



2010 POPULATION & HOUSING CENSUS REPORT



MILLENNIUM DEVELOPMENT GOALS IN GHANA



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Preface and acknowledgements

Ghana, like many other developing countries, relies mainly on survey and population census data for planning at the national and the sub-national levels. Characteristics of the population such as age, sex, education and occupation are obtained from census data and complemented by other relevant indicators from national sample survey data. The 2010 Population and Housing Census, which is the fifth census to be conducted in the country was, therefore, implemented to provide data for effective planning at all levels.

The success of the 2010 Population and Housing Census, including the preparation of analytical reports and monographs, has been a collaborative effort of the Government of Ghana, various Development Partners (DPs) and the people of Ghana. Local consultants from research institutions and universities in Ghana were engaged to prepare the national and regional analytical reports including six monographs using the 2010 Census data. In order to strengthen the report writing capacities of the Ghana Statistical Service (GSS) and Ministries, Departments and Agencies (MDAs) which are engaged in population-related activities, professional staff of GSS and these MDAs were paired up with consultant writers to prepare these reports.

The monograph on ‘Tracking the progress towards MDGs in Ghana’, is one of the six monographs, that have been prepared from the 2010 Population and Housing and is meant to inform policy makers on how far the country has gone in achieving each of the eight Millennium Development Goals. The report focuses on seven out of the eight goals and about 18 indicators. Issues of youth and child labour have also been discussed in the report because of the emerging interest of policy makers and development partners on this matter. All indicators are disaggregated by sex, region and urban/rural residence as far as possible to enable data users to have the full benefit of the report.

The report indicates that Ghana has made great progress in achieving the MDGs but substantial amount of work needs to be done in order to achieve many of the goals by 2015. The report points out that while significant progress has been made in some key MDG targets such as poverty eradication, education and access to safe water, a lot needs to be done with respect to under-five, infant and maternal mortality as well as sanitation.

The Ghana Statistical Service wishes to thank the United Nations Development Programme (UNDP) for providing funds for the preparation of this monograph and the United Nations Population Fund (UNFPA) for the lead role it played in mobilizing resources from the UN System and from other DPs for the 2010 PHC. Our appreciation also goes to Mr. Steve Gray and Dr. Eric Osei-Assibey for the dedication and competence they demonstrated during the preparation of this report.

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List of Acronyms

AIDS	Acquired Immune Deficiency Syndrome
APR	Annual Progress Report (Various Issues on the Implementation of the GPRS)
BECE	Basic Certificate of Examination
BOG	Bank of Ghana
CHPS	Community Health Planning Services
CWSA	Community Water and Sanitation Agency
DPs	Development Partners
E-LEAP	Emergency Livelihood Empowerment Against Poverty
EPA	Environmental Protection Agency
EPI	Expanded Program <i>of</i> Immunisation
FCUBE	Free Compulsory Basic Education
GDHS	Ghana Demographic and Health Survey
GDP	Gross Domestic Product
GER	Gross Enrolment Ratio
GLSS	Ghana Living Standards Survey
GMHS	Ghana Maternal Health Survey
GOG	Government of Ghana
GPI	Gender Parity Index
GPRS	Growth and Poverty Reduction Strategy
GSS	Ghana Statistical Service
HIV/AIDS	Human Immuno Virus/Acquired Immune Deficiency Syndrome
ICSE	International Classification of Status of Employment
ILO	International Labour Organisation
IMF	International Monetary Fund
IMNCIs	Integrated Management of Neonatal and Childhood illnesses
IMR	Infant Mortality Rate
IPEC	International Programme for the Elimination of Child Labour
LEAP	Livelihood Empowerment Against Poverty
M&E	Monitoring and Evaluation
MOFEP	Ministry of Finance and Economic Planning
MOH	Ministry of Health
MMR	Maternal Mortality Ratio
MOWAC	Ministry of Women and Children Affairs
MPs	Members of Parliament
NDPC	National Development Planning Commission
NEPAD	New Partnership for Africa's Development
NER	Net Enrolment Rate
NGOs	Non-governmental Organizations
NHIS	National Health Insurance Scheme
ORS	Oral Rehydration Solution
PLWAs	People Living with HIV Aids
PMMP	Prevention of Maternal Mortality Programme
PMP	Maternal Mortality Programme
PMTCT	Prevention of Mother-to-Child Transmission
SADA	Savannah Accelerated Development Authority
SFP	School Feeding Programme
STEPP	Skills Training and Employment Placement Programme
UN	United Nations
UNDP	United Nations Development Programme
WFCL	Worst Forms of Child Labour
WHO	World Health Organisation

Chapter One

Introduction

The Millennium Development Goals come from the Millennium Declaration, signed by 189 countries, including 147 heads of State and Government, in September 2000. Building on the United Nations global conferences of the 1990s, the United Nations Millennium Declaration of 2000 marked a strong commitment to the right to development, to peace and security, to gender equality, to the eradication of the many dimensions of poverty and to sustainable human development. The goals represent a partnership between the developed countries and the developing countries "to create an environment - at the national and global levels alike - which is conducive to development and the elimination of poverty". This is what has become known as the eight Millennium Development Goals (MDGs), including 21 time bound targets and 60 indicators.

The specific aim of the MDGs is to eradicate extreme poverty and hunger, achieve universal primary education, promote gender equality and empower women, reduce child mortality, improve maternal health, combat HIV/AIDS, malaria and other diseases, ensure environmental sustainability, and develop global partnerships for development. Since 2000, when the goals were launched, Ghana has committed to all the goals and implemented policies that are in line with its broader Medium-term Development Frameworks such as Ghana Poverty Reduction Strategy I & II and the Ghana Shared Growth and Development Agenda. Progress towards the attainment of the MDGs has been reported periodically since 2002 in many national documents including the Annual Progress Report on the implementation of the Medium-term Development Frameworks and the biannual special MDG report prepared by the National Development Planning Commission, with support from the UNDP, Ghana.

The overall assessment of Ghana's progress toward the MDGs reveals that, while progress has generally been positive, performance has been mixed across indicators, regions and localities. While significant progress has been made in some key MDG targets such as poverty eradication and food security, education and access to safe water, the overall pace of progress, based on current trends, is insufficient to achieve many of the MDGs such as under-five, infant and maternal mortalities as well as access to improved sanitation by the target date of 2015.

The main purpose of this report is to track the progress towards achieving the MDG goals based on new data from the latest population census, the 2010 Population and housing Census (PHC). For comparison purposes, the 2010 PHC data was complemented with the past censuses, particularly the 2000 PHC and, where available, reference is also made to similar national surveys such as the GDHS and the various rounds of the GLSS. It is also noteworthy that because of the data limitations, the report focuses on only targets whose indicators are captured in the PHC questionnaire. In this regard, the report is limited to seven goals (i.e., MDGs 1, 2, 3, 4, 5, 7 and 8) and about 18 indicators. The report also has special discussion on youth and child labour. All indicators are disaggregated by sex, region and urban/rural residence as far as possible. The rest of the paper is organised as follows: Section II presents the national development context and a brief review of the status of MDG in Ghana. Section III tracks the progress of the selected targets and indicators. Section IV concludes with recommendations on the way forward.

Chapter Two

National Context

According to the 2010 Population and Housing Census (PHC) report, Ghana's population stood at 24,658,823 at the time of the 2010 census. The country has ten administrative regions and 170 districts. Ghana has one of the highest GDP per capita in West Africa and is ranked as a Lower-Middle Economy by the World Bank. The country has a diverse and rich resource base with gold, cocoa, timber, diamond, bauxite, and manganese being the most important source of foreign trade. In 2007, an oilfield which could contain up to 3 billion barrels of light oil was discovered. Although oil and gas exploration in Ghana dates back to a century, it is this latest discovery and many more afterward that have catapulted the country to be counted among the league of oil producing countries across the globe. Yet, in spite of the abundance of natural resources, a quarter of the population lives below the poverty line.

However, the country has made considerable progress in reducing poverty over the last two decades. Successive nationally representative living standards surveys conducted between 1992 and 2006 (respectively, GLSS3 in 1991/2, GLSS4 in 1998/9 and GLSS5 in 2005/6) suggest that monetary poverty (measured by the level of per capita consumption) has significantly reduced. The number of poor went down from 7.9 million people (or 52 percent of the population at that time) in 1992 to 6.3 million people in 2006 (or 29 percent of the population at that time). With the rapid economic growth since the last survey in 2006, it is likely there is a further poverty reduction. Structurally, Ghana's economy has undergone some significant transformation over the last couple of years. Ghana's economy which until 2006 was dominated by agriculture is now led by service accounting for about 51% of national output. Agriculture accounts for about 30% (although about 55% of employed are engaged in the sector) while industry trail with only 19% of total national output. The informal economy accounts for about 86% of total employment while gold and cocoa remain the leading export earnings. This is expected to change with the commencement of oil production in commercial quantities in 2010.

Various policy frameworks that have been adopted since the adoption of the Millennium Declaration, 2000 can largely explain the above development outcomes. The Ghana Poverty Reduction Strategy (GPRS I), 2003 – 2005, the Growth and Poverty Reduction Strategy (GPRS II), 2006 – 2009 and the on-going Ghana Shared Growth and Development Agenda (GSGDA 2010-2013) are the most notable ones. The GPRS I focused on the macroeconomic stability, production and gainful employment, human resource development and provision of basic services, vulnerable and excluded, and good governance. The GPRS II also emphasizes continued macroeconomic stability, human resource development, private sector competitiveness, and good governance and civic responsibility. The GSGDA is anchored on seven main themes: sustainable macroeconomic stability; enhanced competitiveness of the private sector; accelerated agricultural modernisation and natural resource management; oil and gas development; infrastructure, energy and human settlements development; human development; and transparent and accountable governance.

Within/amidst the context described above, the country has been touted as one of the best performing countries in the sub-region likely to achieve many of the MDG targets by the year 2015. However, as previously mentioned, this performance has been mixed and the country is

completely off-track in achieving some of the important indicators on non-monetary poverty. In what follows, we briefly describe the progress the country has made so far towards achieving the MDGs by 2015 based on the previous national surveys preceding the 2010 PHC and as reported in the latest report, the 2010 MDG monitoring report on Ghana.

Out of the seven MDG goals (except Goal 6) that this paper focuses on, the performance of Ghana over the years has generally been mixed with considerable work still to be done on some of the goals. The 2010 MDG report indicates that MDG 1A target of halving extreme poverty and MDG7B of halving the proportion of people without access to safe drinking water have been achieved ahead of time. MDG1C of halving proportion of people who suffer from hunger; MDG2 of achieving universal basic education; MDG3 of eliminating gender disparity in school for both boys and girls; MDG4 of reducing under-five mortality; MDG6 of halting and reversing the spread of HIV/AIDS and malaria; MDG8 of ensuring debt sustainability are found to be on track of potentially or probably achieving the targets. Five targets – MDG1B of achieving full and productive employment and decent work; MDG3 of achieving equal share of women in wage employment in non-agriculture sector; MDG5 of reducing maternal mortality; and MDG7 target of reversing the loss of environmental resources and address the problem of sanitation are unlikely to be achieved.

According to the MDG (2010) report, Ghana is largely on track in achieving the MDG 1 target of reducing by half the proportion of the population living in extreme poverty at the national level and in rural and urban areas. Although current data on poverty is not available, trends in economic growth suggest a further decline in poverty between 2006 and 2010. However, poverty is quite endemic in the three northern regions to the extent that it would be a difficult hurdle for these regions to reduce extreme poverty by a range between 11.7 percentage points in the Northern Region and 41.8 percentage points to reach the target of halving extreme poverty by 2015.

With regard to MDG2, the report shows that Universal primary education in Ghana is on track to achieving both the gross and net enrolment targets by 2015. The country has five years to increase GER and NER by 5.1 and 11.5 percentage points respectively to reach the target with intensification of much more effort in the area of capitation grant, school feeding programme and free school uniform. Four regions namely Western, Central, Brong Ahafo and Upper West have already achieved the 100 percent GER ahead of time while Northern Region is not far from the target. Ashanti, Eastern, Greater Accra, Upper East and Volta regions have GER below the national average and therefore require a bit more attention to help them to attain the target in 2015. Only two regions, Central and Western have NER above the national average indicating that the eight other regions require particular policy attention to fast improve NER to facilitate the attainment of the target within the next remaining five years. The country needs to do much more to improve the primary school completion rate considering the distance 13.7 percentage points from the target.

On MDG 3 target of ensuring gender parity especially at the Primary and Junior High school (JHS) levels, the report indicates that Ghana is on track in achieving both targets, although primary level parity has stagnated at 0.96 since 2006/07. Gender parity at JHS which increased slightly from 0.91 in 2006/07 to 0.92 in 2007/08 has also remained at that level in 2008/09 and 2009/10. On the other hand, the parity at the KG has declined slightly from 0.99 in 2006/07 to 0.98 in 2008/10. Regarding gender equality and empowerment, progress towards increasing the number of women in public life suffered a setback with the reduction of the number of women elected into Parliament during the 2008 elections declining from 25

to 20. This had reduced the proportion to below 10 percent, and puts Ghana under the international average of 13 percent. Access of women to wage employment in non-agricultural sector has remained quite weak undermining the country's quest to promoting gender equality and women empowerment.

The country has made significant progress in achieving the MDG 4 target of reducing both infant and under-five mortality rates by two-thirds by 2015. However, as the 2010 MDG report indicates, with the average rate of reduction it will be a challenge to achieve the MDG target for 2015 of 41 per 1000 live births unless greater effort is made to scale-up and sustain the recent child survival interventions which have brought about the current improvement in these indicators. The MDG 5- Improve Maternal health- is way off-track. The MMR at 164 per 100,000 live births in 2010 Ghana is unlikely to attain the target of reducing by three quarters the maternal mortality ratio between 1990 and 2015, despite the introduction of free maternal health in 2008 and other similar interventions.

The MDG target of reducing by half the proportion of people without access to improved water has been achieved ahead of time. The report suggests that the slow progress in improving environmental sanitation and the continue loss of forest cover and the slow pace of decline in the proportion of urban population living in slum areas remain a big challenge. The forest cover is continuously being depleted with the cost of environmental degradation (lands, forest, fisheries) pegged at about 10 percent of GDP in 2010. Even though access to improve sanitation has been increasing over the years, Ghana is unlikely to achieve the MDG target for sanitation. Efforts should therefore be accelerated to quicken the pace of policy implementation rolled out to improve the situation. There is also the urgent need to effect attitudinal and behavioural change in the people through extensive educational and awareness creation programmes.

Lastly, Ghana continued to sustain the progress under MDG 8 of dealing comprehensively with the domestic debt burden and ICT development. The 2010 MDG report indicates that the total ODA inflows declined in 2010, and ODA as a percentage of GDP has not shown any consistent trend over the years. The portfolio of aid inflows continued to be dominated by project aid. Project aid constitutes the highest percentage of total ODA received from 2003 to 2010. This is followed by budget support aid. With regard to ICT penetration in the country, mobile phone subscription has since 2000 increased significantly, according to the report. Mobile cellular phone subscription jumped from about 0.67 per 100 inhabitants in 2000 to 63 per 100 inhabitants in 2009. According to the National Communication Authority (NCA), the total subscription stood at 17.4 million at the end of 2010, which represented a penetration rate of about 71.5 percent. This has been facilitated by the increase in the number of service providers and the expansion in the network coverage across the country. Like the cellular phone, internet usage has expanded rapidly since 1995, although its rate of increase has been slower. With virtually only isolated cases of internet access in 1995, usage has increased dramatically to about 5.3% of the population in 2009.

2.1 Sources of data

The main source of data for this assessment is the 2010 PHC. The data were generated from the responses to the questionnaire administered to the household population. The 2010 PHC is the fifth census conducted in Ghana since independence. Previous post-independence censuses were conducted in 1960, 1970, 1984 and 2000. The 2010 PHC was carried out with reference to 26Th September 2010 as the Census Night. Enumeration was completed in

November 2010 and data processing ended in May 2012. Since the census questionnaire was not specifically designed to solicit information for the assessment or tracking of progress on the MDGs, it was challenging to get appropriate responses to cross tabulate so as to monitor progress on the MDGs. Since the MDG goals were set in 2000, data from the 2000 PHC were also used so as to provide a basis for comparison with the information obtained from the 2010 census. Institutional data were resorted to essentially for comparison purposes. Some of the data were from the various round of the Ghana Living Standards Survey (GLSS), World Bank and IMF global monitoring reports on the MDGs, Africa MDG reports, and various Ghana MDG reports produced by the NDPC and the UNDP.

It has to be noted that it is only eighteen (18) out of the sixty (60) indicators that have been reported on in this paper, as these are the only ones covered in the PHC data set. The census is therefore, not a very comprehensive source to turn to for a holistic assessment of the performance of the MDGs. Notwithstanding these challenges, the recourse to the use of census data for an exercise like this, which is a pioneering endeavour in Ghana, has revealed significant insights into some of the indicators, particularly at sub-national levels.

The use of census data also posed a few challenges especially with regard to definition of terms and concepts. For example, while one of the indicators requires data on slums, the census did not specifically designate any settlement as a slum. To be able to report on this indicator using the census data will require that a working definition is adopted for what dwelling units the authors consider as constituting a slum settlement. The alternative was to use the proxy for a slum as explained in the official MDG indicators.

Chapter Three

Tracking Progress towards Achieving MDGs in Ghana

The discussions that follow examine the progress made in only those indicators listed under the various goals of the MDGs using as a primary source data from the 2010 PHC. Where there are comparable data for the 2000 PHC, these are used to show trends. Some administrative records and survey data are also used where possible to see whether there is any consistency or departure from the results obtained from the census data. At the end of the discussion of the indicators under each of the goals, the key policy measures and challenges are presented.

Goal 1: Eradicate extreme poverty and hunger

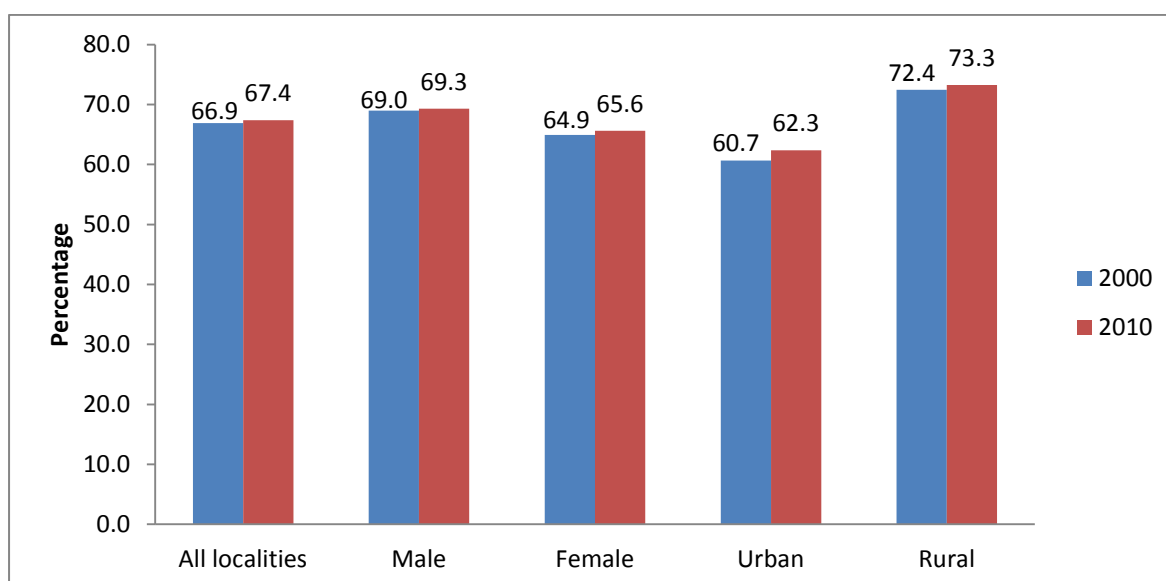
Target 1B: Achieve full and productive employment and decent work for all, including women and young people

Indicators 1.5: Employment-to-population ratio

Employment to population ratio is the proportion of a country's working age population that is employed. The indicator provides information on the ability of an economy to provide employment. It monitors the degree to which the labour force is utilized in the economy and therefore serves as a measure of the success of strategies to create jobs for the population. Moreover, according to ILO (2008), the ratio, both in its level and change over time, can be viewed in connection with economic growth to determine the extent to which economic growth is pro-employment growth and, in connection, pro-poor. While a higher share indicates a greater proportion of the population that could be working does work, a low ratio indicates that a large share of the population is not involved directly in market-related activities. The indicator is computed by dividing the total number of employed person 15 years and above by the population of the same age group.

