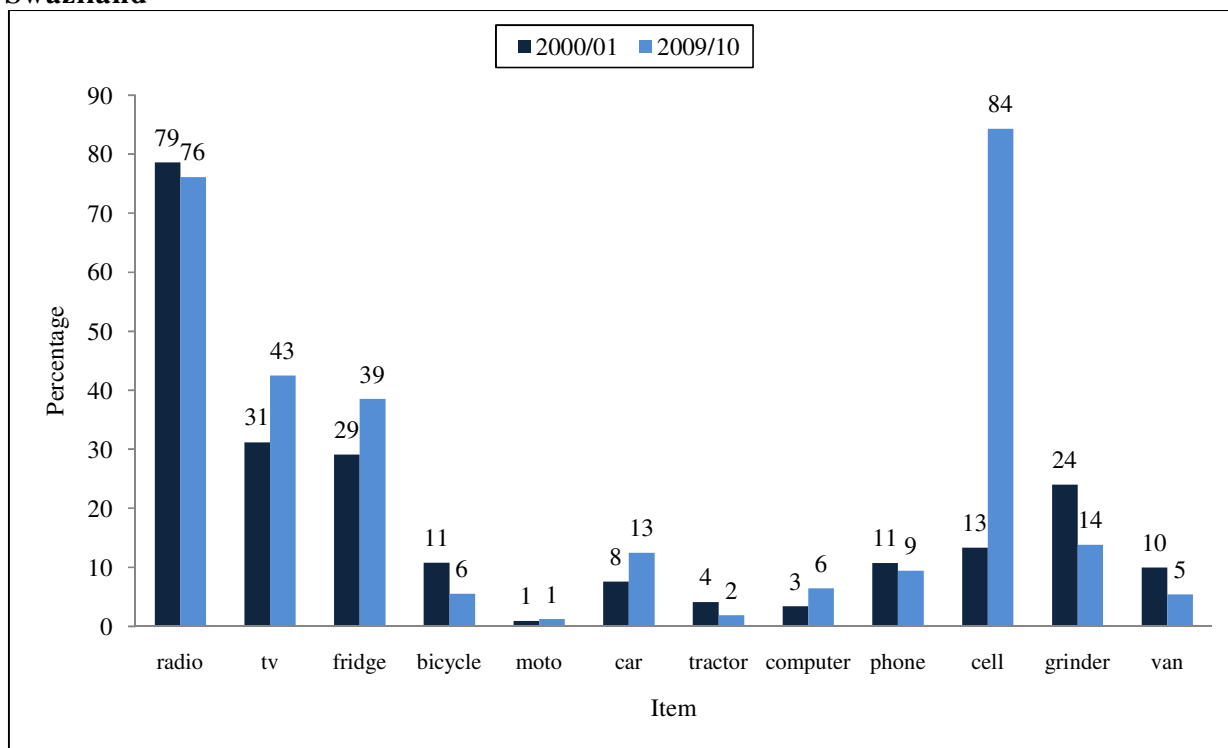
⁵ For each of these non-monetary measures, it is valuable to look at the relationship between the variations in living conditions they reveal and those of the consumption-based standard of living measure. This is considered here based on a division of households into quintile groups reflecting their standard of living according to the consumption-based measure. The lowest quintile group represents the poorest 20% of individuals in the population, the second quintile the next poorest 20% and so on until the highest quintile which contains the richest 20%. These groups are defined

In general, the results for each of the specific items namely refrigerator, television and mobile phone indicate a strong correlation between asset ownership and a household's standard of living, i.e. the rate of asset ownership increases as the standard of living quintile also improves. Figure 13 shows that proportionately more urban households than rural, own a television set, even though the opposite is true for urban households in the lowest wealth quintile, who when compared with the same group of households ten years ago, it is apparent that they are now worse off, confirming the view that poverty is not static, that some households move in and out poverty from time to time. Figure 14 (refrigerator ownership) portrays a similar picture which may indicate that households owning a television set are also more likely to own a refrigerator. It is worth noting that rural households experienced more significant gains in ownership of key electrical durable goods than urban households which may be partly attributable to electricity being made more available to rural communities.

Figure 15 shows dramatic increases in cellular phone ownership for all quintile groups in the ten year period. While it is true that proportionally more urban households own a cellular phone than rural, it is also obvious that this gadget is important across all quintile groups. The large increases in cellular phone ownership may be resulting from improved network coverage on the part of the service provider.

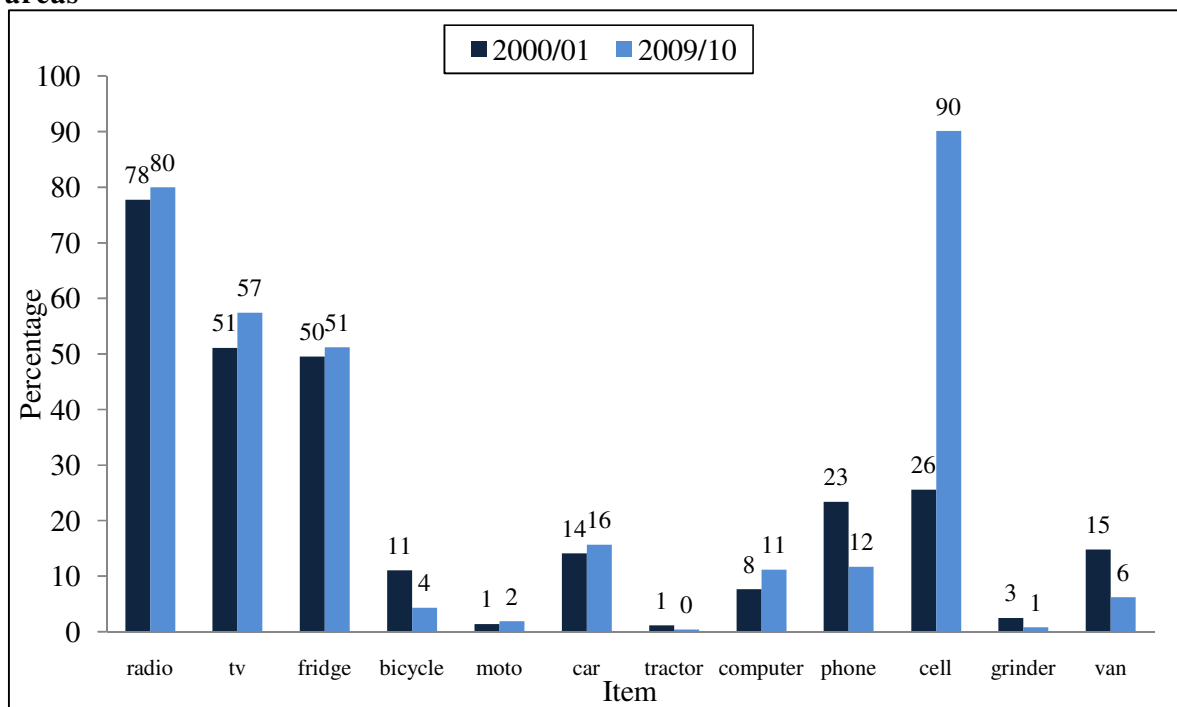
at a national level throughout; whenever results are presented by quintile group for urban and rural areas separately, the quintile groups are still those defined at the national level. Therefore, for example, those in urban areas reported as being in the fifth quintile have comparable living standards to those in the fifth quintile in rural areas.

Figure 10: Percentage of households owning different household assets: Swaziland



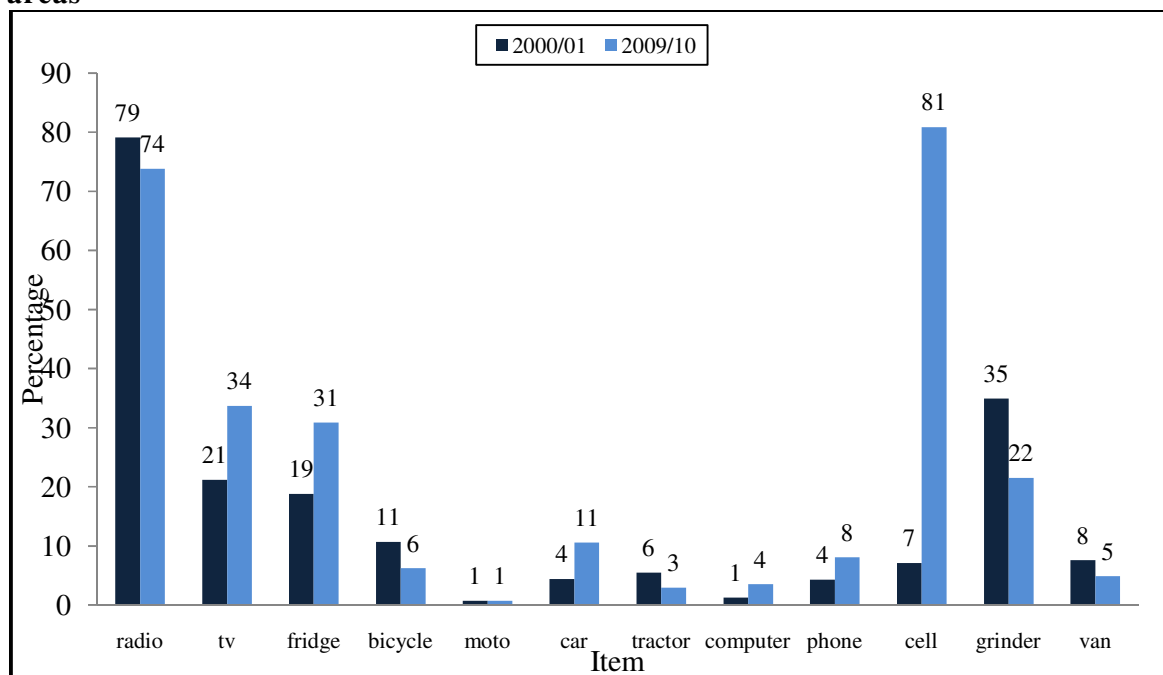
Source: Table A2.1

Figure 11: Percentage of households owning different household assets: Urban areas



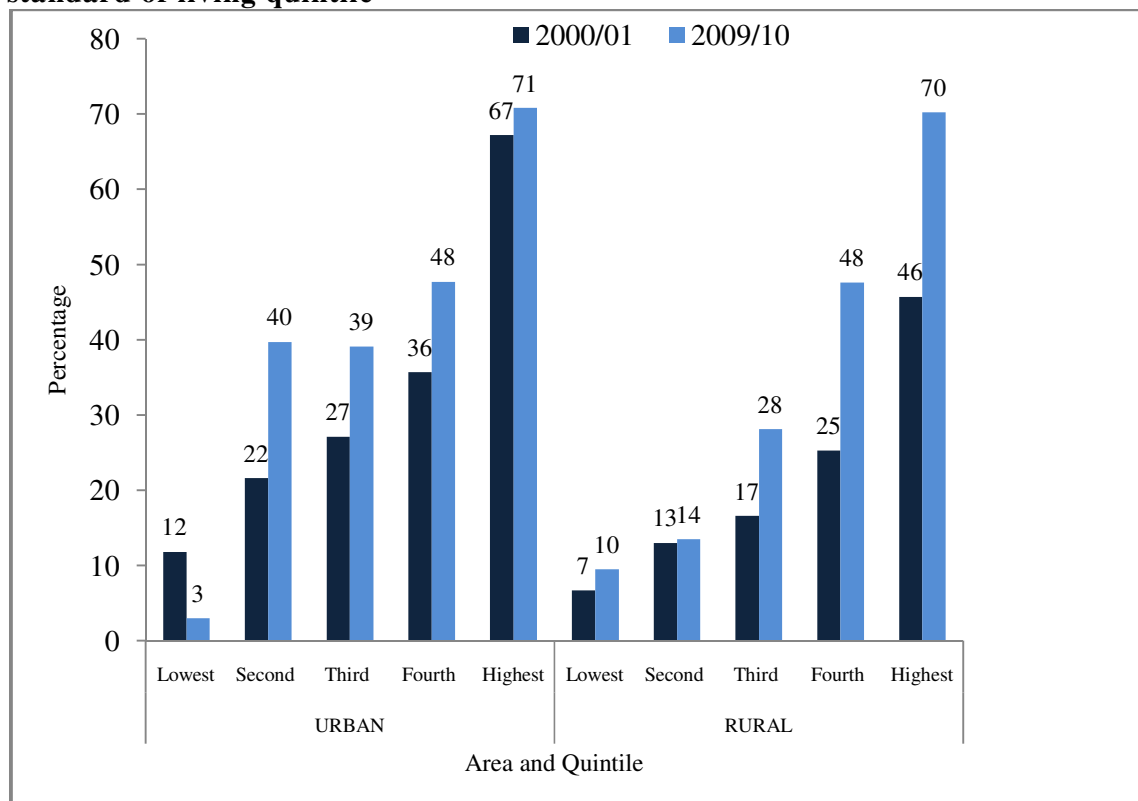
Source: Table A2.2

Figure 12: Percentage of households owning different household assets: rural areas



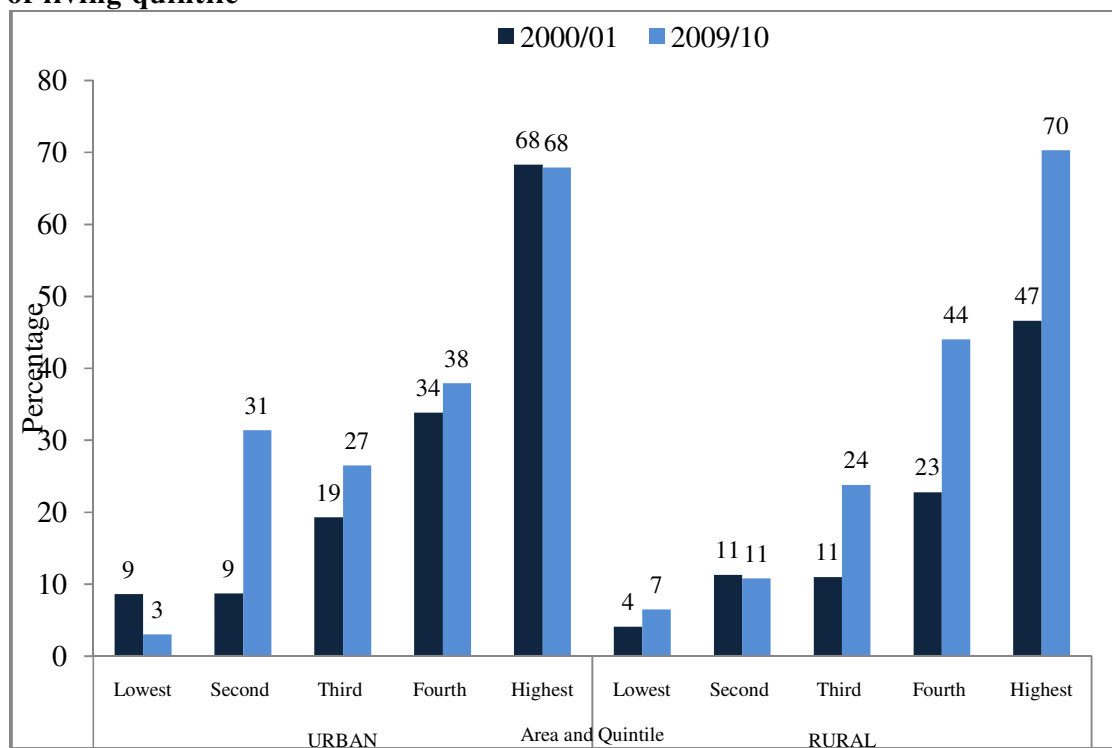
Source: Table A2.3

Figure 13: Percentage of households owning a television set by area and standard of living quintile



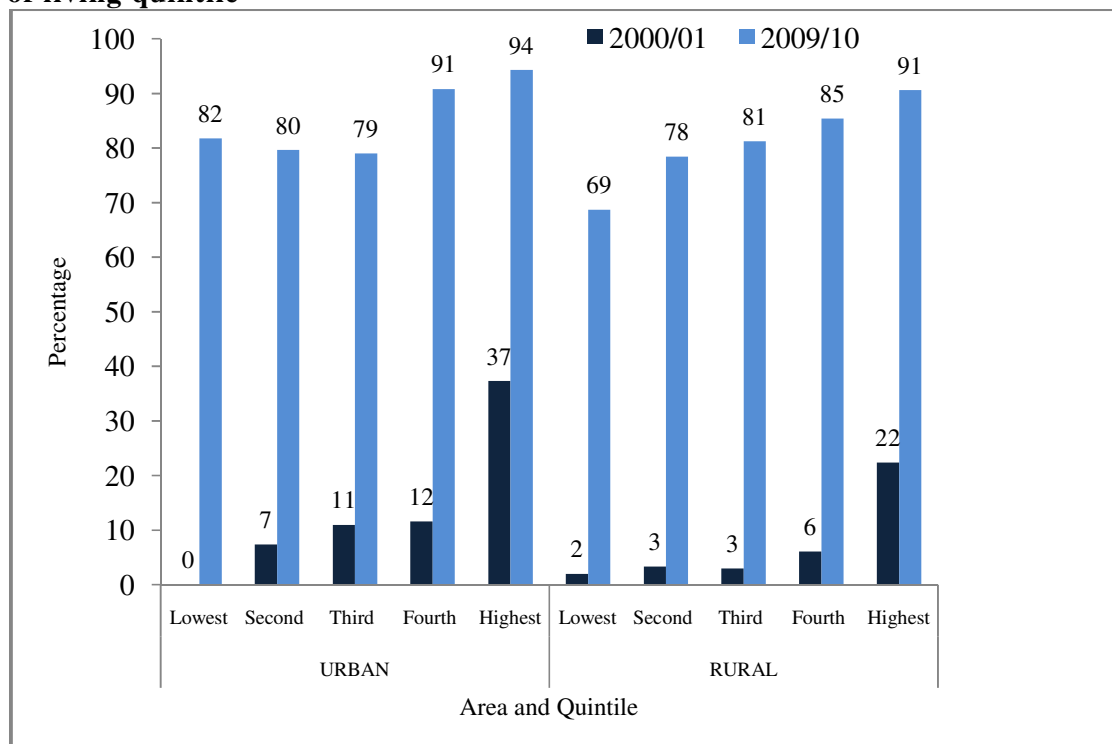
Source: Tables A2.5 and A2.6

Figure 14: Percentage of households owning a refrigerator by area and standard of living quintile



Source: Tables A2.5 and A2.6

Figure 15: Percentage of households owning a cell phone by area and standard of living quintile



Source: Tables A2.5 and A2.6

V. ACCESS TO SERVICES

Infrastructural development in communities such as providing potable water and electricity may not be directly influenced by households per se but by other players such as the state itself. This dimension is nevertheless useful in analyzing the spread of development programmes and their impact in poverty alleviation. It is also important to study the extent to which such services get utilized and identifying the beneficiaries of such initiatives.

