

Pattern and Trends of Poverty in Ghana 1991-2006

Ghana Statistical Service
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Preface and Acknowledgement

This publication presents an up-to-date analysis of the living conditions of Ghanaian households focusing on the poverty patterns and trends since the beginning of the 1990s. The publication is based on the results of the last three rounds of the Ghana Living Standards Survey (GLSS), multi-topic household surveys which are designed to provide comprehensive information on living standards. Five rounds of the GLSS have been completed so far, (1987/88, 1988/89, 1991/92, 1998/99 and 2005/06) with each round covering a nationally representative sample of households spread over a period of 12-month.

The report is on three different dimensions of poverty: consumption poverty, lack of access to assets/services and human development. It adds to the policy debate and discussions in Ghana on actions taken to reduce poverty so far and various programmes being implemented to chart the progress towards the attainment of the various goals under the Growth and Poverty Reduction Strategy (GPRS II) in Ghana and the Millennium Development Goals (MDGs). The comparison of the GLSS data from the previous rounds in 1991/92 and 1998/99 to the most recent round of 2005/06 provides an opportunity to study trends in household well-being over the 15-year period and ensure evidence-based public policy decision-making in the poverty reduction effort.

A companion report that provides more comprehensive description of the results of the GLSS-5 (2005/2006) would be published. The Statistical Service welcomes collaboration from researchers and others in carrying out further analysis of the GLSS data series.

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I. INTRODUCTION

This report examines poverty in Ghana since the beginning of the 1990s. It looks at both poverty trends and its decomposition between different groups: urban/rural, locality, region and socioeconomic. In recent past, Ghana has achieved impressive economic growth that has yielded per capita economic growth rates for each year of the 15 year period under study. Gross Domestic Product is estimated to have grown on average by 4.65 percent per annum during the 1991-1999 period, and 4.98 between 1999 and 2006. Per capita, it yielded an average of 2.20 per annum over the whole period. Even if no regional GDP figures are available, there is some hard evidence that most part of the country benefited from it although the southern cocoa-producing regions seem to have benefited the most.

A previous Poverty Profile (GSS, 2000) using the two rounds of the Ghana Living Standards Survey from the 1990s (1991/92 & 1998/99) found a significant poverty reduction for the country as a whole although some regions were completely left out. In particular, it was found that the already poorest part of Ghana (the savannah area) did not benefit from that economic growth. This report builds on the previous one, thanks to the availability of a recent round of the GLSS conducted between September 2005 and September 2006. As before, we will attempt to answer the following questions: To what extent have Ghanaian households and communities benefited from this growth? Which groups have benefited most? Have the lives of poor Ghanaians improved as a result?

Poverty has many dimensions; it is characterised by low income, 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 Ghana 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 Ghana the results of the fifth round of the Ghana Living Standards Survey (GLSS) along with the already published results from the GLSS 3 and 4. These are nationally representative surveys, covering a wide range of household characteristics and behaviours. The availability of three highly comparable surveys provides an opportunity to trace trends in household well-being over a rather long period of 15 years, from 1991 to 2006. These data have been subjected to careful analysis in order to establish trends in poverty, and to inform public policy.

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 in the previous poverty profile (GSS, 2000). Section III then describes the main results on consumption poverty. The report demonstrates the notable decline in consumption poverty experienced during the 1990s has been prolonged into the first half of the new decade. Unfortunately, the regional disparity is persisting even if many of the poorest households from the northern half of the country have seen their fortunes improving. 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 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 GLSS. Concluding observations are made in the final section.¹

¹ Our intention has been to avoid including too many tables and other technical detail in the main body of this report. This material has been assigned to the appendices. Appendices 1-3 report some main findings of the survey. Appendices 4-6 provide details of the underlying analysis that has been undertaken.

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 third, fourth and fifth rounds of the Ghana Living Standards Survey (GLSS). The GLSS is a multi-purpose survey of households in Ghana, which collects information on the many different dimensions of their living conditions on, among others, education, health and employment. These data are collected on a countrywide basis. Five rounds of data have been collected, starting in 1987/88. In this report we focus on the three most recent rounds—those conducted in 1991/92, 1998/99 and more recently in 2005/06. The questionnaires used for these three rounds were almost identical, meaning that their results can be directly compared. By contrast, the first two rounds were based on different questionnaires, making comparison with the later rounds more difficult.

Ghana Living Standards Surveys collect 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, payment for work done in the form of commodities, or from transfers from other households). The household consumption measure must take account of all of these sources, and the different questionnaires enable this to be done (Appendix 6, Table A6.1).

Construction of the standard of living measure

In using measures of household consumption to compare living standards across the country, it is necessary to take account of variations in the cost of living across households, as well as differences in their size and composition. The latter can be taken to reflect the consumption needs of the household larger households have greater consumption needs.

As in the previous poverty profile (GSS, 2000), the measure of the standard of living is based on household consumption expenditure, covering food and non-food (including housing). The regional cost of living index based on GLSS 4 compares the cost of a given consumption basket in each of five localities with the cost of the same basket in Accra. The index is presented in Table 1. It indicates that there are significant differences in the prices of food

and housing, with urban areas in general and Accra in particular being more expensive for these items than rural areas. The prices of other non-food items are much more uniform. The regional cost of living index is a weighted average of these three regional sub-indices.

Table 1: Regional cost of living indices

	Food index	Non food index	Housing index
Accra	1.0000	1.0000	1.0000
Other Urban	0.9183	0.9086	0.6442
Rural Coastal	0.8832	0.9753	0.6149
Rural Forest	0.8212	0.9839	0.5296
Rural Savannah	0.7310	1.0484	0.4491

Source: Computed from the Ghana Living Standards Survey, 1998/99.

The overall cost of living index also allows for variation in prices *over time* within and between the sample years, based on the Consumer Price Index. The use of area-specific CPIs (Accra, Other Urban and Rural) allows us taking into account adjustment in relative spatial prices. In this way, each household's consumption expenditure is expressed in the constant prices of Accra in January 2006.

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 Ghana. 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 A6.2 (Appendix 6).

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 some account of intra-household variations.

In summary, the standard of living for each individual is measured as the total consumption expenditure, per equivalent adult, of the household to which he or she belongs, expressed in constant prices of Accra, January 2006.

Setting the poverty line

While these lines corresponded to reasonable levels of calorie intake, there was a clear need to develop absolute poverty lines in Ghana, around which a broad consensus could be built. Such a consensus was achieved through a series of data users' seminars in the months leading to the Consultative Group Meeting in November 1999. Setting poverty lines is not an exact science. Analysts must use sound judgement as well as quantitative tools. The approach taken here is to anchor such lines on calorie requirements that is to use *nutrition based* poverty lines. The principles used for doing this are discussed in Box 1. Two nutritionally-based poverty lines are derived from this procedure:

- A lower poverty line of 2,884,700 cedis per adult per year: this focuses on what is needed to meet the nutritional requirements of household members.

Individuals whose total expenditure falls below this line are considered to be in extreme poverty, since even if they allocated their entire budgets to food, they would not be able to meet their minimum nutrition requirements (if they consume the average consumption basket). This poverty line is equivalent of the 700,000 cedis line used in the previous Poverty Profile (GSS, 2000), before being inflated with the 1999 to 2006 Consumer Price Index. This line is 37.8 percent of mean consumption levels in 2005/06.

- An upper poverty line of 3,708,900 cedis per adult per year: this incorporates both essential food and non-food consumption. Individuals consuming at levels above this can be considered able to purchase enough food to meet their nutritional requirements, and to be able to meet their basic non-food needs. This poverty line is equivalent of the 900,000 cedis used in the previous Poverty Profile (GSS, 2000), before being inflated with the 1999 to 2006 CPI. This line is 48.6 percent of mean consumption levels in 2005/06.

In summary, this report anchors the poverty line on the nutrition needs of the Ghanaian population. It derives two lines: a lower line of 2,884,700 cedis per adult equivalent per year, and an upper line of 3,708,900 cedis per adult equivalent per year.

Box 1: Setting a poverty line for Ghana

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 (2900 kilocalories per equivalent adult based on the scale used here). This provides an estimate of the food expenditure required to attain 2900 kilocalories, based on the consumption basket of the poorest x percent of the distribution. Obviously, an issue in this is the choice of x . Taking account of non-food needs is subjective and more difficult to judge. 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.

Many readers might find 2900 Kcal too high given that most poverty profiles in other developing countries use between 2000 and 2300 Kcal for their poverty lines. Those countries usually construct a per capita welfare measure while ours is based on equivalent adult. It would be easy to show that our level of kilocalories in a per capita basis would be 2202.

This poverty line methodology had been used in the previous poverty profile based on GLSS 3 and 4 (GSS, 2000). The methodology used suggests food poverty line of, in round figures, 700,000 when $x=50$ percent (slightly lower for lower values of x), while allowing for non-food requirements suggests an overall poverty line of approximately 900,000 cedis per equivalent adult per year in Accra, January 1999 prices. World Bank (1995) have shown that this line represent roughly \$1 a day. This latter line would be used as the overall poverty line for Ghana. The lower poverty line of 700,000 is used as an extreme poverty line; people whose standard of living measure lies below this would not be able to meet their calorie requirements even if they spent their entire budget on food.

These same poverty lines of 700,000 and 900,000 cedis are used in the current report although they were inflated – using locality specific Consumer Price Index (CPI) provided by GSS – to January 2006 prices, yielding poverty lines of 2,884,700 cedis and 3,708,900 cedis. As stated previously, those lines take into account price differentials between the different localities. In local prices the higher line can be translated to 3,708,900 (Accra); 2,773,170 (Other Urban); 3,146,220 (Rural Coastal); 3,034,800 (Rural Forest) and 2,850,120 (Rural Savannah).

III. PATTERNS AND CHANGES IN CONSUMPTION POVERTY

By applying the two poverty lines to the distribution of the standard of living measure, we are able to obtain measures of poverty in Ghana. 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, poverty and extreme poverty lines referred to above.

Poverty and Extreme Poverty Trends

Our objective in this section is to examine the poverty situation from 1991/92 to 2005/06. It considers the situation in the country over the period and variations among geographical/administrative regions as well as among the various socio-economic groups.

Considering the upper poverty line of 3,708,900 cedis, the proportion of the population of Ghanaian defined as poor fell from 51.7 percent in 1991/92 to 39.5 percent in 1998/99 and further to 28.5 in 2005/06 (Table 2 and Appendix 1—the results are also illustrated in Figure 1). Considering the first MDG of halving the poverty rate from 1990 to 2015, it appears that Ghana should meet this goal very soon if the economic growth remain as high as it is now. Furthermore, that impressive decline in poverty incidence has led to lowering the absolute numbers of poor from around 7,931,000 individuals in 1991/92 to 7,203,000 to 6,178,000 individuals in 2005/06.

In the previous poverty profile (GSS, 2000) it was observed that the decline in poverty in Ghana (from 1991/92 to 1998/99) was “not evenly distributed geographically, the poverty reductions being concentrated in Accra and Forest (rural and urban) localities”. In the remaining localities, both urban and rural, poverty fell “only very moderately, apart from Urban Savannah, where the proportion of the population defined as poor increased during the period”. The situation is, however, different in 2005/06 as poverty has fallen significantly in all localities from the 1998/99 level, except Accra which has experienced an increase as depicted in Figure 1.

In line with the general decline of poverty in the country, the percentage of rural population living below the poverty line declined from about 64 percent in 1991/92 to about 50 percent in 1998/99 and has further declined to about 39 percent in 2005/06.

In the case of Accra (GAMA)², there are mixed results. In 1991/92 about 23 percent of the population of Accra fell below the poverty line. This reduced significantly to only about four percent in 1998/99. However, the incidence of poverty has increased significantly to about 11 percent in 2005/06. This could be the result of a large increase in net numbers of migrants from the poorer regions to Accra, since for instance, net migration (per 1000) was found to be about +310,000 for Greater Accra region but –332,000 for Upper West region and –219,000 for the Upper East region which are considered the poorest regions (GSS, 2005).

It is also observed that after its poverty rate increasing during the 1990s, Urban Savannah experienced a decline in poverty incidence from 43 percent in 1998/99 to about 28 percent in 2005/06.

While households from the forest ecological zone had experienced the largest decline in poverty during the 1990s, the coastal areas are now the ones having benefited the most of Ghana's economic growth since the late 1990s.

Notwithstanding the marginal decline of poverty incidence from about 73 percent in 1991/92 to 70 percent in 1998/99, and a significant decline to about 60 percent in 2005/06, Rural Savannah remains the locality with the highest poverty incidence in the country. The changes over the years for the other localities are presented in Figure 1.

Poverty in Ghana has remained a disproportionately rural phenomenon up till now. Eighty-six percent of the total population living below the poverty line in Ghana is living in the rural area. This is slightly higher than the figure as at 1998/99 (83%) as indicated in Table 2.

The distribution of the population living below the poverty line ranges between one percent in Urban Coastal and about 50 percent in Rural Savannah. In fact, the contribution of Rural Savannah to total poverty in Ghana has consistently been increasing. From about 33 percent in 1991/92, the contribution of Rural Savannah to total poverty increased to 37 percent in 1998/99 and has increased further to about 50 percent in 2005/06. Even if poverty in Savannah has been declining in the last seven years its higher share of Ghana's poor is due to the fact that poverty have been declining even faster in the southern part of the country. On the other hand, the contribution of Rural Forest locality to total poverty has been declining, as it reduced from about 35 percent in 1991/92 to about 30 percent in 1998/99 and has reduced further to about 27 percent in 2005/2006. The recent boom in the cocoa sector might have contributed to the improving situation in the Rural Forest zone.

The contributions of the other localities to total poverty in Ghana over the years is indicated in Figure 2 where the contributions to total poverty are compared with population share.

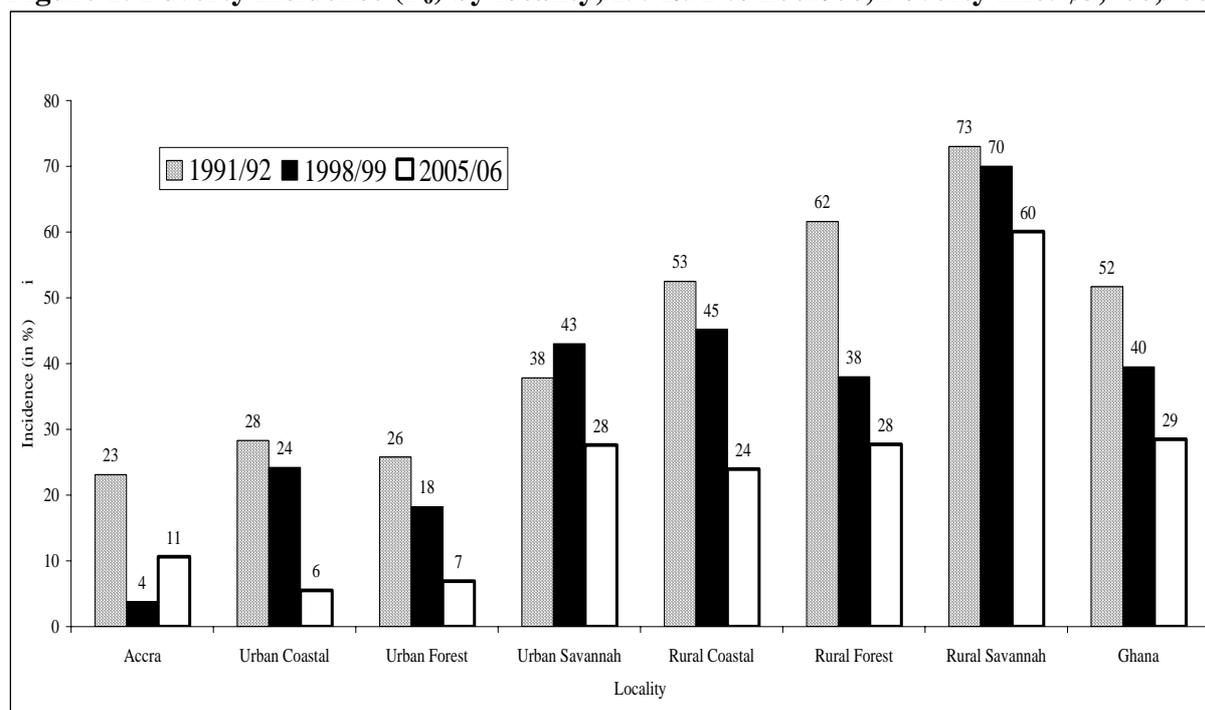
² GAMA is defined as Greater Accra Metropolitan Area which includes: Accra Metropolitan Area, Tema Municipal Area as well as the urban areas in Ga East and Ga West districts. This is a departure from the previous study where Accra had been defined as AMA along with some bordering neighbourhoods but excluding Tema.

Table 2: Poverty incidence by locality, 1991/92, 1998/99 and 2005/06 (in percent)

	Poverty line = 3,708,900 cedis		Poverty line = 2,884,700 cedis	
	Poverty Incidence	Contribution to total poverty	Poverty incidence	Contribution to total poverty
<i>1991/92</i>				
Accra (GAMA)	23.1	3.7	11.3	2.5
Urban Coastal	28.3	4.7	14.2	3.4
Urban Forest	25.8	5.5	12.9	3.9
Urban Savannah	37.8	3.9	27.0	3.9
Rural Coastal	52.5	14.4	32.8	12.7
Rural Forest	61.6	35.3	45.9	37.3
Rural Savannah	73.0	32.6	57.5	36.3
Urban	27.7	17.8	15.1	13.7
Rural	63.6	82.2	47.2	86.3
All Ghana	51.7	100.0	36.5	100.0
<i>1998/99</i>				
Accra (GAMA)	4.4	1.3	1.9	0.8
Urban Coastal	31.0	4.6	19.0	4.2
Urban Forest	18.2	5.4	10.9	4.8
Urban Savannah	43.0	5.2	27.1	4.9
Rural Coastal	45.6	16.7	28.5	15.3
Rural Forest	38.0	30.1	21.1	24.6
Rural Savannah	70.0	36.6	59.3	45.5
Urban	19.4	16.6	11.6	14.6
Rural	49.5	83.4	34.6	85.4
All Ghana	39.5	100.0	26.8	100.0
<i>2005/06</i>				
Accra (GAMA)	10.6	4.4	5.4	3.5
Urban Coastal	5.5	1.1	2.0	0.6
Urban Forest	6.9	3.5	2.9	2.3
Urban Savannah	27.6	5.2	18.3	5.5
Rural Coastal	24.0	9.2	11.5	6.9
Rural Forest	27.7	27.2	14.6	22.5
Rural Savannah	60.1	49.3	45.4	58.7
Urban	10.8	14.3	5.7	11.9
Rural	39.2	85.7	25.6	88.1
All Ghana	28.5	100.0	18.2	100.0

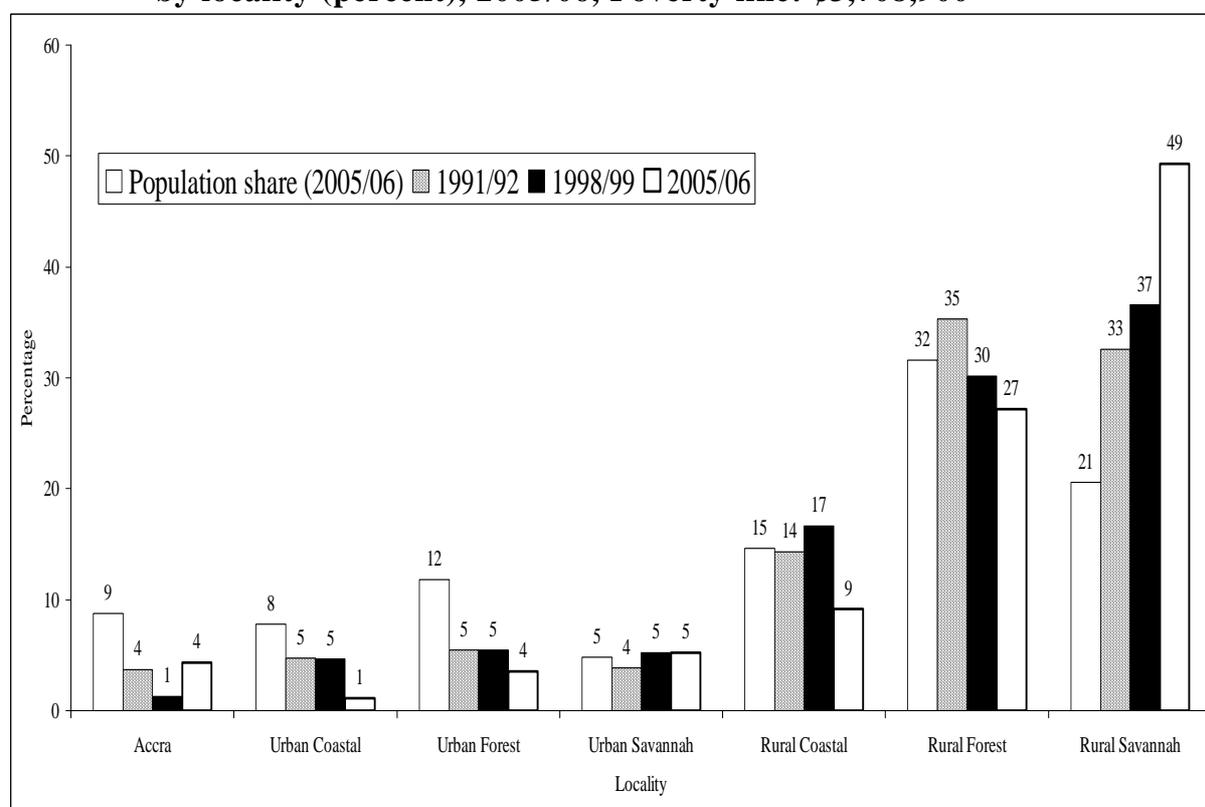
Sources: Table A.1.1 and A.1.2.

Figure 1: Poverty incidence (P_0) by locality, 1991/92 to 2005/06, Poverty line: ₺3,708,900



Source: Table A1.2

Figure 2: Population shares and contribution to poverty incidence (C_0), by locality (percent), 2005/06, Poverty line: ₺3,708,900



Source: Table A1.2

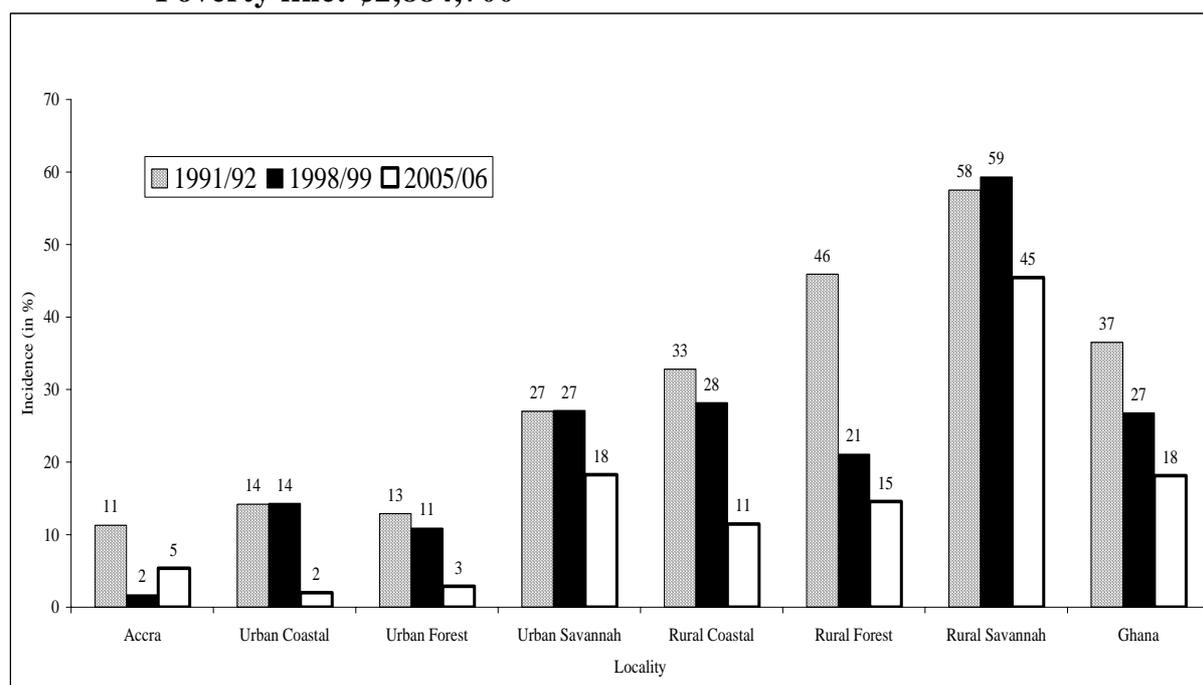
Extreme poverty

Extreme poverty has been defined as those whose standard of living is insufficient to meet their basic nutritional requirements even if they devoted their entire consumption budget to food. Figure 3 illustrates the trend in the incidence of extreme poverty for the country as a whole and for the seven geographic localities (the results are also reported in Table 2). At the national level, the incidence of extreme poverty fell from a little over 36 percent in 1991/92 to just fewer than 27 percent in 1998/99. This has declined further to a little above 18 percent of the population in 2005/06.

In 1998/99, sharp geographic variations in the pattern of poverty were found to be more marked with extreme poverty. The situation remains the same in 2005/06. In both 1991/92 and 1998/99, more than half of those living in the Rural Savannah were classified as extremely poor. The incidence of extreme poverty in this locality actually increased slightly between 1991/92 and 1998/99. However, the incidence of extreme poverty in the Rural Savannah locality has declined significantly from about 59 percent in 1998/99 to about 45 percent in 2005/06. With the exception of Accra, there has been a substantial decline in the incidence of extreme poverty in all the localities in 2005/06 compared to 1998/99. In the case of Accra, the incidence of extreme poverty which declined from about 11 percent in 1991/92 to about two percent in 1998/99, has now risen to about five percent in 2005/06 as can be seen in Figure 3.

The contribution of Accra to the incidence of extreme poverty in Ghana, which declined from about three percent in 1991/92 to less than one percent in 1998/99, has now increased to a little over three percent in 2005/06. It may be noted that the contribution of the Urban Coastal locality to extreme poverty in Ghana in 2005/06 is less than one percent, having fallen from about four percent in 1998/99.