The 2010 PHC data indicate that out of the 15,208,425 population 15 years and older, 10,243,476 are employed. This makes employment to population ratio 67.4 percent. Compared to the 2000 PHC (66.9%), employment to population ratio has increased only marginally by about one percentage point in a decade (Figure 3.1). This should be a matter of concern to policymakers since the result is indicative of the fact that not much employment opportunities have been created for the country's labour force despite the numerous government initiatives, the expansion of the private sector and the sustained economic growth over the last decade or so.

Figure 3.1: Employment to population ratio, 2000 and 2010 by sex and locality



Source: Ghana Statistical Service, 2000 and 2010 Population and Housing Census

On the other hand, one could argue that although the increase is marginal, for the fact that the proportion has increase or even stayed the same while actual population has increased suggests that there is an expanding labour market at least that commensurate with the growth in the employable population. In any case, the thorny issue is how sustainable and the potential of these jobs to lead to reduced working poor. While elsewhere these ratios of employment to population will be considered as high and impressive, we should note that the ratio only measures quantity, but not quality. It is important that if employment is being used as a tool to poverty reduction then considerations should be given to the quality and the decency of these jobs. Confirming this concern, Table 3.1 shows that a greater majority of the employed are within the private informal sector (86.2%). In the sections that follow, we will examine the decency and the vulnerability of these jobs in much detail.

Table 3.1: Employment sector by locality and sex

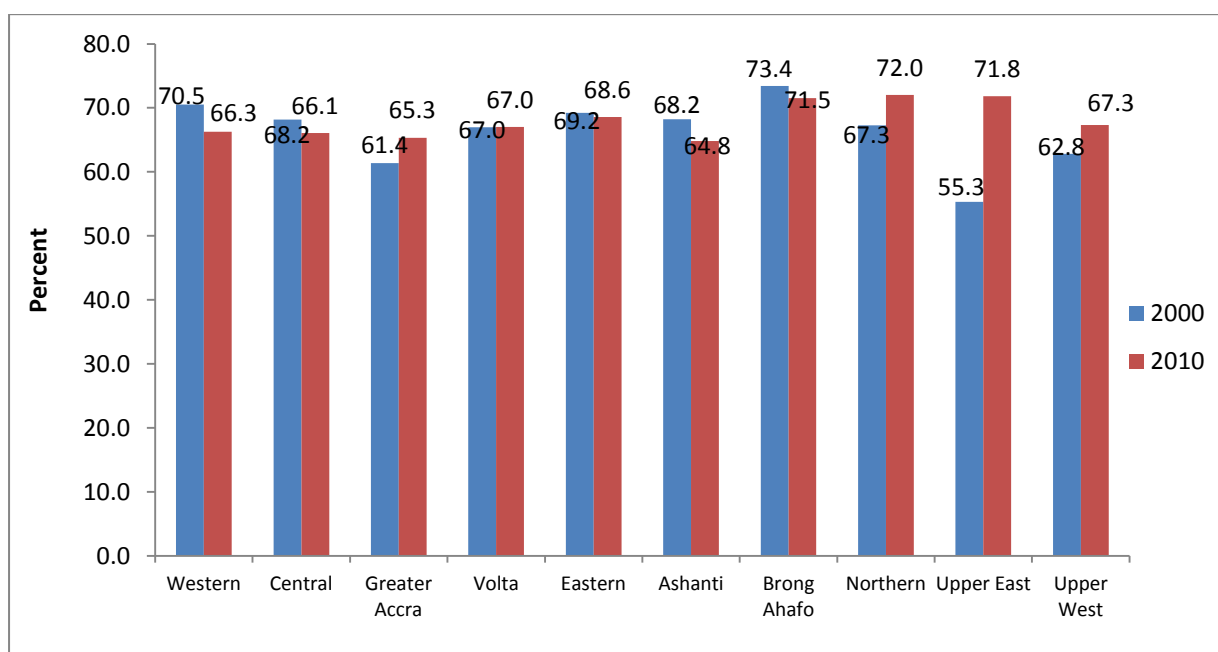
	All employment sector	Public (Government)	Private Formal	Private Informal	Semi-Public/Parastatal	NGOs (Local and International)	Other International Organisations
All ages							
Total	10,243,476	6.2	6.8	86.2	0.1	0.5	0.0
Male	5,005,534	8.1	9.7	81.2	0.2	0.7	0.1
Female	5,237,942	4.5	4.1	91.0	0.1	0.3	0.0
Urban							
Total	5,125,635	9.4	11.2	78.5	0.2	0.7	0.1
Male	2,477,284	12.1	16.0	70.5	0.3	1.0	0.1
Female	2,648,351	6.9	6.7	85.9	0.1	0.4	0.0
Rural							
Total	5,117,841	3.1	2.5	94.0	0.1	0.3	0.0
Male	2,528,250	4.2	3.6	91.7	0.1	0.4	0.0
Female	2,589,591	2.0	1.4	96.3	0.0	0.3	0.0

Source: Ghana Statistical Service, 2010 Population and Housing Census

The 2010 PHC also show that employment to population ratios are higher in rural (73.3%) than in urban areas (62.3%). However, a higher proportion of the employed rural workforce is in the private informal sector 94 percent as against 78.5 percent in urban areas. Furthermore, only 3.1 percent and 2.5 percent of the rural workforce is employed in either public formal or private formal respectively, while in urban areas, the corresponding figures are 9.4 percent and 11.2 percent for public and private formal sectors.

With regard to regional variations, there appears not to be any substantial disparities in employment to population ratio across the regions, except that the gap has narrowed in the last decade. The three northern regions have the highest employment to population ratios and experienced the highest growth rate ranging from 7.1 percent for Northern and Upper West Regions to 29.8 percent for Upper East region between the period 2000 and 2010. The Ashanti Region which recorded the lowest employment to population ratio of 64.8 percent also experienced a decline of 5 percent. The greatest decline, however, was in the Western Region, declining from 70.5 percent in 2000 to 66.3 percent in 2010, a percentage fall of four percent. This result, no doubt, has a positive implication for poverty reduction in the three northern regions which happen to be the poorest regions in the country and have the slowest progress towards achieving MDG target for Goal 1. For instance, while all seven other regions have exceeded the Goal 1 target, the three northern regions have target deficits of not less than 20 percent in moving out of the upper poverty line and more than 30 percent in moving out of the lower poverty line (extreme poverty) according to the GLSS 5 data (2005/06 reported in 2010 Ghana MDG report). Therefore, the increasing employment ratios in the region will, all else being equal, will increase the income levels of the people (Fig 3.2).

Figure 3.2: Employment to population ratio by region



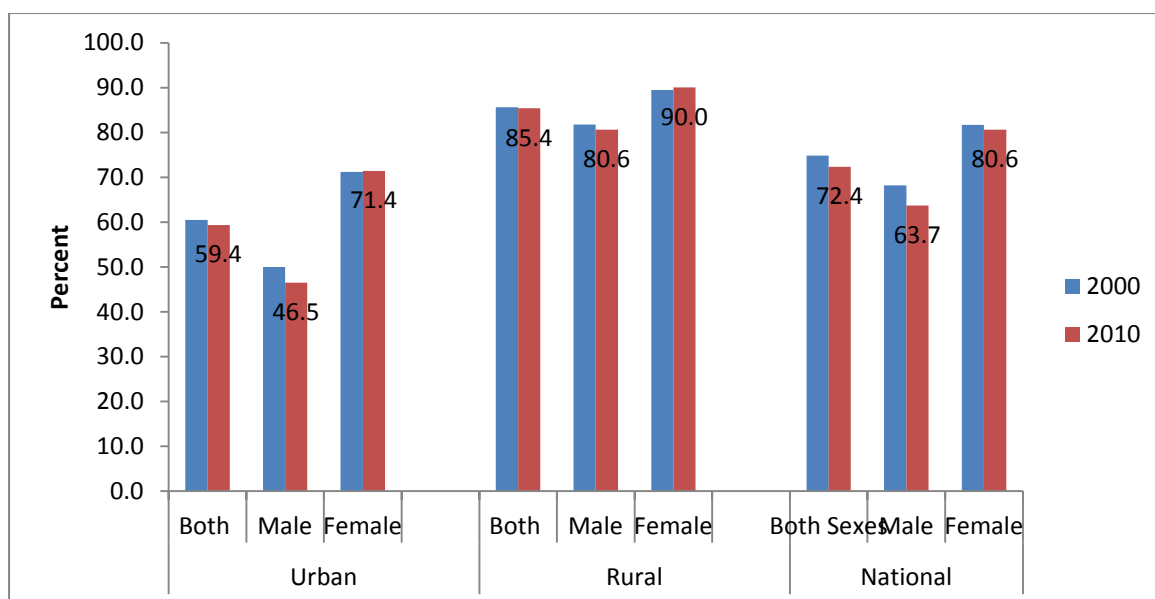
Source: Ghana Statistical Service, 2000 and 2010 Population and Housing Census

Indicator 1.7: Proportion of own account and contributing family workers in total employment

While monitoring employment ratios provides a good starting point to assess the health of labour markets in the country, it is essential to consider decent work deficits and the quality of work among the employed. In the current situation where the employment to population ratio is way above 65 percent in the country, the issue that arises is how secured, decent, sustainable and dignifying these employments are. According to the International Labour Organization (ILO), Decent Work involves opportunities for work that is productive and delivers a fair income, security in the workplace and social protection for families, better prospects for personal development and social integration, freedom for people to express their concerns, organize and participate in the decisions that affect their lives and equality of opportunity and treatment for all women and men. On the contrary, Vulnerable worker is a category of workers who are less likely to have formal work arrangements, and are therefore more likely to lack decent working conditions, adequate social security and ‘voice’ through effective representation by trade unions and similar organizations. Vulnerable employment is often characterized by inadequate earnings, low productivity and difficult conditions of work that undermine workers’ fundamental rights, and do not allow workers to live a life of human dignity in the security of employment that is often absent in the informal sector.

The indicator to monitor this is unpaid or contributing family workers and own-account workers as a percentage of total employment. They also sometimes fall in the category of the working poor. That is, even though they are deemed to be working, such workers still fall below the national poverty line. According to International Classification of Status of Employment (ICSE), own account workers refer to those who, working on their own account or with one or more partners hold the type of jobs defined as a “self-employment jobs” and have not engaged on a continuous basis any employees to work for them. People engaged in own account and contributing family jobs are deemed vulnerable because they are more likely to lack relevant elements associated with decent work as mentioned above.

Figure 3.3: Proportion of own account and contributing family worker by sex and locality

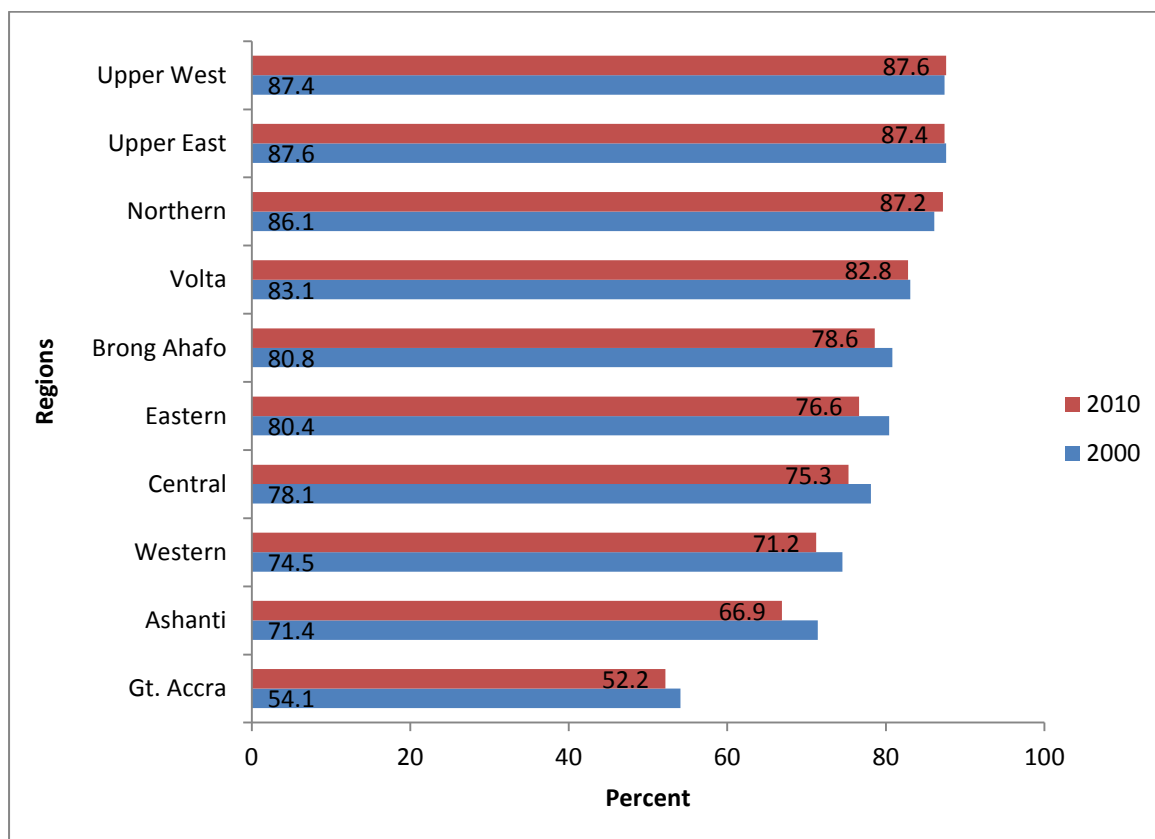


Source: Ghana Statistical Service, 2000 and 2010 Population and Housing Census

According to the 2010 PHC results, majority of employments in the country are vulnerable. The data show that out of 10,243,476 employed people in the country, 7,413,025 are vulnerable. In other words, 7 out of every 10 Ghanaian workers (72.4%) are vulnerable workers (Figure 3.3). This clearly shows that most of the informal sector employment, which, as mentioned earlier, employs over 86 percent of the nation’s workforce, generally lacks social protection, fair income and dignity.

Although there appears to be a downward trend in the rate of vulnerable employment over the years, it is marginal. According to the various rounds of GLSS data, the rates declined marginally from 82.5 percent to 75.4 percent between 1991 and 2006 (2010 MDG report). A comparison of the 2000 and 2010 census data also indicates a similar pattern as it declined only less than three percentage points from 2000 (74.9%) to 2010 (72.4%). Moreover, Figure 3.3 shows that female workers (80.6%) are more likely to be vulnerable than their male counterparts (63.7%), and this is even worse if the female worker is in a rural locality. In general, rural workers are more likely to be vulnerable as shown in Figure 3.4. With regard to regional variations, the Greater Accra, Ashanti and Western regions have rates that are below the national average while all the others are above with Upper West, Upper East and Northern regions with figures above 78 percent, according to Figure 3.5. This result suggests that vulnerability is highly related with poverty as the three northern regions have the highest incidence of poverty in the country.

Figure 3.4: The proportion of own account and contributing family worker by region



Source: Ghana Statistical Service, 2000 and 2010 Population and Housing Census

The implication of these results suggests that the increasing number of “Kayayei”, street vendors or streetism, shoeshine boys and hawkers should be a matter of great concern not only to policy makers, but also the international community and civil society if the nation is to attain the MDG goal on decent employment and poverty.

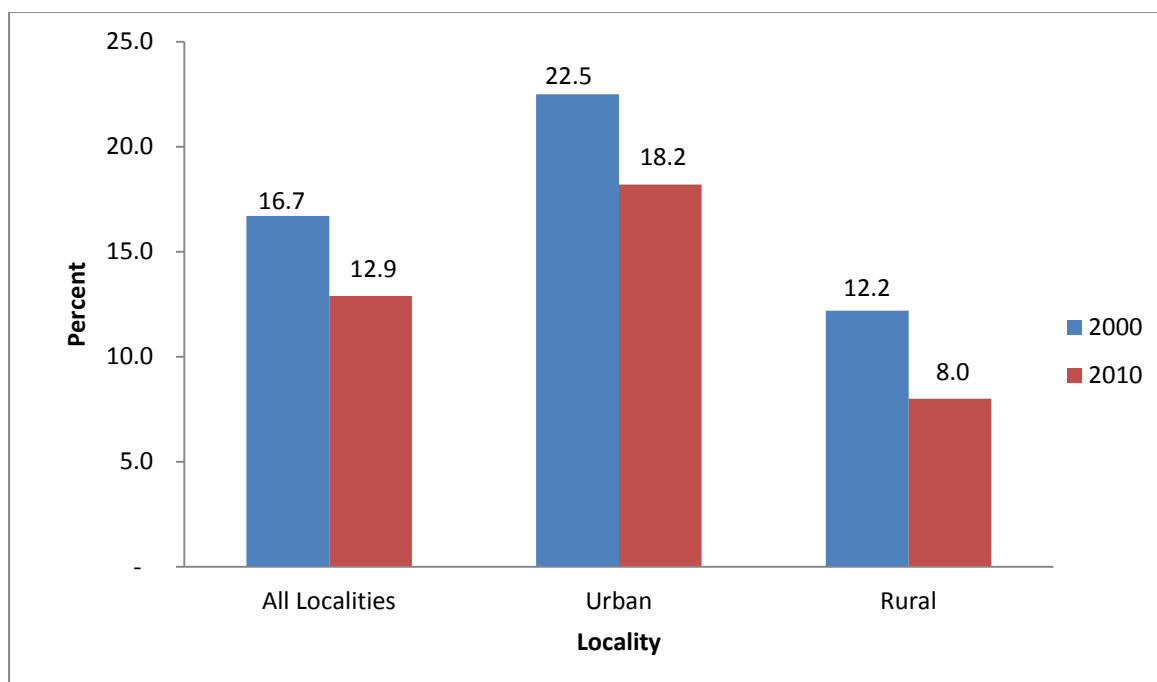
Youth Unemployment

Target: “In Cooperation With Developing Countries, Develop And Implement Strategies For Decent And Productive Work For Youth”.

Indicator: Youth Unemployment Rate

In recent times, youth unemployment has been a growing concern to policy makers, international community and civil society. Youth unemployment has the potential to bring about social upheaval and brutal revolution as evident in the recent Arab Spring. In the light of this, the MDG Goal 8, Target 16 stipulates that “in cooperation with developing countries, develop and implement strategies for decent and productive work for youth”. The indicator to monitor this is the unemployment rate of young people measured as the number of people aged 15–24 years who are unemployed divided by the number of people in the labour force of the same age group. The rationale is to monitor the degree to which the youth labour force is utilized in the economy and therefore serves as a measure of the success of strategies to create jobs for the youth.

Figure 3.5: Unemployment rate of young people aged 15–24 years by locality



Source: Ghana Statistical Service, 2000 and 2010 Population and Housing Census

The 2010 PHC data indicate that youth unemployment rate in the country is 12.9 percent as against the national unemployment rate of 6.2 percent. There is, however, a decline of about four percentage points from the 2000 PHC youth unemployment rate of 16.7 percent (Figure 3.5). What is of great concern is the share of youth in the national unemployment rate. Table 3.2 shows that more than 70 percent of the unemployed in Ghana can be found in the 15- 29 years age group with those within 15-24 constituting about half of it.

Figure 3.5 shows that youth unemployment in 2010 (like all previous censuses) is much higher in urban localities (18.2%) than in rural areas (8%). The data, however, show no substantial variation in rates for males and females, although females (13.5%) in all localities are more likely to be unemployed than their male counterparts (12.1%) (see Appendix 3).