According to the definition used in the survey, 'safe water' comprises of water drawn from: 'piped water into the building', 'piped water but accessible from outside the building', 'borehole', 'protected well' and 'protected spring'. Protection here implies that some protective wall has been erected and that animals such as cows and dogs cannot have access to that well or spring. 'Unsafe water' is water drawn from an unprotected well, unprotected spring and water obtained from the surface. It has to be noted that a household survey like this one is limited in scope and is thus unable to capture information on populations exposed to the use contaminated water and vice versa. Respondents were only asked to state the source where their households draw water from.

In general, urban households have greater access to safe water than rural households. Figure 17 shows that nearly all urban households (9 in 10) regardless of region of location have access to safe water compared with only 6 in 10 of rural households. However, access to safe water by rural households has improved tremendously over the ten year period while among urban households most of the gains have been experienced by households in urban Shiselweni. Looking at the results by the standard of living quintile (Figure 18), it is again evident that improvements in access to safe water among rural households occurred in all the quintile groups. Urban households also experienced significant improvements in access to safe water.

Contrary to achievements made in access to safe water over the past decade, there has been a drop in the standard of sanitation in Swaziland's two most populous regions namely Hhohho and Manzini. The acceptable means of excreta disposal comprise of the flush toilet and the ventilated improved pit privy (VIP) as these meet minimum health standards, thus regarded hygienically safe. Looking at sanitation over the ten year period, Figure 19 shows that the standard has worsened over time, particularly in the urban areas of Manzini and Hhohho regions. This may possibly be a result of growing urban population occurring in slum areas where proper means of excreta disposal are not available.

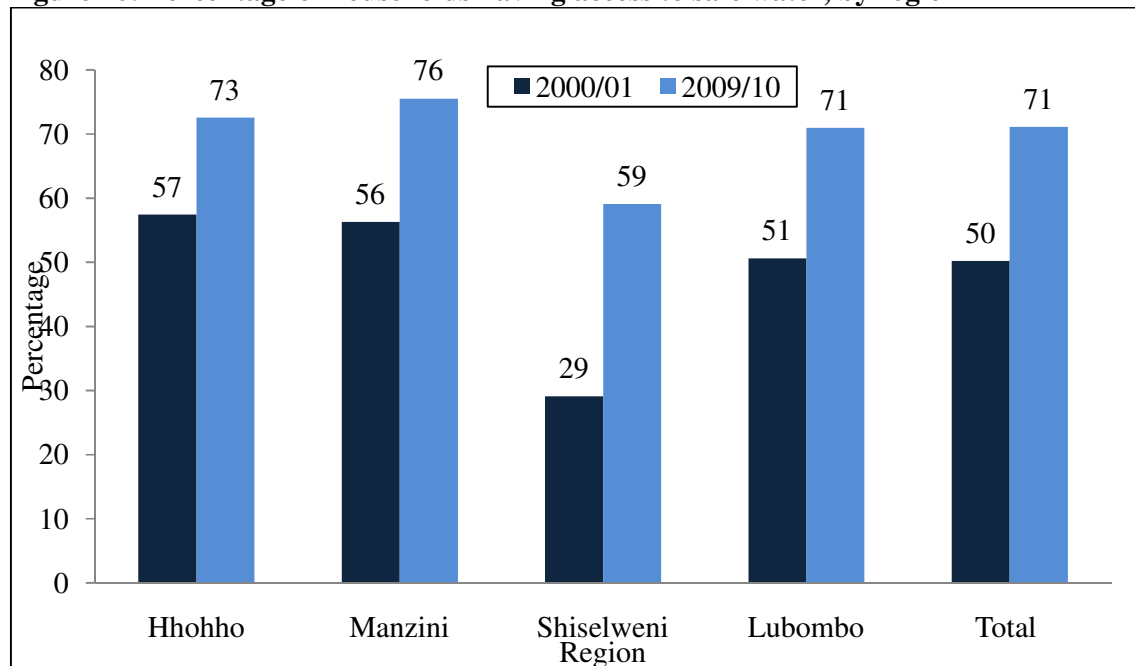
Sanitation conditions improved significantly in the Shiselweni region particularly in urban areas where the proportion of households using the flush toilet more than doubled over the ten year period. In general urban households have better access to

proper sanitation means than rural. Sanitation conditions have remained unchanged in rural areas over the ten year period.

Figure 21 shows that two thirds of urban households have access to electricity compared with only one third among rural households. Slightly less than half (46%) of urban households in the Shiselweni region have access to electricity. There has been a significant improvement in access to electricity especially among rural households. Looking at access to electricity by the standard of living quintile and by area, Figure 22 shows that access improves as the standard of living quintiles also improve and that the second and third quintile groups in urban areas experienced the most gains while in rural areas the most gains occurred among the fourth and fifth quintile groups.

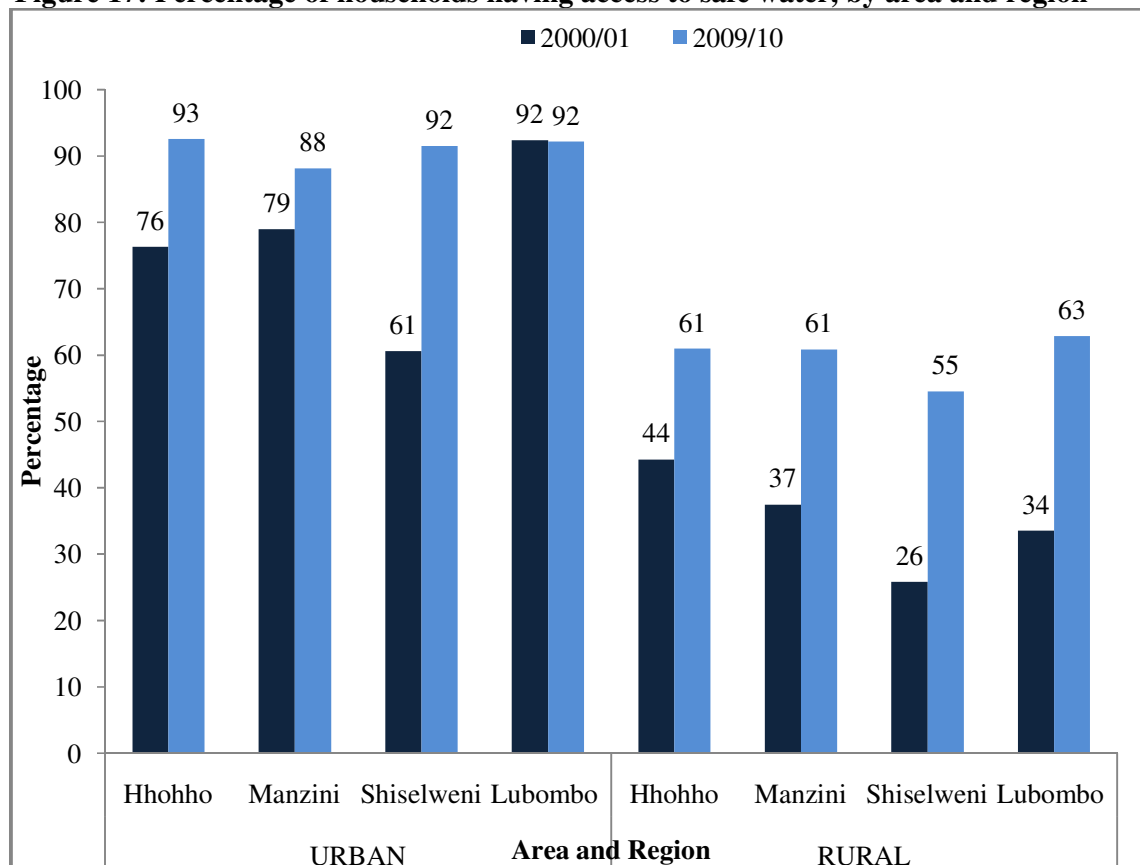
Electricity and gas are the two most efficient types of fuel that households use to meet their domestic energy requirements. The survey asked on the type of fuel that households mainly use for cooking. Figures 23 and 24 show that the use of electricity and gas occurs largely in urban areas. Nearly 8 in 10 households in urban areas use electricity or gas for cooking compared with only 2 in 10 among rural households. It has to be noted that there is a gap in access to electricity and using it for cooking among rural households (about 10 percentage points). This may indicate that some rural households opt for other types of fuel for their cooking requirements. The results also indicate that fewer households in Shiselweni use electricity for cooking. Among urban quintile groups, electricity consumption for cooking purposes increases gradually as one moves from one group to the next, being highest at the fifth (and richest) quintile group. In rural areas the proportions of households who use electricity for cooking in the first four quintile groups is relatively small when compared with users in the highest quintile group. This reflects a widening gap among the most affluent group living in rural areas compared to the rest of the rural population.

Figure 16: Percentage of households having access to safe water, by region



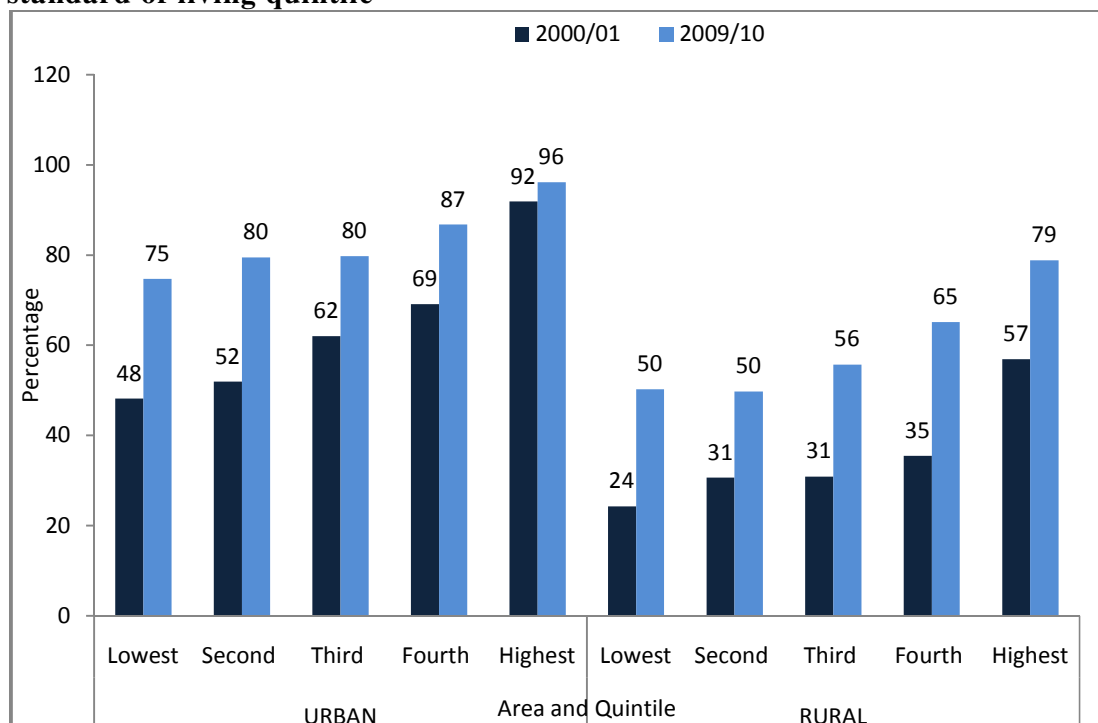
Source: Table A3.1

Figure 17: Percentage of households having access to safe water, by area and region



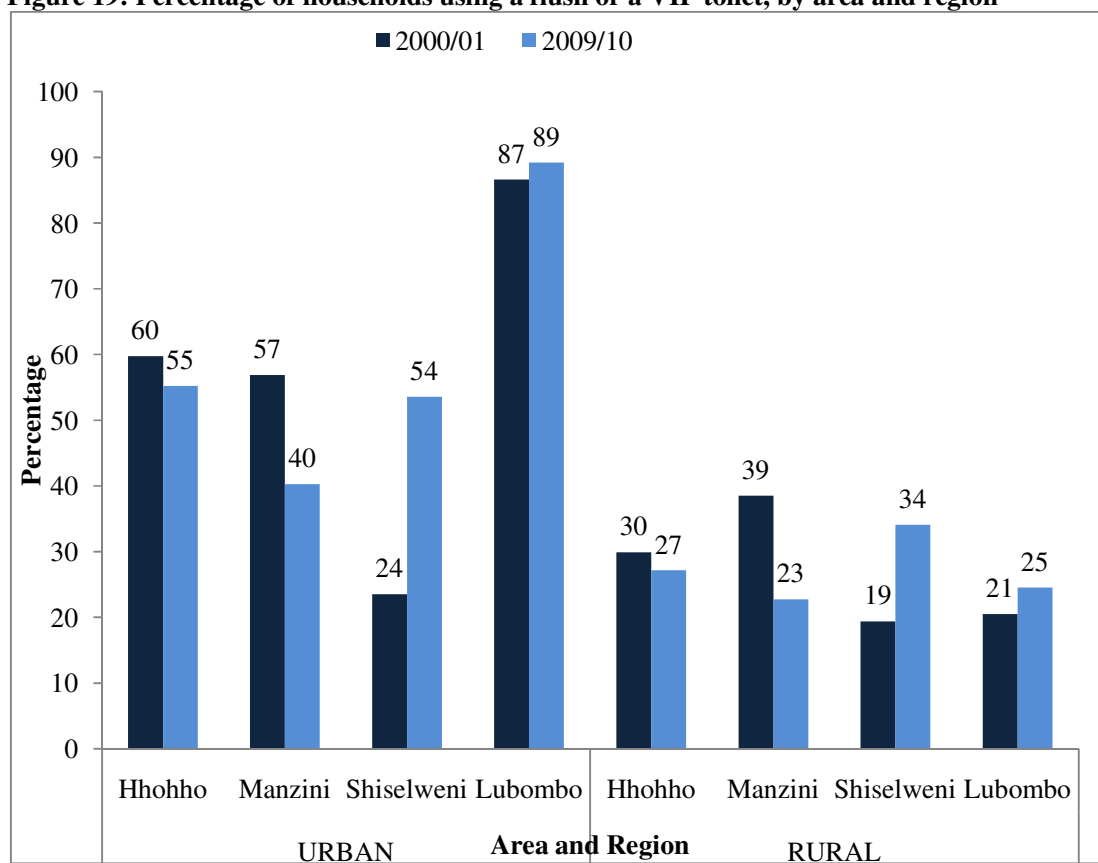
Source: Tables A3.2 and A3.3

Figure 18: Percentage of households having access to safe water, by area and standard of living quintile