**Figure 3: Extreme poverty incidence (P_0) by locality, 1991/92 to 2005/06,
Poverty line: $\text{¢}2,884,700$**

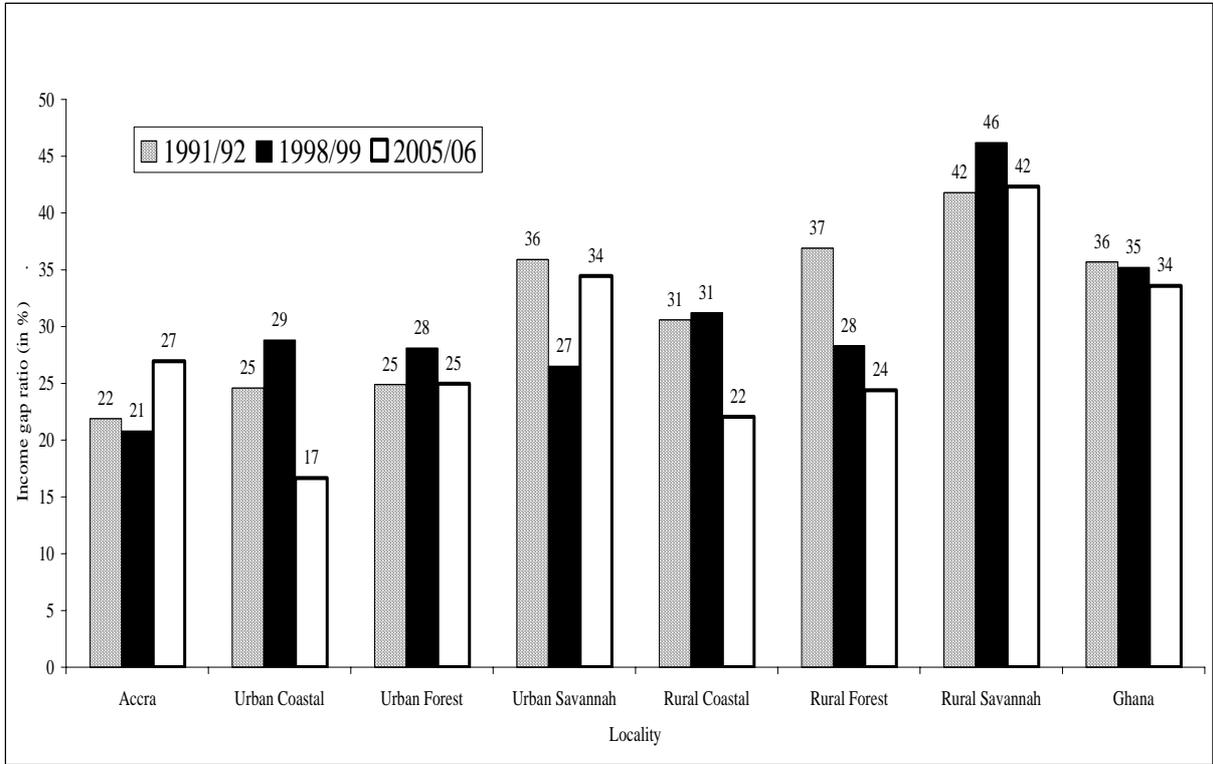


Source: Table A1.1

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 has been in Ghana (Figure 4). The average consumption among the poor in Ghana is about 34 percent below the upper poverty line in 2005/06. This shows only a slight decline in the depth of poverty compared to the figure of 35 percent in 1998/99. With respect to the extreme poor, the depth of poverty has remained relatively stable from about 30.0 percent in 1998/99 to about 31.3 percent in 2005/06 (Appendix 1). Thus, the average consumption of those living in extreme poverty is about 31 percent below the lower poverty line.

Figure 4: Income gap ratios (P_1/P_0) by locality, 1991/92 to 2005/06, Poverty line: ₵3,708,900



Source: Table A1.2

In summary, though the incidence of poverty has been falling since 1991/92, the depth of poverty for those who remain poor has remained unchanged. The depth of poverty is about the same for both the standard poverty line and the extreme poverty line.

Poverty by region

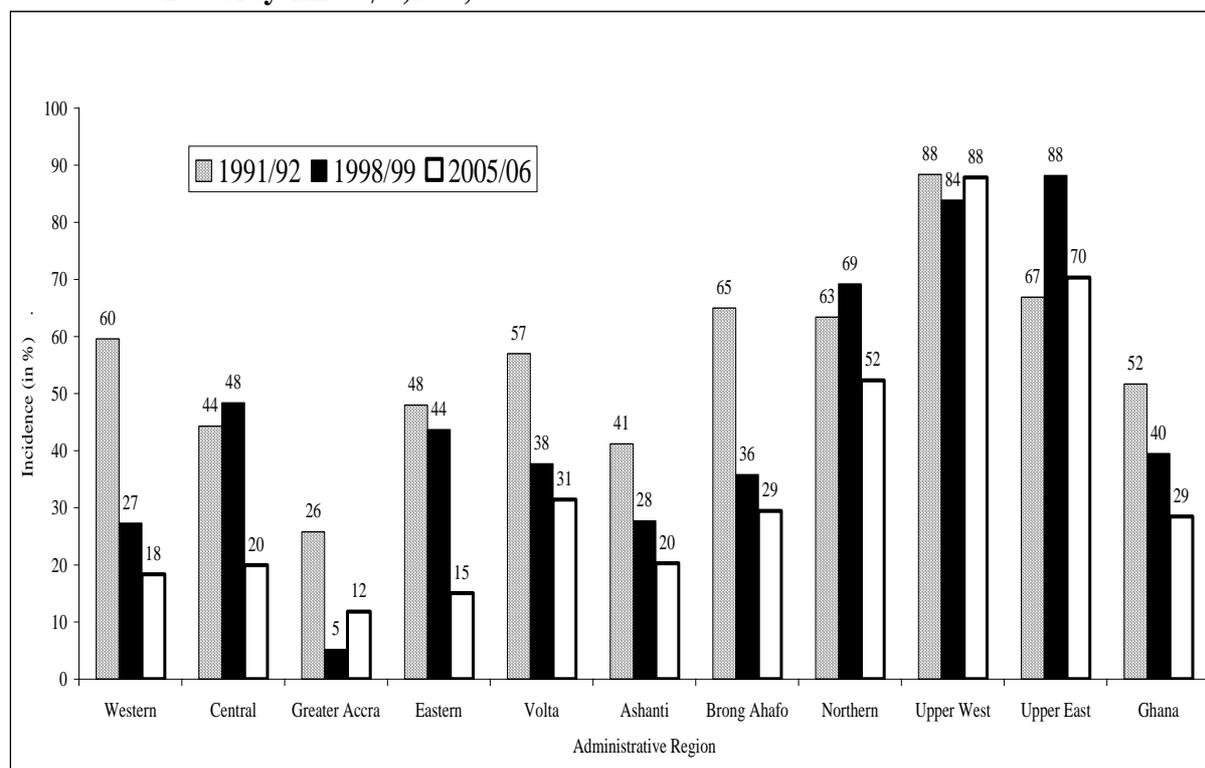
Compared to 1998/99, the incidence of poverty has declined in all regions except Greater Accra and Upper West regions. Poverty incidence in the Greater Accra region was about five percent in 1998/99, having declined from about 26 percent in 1991/99. It has, however, increased significantly to over 11 percent in 2005/06. The highest poverty incidence occurs in the Upper West region, where the figure

increased from about 84 percent in 1998/99 to about 88 percent in 2005/06. The Eastern Region has the second lowest poverty incidence in the country with about 15 percent of the population living below the poverty line. It is worthy to note that the Eastern Region was considered as one of the regions of southern Ghana with the highest incidence of poverty in 1998/99.

It is observed (Figure 5 and Appendix 1) that poverty vary significantly by geographic area. Again, the differences in poverty levels that occurred between geographically adjacent regions in 1988/99 have reduced.

The pattern of change in poverty between 1998/99 and 2005/06 also varies substantially by region (Figure 5). The most significant reductions in poverty occurred in the Eastern and Central regions, which were considered to be the two regions with the highest poverty incidence in the southern part of the country in 1998/99, but are now, respectively, the regions with the 2nd and 4th lowest incidence of poverty in the country in 2005/06.

Figure 5: Poverty incidence (P₀) by administrative region, 1991/92 to 2005/06, Poverty line: ₵3,708,900



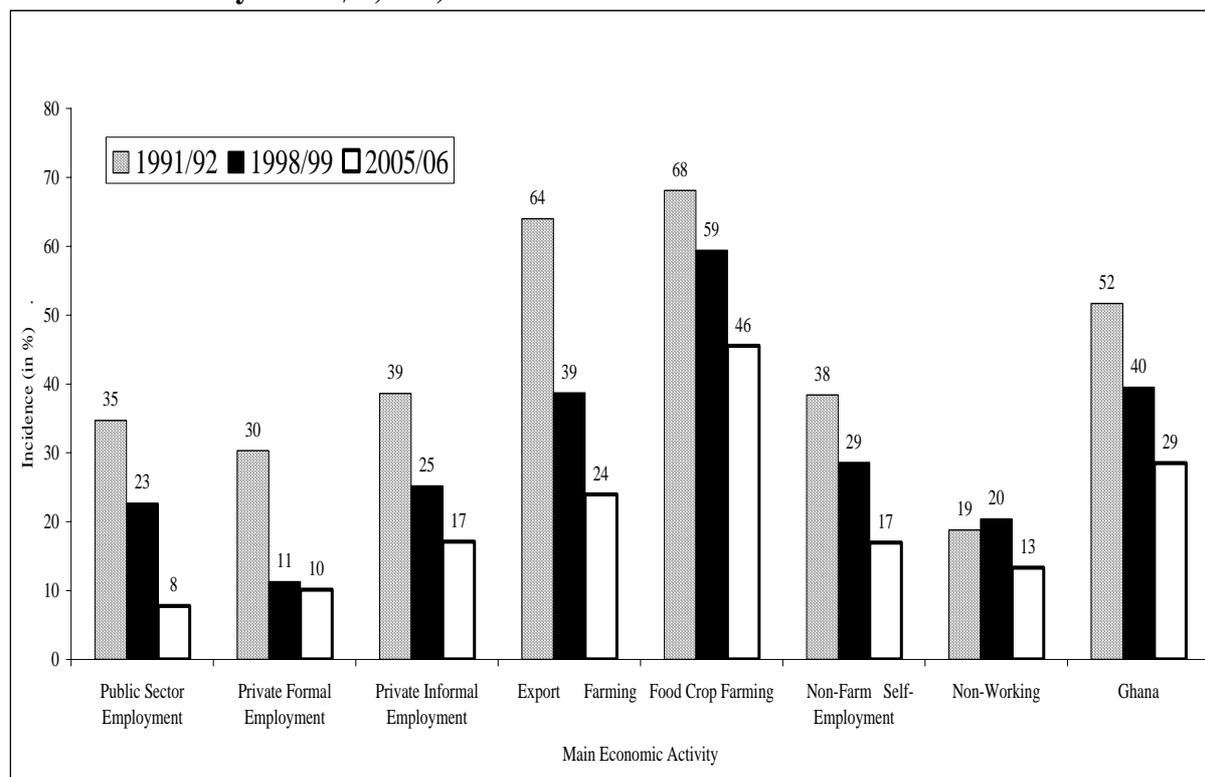
Source: Table A1.6

Poverty by main economic activity

Besides its geographic pattern, it is also important to relate poverty trends to the economic activities in which households are engaged. Figure 6 presents the incidence of poverty by the main economic activity of the household. In 2005/06 in particular, poverty was highest by far among food crop farmers. Moreover, their contribution to the national incidence of poverty is much in excess of their

population share. Indeed, at the national level about 46 percent of those identified as poor are from households for whom food crop cultivation is the main activity. Other results also show that the concentration of poverty among food crop farmers becomes much more pronounced using measures which take account of the depth of poverty, or when extreme poverty is considered (Appendix 1).

Figure 6: Poverty incidence (P_0) by main economic activity, 1991/92 to 2005/06, Poverty line: ₵3,708,900



Source: Table A1.4

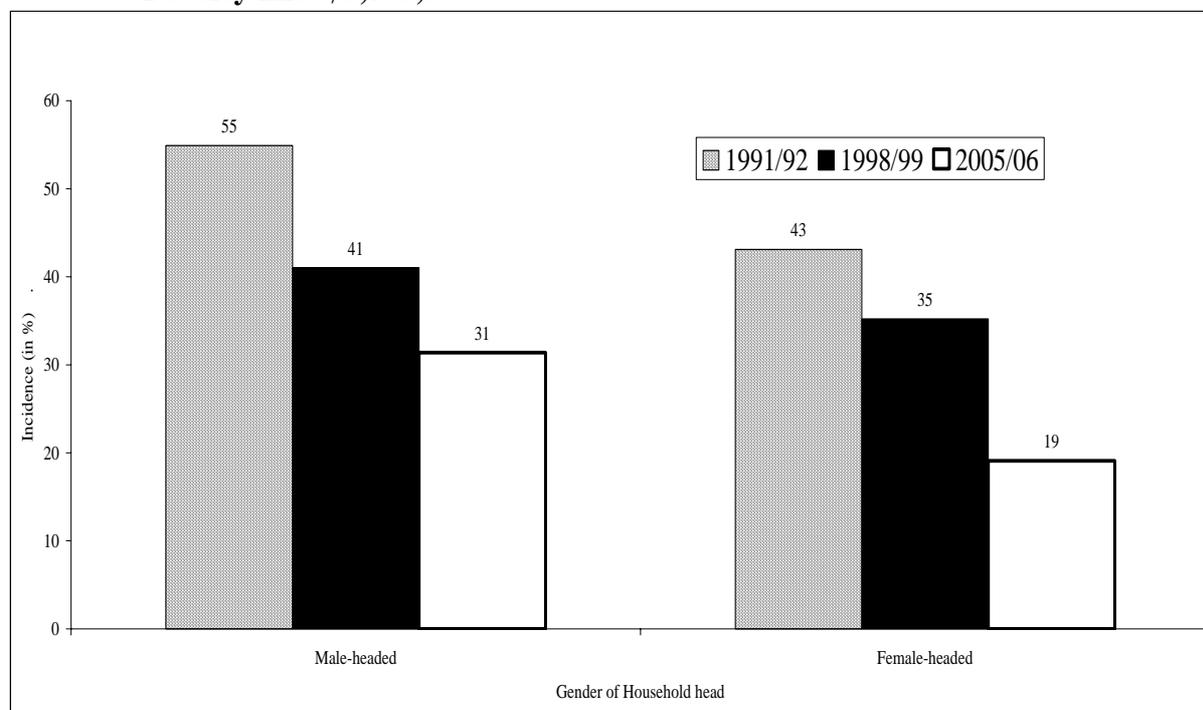
With the exception of food crop farmers, other groups represent a smaller share of the national poor than their share of the population. In other words, the food crop farmers is the only group with an higher than average poverty rate. Given its large population share and high poverty rates, any further poverty reduction would have to benefit substantially the farmers, particularly the ones not producing cocoa. Nonetheless, the incidence of poverty is still quite high among export crop farmers, private informal sector wage employees and the non-farm self-employed.

Most groups have experienced reductions in poverty over this period, but to differing degrees. Public sector employees and farmers (both export and food crop farmers) have experienced the largest reductions in poverty. Poverty has fallen among both wage employees in the public sector and the non-farm self employed (though over this period the number in the former category has fallen significantly, with a corresponding increase in the number working in non-farm self employment). In 1998/99 food crop farmers experienced the least reduction in poverty by 8.7 percentage point relative to the other groups. The situation, however, improved in 2005/06 where the food crop farmers experienced an appreciable reduction of 13.9 percentage points.

Poverty by gender of household head

A final set of tabulations is constructed to examine the poverty level according to the gender of household head. Figure 7 shows that female-headed households are on average less poor than male-headed households.

**Figure 7: Poverty incidence (P_0) by gender of household head, 1991/92 to 2005/06,
Poverty line: ₺3,708,900**



Source: Table A1.7

In summary, the decline in poverty since 1998/99 has been concentrated mostly in the Central, Western, Eastern, Upper East and Northern regions. However, Greater Accra and Upper West have experienced increases. Farmers in general, non-farm self employed and public sector employees enjoyed the greatest gains in their standard of living, while private sector employees and non-working households have the greatest, experienced the least gains. Female-headed households appear to be better off than male-headed households and to enjoy increasingly lower poverty.

Decomposition of poverty incidence between growth and redistribution effects

For a given poverty line, changes in a poverty index can be expressed in terms of the change due to:

- the observed change in the mean value of the standard of living measure, assuming that inequality had remained unchanged (“growth” effect);
- the observed change in inequality, assuming the mean value had remained unchanged (redistribution effect);

Growth in the average standard of living will reduce poverty other things being equal, but where it is accompanied by an increase in inequality, the reduction in poverty will be reduced. The effectiveness of growth in poverty reduction is increased where that growth is pro-poor, in other words, when it is accompanied by falling inequality. To what extent do changes in poverty in Ghana reflect changes in the average living standard, and what role have changes in inequality played?

Table 3 presents this decomposition of changes in the incidence of poverty for Ghana and for an urban/rural breakdown. The reduction in the incidence of poverty at the national level as well as in urban/rural areas overwhelmingly reflects the growth in mean consumption. At the national level the changes in inequality contribute little to the changes in poverty during the 1990s, although inequality seems to have increased considerably in the last seven years. If Ghana had experienced no change in inequality during the last seven year the actual decline in poverty of 10.4 would have been 13.8. The difference is fully explained by change in inequality that contributes to increases in poverty, so offsetting beneficial growth effects. Particularly since 1998/99, this increasing inequality mainly occurs in rural areas.

Table 3: Decomposition of change in poverty headcount, by urban/rural

	Total Change	Share of change due to:	
		Growth	Redistribution
<i>1991/92 to 1998/99</i>			
National	-12.3	-13.1	0.9
Urban	-8.3	-10.7	2.4
Rural	-14.0	-14.4	0.3
<i>1998/99 to 2005/06</i>			
National	-10.9	-13.5	2.6
Urban	-8.6	-8.6	0.0
Rural	-10.4	-13.8	3.4
<i>1991/92 to 2005/06</i>			
National	-23.2	-27.5	4.3
Urban	-16.9	-20.0	3.1
Rural	-24.4	-28.7	4.3

Source: Computed from the Ghana Living Standards Survey, 1991/92, 1988/1999 and 2005/06.

Has Ghana had pro-poor growth?

Whether economic growth is pro-poor or not have been a raising topic in the last few years. The concern is whether the poorest households are really benefiting from the accelerated economic growth being enjoyed by Ghana since the early 1990s.

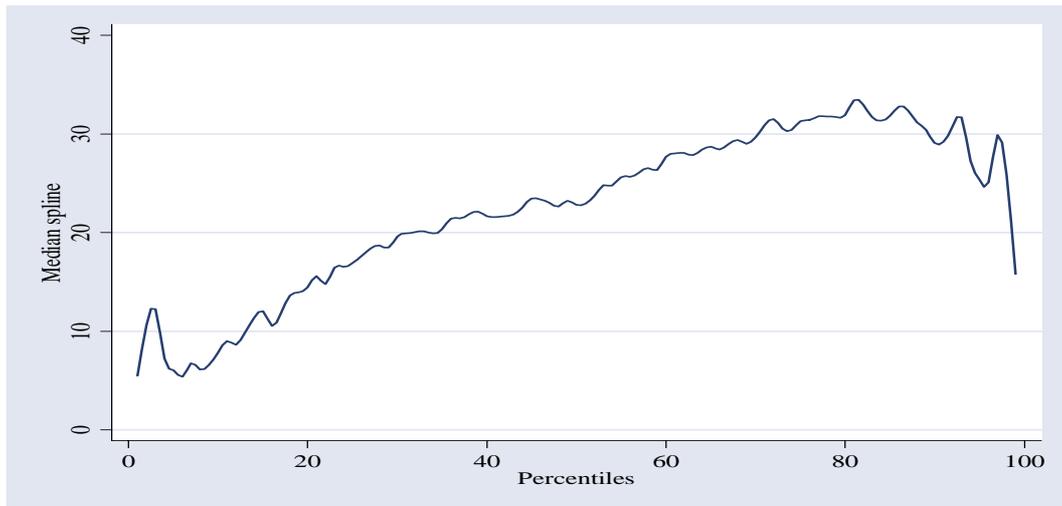
Growth incidence curve is one approach to answer this question (Ravallion 2003). These curves graph the growth rates in consumption at various points of the distribution of consumption, starting from the poorest on the left of the horizontal axis to the richest on the right. The growth incidence curve shows the percentage increase in consumption obtain for various groups of the population according to their consumption level. Clearly, as shown in Figure 8, the growth rates in consumption have been significantly higher in the upper part of the population, especially in the 1990s. From 1998/99 to 2005/06, while the upper echelons of the population benefited from very large gains in consumption, and while the very poor had lower gains than the rest of the population (but positive gains nevertheless), the pattern of

gains was equitable for a fairly large segment of the population since the growth incidence curve is flat from the second decile to the ninth decile. Has economic growth been pro-poor in Ghana during the last 15 years? The economic literature does not fully agreed on what should be labeled pro-poor growth. One side, some researchers want economic growth to be faster for the poor than the richer households to declared pro-poor growth (hence see a decline in inequality) while some others are pleased with any growth that raised the welfare level of all households as measured per percentile. Taking the former definition, Ghana has clearly not experienced pro-poor while the less restrictive definition clearly gives us pro-poor growth since all percentile benefited from economic growth even if it was very small for some households.

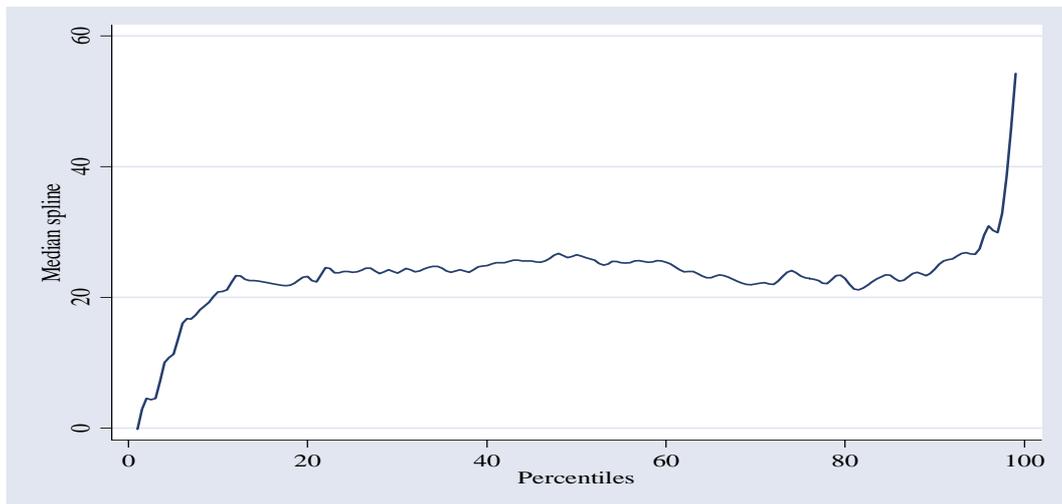
In summary, poverty reduction has benefited from very favourable economic growth in the last fifteen years. However, the decline in poverty would have been even better if it had not been offset by increasing inequality, particularly since 1998/99.

Figure 8: Growth Incidence Curves, national level

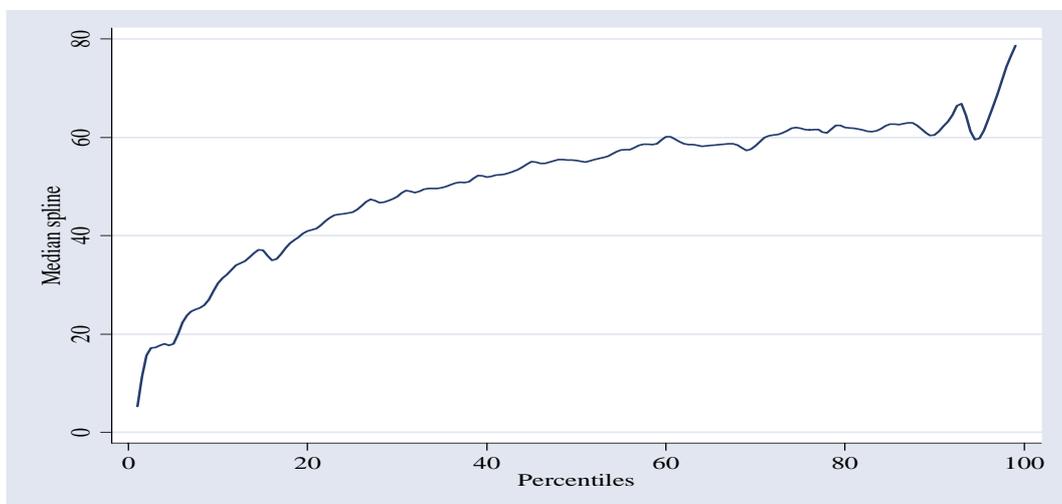
1991/92 to 1998/99



1998/99 to 2005/06



1991/92 to 2005/06



Source: Computed from the Ghana Living Standards Survey, 1991/92, 1988/1999 and 2005/06.

IV. HOUSEHOLD ASSETS

The first part of this report has shown that the incidence of poverty – measured in terms of consumption expenditure – has declined by quite a large margin in Ghana between 1991 and 2006 although this reduction has not been uniformly spread across the country.

Poverty is a multi-dimensional phenomenon and consumption-based measures need to be supplemented by other welfare indicators. This section examines poverty in terms of household ownership of durable goods which can be seen as an *alternative* measure of poverty to the consumption-based measures of welfare presented in section III. One of the advantages of these asset-based indicators is the ease with which they can be measured compared to indicators based on consumption expenditure.

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 households.³ 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 proxy indicator of the standard of living.

Information on the proportion of households owning different consumer durable goods in 1991/92, 1998/99 and 2005/06 is presented in Figures 9 and 10 for urban and rural areas respectively (and also in Tables A2.1, A2.2). 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 most of these assets shows large increases over the fifteen year period. This is particularly the case for items like refrigerators, video recorders, radios, televisions, electric irons and mobile phones.

The effect of other factors, not directly reflecting income levels but influence spatial aspects of ownership, shows in the distribution of items in rural and urban areas. With the exception of bicycles (incidentally mostly owned by households in the Savannah), the proportions of households owning these assets remain much higher in urban areas than in rural areas. The pattern of changes between ownership of assets in the last two surveys i.e. 1998/99 and 2005/06 is also different for urban and rural households. Whereas the increases in ownership of items are relatively significant for only three assets in rural areas, increases in urban areas are reflected in about six items. Ownership of radio sets and mobile phones show large increases in both rural and urban areas, but in urban areas other items like video recorders, television sets and cooking stoves show significant increases in their ownership. Most likely, this reflects not just higher incomes in urban areas but also supply factors including wider access to electricity and liquefied petroleum gas.

³ 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).

Further examination reveals that the increases in the proportion of households owning these goods occurred in all geographic localities for the period 1991/92 to 2005/06 and particularly large in urban areas in the Forest and Savannah ecological zones (Appendix 2, Table A2.1).

More information can be provided by examining specific durable goods in greater detail. Figures 11 and 12 examine ownership of two such goods, one being a useful productive asset for the households (refrigerator) while the other is more for pleasure and information (television set). The same figures for all other durable goods under study can be found in the appendix. The figures present the changes in ownership of these assets for different quintile⁴ groups of households defined according to their standards of living.

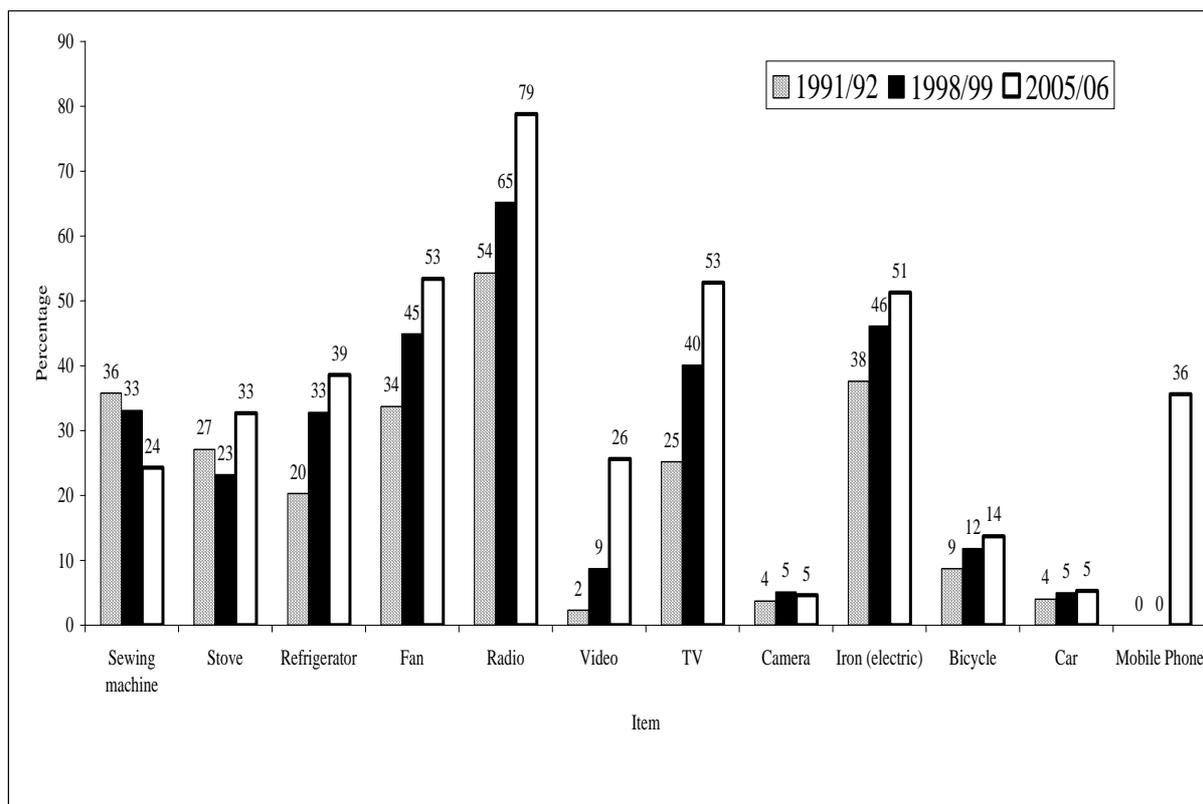
Standard of living as measured in the three survey periods is positively correlated with the ownership of the durable goods; the proportion of households owning these assets increase sharply with the quintile group. This is observed in both urban and rural areas, and in all the three survey years. However, the level of ownership of these assets is much lower in rural areas than among urban households of a comparable standard of living. As explained above, lower ownership of these assets in rural areas clearly does not just reflect lower income levels but probably also reflects supply factors, which indicate the opportunity to acquire and/or use such goods.