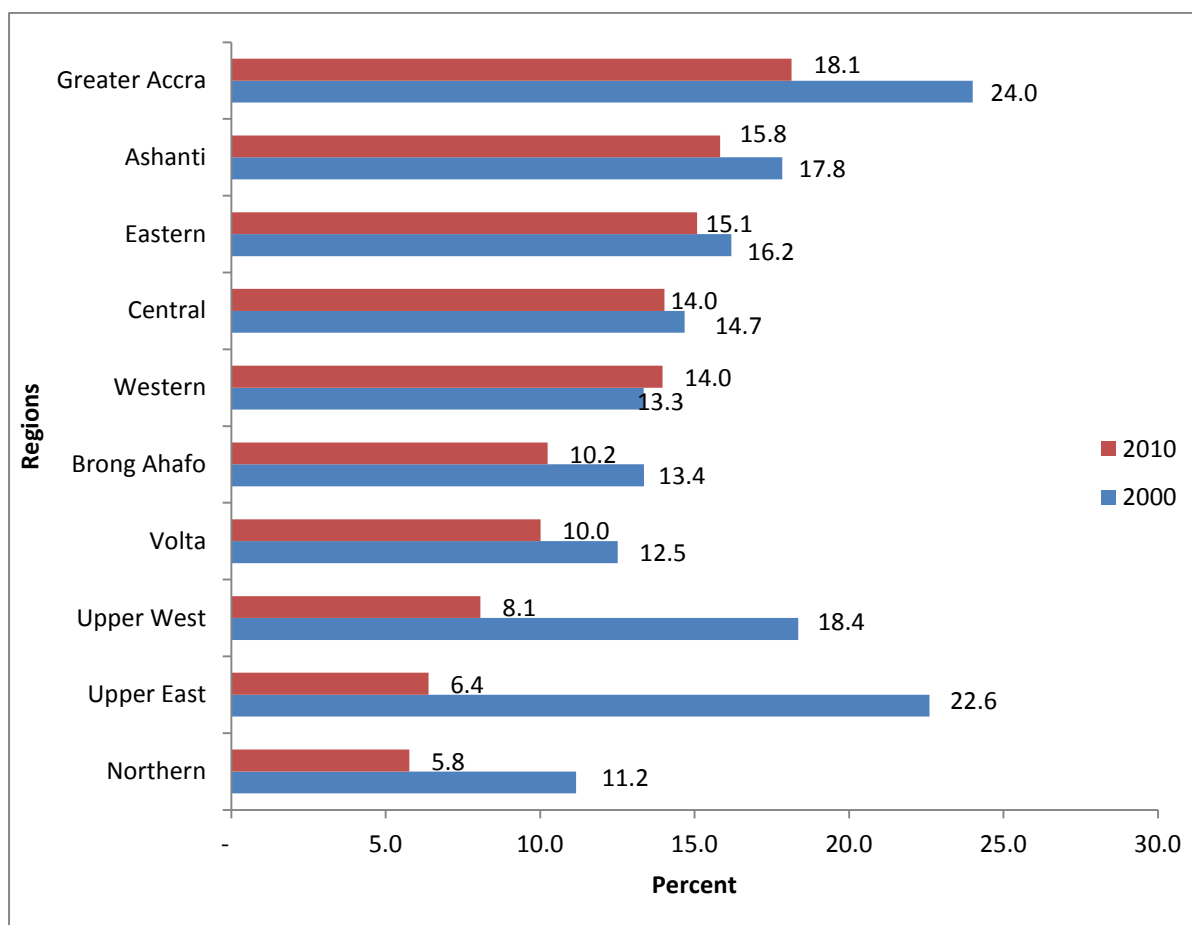
Table 3.2: Unemployed population by age group, 1960-2010

Age Group	1960	1970	1984	2000	2010
15-19	40.1	39.8	37.7	17	1.1
20-24	23.7	31.9	36.8	19.1	33.3
25-29	12.8	13.7	13.7	14.2	41.6
30-34	7.4	6.4	4.6	9.9	12.0
35-39	4.7	3.4	2.2	7.8	4.9
40-44	3.4	2	1.3	6.5	2.4
45-49	2.3	1.4	1	5.4	1.3
50-54	1.8	0.9	0.7	4.3	1.1
55-59	1.1	0.5	0.5	2.9	0.8
60-64	1.1	0.4	0.4	3	0.5
65+	1.6	0.6	1.1	9.8	0.9

Source: Central Bureau of Statistics, 1960, 1970, 1984 Censuses and Ghana Statistical Service, 2000 and 2010 Population and Housing Census

All regions except the three northern regions registered a double-digit youth unemployment rates according to the 2010 PHC data. Figure 3.6 indicates that while Greater Accra Region recorded the highest of 18.1 percent of its economically active youth being unemployed, Northern region registered the least youth unemployment rate of 5.8 percent in the country. The high rates in the big, well-endowed cities and regions compared to the poor ones may be attributed to the surge in rural-urban migration of young people in search of unavailable jobs, particularly from the northern parts of the country to the south. It is also significant to note that the only region where the youth unemployment rate increased was Western region, increasing from 13.3 percent in 2000 to 14.0 percent. All the others registered a substantial decline with Upper West region leading the way by falling from a high of 22.6 percent in 2000 to a low of 6.2 percent in 2010. It may be likely that a large number of unemployed youth in the region might have moved out to other regions to seek employment and were therefore not available during the census to be enumerated. Sometimes people who are not working may deliberately report themselves as employed so as not to be tagged as being lazy.

Figure 3.6: Unemployment rate of young people aged 15–24 years by region



Source: Ghana Statistical Service, 2000 and 2010 Population and Housing Census

Key Policy Measures and Challenges

Government recognising the critical concern and the developmental challenges pose by youth unemployment, has rolled out a number of policy interventions and initiatives to address the problem in recent times. Initiatives and guiding principles have been taken in the recent past to increase access and participation in the workplace by the youth such as the National Youth Volunteer Programme by the Ghana National Service Scheme; the establishment of the Youth Venture Capital Fund; the enactment of a new Labour Law (Act 561) to ensure a more flexible labour market environment; the enactment of the Disability Act to address the employment needs of young persons with disabilities and the enactment of a demand-driven law for technical and vocational education. Moreover, the various growth and development frame-works such as Growth and Poverty Reduction Strategy Programmes (GPRSP I&II) and the Ghana Shared Growth and Development Agenda (GSGDA, 2010-2013) all came out with specific policy initiatives to promote youth employment. For instance, the GPRS II blueprint expected that general policy initiatives such as the pro-poor decentralization and good governance reforms, the Rural Enterprise Project, Alternative Livelihood Programme, the Village Infrastructure Project (VIP) and projects implemented by the Social Investment Fund (SIF) would support and enhance employment opportunity for the youth.

One key intervention in the country to reduce the growing unemployment among the youth is the National Youth Employment Programme (NYEP). The NYEP was created in October 2006 to address the country's youth unemployment with the aim of empowering Ghanaian youth so they could add positively to the socio-economic and sustainable development of the nation. This has made it easier for some unemployed youth to find jobs in sectors such as, agriculture, education, forestry, resource mobilization, health (auxiliary nursing), waste and sanitation and internship. The current GSGDA also supports this initiative with an enhanced form of NYEP by expanding the modules to include Youth in Agriculture Programme and the establishment of ICT trainers' programme to train SHS graduates in ICT applications (e. g. repair of mobile phones and other related gadgets). The government's creation or establishment of Special Development Areas to reduce Poverty such as the Savannah Accelerated Development Authority (SADA) and Central Regional Development Commission (CEDECOM) are strategies to provide productive jobs for the youth.

There is also a complete government supported private initiative, Local Enterprise and Skills Development Programme (LESDEP) aimed at training the unemployed youth to acquire viable skills that will eventually make them self-employed through a specialized hands-on training, within the shortest possible time in their localities. Launched in 2011, LESDEP is registered under the auspices of the Ministry of Local Government & Rural Development, and trainings are implemented in collaboration with the Ministry of Employment and Social Welfare and other government agencies.

Finally, cognisant of the effect of the lack of a policy framework with which stakeholders could work to achieve the objectives of youth development in the country, government launched a National Youth Policy on the International Youth Day in August, 2010 to address such challenges. The national youth policy is intended to address challenges such as lack of education, skills training; inadequate labour market information, unemployment and underemployment and also include the provision of opportunities for government to engage the youth and other stakeholders in meaningful partnership to develop appropriate interventions and services for youth empowerment.

Challenges

These initiatives and programmes notwithstanding, a number of challenges remain in tackling the growing youth and graduate unemployment in the country. The following are some of the challenges:

- The rapid increase in youth population (with people age between 15-24 constituting more than 20 percent of the country's population) and increasing more than fourfold over the last forty years
- Failure of the economy to generate sufficient employment outlets.

Moreover, there is an apparent mismatch. Education and training have no link to the needs of the important sectors of the economy; the shrinking of Ghana's industrial and manufacturing base due partly to the influx of foreign products particularly from China.; the shrinking of public sector employment opportunities coupled with a relatively slow growth of the private sector; and the lack of a coherent national employment policy and comprehensive strategy to deal with the employment problem.

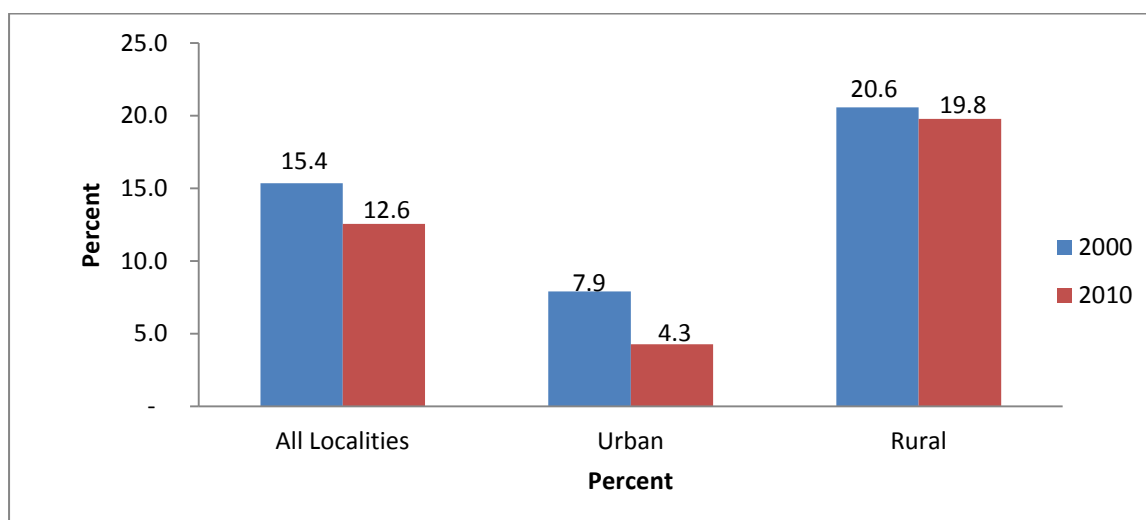
Reduce child labour

Target CCA 19: Elimination of child labour¹

Indicator: Proportion of Children under Age 15 who are working

The world Summit on Sustainable Development in 1995 directed that countries should take immediate and effective measures to eliminate the worst forms of child labour (WFCL) as defined in International Labour Organization Convention No. 182, and elaborate and implement strategies for the elimination of child labour that is contrary to accepted international standards. Child labour refers to children who are employed in an economic activity for pay, profit or family and is measured by the number of children aged 7-14 who are employed, divided by the number of children of the same age group in the population. This phenomenon is pervasive across the globe particularly in Africa, and for that matter Ghana, where children as young as seven years work as domestic labourers, porters, hawkers, miners, quarry workers, fare collectors, and in agriculture, particularly cocoa growing areas and in fishing communities. The results from the 2010 population census indicate that more than half a million children (594,642) aged 7-14 years, representing 12.6 percent of that population, are employed.

Figure 3.7: Proportion of children aged 7-14 who are employed by locality

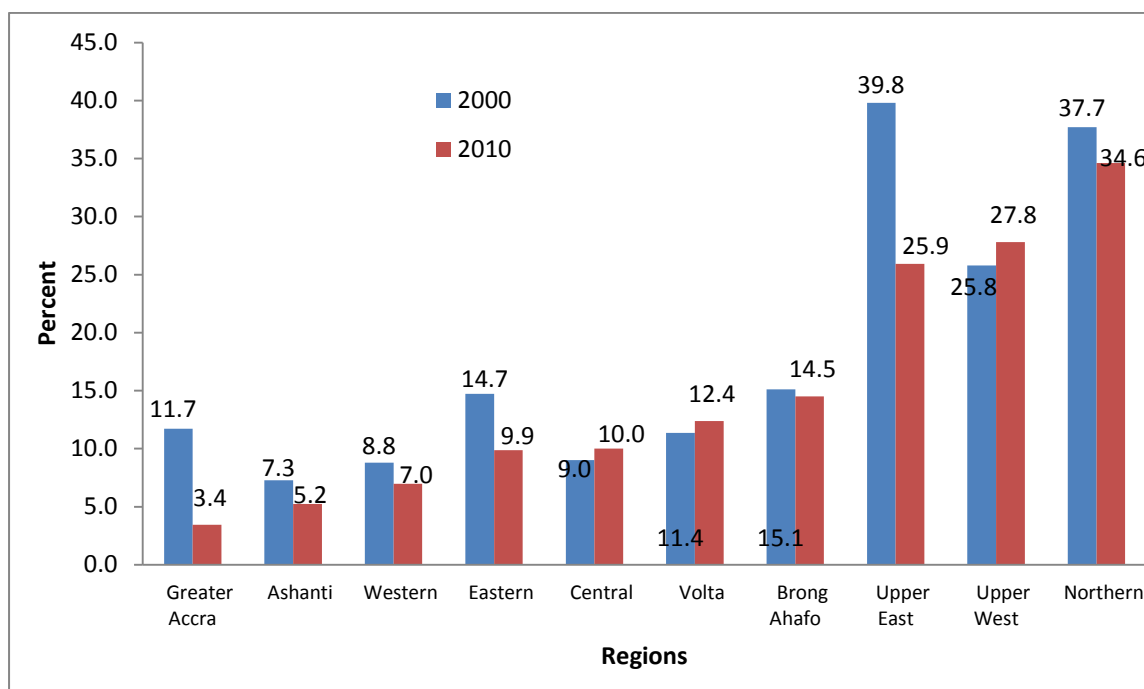


Source: Ghana Statistical Service, 2000 and 2010 Population and Housing Census

Figure 3.7 shows that children in rural localities (19.8%) are more likely to be employed than their counterparts in urban areas (4.3%). The prevalence of child labour in rural areas could be due to the fact that the capacity to enforce minimum age requirements for schooling and work is lacking, as well as, poverty. This is confirmed by Figure 1.8 below which shows that the less well-endowed regions in the country had a much higher incidence of child labour than the other regions. It averages about 30 percent in the three northern regions with the Northern region registering the highest of 34.6 percent.

¹ Additional socio-economic common country assessment (CCA) indicators (UN, 2003)

Figure 3.8: Proportion of children aged 7-14 who are employed by region



Source: Ghana Statistical Service, 2000 and 2010 Population and Housing Census

Moreover, while the 2010 PHC data indicate a reduction of about 18.6 percent change from the 2000 level, regions such as Central, Volta, and Upper West regions actually recorded an increase in child labour rates by 11 percent, nine percent and 7.8 percent respectively. Although, the Greater Accra Region recoded the largest decline in child labour rate of more than 70 percent, the decline (35%) recorded in Upper East seems to have a greater impact because of the prevailing high rate.

Key Policy Measures and Challenges

It is well acknowledged that children work for a multiplicity of reasons, the most important being poverty. In developing countries, though children are not well paid and are sometimes exploited, they still serve as major contributors to family income and towards their education. Furthermore, schooling problems also contribute to child labour, whether the inaccessibility of schools (due either to proximity or affordability) or the lack of quality education which spurs parents to allow their children to enter into more profitable ventures. Rigid traditional and cultural factors as well as migratory issues in rural and cocoa growing communities have all been mentioned as some of the causes why children work (Sahel and West Africa Club Secretariat/OECD, 2011). Government has recognised these problems and has initiated a number of interventions and programmes to address child labour as an integral part of national development policies by creating an enabling environment and setting-up effective and relevant national child protection systems.

Ghana has formally adopted the three International Labour Organization (ILO) Conventions on child labour. In addition, it has signed a memorandum of understanding with ILO to launch a programme under the International Programme for the Elimination of Child Labour (IPEC). Ghana laws also forbid child labour. Section 87 of the Children's Act, 1998 (Act 560) forbids any person from employing a child in exploitative labour, or in any engagement that deprives the child of its health, education or development. Section 88 prohibits anyone from employing any child at night that is between the hours of eight o'clock in the evening and six

o'clock in the morning. Section 89 and 90 of the Act allow children above the age of 13 to engage in light work, and those aged over 15 in non-hazardous work.

Challenges

While substantial legislation and programmes are now in place, legal enforcement remains a challenge, particularly in the rural areas. With high poverty and poor schooling opportunities, child labour is still prevalent and sometimes a survival strategy to cope with deprivation. Thus, there is still a lack of consensus with the definition of what constitutes child labour even within the international community, making immediate abolishment or enforcement difficult. A case in point is that in areas/situations where children may have to work to support their schooling or care for incapacitated or ailing guardian/parents, complete and immediate abolishment may be precarious or counterproductive.

Goal 2: Achieve universal primary education

Target 2.A: Ensure that, by 2015, children everywhere, boys and girls alike, will be able to complete a full course of primary schooling.

Indicators

2.1 Net enrolment ratio in primary education

2.2 Proportion of pupils starting grade 1 who reach last grade of primary

2.3 Literacy rate of 15-24 year-olds, women and men

Indicator 2.1: Net enrolment ratio in primary education

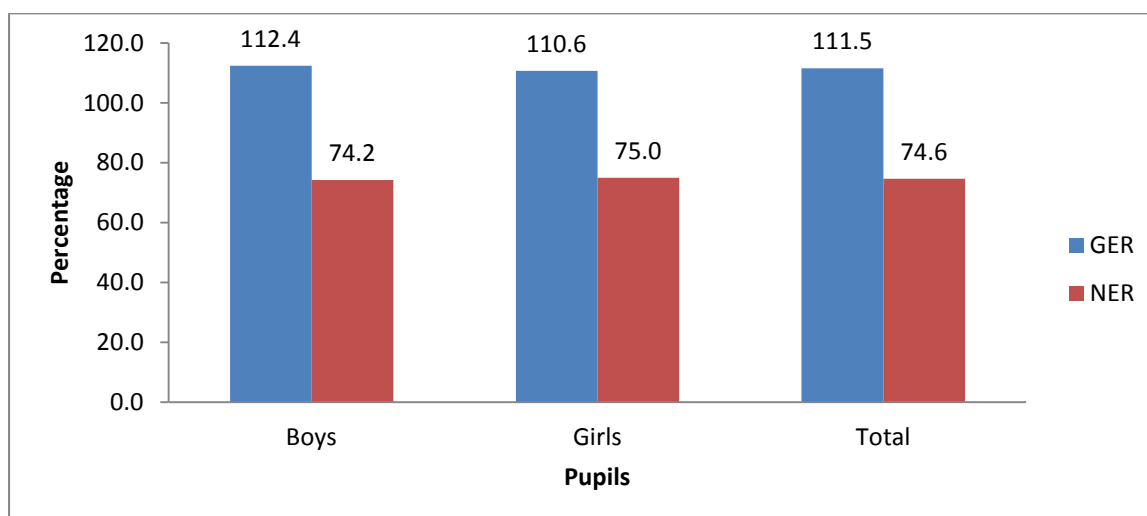
Net primary enrolment rate (NER) in primary education is the number of children of official primary school age (as defined by the Ghana Education Service) who are enrolled in primary education as a percentage of the total children of the official school age population. The indicator is used to monitor progress towards the goal of achieving universal primary education, identified in both the MDGs and the Education for All initiative. It shows the proportion of children of primary school age who are enrolled in primary school. NER refers only to children of official primary school age while Gross Enrolment Rate (GER) includes children of any age. A high NER denotes a high degree of enrolment in education by the official school-age population. NER below 100 percent provides a measure of the proportion of school age children who are not enrolled at the primary level. It is important to note, however, that this difference does not necessarily indicate the percentage of students who are not enrolled, since some children might be enrolled at the secondary school level. When the NER is compared with the GER the difference between the two ratios highlights the incidence of under-aged and over-aged enrolment.