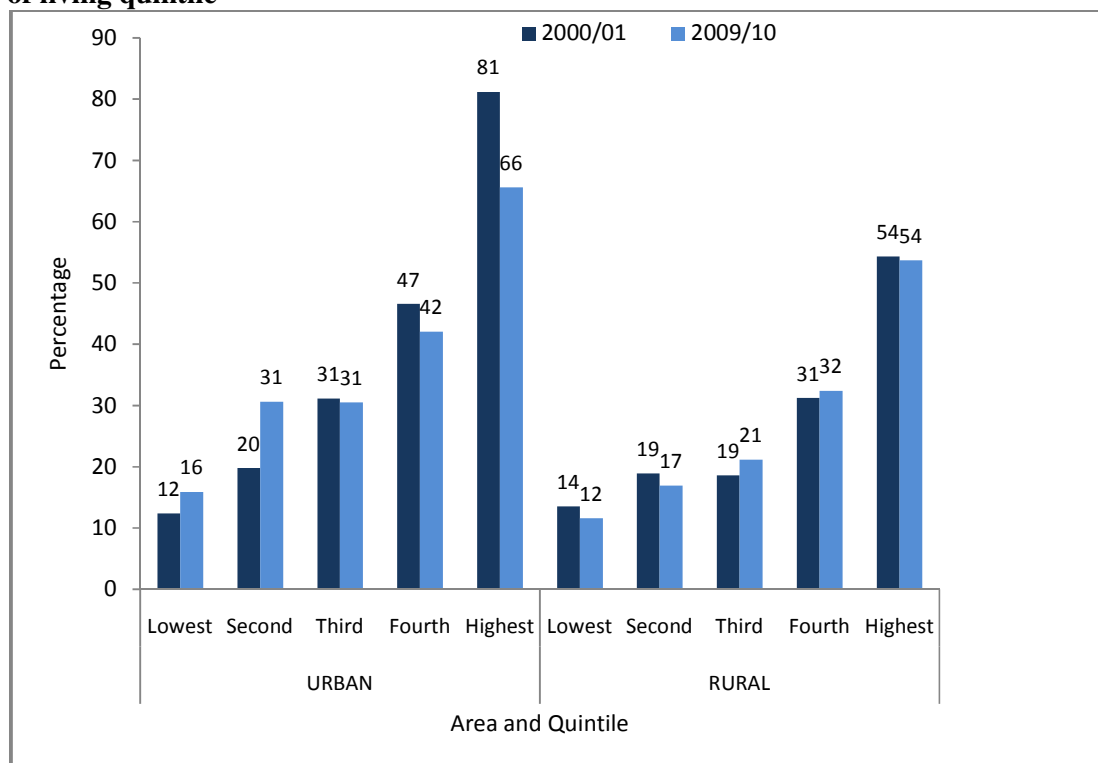
Source: Tables A3.5 and A3.6

Figure 19: Percentage of households using a flush or a VIP toilet, by area and region



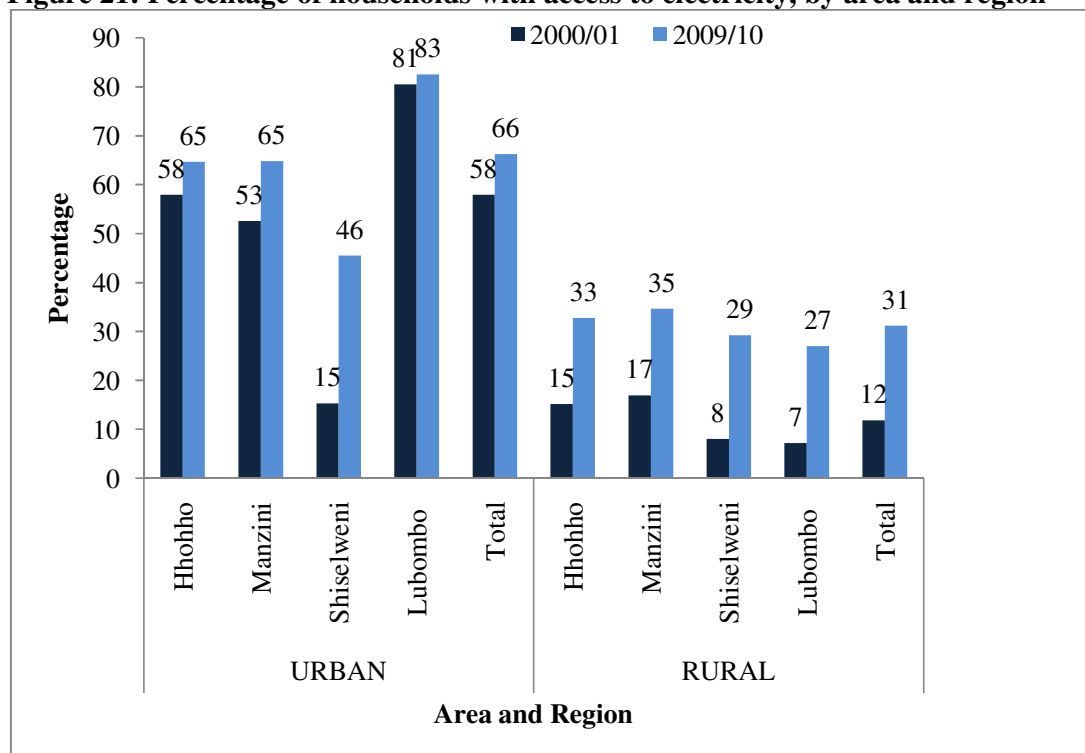
Source: Tables A3.8 and A3.9

Figure 20: Percentage of households using a flush or a VIP toilet, by area and standard of living quintile



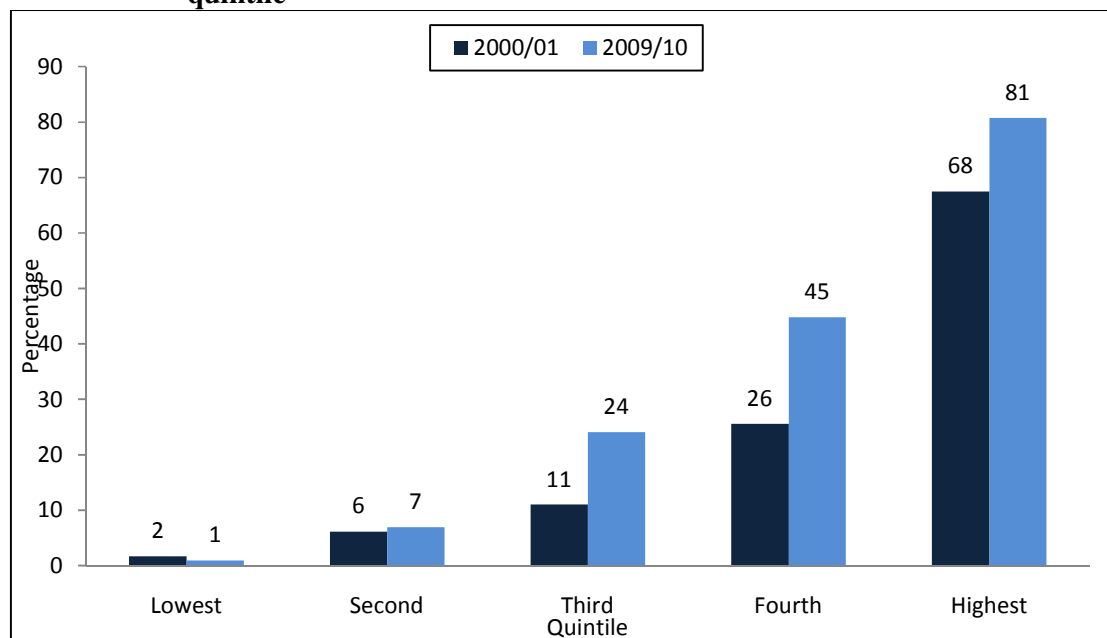
Source: Tables A3.11 and A3.12

Figure 21: Percentage of households with access to electricity, by area and region



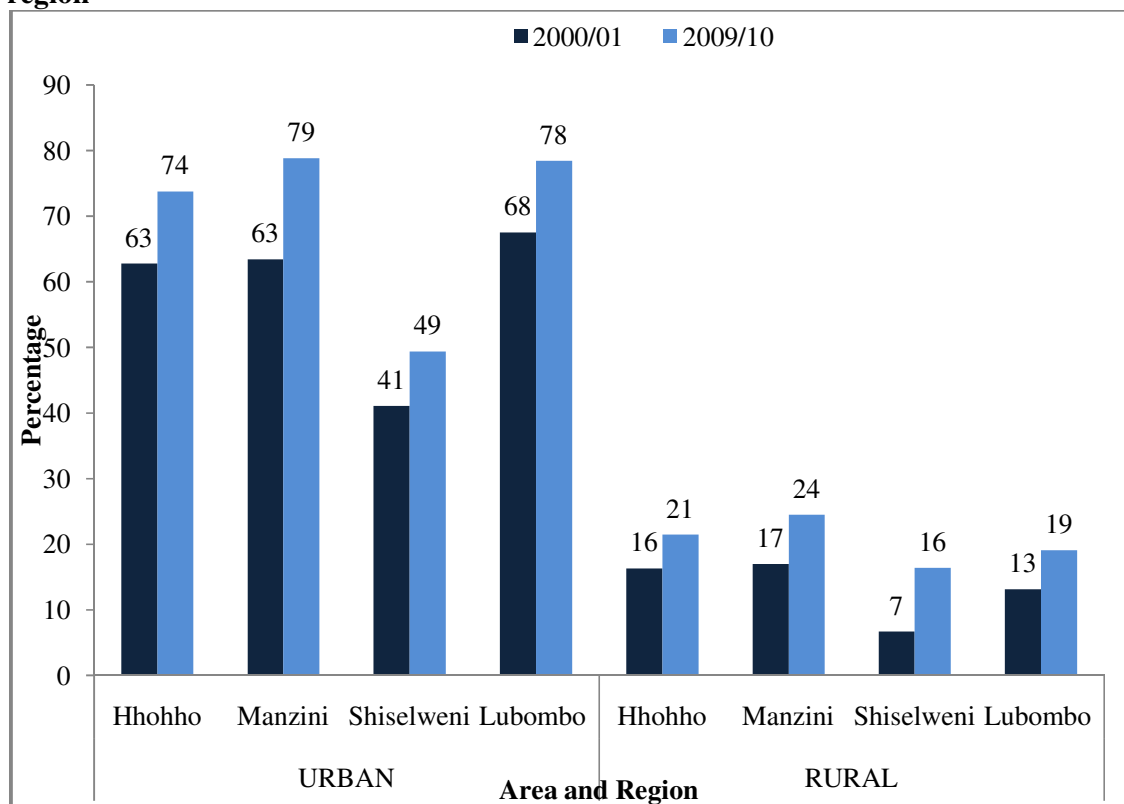
Source: Table A3.13

Figure 22: Percentage of households with access to electricity, by standard of living quintile



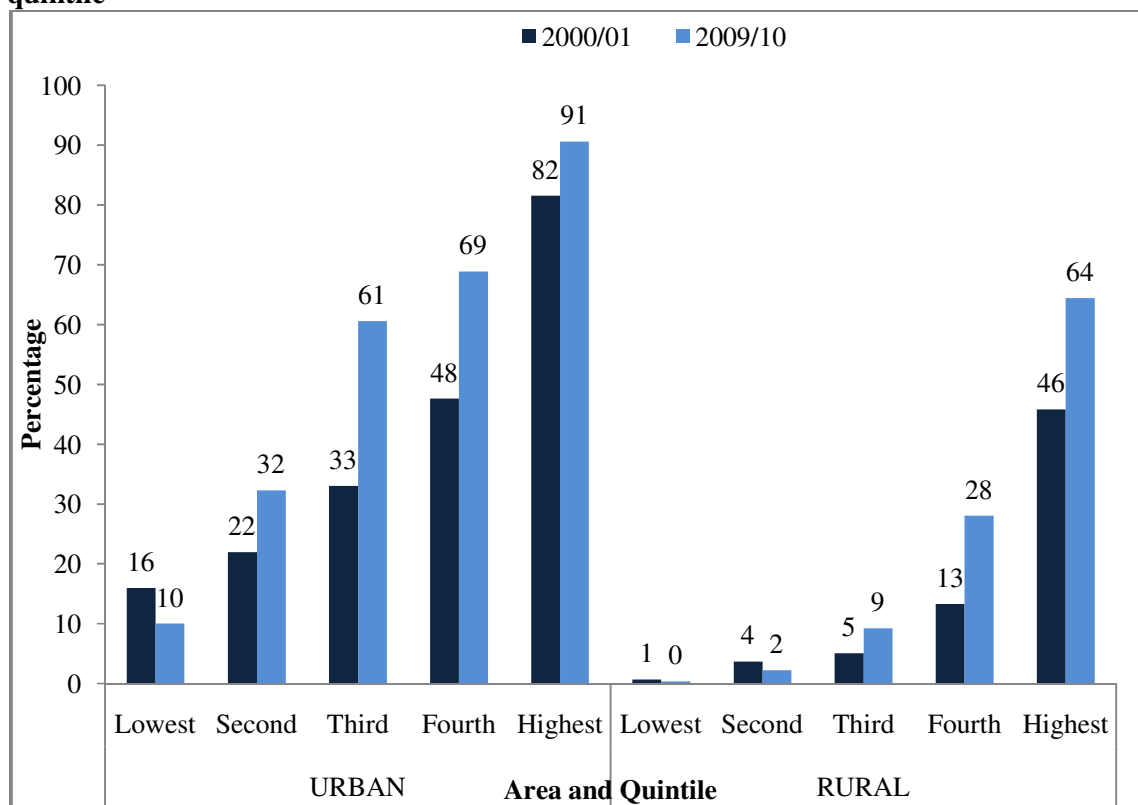
Source: Table A3.14

Figure 23: Percentage of households using electricity or gas for cooking, by area and region



Source: Tables A3.16 and A3.17

Figure 24: Percentage of households using electricity or gas for cooking, by area and quintile



Source: Tables A3.19 and A3.20

VI. HUMAN DEVELOPMENT

Along with the access to services which were examined in the previous section, education and health are also indicators labelled “basic needs” and should be seen as *complementary* to the consumption-based welfare indicator. They have some of the characteristics of public goods and are conceptually difficult to measure in monetary terms.

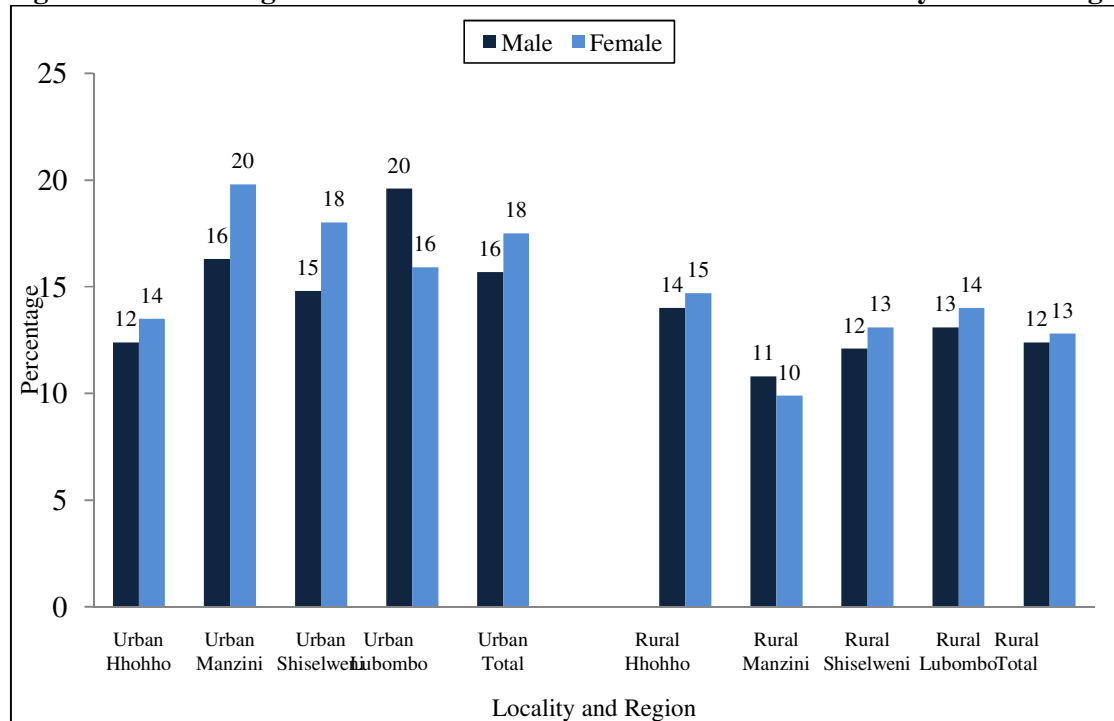
The health status of people determines their quality of life, level of productivity and longevity. Education on the other hand has been identified as the most important tool in providing people with the basic knowledge, skills and the competencies to improve their quality of life at all levels of development. Thus, the health and the education status of the people are directly linked to the general state of development of a country. It is, therefore, not surprising that health and education issues have featured prominently in the UN Human Development Index as well as in the Millennium Development Goals.