The distribution of the assets (among the quintile groups) across the survey periods shows that relatively there are increases in the proportion of households owning these durable goods in all the quintile groups, apart from the first quintile in urban areas (where the sample is quite small anyway). Among the higher quintile groups the proportion of households owning these assets increases more than that in the lower quintile groups. This is observed in both rural and urban areas, but more dramatically so in urban areas. The information in the appendix tables (Appendix 2, Table A2.2a and A2.2b) further show that for the first quintiles in urban areas the proportion of households owning radio and bicycles reduced between 1998/99 and 2005/06. This, more or less, confirms the relatively disproportionate reduction in poverty in urban areas as captured by the consumption based measure of poverty.

In summary, the proportions of households owning most of the durable goods covered in the surveys have shown large increases between 1991/92 and 1998/99, and further increases in 2005/06. The increases were observed in both urban and rural areas but they have often been higher for wealthier groups, with greater disparity among urban households. Ownership of durable goods remains much lower in rural areas than urban areas, even among households of similar overall living standards.

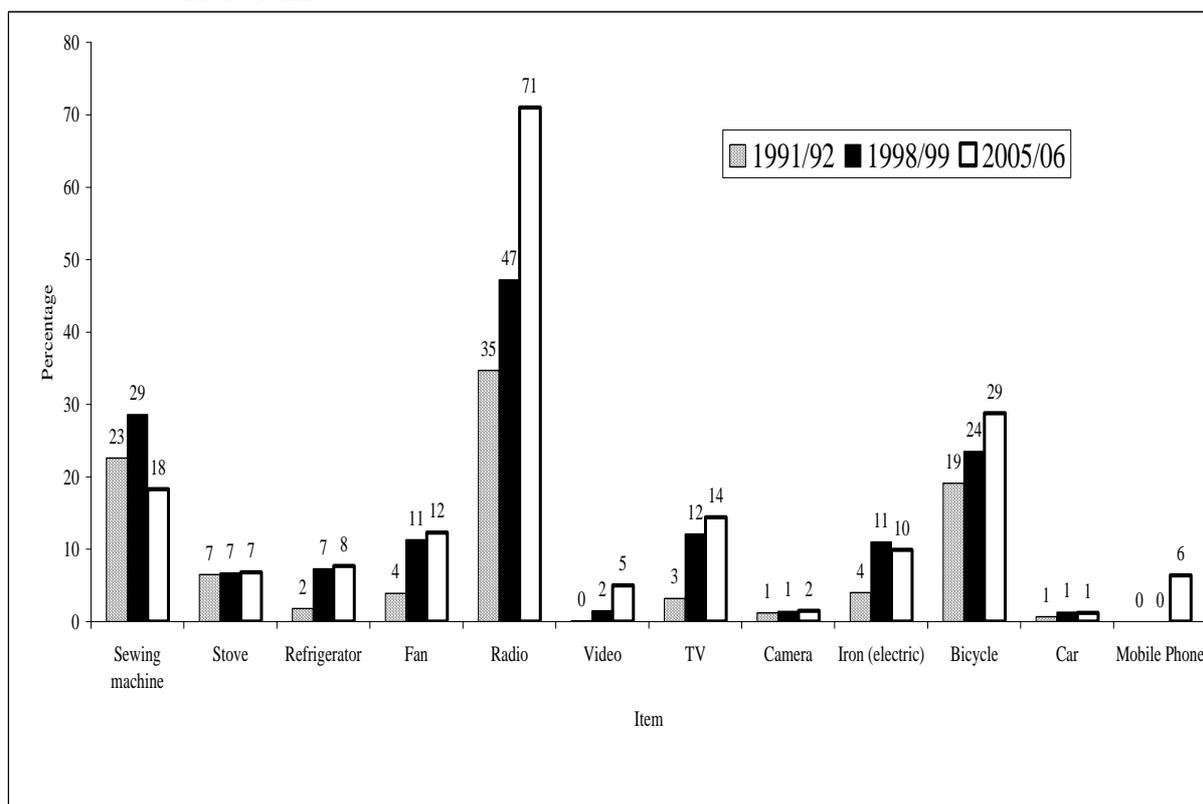
⁴ For each of these non-monetary measures, it is valuable to look at the relationship between the variations in living conditions they reveal and those of the consumption-based standard of living measure. This is considered here based on a division of households into quintile groups reflecting their 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 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 9: Percentage of households owning different household assets, Urban Areas



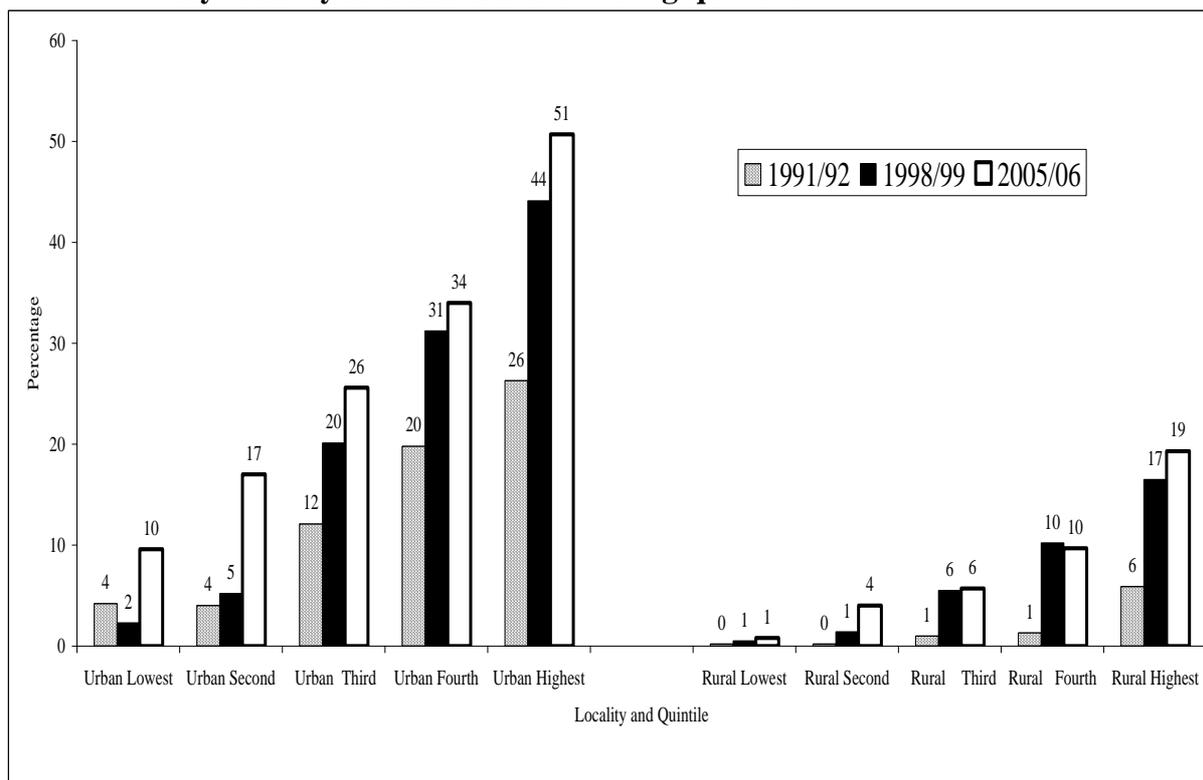
Source : Table A2.2a

Figure 10: Percentage of households owning different household assets, Rural Areas



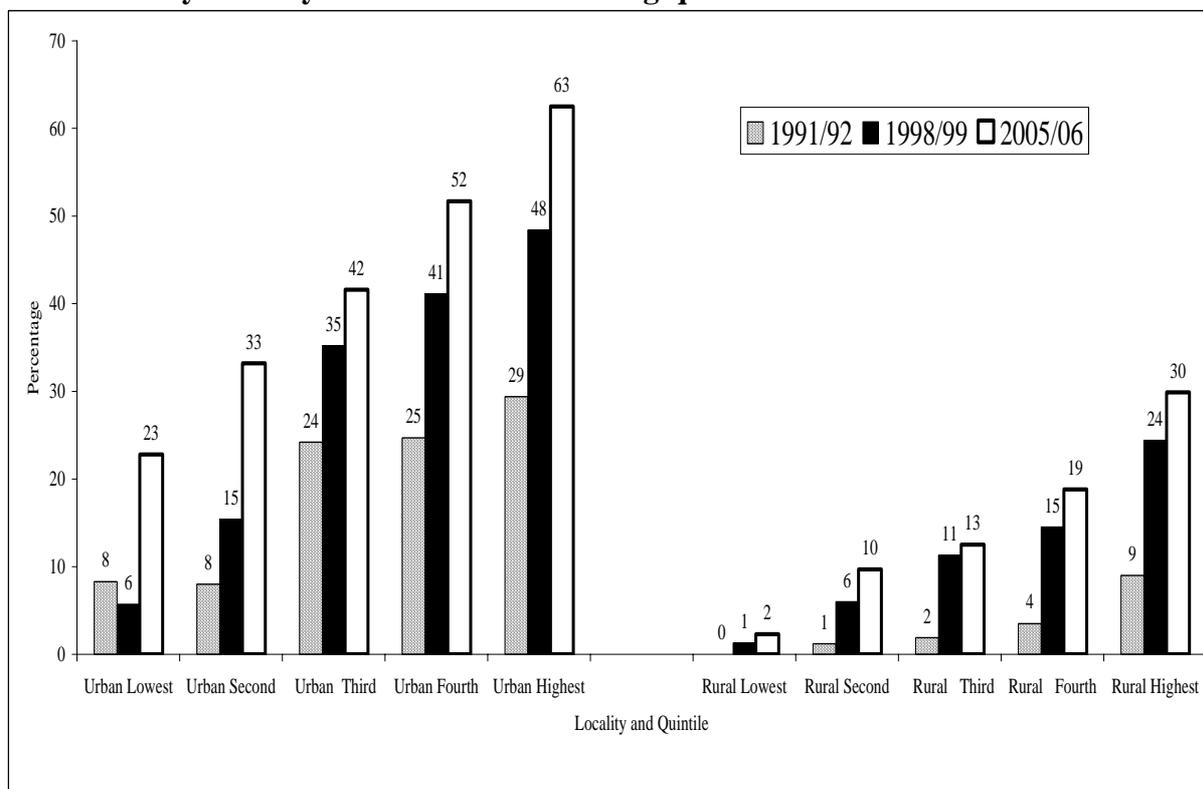
Source : Table A2.2b

Figure 11 : Percentage of households owning a Refrigerator, by locality and standard of living quintile



Source : Table A2.2

Figure 12: Percentage of households owning a TV, by locality and standard of living quintile



Source : Table A2.2

V. ACCESS TO SERVICES

Gauging household poverty is also done in this report by assessing households' access to some essential services. Some of the most important housing characteristics concern the facilities to which a household has access. Information from Figures 13 to 15 report the proportion of households having access to potable water, using adequate toilet facilities and having access to electricity respectively (see Appendix 4 for further details on the trends). As before, this is examined separately for urban and rural areas according to the household's standard of living (again defined by the quintile group it belongs to).

It should be noted that access to those services do not usually depend on the individual households, but on public decision. Access to electricity fully depends on decision beyond household's. For access to water and toilet, this is also true to a certain extent.

A large majority of households in urban areas, among all quintile groups have access to potable water (defined as reliance on all sources apart from wells or natural sources), though the proportion increases with the quintile group. The proportionate changes in access between the survey years are relatively small for the two top quintile groups for the period 1998/99 to 2005/06 after the initial modest increases between 1991/92 and 1998/99. The two lowest quintiles rather have large increases between the years 1998/99 and 2005/06 as compared to the period 1991/92, when there was virtually no significant change⁵. By contrast, in rural areas there is a much bigger change in the proportion of households having access to potable water in the successive survey years, this being especially large for those in the lower quintiles. Indeed, by 2005/06 three-quarters of rural households have access to potable water, and this proportion does not vary with the standard of living. This contrasts sharply with the situation in 1991/92, where on average only one half of rural households had access to potable water, and this proportion did show large variation among groups with different standard of living. This represents a significant reduction in urban-rural gap in access to safe water as compared to situation which prevailed about fourteen years ago. More detailed analysis shows that much of the change in rural areas reflects increased use of water from boreholes or protected wells and less use of rainwater and water from lakes, rivers and others. These trends are consistent with Government interventions which are focused mainly on improving access for rural areas while encouraging the need to ensure private partnerships in water provision for urban areas.

The information on safe sanitation is provided in Figure 14. The proportion of households having access to adequate toilet facilities (a flush toilet or the KVIP toilet) increases sharply in urban areas between 1991/92 and 1998/99, and further between 1998/99 and 2005/06. The changes in rural areas observed between 1998/99 and 2005/06 after the initial sharp increases from 1991/92 to 1998/99 are rather small. Further analysis reveals that this increase is predominantly due to large increases in the use of KVIP toilets in urban areas over the fifteen year period. The rural areas observed reduced incremental increases in the use of adequate toilet facilities, thus widening the gap between rural and urban use of safe sanitation facilities in the last seven years. The income dimension in case is more pronounced. The proportion of rural households with access to adequate toilet facilities is much less than half that of households with a comparable standard of living in urban areas. Indeed in rural areas this relativity has increased by more in lower quintile groups than in higher quintile groups, reflecting much higher rates of adoption of KVIP toilets by the latter compared to the former.

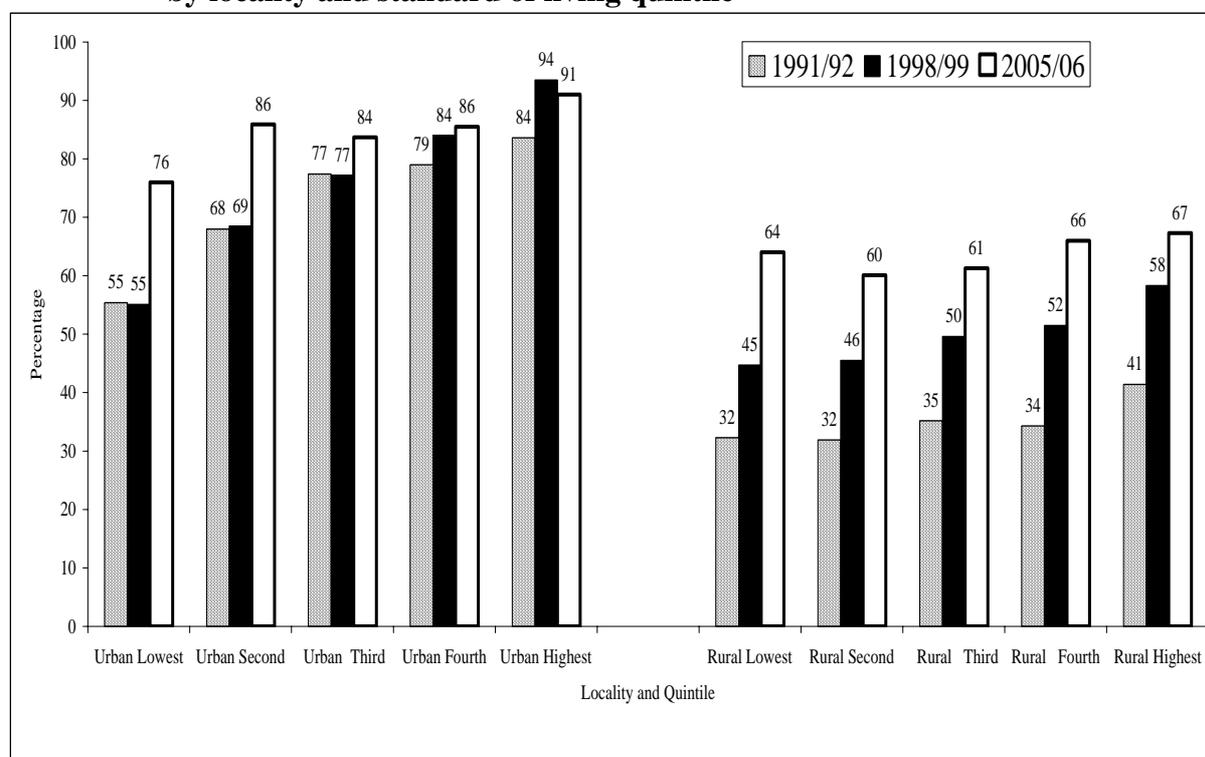
⁵ Other issues apart from access like direct and indirect costs of obtaining potable water can be analyzed with information from the survey data sets.

These figures suggest that though all groups have benefited from recent increases in the provision of KVIPS, wealthier groups and generally urban households have benefited more.

The proportion of households in urban areas having access to electricity is nearly three times that of households in rural areas. This disparity varies sharply among households with different standard of living (Figure 15). Within the lowest quintile group the proportion of households in urban areas with access to electricity is over four times that of households in rural areas, but the ratio for the highest quintile is slightly above 2. It is important to note that access to electricity has increased for the lower two lowest quintiles in urban areas and for almost all the five quintiles in rural areas between 1998/99 and 2005/06. Between 1991/92 and 1998/99, the proportion of urban households with access to electricity increased significantly in the two highest quintiles. Thus, the situation in the last seven years tends to reduce the gap between the income groups in urban areas. By contrast in rural areas, the pattern is a bit more broadly based, with increased access to electricity in each quintile group. The increased access to electricity in rural areas presumably reflects the sustained rural electrification programme carried out over the period.

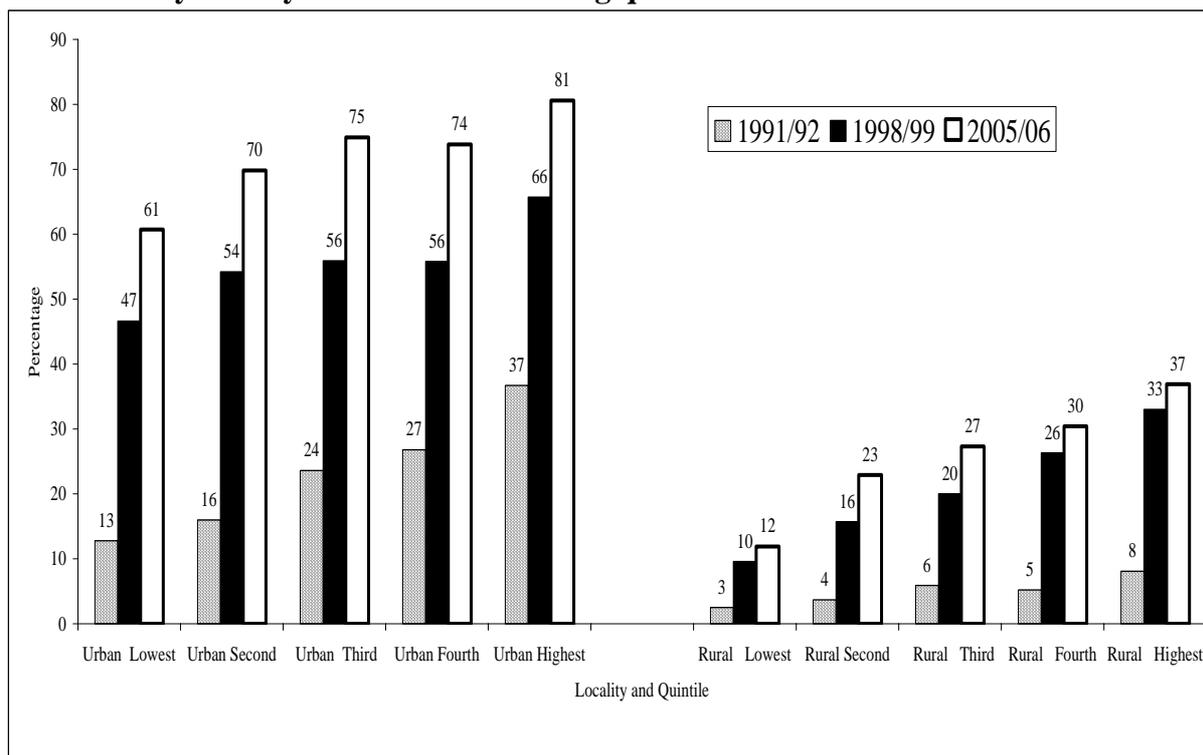
In summary, there have been significant improvements over the fifteen-year period in the number of households obtaining their drinking water from a safe source, using adequate toilet facilities and having access to electricity. Increases in use of safe drinking water sources and access to electricity have been most pronounced in rural areas and for poorer urban households. Improvement in access to adequate toilet facilities have often been more marked for urban households.

Figure 13: Percentage of households having access to potable water, by locality and standard of living quintile



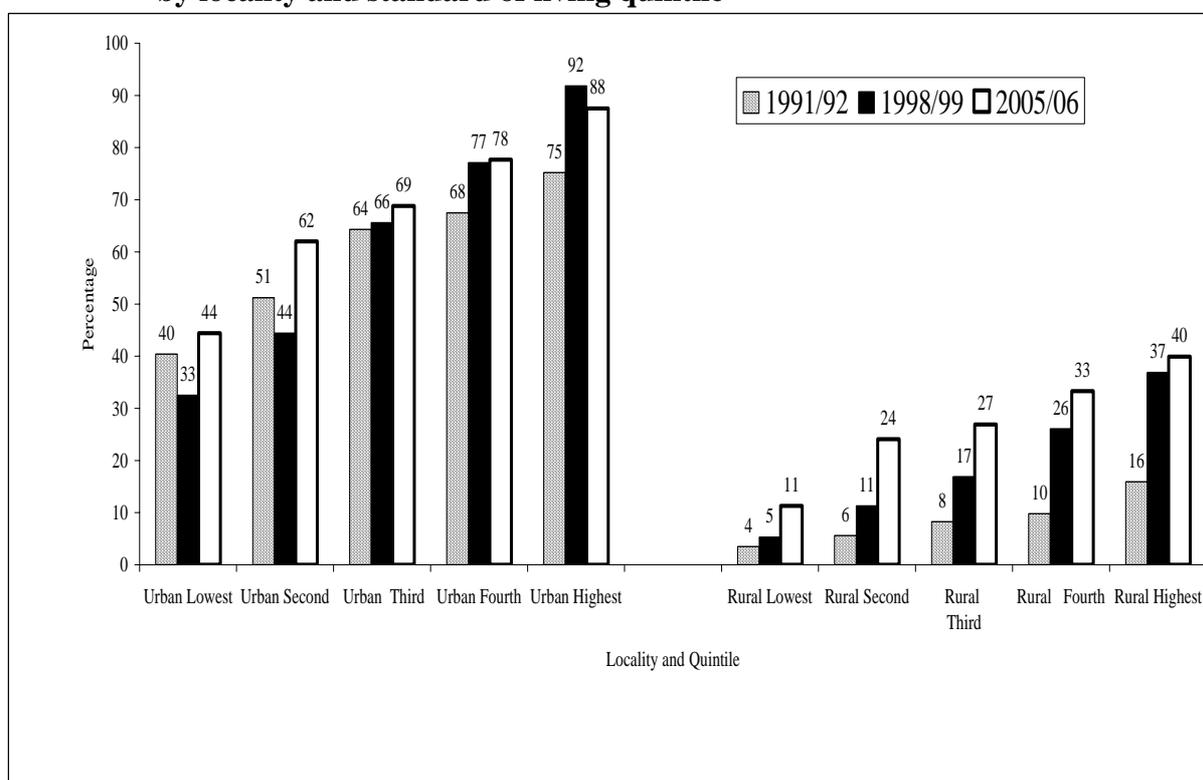
Source : Table A3.2

Figure 14: Percentage of households using a flush or a KVIP toilet, by locality and standard of living quintile



Source : Table A3.4

Figure 15: Percentage of households using electricity, by locality and standard of living quintile



Source : Table A3.6

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. In the GLSS, information on the utilization of health and education facilities was collected from the selected households.

Health

The information presented here concern the use of health facilities by individuals who considered themselves to have been ill or injured in the two weeks preceding the interview. Respondents report themselves whether or not they have been ill or injured, and those who consider that they have; are asked about their use of health facilities. Self-diagnosis of illness or injury is inevitably subjective; therefore it is not appropriate to focus on prevalence of illness or injury defined in this way.⁶ This however, is the appropriate filter question for identifying those who should be asked about their use of health facilities when they are ill or injured.

The survey enquired into the extent to which the ill or injured persons consult health practitioners. Figure 16 indicates that the proportion of those ill or injured who consulted a doctor varies with the standard of living within urban and rural areas. The proportions are much higher in urban areas than rural areas, even within the same quintile groups. In rural areas the proportion who consulted a doctor increases systematically with the standard of living, with the proportions in the highest quintile being twice as high as in the lowest quintile in 1991/92 and 2005/06, three times as high in 1998/99. The proportion of those ill or injured that consulted a doctor has consistently been higher for richer individuals than poorer ones in all the three studies.

The proportion of individuals in both urban and rural areas consulting doctor decreases significantly between 1991/92 and 1998/99 but somehow, the trend was reversed during the last seven years.

While consultation of the doctor in 1991/92 and 1998/99 was much noticeable, the situation had changed significantly within the last seven years in both rural and urban

⁶ Indeed there is likely to be a systematic bias. Different people may have different perceptions of what it means to be ill or injured. In particular a richer individual might be more likely to report him- or her- self as ill or injured in circumstances that a poorer person would not. This does not matter though for examining the use of health facilities.

areas with consultation of pharmacist and chemical seller becoming more important (Figure 17). Overall, the proportion of those ill or injured who consulted pharmacist and chemical sellers increased tremendously in 2005/06 over 1991/92 and 1998/99. The sharp increase was largely observed among the lower poverty quintiles than the non-poor groups and in rural areas. It is also worthy to note that in all quintile groups for both rural and urban localities, the proportion of those who did not consult any health practitioner declined markedly in 2005/06 compared with 1991/92 and 1998/99. (Tables A4.2 in Appendix 4).