Table 3.3: GER and NER in primary school by sex and locality 2000 and 2010

	2000		2010	
	GER	NER	GER	NER
Both sexes	80.8	61.4	111.5	74.6
Boys	82.3	61.8	112.4	74.2
Girls	79.2	60.9	110.6	75.0
Urban	92.1	70.7	116.0	81.8
Boys	93.4	71.5	115.9	81.6
Girls	90.8	70.0	116.1	81.9
Rural	73.5	55.4	107.8	68.6
Boys	75.5	56.0	109.7	68.3
Girls	71.5	54.8	105.9	69.0

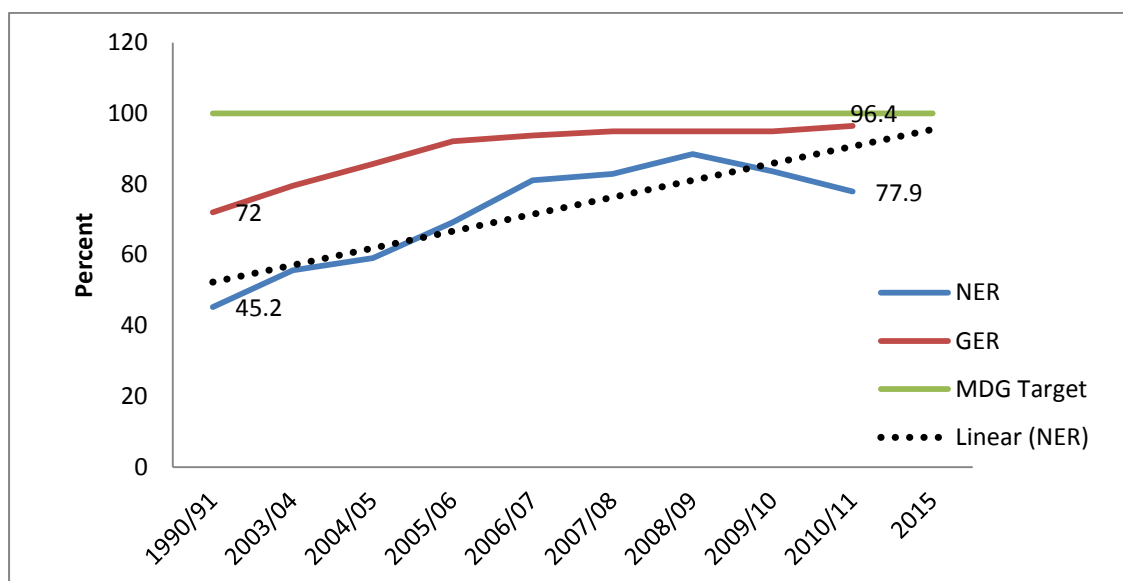
Source: Ghana Statistical Service, 2000 and 2010 Population and Housing Census

The 2010 PHC data indicate that the NER for children in the age group 6-11 in primary school is 74.6 percent (Table 3.3). While this figure is a marked improvement over the 2000 PHC, which was 61.4%, it is marginally lower than the institutional NER released by the Ghana Education Service (GES). As shown in Figure 3.9, the institutional data from GES in themselves show a declining trend of NER, dropping from 88.5 percent in 2008/09 to 77.9 percent in 2010/11 academic year. The two results therefore show a slow progress towards achieving the MDG target of 100 percent universal primary education by 2015. In contrast, Figure 3.10 indicates that the GER has been rising steadily from 79.5 percent to 96.4 percent in 2010/11, itching closer to the 100 percent target. The 2010 PHC results, however, show a much higher GER of 115.5 percent, creating a wide gap with the NER. The wide gap suggests that increasingly over-aged enrolments at the primary school level are increasing, indicating a growing participation in the education system. However, the declining NER which provides an indication of the extent to which children are enrolling in school at their correct ages may have implications for the likelihood of children not staying in school and dropping out particularly if they do not enroll at their correct ages.

Figure 3.9: Net and Gross enrolment ratio in primary school, 2010

Source: Ghana Statistical Service, 2010 Population and Housing Census

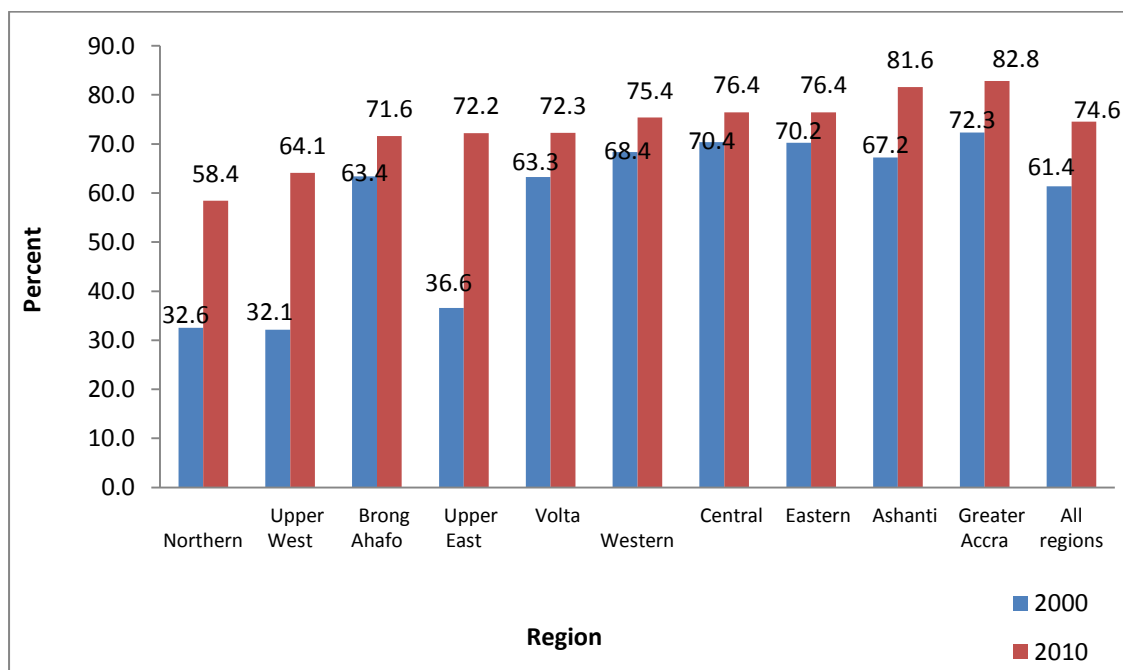
Figure 3.10: Net and Gross enrolment ratio in primary school, 1990 -2010



Source: Ministry of Education
Ghana Statistical Service, 2010 Population and Housing Census

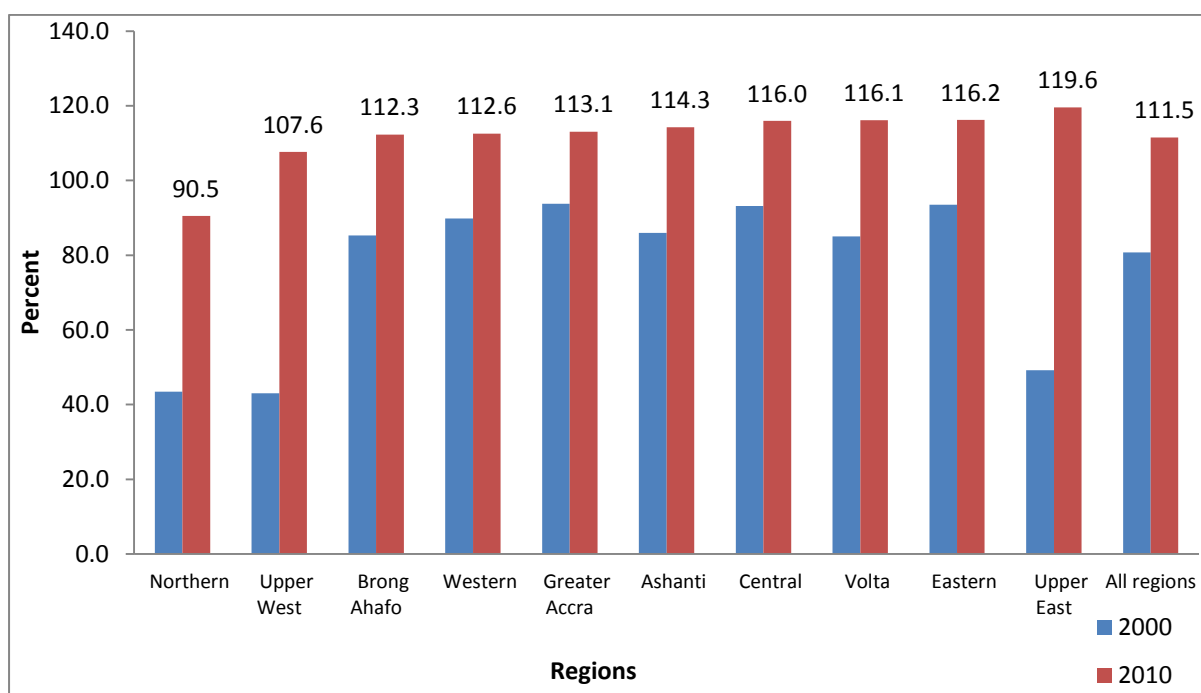
At the locality level, the 2010 PHC results indicate that enrolment in rural areas is much lower than in the urban areas. While NER in urban areas is 81.8 percent, rural areas registered 68.6 percent. Both localities, however, registered significant progress over a 10 year period as urban NER increased by 11 percentage points while rural NER increased by about 13 percentage points over the 2000 PHC results.

Figure 3.11: NER in primary school by region, 2000 and 2010



Source: Ghana Statistical Service, 2000 and 2010 Population and Housing Census

Figure 3.12: GER in primary school by region 2000 and 2010



Source: Ghana Statistical Service, 2000 and 2010 Population and Housing Census

Indicator 2.3: Literacy rate of 15-24 year-olds, women and men

There has been a significant improvement in youth literacy status since 2000. A comparison of the 2000 and the 2010 PHC results shows that the proportion of illiterate youth has decreased more than half, dropping from 29.3 percent in 2000 to 14.3 percent in 2010. The reduction appears the same for both men and women. In terms of literacy status on specific local and international languages, Table 3.4 shows that significant progress have been made in literacy in local languages only, increasing from 1.8 percent in 2000 to 5.0 percent in 2010 (a growth of about 177%). Surprisingly however, literacy in English among men registered a slight decline of three percent over the 10 year period. Similarly, while literacy in English and Ghanaian language among male recorded a slight decline, that of their female counterparts recorded a substantial increase from 40.3 percent to 52.1 percent over the period, representing about 30 percent increase. Literacy in other international languages including French also witnessed a marked improvement of 100 percent over the 2000 rate, increasing from 0.8 percent in 2000 to 1.6 percent in 2010.

Table 3.4: Literacy status of population 15-24 by sex and locality, 2000 and 2010

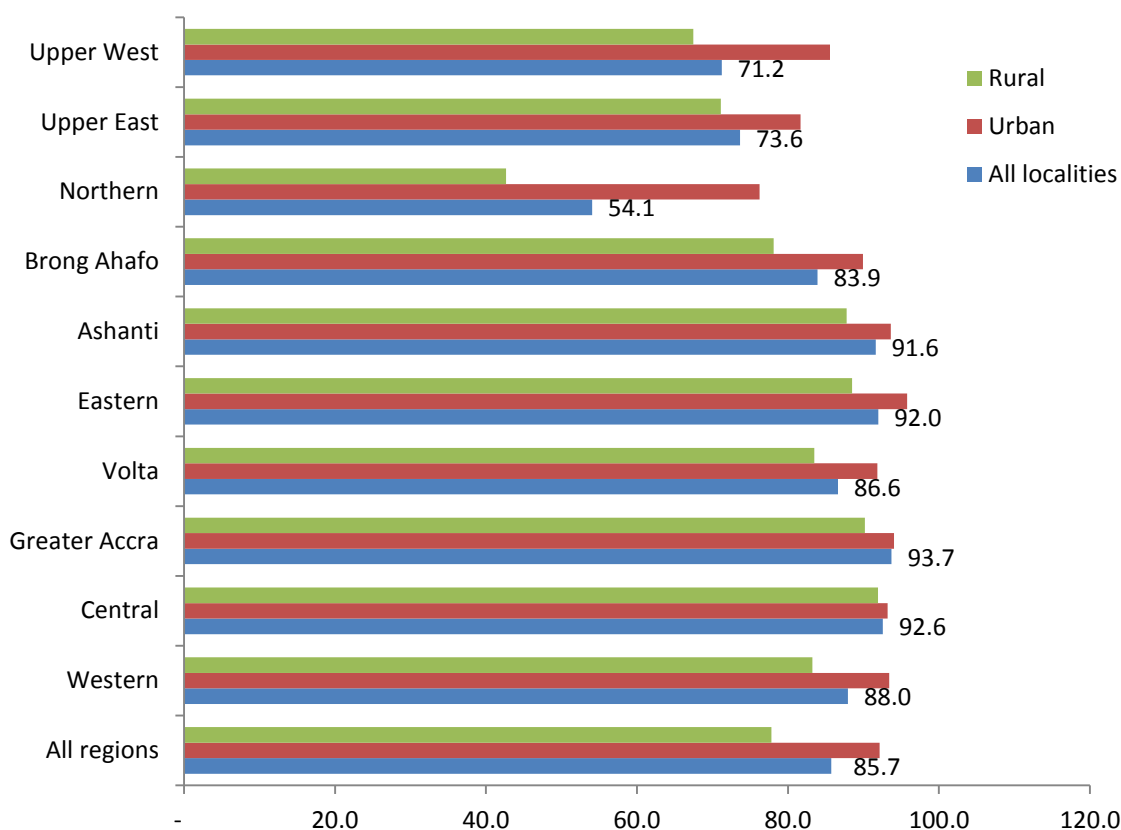
Literacy status	2000			2010		
	All localities	Urban	Rural	All localities	Urban	Rural
Not literate						
Both sexes	29.3	17.6	41.2	14.3	7.8	22.2
Male	24.1	12.8	34.9	11.7	5.5	18.8
Female	34.5	22.1	47.7	16.8	9.9	25.7
English only						
Both sexes	23.6	28.0	19.1	23.9	26.4	20.8
Male	24.7	28.9	20.6	23.9	26.3	21.1
Female	22.5	27.1	17.6	23.9	26.4	20.5
Ghanaian language only						
Both sexes	1.8	1.6	2.0	5.0	3.8	6.6
Male	1.7	1.3	2.0	4.4	3.2	5.9
Female	2.0	1.8	2.1	5.6	4.3	7.3
English and Ghanaian language						
Both sexes	44.5	52.0	36.9	55.2	59.7	49.7
Male	48.8	56.0	41.8	58.5	62.8	53.5
Female	40.3	48.2	32.0	52.1	56.9	45.8
English, French, Ghanaian language and other						
Both sexes	0.8	0.9	0.7	1.6	2.3	0.7
Male	0.8	0.9	0.7	1.5	2.3	0.7
Female	0.7	0.8	0.6	1.7	2.4	0.8

Source: Ghana Statistical Service, 2000 and 2010 Population and Housing Census

Note: 2000 data does not include French

Figure 3.13 shows that youth literacy rate in Ghana is much higher in urban localities (92.2%) than in the rural areas (77.8%), giving credence to the fact that illiteracy is associated with poverty and underdevelopment. While the youth in urban localities often have easy access/proximity to schools, the same cannot be said about the youth in rural and deprived localities. The regional results indicate that regions of low level of development and high poverty rates tend to have lower literacy rates. While the national literacy rate among the youth according to the 2010 PHC data is 85.7 percent, those of the three northern regions range from 54.1 percent (Northern), 71.2 percent (Upper West) to 73.6 percent (Upper East).

Figure 3.13: Youth literacy status by locality and region



Source: Ghana Statistical Service, 2010 Population and Housing Census

Key Policy Measures and Challenges

The broad policy objectives outlined in the Ghana Shared Growth and Development Agenda (GSGDA) on education are aimed at producing a well-educated, skilled and informed population capable of transforming the key sectors of the economy for wealth creation and poverty reduction. At the level of primary education, key policy related issues to be addressed include the low perception of quality of teaching and learning outcomes, the removal of geographical disparities to support the reduction of overcrowding by providing enough schools for the growing school-age population, low teacher motivation and supervision, and inadequate supply of teachers in classrooms especially in deprived districts, etc.

Whilst significant efforts have been made by Government and its development partners particularly towards achieving the universal primary education in the country over the years through improved access, financing and the provision of infrastructure and facilities, the progress towards MDG target of NER has been slow and unlikely to be achieved by 2015. The continued decline in the Net Enrolment Ratio (NER) in primary education is worrying and requires critical attention and appropriate policy measures are needed to reverse the trend. Beyond the implementation of the Free Compulsory Basic Education (FCUBE) policy over the last two decades or so, some of the key policy interventions and strategies that are being implemented and that seemed to explain the recent high rates of GER include the following:

- Capitation grant which is intended to encourage participation in basic education and increase school attendance rate.
- *The school feeding programme:* The objectives of the school feeding programme are to increase school enrolment, attendance and retention; and to reduce short-term hunger and malnutrition among school children in deprived communities across the country.
- *Provision of free school uniform and exercise books:* Like the Capitation Grant the objective of providing of school uniforms is to enhance enrolment and retention of children in schools, particularly children from poor households.
- *Construction/Rehabilitation of School Classrooms:* Measures to construct new classrooms and rehabilitate those dilapidated have been intensified in recent times. New schools are been built to reduce the number of schools under trees.

Challenges

Despite the above policy interventions, access and quality education issues remain a matter of national concern as evidenced by the increasing number of children out of school and persistently low educational outcomes. Inadequate education infrastructure and high and increasing cost of education at all levels, as well as low teacher motivation that dampens morale and commitment are some of the challenges confronting broadening access to the remaining out of school children at their correct age.

Goal 3: Promote gender equality and empower women

Target 3.A: Eliminate gender disparity in primary and secondary education, preferably by 2005, and in all levels of education no later than 2015

Indicators

- 3.1 Ratios of girls to boys in primary, secondary and tertiary education
- 3.2 Share of women in wage employment in the non-agricultural sector
- 3.3 Proportion of seats held by women in national parliament

Indicator 3.1: Ratios of girls to boys in primary, secondary and tertiary education

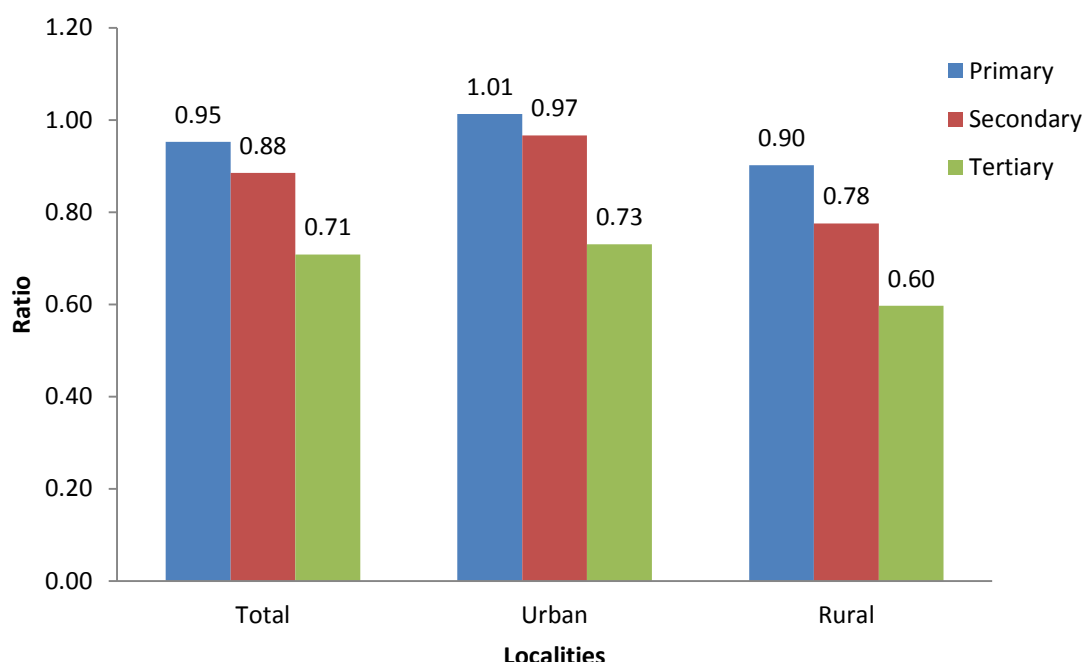
This indicator measures the equality of opportunity, fairness and efficiency of education, measured as a ratio of the number of enrolled girls to enrolled boys in primary, secondary and tertiary education (also known as the gender parity index), regardless of ages. Education is one of the most important aspects of human development. It is widely acknowledged that eliminating gender disparity at all levels of education would help to increase the status and capabilities of women and reduce feminisation of poverty (GSGDA, 2010). Female education is also an important determinant of economic development. The emphasis on girls is because girls are more likely than boys to suffer from limited access to education, especially in rural areas and/or where families have to make difficult choices in situations of limited resources or low income. This situation is even worse at higher levels of education as it is well acknowledged that in most developing countries girls potentially face additional hurdles in accessing and remaining within the educational ladder, particularly in the later grades as daughters assume additional burdens within the home and are more susceptible to harassment from male pupils/students and teachers as well as forced early marriage.