Health

This section presents information on the use of health facilities by members of households who were reported to have sought medical attention four weeks before the survey either from a clinic/hospital/private doctor/traditional healer or visited a pharmacy. These individuals were further asked to specify the type of health personnel consulted. The results in Figures 25 and 26 below are therefore based on the proportion of all those who consulted a health professional who in this case, could either be a nurse or a doctor. In general the results indicate that health professionals are rarely consulted as no more than 1 in 5 people sought medical attention of either a nurse or a doctor. Even though the differences are marginal, Figure 25 shows that people living in urban areas consult more than their rural counterparts. Female persons living in urban Manzini and male persons living in urban Lubombo are most likely to consult a professional than other people living in other parts of Swaziland (Figure 25). It should be noted that the 2000/01 questionnaire did not permit analysis on medical consultation.

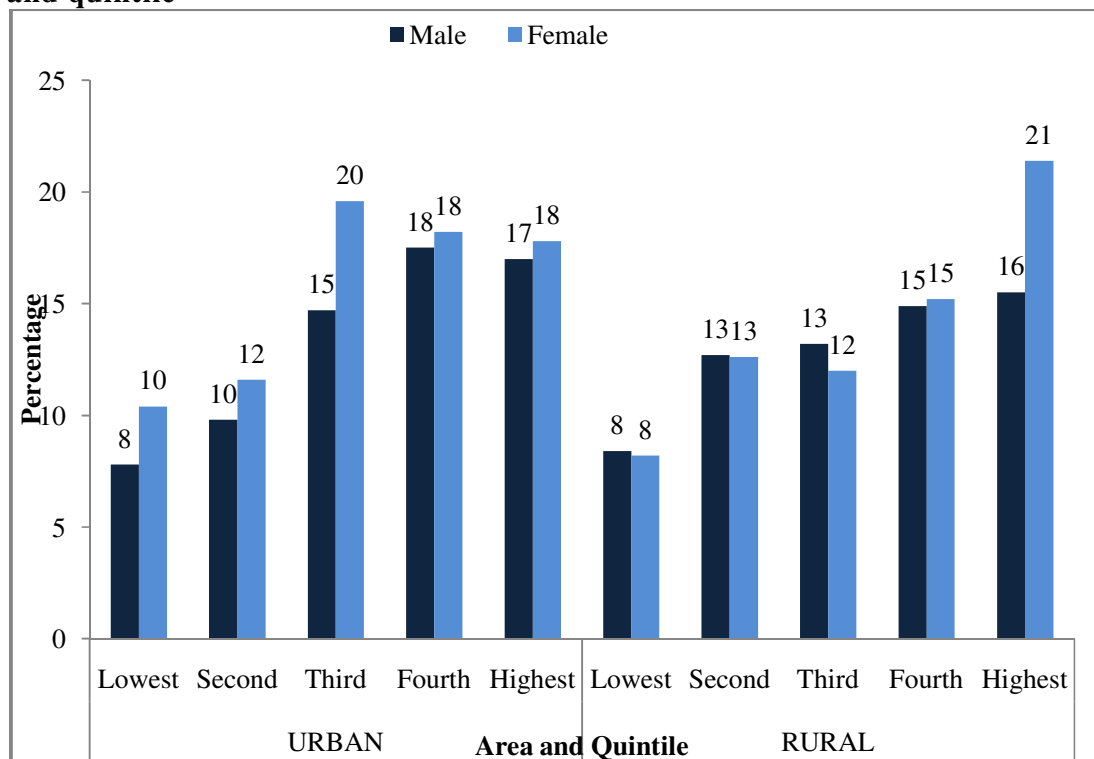
Differences in consultation rates for the second, third and fourth quintile groups among rural folks seem marginal (Figure 26). Rural females in the highest quintile group are nearly three times as likely to consult a health professional than rural females in the first quintile group. Among urban populations, consultation rates by those in the first and second quintile groups are nearly the same and differences only begin to show in the third quintile group.

Figure 25: Percentage of individuals who consulted a medical worker by area and region



Source: Table A4.1

Figure 26: Percentage of individuals who consulted a medical worker by area and quintile



Source: Table A4.2

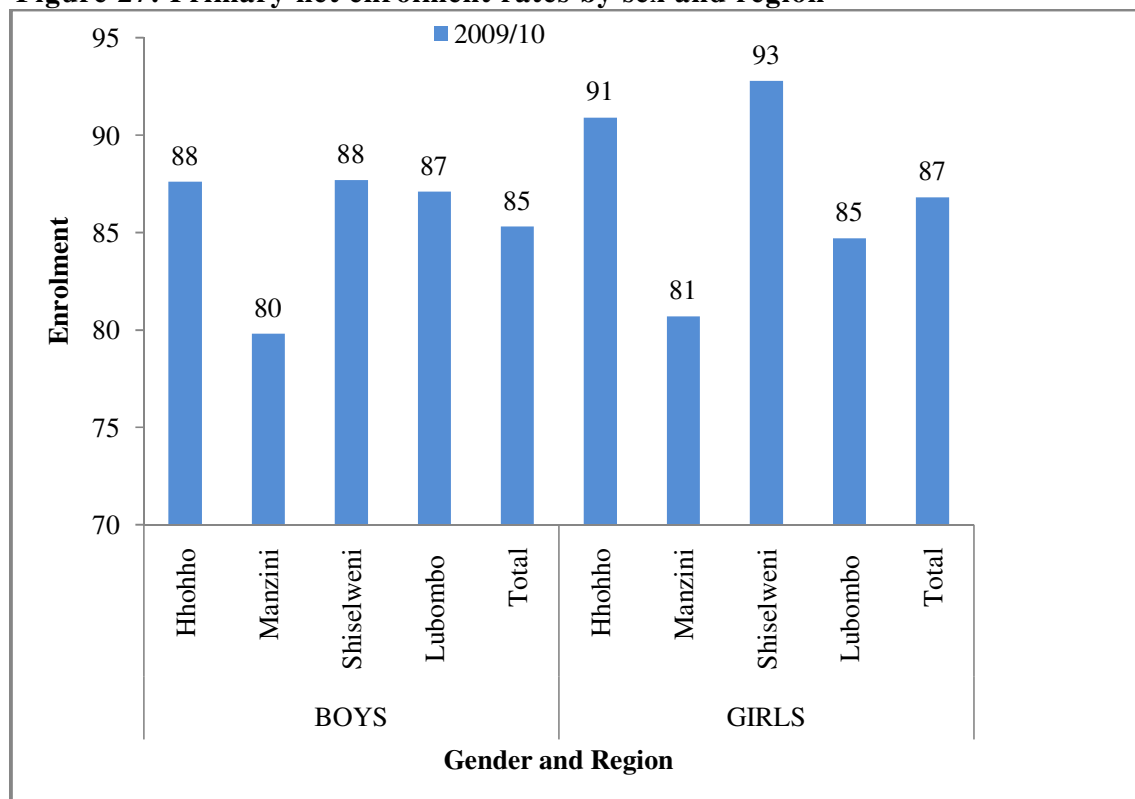
Education

There are a number of indicators which could be used to measure the quality of education in relation to the standard of living of households. It is rather difficult to examine in detail the impact of changes in education policies in a short term, especially how changes in quality education affect poverty. This section focuses on school attendance and school enrolment at two levels: primary and secondary. As school enrolment persistently and appreciably increases over time, literacy rates and levels of educational attainment for the whole population are also likely to rise.

School attendance of children at primary and secondary schools is examined in terms of net enrolment rates which are the proportion of those in the relevant age range attending primary or secondary school. Net enrolment at primary level is impressively high for both girls (87%) and boys (85%) with girl enrolment slightly exceeding that of boys (Figures 27 and 28). Boys in the Shiselweni are less likely to attend primary school than other boys elsewhere in Swaziland. The same is true of primary school girls living Manzini. Looking at enrolment by the standard of living quintile, it is obvious that education is considered important by all quintile groups as differences in net enrolment between quintile groups are relatively small.

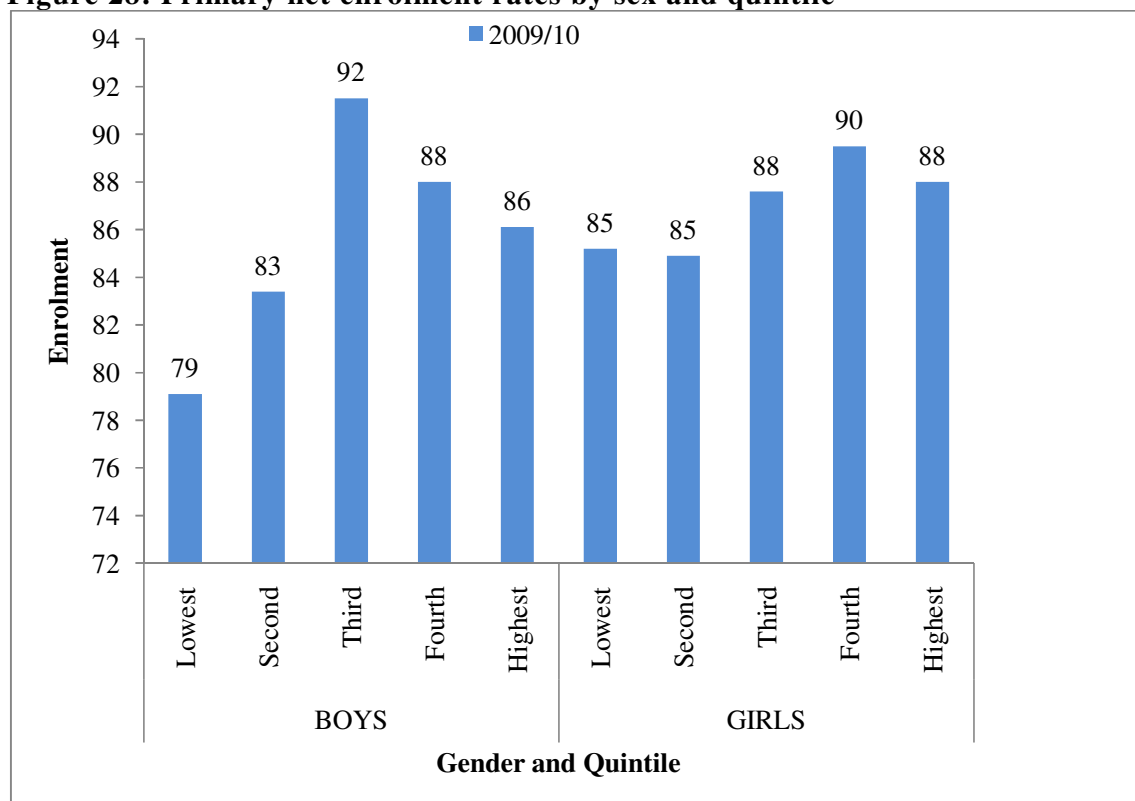
Looking at Figures 29 and 30 it is clear that progression from primary to secondary is very low. Slightly less than half of those enrolling at primary level go as far as secondary level. Only 37 percent of boys are enrolled at secondary compared with only 41 percent of girls. Secondary school enrolment improved significantly over the ten year period for both girls and boys except for girls in the Hhohho region whose enrolment has remained the same. Secondary school enrolment tends to increase as the standard of living quintile also improves.

Figure 27: Primary net enrolment rates by sex and region



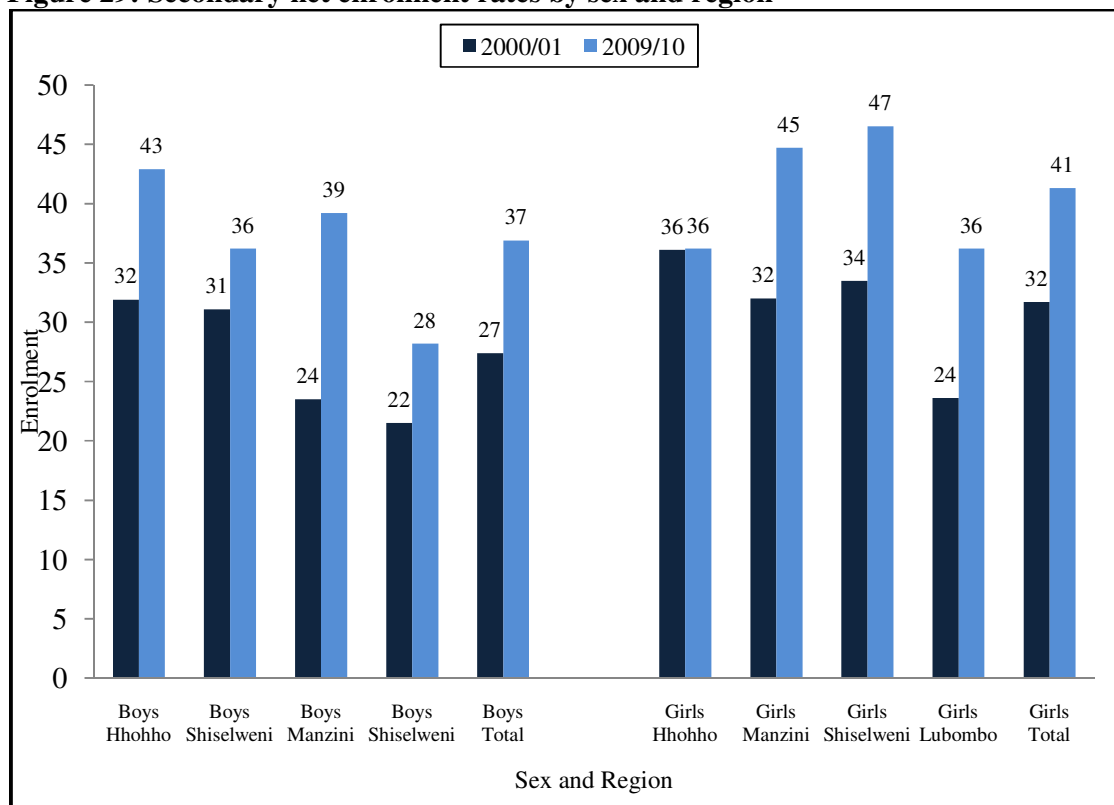
Source: Table A4.3

Figure 28: Primary net enrolment rates by sex and quintile



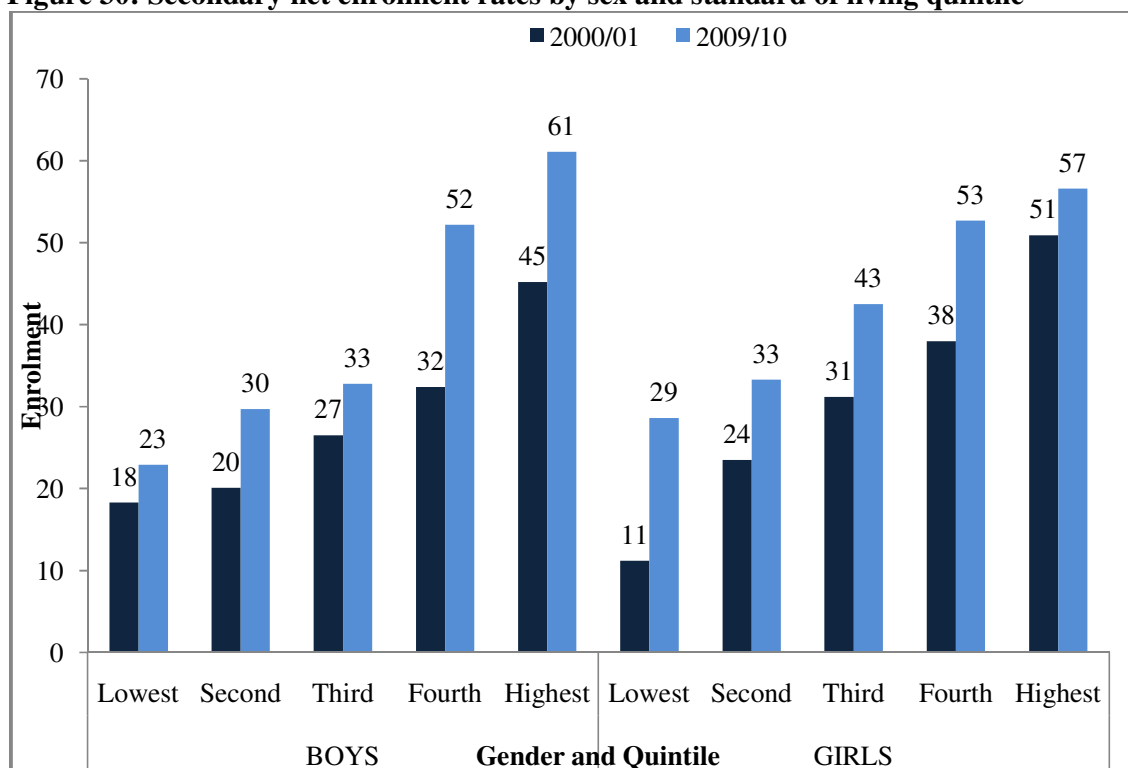
Source: Table A4.5

Figure 29: Secondary net enrolment rates by sex and region



Source: Table A4.4

Figure 30: Secondary net enrolment rates by sex and standard of living quintile



Source: Table A4.6

VII. CONCLUDING OBSERVATIONS

The latest two rounds of the Swaziland Household Income and Expenditure Survey conducted in 2000/01 and 2009/10 presents a rich source of data on the many different aspects of living conditions of households. The databases are highly comparable and make it possible to examine the changes of poverty in Swaziland over a ten-year period (2000/01 to 2009/10). Computation of consistent expenditure aggregates along with the use of a constant poverty line in real terms (461 Emalangeni per month per equivalent adult in January 2010 prices) makes convincing poverty comparison over the 2000s. Three different dimensions: consumption poverty; poverty in terms of assets and housing facilities; and human development are presented in this report.