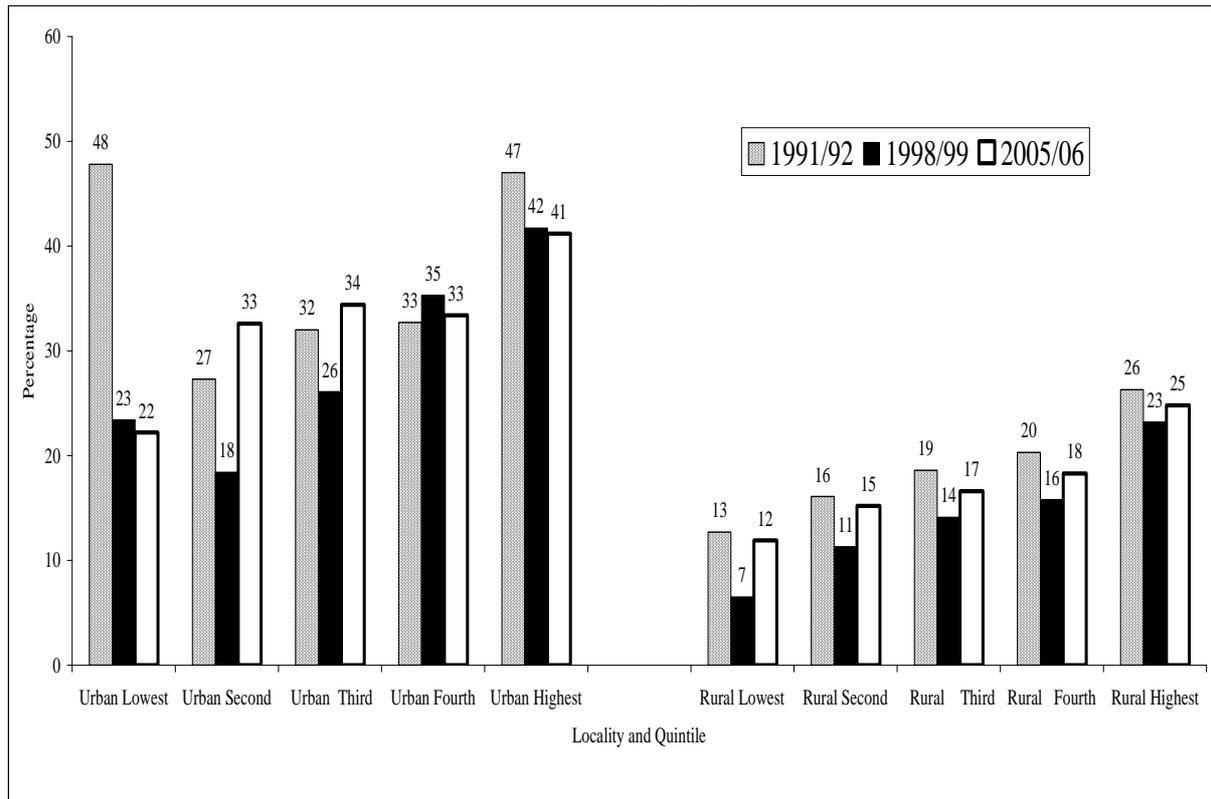
Results from the three rounds of the survey show that consultation with nurse/midwife has remain fairly stable with less than a tenth doing so. In rural areas, the proportion consulting a nurse/midwife increased marginally from 8.8 percent in 1991/92 to 9.0 percent in 1998/99 and 9.8 percent in 2005/06. It is important to note that the proportion not consulting at all has declined significantly by 16 percentage points, from 60 percent in 1998/99 to 44 percent in 2005/06. It seems clear that the legalisation of licensed Chemical Stores has increased tremendously access to drugs, particularly in rural areas and across all quintiles.

Figure 18 shows the proportion of those who reported ill or injured that consulted in a hospital. In rural areas, within each period the proportions consulting in a hospital increased markedly with the standard of living quintile. In urban areas the proportion also increases overall with the standard of living quintile. The proportion of those who consulted in a hospital in rural areas falls between 1991/92 and 1998/99 in all quintile groups. However, the trend changed between 1998/99 and 2005/06 except for the last quintile group which declined (Table A4.3 and A4.4, Appendix 4).

It is significant to note that the National Health Insurance Scheme (NHIS) was introduced in the course of the survey period. It is expected that its impact would be assessed in the next round of the GLSS.

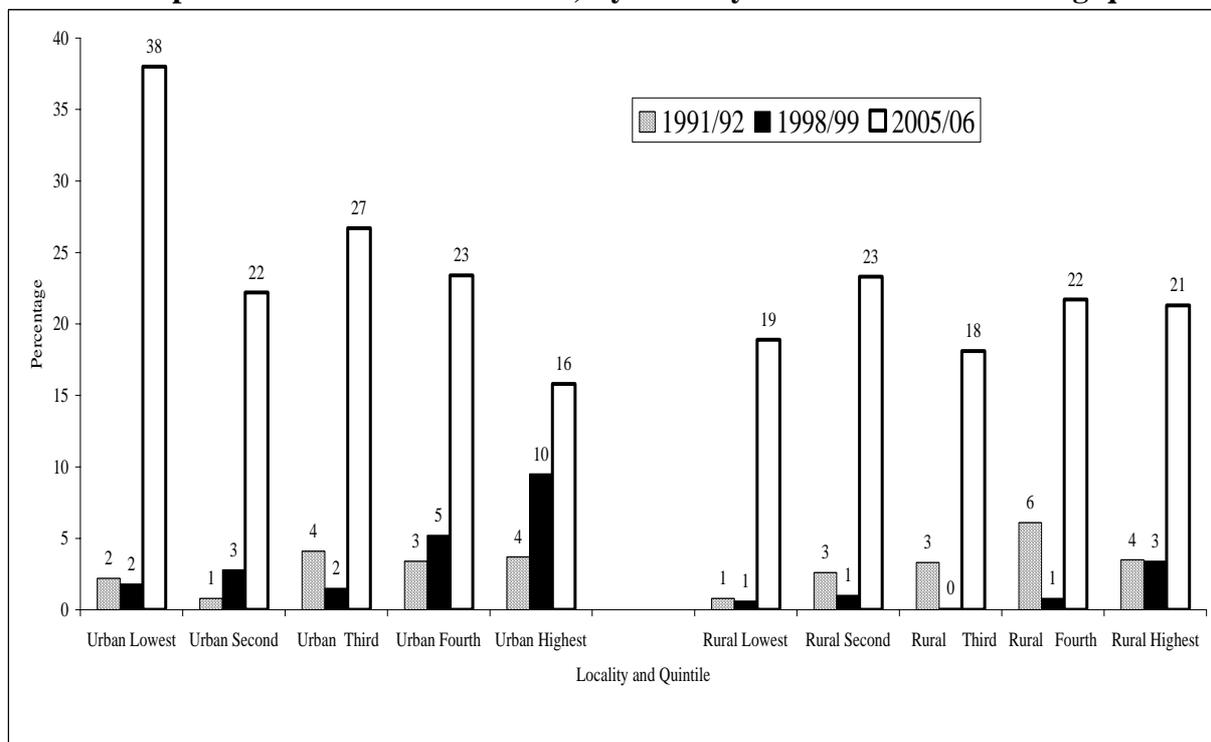
In summary, compared to 1991/92 and 1998/99, individuals are more likely now to consult doctors and pharmacist/chemical sellers when they are ill or injured. The proportion of those ill or injured and did not consult any health practitioner has declined during the last seven years. Generally, this pattern is observed in all income groups in both rural and urban areas.

Figure 16: Percentage of ill or injured individuals that consulted a doctor, by locality and standard of living quintile



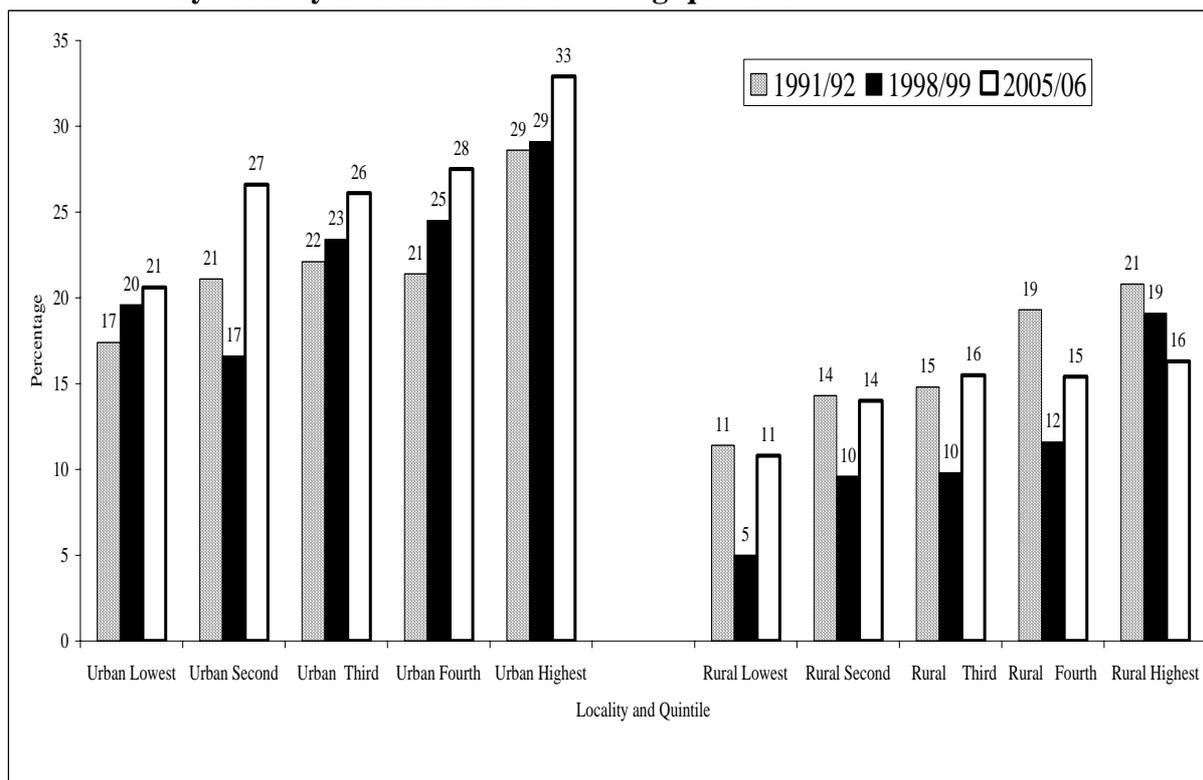
Source: Table A4.2

Figure 17: Percentage of ill or injured individuals that consulted a pharmacist/chemical seller, by locality and standard of living quintile



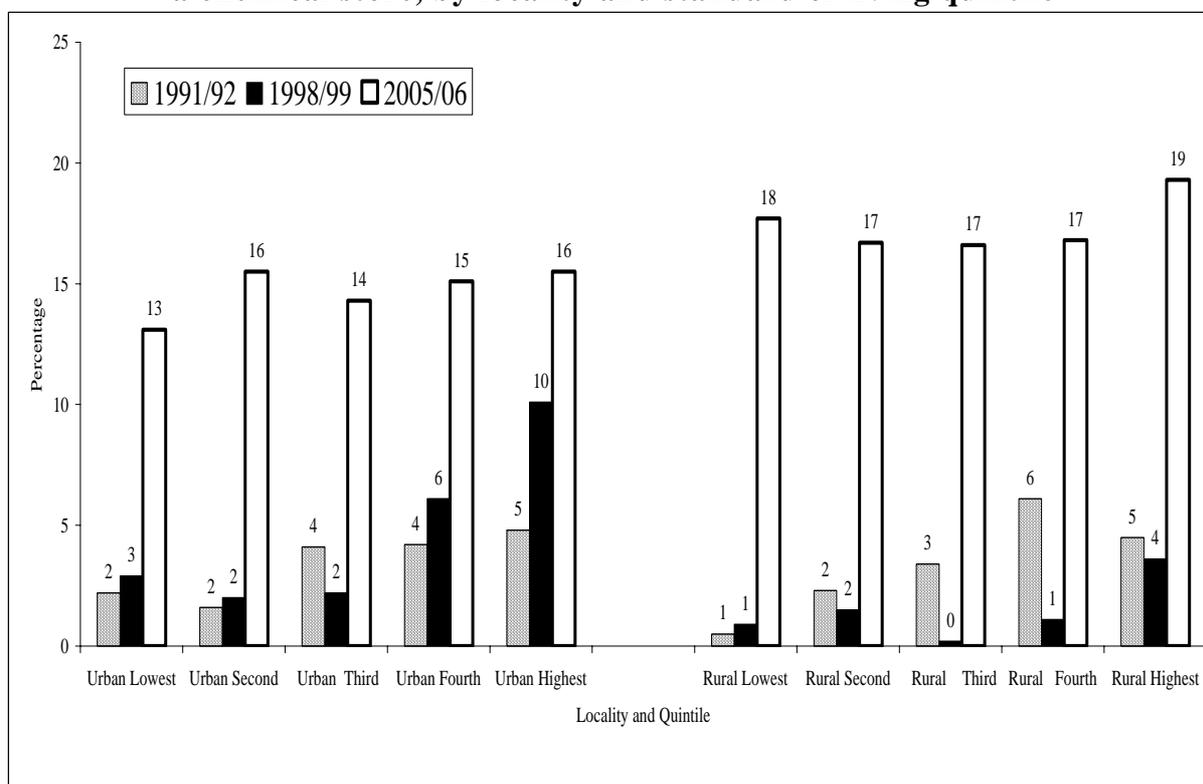
Source: Table A4.2

Figure 18: Percentage of ill or injured individuals that went to hospital, by locality and standard of living quintile



Source: Table A4.4

Figure 19: Percentage of ill or injured individuals that went to a pharmacy or a chemical store, by locality and standard of living quintile



Source: Table A4.4

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 in education affects 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. At the primary level (Figures 20 and 21, also Appendix 4), net enrolment rates at the national level increased from about 74 percent in 1991/92 to 83 percent in 1998/99, and marginally increased to 85 percent in 2005/06. The net enrolment rate for girls is slightly below that for boys between 1991/92 and 1998/99 but at parity in 2005/06.

Net enrolment rates in primary school do not vary much by geographic locality, except in the Rural Savannah where net enrolment rates are much lower than elsewhere. The three rounds show that net enrolment rates in primary school in the Rural Savannah have persistently been below 70 percent. In each of the localities identified in Figure 20, net enrolment rates in primary increased between 1991/92 and 1998/99, with the biggest increases occurring in the Savannah zone (rural and urban). However, the gain recorded between these periods was eroded as there was a decrease in 2005/06 compared to 1998/99 figures. In each locality, net enrolment rates for girls are marginally below those for boys, except in the Coastal zone (urban and rural) in 1998/99, and urban Savannah in 2005/06 where girls have a slight advantage.

Net enrolment rates in secondary school are much lower than those for primary school across all the quintile groups and localities (Figures 22 and 23, and Appendix 4). Net enrolment rate at secondary school increased from 37.5 percent in 1991/92 to 40.7 percent (1998/99), and remain almost the same, 40.9 percent (2005/06) less than half that at the primary level in 2005/06 (84.8%). At the locality level, while net enrolment rates in secondary school increase with the standard of living in 1991/92, 1998/99 and 2005/06 for boys and girls in Accra, Urban Coastal and Urban Forest, it continues to decline for boys and girls in the rural Savannah. A critical assessment of the results also reveals that while net enrolment rates in secondary school for boys in the rural Coastal declined continuously during the fifteen-year period that of the girls had been increasing over the same period. A more pronounced urban-rural differential is apparent at secondary level than at the primary level, in favour of urban areas.

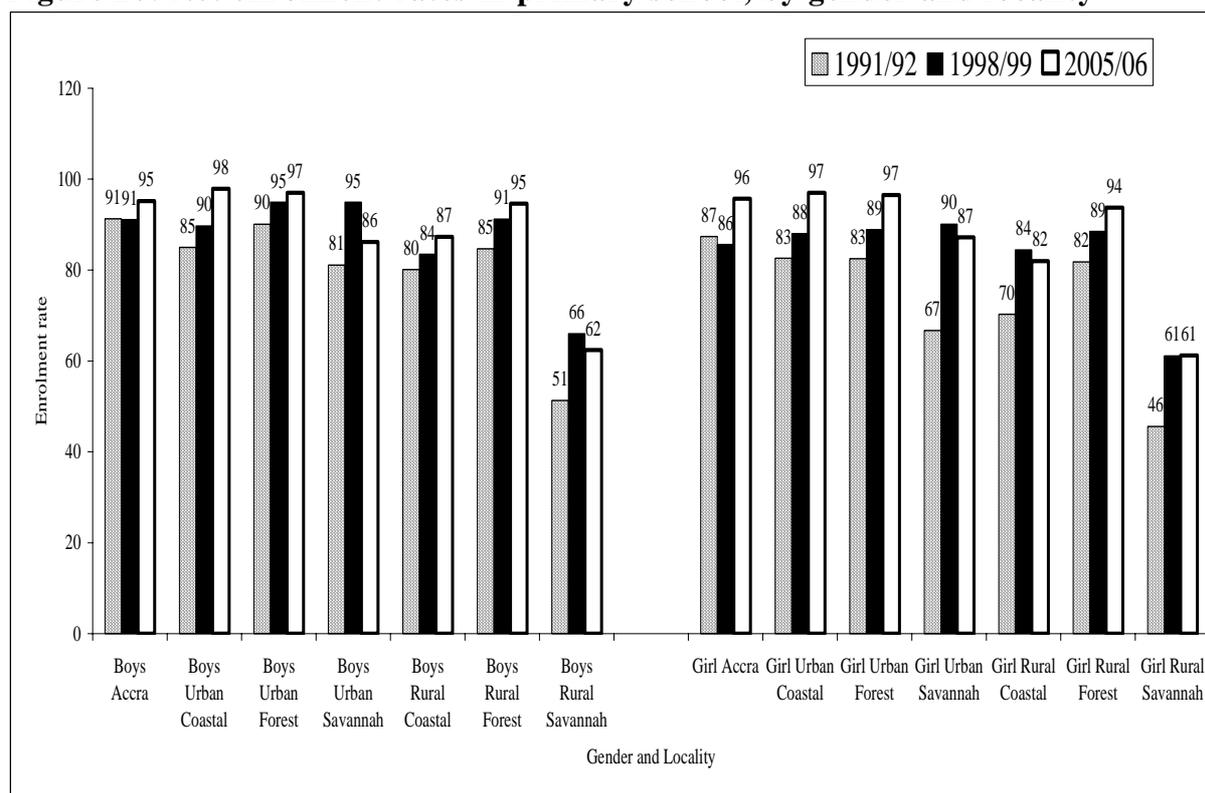
Generally, net enrolment rates for boys are higher than for girls at the secondary level, but the gap is bridging over the period (1991/92 to 2005/06). During this period, net enrolment rates for girls increased by six percent at the national level. There were increases in all other localities. Over the same period, net enrolment rates for boys increased much less but fell in both urban and rural areas of the coastal zone, and in other rural areas.

The net enrolment rates for secondary school, at the national level, increase with the standard of living. Among the richest twenty, percent only one in two children of secondary school age is actually attending secondary school. Apart from the first two quintile groups in 2005/06 where net enrolment rates for both boys and girls declined, net enrolment rates of girls in secondary school increased between 1991/92 and 1998/99 except for the lowest quintile. A similar pattern is observed for boys where the magnitude of change is smaller, except in the highest quintile. Just as at the primary level, the differential between boys and girls in enrolment rates is not strongly associated with the standard of living (that for girls appeared lower in all quintile groups). A noticeable trend is the continuous decline in net enrolment at the secondary school for the poorest of the poor for both boys and girls. However, there is a continuous increase in enrolment among those whose standard of living is high. It is also worthy to mention that net enrolment rate for girls in the highest group was very impressive, increased from 41 percent in 1991/92 to 46 percent in 1998/99; then increased to 55 percent in 2005/06; compared to boys (49% in 1991/92 to 56% in 1998/98 to 62 percent in 2005/06) (Figures 22 and table A4.6).

The government policy on waiving school fees, the Capitation Grant and also the Free School Feeding Programme at the basic school are likely to act as a catalyst in accelerating school enrolment at the lower level. When this happens, it may have a positive spill over effects at the secondary level.

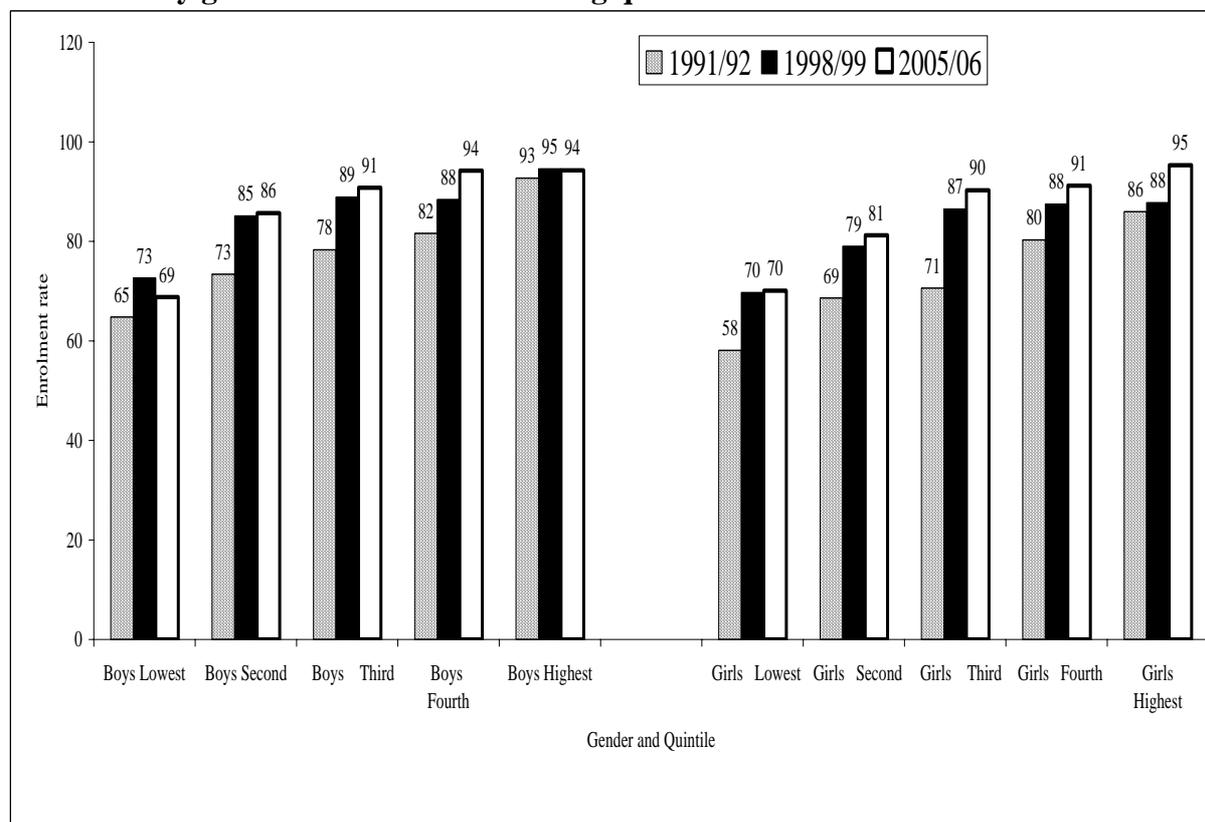
In summary, enrolment rates in primary and secondary school have improved considerably over the fifteen-year period. Now more than four out of five Ghanaian children in the relevant age group are attending primary school. The Savannah areas are still having the lowest enrolment rates by a large margin. The increases in net enrolment rates at secondary level have been much bigger for girls than boys, but are still below those for boys. Even with these increases, net enrolment rates at secondary level are much lower than at primary level, especially so in rural areas. Since the enrolment rates at the secondary school are not matching with the primary level, it means that some of those who complete primary are dropping out of school.

Figure 20: Net enrolment rates in primary school, by gender and locality



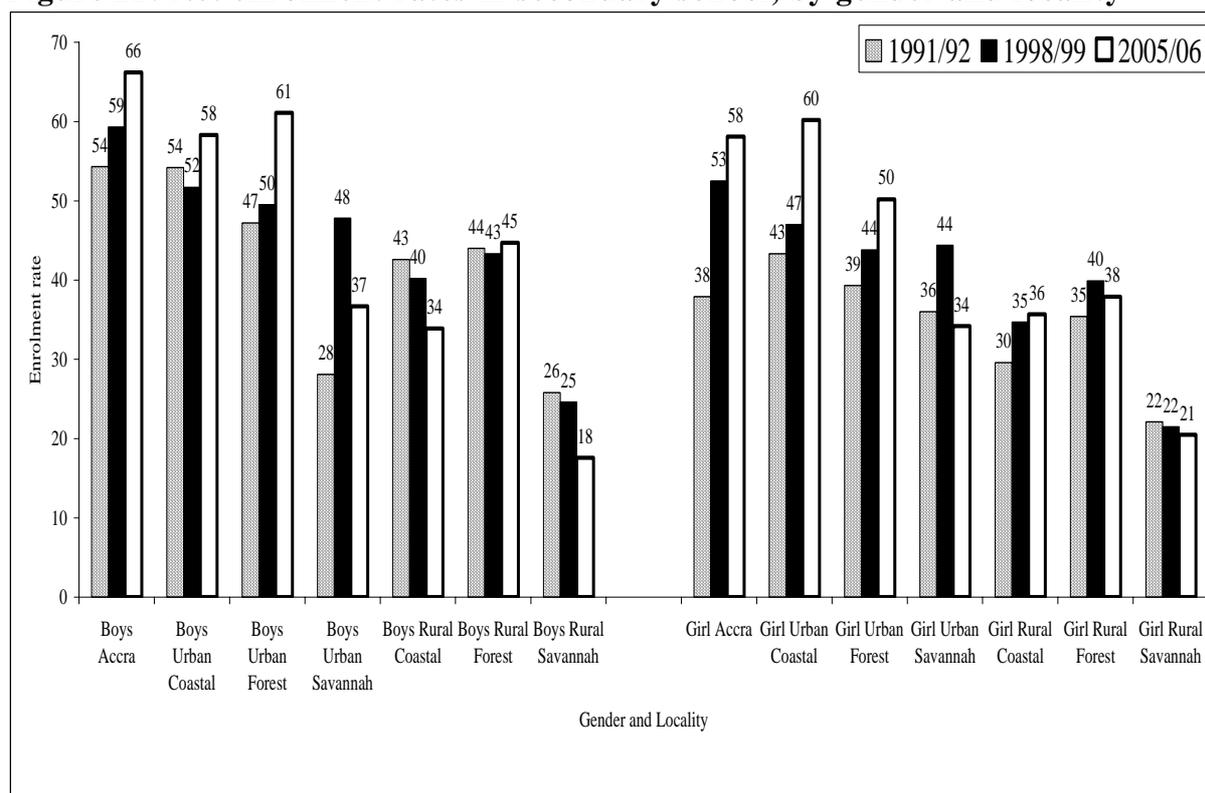
Source: Table A4.5

Figure 21: Net enrolment rates in primary school, by gender and standard of living quintile



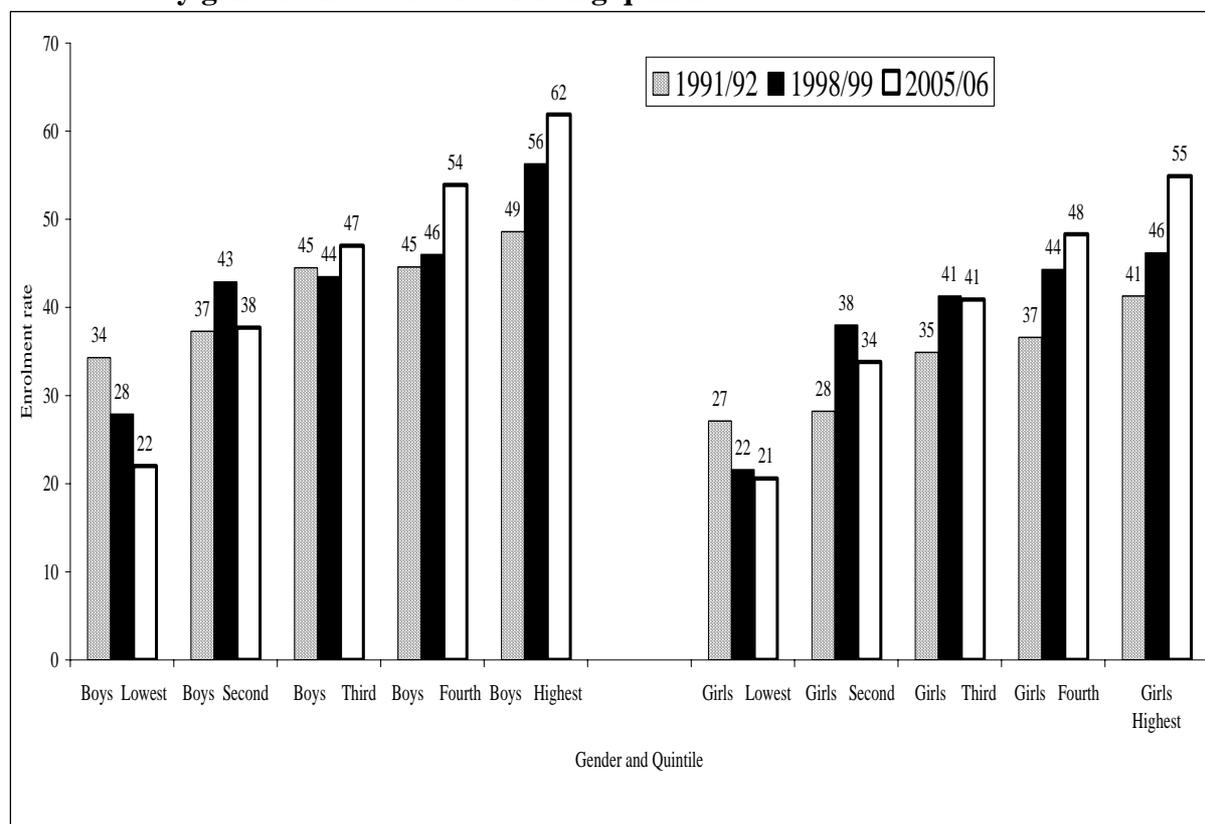
Source: Table A4.5

Figure 22: Net enrolment rates in secondary school, by gender and locality



Source: Table A4.6

Figure 23: Net enrolment rates in secondary school, by gender and standard of living quintile



Source: Table A4.6

VII. CONCLUDING OBSERVATIONS

The fifth round of the Ghana Living Standards Survey conducted in 2005/06 together with the previous two rounds presents a rich source of data on the many different aspects of living conditions of households. The three sets of data are comparable and make it possible to examine the changes of poverty in Ghana over the fifteen-year period (1991/92 to 2005/06). Three different dimensions: consumption poverty; poverty in terms of assets and housing facilities; and human development are presented in this report.