Figure 3.14 shows that the Gender Parity Index (GPI), according to the 2010 PHC data, reduces as one moves higher on the educational ladder. GPI at the primary level is 0.95,

which is for every 100 boys in school there are 95 girls while secondary school and tertiary level are 0.88 and 0.71 respectively. Trend analysis shows that the GPI has reduced by one percentage point when compared with the 2000 PHC data, indicating slow progress towards achieving the MDG target of 1.00 GPI. However, substantial progress has been made at the tertiary level where the GPI has increased from 0.58 in 2000 to 0.71 in 2010. This increase may indicate the beginning of a positive trend in increased enrollment of female students compared with male students at the tertiary level, and thus a positive development for the country's quest for equitable and universal education for all children.

A comparison of GPI in urban and rural localities shows that it is lower at all levels of education in rural localities ranging from 0.9 in primary, 0.78 in secondary and 0.6 at tertiary levels as against 1.01, 0.97 and 0.73 respectively in urban areas.

Figure 3.14: Ratio of females to males in primary, secondary and tertiary education by locality



Source: Ghana Statistical Service, 2010 Population and Housing Census

Although the variations at the regional level are generally small, the Greater Accra region has a GPI at primary of 1.04, secondary school 1.02 and tertiary (0.84), whereas the Northern region has the lowest GPI at all levels with primary being 0.88, secondary 0.71 and tertiary 0.47 (Table 3.5). A comparison with the 2000 PHC results suggests that while Western, Central, Northern and Upper Western regions recorded increase in primary school enrolment, Volta and Eastern regions recorded a decline of three and one percentage point respectively. However, all the regions saw an increase in both secondary and tertiary enrolments. Northern (22%) and Upper East (18%) regions registered the most impressive increase at the secondary school level while the Greater Accra (21%) and Volta (20%) regions recorded the highest at the tertiary level.

Table 3.5: Ratio of females to males in primary, secondary and tertiary education by locality

	2000			2001		
	Primary	Secondary	Tertiary	Primary	Secondary	Tertiary
Western	0.95	0.82	0.64	0.96	0.87	0.71
Central	0.95	0.83	0.65	0.96	0.95	0.67
Greater Accra	1.04	0.98	0.63	1.04	1.02	0.84
Volta	0.96	0.8	0.49	0.93	0.8	0.69
Eastern	0.94	0.81	0.59	0.93	0.86	0.75
Ashanti	0.97	0.88	0.66	0.97	0.92	0.69
Brong Ahafo	0.94	0.79	0.53	0.94	0.82	0.62
Northern	0.82	0.58	0.35	0.88	0.71	0.47
Upper East	0.9	0.74	0.48	0.91	0.87	0.49
Upper West	0.95	0.8	0.49	0.95	0.86	0.54

Source: Ghana Statistical Service, 2010 Population and Housing Census

Table 3.6 shows trends in GPI since 2009 computed with data from Ministry of Education. While the GPI obtained from the institutional data depicts similar results as the population census at both primary and secondary school levels, female enrolment at tertiary level shows rather wide disparity (Table 3.6). At the basic education sub-sector GPI is highest at the lower levels in education. There was no change in the GPI for Kindergarten, which currently stands at 0.98 as in the previous year. At the primary level, GPI increased marginally to 0.97 after it had stagnated at 0.96 since 2006/07 (MOE, 2008). This increase suggests a positive trend in the enrolment of female pupils compared to male pupils at the primary level. With regard to JHS, the GPI climbed to 0.93 in 2010/11 after a period of stagnation at 0.92. The limited progress in GPI in recent years at the basic education level suggests that if parity is to be achieved, a concerted and targeted strategy is required to close the gap in access at all levels.

Table 3.6: Gender parity in education, 2009/10 and 2010/11

Educational level/year	2009	2009/10	2010/11	Target (2015)	Progress Towards target
GPI at KG	0.99	0.98	0.98	1.00	Stagnated
GPI at Primary	0.96	0.96	0.97	1.00	Slow Progress
GPI at JHS	0.92	0.92	0.93	1.00	Slow Progress
GPI at SHS level	0.84	0.85	0.87	1.00	Significant progress
Female enrollment in Tertiary level	44.3	44.7	45.4	50%	Significant progress
Female enrollment in Public Universities	37.4	32.4	33.3	40%	Slow Progress
Female enrollment in Polytechnics	29.7	30.2	32	40%	Slow progress
Female enrollment in TVET	44.3	44.7	44	50%	Stagnated

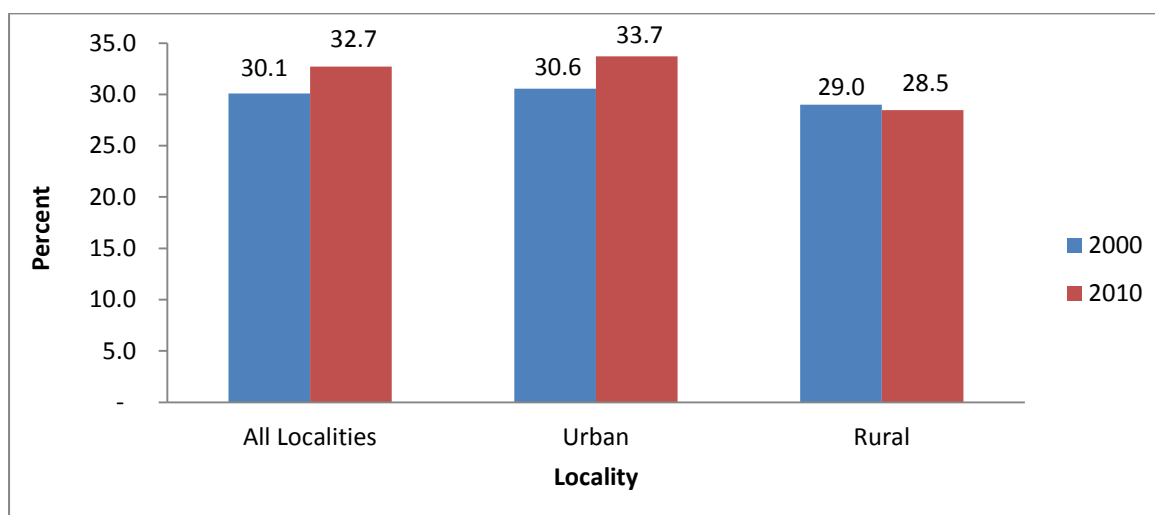
Source: Ministry of Education, 2012

Indicator 3.2: Share of women in wage employment in the non-agricultural sector

The share of women in wage employment in the non-agricultural sector is the share of female workers in the non-agricultural sector expressed as a percentage of total employment in the sector². The indicator measures the degree to which labour markets are open to women in industry and service sectors, which affects not only equal employment opportunity for women but also economic efficiency through flexibility of the labour market and, therefore, the economy's ability to adapt to change. However, labour markets, particularly in developing countries, remain strongly segregated. According to United Nations (2003), in many countries, productive work under conditions of freedom, equity and human dignity is in short supply, and this disproportionately affects women. Women are much more likely than men to work as contributing family workers, without their own pay, and in the informal sector (as previously shown). As the rationale behind this MDG indicator envisages, as economies develop, the share of women in non-agricultural wage employment becomes increasingly important. A higher share in paid employment could secure for them better income, economic security and well-being.

The 2010 PHC data show that there are large variations between women and men in non-agricultural employment in Ghana. Figure 3.15 indicates that the share of women in paid employment stands at 32.7 percent, only increasing marginally from the 2000 PHC figure of 30.1 percent. This result therefore suggests slow progress towards the attainment of the MDG target. It also indicates that women are not taking advantage, or are not able to take advantage, of the growing opportunity in the formal sector employment and are more likely than men to engage in informal activities, subsistence and/or unpaid work in the household.

Figure 3.15: Share of women in paid employment by locality, 2000 and 2010

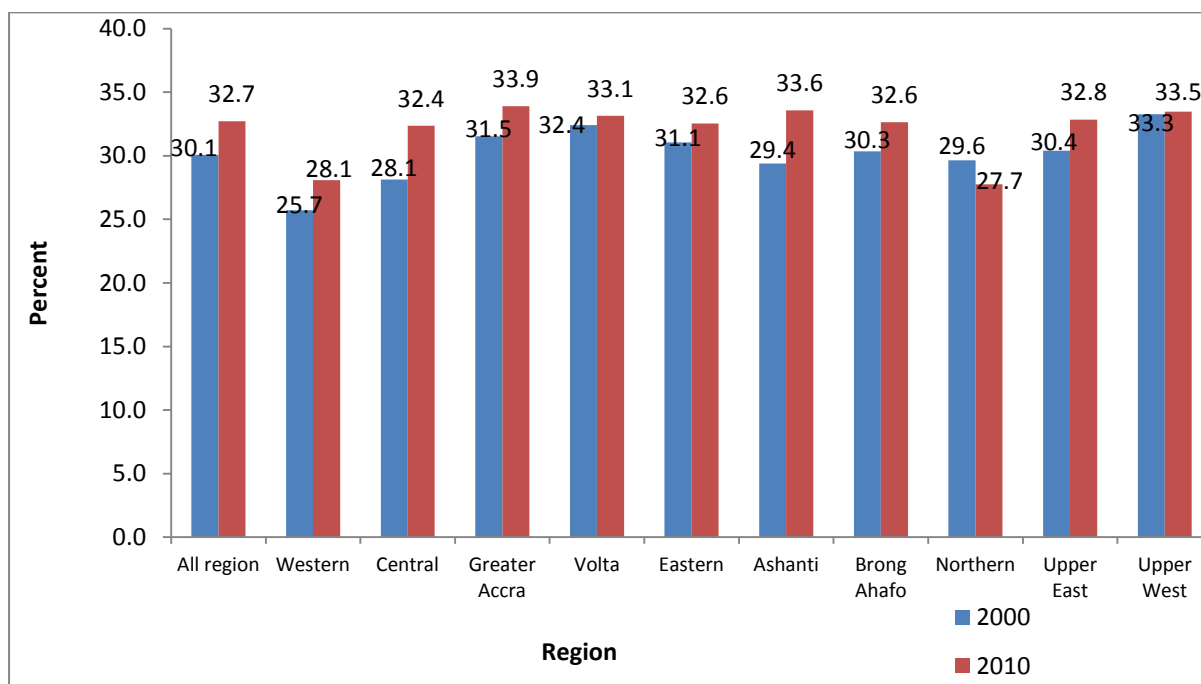


Source: Ghana Statistical Service, 2000 and 2010 Population and Housing Census

² The *non-agricultural sector* includes industry and services. The Ghana Statistical Services follows the International Standard Industrial Classification (ISIC) of All Economic Activities which defines *industry* to include mining and quarrying (including oil production), manufacturing, construction, electricity, gas and water. *Services* includes wholesale and retail trade; restaurants and hotels; transport, storage and communications; financing, insurance, real estate and business services; and community, social and personal services.

Since 2000 the share of women in paid employment has increased among those in urban localities, from 30.6 percent to 33.7 percent but has declined in rural areas from 29.0 percent to 28.5 percent accentuating the disparity between rural and urban areas. At the regional level, with the exception of Northern Region, all the regions registered positive growths of women's share in paid employment with the Central Region recording the highest percentage increase of 15 percent. Northern Region however, witnessed a fall of about 6.4 percent to 27.7 percent in 2010 from the 2000 figure of 29.6 percent. See Figure 3.16.

Figure 3.16: Share of women in paid employment by region, 2000 and 2010



Source: Ghana Statistical Service, 2000 and 2010 Population and Housing Census

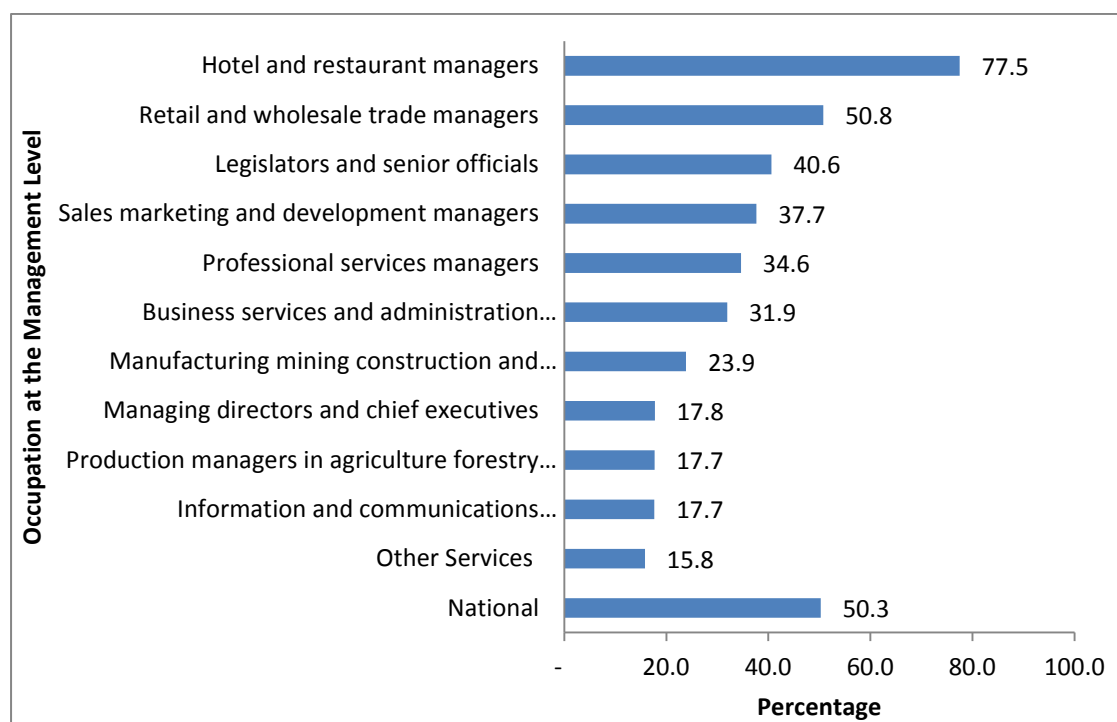
Indicator 3.3: Proportion of seats held by women in national parliament

Women's representation in parliament is one aspect of women's opportunities in political and public life, and it is therefore linked to women's empowerment. It is against this backdrop that the indicator, proportion of seats held by women in national parliament, introduced to measure women's presence in leadership and decision making that will not only promote gender equality and empower women, but also influence an effective and transformative participation.

Although the 2010 PHC does not specifically capture this indicator, it gives an important signal of the extent of women participation compared to their male counterparts at the senior level management positions in both public and private works. Figure 3.17 shows that more females are more likely to work in management positions than their male counterparts as more than half (50.3%) of the senior level management positions in the country are occupied by women. However, there are wide disparities in the type of occupation concerned. While over 77 percent of managers in hotels and restaurants are by women, only 18 percent of Chief Executive Officers (CEOs) or managing directors, production managers and ICT managers are women. With regards to legislators and senior public officials, women constitute 40.6 percent. In the case of elementary occupations (such as labourers, street vendors and food preparation assistants), however, women make up about 65 percent. This result clearly

suggests that not only are women more likely to be engaged in the service industry such as hotels, restaurants and retail and wholesale, but also far outnumber their male counterparts in menial and elementary occupations.

Figure 3.17: Proportion of women in senior management position in public and private occupations



Source: Ghana Statistical Service, 2010 Population and Housing Census

Available institutional data from Ministry of Women and Children's Affairs (MOWAC) suggest that the progress towards increasing the number of women in public life is slow, and shows a declining trend. Table 3.7 shows that the proportion of seats held by women declined from 10.9 percent between the periods 2004-2006, to 8.3 percent between the periods 2008-2011.

Table 3.7: Trends in women participation in public life, 2000-2011

Sector	2000-2004			2004 – 2008			2008-2011		
	Total	Female	Percent of total	Total	Female	Percent of total	Total	Female	Percent of total
Members of Parliament	200	19	10	230	25	10.9	230	19	8.3
Ministers of State	33	2	6.1	29	4	13.9	35	7	20
Deputy Ministers	31	5	16.1	39	10	25.9	28	4	14
Regional Ministers	10	0	0	10	0	0	10	1	10
Deputy Regional Ministers	5	1	20	10	4	40	7	3	42.9
Cabinet Ministers	20	2	10		2		19	4	21.1
State Board and Council Members							205	48	23.41
Constitutional Review Commission							9	2	22

Source: MOWAC, 2011

Key Policy Measures and Challenges

Empowering women and gender mainstreaming into socio-economic development of the country has received enormous attention since the Affirmative Action adopted in the Beijing Conference in 1995. Government thus continues to honour its international obligations and commitments to women, notably, the implementation of the Beijing Platform for Action; the Convention on the Elimination of All Forms of Discrimination against Women (CEDAW); ECOWAS, EU and the Commonwealth Policies, plans and programmes on gender equality. Key policy strategies and programmes of action that have been developed to empower women and ensure gender equality in government development frameworks include:

- Development and implementation of affirmative policy action for women
- Creation of a special fund to support the participation of women in national and district level elections.
- Instituting measures to ensure increasing proportion of women government appointees in District Assemblies.
- Sustenance of public education, advocacy and sensitization on the need to reform outmoded socio-cultural practices, beliefs and perceptions that promote gender discrimination.
- Development of leadership training programmes for women to enable, especially young women, to manage public offices and exercise responsibilities at all levels
- Strengthening of institutions dealing with women and children.

The ongoing medium term policy framework, GSGDA (2010-2013), has some strategies aimed at slowing the feminization of poverty. These include promoting the economic empowerment of women through access to land, labour, credit, markets, information, technology, business services and networks. Other areas covered are social protection including property rights, promoting the social empowerment of women through access to education, (especially secondary, vocational/ technical and tertiary education, non-formal education, opportunities for continuing education for school drop-outs; and scholarships). Finally, there are avenues for creating access to health/reproductive health services and rights, legal aid, social safety nets, social networks and adoption of affirmative action policy/law to increase participation of women in sectors of leadership and decision-making – (40%) minimum of women representation.

The setting up and the continuous existence of the Ministry of Women and Children's Affairs (MOWAC), no doubt, underline the commitment of Government to carry through these policies. The MOWAC was set up with the mandate of initiating or formulating policies to promote gender mainstreaming across all sectors that will lead to the achievement of gender equality and empowerment of women and to facilitate the survival, development and growth of children.

Challenges

Although, there have been gradual improvements in women's public life and empowerment, significant challenges still remain for women's participation in access to education particularly at the secondary and tertiary levels, governance and access to economic resources. Low female enrolment at secondary and tertiary levels poses a challenge to women's participation in decision-making at higher levels and their involvement in employment in wage employment and higher level occupations. With regard to governance, there is inadequate women representation and participation in public life. Perceived

discrimination and harassments in election campaign processes for female candidates, low limited resources and lack of requisite educational qualification are but a few factors that hamper women's participation in public life (GSGDA, 2010). Moreover, the dominance of women in the informal private sector, mainly engaging in contributory or unpaid family work or menial jobs is a matter of concern. This poses a challenge to the development of a policy to end the feminisation of poverty. Last but not least, socio-cultural practices, norms, and societal attitudes tend to discourage women from engaging in wage employment and some occupations such as commercial driving, welding, auto-mechanics etc. Moreover, certain socio-cultural practices such as early marriages, customary fostering, female ritual servitude (Trokosi) and puberty rites still remain a challenge to girl-child education.