Our results show that poverty headcount declined during the 2000s, 69.0 to 63.0 percent of the Swazi population. Looking at regional level the decline has been particularly impressive in Shiselweni region and still significant in Manzini region. Both urban and rural areas benefitted of that reduction poverty headcount. However, it had been shown that the economic growth experienced by Swaziland during the 2000s has not been pro-poor. Indeed, the poorest of the poor individuals (say the bottom 30 percent) have seen their level of welfare going down.

As an alternative measure of welfare, we examine durable goods ownership, particularly for fridge, television and mobile phone. Ownership went up for most key items during the 2000s. Asset ownership was also strongly linked to expenditure-based quintile except mobile phone which was almost universal by 2010.

Poverty being multi-dimensional, we supplemented our money-metric measure of welfare by indicators of access to services. Access to safe water went up between 2000 and 2010 although richer households (top quintiles) have a privileged access. Similarly access to electricity has increased, particularly in rural areas.

We also examine poverty through a series of human development indicators. The SHIES questionnaire has very few health indicators. However we could conclude that consultation rate of a nurse or a doctor was slightly higher for female than for male but that the consultation rate increases with quintile but not as much as we could have expected. School enrolment in primary level do not vary much by region and quintile (only 2009/10 figures could be computed). However net school enrolment in secondary level has increased quite a lot during the 2000s. We also found that contrary to primary level, secondary schooling net rate increase a lot with quintile. A much higher proportion of children coming from the richer households are attending secondary schools.

In conclusion, although economic growth had been rather limited during the 2000s, most welfare related indicators have been going up for the country as a whole but disaggregating the figures by area, region or expenditure-based quintile give us a richer and more policy-relevant picture. It should be noted that the welfare status of the bottom 30% did not improve.

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APPENDIX 1: MAIN TABLES - CONSUMPTION POVERTY INDICES

Table A1.1: Indices of poverty by area and administrative region

2000/01

	Pop'n share	Poverty indices				Contribution to national poverty		
		P ₀	P ₁	P ₂	P ₁ /P ₀	C ₀	C ₁	C ₂
Region								
Hhohho	28.1	60.2	29.0	16.9	48.2	24.5	25.1	25.8
Manzini	28.9	66.4	29.4	16.2	44.3	27.8	26.2	25.4
Shiselweni	21.9	82.0	40.2	23.0	49.0	26.1	27.2	27.4
Lubombo	21.2	70.7	32.9	18.6	46.5	21.7	21.5	21.4
Area								
Urban	24.3	35.5	12.5	6.0	35.2	12.5	9.4	7.9
Rural	75.7	79.7	38.8	22.4	48.7	87.5	90.6	92.1
Swaziland	100.0	69.0	32.4	18.4	47.0	100.0	100.0	100.0

Source: Computed from the Swaziland Household Income and Expenditure Survey, 2000/01.

2009/10

	Pop'n share	Poverty indices				Contribution to national poverty		
		P ₀	P ₁	P ₂	P ₁ /P ₀	C ₀	C ₁	C ₂
Region								
Hhohho	25.9	60.9	30.2	17.9	49.6	25.0	25.7	25.6
Manzini	34.1	57.7	26.9	15.8	46.6	31.3	30.2	29.9
Shiselweni	20.4	68.3	30.6	17.2	44.8	22.2	20.5	19.5
Lubombo	19.6	69.3	36.7	23.1	53.0	21.6	23.6	25.1
Area								
Urban	24.2	31.1	10.3	4.7	33.1	12.0	8.2	6.4
Rural	75.8	73.1	36.9	22.3	50.5	88.0	91.8	93.6
Swaziland	100.0	63.0	30.4	18.1	48.3	100.0	100.0	100.0

Source: Computed from the Swaziland Household Income and Expenditure Survey, 2009/10.

Table A1.2: Indices of extreme poverty by area and administrative region**2000/01**

	Pop'n share	Poverty indices				Contribution to national poverty		
		P ₀	P ₁	P ₂	P ₁ /P ₀	C ₀	C ₁	C ₂
Region								
Hhohho	28.1	27.0	8.8	4.0	32.6	25.3	28.2	31.1
Manzini	28.9	25.4	7.1	2.9	28.0	24.5	23.6	23.1
Shiselweni	21.9	37.9	10.9	4.2	28.8	27.7	27.3	25.7
Lubombo	21.2	31.9	8.6	3.4	27.0	22.5	20.9	20.0
Area								
Urban	24.3	7.1	2.0	0.8	28.2	5.7	5.5	5.6
Rural	75.7	37.3	10.9	4.5	29.2	94.3	94.5	94.4
Swaziland	100.0	30.0	8.7	3.6	29.0	100.0	100.0	100.0

Source: Computed from the Swaziland Household Income and Expenditure Survey, 2000/01.

2009/10

	Pop'n share	Poverty indices				Contribution to national poverty		
		P ₀	P ₁	P ₂	P ₁ /P ₀	C ₀	C ₁	C ₂
Region								
Hhohho	25.9	28.4	9.5	4.4	33.5	25.6	25.0	24.2
Manzini	34.1	25.2	8.4	3.8	33.3	29.9	29.2	28.0
Shiselweni	20.4	26.9	8.6	4.1	32.0	19.1	17.9	17.9
Lubombo	19.6	37.3	14.0	7.1	37.5	25.4	28.0	29.8
Area								
Urban	24.2	5.8	1.4	0.6	24.1	4.8	3.5	3.0
Rural	75.8	36.1	12.5	6.0	34.6	95.2	96.5	97.0
Swaziland	100.0	28.8	9.8	4.7	34.0	100.0	100.0	100.0

Source: Computed from the Swaziland Household Income and Expenditure Survey, 2009/10.

Table A1.3: Indices of poverty by area/region**2000/01**

	Pop'n share	Poverty indices				Contribution to national poverty		
		P ₀	P ₁	P ₂	P ₁ /P ₀	C ₀	C ₁	C ₂
Urban								
Hhohho	9.3	26.1	9.8	4.9	37.5	3.5	2.8	2.5
Manzini	9.5	45.1	15.4	7.2	34.1	6.2	4.5	3.7
Shiselweni	1.2	67.7	29.6	15.7	43.7	1.2	1.1	1.0
Lubombo	4.3	25.9	7.2	3.0	27.8	1.6	1.0	0.7
Rural								
Hhohho	18.7	77.3	38.5	23.0	49.8	21.0	22.3	23.3
Manzini	19.4	76.8	36.3	20.6	47.3	21.6	21.7	21.7
Shiselweni	20.7	82.9	40.8	23.4	49.2	24.9	26.1	26.3
Lubombo	16.9	82.0	39.4	22.6	48.0	20.1	20.6	20.7
Swaziland	100.0	69.0	32.4	18.4	47.0	100.0	100.0	100.0

Source: Computed from the Swaziland Household Income and Expenditure Survey, 2000/01.

2009/10

	Pop'n share	Poverty indices				Contribution to national poverty		
		P ₀	P ₁	P ₂	P ₁ /P ₀	C ₀	C ₁	C ₂
Urban								
Hhohho	6.5	23.2	7.9	3.5	34.1	2.4	1.7	1.3
Manzini	12.7	32.3	9.4	4.0	29.1	6.5	3.9	2.8
Shiselweni	1.4	38.9	16.5	8.8	42.4	0.9	0.8	0.7
Lubombo	3.6	38.5	15.2	8.0	39.5	2.2	1.8	1.6
Rural								
Hhohho	19.4	73.5	37.7	22.7	51.3	22.6	24.0	24.3
Manzini	21.4	72.8	37.4	22.9	51.4	24.7	26.3	27.1
Shiselweni	19.0	70.5	31.7	17.9	45.0	21.3	19.8	18.8
Lubombo	16.0	76.2	41.5	26.5	54.5	19.4	21.8	23.5
Swaziland	100.0	63.0	30.4	18.1	48.3	100.0	100.0	100.0

Source: Computed from the Swaziland Household Income and Expenditure Survey, 2009/10.

Table A1.4: Indices of poverty by main economic activity**2009/10**

	Pop'n share	Poverty indices				Contribution to national poverty		
		P ₀	P ₁	P ₂	P ₁ /P ₀	C ₀	C ₁	C ₂
Employee-Private	21.4	46.9	20.5	11.3	43.7	15.9	14.4	13.4
Employee-Public	10.6	26.0	11.0	5.9	42.3	4.4	3.8	3.5
Self-employed	19.5	65.1	29.1	16.5	44.7	20.2	18.7	17.8
Non-working	48.4	77.4	39.7	24.4	51.3	59.5	63.1	65.3
All	100.0	63.0	30.4	18.1	48.3	100.0	100.0	100.0

Source: Computed from the Swaziland Household Income and Expenditure Survey, 2009/10**Table A1.5: Indices of poverty, by Gender of Household Head****2000/01**

	Pop'n share	Poverty indices				Contribution to national poverty		
		P ₀	P ₁	P ₂	P ₁ /P ₀	C ₀	C ₁	C ₂
Male	54.3	66.5	31.5	18.2	47.4	52.4	52.8	53.7
Female	45.7	71.9	33.4	18.7	46.5	47.6	47.2	46.3
All	100.0	69.0	32.4	18.4	47.0	100.0	100.0	100.0

Source: Computed from the Swaziland Household Income and Expenditure Survey, 2000/01.**2009/10**

	Pop'n share	Poverty indices				Contribution to national poverty		
		P ₀	P ₁	P ₂	P ₁ /P ₀	C ₀	C ₁	C ₂
Male	50.5	58.9	27.3	15.8	46.3	47.3	45.3	44.1
Female	49.5	67.1	33.6	20.4	50.1	52.7	54.7	55.9
All	100.0	63.0	30.4	18.1	48.3	100.0	100.0	100.0

Source: Computed from the Swaziland Household Income and Expenditure Survey, 2009/10.

APPENDIX 2: MAIN TABLES - HOUSEHOLD ASSETS

Table A2.1: Percentage of households owning different physical assets by region

2000/01

	Hhohho	Manzini	Shiselweni	Lubombo	All
Radio	79.4	79.4	77.0	77.9	78.6
TV	38.0	38.0	16.4	26.0	31.2
Fridge	33.0	36.5	16.4	25.3	29.1
Bicycle	11.9	6.5	7.6	17.7	10.8
Motor cycle	0.5	0.9	0.7	1.7	0.9
Car	10.0	9.5	4.0	5.2	7.6
Tractor	2.0	3.7	7.8	4.2	4.1
Computer	5.2	3.0	0.5	4.1	3.4
Phone	17.3	11.2	3.0	7.8	10.7
Cell	17.8	17.5	5.1	8.8	13.3
Grinder	10.2	23.6	46.2	24.0	24.0
Van	12.9	9.8	6.1	9.6	10.0

Source: Computed from the Swaziland Household Income and Expenditure Survey, 2000/01.

2009/10

	Hhohho	Manzini	Shiselweni	Lubombo	All
Radio	81.9	77.2	73.3	68.2	76.1
TV	44.2	49.3	34.3	33.8	42.5
Fridge	38.8	44.3	32.3	31.9	38.5
Bicycle	5.1	4.0	5.5	9.3	5.5
Motor cycle	0.8	1.7	0.6	1.1	1.2
Car	16.7	12.6	8.1	10.0	12.5
Tractor	1.3	1.4	4.1	2.1	1.9
Computer	9.7	5.9	2.8	5.7	6.4
Phone	12.0	7.0	10.0	10.1	9.4
Cell	87.6	86.7	80.7	78.1	84.3
Grinder	6.7	10.2	31.3	15.5	13.8
Van	6.5	5.9	2.7	5.0	5.4

Source: Computed from the Swaziland Household Income and Expenditure Survey, 2009/10.

Table A2.2: Percentage of households owning different physical assets, by region - Urban Areas

2000/01

	Urban Hhohho	Urban Manzini	Urban Shiselweni	Urban Lubombo	All
Radio	74.1	80.6	75.3	79.5	77.7
TV	57.2	50.8	23.8	47.4	51.1
Fridge	54.5	49.8	17.0	48.3	49.5
Bicycle	11.6	5.9	5.4	22.3	11.1
Motor cycle	0.7	0.9	0.0	4.3	1.4
Car	16.6	14.5	2.7	11.6	14.1
Tractor	0.3	1.6	1.3	2.3	1.2
Computer	10.3	4.9	0.0	10.7	7.7
Phone	32.7	17.4	8.6	22.0	23.4
Cell	31.8	26.1	7.9	17.5	25.6
Grinder	0.6	3.9	5.3	2.1	2.5
Van	18.8	11.0	0.0	18.9	14.8

Source: Computed from the Swaziland Household Income and Expenditure Survey, 2000/01.

2009/10

	Urban Hhohho	Urban Manzini	Urban Shiselweni	Urban Lubombo	All
Radio	88.4	77.6	74.1	75.5	80.0
TV	61.0	57.4	45.8	55.1	57.4
Fridge	54.5	50.8	39.9	51.1	51.2
Bicycle	5.6	2.6	2.4	9.6	4.3
Motor cycle	1.5	2.4	0.0	1.4	1.9
Car	24.2	11.6	9.3	17.6	15.7
Tractor	0.5	0.1	1.1	0.9	0.4
Computer	19.3	7.3	4.6	13.3	11.2
Phone	19.9	7.5	10.1	13.1	11.7
Cell	92.9	89.0	84.2	91.6	90.1
Grinder	0.7	0.4	2.4	1.5	0.8
Van	8.4	5.3	3.7	6.3	6.2

Source: Computed from the Swaziland Household Income and Expenditure Survey, 2009/10.

Table A2.3: Percentage of households owning different physical assets, by region - Rural Areas

2000/01

	Rural Hhohho	Rural Manzini	Rural Shiselweni	Rural Lubombo	All
Radio	83.1	78.5	77.2	77.3	79.1
TV	24.6	27.3	15.7	17.2	21.2
Fridge	18.0	25.4	16.3	15.9	18.8
Bicycle	12.1	7.0	7.8	15.8	10.7
Motor cycle	0.5	0.8	0.8	0.6	0.7
Car	5.5	5.2	4.1	2.5	4.4
Tractor	3.2	5.4	8.4	4.9	5.5
Computer	1.6	1.4	0.6	1.4	1.3
Phone	6.6	6.1	2.5	2.0	4.3
Cell	8.1	10.4	4.8	5.2	7.1
Grinder	16.8	40.0	50.4	33.0	34.9
Van	8.9	8.9	6.7	5.8	7.6

Source: Computed from the Swaziland Household Income and Expenditure Survey, 2000/01.

2009/10

	Rural Hhohho	Rural Manzini	Rural Shiselweni	Rural Lubombo	All
Radio	78.0	76.7	73.2	65.4	73.8
TV	34.5	39.9	32.6	25.7	33.7
Fridge	29.7	36.8	31.2	24.5	30.9
Bicycle	4.9	5.6	6.0	9.1	6.2
Motor cycle	0.4	0.9	0.6	1.0	0.7
Car	12.4	13.8	7.9	7.1	10.6
Tractor	1.7	2.9	4.5	2.5	2.9
Computer	4.1	4.4	2.6	2.8	3.5
Phone	7.4	6.4	10.0	9.0	8.1
Cell	84.5	84.1	80.2	73.0	80.9
Grinder	10.1	21.5	35.4	21.0	21.5
Van	5.4	6.7	2.6	4.4	4.9

Source: Computed from the Swaziland Household Income and Expenditure Survey, 2009/10.

Table A2.4: Percentage of households owning different physical assets, by quintile**2000/01**

	Lowest	Second	Third	Fourth	Highest	Total
Radio	74.8	79.7	79.4	83.2	76.3	78.6
TV	7.0	14.1	18.9	29.0	58.8	31.2
Fridge	4.4	11.0	12.8	26.7	59.8	29.1
Bicycle	8.4	9.1	8.7	9.6	14.8	10.8
Motor cycle	0.4	0.5	0.6	0.0	2.2	0.9
Car	1.1	1.6	3.7	4.6	17.7	7.6
Tractor	3.2	3.0	3.8	4.8	4.7	4.1
Computer	0.5	0.0	0.6	0.8	9.8	3.4
Phone	0.4	0.2	1.8	5.0	29.4	10.7
Cell	1.8	3.8	4.7	8.1	31.5	13.3
Grinder	40.8	38.1	31.3	21.6	7.1	24.0
Van	3.6	5.1	4.5	8.2	19.6	10.0

Source: Computed from the Swaziland Household Income and Expenditure Survey, 2000/01.