Two national poverty lines are reported in this report based on the nutrition needs of the population: a lower line of 2,884,700 cedis per adult per year, and an upper line of 3,708,900 cedis per adult per year. Using the higher poverty line, the results indicate that the incidence of consumption poverty has fallen by 11 percentage points in the seven year period since 1998/99; the depth of poverty for those who remain poor has remained almost the same.

All localities outside Accra have experienced significant decline in their poverty levels, particularly in the cocoa-producing regions. Export crop farmers and public sector employees enjoyed the greatest gains in their standard of living, while private sector employees and non-working households have seen smaller declines. Furthermore, that impressive decline in poverty incidence has led to lower the absolute numbers of poor from around 7,931,000 in 1991/92 to 7,203,000 and to 6,178,000 individuals in 2005/06.

While poverty has been going down, inequality has unfortunately been increasing significantly, particularly since 1998/99. While every household in our sample seem to have enjoyed an increase in consumption, the change was much lower for the poorest households; particularly the ones from the Upper regions.

On the whole, there have been significant improvements in the number of households obtaining drinking water from a safe source, using adequate toilet facilities and having access to electricity over the fifteen year period. These changes have been observed in most income groups and areas of the country. Increases in access to safe drinking water and electricity have benefited the rural areas and poorer urban households most.

Access to basic education has increased and the Millennium Development Goal (MDG) of bridging the gender gap in primary school enrolment is achieved. Primary school enrolments have increased by 11 percentage points over this period although the increase has slowed down significantly in the recent years. The increases in net enrolment rates at secondary level have been much bigger for girls than boys, but are still below those for boys. Even with these increases, net enrolment rates at secondary level are much lower than at primary level, especially so in rural areas.

Compared to 1991/92 and 1998/99, Ghanaians are more likely now to consult doctors, pharmacists or chemical sellers when they are ill or injured. The proportion of those ill or injured and did not consult any health practitioner has declined during the last seven years. Generally, this pattern is observed in all income groups in both rural and urban areas.

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Appendix 1: Main Tables - Consumption Poverty Indices

**Table A1.1: Indices of extreme poverty by locality, 1991/92 to 2005/2007,
Poverty line = 2,884,700 cedis**

1991/92

	Pop'n share	Average Welfare	Poverty indices				Contribution to national poverty		
			P ₀	P ₁	P ₂	P ₁ /P ₀	C ₀	C ₁	C ₂
Accra	8.2	7602.5	11.3	2.0	0.5	17.5	2.5	1.5	0.9
Urban Coastal	8.7	5907.7	14.2	2.7	0.8	19.4	3.4	2.2	1.4
Urban Forest	11.0	6671.6	12.9	2.6	0.7	20.0	3.9	2.5	1.7
Urban Savannah	5.3	5444.8	27.0	8.4	4.2	31.1	3.9	4.0	4.8
Rural Coastal	14.2	4473.2	32.8	8.4	3.0	25.7	12.7	10.8	9.0
Rural Forest	29.6	3865.5	45.9	13.6	5.5	29.6	37.3	36.5	34.3
Rural Savannah	23.1	3143.9	57.5	20.4	9.8	35.4	36.3	42.6	48.0
All	100.0	4660.0	36.5	11.1	4.7	30.3	100.0	100.0	100.0

Source: Computed from the Ghana Living Standards Survey, 1991/92.

1998/99

	Pop'n share	Average welfare	Poverty indices				Contribution to national poverty		
			P ₀	P ₁	P ₂	P ₁ /P ₀	C ₀	C ₁	C ₂
Accra	11.2	10121.4	1.9	0.3	0.1	14.4	0.8	0.4	0.2
Urban Coastal	5.9	6233.5	19.0	4.6	1.7	24.0	4.2	3.2	2.8
Urban Forest	11.8	8262.7	10.9	2.5	0.9	22.9	4.8	3.5	2.8
Urban Savannah	4.8	4910.8	27.1	5.1	1.5	18.8	4.9	3.0	2.0
Rural Coastal	14.4	5085.4	28.5	7.7	2.9	26.9	15.3	13.3	11.6
Rural Forest	31.3	5354.1	21.1	5.3	2.0	25.0	24.6	19.8	17.4
Rural Savannah	20.6	3407.3	59.3	23.0	11.1	38.8	45.5	56.9	63.3
All	100.0	5819.4	26.8	8.3	3.6	31.0	100.0	100.0	100.0

Source: Computed from the Ghana Living Standards Survey, 1998/99.

2005/06

	Pop'n share	Average welfare	Poverty indices				Contribution to national poverty		
			P ₀	P ₁	P ₂	P ₁ /P ₀	C ₀	C ₁	C ₂
Accra (GAMA)	11.8	11202.5	5.4	1.3	0.4	23.7	3.5	2.6	2.0
Urban Coastal	5.8	12474.4	2.0	0.2	0.0	8.5	0.6	0.2	0.1
Urban Forest	14.6	10365.8	2.9	0.8	0.3	28.9	2.3	2.2	2.0
Urban Savannah	5.4	7489.5	18.3	5.9	2.5	32.1	5.5	5.6	5.1
Rural Coastal	11.0	6704.7	11.5	2.0	0.6	17.5	6.9	3.9	2.4
Rural Forest	28.0	6249.8	14.6	2.7	0.8	18.8	22.5	13.6	8.8
Rural Savannah	23.4	5042.6	45.4	17.4	8.8	38.4	58.7	72.0	79.7
All	100.0	7627.7	18.2	5.7	2.6	31.3	100.0	100.0	100.0

Source: Computed from the Ghana Living Standards Survey, 2005/06.

Notes: Pop'n share is expressed in percent, and 'average welfare' denotes the mean value of the standard of living measure, expressed in thousands of cedis. P₀, P₁, P₂ denote values of the P_α poverty indices for α=0, 1, 2 respectively; C₀, C₁, C₂ is the percentage contribution of each group to national poverty as defined by P₀, P₁, P₂ respectively; and P₁/P₀ is the income gap ratio for the poverty line: the average proportion by which the poor fall below the poverty line.

Table A1.2: Indices of poverty by locality, 1991/92 to 2005/06
Poverty line = 3,708,900 cedis

1991/92

	Pop'n share	Average welfare	Poverty indices				Contribution to national poverty		
			P ₀	P ₁	P ₂	P ₁ /P ₀	C ₀	C ₁	C ₂
Accra	8.2	7602.5	23.1	5.1	1.7	21.9	3.7	2.2	1.6
Urban Coastal	8.7	5907.7	28.3	7.0	2.4	24.6	4.7	3.3	2.3
Urban Forest	11.0	6671.6	25.8	6.4	2.2	24.9	5.5	3.8	2.8
Urban Savannah	5.3	5444.8	37.8	13.6	6.9	35.9	3.9	3.9	4.2
Rural Coastal	14.2	4473.2	52.5	16.1	6.7	30.6	14.4	12.3	10.8
Rural Forest	29.6	3865.5	61.6	22.7	10.6	36.9	35.3	36.4	35.8
Rural Savannah	23.1	3143.9	73.0	30.5	16.1	41.8	32.6	38.1	42.5
All	100.0	4660.0	51.7	18.5	8.8	35.7	100.0	100.0	100.0

Source: Computed from the Ghana Living Standards Survey, 1991/92.

1998/99

	Pop'n share	Average welfare	Poverty indices				Contribution to national poverty		
			P ₀	P ₁	P ₂	P ₁ /P ₀	C ₀	C ₁	C ₂
Accra	11.2	10121.4	4.4	0.9	0.3	19.8	1.3	0.7	0.4
Urban Coastal	5.9	6233.5	31.0	9.2	3.7	29.5	4.6	3.9	3.3
Urban Forest	11.8	8262.7	18.2	5.1	2.0	28.1	5.4	4.3	3.6
Urban Savannah	4.8	4910.8	43.0	11.4	4.2	26.5	5.2	4.0	3.1
Rural Coastal	14.4	5085.4	45.6	14.2	6.1	31.2	16.7	14.8	13.3
Rural Forest	31.3	5354.1	38.0	10.8	4.4	28.4	30.1	24.3	20.7
Rural Savannah	20.6	3407.3	70.0	32.3	17.8	46.2	36.6	48.0	55.5
All	100.0	5819.4	39.5	13.9	6.6	35.2	100.0	100.0	100.0

Source: Computed from the Ghana Living Standards Survey, 1998/99.

2005/06

	Pop'n share	Average welfare	Poverty indices				Contribution to national poverty		
			P ₀	P ₁	P ₂	P ₁ /P ₀	C ₀	C ₁	C ₂
Accra (GAMA)	11.8	11202.5	10.6	2.9	1.1	27.0	4.4	3.5	2.8
Urban Coastal	5.8	12474.4	5.5	0.9	0.2	16.7	1.1	0.6	0.3
Urban Forest	14.6	10365.8	6.9	1.7	0.7	25.0	3.5	2.6	2.2
Urban Savannah	5.4	7489.5	27.6	9.5	4.5	34.5	5.2	5.4	5.3
Rural Coastal	11.0	6704.7	24.0	5.3	1.8	22.1	9.2	6.0	4.2
Rural Forest	28.0	6249.8	27.7	6.8	2.4	24.4	27.2	19.8	14.4
Rural Savannah	23.4	5042.6	60.1	25.4	13.9	42.3	49.3	62.1	70.7
All	100.0	7627.7	28.5	9.6	4.6	33.6	100.0	100.0	100.0

Source: Computed from the Ghana Living Standards Survey, 2005/06

Notes: Pop'n share is expressed in percent, and 'average welfare' denotes the mean value of the standard of living measure, expressed in thousands of cedis. P₀, P₁, P₂ denote values of the P_α poverty indices for α=0, 1, 2 respectively; C₀, C₁, C₂ is the percentage contribution of each group to national poverty as defined by P₀, P₁, P₂ respectively; and P₁/P₀ is the income gap ratio for the poverty line: the average proportion by which the poor fall below the poverty line.

Table A1.3: Indices of extreme poverty by main economic activity, 1991/92 to 2005/06
Poverty line 2,884,700 cedis

1991/92

	Pop'n share	Average welfare	Poverty indices				Contribution to national poverty		
			P ₀	P ₁	P ₂	P ₁ /P ₀	C ₀	C ₁	C ₂
Public sector empl.	13.5	6058.9	21.2	5.3	2.0	24.9	7.9	6.5	5.6
Private formal empl.	3.9	6279.4	15.1	3.7	1.6	24.2	1.6	1.3	1.3
Private informal empl.	3.1	5674.2	22.5	5.3	1.9	23.5	1.9	1.5	1.2
Export farmers	6.3	3652.7	49.6	15.4	6.7	31.0	8.5	8.7	8.8
Food crop farmers	43.6	3452.8	51.8	17.1	7.7	33.1	61.7	67.5	70.7
Non-farm self empl.	27.6	5557.8	23.3	5.6	2.0	24.1	17.7	14.0	11.9
Non-working	2.0	7537.7	13.0	2.7	0.8	20.4	0.7	0.5	0.3
All	100.0	4660.0	36.5	11.1	4.7	30.3	100.0	100.0	100.0

Source: Computed from the Ghana Living Standards Survey, 1991/92.

1998/99

	Pop'n share	Average welfare	Poverty indices				Contribution to national poverty		
			P ₀	P ₁	P ₂	P ₁ /P ₀	C ₀	C ₁	C ₂
Public sector empl.	10.7	7309.1	9.5	1.9	0.6	20.1	3.8	2.5	1.7
Private formal empl.	4.9	9113.7	4.5	0.7	0.1	15.3	0.8	0.4	0.2
Private informal empl.	2.9	6723.8	16.1	3.7	1.4	23.1	1.7	1.3	1.1
Export farmers	7.0	5087.1	19.4	4.6	1.7	23.6	5.1	3.9	3.2
Food crop farmers	38.6	3972.7	45.0	15.9	7.3	35.3	64.6	73.4	78.0
Non-farm self empl.	33.8	6776.5	18.1	4.3	1.6	23.8	22.8	17.4	14.8
Non-working	2.1	10241.4	15.1	4.4	1.9	28.7	1.2	1.1	1.1
All	100.0	5819.4	26.8	8.3	3.6	31.0	100.0	100.0	100.0

Source: Computed from the Ghana Living Standards Survey, 1998/99.

2005/06

	Pop'n share	Average welfare	Poverty indices				Contribution to national poverty		
			P ₀	P ₁	P ₂	P ₁ /P ₀	C ₀	C ₁	C ₂
Public sector empl.	7.1	11729.5	3.7	0.9	0.3	24.1	1.5	1.1	0.9
Private formal empl.	6.9	11596.7	5.1	0.7	0.2	14.6	1.9	0.9	0.7
Private informal empl.	6.7	7910.3	9.5	2.8	1.2	29.1	3.5	3.3	3.1
Export farmers	7.4	6522.0	14.2	3.1	1.0	22.1	5.8	4.1	2.8
Food crop farmers	43.0	5498.5	30.7	10.2	4.8	33.0	72.8	76.9	79.5
Non-farm self empl.	26.2	8930.0	9.2	2.8	1.2	30.0	13.4	12.8	12.3
Non-working	2.7	10178.8	8.2	1.9	0.8	23.6	1.2	0.9	0.9
All	100.0	7627.7	18.2	5.7	2.6	31.3	100.0	100.0	100.0

Source: Computed from the Ghana Living Standards Survey, 2005/06.

Table A1.4: Indices of poverty by main economic activity, 1991/92 to 2005/06
Poverty line 3,708,900 cedis

1991/92

	Pop'n share	Average welfare	Poverty indices				Contribution to national poverty		
			P ₀	P ₁	P ₂	P ₁ /P ₀	C ₀	C ₁	C ₂
Public sector empl.	13.5	6058.9	34.7	10.2	4.3	29.5	9.1	7.5	6.6
Private formal empl.	3.9	6279.4	30.3	7.7	3.2	25.6	2.3	1.7	1.4
Private informal empl.	3.1	5674.2	38.6	10.8	4.3	28.0	2.3	1.8	1.5
Export farmers	6.3	3652.7	64.0	24.5	12.0	38.2	7.8	8.3	8.6
Food crop farmers	43.6	3452.8	68.1	26.8	13.4	39.4	57.3	63.2	66.9
Non-farm self empl.	27.6	5557.8	38.4	11.3	4.6	29.5	20.5	16.9	14.5
Non-working	2.0	7537.7	18.8	5.4	2.1	28.7	0.7	0.6	0.5
All	100.0	4660.0	51.7	18.5	8.8	35.7	100.0	100.0	100.0

Source: Computed from the Ghana Living Standards Survey, 1991/92.

1998/99

	Pop'n share	Average welfare	Poverty indices				Contribution to national poverty		
			P ₀	P ₁	P ₂	P ₁ /P ₀	C ₀	C ₁	C ₂
Public sector empl.	10.7	7309.1	22.7	4.8	1.6	21.2	6.2	3.7	2.6
Private formal empl.	4.9	9113.7	11.3	2.4	0.7	21.4	1.4	0.9	0.5
Private informal empl.	2.9	6723.8	25.2	7.4	3.0	29.4	1.9	1.6	1.3
Export farmers	7.0	5087.1	38.7	10.3	3.9	26.6	6.9	5.2	4.2
Food crop farmers	38.6	3972.7	59.4	24.0	12.4	40.4	58.1	66.7	72.2
Non-farm self empl.	33.8	6776.5	28.6	8.6	3.5	30.0	24.5	20.8	18.0
Non-working	2.1	10241.4	20.4	7.4	3.5	36.5	1.1	1.1	1.1
All	100.0	5819.4	39.5	13.9	6.6	35.2	100.0	100.0	100.0

Source: Computed from the Ghana Living Standards Survey, 1998/99.

2005/06

	Pop'n share	Average welfare	Poverty indices				Contribution to national poverty		
			P ₀	P ₁	P ₂	P ₁ /P ₀	C ₀	C ₁	C ₂
Public sector empl.	7.1	11729.5	7.8	2.0	0.8	25.5	1.9	1.5	1.2
Private formal empl.	6.9	11596.7	10.1	2.2	0.7	21.4	2.5	1.6	1.1
Private informal empl.	6.7	7910.3	17.1	5.4	2.3	31.5	4.0	3.8	3.4
Export farmers	7.4	6522.0	24.0	6.7	2.5	27.7	6.2	5.1	4.1
Food crop farmers	43.0	5498.5	45.5	16.4	8.2	36.0	68.5	73.4	76.4
Non-farm self empl.	26.2	8930.0	17.0	5.0	2.3	29.3	15.6	13.6	12.9
Non-working	2.7	10178.8	13.3	3.8	1.7	28.7	1.3	1.1	1.0
All	100.0	7627.7	28.5	9.6	4.6	33.6	100.0	100.0	100.0

Source: Computed from the Ghana Living Standards Survey, 2005/06.

Notes: as Table A1.2.

**Table A1.5: Indices of extreme poverty by region, 1991/92 to 2005/06,
(Poverty line = 2,884,700 cedis)**

1991/92

	Pop'n share	Average welfare	Poverty indices				Contribution to national poverty		
			P ₀	P ₁	P ₂	P ₁ /P ₀	C ₀	C ₁	C ₂
Western	10.2	3981.5	42.0	11.6	4.4	27.6	11.7	10.6	9.5
Central	10.4	5040.6	24.1	7.0	3.0	29.1	6.8	6.6	6.5
Greater Accra	11.7	6989.2	13.4	2.8	0.9	21.1	4.3	3.0	2.2
Volta	9.0	4156.1	42.1	11.7	4.5	27.7	10.4	9.5	8.5
Eastern	12.9	4554.9	34.8	8.4	2.9	24.0	12.3	9.8	7.8
Ashanti	15.9	5531.6	25.5	6.9	2.7	27.2	11.1	9.9	9.0
Brong Ahafo	11.8	3945.9	45.9	13.0	5.1	28.4	14.9	14.0	12.7
Northern	9.5	3628.9	54.1	21.4	11.4	39.5	14.0	18.3	22.9
Upper East	5.6	3392.4	53.5	19.5	9.2	36.3	8.2	9.8	10.9
Upper West	3.1	2460.7	74.3	29.9	15.1	40.3	6.4	8.5	10.0
All	100.0	4660.0	36.5	11.1	4.7	30.3	100.0	100.0	100.0

Source: Computed from the Ghana Living Standards Survey, 1991/92.

1998/99

	Pop'n share	Average welfare	Poverty indices				Contribution to national poverty		
			P ₀	P ₁	P ₂	P ₁ /P ₀	C ₀	C ₁	C ₂
Western	11.6	6194.6	13.6	2.7	0.9	20.1	5.9	3.8	2.8
Central	8.9	4775.4	31.5	7.6	2.6	24.2	10.5	8.2	6.4
Greater Accra	11.9	10026.0	2.4	0.3	0.1	14.3	1.1	0.5	0.2
Volta	12.4	5193.2	20.4	4.6	1.6	22.5	9.5	6.9	5.6
Eastern	11.6	4896.3	30.4	9.4	4.1	30.9	13.2	13.2	13.0
Ashanti	16.8	7317.9	16.4	4.6	1.8	27.8	10.3	9.2	8.5
Brong Ahafo	8.7	5585.9	18.8	4.5	1.8	24.1	6.1	4.7	4.3
Northern	10.2	3571.5	57.4	20.2	9.0	35.2	21.9	24.8	25.3
Upper East	4.5	2318.8	79.6	32.4	16.3	40.7	13.4	17.6	20.3
Upper West	3.2	2491.1	68.3	28.9	15.2	42.3	8.2	11.2	13.6
All	100.0	5819.4	26.8	8.3	3.6	31.0	100.0	100.0	100.0

Source: Computed from the Ghana Living Standards Survey, 1998/99.

2005/06

	Pop'n share	Average welfare	Poverty indices				Contribution to national poverty		
			P ₀	P ₁	P ₂	P ₁ /P ₀	C ₀	C ₁	C ₂
Western	10.1	7813.3	7.9	1.6	0.5	19.7	4.4	2.8	2.0
Central	8.8	8394.3	9.7	1.5	0.4	15.0	4.7	2.2	1.3
Greater Accra	13.9	10871.2	6.2	1.3	0.4	20.9	4.7	3.2	2.2
Volta	7.5	9590.9	15.2	2.9	0.8	18.8	6.2	3.8	2.2
Eastern	13.4	7805.7	6.6	1.5	0.5	22.5	4.9	3.5	2.7
Ashanti	16.8	8284.9	11.2	2.3	0.7	20.5	10.4	6.8	4.7
Brong Ahafo	9.2	6718.2	14.9	3.5	1.3	23.5	7.5	5.7	4.6
Northern	12.2	4779.8	38.7	13.4	6.1	34.8	25.9	28.8	28.6
Upper East	4.8	3409.3	60.1	23.5	11.9	39.0	15.8	19.7	21.8
Upper West	3.6	2354.4	79.0	37.6	21.8	47.6	15.5	23.6	29.9
All	100.0	7627.7	18.2	5.7	2.6	31.3	100.0	100.0	100.0

Source: Computed from the Ghana Living Standards Survey, 2005/06.

Table A1.6: Indices of poverty by region, 1991/92 to 2005/06
Poverty line = 3,708,900 cedis

1991/92

	Pop'n share	Average welfare	Poverty indices				Contribution to national poverty		
			P ₀	P ₁	P ₂	P ₁ /P ₀	C ₀	C ₁	C ₂
Western	10.2	3981.5	59.6	20.5	9.1	34.4	11.7	11.3	10.5
Central	10.4	5040.6	44.3	12.9	5.7	29.2	8.9	7.3	6.8
Greater Accra	11.7	6989.2	25.8	6.3	2.3	24.5	5.8	4.0	3.1
Volta	9.0	4156.1	57.0	20.1	9.1	35.2	9.9	9.7	9.3
Eastern	12.9	4554.9	48.0	15.9	6.6	33.1	12.0	11.1	9.7
Ashanti	15.9	5531.6	41.2	12.9	5.6	31.3	12.6	11.1	10.1
Brong Ahafo	11.8	3945.9	65.0	22.8	10.2	35.0	14.9	14.6	13.8
Northern	9.5	3628.9	63.4	29.9	17.2	47.1	11.6	15.3	18.6
Upper East	5.6	3392.4	66.9	28.7	15.2	42.8	7.2	8.6	9.7
Upper West	3.1	2460.7							
			88.4	41.3	23.3	46.7	5.4	7.0	8.4
All	100.0	4660.0	0.517	0.185	0.088	0.357	100.0	100.0	100.0

Source: Computed from the Ghana Living Standards Survey, 1991/92.

1998/99

	Pop'n share	Average welfare	Poverty indices				Contribution to national poverty		
			P ₀	P ₁	P ₂	P ₁ /P ₀	C ₀	C ₁	C ₂
Western	11.6	6194.6	27.3	7.0	2.5	25.6	8.0	5.8	4.3
Central	8.9	4775.4	48.4	14.8	6.0	30.6	11.0	9.5	8.1
Greater Accra	11.9	10026.0	5.2	1.1	0.3	20.4	1.6	0.9	0.6
Volta	12.4	5193.2	37.7	9.9	3.8	26.1	11.9	8.8	7.2
Eastern	11.6	4896.3	43.7	15.6	7.4	35.8	12.9	13.1	13.1
Ashanti	16.8	7317.9	27.7	8.5	3.7	30.5	11.8	10.2	9.4
Brong Ahafo	8.7	5585.9	35.8	9.8	3.9	27.2	7.9	6.1	5.2
Northern	10.2	3571.5	69.2	29.9	15.5	43.2	18.0	22.1	23.9
Upper East	4.5	2318.8	88.2	44.0	25.1	49.9	10.1	14.3	17.2
Upper West	3.2	2491.1							
			83.9	38.8	22.7	46.2	6.9	9.0	11.1
All	100.0	5819.4	0.395	0.139	0.066	0.352	100.0	100.0	100.0

Source: Computed from the Ghana Living Standards Survey, 1998/99.

2005/06

	Pop'n share	Average welfare	Poverty indices				Contribution to national poverty		
			P ₀	P ₁	P ₂	P ₁ /P ₀	C ₀	C ₁	C ₂
Western	10.1	7813.3	18.4	4.2	1.4	22.9	6.5	4.4	3.1
Central	8.8	8394.3	19.9	4.3	1.4	21.5	6.1	3.9	2.6
Greater Accra	13.9	10871.2	11.8	3.1	1.1	25.9	5.8	4.5	3.4
Volta	7.5	9590.9	31.4	7.3	2.4	23.1	8.2	5.6	4.0
Eastern	13.4	7805.7	15.1	3.3	1.3	22.0	7.1	4.6	3.6
Ashanti	16.8	8284.9	20.3	5.2	1.9	25.8	11.9	9.1	7.0
Brong Ahafo	9.2	6718.2	29.5	7.8	3.0	26.4	9.5	7.4	5.9
Northern	12.2	4779.8	52.3	20.7	10.5	39.6	22.3	26.3	27.8
Upper East	4.8	3409.3	70.4	32.7	18.4	46.5	11.7	16.3	19.1
Upper West	3.6	2354.4	87.9	48.0	30.2	54.6	10.9	17.8	23.4
All	100.0	7627.7	28.5	9.6	4.6	33.6	100.0	100.0	100.0

Source: Computed from the Ghana Living Standards Survey, 2005/06.