Goal 4: Reduce child mortality

Target 4.A: Reduce by two-thirds, between 1990 and 2015, the under-five mortality rate

Indicators

4.1 Under-five mortality rate

4.2 Infant mortality rate

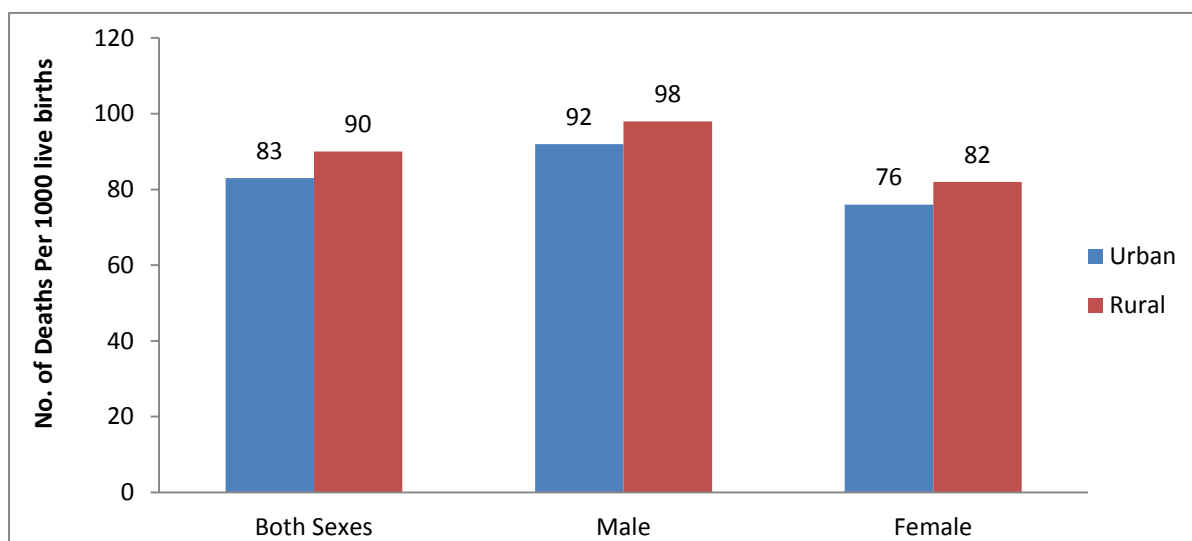
4.1 Under Five Mortality Rate

The under-five mortality rate remains a major public health concern to governments and the international community. This is because it captures more than 90 percent of global mortality among children under the age of 18 (United Nations, 2003). It is the probability (expressed as a rate per 1,000 live births) of a child born in a specified year dying before reaching the age of five. The rationale of this indicator is the fact that it measures child survival and reflects the social, economic and environmental conditions in which children (and others in society) live, including their health care and vulnerability to diseases (United Nations, 2003). In other words, and more simply, the under-five mortality rate is used to identify vulnerable populations, particularly where data on the incidences and prevalence of diseases (morbidity data) are not readily available.

Results from the 2010 PHC, in combination with similar data collected from 2000 PHC and GDHS show a marked decline in under-five mortality. Under-five mortality declined from 167 per 1000 live births in 2000 to 90 per 1000 live births in 2010, about 46 percent decline. The decline notwithstanding, the result indicates that the country appears off-track in achieving the MDG target of 39.9 per 1000 live births in 2015 as the progress is worryingly slow.

Under-five mortality is lower in urban than rural areas. The results from the 2010 PHC indicate that under-five mortality in rural areas is 90 deaths per 1000 live births compared to 83 deaths per 1000 live births in urban areas. Male children experience higher mortality than female children. Figure 3.18 shows that under-five mortality rates for male and female children in urban areas are 92 and 76 deaths per 1000 live births, respectively. Similarly, under-five mortality rates for male and female children in rural areas are 98 and 82 deaths per 1000 live births, respectively (sourced from the 2010 PHC NDA on mortality, Chapter 10).

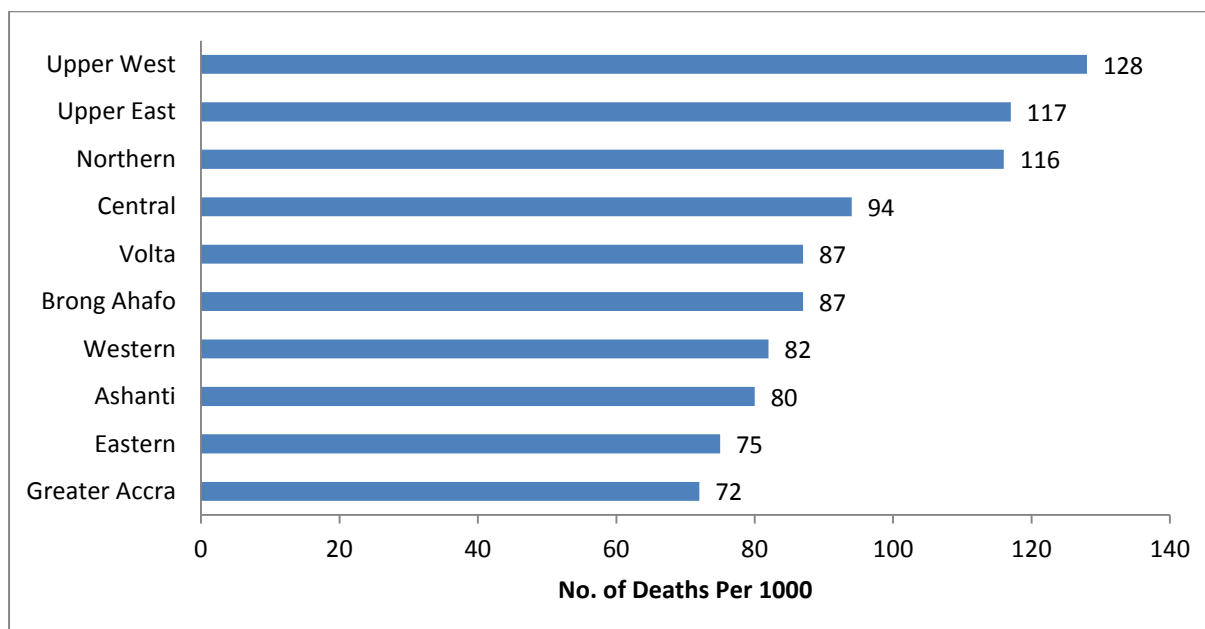
Figure 3.18: Under-five mortality rate by sex



Source: Ghana Statistical Service, 2010 Population and Housing Census

Variations in under- mortality by region are also quite marked. The under-five mortality varies from 72 deaths per 1,000 live births in Greater Accra to 128 deaths in the Upper West Region. Poverty appears to explain the probability that a child will die before the age of five as the three northern regions and the Central Region, the four most deprived regions in the country, have mortality rates higher than the national average.

Figure 3.19: Under-five mortality rate by region



Source: Ghana Statistical Service, 2010 Population and Housing Census

A comparison with the 2000 PHC indicates that under-five mortality rate has reduced in all the regions in Ghana. Table 3.8 shows that the largest decline was recorded in the Greater Accra region, reducing by about 110 percent while Upper East region recorded the lowest decline of approximately 40 percent. The table also indicates that the 2010 PHC results

appear to be consistent with the 2008 GDHS as the two show almost a similar pattern described above.

Table 3.8: Under-five mortality rate by region and period of computation

Region	2000 census	DHS 2003	DHS 2008	2010 census
Western	161	106	65	82
Central	163	102	106	94
G/Accra	152	113	56	72
Volta	174	129	57	87
Eastern	144	94	88	75
Ashanti	146	116	79	80
B/Ahafo	164	95	86	87
Northern	199	148	139	116
U/west	226	191	90	117
U/East	179	96	146	128

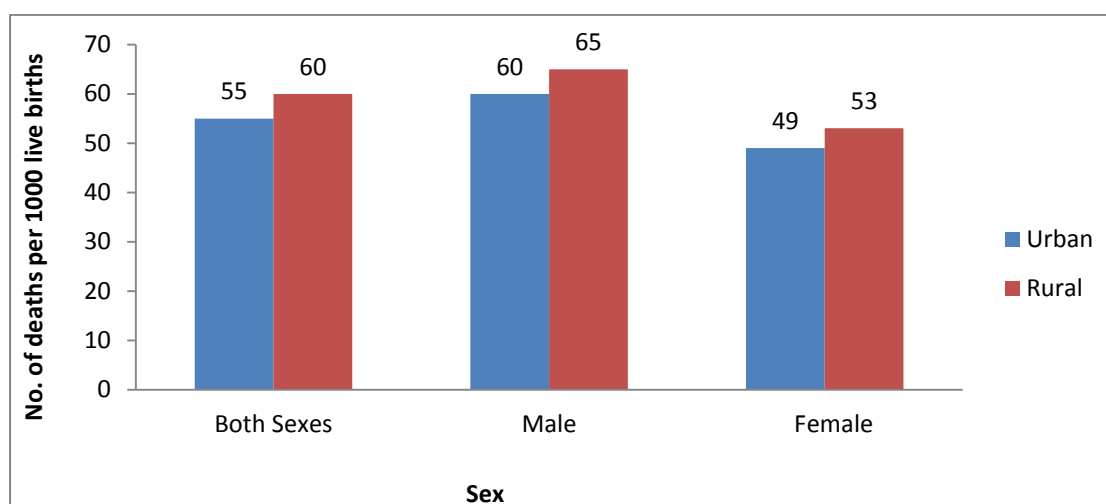
Sources: Ghana Statistical Service, *2000 Census ** DHS 2003, ***2008 and ****2010 Census

Indicator 4.2: Infant mortality rate

The infant mortality rate measures the number of infants dying before reaching the age of one year per 1,000 live births in a given year. In other words, it measures the probability of an infant dying between birth and the first birthday. Like the under-five mortality, it also reflects the social, economic and environmental conditions in which children (and others in society) live, including their health care.

Infant mortality rate stands at 59 deaths per 1000 live births per the 2010 PHC results. This shows a decline in the last ten years from 90 deaths per 1000 live births in 2000. The last GDHS (2008) report, however, indicates a 50 per 1000 live births over the survey period. Although these results show the country has made a substantial progress towards achieving the MDG target of 26 per 1000 live births by 2015, achieving the said target remains a big challenge. Figure 3.20 shows that the probability that a child will die before their first birthday is higher in rural areas than in urban areas (60 deaths per 1000 live births compared with 55). In addition, a male child is more likely to die before year one than their female counterparts. The infant mortality rates of male and female in urban areas are 60 and 49 deaths per 1000 live births, respectively. In rural areas, infant mortality rates for male and female are 65 and 53 deaths per 1000 live births, respectively (Figure 3.20).

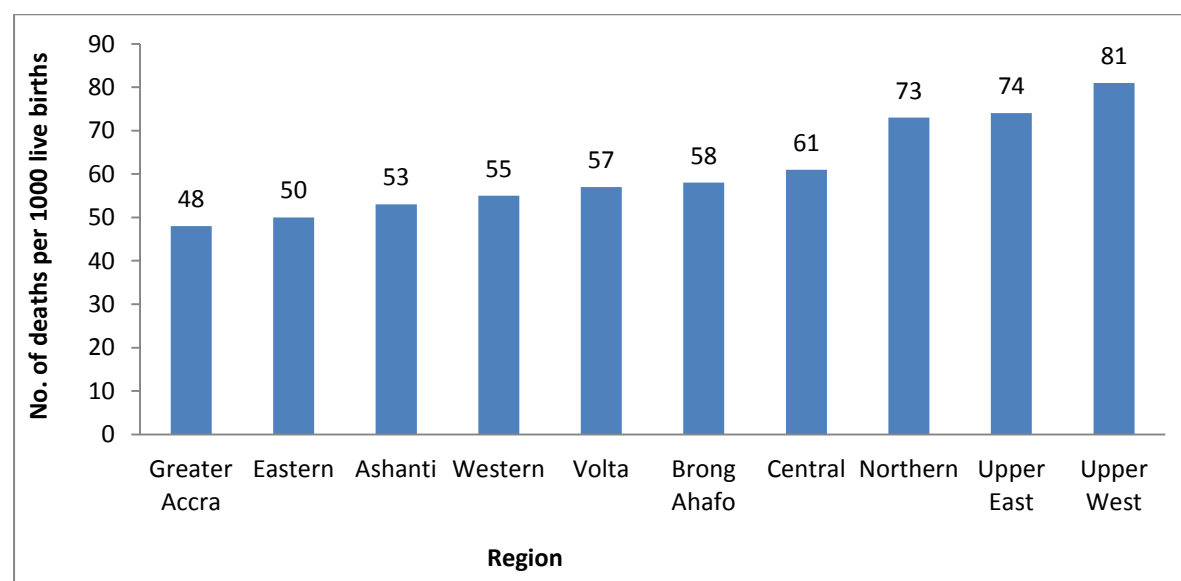
Figure 3.20: Infant mortality rate by locality and sex



Source: Ghana Statistical Service, 2010 Population and Housing Census

At the regional level, like under-five mortality, substantial variation exists in infant mortality. Greater Accra has the lowest infant mortality at 48 deaths per 1000 live births, whereas Upper West has the highest infant mortality at 81 deaths per 1000 live births (Figure 3.20).

Figure 3.20: Infant mortality rate by region



Source: Ghana Statistical Service, 2010 Population and Housing Census

Key Policy Measures and Challenges

The government, in close partnership with development partners (DPs), has implemented a number of priority interventions to reduce by two-thirds mortality among both infants and children between 1990 and 2015. Recognising the stagnation in the child survival indicators, Ghana adopted a new Child Health Policy and Child Health Strategy in 2006. The Child Health Policy outlines the key interventions to be scaled up along the continuum of care and

focuses on improving access to, quality of, and demand for essential services. The strategy also includes recent new technologies such as low osmolarity oral rehydration solution (*ORS*) and zinc for the management of diarrhoea, and introduction of new vaccines such as 2nd dose measles vaccine, pneumococcal vaccine and rotavirus vaccine through the national Expanded Program of Immunisation (EPI) programme.

Moreover, the government recognising the fact that about 40 percent of all deaths that occur before the age of five are due directly and indirectly to under-nutrition, making it the single most important cause of child mortality, has rolled out a number of initiatives including the 2007 Program of Work (POW) and the draft 5YPOW III (2007-2011)³. The Ministry of Health (MOH) and the Ghana Health Service (GHS) spearheaded the launch of 'Imagine Ghana Free of Malnutrition', a multi-sectoral strategy that addresses malnutrition as a developmental problem in the context of the Ghana Poverty Reduction Strategy and the second Five Year Program of Work (5YPOW). Specifically, the MOH and GHS, with the support of DPs, have expanded over the last several years core health and nutrition services (i.e. immunization, vitamin A supplementation, deworming etc.) that affect nutritional and health status of children, mainly through the rapid delivery approach.

Challenges

Though child survival has improved as a result of high impact healthcare services and economic progress, the current data suggest that one in eleven Ghanaian children dies before they reach the age of five from largely preventable childhood diseases. There are still challenges that need to be addressed. These include:

- **Funding:** The inability to sustain the funds used to support programmes under EPI which requires enormous donor support. Again, more innovation is required in the use of existing resources, in addition to sustaining resource mobilization and allocation to the child health programme.
- **Low coverage of comprehensive health and nutrition services:** Despite several interventions to expand the scale of health services, many reports have complained that essential health services including intensive health and nutrition education with necessary inputs (e.g. LLINs) have not been delivered at a scale large enough to bring desirable outcomes at the regional or national level. A GHS report indicates that many programs/project supported by DPs cover just a few communities in each district, if any.
- **Inadequate human resources and skills within the health system to improve the poor quality of care;**
- **Uncoordinated activities of Neonatal, Postnatal and Child illness:** Lack of integrated Management of Neonatal and Childhood illnesses (IMNCIs), skilled deliveries, and postnatal care;
- **Under reporting of child deaths and inadequate national data to provide complete and reliable information on child health.**

³ The last Multiple Indicator Cluster Survey (MICS, 2006) report indicates that most of childhood deaths are caused by preventable or treatable health conditions: the main causes of childhood deaths are malaria (26%), pneumonia (18%), diarrhoea (18%), and neonatal factors (38%).

Goal 5: Improve maternal health

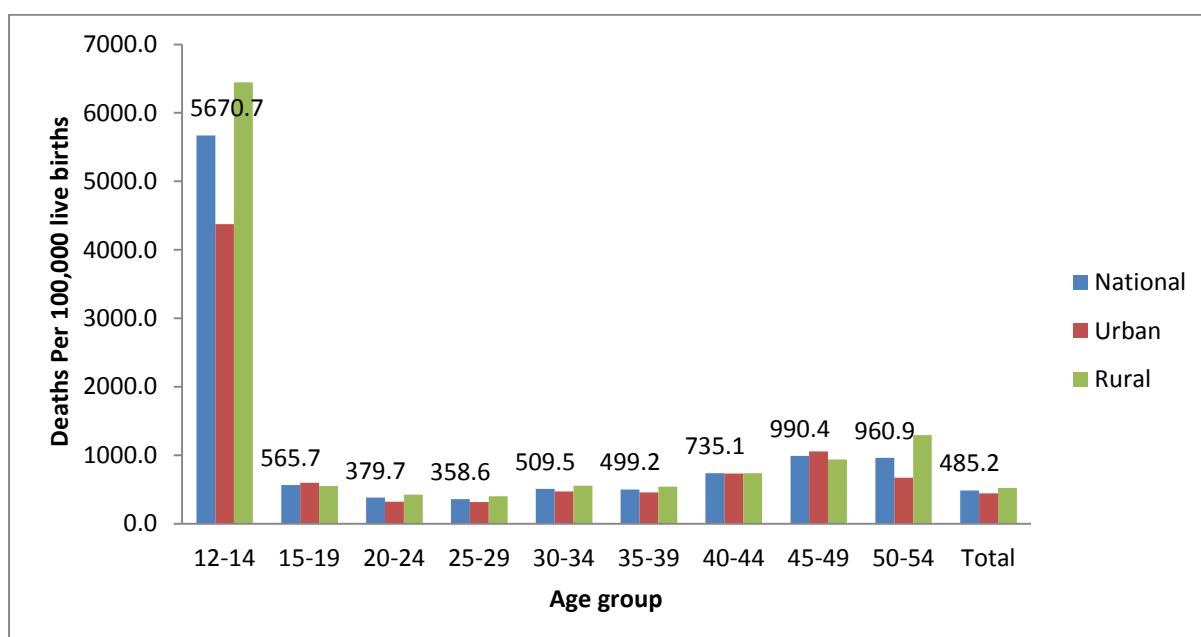
Target 5.A: Reduce by three quarters, between 1990 and 2015, the maternal mortality ratio

Indicator 5.1: Maternal mortality ratio

The *maternal mortality ratio* is the number of women who die from any cause related to or aggravated by pregnancy or its management (excluding accidental or incidental causes) during pregnancy and childbirth or within 42 days of termination of pregnancy, irrespective of the duration and site of the pregnancy, per 100,000 live births. This indicator remains one of the greatest concerns for the country as far as achieving the MDG target is concerned. The progress towards the target has been slow and completely off track. Although considerable progress has been made as various health survey results indicate a fall from a high of 740 per 100,000 live births in 1990 to 451 per 100,000 live births in 2008 (Ghana Health Sector Review, 2009). The results from the 2010 PHC cast further doubt on achieving the MDG target. Figure 3.21, based on 2010 PHC, shows that the maternal mortality ratio (hereinafter referred to as MMR) stands at 485 deaths per 100,000 live births. With less than three years to 2015, this result indicates a reduction of about 60 percent to 70 percent will be required to reach the MDG 2015 target of 185 deaths per 100,000 live births.

Although the census did not ask questions on the causes of maternal deaths, several studies relate it to pregnancy related complications such as severe bleeding (hemorrhage), hypertensive diseases, infections and abortions (Ghana Health Sector Review, 2010). The issue is if health workers and government are aware of the causes, why is the country missing this MDG 5 target. Even a more critical issue is whether the modest gains achieved so far have been evenly/equitably distributed across different geographical settings and socio-economic groups such as poor and non-poor individuals, rural and urban localities and age groups, etc.