2009/10

	Lowest	Second	Third	Fourth	Highest	Total
Radio	56.9	70.2	75.3	77.9	85.9	76.1
TV	9.1	17.6	31.3	47.6	70.5	42.5
Fridge	6.3	14	24.6	41.5	68.8	38.5
Bicycle	4.0	6.5	4.4	5.5	6.4	5.5
Motor cycle	0.3	0.6	1.9	1.1	1.4	1.2
Car	1.4	2.1	5.1	10.4	27.4	12.5
Tractor	0.4	2.1	2.5	2.6	1.7	1.9
Computer	0.5	0.5	0.4	3.5	16.9	6.4
Phone	0.6	2.3	3.8	10.0	19.1	9.4
Cell	69.4	78.6	80.6	87.6	92.9	84.3
Grinder	23.9	22.4	18.6	12.6	3.7	13.8
Van	1.2	1.4	2.6	5.3	10.5	5.4

Source: Computed from the Swaziland Household Income and Expenditure Survey, 2009/10.

Table A2.5: Percentage of households owning different physical assets by area and quintile - Urban Areas

2000/01

	Urban Lowest	Urban Second	Urban Third	Urban Fourth	Urban Highest	Urban Total
Radio	64.5	83.2	75.6	84.1	75.6	77.7
TV	11.8	21.6	27.1	35.7	67.2	51.1
Fridge	8.6	8.7	19.3	33.8	68.3	49.5
Bicycle	5.7	2.3	5.1	8.2	14.8	11.1
Motor cycle	0.0	0.0	0.0	0.0	2.5	1.4
Car	5.5	1.5	4.7	3.9	21.9	14.1
Tractor	2.6	0.0	0.2	0.5	1.8	1.2
Computer	0.0	0.0	1.2	0.8	13.1	7.7
Phone	0.0	0.0	4.8	6.9	37.5	23.4
Cell	0.0	7.4	11.0	11.6	37.3	25.6
Grinder	10.8	0.9	9.7	2.6	0.7	2.5
Van	3.0	2.5	6.0	6.1	21.9	14.8

Source: Computed from the Swaziland Household Income and Expenditure Survey, 2000/01.

2009/10

	Urban Lowest	Urban Second	Urban Third	Urban Fourth	Urban Highest	Urban Total
Radio	43.4	78.0	75.8	76.8	84.2	80.0
TV	3.0	39.7	39.1	47.7	70.8	57.4
Fridge	3.0	31.4	26.5	37.9	67.9	51.2
Bicycle	0.0	4.3	1.8	4.1	5.3	4.3
Motor cycle	0.0	0.8	6.0	1.2	1.3	1.9
Car	0.0	0.4	4.1	4.6	26.1	15.7
Tractor	2.8	0.0	0.0	0.0	0.6	0.4
Computer	0.0	0.0	0.7	4.2	18.8	11.2
Phone	0.0	0.5	1.8	5.9	18.8	11.7
Cell	81.8	79.6	79.0	90.8	94.3	90.1
Grinder	8.5	0.0	0.7	0.8	0.5	0.8
Van	0.0	0.8	1.6	2.1	10.1	6.2

Source: Computed from the Swaziland Household Income and Expenditure Survey, 2009/10.

Table A2.6: Percentage of households owning different physical assets by area and quintile – Rural areas

2000/01

	Rural Lowest	Rural Second	Rural Third	Rural Fourth	Rural Highest	Rural Total
Radio	75.5	79.1	80.4	82.6	77.4	79.1
TV	6.7	13.0	16.6	25.3	45.7	21.2
Fridge	4.1	11.3	11.0	22.8	46.6	18.8
Bicycle	8.6	10.1	9.7	10.4	14.8	10.7
Motor cycle	0.4	0.5	0.8	0.0	1.7	0.7
Car	0.8	1.7	3.5	5.0	11.3	4.4
Tractor	3.2	3.5	4.7	7.3	9.0	5.5
Computer	0.5	0.0	0.5	0.9	4.7	1.3
Phone	0.5	0.3	1.0	3.9	16.9	4.3
Cell	2.0	3.3	3.0	6.1	22.4	7.1
Grinder	42.9	43.9	37.2	32.3	17.1	34.9
Van	3.7	5.5	4.0	9.4	16.0	7.6

Source: Computed from the Swaziland Household Income and Expenditure Survey, 2000/01.

2009/10

	Rural Lowest	Rural Second	Rural Third	Rural Fourth	Rural Highest	Rural Total
Radio	57.8	68.7	75.1	78.7	88.8	73.8
TV	9.5	13.5	28.1	47.6	70.2	33.7
Fridge	6.5	10.8	23.8	44.0	70.3	30.9
Bicycle	4.2	6.9	5.4	6.4	8.3	6.2
Motor cycle	0.3	0.5	0.2	1.0	1.6	0.7
Car	1.5	2.4	5.5	14.5	29.5	10.6
Tractor	0.3	2.4	3.6	4.4	3.6	2.9
computer	0.5	0.6	0.2	2.9	13.8	3.5
Phone	0.7	2.7	4.6	12.8	19.8	8.1
Cell	68.7	78.4	81.2	85.4	90.6	80.9
Grinder	24.9	26.6	25.9	20.8	8.9	21.5
Van	1.3	1.5	3.1	7.4	11.2	4.9

Source: Computed from the Swaziland Household Income and Expenditure Survey, 2009/10.

APPENDIX 3: MAIN TABLES - ACCESS TO SERVICES

Table A3.1: Main source of drinking water of households, by region

2000/01

	Hhohho	Manzini	Shiselweni	Lubombo	Total
Piped Into Housing	21.0	22.7	3.1	22.8	18.5
Piped Outside Housing	25.0	26.0	17.0	17.5	22.1
Borehole	3.8	1.9	5.1	5.2	3.8
Protected Well	4.9	2.1	2.6	3.5	3.3
Unprotected Well	6.4	3.6	11.1	7.1	6.6
Protected Spring	2.8	3.6	1.4	1.7	2.5
Unprotected Spring	4.8	5.2	6.5	4.0	5.1
Surface Water	31.4	34.9	53.4	38.4	38.1
Total	100.0	100.0	100.0	100.0	100.0

Source: Computed from the Swaziland Household Income and Expenditure Survey, 2000/01.

2009/10

	Hhohho	Manzini	Shiselweni	Lubombo	Total
Piped Into Housing	19.9	14.2	6.1	19.4	15.3
Piped Outside Housing	47.4	53.5	36.7	34.8	45.5
Borehole	1.8	4.3	7.8	11.7	5.6
Protected Well	1.7	1.2	4.5	1.9	2.0
Unprotected Well	9.8	3.4	8.5	7.9	6.8
Protected Spring	1.8	2.5	4.2	3.2	2.7
Unprotected Spring	2.8	3.7	4.9	3.5	3.6
Surface Water	14.8	17.3	27.5	17.7	18.4
Total	100.0	100.0	100.0	100.0	100.0

Source: Computed from the Swaziland Household Income and Expenditure Survey, 2009/10.

Table A3.2: Main source of drinking water of households by region - Urban Areas

2000/01

	Urban Hhohho	Urban Manzini	Urban Shiselweni	Urban Lubombo	Urban Total
Piped Into Housing	43.3	41.0	11.6	64.6	44.9
Piped Outside Housing	30.6	34.7	49.0	27.2	32.5
Borehole	0.0	0.8	0.0	0.0	0.3
Protected Well	1.5	0.7	0.0	0.6	0.9
Unprotected Well	4.5	0.8	1.7	0.1	2.1
Protected Spring	0.9	1.8	0.0	0.0	1.1
Unprotected Spring	1.8	2.8	2.0	0.0	1.8
Surface Water	17.4	17.5	35.6	7.5	16.5
Total	100.0	100.0	100.0	100.0	100.0

Source: Computed from the Swaziland Household Income and Expenditure Survey, 2000/01.

2009/10

	Urban Hhohho	Urban Manzini	Urban Shiselweni	Urban Lubombo	Urban Total
Piped Into Housing	40.5	19.9	22.5	56.5	30.6
Piped Outside Housing	50.7	63.3	69.0	35.0	56.4
Borehole	0.0	4.3	0.0	0.6	2.4
Protected Well	1.2	0.2	0.0	0.0	0.4
Unprotected Well	2.6	0.3	0.0	1.4	1.1
Protected Spring	0.1	0.4	0.0	0.0	0.2
Unprotected Spring	0.8	1.6	3.2	1.4	1.4
Surface Water	4.1	10.0	5.3	5.0	7.4
Total	100.0	100.0	100.0	100.0	100.0

Source: Computed from the Swaziland Household Income and Expenditure Survey, 2009/10.

Table A3.3: Main source of drinking water of households by region – Rural Areas

2000/01

	Rural Hhohho	Rural Manzini	Rural Shiselweni	Rural Lubombo	Rural Total
Piped Into Housing	5.5	7.6	2.2	5.7	5.2
Piped Outside Housing	21.1	18.8	13.7	13.5	16.8
Borehole	6.4	2.8	5.6	7.3	5.5
Protected Well	7.3	3.3	2.8	4.7	4.6
Unprotected Well	7.7	5.9	12.1	9.9	8.9
Protected Spring	4.1	5.0	1.6	2.3	3.2
Unprotected Spring	6.9	7.2	6.9	5.6	6.7
Surface Water	41.2	49.4	55.2	51.0	49.1
Total	100.0	100.0	100.0	100.0	100.0

Source: Computed from the Swaziland Household Income and Expenditure Survey, 2000/01.

2009/10

	Rural Hhohho	Rural Manzini	Rural Shiselweni	Rural Lubombo	Rural Total
Piped Into Housing	7.9	7.4	3.7	5.2	6.2
Piped Outside Housing	45.5	41.9	32.1	34.8	39.0
Borehole	2.9	4.4	8.9	15.9	7.5
Protected Well	1.9	2.3	5.1	2.6	2.9
Unprotected Well	13.9	7.0	9.7	10.4	10.3
Protected Spring	2.7	4.9	4.8	4.5	4.2
Unprotected Spring	4.0	6.3	5.1	4.2	4.9
Surface Water	21.1	25.9	30.6	22.5	25.0
Total	100.0	100.0	100.0	100.0	100.0

Source: Computed from the Swaziland Household Income and Expenditure Survey, 2009/10.

Table A3.4: Main source of drinking water of households by quintile**2000/01**

	Lowest	Second	Third	Fourth	Highest	Total
Piped Into Housing	0.3	2.2	3.0	13.6	46.7	18.5
Piped Outside Housing	10.2	18.0	23.2	26.1	26.0	22.1
Borehole	4.0	5.0	4.6	3.8	2.6	3.8
Protected Well	6.7	5.2	3.8	2.3	1.4	3.3
Unprotected Well	11.7	9.7	8.6	6.0	2.2	6.6
Protected Spring	4.6	3.1	3.1	1.7	1.5	2.5
Unprotected Spring	6.7	8.2	5.5	5.1	2.5	5.1
Surface Water	55.8	48.5	48.4	41.4	17.2	38.1
Total	100.0	100.0	100.0	100.0	100.0	100.0

Source: Computed from the Swaziland Household Income and Expenditure Survey, 2000/01.

2009/10

	Lowest	Second	Third	Fourth	Highest	Total
Piped Into Housing	0.2	1.4	2.4	12.1	37.5	15.3
Piped Outside Housing	32.3	39.8	50.5	52.2	46.2	45.5
Borehole	10.5	8.8	5.0	4.0	3.6	5.6
Protected Well	2.4	2.6	2.8	1.9	1.2	2.0
Unprotected Well	15.9	11.8	7.9	6.1	0.7	6.8
Protected Spring	6.2	1.9	2.0	4.0	1.2	2.7
Unprotected Spring	6.2	5.7	6.1	2.6	1.0	3.6
Surface Water	26.2	28.1	23.3	17.3	8.7	18.4
Total	100.0	100.0	100.0	100.0	100.0	100.0

Source: Computed from the Swaziland Household Income and Expenditure Survey, 2009/10.

Table A3.5: Main source of drinking water of households by quintile-Urban Areas

2000/01

	Urban Lowest	Urban Second	Urban Third	Urban Fourth	Urban Highest	Urban Total
Piped Into Housing	0.0	5.7	9.1	27.8	65.3	44.9
Piped Outside Housing	42.3	41.4	48.0	38.8	25.4	32.5
Borehole	0.0	0.0	1.4	0.3	0.1	0.3
Protected Well	5.9	3.1	2.3	0.9	0.2	0.9
Unprotected Well	4.0	11.5	5.1	1.9	0.4	2.1
Protected Spring	0.0	1.8	1.2	1.3	0.9	1.1
Unprotected Spring	9.3	11.5	2.5	1.7	0.4	1.8
Surface Water	38.6	25.0	30.4	27.4	7.3	16.5
Total	100.0	100.0	100.0	100.0	100.0	100.0

Source: Computed from the Swaziland Household Income and Expenditure Survey, 2000/01.

2009/10

	Urban Lowest	Urban Second	Urban Third	Urban Fourth	Urban Highest	Urban Total
Piped Into Housing	0.0	7.7	7.6	18.3	46.1	30.6
Piped Outside Housing	70.7	62.8	68.5	66.7	47.2	56.4
Borehole	2.1	9.0	2.2	0.7	2.5	2.4
Protected Well	1.9	0.0	1.3	0.2	0.3	0.4
Unprotected Well	7.5	2.7	0.3	2.2	0.3	1.1
Protected Spring	0.0	0.0	0.3	0.8	0.0	0.2
Unprotected Spring	0.0	3.7	6.2	0.7	0.3	1.4
Surface Water	17.8	14.1	13.7	10.4	3.3	7.4
Total	100.0	100.0	100.0	100.0	100.0	100.0

Source: Computed from the Swaziland Household Income and Expenditure Survey, 2009/10.

Table A3.6: Main source of drinking water of households by quintile-Rural Areas

2000/01

	Rural Lowest	Rural Second	Rural Third	Rural Fourth	Rural Highest	Rural Total
Piped Into Housing	0.3	1.7	1.3	5.7	17.8	5.2
Piped Outside Housing	8.0	14.3	16.4	19.0	26.9	16.8
Borehole	4.3	5.8	5.4	5.7	6.5	5.5
Protected Well	6.8	5.5	4.2	3.1	3.3	4.6
Unprotected Well	12.2	9.4	9.5	8.3	5.0	8.9
Protected Spring	4.9	3.3	3.6	1.9	2.4	3.2
Unprotected Spring	6.6	7.7	6.4	7.0	5.7	6.7
Surface Water	57.0	52.2	53.2	49.3	32.4	49.1
Total	100.0	100.0	100.0	100.0	100.0	100.0

Source: Computed from the Swaziland Household Income and Expenditure Survey, 2000/01.

2009/10

	Rural Lowest	Rural Second	Rural Third	Rural Fourth	Rural Highest	Rural Total
Piped Into Housing	0.2	0.3	0.3	7.7	23.1	6.2
Piped Outside Housing	29.9	35.5	43.1	42.0	44.5	39.0
Borehole	11.1	8.8	6.1	6.3	5.4	7.5
Protected Well	2.4	3.1	3.4	3.0	2.6	2.9
Unprotected Well	16.5	13.5	11.0	8.9	1.4	10.3
Protected Spring	6.6	2.2	2.7	6.2	3.2	4.2
Unprotected Spring	6.6	6.0	6.1	3.9	2.0	4.9
Surface Water	26.7	30.8	27.3	22.1	17.7	25.0
Total	100.0	100.0	100.0	100.0	100.0	100.0

Source: Computed from the Swaziland Household Income and Expenditure Survey, 2009/10.

Table A3.7: Toilet facilities used by households by region**2000/01**

	Hhohho	Manzini	Shiselweni	Lubombo	Total
Flush toilet	24.7	24.2	4.2	28.1	21.4
Ventilated Improved Pit	17.4	22.6	15.6	11.5	17.3
Ordinary Pit Toilet	38.4	38.4	53.8	29.8	39.4
Bush/Field	19.4	14.7	26.5	30.5	21.9
Total	100.0	100.0	100.0	100.0	100.0

Source: Computed from the Swaziland Household Income and Expenditure Survey, 2000/01.

2009/10

	Hhohho	Manzini	Shiselweni	Lubombo	Total
Flush toilet	24.4	19.9	9.5	29.0	21.1
Ventilated Improved Pit	13.0	12.3	27.1	13.5	15.2
Ordinary Pit Toilet	50.2	59.3	55.2	33.7	51.4
Bush/Field	12.4	8.5	8.3	23.8	12.4
Total	100.0	100.0	100.0	100.0	100.0

Source: Computed from the Swaziland Household Income and Expenditure Survey, 2009/10.