Table A1.7: Indices of poverty, by Gender of Household Head, 1991/92 to 2005/06, Poverty line = 3,708,900 cedis

1991/92

	Pop'n share	Average welfare	Poverty indices				Contribution to national poverty		
			P ₀	P ₁	P ₂	P ₁ /P ₀	C ₀	C ₁	C ₂
Urban									
Male	22.0	1554.9	29.4	8.0	3.2	27.2	12.5	9.5	8.2
Female	11.2	866.8	24.5	6.2	2.1	25.3	5.3	3.7	2.7
Rural									
Male	51.1	1624.8	65.9	25.3	12.4	38.4	65.1	69.9	72.6
Female	15.7	1044.9	56.3	19.8	9.2	35.2	17.1	16.9	16.5
All	100.0	4660.0	51.7	0.185	0.088	0.357	100.0	100.0	100.0
Ghana									
Male	73.1	1073.6	54.9	20.1	9.7	36.6	77.5	79.4	80.7
Female	26.9	1285.9	43.1	14.1	6.3	32.7	22.5	20.6	19.3
All	100.0	4660.0	51.7	0.185	0.088	0.357	100.0	100.0	100.0

Source: Computed from the Ghana Living Standards Survey, 1991/92.

1998/99

	Pop'n share	Average welfare	Poverty indices				Contribution to national poverty		
			P ₀	P ₁	P ₂	P ₁ /P ₀	C ₀	C ₁	C ₂
Urban									
Male	22.7	1932.0	19.4	5.0	1.9	25.8	11.2	8.2	6.4
Female	10.9	1994.2	19.6	5.9	2.5	30.1	5.4	4.7	4.0
Rural									
Male	49.9	1106.4	50.9	19.0	9.4	37.3	64.5	68.3	71.0
Female	16.4	1234.7	45.6	15.9	7.5	34.9	19.0	18.8	18.5
All	100.0	5819.4	0.395	0.139	0.066	0.352	100.0	100.0	100.0
Ghana									
Male	72.7	1364.9	41.0	14.6	7.1	35.6	75.6	76.6	77.4
Female	27.3	1537.6	35.2	11.9	5.5	33.8	24.3	23.4	22.6
All	100.0	5819.4	0.395	0.139	0.066	0.352	100.0	100.0	100.0

Source: Computed from the Ghana Living Standards Survey, 1998/99.

2005/06

	Pop'n share	Average welfare	Poverty indices				Contribution to national poverty		
			P ₀	P ₁	P ₂	P ₁ /P ₀	C ₀	C ₁	C ₂
Urban									
Male	26.8	2547.7	10.9	3.2	1.4	29.4	10.2	8.9	7.9
Female	10.8	2579.2	10.7	2.9	1.2	27.1	4.1	3.2	2.7
Rural									
Male	50.0	1396.0	42.4	15.0	7.5	35.4	74.2	78.3	81.2
Female	12.4	1546.5	26.4	7.4	3.0	28.0	11.5	9.6	8.2
All	100.0	7627.7	28.5	9.6	4.6	33.6	100.0	100.0	100.0
Ghana									
Male	76.8	1798.0	31.4	10.9	5.3	34.7	84.4	87.2	89.1
Female	23.2	2026.1	19.1	5.3	2.2	27.7	15.6	12.8	10.9
All	100.0	7627.7	28.5	9.6	4.6	33.6	100.0	100.0	100.0

Source: Computed from the Ghana Living Standards Survey, 2005/06.

Appendix 2: Main Tables-Household Assets

Table A2.1: Percentage of households owning different physical assets, by locality, 1991/92 to 2005/06

1991/92

	Accra	Urban Coastal	Urban Forest	Urban Savannah	Rural Coastal	Rural Forest	Rural Savannah	All
Sewing machine	36.8	35.5	40.2	23.2	22.2	27.2	15.6	27.2
Stove	34.6	24.0	26.0	19.1	8.1	6.9	4.6	13.7
Refrigerator	33.1	16.2	18.0	5.2	1.5	2.8	0.4	8.2
Fan	46.8	31.8	30.3	14.9	5.3	5.5	0.2	14.3
Radio	62.1	48.7	56.4	43.3	32.2	38.9	29.9	41.5
Video	4.1	1.1	2.5	0.5	0.0	0.1	0.0	0.9
TV	39.0	22.0	22.3	7.2	4.3	4.1	0.8	10.9
Camera	5.0	2.7	3.7	2.6	1.0	1.5	0.7	2.0
Iron (electric)	50.5	38.4	33.8	14.4	4.5	5.8	0.7	15.7
Bicycle	2.4	4.3	6.8	38.1	8.4	9.1	44.0	15.5
Car	6.3	2.3	4.1	2.1	1.0	0.7	0.7	1.9
Mobile Phone	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Source: Computed from the Ghana Living Standards Survey, 1991/92.

1998/99

	Accra	Urban Coastal	Urban Forest	Urban Savannah	Rural Coastal	Rural Forest	Rural Savannah	All
Sewing machine	33.5	30.3	33.8	34.7	26.5	34.9	19.3	30.3
Stove	35.6	18.2	16.8	15.8	8.0	7.8	2.8	12.8
Refrigerator	44.7	26.1	30.8	14.7	7.0	10.5	1.1	16.6
Fan	61.5	33.0	40.6	26.5	13.0	15.7	1.5	23.6
Radio	75.4	55.7	60.0	64.8	40.7	50.5	46.6	53.8
Video	13.5	4.5	8.7	2.0	0.4	2.3	0.5	4.1
TV	51.7	35.2	36.6	25.5	13.4	16.4	2.4	22.4
Camera	8.0	3.8	3.2	3.8	1.5	1.6	0.7	2.7
Iron (electric)	63.1	33.7	43.9	22.1	11.7	15.2	1.9	23.8
Bicycle	7.5	6.0	8.3	43.7	10.6	13.2	52.8	19.2
Car	9.8	2.0	3.4	0.0	1.3	1.6	0.6	2.6
Mobile Phone	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Source: Computed from the Ghana Living Standards Survey, 1998/99.

Table A2.1: Percentage of households owning different physical assets, by locality, 1991/92 to 2005/06 (continued)

2005/06

	Accra	Urban Coastal	Urban Forest	Urban Savannah	Rural Coastal	Rural Forest	Rural Savannah	All
Sewing machine	23.0	22.8	26.7	22.3	15.6	21.9	14.7	20.9
Stove	45.3	31.2	29.6	9.3	8.5	8.0	3.9	18.0
Refrigerator	49.1	32.6	37.6	20.3	10.5	9.2	3.3	21.0
Fan	65.9	46.8	49.2	40.7	16.0	14.6	6.0	30.0
Radio	82.6	77.6	77.9	72.1	67.6	74.0	68.7	74.3
Video	30.9	21.8	25.4	16.0	5.5	6.1	2.8	13.9
TV	68.9	44.4	48.0	34.8	18.0	17.8	6.6	31.0
Camera	6.8	3.8	3.5	2.8	2.1	1.6	1.1	2.8
Iron (electric)	62.8	49.8	50.4	23.6	12.3	12.5	4.2	27.8
Bicycle	4.9	9.2	11.9	50.9	12.3	15.6	61.5	22.3
Car	8.9	2.9	4.0	2.3	1.1	1.5	0.8	2.9
Mobile Phone	48.1	29.6	33.5	15.5	7.5	8.0	2.9	19.0

Source: Computed from the Ghana Living Standards Survey, 2005/06.

Table A2.2a: Percentage of households owning different physical assets, by standard of living quintile – Urban areas

1991/92

	Quintile					Poverty status			All
	Lowest	Second	Third	Fourth	Highest	Very poor	Poor	Non poor	
Sewing machine	18.8	24.0	40.4	36.5	37.1	20.8	40.5	37.0	35.8
Stove	4.2	10.4	21.1	22.5	34.9	7.4	17.6	30.5	27.1
Refrigerator	4.2	4.0	12.1	19.8	26.3	2.7	10.8	23.5	20.3
Fan	8.3	20.0	29.1	29.8	40.3	16.1	25.0	36.7	33.7
Radio	31.3	36.8	56.5	53.6	58.1	37.6	50.7	56.7	54.3
Video	0.0	0.8	0.0	0.3	4.3	0.0	0.7	2.8	2.3
TV	8.3	8.0	24.2	24.7	29.4	8.1	20.3	27.8	25.2
Camera	0.0	0.0	2.2	2.9	5.2	0.0	2.7	4.2	3.7
Iron (electric)	10.4	17.6	26.5	36.7	45.7	14.1	25.0	41.8	37.6
Bicycle	18.8	10.4	6.3	9.1	8.3	14.8	5.4	8.4	8.7
Car	0.0	0.0	1.8	1.3	6.7	0.0	1.4	4.8	4.0
Mobile Phone	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Source: Computed from the Ghana Living Standards Survey, 1991/92.

1998/99

	Quintile					Poverty status			All
	Lowest	Second	Third	Fourth	Highest	Very poor	Poor	Non poor	
Sewing machine	12.8	28.4	33.5	34.7	35.1	20.4	32.9	34.4	33.2
Stove	4.8	7.3	13.1	21.3	31.4	4.9	12.3	26.0	23.5
Refrigerator	2.3	5.2	20.1	31.2	44.1	2.6	7.2	37.4	32.9
Fan	3.5	14.8	32.3	41.7	58.0	8.2	14.0	50.4	44.8
Radio	29.0	46.5	60.3	66.1	72.4	37.2	47.2	69.1	65.2
Video	0.0	0.0	1.3	4.8	14.7	0.0	0.0	10.2	8.8
TV	5.7	15.4	35.2	41.1	48.4	10.5	17.9	44.6	40.3
Camera	1.4	0.8	2.4	3.2	7.6	1.1	0.7	5.7	5.1
Iron (electric)	4.7	14.6	32.0	42.3	60.4	9.3	15.3	51.8	46.2
Bicycle	20.0	20.0	16.8	12.8	8.2	20.0	21.7	10.5	11.9
Car	0.0	0.4	0.4	1.8	8.7	0.4	0.0	5.7	5.0
Mobile Phone	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Source: Computed from the Ghana Living Standards Survey, 1998/99.

2005/06

	Quintile					Poverty status			All
	Lowest	Second	Third	Fourth	Highest	Very poor	Poor	Non poor	
Sewing machine	9.4	20.0	21.4	24.4	27.1	10.6	13.3	25.3	24.3
Stove	4.3	10.1	17.7	26.7	46.1	2.5	7.0	34.9	32.7
Refrigerator	9.6	17.0	25.6	34.0	50.7	8.7	9.7	41.0	38.6
Fan	19.6	32.2	39.4	49.3	65.8	20.3	24.1	55.9	53.4
Radio	62.0	69.9	71.5	77.8	84.2	59.4	63.8	80.1	78.8
Video	0.8	6.8	13.0	21.4	36.5	0.9	2.5	27.5	25.6
TV	22.8	33.2	41.6	51.7	62.5	23.8	23.6	55.2	52.8
Camera	0.0	2.5	0.8	3.0	7.2	0.0	0.3	4.9	4.6
Iron (electric)	10.6	27.9	34.4	46.5	65.9	11.1	14.2	54.4	51.3
Bicycle	23.6	17.2	13.5	14.9	11.7	25.3	20.3	13.0	13.7
Car	0.0	1.2	0.3	0.9	10.0	0.0	0.0	5.7	5.3
Mobile Phone	2.6	13.8	17.3	30.4	49.9	3.2	7.1	38.1	35.6

Source: Computed from the Ghana Living Standards Survey, 2005/06.

Notes: “Very poor” correspond to those lying below the extreme poverty line, “poor” to those below the poverty line but above the extreme poverty line, and “non poor” to those above the poverty line.

Table A2.2b: Percentage of households owning different physical assets, by standard of living quintile – Rural areas

1991/92

	Quintile					Poverty status			All
	Lowest	Second	Third	Fourth	Highest	Very poor	Poor	Non poor	
Sewing machine	16.5	21.2	28.0	21.9	25.2	19.0	26.5	24.0	22.6
Stove	1.2	3.2	5.8	6.9	15.0	2.3	5.3	10.0	6.5
Refrigerator	0.2	0.2	1.0	1.3	5.9	0.1	1.1	3.2	1.8
Fan	0.5	1.9	2.9	3.4	10.7	1.2	2.4	6.4	3.9
Radio	26.6	30.8	34.7	38.8	41.9	28.7	34.7	39.1	34.7
Video	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.1	0.1
TV	0.0	1.2	1.9	3.5	9.0	0.5	1.8	5.6	3.2
Camera	0.0	0.5	0.9	1.7	2.6	0.3	0.9	1.9	1.2
Iron (electric)	0.5	1.3	4.0	4.2	9.5	0.9	3.6	6.3	4.0
Bicycle	26.9	20.5	19.6	16.4	12.5	24.3	18.9	15.3	19.1
Car	0.4	0.0	0.5	0.5	2.3	0.2	0.4	1.3	0.7
Mobile Phone	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Source: Computed from the Ghana Living Standards Survey, 1991/92.

1998/99

	Quintile					Poverty status			All
	Lowest	Second	Third	Fourth	Highest	Very poor	Poor	Non poor	
Sewing machine	17.2	26.1	32.6	32.0	34.2	19.2	27.2	33.0	28.6
Stove	1.2	2.5	5.3	9.1	13.6	1.4	3.4	9.4	6.5
Refrigerator	0.5	1.4	5.5	10.2	16.5	0.5	2.4	10.9	7.0
Fan	1.1	3.9	10.4	15.6	23.0	1.3	5.4	16.7	11.1
Radio	36.7	42.2	48.7	52.4	54.1	37.2	44.2	52.1	47.0
Video	0.2	0.1	0.9	0.7	4.6	0.1	0.5	2.1	1.4
TV	1.3	6.0	11.3	14.5	24.4	2.0	8.8	16.8	11.8
Camera	0.1	0.8	0.6	1.6	3.4	0.2	1.0	1.9	1.3
Iron (electric)	1.4	3.8	8.5	15.1	23.0	1.7	4.9	15.9	10.7
Bicycle	36.5	25.0	21.0	20.4	15.3	33.9	23.7	18.7	23.5
Car	0.2	0.4	0.7	1.4	3.3	0.2	0.4	1.9	1.3
Mobile Phone	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Source: Computed from the Ghana Living Standards Survey, 1998/99.

2005/06

	Quintile					Poverty status			All
	Lowest	Second	Third	Fourth	Highest	Very poor	Poor	Non poor	
Sewing machine	12.8	18.3	17.9	20.8	21.9	12.6	17.0	19.9	18.3
Stove	1.4	3.7	3.6	7.6	18.8	1.4	3.8	8.6	6.8
Refrigerator	0.8	4.0	5.7	9.7	19.3	0.9	3.4	10.0	7.7
Fan	3.1	6.9	9.2	16.8	26.6	3.1	4.6	15.6	12.3
Radio	67.5	70.4	71.1	72.7	73.5	67.2	69.4	72.1	71.0
Video	1.0	2.5	2.2	6.6	13.3	1.1	2.1	6.3	5.0
TV	2.3	9.7	12.5	18.8	29.9	2.2	8.9	18.1	14.4
Camera	0.4	0.8	0.8	1.9	4.0	0.3	1.1	1.9	1.5
Iron (electric)	1.6	5.2	7.5	12.3	24.1	1.6	4.0	12.8	9.9
Bicycle	50.5	28.9	23.7	21.3	20.3	51.7	31.7	22.9	28.8
Car	0.2	0.1	0.9	1.5	3.3	0.3	0.2	1.5	1.2
Mobile Phone	0.9	2.5	3.7	8.3	17.5	0.9	1.5	8.4	6.4

Source: Computed from the Ghana Living Standards Survey, 2005/06.

Notes: “Very poor” correspond to those lying below the extreme poverty line, “poor” to those below the poverty line but above the extreme poverty line, and “non poor” to those above the poverty line.

Appendix 3: Main Tables-Access To Services

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

1991/1992

	Accra	Urban			Rural			All
		Urban Coastal	Urban Forest	Urban Savanna h	Rural Coastal	Rural Forest	Rural Savanna h	
Inside pipe	59.8	36.2	29.3	15.5	2.7	3.3	1.4	15.1
Water vendor	0.7	2.1	0.2	22.7	1.0	0.1	0.4	1.5
Neighbour/Private	38.2	15.8	19.8	1.0	7.4	0.6	1.1	9.2
Public standpipe	1.3	30.3	12.8	5.2	18.6	4.9	5.9	10.2
Borehole	0.0	0.2	3.9	9.8	2.7	28.8	24.6	14.6
Well	0.0	7.8	18.1	22.2	18.5	14.1	17.1	14.1
Natural sources	0.0	7.6	15.9	23.7	49.2	48.2	49.6	35.2
All	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Source: Computed from the Ghana Living Standards Survey, 1991/1992.

1998/1999

	Accra	Urban			Rural			All
		Urban Coastal	Urban Forest	Urban Savanna h	Rural Coastal	Rural Forest	Rural Savanna h	
Inside pipe	50.3	23.1	30.7	13.6	4.2	4.6	0.0	14.7
Water vendor	12.9	4.5	3.0	3.3	3.3	0.5	2.3	3.6
Neighbour/Private	35.1	32.0	22.7	23.3	5.6	8.0	0.8	14.1
Public standpipe	0.8	21.9	23.1	15.9	26.7	9.8	0.0	12.3
Borehole	0.0	1.1	1.7	5.6	15.0	31.0	36.0	18.5
Well	0.0	11.6	10.3	16.2	19.7	10.1	17.7	12.0
Natural sources	0.9	5.9	8.5	22.1	25.5	36.0	43.2	24.9
All	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Source: Computed from the Ghana Living Standards Survey, 1998/1999.

2005/2006

	Accra	Urban			Rural			All
		Urban Coastal	Urban Forest	Urban Savanna h	Rural Coastal	Rural Forest	Rural Savanna h	
Inside pipe	50.8	32.1	27.6	13.6	4.2	2.0	2.2	16.3
Water vendor	5.8	8.8	2.4	0.8	2.4	0.1	.	2.2
Neighbour/Private	37.6	24.5	20.0	24.3	11.4	2.9	2.5	14.3
Public standpipe	4.5	16.2	21.0	28.2	14.6	7.2	1.2	10.7
Borehole	0.1	4.3	8.8	16.6	27.7	55.5	53.4	30.4
Well	1.1	11.5	17.2	8.8	10.2	11.9	8.7	10.3
Natural sources	0.1	2.7	3.0	7.7	29.5	20.3	32.0	15.8
All	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Source: Computed from the Ghana Living Standards Survey, 2005/2006.

**Table A3.2a: Main source of drinking water of households
by standard of living quintile - Urban Areas**

1991/92

	Quintile					Poverty status			All
	Lowest	Second	Third	Fourth	Highest	Very poor	Poor	Non poor	
Inside pipe	17.0	22.4	30.8	34.4	46.0	23.0	23.8	41.9	38.4
Water vendor	4.3	2.4	3.6	5.1	3.1	3.4	3.4	3.7	3.6
Neighbour/Private	6.4	25.6	27.6	23.9	19.4	18.9	31.3	21.0	21.7
Public standpipe	14.9	16.8	12.2	12.6	13.4	13.5	14.3	13.2	13.4
Borehole	12.8	0.8	3.2	3.0	1.7	4.7	2.7	2.2	2.5
Well	21.3	13.6	13.6	10.8	8.4	14.9	13.6	9.6	10.5
Natural sources	23.4	18.4	9.0	10.2	7.9	21.6	10.9	8.5	9.9
All	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Source: Computed from the Ghana Living Standards Survey, 1991/92.

1998/99

	Quintile					Poverty status			All
	Lowest	Second	Third	Fourth	Highest	Very poor	Poor	Non poor	
Inside pipe	6.4	12.6	20.4	28.7	46.0	7.8	14.9	37.9	34.1
Water vendor	1.2	2.9	3.8	7.4	8.4	2.0	2.4	7.5	6.8
Neighbour/Private	28.6	30.6	28.8	32.1	26.9	30.9	28.1	28.5	28.7
Public standpipe	16.1	21.1	22.3	13.1	11.5	16.9	24.5	13.3	14.3
Borehole	2.8	1.3	1.9	2.7	0.7	2.4	2.6	1.3	1.5
Well	21.2	12.9	11.6	9.0	4.0	17.4	12.4	6.4	7.7
Natural sources	23.7	18.6	11.4	6.9	2.6	22.6	15.1	5.0	7.0
All	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Source: Computed from the Ghana Living Standards Survey, 1998/99.

2005/06

	Quintile					Poverty status			All
	Lowest	Second	Third	Fourth	Highest	Very poor	Poor	Non poor	
Inside pipe	18.5	23.4	22.6	29.7	43.3	19.8	13.1	35.9	34.4
Water vendor	0.0	4.6	3.7	4.2	5.0	0.0	6.4	4.4	4.4
Neighbour/Private	28.2	30.4	32.9	30.8	23.1	24.3	34.6	26.9	27.1
Public standpipe	12.1	18.1	17.4	14.9	15.2	8.9	22.2	15.5	15.5
Borehole	17.2	9.4	7.1	5.9	4.4	21.2	9.0	5.4	6.1
Well	20.0	10.4	12.7	11.5	7.4	21.6	10.5	9.5	9.9
Natural sources	4.0	3.7	3.6	3.0	1.7	4.2	4.2	2.4	2.5
All	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Source: Computed from the Ghana Living Standards Survey, 2005/06.

Notes: "Very poor" correspond to those lying below the extreme poverty line, "poor" to those below the poverty line but above the extreme poverty line, and "non poor" to those above the poverty line.

**Table A3.2b: Main source of drinking water of households
by standard of living quintile – Rural Areas**

1991/92

	Quintile					Poverty status			All
	Lowest	Second	Third	Fourth	Highest	Very poor	Poor	Non poor	
Inside pipe	1.1	1.9	2.2	1.4	6.1	1.4	1.8	3.7	2.6
Water vendor	0.4	0.2	0.5	0.7	0.3	0.3	0.4	0.5	0.4
Neighbour/Private	1.2	1.9	2.6	2.7	3.5	1.5	2.7	3.0	2.4
Public standpipe	5.0	5.4	9.3	11.3	11.4	5.0	8.5	11.1	8.5
Borehole	24.6	22.5	20.6	18.2	20.1	23.7	20.7	19.5	21.2
Well	14.5	15.4	14.9	18.2	17.2	15.0	13.7	17.6	16.1
Natural sources	53.2	52.8	49.9	47.5	41.3	53.0	52.1	44.8	48.9
All	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Source: Computed from the Ghana Living Standards Survey, 1991/92.

1998/99

	Quintile					Poverty status			All
	Lowest	Second	Third	Fourth	Highest	Very poor	Poor	Non poor	
Inside pipe	0.6	0.7	3.3	3.7	7.3	0.7	0.7	4.9	3.2
Water vendor	0.1	0.3	2.0	1.9	3.9	0.1	0.5	2.6	1.7
Neighbour/Private	1.8	2.1	3.5	6.8	12.4	1.7	3.0	7.7	5.5
Public standpipe	5.9	12.2	9.8	14.0	13.9	7.1	13.7	12.5	11.2
Borehole	36.3	30.2	31.0	25.1	20.8	34.4	31.0	25.3	28.5
Well	23.6	14.6	11.1	13.0	10.7	21.4	13.3	11.7	14.5
Natural sources	31.7	40.0	39.4	35.6	31.0	34.5	37.7	35.4	35.4
All	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Source: Computed from the Ghana Living Standards Survey, 1998/99.

2005/06

	Quintile					Poverty status			All
	Lowest	Second	Third	Fourth	Highest	Very poor	Poor	Non poor	
Inside pipe	0.5	1.2	1.4	3.1	7.0	0.4	0.7	3.3	2.6
Water vendor	0.1	0.1	0.2	1.3	1.1	0.1	0.0	0.7	0.6
Neighbour/Private	1.3	3.2	4.0	7.1	7.7	1.3	1.3	5.9	4.6
Public standpipe	3.2	5.8	8.4	10.0	7.4	2.7	4.3	8.4	7.0
Borehole	58.9	49.8	47.3	44.5	44.1	59.3	53.1	45.8	48.9
Well	12.1	10.8	10.9	8.2	10.8	12.3	11.2	10.1	10.6
Natural sources	23.8	29.2	27.8	25.8	21.9	23.9	29.3	25.8	25.9
All	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Source: Computed from the Ghana Living Standards Survey, 2005/06.

Notes: “Very poor” correspond to those lying below the extreme poverty line, “poor” to those below the poverty line but above the extreme poverty line, and “non poor” to those above the poverty line.

Table A3.3: Toilet facilities used by households by locality**1991/1992**

	Accra	Urban			Rural			All
		Coastal	Urban Forest	Savanna h	Coastal	Rural Forest	Savanna h	
Flush toilet	30.7	18.3	10.4	2.6	1.4	1.9	0.6	7.1
Pit latrine	13.7	32.8	39.3	36.1	56.2	81.8	32.8	50.2
Pan/Bucket	29.2	18.3	26.3	26.3	3.5	5.4	2.1	11.3
KVIP	13.3	9.9	16.8	6.7	6.2	3.2	2.3	6.8
Other	13.1	20.6	7.2	28.4	32.7	7.6	62.2	24.6
All	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Source: Computed from the Ghana Living Standards Survey, 1991/1992.

1998/1999

	Accra	Urban			Rural			All
		Coastal	Urban Forest	Savanna h	Coastal	Rural Forest	Savanna h	
Flush toilet	28.5	6.6	11.2	3.3	2.1	1.5	0.3	6.6
Pit latrine	21.6	10.9	16.8	24.7	47.5	60.7	16.7	35.4
Pan/Bucket	15.2	11.5	12.7	5.5	4.5	4.7	0.3	6.8
KVIP	30.7	53.7	56.1	40.2	23.0	23.3	11.2	29.1
Other	4.0	17.3	3.2	26.2	22.9	9.8	71.5	22.1
All	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Source: Computed from the Ghana Living Standards Survey, 1998/1999.

2005/2006

	Accra	Urban			Rural			All
		Coastal	Urban Forest	Savanna h	Coastal	Rural Forest	Savanna h	
Flush toilet	33.4	22.9	17.6	5.1	1.4	1.1	0.7	10.2
Pit latrine	5.0	22.7	23.3	11.6	43.5	57.6	20.8	31.5
Pan/Bucket	57.2	42.3	52.8	65.5	27.2	33.5	9.2	37.4
KVIP	3.2	1.5	3.2	0.3	0.1	0.3	0.3	1.3
Other	1.1	10.6	3.0	17.4	27.8	7.5	69.0	19.6
All	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Source: Computed from the Ghana Living Standards Survey, 2005/2006.

**Table A3.4a: Toilet facilities used by households
by standard of living quintile – Urban Areas**

1991/92

	Quintile					Poverty status			All
	Lowest	Second	Third	Fourth	Highest	Very poor	Poor	Non poor	
Flush toilet	6.4	4.0	9.5	14.7	23.8	4.7	9.5	20.0	17.6
Pit latrine	46.8	35.2	29.5	30.3	27.5	37.8	32.7	28.3	29.6
Pan/Bucket	17.0	22.4	28.6	27.6	23.5	20.9	26.5	25.2	24.9
KVIP	6.4	12.0	14.1	12.1	12.9	10.1	15.6	12.5	12.6
Other	23.4	26.4	18.2	15.3	12.3	26.4	15.6	13.9	15.3
All	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Source: Computed from the Ghana Living Standards Survey, 1991/92.

1998/99

	Quintile					Poverty status			All
	Lowest	Second	Third	Fourth	Highest	Very poor	Poor	Non poor	
Flush toilet	0.2	2.2	5.1	10.5	23.8	0.4	2.8	17.8	15.5
Pit latrine	27.9	21.2	18.3	22.1	15.5	26.5	19.5	17.5	18.4
Pan/Bucket	5.5	5.4	10.7	13.4	14.3	4.4	7.1	13.6	12.5
KVIP	46.4	52.0	50.8	45.3	41.9	48.1	52.7	44.1	44.9
Other	20.0	19.2	15.0	8.6	4.5	20.6	18.0	7.0	8.8
All	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Source: Computed from the Ghana Living Standards Survey, 1998/99.