Figure 3.21: Maternal mortality ratio by locality

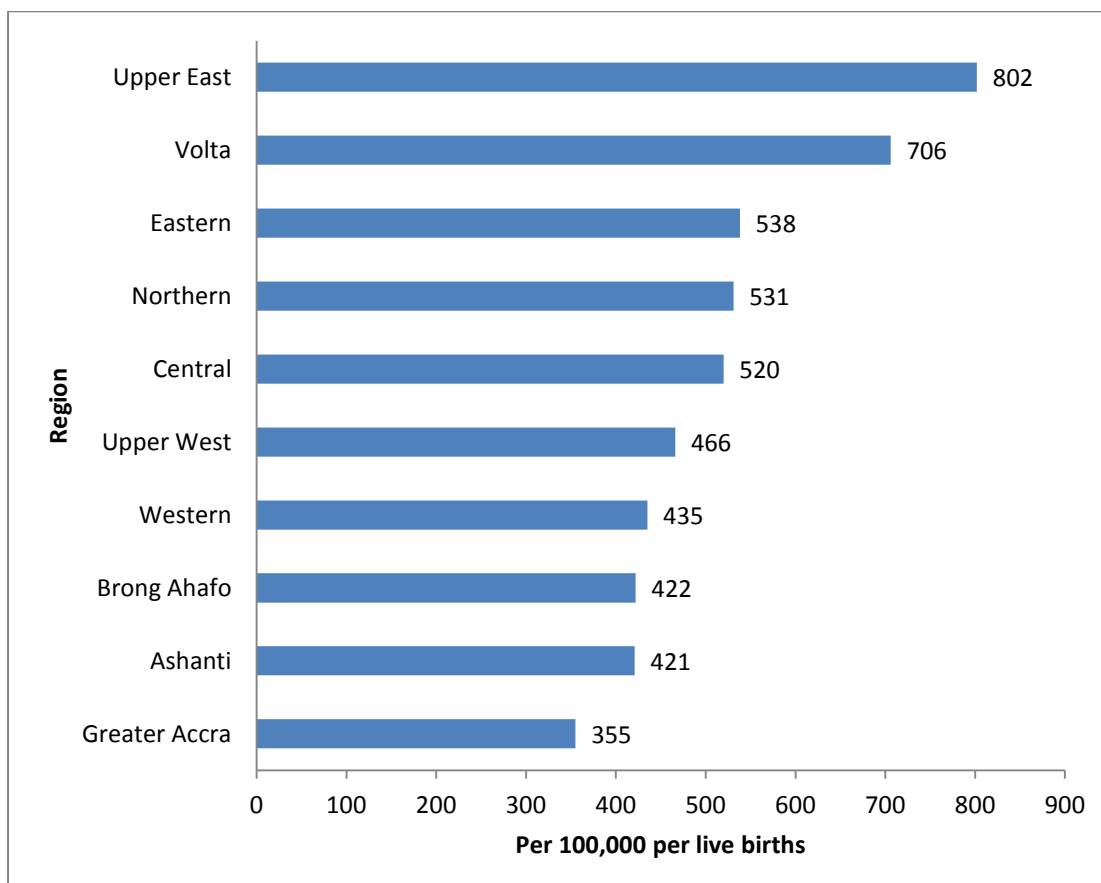


Source: Ghana Statistical Service, 2010 Population and Housing Census

The 2010 PHC results give a startling revelation about the variation of MMR across the age-groups. Though not too surprising, the highest incidence of death occurs between the ages of 12 and 14 as the results indicate 5671 deaths per 100,000 live births, more than ten times higher than the national rate (Figure 3.21). This age group, however, has the least number of pregnancy related deaths and live births of 52 and 917 respectively (see Appendix 6). The data further show that the risk of death increases for women aged above 40 years. The second highest age group more likely to die from pregnancy related complication is women aged between 45 and 59. With regard to rural-urban variation, the results appear almost evenly distributed across the two localities, although deaths in rural areas appear slightly above that of urban areas, and particularly so for those aged 12-14 and those aged 50-54 years

At the regional level, the disparities are much wider. The MMR ranges from 355 deaths per 100,000 in the Greater Accra Region to 802 deaths per 100,000 in the Upper East Region. Closely following the Upper East Region is the Volta Region which stands at 701 deaths per 100,000. (Figure 3.22) This latest result on Volta Region is not surprising since it confirms many reports from Ghana Health Service that suggest a worrying trend from the region in recent times (Ghana Health Sector Review, 2010), particularly in the area of Antenatal Care (ANC) and Skilled Birth Attendance (SBA).

Figure 3.22: Maternal mortality ratio by region



Source: Ghana Statistical Service, 2010 Population and Housing Census

Antenatal care (ANC) from health professionals (nurses, doctors, midwives or community health officers) is one of the most important ways of reducing maternal mortality. Data from the 2008 GDHS indicates that 15 percent of all pregnancies develop complications and

become emergencies. Thus, early identification can help for it to be managed to avoid needless death. However, the 2010 Ghana Health Sector Review Report indicates that the coverage of pregnant women who received at least one antenatal care visit nationwide dropped by about 5 percentage points, from 95.0 percent in 2008 to 90.6 percent in 2010. As mentioned previously, according to the report, even more worrying is women in the Volta Region, as it recorded the lowest coverage at 70.9 percent in 2010; almost 20 percentage points lower than the national average. Although, the percentage of Volta women seeking ANC from health professional has remained the lowest in the country for some time now (GDHS, 2008), the recent sharp drop-out rates should be a matter of concern since that could be explaining the high maternal deaths recorded in the 2010 PHC. Table 3.9 below indicates regions that are performing better compared with regions that need attention in the efforts at curbing the increasing maternal deaths in the country.

“Regions of excellence” and regions “Requiring Attention”

Introducing the “regions of excellence” and “regions requiring attention” concepts, the 2010 Ghana Health Review report indicates that although no single region stood out as the most excellent performer, different regions had presented the most positive trends for different indicators – notably, Upper West, Eastern and Western Regions (see Table 3.9 below).

Table 3.9: Three Best Performing Regions in 2010

	Penta 3 (%)	ANC	Supervised deliveries (%)	FP acceptor rate (%)	Institutional MMR (%)	OPD per capita (%)
Most positive trend	0.0	4.2	25.6	1.8	-40.9	45.7
National trend	-5.0	-1.6	5.6	-24.5	-3.5	10.0
MDG 5:U/West R	-8.8	-1.0	25.6	-13.8	-40.9	25.0
EPI: Eastern R	0.0	-3.4	-1.5	1.8	41.2	16.0
OPD: Western R	-2.1	4.2	-1.4	-39.0	-7.4	45.7

Source: 2010 Ghana Health Sector Review Report

However, in line with our earlier observations, the regional analysis indicates that Volta region is one region that requires most attention (Table 3.10). A number of Volta Region’s indicators showed a negative trend from 2009 to 2010. Furthermore, Volta Region generally ranked low in performance compared with the other 9 regions.

Table 3.10: Region requiring attention

	Penta 3	ANC	Supervised deliveries	FP acceptor rate	Institutional MMR	OPD per capita
Most negative trend	-16.0 %	-20.2 %	-15.2 %	-39.0 %	60.5 %	-0.1 %
National trend	-5.0 %	-1.6 %	5.6 %	-24.5 %	-3.5 %	10.0 %
Volta Region	-14.1 %	-20.2 %	-15.2 %	-19.0 %	50.3 %	0.2 %
Trend rank (1 is highest)	9/10	10/10	10/10	5/10	9/10	9/10
Performance rank	9/10	10/10	10/10	7/10	9/10	8/10

Source: 2010 Ghana Health Sector Review Report

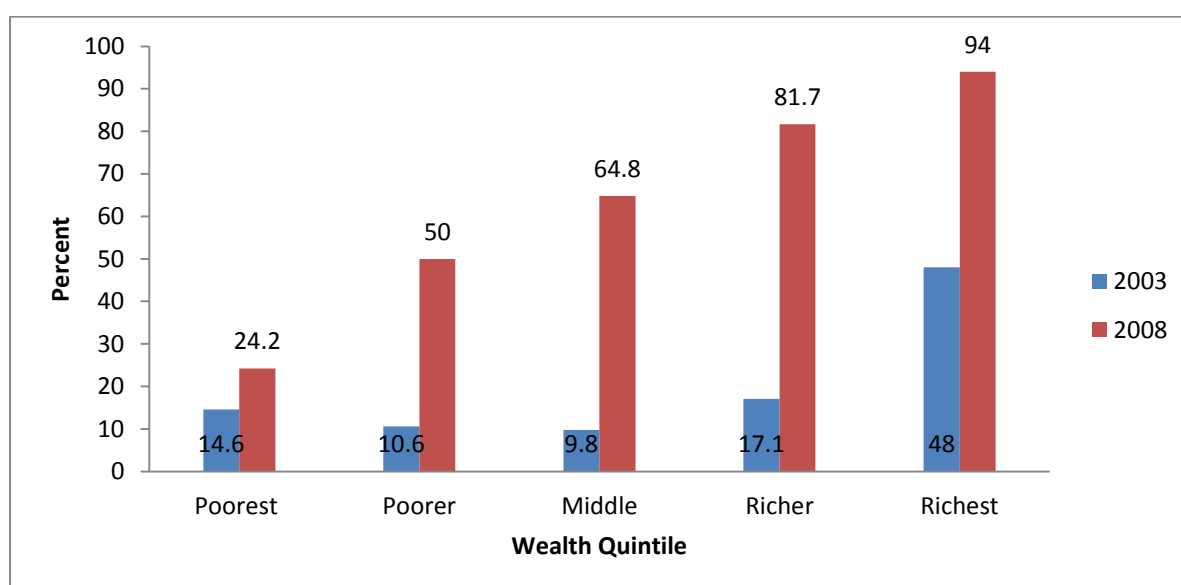
The coverage in Volta Region of Penta 3, ANC and supervised deliveries, institutional MMR and OPD per capita were among the lowest in Ghana. The analysis suggests that Volta Region may require special attention going forward in stemming maternal death in Ghana,

and as the report recommends, there is an urgent need for specific support to Volta Region in order to identify the causes of deteriorating performance.

Causes of Maternal Mortality: Does poverty matter?

Various studies have shown that women’s wealth status is one of the determinants of receiving skilled care during pregnancy. An analysis of the GDHS (2008) data suggests that in 2008, at national level, 57 percent of births received skilled assistance, however, births to women in the poorest quintile had approximately three (3) times less access to skilled care compared to their richest counterparts (Figure 3.23). A substantial increase in the SBA coverage was observed across all the wealth groups between the two surveys. However, the coverage gap in accessing skilled care by the poorest and the richest remained wide.

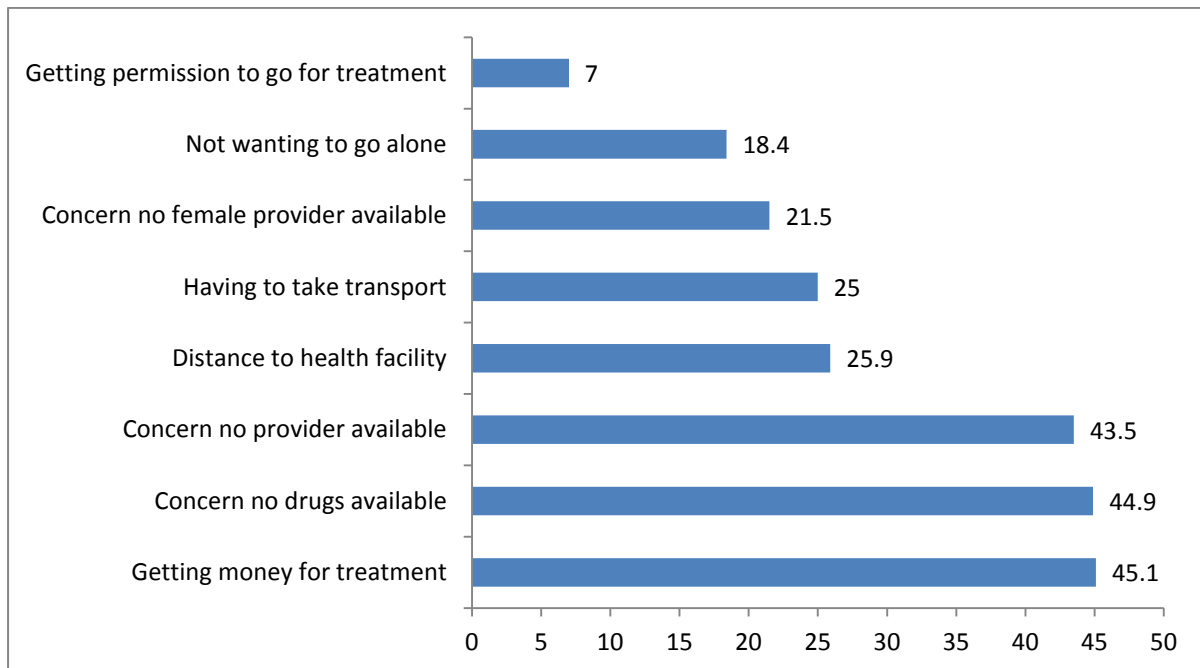
Figure 3.23: Skilled birth attendants (SBA) at birth by wealth quintile (1998 -2008)



Source: Ghana Statistical Service, 2003 and 2008 Ghana Demographic Health Survey

A further analysis of the data relating to problems women encounter in accessing health facilities, confirms the fact that poverty plays a critical role in women’s decision to seek medical treatment or ANC. Women respondents of the 2008 demographic health survey reported that the greatest problem they face in accessing healthcare for themselves was getting money for treatment (45.1%). Other problems cited were concerns that no drugs were available (45%), followed by concerns that no providers were available (44%) and the distance to health facility (26%) (Figure 3.24).

Figure 3.24: Problems in accessing health facilities



Source: Ghana Statistical Service, 2008 Ghana Demographic Health Survey

Again, information gap, including inadequacy of information, incomplete or inaccurate information, is more prevalent among poor women and/or in relatively deprived communities. The lack of information available to women about signs of complications in pregnancy, and access to basic laboratory services, particularly in the Northern and Upper West regions, affect the quality of antenatal care (MAF, 2010). In the Northern and Upper West regions, only six in ten pregnant women, and two in three have access to urine testing and blood testing respectively (GDHS, 2008). These are against the national average of 90 percent access to these services. This suggests that taking blood and urine samples were less likely to be performed among poorest women.

A study by Overboscha, *et al.* (2004) that investigated the determinants of antenatal care use in Ghana, seems to be consistent with the problems outlined above. The study finds that standard of living, cost of consultation and in particular travel distance to the provider have a significant impact on the demand and sufficiency of antenatal care. In addition, pregnant women with more schooling have a higher propensity to seek sufficient antenatal care from all providers, while women of higher poverty tend to use less antenatal care from less expensive providers. Their findings suggest that adequate antenatal care use in Ghana can be promoted effectively by extending the supply of antenatal care services in the rural area, by general education policies and by specific policies that increase reproductive health knowledge.

It is important to note, however, that in Ghana there is too much emphasis on the supply side of health services delivery. Although, very often, health workers are swift to mention what they call the Three Ds or the Three Delays that result in maternal death, not much attention has been given to all the Ds. The Three Ds relate to the delay in making a decision to go to the health facility, the delay in getting to the facility and the delay in the facility itself. The first two Ds which border on the demand side of health delivery do not often receive enough attention as the last D. To a large extent most of the deaths are avoidable. Yet it will depend on the knowledge available to the woman involved and the family in general to make the

right and quick decision during pregnancy. Information on such factors as outlined above is particularly important in understanding and addressing the barriers women may face in seeking care during pregnancy and at the time of birth. These are a clear case of demand deficiency issues. Much as the supply side of the health delivery process is crucial to stem the tide of maternal mortality, the demand side issues should also receive an equal amount of attention. It should be noted that access to a health facility is not the same as use. A pregnant woman may have access or be very close to a hospital but can decide to voluntarily exclude herself because of certain socio-cultural or religious beliefs she or her family harbours. Demand driven factors that have recently been identified as key factors affecting delivery in facilities are poor staff attitude and unsatisfactory facilities, transportation, next to cultural and other barriers (Ghana Health Sector Review, 2010). Thus, addressing maternal health issues in the country should be holistic.

Key Policy Measures and Challenges

Recognising that the target year of 2015 to achieve the MDGs is close, and the fact that Ghana's maternal mortality rate continues at an unacceptably high level, the government with support from the development partners has introduced a number of interventions within the framework of GPRS II and the ongoing GSGDA (2010-2013). Specific to GSGDA, the following policy measures have been outlined to improve access to quality maternal, child and adolescent health services:

- re-introducing certificate midwifery training and ensuring midwifery service in CHPS compounds;
- providing comprehensive emergency obstetric care (including blood transfusion, ambulances) at the district level; providing basic emergency obstetric care at all health centers;
- scaling up community case management and strengthening high rapid impact delivery (HIRD) for U5M & MM and malnutrition; and instituting essential newborn care.
- ensuring safe blood and blood products transfusion; intensifying the implementation of strategies to reduce maternal mortality;
- continuing the implementation of the free health care for pregnant women including deliveries;
- continuing training and upgrading of skills of people engaged in traditional maternal health service delivery in deprived areas,
- sensitizing the public on entrenched negative cultural beliefs associated with maternal health, increasing coverage of community based management of childhood diseases and nutrition and scaling up implementation of essential nutrition actions. The remaining measures are:
- strengthening community/facility growth promotion including school feeding programme; supplementary feeding for malnourished children under five years of age and pregnant and lactating women; equipping district hospitals and health centers to handle obstetric emergencies, strengthening referral services for childhood and maternal emergencies and other essential services, and strengthening adolescent health service programmes at school, clinic and community levels.

Challenges

These policies notwithstanding, maternal mortality ratio is unacceptably high and achieving the MDG 5 target by 2015 is almost impossible. But we can work to reduce this unacceptable

high rate and save the lives of our mothers. In order to do this, there are persistent policy-related issues that need to be addressed. These include:

- Inadequate maternal health, particularly at the district level as well as investments in Community Health Planning Services and related Primary Health Care infrastructure and systems within the context of the Ouagadougou Declaration.
- Lack of skilled health workers, supply of equipment, logistics, staff accommodation, transportation and ambulance services and poor quality of care at facilities.
- Poor transportation and limited referral opportunities: Referrals still remain a problem in many districts. Although a national ambulance service has been introduced, it is said to be expensive (and probably not yet able to ensure district based services).
- Proximity: Barriers to access to critical health services by families and communities, mainly due inadequate financial capabilities of families or mothers, long distance to the health facility and low female literacy rate as well as poor health-seeking behaviours among the poor and socio-cultural factors such as men's influence in healthcare decision making.
- Low coverage of the NHIS: The NHIS does not cover the cost of conveying women in labour to the facilities. The fact that the additional costs of transporting the women in labour together with the responsible TBA to the nearby hospital or health facility is not covered may be one of the major factors explaining the reluctance of mothers to deliver at the facility

Going Forward

There is no doubt that urgent attention and interventions are needed to reduce maternal deaths, if the 2015 target is to be achieved or appreciably reduced. The issue really has not been policies or strategies to stem the tide but what we refer to as “impact action” that will produce measurable results at the grass roots. The recent Ghana MAF 2010 report observes, among others, that there are a number of policy documents, strategic plans and review reports on maternal health. However, implementation has almost always stalled, leading to minimal impact on the MMR. There exist several long and short term measures including the expansion of midwifery school intake, redistribution of midwives, lifesaving skills training, CHPS and free delivery that have been instituted to increase supervised deliveries (Ghana MAF, 2010); yet current reports indicate a rise in rate from the regions. It is in this light that there is the need to redirect focus and strategy towards a more action oriented and demand focused solutions to complement the already existing policies and strategies. A bottom-up approach from the district health centres should be the way to go. Issues such as transportation, information and socio-cultural inhibitions that are region specific should receive immediate attention (details of these are discussed at the recommendation sections).