Table A3.8: Toilet facilities used by households by area- Urban Areas**2000/01**

	Urban Hhohho	Urban Manzini	Urban Shiselweni	Urban Lubombo	Urban Total
Flush toilet	48.3	45.5	10.5	84.2	52.2
Ventilated Improved Pit	11.4	11.3	13.0	2.4	9.7
Ordinary Pit Toilet	38.8	38.1	70.9	10.0	34.7
Bush/Field	1.5	5.0	5.6	3.4	3.4
Total	100.0	100.0	100.0	100.0	100.0

Source: Computed from the Swaziland Household Income and Expenditure Survey, 2000/01.

2009/10

	Urban Hhohho	Urban Manzini	Urban Shiselweni	Urban Lubombo	Urban Total
Flush toilet	49.7	27.4	36.5	85.1	41.8
Ventilated Improved Pit	5.5	12.9	17.0	4.1	10.0
Ordinary Pit Toilet	43.5	57.3	44.0	5.9	45.8
Bush/Field	1.3	2.4	2.5	4.9	2.5
Total	100.0	100.0	100.0	100.0	100.0

Source: Computed from the Swaziland Household Income and Expenditure Survey, 2009/10.

Table A3.9: Toilet facilities used by households by area- Rural Areas**2000/01**

	Rural Hhohho	Rural Manzini	Rural Shiselweni	Rural Lubombo	Rural Total
Flush toilet	8.3	6.4	3.6	5.2	5.9
Ventilated Improved Pit	21.6	32.1	15.8	15.3	21.1
Ordinary Pit Toilet	38.2	38.7	52.0	37.9	41.8
Bush/Field	32.0	22.8	28.7	41.6	31.2
Total	100.0	100.0	100.0	100.0	100.0

Source: Computed from the Swaziland Household Income and Expenditure Survey, 2000/01.

2009/10

	Rural Hhohho	Rural Manzini	Rural Shiselweni	Rural Lubombo	Rural Total
Flush toilet	9.7	11.1	5.6	7.5	8.7
Ventilated Improved Pit	17.4	11.6	28.5	17.1	18.4
Ordinary Pit Toilet	54.0	61.6	56.8	44.4	54.7
Bush/Field	18.9	15.7	9.1	31.1	18.3
Total	100.0	100.0	100.0	100.0	100.0

Source: Computed from the Swaziland Household Income and Expenditure Survey, 2009/10.

Table A3.10: Toilet facilities used by households by standard of living quintile**2000/01**

	Lowest	Second	Third	Fourth	Highest	Total
Flush toilet	0.8	2.9	3.8	15.0	54.0	21.4
Ventilated Improved Pit	12.7	16.2	17.5	21.7	16.6	17.3
Ordinary Pit Toilet	45.2	49.1	49.3	43.8	23.5	39.4
Bush/Field	41.4	31.9	29.4	19.4	5.9	21.9
Total	100.0	100.0	100.0	100.0	100.0	100.0

Source: Computed from the Swaziland Household Income and Expenditure Survey, 2000/01.

2009/10

	Lowest	Second	Third	Fourth	Highest	Total
Flush toilet	0.7	3.4	7.4	17.4	47.7	21.1
Ventilated Improved Pit	11.2	15.7	16.4	19.0	13.4	15.2
Ordinary Pit Toilet	53.1	60.0	61.8	56.9	37.0	51.4
Bush/Field	35.1	20.9	14.3	6.8	1.9	12.4
Total	100.0	100.0	100.0	100.0	100.0	100.0

Source: Computed from the Swaziland Household Income and Expenditure Survey, 2009/10.

Table A3.11: Toilet facilities used by households by standard of living quintile–Urban Areas

2000/01

	Urban Lowest	Urban Second	Urban Third	Urban Fourth	Urban Highest	Urban Total
Flush toilet	6.1	13.6	13.3	34.6	73.5	52.2
Ventilated Improved Pit	6.3	6.2	17.8	12.0	7.7	9.7
Ordinary Pit Toilet	75.2	76.1	60.9	49.4	17.0	34.7
Bush/Field	12.5	4.1	8.0	4.0	1.8	3.4
Total	100.0	100.0	100.0	100.0	100.0	100.0

Source: Computed from the Swaziland Household Income and Expenditure Survey, 2000/01.

2009/10

	Urban Lowest	Urban Second	Urban Third	Urban Fourth	Urban Highest	Urban Total
Flush toilet	7.7	13.4	21.4	29.3	57.5	41.8
Ventilated Improved Pit	8.2	17.3	9.1	12.8	8.1	10.0
Ordinary Pit Toilet	74.2	64.5	62.0	56.2	33.6	45.8
Bush/Field	10.0	4.9	7.5	1.8	0.9	2.5
Total	100.0	100.0	100.0	100.0	100.0	100.0

Source: Computed from the Swaziland Household Income and Expenditure Survey, 2009/10.

Table A3.12: Toilet facilities used by households by standard of living quintile–Rural Areas

2000/01

	Rural Lowest	Rural Second	Rural Third	Rural Fourth	Rural Highest	Rural Total
Flush toilet	0.4	1.2	1.2	4.1	24.0	5.9
Ventilated Improved Pit	13.1	17.7	17.4	27.1	30.3	21.1
Ordinary Pit Toilet	43.1	44.9	46.2	40.7	33.5	41.8
Bush/Field	43.4	36.2	35.2	28.1	12.2	31.2
Total	100.0	100.0	100.0	100.0	100.0	100.0

Source: Computed from the Swaziland Household Income and Expenditure Survey, 2000/01.

2009/10

	Rural Lowest	Rural Second	Rural Third	Rural Fourth	Rural Highest	Rural Total
Flush toilet	0.2	1.6	1.7	9.1	31.6	8.7
Ventilated Improved Pit	11.4	15.4	19.4	23.3	22.1	18.4
Ordinary Pit Toilet	51.8	59.1	61.7	57.4	42.6	54.7
Bush/Field	36.7	24.0	17.1	10.2	3.7	18.3
Total	100.0	100.0	100.0	100.0	100.0	100.0

Source: Computed from the Swaziland Household Income and Expenditure Survey, 2009/10.

Table A3.13: Percentage of households using electricity by area and region**2000/01**

	Hhohho	Manzini	Shiselweni	Lubombo	Total
Urban	57.9	52.6	15.3	80.5	57.9
Rural	15.2	16.9	8.0	7.2	11.8
Total	32.7	33.1	8.6	28.5	27.3

Source: Computed from the Swaziland Household Income and Expenditure Survey, 2000/01.

2009/10

	Hhohho	Manzini	Shiselweni	Lubombo	Total
Urban	64.7	64.8	45.5	82.5	66.2
Rural	32.8	34.6	29.2	27.0	31.2
Total	44.6	50.9	31.2	42.4	44.3

Source: Computed from the Swaziland Household Income and Expenditure Survey, 2009/10.

Table A3.14: Percentage of households using electricity by area and quintile**2000/01**

	Lowest	Second	Third	Fourth	Highest	Total
Urban	0.0	8.4	14.9	43.1	80.7	57.9
Rural	0.7	3.3	3.2	13.7	40.4	11.8
Total	0.6	4.0	5.7	24.2	64.9	27.3

Source: Computed from the Swaziland Household Income and Expenditure Survey, 2000/01.

2009/10

	Lowest	Second	Third	Fourth	Highest	Total
Urban	6.4	34.1	48.6	54.7	82.1	66.2
Rural	2.4	8.3	24.5	47.1	74.5	31.2
Total	2.7	12.4	31.5	50.2	79.2	44.3

Source: Computed from the Swaziland Household Income and Expenditure Survey, 2009/10.

Table A3.15: Percentage of households using different types of energy for cooking by region

2000/01

	Hhohho	Manzini	Shiselweni	Lubombo	Total
Wood	50.1	49.1	86.1	59.8	58.8
Coal	1.5	0.6	0.2	6.2	2.1
Electricity	22.1	24.0	3.9	11.0	16.7
Paraffin	13.0	12.2	3.8	5.0	9.3
Gas	13.3	14.1	5.9	17.9	13.1
Total	100.0	100.0	100.0	100.0	100.0

Source: Computed from the Swaziland Household Income and Expenditure Survey, 2000/01.

2009/10

	Hhohho	Manzini	Shiselweni	Lubombo	Total
Wood	51.6	38.6	69.4	61.6	51.6
Coal	0.0	0.0	7.6	1.8	1.6
Electricity	29.6	36.9	13.7	22.9	28.4
Paraffin	7.7	7.7	2.6	1.1	5.6
Gas	11.1	16.9	6.8	12.7	12.9
Total	100.0	100.0	100.0	100.0	100.0

Source: Computed from the Swaziland Household Income and Expenditure Survey, 2009/10.

Table A3.16: Percentage of households using different types of energy for cooking by region - Urban Areas

2000/01

	Urban Hhohho	Urban Manzini	Urban Shiselweni	Urban Lubombo	Urban Total
Wood	9.8	12.3	38.7	6.6	11.7
Coal	3.2	0.6	0.0	17.5	4.8
Electricity	43.6	44.1	7.6	28.7	39.1
Paraffin	24.2	23.8	20.3	8.4	20.8
Gas	19.1	19.3	33.5	38.8	23.7
Total	100.0	100.0	100.0	100.0	100.0

Source: Computed from the Swaziland Household Income and Expenditure Survey, 2000/01.

2009/10

	Urban Hhohho	Urban Manzini	Urban Shiselweni	Urban Lubombo	Urban Total
Wood	10.5	9.8	37.5	11.9	11.8
Coal	0.0	0.0	3.3	6.3	1.1
Electricity	54.5	54.2	28.2	53.2	52.7
Paraffin	15.8	11.3	9.8	3.3	11.3
Gas	19.2	24.7	21.2	25.2	23.1
Total	100.0	100.0	100.0	100.0	100.0

Source: Computed from the Swaziland Household Income and Expenditure Survey, 2009/10

Table A3.17: Percentage of households using different types of energy for cooking by region-Rural Areas

2000/01

	Rural Hhohho	Rural Manzini	Rural Shiselweni	Rural Lubombo	Rural Total
Wood	78.1	79.8	91.0	81.5	82.7
Coal	0.2	0.7	0.2	1.6	0.7
Electricity	7.1	7.3	3.6	3.8	5.4
Paraffin	5.3	2.6	2.1	3.7	3.4
Gas	9.2	9.7	3.1	9.3	7.8
Total	100.0	100.0	100.0	100.0	100.0

Source: Computed from the Swaziland Household Income and Expenditure Survey, 2000/01.

2009/10

	Rural Hhohho	Rural Manzini	Rural Shiselweni	Rural Lubombo	Rural Total
Wood	75.5	72.2	73.9	80.7	75.3
Coal	0.0	0.0	8.2	0.0	1.9
Electricity	15.1	16.7	11.6	11.2	13.9
Paraffin	3.0	3.4	1.6	0.2	2.2
Gas	6.4	7.8	4.8	7.9	6.7
Total	100.0	100.0	100.0	100.0	100.0

Source: Computed from the Swaziland Household Income and Expenditure Survey, 2009/10

Table A3.18: Percentage of households using different types of energy for cooking by quintile

2000/01

	Lowest	Second	Third	Fourth	Highest	Total
Wood	94.8	86.0	76.9	56.4	21.1	58.8
Coal	0.0	0.5	1.5	3.5	3.1	2.1
Electricity	0.0	2.1	3.1	10.8	43.1	16.7
Paraffin	3.5	7.4	10.6	14.5	8.3	9.3
Gas	1.7	4.1	7.9	14.8	24.4	13.1
Total	100.0	100.0	100.0	100.0	100.0	100.0

Source: Computed from the Swaziland Household Income and Expenditure Survey, 2000/01.

2009/10

	Lowest	Second	Third	Fourth	Highest	Total
Wood	95.4	85.3	67.6	43.9	14.2	51.6
Coal	0.8	2.6	2.3	2.4	0.5	1.6
Electricity	0.8	3.7	13.1	26.6	61.0	28.4
Paraffin	2.8	5.1	5.9	8.9	4.5	5.6
Gas	0.1	3.3	11.0	18.3	19.8	12.9
Total	100.0	100.0	100.0	100.0	100.0	100.0

Source: Computed from the Swaziland Household Income and Expenditure Survey, 2009/10.

Table A3.19: Percentage of households using different types of energy for cooking by quintile – Urban Areas

2000/01

	Urban Lowest	Urban Second	Urban Third	Urban Fourth	Urban Highest	Urban Total
Wood	40.9	32.2	24.2	13.5	4.8	11.7
Coal	0.0	1.8	2.3	8.8	4.2	4.8
Electricity	0.0	8.4	10.7	20.9	57.3	39.1
Paraffin	43.1	44.1	40.5	30.1	9.5	20.8
Gas	16.0	13.6	22.3	26.7	24.3	23.7
Total	100.0	100.0	100.0	100.0	100.0	100.0

Source: Computed from the Swaziland Household Income and Expenditure Survey, 2000/01.

2009/10

	Urban Lowest	Urban Second	Urban Third	Urban Fourth	Urban Highest	Urban Total
Wood	49.2	36.1	23.4	14.3	3.4	11.8
Coal	1.8	4.5	0.7	1.7	0.5	1.1
Electricity	7.7	17.8	33.7	38.4	70.0	52.7
Paraffin	39.1	27.2	15.3	15.2	5.6	11.3
Gas	2.4	14.5	26.9	30.5	20.6	23.1
Total	100.0	100.0	100.0	100.0	100.0	100.0

Source: Computed from the Swaziland Household Income and Expenditure Survey, 2009/10.

Table A3.20: Percentage of households using different types of energy for cooking by quintile – Rural Areas

2000/01

	Rural Lowest	Rural Second	Rural Third	Rural Fourth	Rural Highest	Rural Total
Wood	98.5	94.4	91.2	80.4	46.3	82.7
Coal	0.0	0.3	1.2	0.5	1.3	0.7
Electricity	0.0	1.1	1.0	5.2	21.1	5.4
Paraffin	0.8	1.6	2.5	5.8	6.6	3.4
Gas	0.7	2.6	4.0	8.1	24.7	7.8
Total	100.0	100.0	100.0	100.0	100.0	100.0

Source: Computed from the Swaziland Household Income and Expenditure Survey, 2000/01.

2009/10

	Rural Lowest	Rural Second	Rural Third	Rural Fourth	Rural Highest	Rural Total
Wood	98.4	94.5	85.7	64.6	32.3	75.3
Coal	0.7	2.3	3.0	2.9	0.5	1.9
Electricity	0.4	1.1	4.6	18.3	46.1	13.9
Paraffin	0.5	1.0	2.1	4.4	2.8	2.2
Gas	0.0	1.2	4.6	9.7	18.3	6.7
Total	100.0	100.0	100.0	100.0	100.0	100.0

Source: Computed from the Swaziland Household Income and Expenditure Survey, 2009/10

APPENDIX 4: MAIN TABLES – HUMAN DEVELOPMENT

Table A4.1: Percentage of individuals who consulted a Medical Worker by area and region in 2009/10

		Hhohho	Manzini	Shiselweni	Lubombo	Total
Urban	Male	12.4	16.3	14.8	19.6	15.7
	Female	13.5	19.8	18.0	15.9	17.5
	Total	13.0	18.2	16.6	17.8	16.6
Rural	Male	14.0	10.8	12.1	13.1	12.4
	Female	14.7	9.9	13.1	14.0	12.8
	Total	14.4	10.3	12.7	13.6	12.6
Total	Male	13.6	12.8	12.3	14.4	13.2
	Female	14.4	13.7	13.5	14.4	14.0
	Total	14.0	13.3	12.9	14.4	13.6

Source: Computed from the Swaziland Household Income and Expenditure Survey, 2009/10.

Table A4.2: Percentage of individuals who Consulted a Medical Worker by area and quintile in 2009/10

		Lowest	Second	Third	Fourth	Highest	Total
Urban	Male	7.8	9.8	14.7	17.5	17.0	15.7
	Female	10.4	11.6	19.6	18.2	17.8	17.5
	Total	9.2	10.6	17.2	17.9	17.4	16.6
Rural	Male	8.4	12.7	13.2	14.9	15.5	12.4
	Female	8.2	12.6	12.0	15.2	21.4	12.8
	Total	8.3	12.6	12.6	15.0	18.5	12.6
Total	Male	8.4	12.3	13.5	15.7	16.3	13.2
	Female	8.3	12.5	13.4	16.2	19.3	14
	Total	8.3	12.4	13.5	15.9	17.9	13.6

Source: Computed from the Swaziland Household Income and Expenditure Survey, 2009/10.

Table A4.3: Primary Net Enrolment Rates by area, sex and region

		Hhohho	Manzini	Shiselweni	Lubombo	Total
Urban	Male	92.2	65.8	76.8	88.3	77.7
	Female	90.9	74.8	94.1	91.4	83.0
	Total	91.5	70.7	83.8	89.8	80.4
Rural	Male	86.8	84.3	88.4	87.0	86.6
	Female	91.0	82.8	92.8	83.7	87.6
	Total	88.8	83.6	90.5	85.4	87.1
Total	Male	87.6	79.8	87.7	87.1	85.3
	Female	90.9	80.7	92.8	84.7	86.8
	Total	89.2	80.3	90.2	86.0	86.0

Source: Computed from the Swaziland Household Income and Expenditure Survey, 2009/10.