2005/06

	Quintile					Poverty status			All
	Lowest	Second	Third	Fourth	Highest	Very poor	Poor	Non poor	
Flush toilet	11.7	10.9	10.2	15.6	32.1	3.5	2.9	23.8	22.3
Pit latrine	18.1	15.9	15.9	19.2	13.7	17.1	19.2	15.5	15.7
Pan/Bucket	0.0	2.9	1.8	2.8	2.9	0.0	3.0	2.7	2.6
KVIP	57.8	60.4	62.9	58.1	48.3	55.0	64.1	53.6	54.1
Other	21.3	11.4	7.5	4.1	2.9	24.4	10.8	4.4	5.3
All	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Source: Computed from the Ghana Living Standards Survey, 2005/06.

Notes: “Very poor” correspond to those lying below the extreme poverty line, “poor” to those below the poverty line but above the extreme poverty line, and “non poor” to those above the poverty line.

**Table A3.4b: Toilet facilities used by households
by standard of living quintile– Rural Areas**

1991/92

	Quintile					Poverty status			All
	Lowest	Second	Third	Fourth	Highest	Very poor	Poor	Non poor	
Flush toilet	0.0	1.2	1.4	0.9	3.5	0.5	1.1	2.2	1.4
Pit latrine	55.3	63.7	63.6	62.4	61.1	58.8	65.7	61.6	61.2
Pan/Bucket	2.3	3.9	4.1	4.1	5.3	2.8	3.1	5.1	4.0
KVIP	2.5	2.5	4.5	4.3	4.6	2.5	4.3	4.4	3.7
Other	39.9	28.7	26.4	28.4	25.5	35.4	25.8	26.7	29.7
All	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Source: Computed from the Ghana Living Standards Survey, 1991/92.

1998/99

	Quintile					Poverty status			All
	Lowest	Second	Third	Fourth	Highest	Very poor	Poor	Non poor	
Flush toilet	0.3	0.6	1.3	1.2	3.1	0.5	0.3	2.0	1.3
Pit latrine	29.4	50.3	54.3	52.1	41.2	34.0	53.6	48.7	45.4
Pan/Bucket	0.7	4.5	2.5	5.4	4.1	1.5	4.8	4.0	3.4
KVIP	9.3	15.1	18.7	25.1	29.9	10.3	16.7	24.8	19.9
Other	60.4	29.7	23.2	16.2	21.6	53.7	24.5	20.4	30.0
All	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Source: Computed from the Ghana Living Standards Survey, 1998/99.

2005/06

	Quintile					Poverty status			All
	Lowest	Second	Third	Fourth	Highest	Very poor	Poor	Non poor	
Flush toilet	0.0	0.4	0.4	1.0	3.8	0.0	0.6	1.4	1.1
Pit latrine	27.3	46.2	48.9	48.1	45.4	26.8	43.4	47.4	43.4
Pan/Bucket	0.0	0.3	0.4	0.3	0.2	0.0	0.1	0.3	0.3
KVIP	11.9	22.5	26.9	29.4	33.1	11.0	19.1	28.9	24.8
Other	60.8	30.6	23.4	21.2	17.5	62.2	36.8	22.0	30.5
All	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Source: Computed from the Ghana Living Standards Survey, 2005/06.

Notes: “Very poor” correspond to those lying below the extreme poverty line, “poor” to those below the poverty line but above the extreme poverty line, and “non poor” to those above the poverty line

Table A3.5: Percentage of households using electricity, by locality

	Urban			Rural			All	
	Accra	Urban Coastal	Urban Forest	Urban Savanna h	Rural Coastal	Rural Forest		Rural Savanna h
1991/92	89.5	60.8	70.2	35.1	10.3	11.0	3.6	29.8
1998/99	89.5	68.2	83.4	45.8	27.4	24.9	3.9	41.4
2005/06	88.3	74.3	76.2	64.6	29.1	32.4	17.0	49.2

Source: Computed from the Ghana Living Standards Survey.

Table A3.6: Percentage of households using electricity, by urban/rural and Quintile**1991/92**

	Quintile					Poverty status			All
	Lowest	Second	Third	Fourth	Highest	Very poor	Poor	Non poor	
Urban	40.4	51.2	64.3	67.5	75.2	48.0	57.1	72.7	68.9
Rural	3.5	5.6	8.3	9.8	15.9	4.3	7.9	12.2	8.7
All	6.4	13.5	23.8	32.3	49.8	9.7	20.1	40.8	29.8

Source: Computed from the Ghana Living Standards Survey, 1991/92.

1998/99

	Quintile					Poverty status			All
	Lowest	Second	Third	Fourth	Highest	Very poor	Poor	Non poor	
Urban	32.5	44.4	65.6	77.1	91.8	34.3	47.9	84.5	78.4
Rural	5.3	11.3	16.9	26.1	36.9	5.7	14.7	27.1	19.7
All	8.7	18.1	30.5	46.4	68.9	10.0	21.7	53.3	41.4

Source: Computed from the Ghana Living Standards Survey, 1998/99.

2005/06

	Quintile					Poverty status			All
	Lowest	Second	Third	Fourth	Highest	Very poor	Poor	Non poor	
Urban	44.4	62.0	68.8	77.7	87.5	41.2	56.5	80.9	78.6
Rural	11.3	24.1	26.9	33.3	39.9	10.2	21.4	31.8	27.0
All	16.1	32.7	40.6	54.8	71.6	14.3	29.2	56.0	49.2

Source: Computed from the Ghana Living Standards Survey, 2005/06.

Notes: "Very poor" correspond to those lying below the extreme poverty line, "poor" to those below the poverty line but above the extreme poverty line, and "non poor" to those above the poverty line.

Appendix 4: Main Tables—Human Development Indicators

Table A4.1: Type of health personnel consulted by ill or injured individuals, by locality, 1991/92 to 2005/06

1991/1992

	Accra	Urban			Rural			All
		Coastal	Urban Forest	Savanna h	Coastal	Rural Forest	Savanna h	
Doctor	47.8	27.3	32.0	32.7	47.0	34.9	22.3	41.4
Nurse, midwife	6.5	4.7	0.9	3.4	4.0	6.2	1.4	3.4
Medical assistant	6.5	8.6	9.9	5.7	3.7	8.9	13.7	4.4
Pharmacist	2.2	0.8	4.1	3.4	3.7	1.4	2.2	3.8
Other	0.0	4.7	6.8	4.2	7.8	2.1	5.8	6.6
Did not consult	37.0	53.9	46.4	50.6	33.9	46.6	54.7	40.5
All	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Source: Computed from the Ghana Living Standards Survey, 1991/92.

1998/1999

	Accra	Urban			Rural			All
		Coastal	Urban Forest	Savanna h	Coastal	Rural Forest	Savanna h	
Doctor	44.6	30.9	34.6	21.9	17.7	15.4	7.7	19.8
Nurse, midwife	2.3	9.1	5.3	6.4	11.5	7.7	9.4	8.0
Medical assistant	3.1	3.0	2.4	6.9	6.5	8.5	13.1	7.6
Pharmacist	10.0	1.9	6.7	3.6	2.2	1.0	0.5	2.6
Other	2.3	4.3	4.7	7.0	8.4	5.0	7.9	5.9
Did not consult	37.7	50.8	46.3	54.1	53.7	62.4	61.4	56.2
All	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Source: Computed from the Ghana Living Standards Survey, 1998/99.

2005/2006

	Accra	Urban			Rural			All
		Coastal	Urban Forest	Savanna h	Coastal	Rural Forest	Savanna h	
Doctor	49.2	38.3	33.7	24.4	21.6	18.9	11.5	23.6
Nurse, midwife	2.5	3.2	7.2	7.5	8.3	8.0	13.4	8.3
Medical assistant	0.9	2.6	2.9	4.8	5.2	5.0	7.1	4.7
Pharmacist	8.9	11.8	27.2	31.0	14.7	24.3	18.4	20.8
Other	0.7	1.6	1.8	3.1	3.3	2.3	3.4	2.4
Did not consult	37.9	42.6	27.1	29.2	46.9	41.6	46.3	40.1
All	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Source: Computed from the Ghana Living Standards Survey, 2005/06.

Table A4.2a: Type of health personnel consulted by ill or injured individuals, by standard of living quintile – Urban Areas

1991/92

	Quintile					Poverty status			All
	Lowest	Second	Third	Fourth	Highest	Very poor	Poor	Non poor	
Doctor	47.8	27.3	32.0	32.7	47.0	34.9	22.3	41.4	38.9
Nurse, midwife	6.5	4.7	0.9	3.4	4.0	6.2	1.4	3.4	3.5
Medical assistant	6.5	8.6	9.9	5.7	3.7	8.9	13.7	4.4	5.7
Pharmacist	2.2	0.8	4.1	3.4	3.7	1.4	2.2	3.8	3.4
Other	0.0	4.7	6.8	4.2	7.8	2.1	5.8	6.6	6.1
Did not consult	37.0	53.9	46.4	50.6	33.9	46.6	54.7	40.5	42.5
All	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Source: Computed from the Ghana Living Standards Survey, 1991/92.

1998/99

	Quintile					Poverty status			All
	Lowest	Second	Third	Fourth	Highest	Very poor	Poor	Non poor	
Doctor	23.4	18.4	26.1	35.3	41.7	21.2	16.2	37.4	34.1
Nurse, midwife	9.9	6.8	6.8	6.8	3.6	7.6	10.4	4.8	5.5
Medical assistant	2.0	4.2	7.9	2.7	2.1	4.1	6.3	3.1	3.4
Pharmacist	1.8	2.8	1.5	5.2	9.5	3.3	0.9	6.8	6.0
Other	5.3	8.0	6.8	5.0	2.2	6.2	7.5	3.9	4.4
Did not consult	57.6	59.7	50.9	45.0	40.9	57.7	58.7	43.9	46.5
All	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Source: Computed from the Ghana Living Standards Survey, 1998/99.

2005/06

	Quintile					Poverty status			All
	Lowest	Second	Third	Fourth	Highest	Very poor	Poor	Non poor	
Doctor	22.2	32.6	34.4	33.4	41.2	20.2	23.8	37.5	36.4
Nurse, midwife	6.2	9.0	3.7	6.1	5.0	6.3	8.1	5.4	5.5
Medical assistant	4.0	0.5	2.6	3.3	2.7	4.5	1.7	2.7	2.7
Pharmacist	38.0	22.2	26.7	23.4	15.8	37.8	26.4	20.2	21.1
Other	4.2	1.9	1.7	1.6	1.6	5.1	1.3	1.6	1.7
Did not consult	25.3	33.7	31.0	32.2	33.8	26.1	38.7	32.6	32.5
All	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Source: Computed from the Ghana Living Standards Survey, 2005/06.

Notes: “Very poor” correspond to those lying below the extreme poverty line, “poor” to those below the poverty line but above the extreme poverty line, and “non poor” to those above the poverty line.

Table A4.2b: Type of health personnel consulted by ill or injured individuals, by standard of living quintile – Rural areas

1991/92

	Quintile					Poverty status			All
	Lowest	Second	Third	Fourth	Highest	Very poor	Poor	Non poor	
Doctor	12.7	16.1	18.6	20.3	26.3	13.5	17.2	23.2	18.4
Nurse, midwife	7.4	7.7	7.0	9.8	13.1	7.5	8.3	10.1	8.8
Medical assistant	10.8	9.0	7.5	8.4	9.0	9.9	8.0	8.5	8.9
Pharmacist	0.8	2.6	3.3	6.1	3.5	1.4	3.0	4.8	3.2
Other	7.4	6.5	7.1	4.9	3.7	6.9	8.5	4.3	6.1
Did not consult	61.0	58.0	56.5	50.4	44.5	60.9	55.0	49.1	54.7
All	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Source: Computed from the Ghana Living Standards Survey, 1991/92.

1998/99

	Quintile					Poverty status			All
	Lowest	Second	Third	Fourth	Highest	Very poor	Poor	Non poor	
Doctor	6.5	11.3	14.1	15.8	23.2	7.3	12.5	17.6	13.8
Nurse, midwife	7.7	11.2	9.8	8.0	8.2	7.6	12.2	8.8	9.0
Medical assistant	12.5	9.8	7.2	8.4	8.2	12.4	8.5	7.9	9.3
Pharmacist	0.6	1.0	0.1	0.8	3.4	0.8	0.8	1.4	1.1
Other	6.3	5.9	5.1	7.8	7.6	6.8	4.0	7.0	6.5
Did not consult	66.4	60.8	63.7	59.2	49.5	65.0	62.1	57.3	60.3
All	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Source: Computed from the Ghana Living Standards Survey, 1998/99.

2005/06

	Quintile					Poverty status			All
	Lowest	Second	Third	Fourth	Highest	Very poor	Poor	Non poor	
Doctor	11.9	15.2	16.6	18.3	24.8	11.8	13.7	18.7	16.9
Nurse, midwife	10.7	10.1	10.8	9.9	6.6	10.5	12.0	9.3	9.8
Medical assistant	6.5	6.0	5.7	5.1	5.0	6.8	3.3	5.8	5.7
Pharmacist	18.9	23.3	18.1	21.7	21.3	20.0	21.3	20.7	20.6
Other	2.8	2.9	2.4	2.4	4.1	2.8	3.4	2.7	2.8
Did not consult	49.2	42.5	46.4	42.6	38.2	48.1	46.3	42.7	44.1
All	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Source: Computed from the Ghana Living Standards Survey, 2005/06.

Notes: "Very poor" correspond to those lying below the extreme poverty line, "poor" to those below the poverty line but above the extreme poverty line, and "non poor" to those above the poverty line.

Table A4.3: Where consultation took place for ill or injured individuals, by locality, 1991/92 to 2005/06

1991/1992

	Accra	Urban Coastal	Urban Forest	Urban Savanna h	Rural Coastal	Rural Forest	Rural Savanna h	All
Hospital	22.2	30.2	30.5	9.3	19.0	18.2	9.8	18.6
Dispensary, Pharmacy, Chemical Store	2.2	2.8	6.4	3.7	8.3	2.6	0.4	3.5
Clinic, Maternity								
Home, MHC	28.6	23.1	24.0	19.6	19.7	22.7	15.5	21.2
Other	2.2	1.9	4.7	11.5	5.4	4.0	10.8	5.9
Did not consult	44.9	42.1	34.4	55.9	47.7	52.5	63.4	50.8
All	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Source: Computed from the Ghana Living Standards Survey, 1991/92.

1998/1999

	Accra	Urban Coastal	Urban Forest	Urban Savanna h	Rural Coastal	Rural Forest	Rural Savanna h	All
Hospital	19.1	28.1	27.5	24.0	11.8	12.1	7.3	15.0
Dispensary, Pharmacy, Chemical Store	9.6	1.7	8.0	4.8	2.3	1.2	1.2	3.0
Clinic, Maternity								
Home, MHC	31.5	12.4	12.4	9.4	21.8	16.9	19.3	17.9
Other	2.0	7.0	5.8	7.7	10.5	7.4	10.8	7.9
Did not consult	37.7	50.8	46.3	54.1	53.7	62.4	61.4	56.2
All	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Source: Computed from the Ghana Living Standards Survey, 1998/99.

2005/2006

	Accra	Urban Coastal	Urban Forest	Urban Savanna h	Rural Coastal	Rural Forest	Rural Savanna h	All
Hospital	28.1	30.7	31.5	24.0	20.5	14.6	10.8	19.5
Dispensary, Pharmacy, Chemical Store	24.5	12.6	12.3	12.1	13.3	16.5	20.4	16.5
Clinic, Maternity								
Home, MHC	8.6	12.1	26.8	30.6	14.6	23.4	14.6	19.6
Other	0.9	2.0	2.2	4.1	4.7	3.9	7.9	4.3
Did not consult	37.9	42.6	27.1	29.2	46.9	41.6	46.3	40.1
All	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Source: Computed from the Ghana Living Standards Survey, 2005/06.

Table A4.4a: Where consultation took place for ill or injured individuals, by standard of living quintile – Urban Areas

1991/92

	Quintile					Poverty status			All
	Lowest	Second	Third	Fourth	Highest	Very poor	Poor	Non poor	
Hospital	17.4	21.1	22.1	21.4	28.6	21.9	17.3	25.7	24.5
Dispensary, Pharmacy Chemical Store	2.2	1.6	4.1	4.2	4.8	2.1	2.2	4.6	4.1
Clinic, Maternity Home, MHC	43.5	21.1	23.4	19.2	26.6	28.1	23.0	23.6	24.0
Other	0.0	2.3	4.1	4.7	5.9	1.4	2.9	5.4	4.8
Did not consult	37.0	53.9	46.4	50.6	34.1	46.6	54.7	40.6	42.6
All	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Source: Computed from the Ghana Living Standards Survey, 1991/92.

1998/99

	Quintile					Poverty status			All
	Lowest	Second	Third	Fourth	Highest	Very poor	Poor	Non poor	
Hospital	19.6	16.6	23.4	24.5	29.1	17.1	17.5	26.9	25.2
Dispensary, Pharmacy, Chemical Store	2.9	2.0	2.2	6.1	10.1	3.6	.	7.6	6.6
Clinic, Maternity Home, MHC	12.4	10.5	14.9	19.0	17.2	13.0	13.3	16.9	16.2
Other	7.5	11.1	8.6	5.4	2.7	8.5	10.5	4.6	5.5
Did not consult	57.6	59.7	50.9	45.0	40.9	57.7	58.7	43.9	46.5
All	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Source: Computed from the Ghana Living Standards Survey, 1998/99.

2005/06

	Quintile					Poverty status			All
	Lowest	Second	Third	Fourth	Highest	Very poor	Poor	Non poor	
Hospital	20.6	26.6	26.1	27.5	32.9	18.2	19.4	30.1	29.3
Dispensary, Pharmacy, Chemical Store	13.1	15.5	14.3	15.1	15.5	14.3	14.1	15.2	15.1
Clinic, Maternity Home, MHC	35.1	22.7	26.4	23.3	15.6	34.3	26.4	20.1	20.9
Other	5.9	1.6	2.2	1.8	2.2	7.2	1.3	2.0	2.2
Did not consult	25.3	33.7	31.0	32.2	33.8	26.1	38.7	32.6	32.5
All	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Source: Computed from the Ghana Living Standards Survey, 2005/06.

Notes: “Very poor” correspond to those lying below the extreme poverty line, “poor” to those below the poverty line but above the extreme poverty line, and “non poor” to those above the poverty line.

Table A4.4b: Where consultation took place for ill or injured individuals, by standard of living quintile – Rural Areas

1991/92

	Quintile					Poverty status			All
	Lowest	Second	Third	Fourth	Highest	Very poor	Poor	Non poor	
Hospital	11.4	14.3	14.8	19.3	20.8	11.8	14.6	19.8	15.8
Dispensary, Pharmacy, Chemical Store	0.5	2.3	3.4	6.1	4.5	1.1	2.6	5.4	3.2
Clinic, Maternity Home, MHC	20.8	18.9	16.6	18.6	25.3	19.9	19.1	20.1	19.8
Other	6.3	6.2	8.7	5.6	4.9	6.2	8.7	5.7	6.4
Did not consult	61.0	58.2	56.5	50.4	44.5	61.0	55.0	49.1	54.7
All	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Source: Computed from the Ghana Living Standards Survey, 1991/92.

1998/99

	Quintile					Poverty status			All
	Lowest	Second	Third	Fourth	Highest	Very poor	Poor	Non poor	
Hospital	5.0	9.6	9.8	11.6	19.1	5.6	10.1	13.6	10.7
Dispensary, Pharmacy, Chemical Store	0.9	1.5	0.2	1.1	3.6	1.3	1.0	1.6	1.4
Clinic, Maternity Home, MHC	17.3	19.3	18.5	18.5	19.7	17.2	20.5	18.9	18.6
Other	10.4	8.7	7.8	9.7	8.1	10.9	6.3	8.6	9.0
Did not consult	66.4	60.8	63.7	59.2	49.5	65.0	62.1	57.3	60.3
All	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Source: Computed from the Ghana Living Standards Survey, 1998/99.

2005/06

	Quintile					Poverty status			All
	Lowest	Second	Third	Fourth	Highest	Very poor	Poor	Non poor	
Hospital	10.8	14.0	15.5	15.4	16.3	10.5	12.5	15.6	14.4
Dispensary, Pharmacy, Chemical Store	17.7	16.7	16.6	16.8	19.3	17.9	15.2	17.4	17.2
Clinic, Maternity Home, MHC	16.7	20.9	16.4	20.5	20.6	17.6	18.8	19.3	18.9
Other	5.6	6.0	5.2	4.6	5.5	5.8	7.3	5.0	5.4
Did not consult	49.2	42.5	46.4	42.6	38.2	48.1	46.3	42.7	44.1
All	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Source: Computed from the Ghana Living Standards Survey, 2005/06.

Notes: “Very poor” correspond to those lying below the extreme poverty line, “poor” to those below the poverty line but above the extreme poverty line, and “non poor” to those above the poverty line.

**Table A4.5: Net enrolment in primary school,
by locality, gender and standard of living quintile**

1991/92

		Quintile					Poverty status			
		Lowest	Second	Third	Fourth	Highest	Very poor	Poor	Non poor	All
<i>Urban/Rural</i>										
Urban	Male	78.9	80.6	85.3	86.1	95.7	80.6	80.7	91.1	87.4
	Female	60.5	72.7	77.9	86.6	88.4	69.2	72.0	86.7	81.6
	All	69.7	77.0	81.5	86.3	92.0	75.4	76.5	88.8	84.6
Rural	Male	63.6	71.3	75.3	77.9	87.0	66.1	74.6	80.3	71.7
	Female	57.9	67.6	66.9	74.6	81.4	61.3	67.6	74.9	66.5
	All	60.9	69.5	71.3	76.3	84.3	63.8	71.4	77.7	69.3
<i>Locality</i>										
Accra	Male	*85.7	*83.3	*88.9	85.3	100.0	*82.4	*90.0	93.3	91.3
	Female	*100.0	*70.8	*87.0	92.3	89.7	*85.7	*68.8	90.7	87.4
	All	*92.9	75.0	88.0	89.0	94.2	84.4	80.6	91.8	89.2
Urban Coastal	Male	*100.0	70.0	84.2	88.9	89.7	75.0	*79.3	89.9	85.0
	Female	*75.0	*86.2	68.6	89.1	86.0	84.4	*65.0	85.3	82.6
	All	*87.5	78.0	76.7	89.0	87.8	79.7	73.5	87.5	83.8
Urban Forest	Male	*90.9	84.2	84.4	89.3	97.3	88.1	76.9	92.9	90.1
	Female	*66.7	*60.9	78.6	87.3	91.5	*59.3	71.1	89.5	82.5
	All	*78.3	75.4	81.2	88.3	94.4	76.8	73.4	91.2	86.4
Urban Savannah	Male	*50.0	*85.7	*84.2	*73.9	*93.1	76.3	*76.9	85.0	81.1
	Female	*18.2	*66.7	*82.4	*70.8	*76.5	*35.0	*100.0	73.6	66.7
	All	*34.8	80.0	83.3	72.3	87.0	62.1	*85.7	79.6	75.0
Rural Coastal	Male	64.4	80.3	87.7	84.0	84.8	71.7	85.7	85.7	80.1
	Female	56.4	73.4	61.3	81.4	91.7	63.5	64.5	80.4	70.3
	All	60.5	76.9	74.3	82.8	88.4	67.7	75.8	82.9	75.3
Rural Forest	Male	82.4	82.4	84.9	89.8	92.3	82.6	83.0	89.1	84.7
	Female	78.2	79.7	83.6	90.9	78.6	77.6	85.5	87.4	81.8
	All	80.4	81.2	84.3	90.3	86.6	80.2	84.2	88.3	83.3
Rural Savannah	Male	46.6	51.2	54.5	46.8	82.1	47.1	53.8	60.9	51.3
	Female	37.0	50.0	48.7	40.0	72.7	43.0	46.8	51.3	45.6
	All	42.3	50.6	52.0	43.3	77.0	45.2	50.7	56.1	48.6
All	Male	64.8	73.4	78.3	81.6	92.7	68.2	76.2	85.7	76.5
	Female	58.1	68.6	70.6	80.3	86.0	62.4	68.9	81.1	71.5
All	All	61.7	71.1	74.6	80.9	89.4	65.5	72.8	83.4	74.1

Source: Computed from the Ghana Living Standards Survey, 1991/92.

Notes: Cells with less than 30 observations are marked with *. “Very poor” correspond to those lying below the extreme poverty line, “poor” to those below the poverty line but above the extreme poverty line, and “non poor” to those above the poverty line.

**Table A4.5: Net enrolment in primary school,
by locality, gender and standard of living quintile (contd)**

1998/99

		Quintile					Poverty status			
		Lowest	Second	Third	Fourth	Highest	Very poor	Poor	Non poor	All
<i>Urban/Rural</i>										
Urban	Male	*86.7	*90.4	92.6	91.1	96.7	86.1	95.1	93.9	92.9
	Female	*88.2	*85.1	86.5	86.9	90.5	83.0	92.4	88.2	88.0
	All	*87.3	87.9	89.5	88.9	93.6	84.7	93.8	91.0	90.4
Rural	Male	70.8	83.6	87.5	86.6	90.5	73.2	84.3	88.0	81.4
	Female	67.2	77.5	86.5	87.9	83.0	67.4	84.2	86.4	78.9
	All	69.2	80.5	87.0	87.3	86.7	70.6	84.3	87.2	80.2
<i>Locality</i>										
Accra	Male	*100.0	*79.6	88.4	86.9	95.3	*84.7	*82.9	91.6	91.1
	Female	*62.4	*54.2	84.8	84.1	91.2	*48.5	*62.5	88.3	85.6
	All	*78.4	65.3	86.9	85.5	93.2	*60.7	*73.2	89.9	88.4
Urban Coastal	Male	*78.0	87.5	87.3	*97.3	97.3	80.0	*91.3	93.3	89.7
	Female	*81.4	91.3	84.5	90.6	91.4	82.8	*94.2	88.4	88.0
	All	79.8	89.3	85.8	93.6	94.4	81.4	92.7	90.7	88.9
Urban Forest	Male	86.4	94.9	93.6	92.9	98.5	86.6	100.0	96.1	94.9
	Female	*96.2	93.4	84.5	86.2	90.1	90.1	100.0	87.7	88.9
	All	90.0	94.2	88.6	89.3	94.5	88.0	100.0	91.8	92.0
Urban Savannah	Male	*95.7	*92.5	*100.0	*92.6	*85.1	91.5	*100.0	95.2	94.9
	Female	*93.6	*85.1	92.3	*91.6	*85.8	*87.2	*95.6	89.7	90.1
	All	94.7	89.3	96.0	92.1	85.6	89.7	97.8	92.1	92.5
Rural Coastal	Male	71.0	80.3	89.5	95.3	97.3	75.2	76.3	93.9	83.4
	Female	79.5	80.6	90.3	87.7	86.2	75.7	85.6	89.8	84.4
	All	74.4	80.4	89.9	91.2	91.6	75.4	80.4	91.8	83.9
Rural Forest	Male	84.6	91.0	91.8	93.7	96.3	86.8	89.7	93.6	91.2
	Female	79.9	85.1	92.1	92.3	91.6	78.5	90.1	92.2	88.5
	All	82.7	87.9	91.9	93.0	94.0	82.9	89.9	92.9	89.9
Rural Savannah	Male	64.5	73.5	68.8	57.3	64.1	65.1	81.3	62.7	66.0
	Female	59.0	58.7	67.8	70.5	58.7	57.9	69.3	64.4	61.1
	All	62.0	66.1	68.3	63.2	61.1	61.8	74.6	63.6	63.7
All	Male	72.6	85.1	88.9	88.4	94.6	75.1	86.7	90.6	84.9
	Female	69.7	79.0	86.5	87.5	87.8	69.6	85.9	87.2	81.9
All	All	71.3	82.1	87.8	87.9	91.1	72.6	86.3	88.9	83.4

Source: Computed from the Ghana Living Standards Survey, 1998/99.