Table A4.4: Secondary Net Enrolment Rates by area, sex and region**2000/01**

		Hhohho	Manzini	Shiselweni	Lubombo	Total
Urban	Male	49.4	43.2	27.4	52.5	46.3
	Female	51.0	43.8	55.7	47.3	48.1
	Total	50.3	43.5	43.3	49.6	47.3
Rural	Male	24.2	27.0	23.4	15.4	22.8
	Female	28.2	27.1	32.0	17.3	26.6
	Total	26.2	27.1	27.3	16.3	24.6
Total	Male	31.9	31.1	23.5	21.5	27.4
	Female	36.1	32.0	33.5	23.6	31.7
	Total	34.1	31.5	28.1	22.5	29.5

Source: Computed from the Swaziland Household Income and Expenditure Survey, 2000/01.

2009/10

		Hhohho	Manzini	Shiselweni	Lubombo	Total
Urban	Male	70.4	53.8	52.0	55.8	58.1
	Female	51.3	52.8	37.5	55.8	51.5
	Total	59.0	53.2	42.4	55.8	54.2
Rural	Male	39.3	32.0	38.8	25.0	34.0
	Female	33.0	41.5	47.2	32.9	39.1
	Total	36.2	36.2	43.0	28.6	36.4
Total	Male	42.9	36.2	39.2	28.2	36.9
	Female	36.2	44.7	46.5	36.2	41.3
	Total	39.5	40.2	43.0	32.0	39.1

Source: Computed from the Swaziland Household Income and Expenditure Survey, 2009/10.

Table A4.5: Primary Net Enrolment Rates by area, sex and quintile,**2009/10**

		Lowest	Second	Third	Fourth	Highest	Total
Urban	Male	84.0	64.5	75.6	80.0	80.0	77.7
	Female	100.0	78.3	80.2	84.9	82.5	83.0
	Total	91.6	71.5	77.8	82.8	81.3	80.4
Rural	Male	79.0	85.1	93.3	89.9	91.4	86.6
	Female	84.8	85.5	88.4	90.9	94.7	87.6
	Total	81.8	85.3	91.0	90.4	92.9	87.1
Total	Male	79.1	83.4	91.5	88.0	86.1	85.3
	Female	85.2	84.9	87.6	89.5	88.0	86.8
	Total	82.1	84.2	89.6	88.7	87.0	86.0

Source: Computed from the Swaziland Household Income and Expenditure Survey, 2009/10.**Table A4.6: Secondary Net Enrolment Rates by area, sex and quintile****2000/01**

		Lowest	Second	Third	Fourth	Highest	Total
Urban	Male	8.6	19.5	40.2	50.2	59.1	46.3
	Female	16.5	21.5	47.6	45.9	55.9	48.1
	Total	11.7	20.4	44.1	48.0	57.2	47.3
Rural	Male	18.9	20.2	24.4	25.6	31.4	22.8
	Female	10.9	23.7	28.4	34.3	44.3	26.6
	Total	15.5	21.9	26.4	29.7	38.2	24.6
Total	Male	18.3	20.1	26.5	32.4	45.2	27.4
	Female	11.2	23.5	31.2	38.0	50.9	31.7
	Total	15.3	21.8	28.9	35.1	48.4	29.5

Source: Computed from the Swaziland Household Income and Expenditure Survey, 2000/01.**2009/10**

		Lowest	Second	Third	Fourth	Highest	Total
Urban	Male	17.6	31.1	35.2	77.0	64.8	58.1
	Female	19.2	38.6	47.2	48.8	61.1	51.5
	Total	18.6	34.8	42.9	60.2	62.7	54.2
Rural	Male	23.0	29.6	32.6	46.8	58.9	34.0
	Female	28.7	32.8	41.6	54.2	53.1	39.1
	Total	25.8	31.0	37.0	50.2	56.0	36.4
Total	Male	22.9	29.7	32.8	52.2	61.1	36.9
	Female	28.6	33.3	42.5	52.7	56.6	41.3
	Total	25.7	31.3	37.8	52.5	58.7	39.1

Source: Computed from the Swaziland Household Income and Expenditure Survey, 2009/10.

APPENDIX 5: SHIES SAMPLE DESIGN

Both rounds of the SHIES used in this study were conducted on a nationwide basis. Households were selected based on a two stage stratified sampling procedure, conducted as follows. In the first stage enumeration areas (EAs) were selected based on those used for 2007 population census, with probability proportional to size (number of households. At the second stage a fixed number of households were selected by systematic random sampling within each of the selected enumeration areas.

At the first stage a total of 375 EAs were selected. An exhaustive household listing exercise was carried out to update the lists prepared during the 2007 PHC. Collection of geo-coordinates of households also formed part of the exercise. This was to facilitate location of households during actual data collection. The final sample size was just under 4000 households.

APPENDIX 6: OPERATIONALISATION OF THE COMPUTER ASSISTED PERSONAL INTERVIEW (CAPI)

This annex is intended to provide an overall overview of how the system operated. For more specific details please refer to the consultant's publication on this system which is posted on our website accessible through <http://www.gov.sz>. Go to Central Statistics Office and click on socio-demographic statistics.

The CAPI system for the 2009-10 SHIES was developed by SERPRO a private company of Chile using CSProX which is an integrated system for processing statistical data that combines a powerful interactive data capture system together with a BATCH module to easily perform the analysis of micro data. The same system runs in the personal data assistants (PDAs) otherwise known as pocket computers (PC) and on notebook computers.

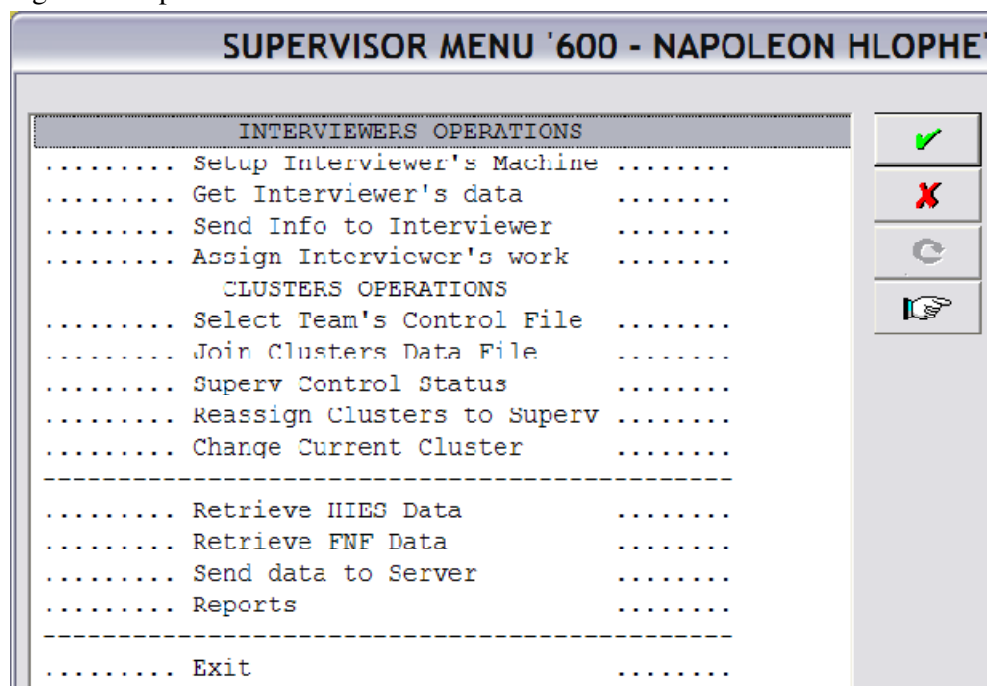
Layout of the system

The system was designed to harmonise the work of the project administrator, supervisors and interviewers in a hierarchical fashion. The administrator managed supervisor-output who in turn managed interviewer-work. Interviewers captured the data through the PCs while supervisors downloaded these files to the notebook computers. By way of facilitating better organisation and good management of the survey work identity numbers or machine ids were created for all fieldwork staff i.e. interviewers and supervisors. The machine ids were created in a logical manner, and they all assumed a 3-digit number, for supervisors the number was followed by the full name of the supervisor and for interviewers the number was followed by the interviewer's initials. Given that there were six teams each lead by a supervisor, the supervisor numbers ranged from 100 up to 600. Similarly, interviewers under the leadership of say supervisor 100 assumed the numbers 101 up to the n^{th} interviewer in the team.

Figure 1 below illustrates the menu of supervisors (whose explanation is given below) which they used to perform most of their functions;

- | | |
|--------------------------------|--|
| Set up interviewer's machine – | this was used to make any changes affecting the identity of the interviewer, for instance in cases where the interviewer pulls out of the survey and a new one comes in or there's a swap of interviewers among the teams. |
| Get interviewer's data - | This was used on a day to day basis to download data from the interviewer's PCs onto the supervisor's notebook computer. |
| Send info to interviewers - | The 'send info to interviewers' key was used to pass on cluster information to the interviewer's PC. This was basically the household identification information such as household number, name of head of household, longitude, latitude etc. |

Figure 1 Supervisor's menu



Assign interviewer's work -	This function was used to obtain cluster information from the team's data base. Each team had its own data base pertaining to its entire workload.
Select teams control file -	This was used by the administrator to monitor the progress of work of the different teams.
Join clusters data file -	This function was also used by the administrator to merge the different clusters data files.
Supervisor control status -	The supervisors tapped into this key to monitor the progress of the interviews, i.e. whether the scheduled visits have been made.
Re-assign clusters to supervisors -	This function was performed by the administrator to re-assign clusters to the supervisors. This was only used towards the end of the survey to redistribute the workload among the teams as some teams completed their workload earlier than others
Change current cluster -	
Retrieve HIES Data	was used to retrieve the household data file, excluding expenditure data.
Retrieve FNF Data	This was used to access the food and non-food data base.
Send data to server	was used by the supervisors to transmit the team's data to the office server

Reports -	was used by the administrator to generate quick tables to monitor data quality.
Exit	to get out of the system

Drop down menus

To cut down on interviewing time and to reduce respondent's fatigue drop down menus were integrated into the system where applicable e.g. name of household members, level of education, occupation, item code classification, etc. By merely typing the first three or so characters of a word relevant in that particular field, a drop down menu would immediately appear on the screen for the interviewer to pick the right selection.

Automatic Skip patterns

For responses requiring skip patterns, the interviewers were immediately posted to the rightful screens within a short space of time, thus again saving on interviewing time.

Controls on data quality

The system was programmed in such a way that error messages and warning messages popped up on the screen each time there were inconsistencies/irregularities. This enabled the interviewer to make corrections there and then. In the case of 'WARNING' the interviewers were given the option to check the response and then allowed to continue with the interview in case the warning message was not a mistake but a genuine fact. As for error messages, interviewers were blocked from continuing with the interview until such were fixed. The following are examples of some of the error messages/irregularities that were integrated into the system.

Error number	error message
00095	The head of the household should be a usual resident of the household!!!
00100	WARNING: More than one spouse in the household
00102	More than two parents in the household
00110	The sex of the spouse can't be the same as the sex of the head of the household!
00115	A person less than the minimum age to be a mother/parent couldn't be ever married!
00120	A child and his/her father/mother must have a difference in age of at least the MinAgeMother
00125	A child and his/her grandfather/grandmother must have a

difference in age of at least two times the MinAgeMother

00128 A male person is not attending school by reason of pregnancy

00129 The second reason for not attending school is the same as
the first one!

00130 The child/HH Member is too young to be at this level!
Confirm the age and the Level attending!

00132 WARNING: The HH member is illiterate but he attended lower
primary!

00133 ERROR: The HH member has attended a level of education
that makes impossible to be illiterate!

APPENDIX 7: POVERTY INDICES

Given a suitable measure of the standard of living (denoted as y_i) and poverty line (z), it remains to define a convenient means of summarising the principal dimensions of poverty. Essentially, two aspects are of interest: the *incidence* and the *depth* of poverty. The former is conveniently summarised as the proportion of individuals in the population of interest who are poor, and the latter by the mean proportion by which the welfare level of the poor falls short of the poverty line. Both of these may be derived as special cases of the widely used P_α indices of poverty proposed by Foster, Greer and Thorbecke⁶ and defined as follows:

$$P_\alpha = \frac{1}{n} \sum_{i=1}^q \left(\frac{z - y_i}{z} \right)^\alpha$$

where individuals have been ranked from the poorest ($i=1$) to the richest ($i=n$, where n is the population size), where q is the number of economic units reflecting the weight placed on the welfare levels of the poorest among the poor. In the special case in which $\alpha = 0$, the index reduces to a measure of the incidence of poverty (the proportion of the population defined to be poor):

$$P_0 = \frac{q}{n}$$

This index takes into account the number of poor people, but not the depth of their poverty. In the case in which $\alpha = 1$ the index may be written as follows:

$$P_1 = \left(\frac{q}{n} \right) \left(\frac{z - \mu_p}{z} \right)$$

where μ_p is the mean income of the poor. The index P_1 is thus the product of the index P_0 and the income gap ratio, a measure of the average amount by which poor households fall below the poverty line. Therefore the P_1 index takes account of both the incidence and the depth of poverty. It is not, however, sensitive to a mean-preserving redistribution among the poor. For higher values of α , increased weight is placed on the poorest of the poor; the P_2 index for example, takes account not only of the incidence and depth of poverty, but also of the distribution among the poor.

Apart from their ability to capture the different dimensions of poverty, another useful feature of the P_α class of indices is their property of *decomposability*. This means that, if the

⁶ J.E. Foster, J. Greer and E. Thorbecke, "A Class of Decomposable Poverty Measures", *Econometrica*, Vol. 52 (1984), pp. 761-766.

population can be divided into m mutually exclusive and exhaustive subgroups, then the value of the index for the population as a whole can be written as the weighted sum of the values of the poverty indices relating to the subgroups ($P_{\alpha j}$, where $j = 1, \dots, m$), where the weights are the population shares of the subgroups (x_j):

$$P_{\alpha} = \sum_{j=1}^m x_j P_{\alpha,j}$$

Given this decomposition, the contribution of group j to national poverty can be calculated as C_j :

$$C_j = \frac{x_j P_{\alpha,j}}{P_{\alpha}}$$

Decomposition of P_{α} indices is used in this study as the basis for examining the geographic and socio-economic pattern of consumption poverty in Swaziland.

Finally, note that when welfare is measured using a household level variable (as proposed above) it is appropriate to use weights in calculating poverty indices, where the weights reflect the differences in size of different households. These weights are in addition to those used to reflect differences in the probability of selection for different households in SHIES (see Appendix 5).

The use of poverty indices for poverty analysis

	Pop'n share	P_0	P_1	P_2	P_1/P_0	C_0	C_1	C_2
Lubombo region	19.6	69.3	36.7	23.1	53.0	21.6	23.6	25.1

To illustrate the use of poverty indices, take the example of the Lubombo region in 2009/10. The above is taken from Table A1.1 in Appendix 1. The following conclusions can be drawn from this data.

Population share: the proportion of the total population accounted for by people from that area. In this example the Lubombo region represents 23.4% of the total population.

P_0 : the proportion of the population in that region falling below the national poverty line, which is referred to as the headcount ratio or the incidence of poverty. Around 69% of those in the sample in the Lubombo region lie below the selected poverty line.

C_0 : the region's contribution to the total number of people in poverty (P_0). Of all the people in the sample who fall below the selected poverty line, 21.6% live in the

Lubombo region. This is significantly higher than the sample share, indicating a disproportionate incidence of poverty in this region.

P_1/P_0 : the income gap ratio or the depth of poverty. Those in the Lubombo region below the poverty line have an average standard of living 53.0% below the selected poverty line.

P_1 : the poverty gap index. This measure takes account of both the incidence and the depth of poverty. It gives an indication of the minimum level of resources which would be required to eliminate poverty, assuming that resources could be perfectly targeted to raise every poor person exactly to the poverty line. The amount of money required is equivalent to 36.7% of the poverty line for every person in the Lubombo region. This amount would then have to be allocated, with perfect targeting, among those in the Lubombo who are below the poverty line in order to raise them exactly to the poverty line.

C_1 : the region's contribution to total poverty, as measured by the poverty index P_1 . C_1 is higher than C_0 because there is a greater depth of poverty in the Lubombo region than in the country as a whole.

P_2 : the severity of poverty. This measure is more complex to interpret, but reflects the need to give greater attention to the needs of the poorest. It takes account of the distribution of poverty among the poor, giving greater weight to the poorest of the poor.

C_2 : The region's contribution to total poverty, as measured by the poverty index P_2 . C_2 is higher than C_1 ; as more emphasis is placed on the depth of poverty (moving from P_0 to P_1 to P_2), the contribution of the Lubombo region to total poverty in Swaziland increases. This reflects the fact that the depth of poverty is higher in this region than on average for the country as a whole.