Notes: Cells with less than 30 observations are marked with *. "Very poor" correspond to those lying below the extreme poverty line, "poor" to those below the poverty line but above the extreme poverty line, and "non poor" to those above the poverty line.

**Table A4.5: Net enrolment in primary school,
by locality, gender and standard of living quintile (contd)**

2005/06

		Quintile					Poverty status			
		Lowest	Second	Third	Fourth	Highest	Very poor	Poor	Non poor	All
<i>Urban/Rural</i>										
Urban	Male	75.2	92.6	97.7	98.8	97.2	73.0	88.9	97.7	95.0
	Female	89.8	91.8	96.0	95.4	96.6	86.7	96.3	95.5	95.0
	All	81.7	92.2	96.8	97.0	96.9	78.8	92.4	96.5	95.0
Rural	Male	67.9	84.3	87.9	89.5	88.6	66.9	80.6	88.1	80.6
	Female	67.7	78.7	87.7	86.5	91.2	67.8	73.9	86.2	79.1
	All	67.8	81.6	87.8	87.9	89.8	67.3	77.5	87.2	79.9
<i>Locality</i>										
Accra	Male	*90.4	*94.9	94.3	100.0	94.4	*87.6	*92.2	96.4	95.2
	Female	*94.2	88.3	97.5	98.5	95.0	*89.7	*94.3	96.0	95.7
	All	92.0	91.2	95.8	99.1	94.7	*88.3	*93.1	96.2	95.5
Urban Coastal	Male	*100.0	*89.9	96.9	100.0	98.2	*100.0	*29.5	98.7	97.9
	Female	*100.0	*100.0	100.0	95.4	95.1	*100.0	*100.0	96.7	97.0
	All	*100.0	95.8	98.4	98.1	96.6	*100.0	81.5	97.7	97.4
Urban Forest	Male	*56.2	93.3	100.0	100.0	100.0	*47.2	*91.1	99.3	97.0
	Female	*90.1	93.6	96.2	95.5	98.7	*84.6	*95.8	96.7	96.5
	All	*71.8	93.4	98.1	97.7	99.1	*63.4	92.9	97.9	96.7
Urban Savannah	Male	70.9	90.4	*100.0	87.5	*94.4	71.5	*88.2	92.7	86.2
	Female	83.8	89.6	*86.4	88.9	91.2	83.5	97.1	87.3	88.1
	All	76.1	89.9	92.7	88.3	92.8	76.5	93.0	89.6	87.2
Rural Coastal	Male	83.4	81.7	92.0	90.0	*93.5	83.4	74.3	91.1	87.3
	Female	80.4	85.9	78.8	78.9	*95.4	79.4	87.4	81.7	82.0
	All	81.9	83.7	85.4	83.4	94.3	81.3	79.5	86.3	84.7
Rural Forest	Male	96.3	92.8	94.4	93.9	100.0	95.9	92.8	94.7	94.6
	Female	94.1	89.3	96.1	95.3	97.6	93.9	88.9	94.7	93.7
	All	95.3	91.2	95.2	94.6	98.7	94.9	91.1	94.7	94.2
Rural Savannah	Male	53.0	73.1	68.9	78.8	67.7	53.3	68.3	72.3	62.4
	Female	53.8	62.1	79.0	72.2	*69.3	54.3	55.1	72.8	61.2
	All	53.4	67.6	73.8	75.7	68.3	53.8	61.7	72.5	61.8
All	Male	68.8	85.7	90.8	94.2	94.3	67.5	81.9	92.0	85.0
	Female	70.1	81.2	90.3	91.2	95.3	69.5	77.8	90.4	84.6
All	All	69.4	83.6	90.6	92.7	94.8	68.4	80.0	91.2	84.8

Source: Computed from the Ghana Living Standards Survey, 2005/06.

Notes: Cells with less than 30 observations are marked with *. "Very poor" correspond to those lying below the extreme poverty line, "poor" to those below the poverty line but above the extreme poverty line, and "non poor" to those above the poverty line.

**Table A4.6: Net enrolment in secondary school,
by locality, gender and standard of living quintile**

1991/92

		Quintile					Poverty status			
		Lowest	Second	Third	Fourth	Highest	Very poor	Poor	Non poor	All
<i>Urban/Rural</i>										
Urban	Male	39.6	41.2	47.5	50.3	49.7	41.9	43.9	50.0	47.3
	Female	25.0	26.9	43.1	40.3	44.2	27.9	41.0	41.9	39.6
	All	33.0	34.4	45.5	45.5	46.4	35.6	42.6	45.6	43.4
Rural	Male	33.8	36.1	42.8	38.6	46.3	34.4	41.2	41.9	37.7
	Female	27.4	28.6	30.4	32.8	33.7	27.6	32.1	31.7	29.8
	All	31.2	32.9	36.8	35.7	39.5	31.6	37.0	36.8	34.2
<i>Locality</i>										
Accra	Male	*50.0	*64.0	48.8	50.0	59.5	*63.0	47.2	54.5	54.3
	Female	*50.0	*22.7	*37.9	33.3	44.0	*30.4	*42.1	38.6	37.9
	All	*50.0	44.7	44.4	42.4	49.6	48.0	45.5	45.5	45.9
Urban Coastal	Male	*50.0	*33.3	60.6	60.9	53.7	40.6	57.7	57.1	54.2
	Female	*44.4	*29.2	41.5	48.3	45.2	*37.0	*47.8	43.8	43.3
	All	*47.6	31.4	50.0	54.9	48.5	39.0	53.1	49.8	48.5
Urban Forest	Male	*38.5	*46.4	43.3	52.9	49.1	48.6	31.6	51.1	47.2
	Female	*23.1	*17.2	42.6	41.2	45.7	23.5	*28.6	44.2	39.3
	All	*30.8	31.6	43.0	47.1	46.9	36.6	30.3	47.2	43.0
Urban Savannah	Male	*31.6	*18.2	*36.8	26.5	*29.6	22.5	*42.9	28.4	28.1
	Female	*0.0	*44.4	*55.0	33.3	*35.0	*22.2	*53.8	38.3	36.0
	All	19.4	30.0	46.2	29.7	31.9	22.4	48.1	33.1	31.7
Rural Coastal	Male	42.9	31.7	50.6	39.1	46.9	34.3	51.5	45.0	42.6
	Female	30.0	28.6	26.9	23.5	*50.0	22.5	41.2	28.7	29.6
	All	38.4	30.4	40.1	30.9	48.3	29.5	47.1	37.1	36.8
Rural Forest	Male	41.8	45.7	42.1	48.0	*41.9	43.9	41.4	45.6	44.0
	Female	34.1	36.7	33.6	38.0	*34.7	36.2	31.0	36.4	35.4
	All	38.6	42.0	37.9	43.2	37.5	40.8	36.6	40.8	40.1
Rural Savannah	Male	23.6	23.6	34.3	15.0	52.6	23.6	29.5	30.6	25.8
	Female	20.4	17.4	28.8	32.4	10.0	19.7	25.9	25.3	22.1
	All	22.3	20.9	31.5	23.4	30.8	22.0	27.7	27.9	24.1
All	Male	34.3	37.3	44.5	44.6	48.6	35.6	42.1	46.3	40.9
	Female	27.1	28.2	34.9	36.6	41.3	27.6	34.8	37.6	33.7
All	All	31.4	33.3	40.0	40.7	44.3	32.3	38.8	41.7	37.5

Source: Computed from the Ghana Living Standards Survey, 1991/92.

Notes: Cells with less than 30 observations are marked with *. "Very poor" correspond to those lying below the extreme poverty line, "poor" to those below the poverty line but above the extreme poverty line, and "non poor" to those above the poverty line.

**Table A4.6: Net enrolment in secondary school,
by locality, gender and standard of living quintile (contd)**

1998/99

		Quintile					Poverty status			
		Lowest	Second	Third	Fourth	Highest	Very poor	Poor	Non poor	All
<i>Urban/Rural</i>										
Urban	Male	36.8	51.7	39.6	54.2	64.9	43.6	51.7	54.8	52.9
	Female	31.3	46.3	42.3	49.5	50.5	37.3	49.7	48.3	47.2
	All	34.2	49.4	41.0	51.9	56.3	40.6	50.8	51.2	49.9
Rural	Male	26.8	40.0	45.4	38.6	40.9	28.2	43.7	42.5	36.9
	Female	20.2	35.5	40.7	40.1	34.0	25.3	34.0	39.4	33.7
	All	24.1	37.9	43.1	39.4	37.5	26.9	39.3	40.9	35.4
<i>Locality</i>										
Accra	Male	*27.9	*50.2	49.7	54.1	66.1	*28.2	*69.6	59.9	59.3
	Female	*21.8	*43.6	58.6	49.1	53.5	*30.3	*41.7	53.1	52.5
	All	*25.1	*48.0	54.5	51.9	58.9	*29.1	*59.2	56.3	55.8
Urban Coastal	Male	*41.1	53.1	30.4	68.7	64.0	42.8	*59.5	53.2	51.7
	Female	*36.4	*34.4	42.1	60.7	56.3	41.0	*18.0	51.4	47.0
	All	38.7	45.2	36.8	64.7	60.6	41.9	43.7	52.3	49.4
Urban Forest	Male	29.0	45.9	39.1	50.5	66.7	35.4	49.1	52.5	49.5
	Female	*36.2	53.0	30.9	46.9	46.6	44.5	*46.0	43.6	43.8
	All	32.1	49.3	34.9	48.4	53.0	39.7	47.8	47.0	46.2
Urban Savannah	Male	*44.0	56.8	*44.1	44.5	*34.4	55.8	*45.4	44.2	47.8
	Female	*17.1	*47.1	*53.6	43.1	*43.5	26.5	*66.3	43.5	44.4
	All	32.6	52.4	48.5	43.9	*39.3	42.6	55.6	43.9	46.2
Rural Coastal	Male	36.8	39.1	41.6	39.3	*50.1	34.5	44.3	42.6	40.2
	Female	24.5	34.0	46.2	34.9	*28.7	32.1	28.1	38.9	34.7
	All	31.0	36.6	44.1	37.0	40.0	33.4	36.5	40.7	37.5
Rural Forest	Male	34.9	45.1	46.2	43.4	44.6	35.3	47.0	45.7	43.3
	Female	31.5	36.3	40.1	47.5	39.5	31.0	38.2	43.5	39.9
	All	33.6	40.9	43.3	45.5	41.9	33.4	43.2	44.6	41.7
Rural Savannah	Male	20.5	29.2	48.1	20.4	*20.0	21.9	31.5	30.2	24.6
	Female	14.5	35.3	34.0	18.1	*11.6	18.8	31.9	23.4	21.5
	All	18.1	32.0	40.6	19.2	17.1	20.6	31.7	26.9	23.2
All	Male	27.9	42.9	43.5	46.0	56.3	30.5	45.6	48.4	42.4
	Female	21.6	38.0	41.3	44.3	46.2	27.5	37.6	44.0	39.0
All	All	25.2	40.6	42.4	45.2	50.6	29.2	42.0	46.1	40.7

Source: Computed from the Ghana Living Standards Survey, 1998/99.

Notes: Cells with less than 30 observations are marked with *. "Very poor" correspond to those lying below the extreme poverty line, "poor" to those below the poverty line but above the extreme poverty line, and "non poor" to those above the poverty line.

**Table A4.6: Net enrolment in secondary school,
by locality, gender and standard of living quintile (contd)**

2005/06

		Quintile					Poverty status			
		Lowest	Second	Third	Fourth	Highest	Very poor	Poor	Non poor	All
<i>Urban/Rural</i>										
Urban	Male	32.7	45.1	59.1	63.8	70.0	31.6	48.7	62.0	58.5
	Female	32.0	43.5	47.9	53.4	59.1	27.2	38.3	54.0	51.8
	All	32.4	44.3	53.7	58.6	63.2	29.7	44.6	57.7	55.0
Rural	Male	20.2	35.5	39.9	42.0	41.5	19.7	31.8	39.8	32.6
	Female	18.6	30.8	36.6	42.1	41.5	18.5	24.0	38.3	31.3
	All	19.5	33.4	38.3	42.0	41.5	19.2	28.1	39.1	32.0
<i>Locality</i>										
Accra	Male	*52.1	51.2	74.1	72.3	67.0	*51.1	*56.1	68.4	66.2
	Female	*50.8	46.7	54.4	61.6	63.3	*48.1	*49.1	58.9	58.1
	All	51.6	48.9	63.4	67.6	64.6	49.8	54.2	63.1	61.9
Urban Coastal	Male	*73.9	*30.6	50.9	56.5	75.1	*87.6	*32.6	59.0	58.3
	Female	*29.9	*60.7	66.9	49.5	65.0	*29.9	*40.0	62.0	60.2
	All	*55.7	45.2	58.9	53.1	68.8	*61.3	*36.0	60.6	59.3
Urban Forest	Male	*15.6	51.8	59.5	64.5	73.3	*7.8	*57.3	64.2	61.1
	Female	*34.6	41.8	37.2	55.1	57.3	*21.6	*53.4	51.5	50.2
	All	25.3	47.5	49.6	59.6	64.0	14.5	56.0	57.6	55.5
Urban Savannah	Male	24.2	33.9	42.7	40.6	50.8	25.3	31.2	42.0	36.7
	Female	18.1	28.7	37.2	34.1	44.3	18.3	20.1	39.6	34.2
	All	21.8	31.4	40.2	36.7	46.3	22.5	24.9	40.6	35.4
Rural Coastal	Male	32.3	34.6	34.2	30.3	*40.3	30.1	42.3	32.8	33.9
	Female	22.5	34.2	35.2	40.0	*54.9	18.8	26.0	40.9	35.7
	All	27.8	34.4	34.6	35.1	48.2	25.0	34.5	36.6	34.7
Rural Forest	Male	31.8	45.9	47.4	50.4	49.6	31.2	39.1	49.3	44.7
	Female	26.9	37.0	38.1	46.1	44.2	27.8	29.6	41.6	37.9
	All	29.6	41.8	42.9	48.4	46.6	29.7	34.7	45.6	41.5
Rural Savannah	Male	13.9	20.3	27.8	24.7	*14.3	14.0	17.6	23.7	17.6
	Female	13.8	19.4	34.8	33.4	19.4	14.2	17.1	28.5	20.5
	All	13.8	19.9	31.4	29.5	17.5	14.0	17.3	26.1	18.9
All	Male	22.0	37.7	47.0	53.9	61.9	21.3	35.4	50.0	41.9
	Female	20.6	33.8	40.9	48.3	54.9	19.8	26.4	46.4	39.8
All	All	21.4	35.9	44.0	51.1	57.7	20.7	31.2	48.2	40.9

Source: Computed from the Ghana Living Standards Survey, 2005/06.

Notes: Cells with less than 30 observations are marked with *. "Very poor" correspond to those lying below the extreme poverty line, "poor" to those below the poverty line but above the extreme poverty line, and "non poor" to those above the poverty line.

APPENDIX 5: GLSS SAMPLE DESIGN

All three rounds of the GLSS used in this study were conducted on a nationwide basis. In the case of GLSS 3 and 4, households were selected based on a two stage sampling procedure, conducted as follows. In the first stage enumeration areas (EAs) were selected based on those used for the 1984 population census, with probability proportional to size (number of households) as recorded in the 1984 census. At the second stage a fixed number of households were selected by systematic sampling within each of the selected enumeration areas. GLSS 5 follows the same procedure except it used the 2000 Census as master sample.

Given the long period of time between any of the GLSS surveys and their respective census, the above procedure will generally not give a self-weighting sample (where the probability of inclusion of each household is equal). This is because the numbers of households in different enumeration areas are likely to have grown at different rates between the survey and the census. The selected enumeration areas will then not have been picked with probability proportional to their *true* sizes.

If the selected enumeration areas were fully listed after their selection, however, then it is possible either (i) to compute weights reflecting differential probabilities of selection of households in different EAs; or (ii) to amend the above procedure to restore a self-weighting sample. The latter was done for GLSS 3 following a procedure devised by Scott and Amenuvegbe (1991) while the former was used for GLSS 5.

The same procedure though was not applied for GLSS 4. Moreover, it was not possible to compute the weights at the time of the survey, because some of the EAs selected for GLSS 4 were only partially listed. It was therefore not possible to know the growth in the number of households in the selected EAs, the information which would form the basis for the calculation of the weights. Fortunately though, these weights could be computed from the results of the recent Population Census conducted in March - April 2000. These weights have been applied throughout this study.

In both GLSS 3 and 4, the sample was designed to be representative at the “locality” level: Accra, Urban Coastal, Urban Forest, Urban Savannah, Rural Coastal, Rural Forest and Urban Savannah. In GLSS 5, the overall sample size was increased from 300 Enumeration Areas (EAs) to 580 EAs. This permitted oversampling in Upper East and Upper West regions to ensure representativeness at the regional level. Any trend analysed in this report is breakdown at the locality level as this is the lowest level at which the sample is still representative in all three rounds. The reader has to be conscious that any GLSS 3 or 4 figures at the regional level would be statistically weaker than GLSS 5 ones.

APPENDIX 6: CONSTRUCTION OF THE STANDARD OF LIVING MEASURE⁷

As noted in the text, the primary standard of living measure used in this study is total household consumption, per equivalent adult, expressed in constant prices of Accra in January 2006. This forms the basis for both the analysis of consumption poverty (section III of the report) and for the definition of the quintile groups used in the analysis of other aspects of living conditions (sections IV to VI of the report). This appendix explains more fully the construction of the standard of living measure and briefly summarises how it is used in defining poverty and quintile groups.

Measuring total household consumption expenditure⁸

The first step in constructing the standard of living measure is to estimate total household consumption expenditure. Table A5.1 sets out in detail how this is done, covering the components of this, their composition and sources within the different GLSS questionnaires. 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), wage payments and transfers received in kind, and imputed rent from owner-occupied dwellings. An imputation is also made for consumption services derived from durable consumer goods owned by the household, rather than including expenditure on the acquisition of such goods (these are lumpy expenditures, e.g. purchasing a car, more like investment rather than consumption).

Total consumption expenditure is estimated for a twelve-month period based on information collected with the questionnaire. In the case of frequent purchases (e.g. food purchases, consumption of own produced food, frequently purchased non-food items such as soap, tobacco) this is estimated by grossing up responses relating to a shorter recall period. Households received multiple visits at regular intervals of a few days in the course of the survey (in GLSS 3 eight visits at two-day intervals in rural areas and eleven visits at three-day intervals in urban areas; seven visits at 5-day interval in the case of GLSS 4; and 11 visits at three days interval in GLSS 5). In each case, in all but the first two visits, they were asked about their purchases of each item since the last visit, and the answers to these “bounded recall” questions (recall relative to a fixed reference point) was used as the basis for estimating annual expenditure or consumption. Similar principles were used to estimate annual expenditure on frequently purchased non-food items and on consumption of own produced food (valuing items at the price at which they could have been sold). In the case of consumption of own produced food, allowance was made for the number of months in which an item was normally consumed.

The recall period for frequently purchased or consumed items did change between GLSS 3, GLSS 4 and GLSS 5, and experimental evidence for Ghana and elsewhere suggest that lengthening the recall period causes respondents to progressively forget more items of

⁷ The methodology to measure the household-level standard of living used in this report is the same as the one established in the previous GSS Poverty Profile (GSS, 2000). Therefore this appendix is reproduced from GSS (2000) although some minor changes were made to reflect the addition of GLSS 5.

⁸ A very detailed companion paper published by GSS fully describes the different steps in the computation of the total household expenditures and incomes (*THE ESTIMATION OF COMPONENTS OF HOUSEHOLD INCOMES AND EXPENDITURES: A Methodological Guide based on the Ghana Living Standards Survey, 1991/92, 1998/99 and 2005/06*)

expenditure. A study for Ghana by Scott and Amenuvegbe (1990) found that, on average, respondents forgot 2.9% of expenditure for each day by which the recall period was lengthened (up to seven days). Given this evidence, this figure was used to estimate what each household's expenditure on frequent purchases in GLSS 3 would have been had the same recall period been used as for GLSS 4 and GLSS 5.

A longer recall period, generally three or twelve months, was used in collecting information on less frequently purchased consumption items (e.g. clothing and footwear); this again is grossed up as necessary. As noted above, 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. This is also a lumpy item, and it would not be reasonable to regard a household as being significantly better off because it had to make a large expenditure on an emergency operation, say. Everyday medical expenses were though included in the consumption measure.

In the case of owner occupied dwellings, imputed rents were estimated based on a hedonic equation, which related rents of rented housing to characteristics, and uses this to estimate rental values for owner-occupied dwellings based on their characteristics and amenities. Consumption flows (use values) for durable goods were estimated based on assumed depreciation rates. In both cases the procedures used for GLSS 3 and GLSS 4 were identical.

The remaining items in the estimate of household consumption relate to the value of wage payments received in kind, and consumption of the output of non-farm enterprises owned and operated by the household. The sum of all the items in Table A5.1 gives the estimate of total household consumption expenditure, which is expressed in nominal values (current prices).

Allowing for cost of living variations

Having estimated total household consumption expenditure, further steps are needed before it is possible to compare standards of living across households. Because the standard of living is expressed in nominal terms, it must be adjusted to allow for variations in prices faced by households. Three sources of variation are relevant for purposes of this study:

- (i) differences in the cost of living between different localities at a point in time;
- (ii) variations in prices within the time periods covered by the surveys, which can occur due to inflation, seasonality and other reasons;
- (iii) most importantly (in comparing trends between the three GLSS rounds) inflation between the GLSS 3, GLSS 4 and GLSS 5 (substantial in this case).

A cost of living index was constructed capturing these different dimensions of variation. Geographic differences in the cost of living were estimated based on the GLSS 4 price questionnaire, in conjunction with expenditure data from the GLSS 4 household questionnaire. Based on five localities, Paasche cost of living indices were constructed for food and non-food separately. The hedonic regression equation was used to estimate a housing cost of living index by comparing rental values for a dwelling with the same characteristics and amenities in each locality. These procedures give the geographic cost of living indices reported in Table 1 (in the main text).

Variations in prices within and between the sample years were allowed for using the Consumer Price Index, using separate series for food and non-food, as well as for Accra, other urban and rural areas. A single overall cost of living index was constructed combining the geographic and over time variations. This was used to deflate the estimate of total household consumption expenditure, so that it was now expressed in the constant prices of a reference locality and time period (here Accra in January 2006).

Allowing for differences in the size and composition of households

The last adjustment needed to construct a standard of living measure is to allow for differences in the size and or composition of households. Though a simple way of doing this would be to divide by the nominal size of the household to give total household consumption expenditure per capita, this does not allow for the fact that different members (e.g. young children and adults) are likely to have different consumption needs. A way of allowing for these differences in consumption needs is, instead, to measure household size in equivalent adults, where this is measured using an appropriate adult equivalence scale which estimates the relative consumption needs of different members (e.g. based on age, gender).

The issue in doing this in practice is which equivalence scale to use. Given that there is currently no Ghana specific scale to use, the scale used here is based on calorie requirements; this is based on a scale commonly used in nutritional studies in Ghana (see Table A5.2). Calorie requirements are distinguished by age category and gender, information which is also reported in the household questionnaire. This information is used to estimate household size in number of adult equivalents.

The standard of living measure is then measured by dividing the estimate of total household consumption expenditure in constant prices by household size measured in number of equivalent adults. The poverty analysis is based on the distribution of this standard of living measure over all households in the sample, weighting each household by its size in number of persons. This household size weight means that for example a poor household of six members is given twice the weight of an equally poor household of three persons. Each individual (rather than each household) in the sample is given equal weight.

The standard of living measure is used both in the analysis of consumption poverty (section 3) and in defining quintile groups for the analysis of other aspects of living standards (sections 4 and 5). Box 1 provides the rationale for the poverty lines used in this study. Individuals are then defined as poor if their standard of living measure falls below the poverty line, and similarly for the extreme poor. Characteristics of poverty are summarised in the tables by poverty indices the interpretation of which is discussed in Appendix 7. The quintile groups used in sections IV to VI are based on the quintile points of the (weighted) distribution over individuals of the standard of living measure. Thus the first quintile represents the poorest 20 per cent of individuals, the second quintile the next poorest 20 per cent and so on until the fifth quintile contains the richest 20 per cent. By analysing education, health and so on by quintile group, this enables an assessment of the extent to which poor outcomes in these areas are – or are not – associated with low values of the consumption standard of living measure.

Table A6.1: Estimation of total household consumption expenditure from the GLSS 3 and GLSS 4 surveys

Element of total household consumption	Composition	Source of data in GLSS questionnaire	Notes
Expenditure on food, beverages and tobacco	Expenditure on about 120 commodities (based on pattern in several short recall periods in the past month)	Section 9B	
Consumption of own produced food	Consumption of food commodities from own production, valued by respondents at prices at which they could be sold	Section 8H	
	Wage income received in form of food (based on payment interval reported by respondents)	Section 4	
Expenditure on non-food items	Expenditure on frequently purchased non-food items (based on pattern in several short recall periods in the past month)	Section 9A2	Section 9B in GLSS5
	Expenditure on less-frequently purchased non-food goods and services (based on pattern over last 3 or last 12 months)	Section 9A1	Excluding purchases of durable goods and expenditure on hospital stays
	Expenditure on education (based on pattern for each child in past 12 months)	Section 2	
	Expenditure on household utilities: water, electricity, garbage disposal (based on payment interval reported by respondents)	Section 7	
Expenditure on housing	Actual rental expenditure (based on payment interval reported by respondents)	Section 7	
	Imputed rent of owner occupied dwellings	Section 7	Estimated based on hedonic regression equation
	Wage income received as subsidized housing (based on payment interval reported by respondents)	Section 4	
Imputed expenditure on non-food items	Durable goods user values	Section 12B	
	Consumption from output of non-farm enterprises (based on two week period)	Section 10D	
	Wage income in kind in forms other than food and housing (based on payment interval reported by respondents)	Section 4	

Table A6.2: 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).

APPENDIX 7: POVERTY INDICES⁹

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 Thorbecke¹⁰ 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 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

⁹ Note that this Appendix is largely based on the discussion in the *Pattern of Poverty* study (GSS, 1995, pp. 97-99).

¹⁰ J.E. Foster, J. Greer and E. Thorbecke, "A Class of Decomposable Poverty Measures", *Econometrica*, Vol. 52 (1984), pp. 761-766.

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 Ghana.

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 GLSS (see Appendix 5).

The use of poverty indices for poverty analysis

	Pop'n Average share	Welfare	P_0	P_1	P_2	P_1/P_0	C_0	C_1	C_2
Rural Savannah	23.4	5042.6	60.1	25.4	13.9	42.3	49.3	62.1	70.7

To illustrate the use of poverty indices, take the example of Rural Savannah in 2005/06, and the higher poverty line of 3,708,900 cedis. The above is taken from Table A1.2 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 locality. In this example Rural Savannah represents 23.4% of the total population.

Average welfare: this is the mean value (expressed in thousands of cedis) of the standard of living measure: total household consumption expenditure per equivalent adult, in the constant prices of Accra in January 2006. The average standard of living in this locality is less than the higher poverty line (3708.9 in the same terms).

P_0 : the proportion of the population in that locality falling below the national poverty line, which is referred to as the headcount ratio or the incidence of poverty. Around 60% of those in the sample in the Rural Savannah lie below the selected poverty line.

C_0 : the locality'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, 49.3% live in the Rural Savannah. This is significantly higher than the sample share, indicating a disproportionate incidence of poverty in this locality.

P_1/P_0 : the income gap ratio or the depth of poverty. Those in the Rural Savannah below the poverty line have an average standard of living 42.3% 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 25.4% of the poverty line for every person in the Rural Savannah. This amount would then have to be allocated, with perfect targeting, among those in the Rural Savannah who are below the poverty line in order to raise them exactly to the poverty line.

C_1 : the locality'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 Rural Savannah 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 locality'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 Rural Savannah to total poverty in Ghana increases. This reflects the fact that the depth of poverty is higher in this locality than on average for the country as a whole.