Goal 7: Ensure environmental sustainability

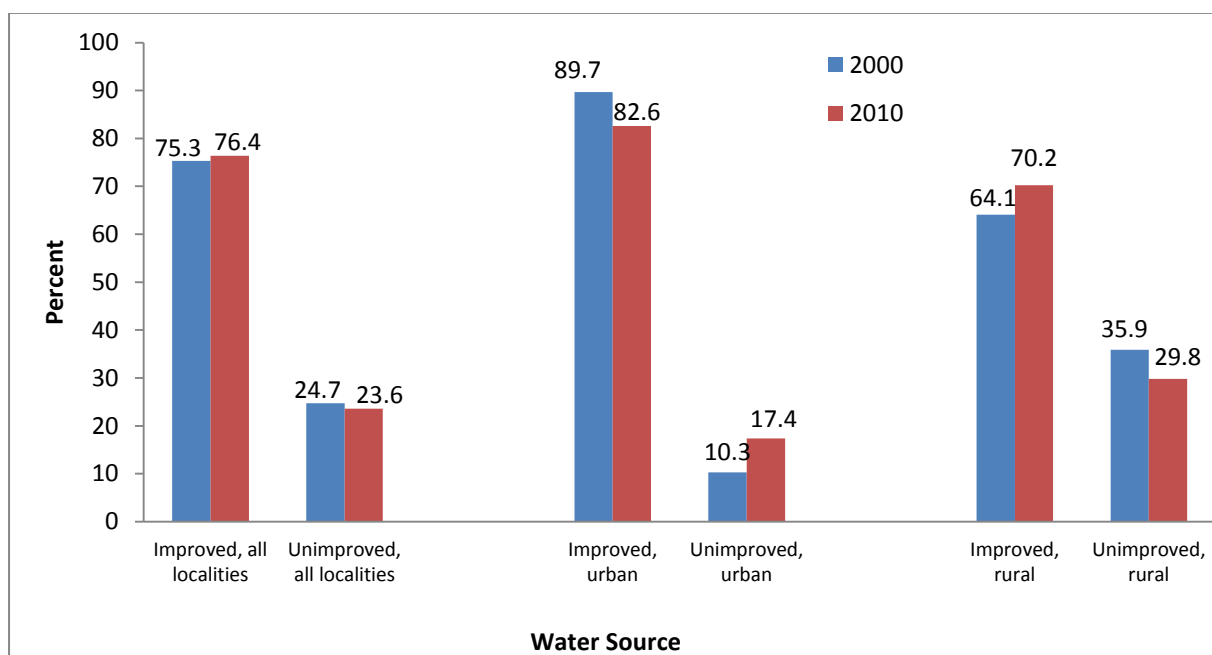
Target 7.C: Halve, by 2015, the proportion of people without sustainable access to safe drinking water and basic sanitation

Indicators: 7.1 Proportion of population using an improved drinking water source

Ghana has made considerable progress towards achieving the MDG target of halving the proportion of population without sustainable access to safe drinking water. A recent UNDP Ghana report (2012) indicates that Ghana is on course to achieve the MDG target of reducing the proportion of Ghanaians without access to improved water sources to 22 percent by 2015, and indeed may even exceed it. The indicator measures the percentage of the population who use any of the following types of water supply for drinking: piped water, public tap, borehole or pump, protected well, protected spring or rainwater. Improved water sources do not include vendor-provided water, bottled water, tanker trucks or unprotected wells and springs. According to UN (2003), the indicator, improved water sources, is based on the assumption that improved sources are more likely to provide safe water, and that unsafe water is the direct cause of many diseases in developing countries (see appendix for the detailed classification of improved and unimproved water source).

The 2010 PHC result appears consistent with the previous survey result on improved water source, although progress seems to be slowing. Figure 3.25 shows that the proportion of the population with access to an improved source stands at 76.4 %, representing an increase of one percentage point from the 2000 PHC survey’s figure of 75.3 %. However, a comparison with the GDHS (2008) results (83.8 %) indicates a sharp decline of about 7.4 percentage point. The concern is that if this apparent decline is not checked, Ghana’s high hope of achieving this target may be dashed.

Figure 3.25: Proportion of population using an improved water source, 2000 and 2010

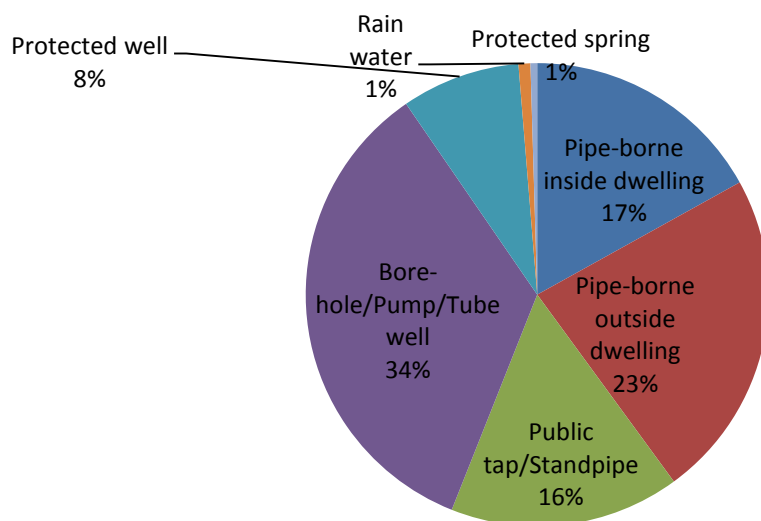


Source: Ghana Statistical Service, 2000 and 2010 Population and Housing Census

A detailed analysis of the improved water sources indicates, however, that a greater majority of the population (50%) still rely on bore-hole/pump/tube well (34%) or public tap/standpipe (16%) water sources while approximately 40 percent of the population has access to pipe borne water either within dwelling (17%) or outside dwelling (23%). The latter result on the pipe-borne indicates a reduction from the 2000 PHC results, which stood at about 48 percent. Regarding unimproved water sources, Figure 3.36 shows that River/Streams dominate with 46 percent while Sachet water comes second with about 29 percent. A significant proportion of the population still depends on Unprotected well (10%) or Dugout/Pond/Lake (8%).

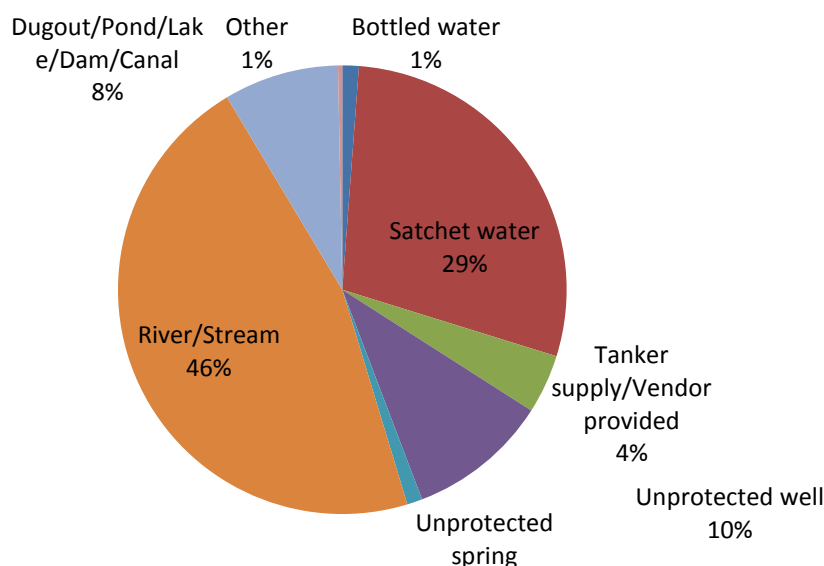
Figure 3.26: Proportion of population using water from the various improved and unimproved water sources

Improved water source



Source: Ghana Statistical Service, 2010 Population and Housing Census

Figure 3.27: Proportion of population using unimproved water source



Source: Ghana Statistical Service, 2010 Population and Housing Census

The data further show that urban dwellers experienced a fall in access to improved water source (from 89.9 % to 82.6 % in 2000 and 2010 respectively) largely on account of a surge in sachet water usage which is an unimproved source (Figure 3.27). This suggests a cause and effect – it could be that lack of access to an improved source means people are increasingly using sachet water. However, the proportion of rural dwellers using unimproved water source (29.8 %) remains much greater than their urban counterparts (17.4 %) (Table 3.11).

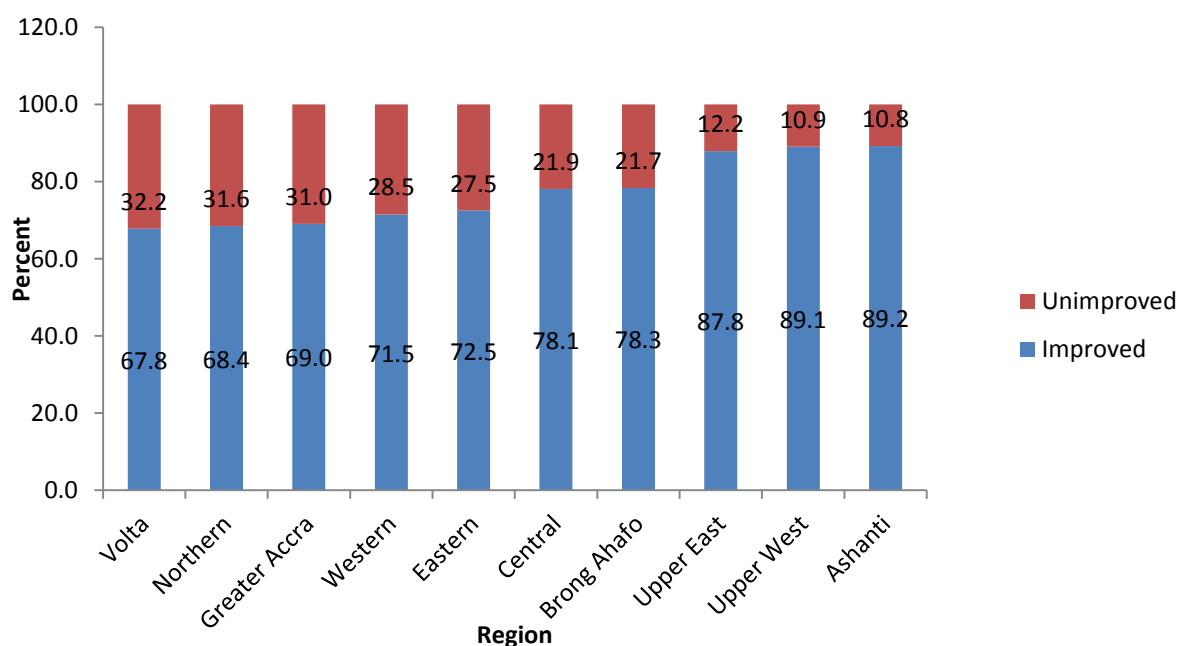
Table 3.11: Proportion of population using improved and unimproved water source by locality and region

Region	Improved Water		Unimproved Water	
	Urban	Rural	Urban	Rural
All region	82.6	70.2	17.4	29.8
Western	88.2	59.4	11.8	40.6
Central	80.0	76.5	20.0	23.5
Greater Accra	69.7	62.0	30.3	38.0
Volta	81.5	60.9	18.5	39.1
Eastern	81.5	65.7	18.5	34.3
Ashanti	93.2	83.2	6.8	16.8
Brong Ahafo	91.0	68.3	9.0	31.7
Northern	85.9	60.8	14.1	39.2
Upper East	92.2	86.7	7.8	13.3
Upper West	95.0	87.9	5.0	12.1

Source: Ghana Statistical Service, 2010 Population and Housing Census

With regard to regional variations, the Volta (67 %), the Northern (68.4 %) and the Greater Accra (69 %) regions are way below the national average (Figure 3.28). The Greater Accra Region, in particular, witnessed the greatest deterioration in access to improved water sources as the proportion of the population with access to improved water fell by about 22 percent between 2000 and 2010). However, the Northern Region recorded the most impressive growth rate of about 24 % during this period. The region with the highest access to improved water is the Ashanti Region, recording about 89.2 %, followed by Upper West (89.1 %), and then Upper East (87.8 %).

Figure 3.28: Proportion of the population with improved and unimproved water source by region



Source: Ghana Statistical Service, 2010 Population and Housing Census

Proportion of population using an improved sanitation facility

Sanitation continues to pose a serious challenge to the country. It is believed that poor sanitation costs the economy of Ghana about \$290 million per year according to a desk study carried out by the Water and Sanitation Program (WSP, 2012). This sum is the equivalent of US\$12 per person in Ghana per year or 1.6 percent of the national Gross Domestic Product (GDP). Although, some progress has been made over the last few years, this has been slow, and the MDG target of 53 percent of the population having access to an improved sanitation facility by 2015 appears unlikely to be achieved. According to data from the Sanitation Directorate of the Ministry of Local Government and Rural Development, the national coverage for improved sanitation stood at 14 percent as at 2011, after stagnating at 13 percent for three consecutive years (see Table 3.12). The implication of this is an additional one million, two hundred thousand people will need to have access to or use an improved sanitation facility each year till the target date of 2015. Put differently, the gap suggests that there must be approximately five times increase in coverage to be able to achieve the MDG target (UNDP, 2012).

The results from the 2010 PHC appear to confirm the above results. Using the UN MDG approved definition for improved sanitation; the proportion of the country's population with access to improved sanitation is 13.6 percent. The improved sanitation is referred to as the percentage of the population with access to facilities that hygienically separate human excreta from human, animal and insect contact. (Appendix 13 shows the classification of improved and unimproved sanitation). Facilities such as sewers or septic tanks, pour-flush latrines and simple pit or ventilated improved pit latrines are assumed to be adequate, provided that they are not public, according to the World Health Organization and United Nations Children's Fund's Global Water Supply and Sanitation Assessment 2000 Report. To be effective, facilities must be correctly constructed and properly maintained. The rationale is that good sanitation is important for urban and rural populations, but the risks are greater in urban areas where it is more difficult to avoid contact with waste.

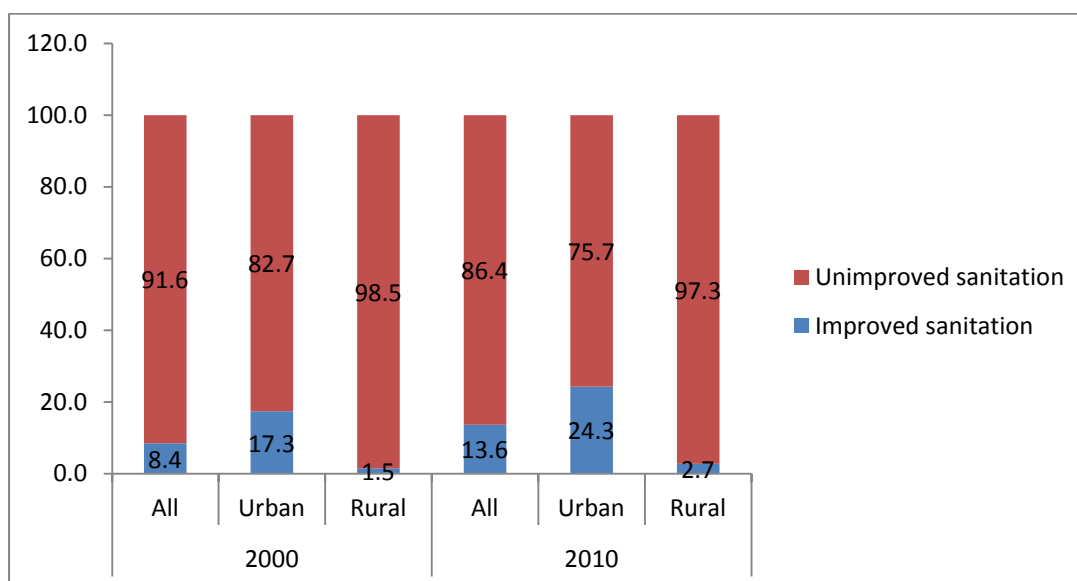
Table 3.12: Trends in national coverage of improved sanitation, 2008-2011

	2008	2009	2010	2011
% of popn with access to improved sanitation services	13	13	13	14
Estimated proportion of solid waste generated properly disposed off (major towns and cities)	40	40	40	40

Source: Sanitation Directorate of the Ministry of Local Government and Rural Development, 2011

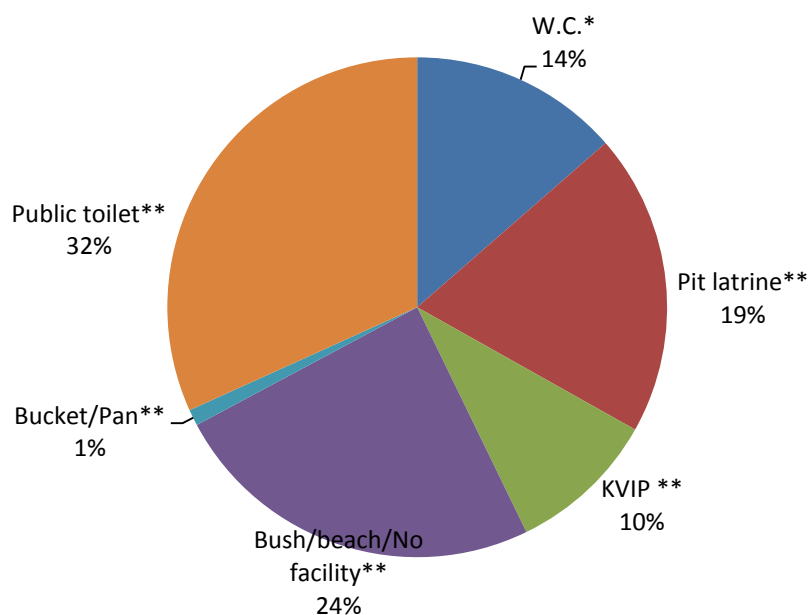
Using a very conservative definition of improved sanitation to be access to private water closet (WC), Figure 3.29 shows the entire population with access to an improved sanitation facility, is 14 percent compared with 8.4 percent in 2000. The remaining unimproved sanitation facilities, constituting about 86 %, include public toilet (32%), no facility, bush or beach (24%), pit latrine (19%) and KVIP (10%).

Figure 3.29: Proportion of the population with access to improved and unimproved sanitation by locality, 2000 and 2010



Source: Ghana Statistical Service, 2000 and 2010 Population and Housing Census

Figure 3.30: Improved and unimproved toilet facilities



Source: Ghana Statistical Service, 2010 Population and Housing Census

Note: ‘*’ indicates improved facility, ‘**’ indicates unimproved facility

Compared to the 2000 PHC data, improved sanitation has only increased slightly by over five percentage points over a decade. With regard to usage of unimproved sanitation facilities, the use of Pit latrine and Bucket/pan have reduced substantially from 22.3 percent and 3.6 percent in 2000 to 19.5 percent and 0.6 percent in 2010 respectively (Figure 3.30). However, the proportion of the population with no facility or that defecate in bushes or at the beaches, those using KVIP and Public toilets increased between the one to three percentage points from the 2000 figures. In the rural areas, Table 3.13 shows that only about 2.7 percent of the

population used W.C. as against 24 percent of their urban counterparts. The results further indicate that the use of KVIP and Public toilets has increased in both urban and rural areas while the use of Bucket/pan is almost phasing out in both localities. It is also significant to note that more than 38 percent of the rural population do not have any toilet facility at all or defecate in the bushes or at the beaches – an increase of six percentage points from 2000.

Table 3.13: Proportion of population using toilet facility by locality, 2000 and 2010

	2000			2010		
	All localities	Urban	Rural	All localities	Urban	Rural
No facilities (bush/beach/field)	23.4	11.3	32.8	24.4	10.8	38.2
W.C.	8.4	17.3	1.5	13.6	24.3	2.7
Pit latrine	22.3	12.4	30.0	19.5	13.5	25.7
KVIP	6.6	9.7	4.2	9.7	12.6	6.7
Bucket/Pan	3.6	6.4	1.4	0.6	1.1	0.2
Public toilet (WC/KVIP/Pit/Pan etc)	28.9	35.8	23.6	31.8	37.3	26.1
Facility in another house	6.5	6.8	6.3	N.A	N.A	N.A
Other	0.2	0.2	0.2	0.4	0.4	0.4
Total	100.0	100.0	100.0	100.0	100.0	100.0

Source: Ghana Statistical Service, 2000 and 2010 Population and Housing Census

The differences are even more pronounced at the regional levels. For example, Table 3.14 shows that while the two most populous regions, the Greater Accra (32.3 %) and Ashanti (22.3%) recorded the highest access to improved sanitation, the three northern regions, Northern (1.5%), Upper East (2.4%) and Upper West (2.2%), recorded rates that were far lower than the national average. In fact, the Northern Region's access to improved sanitation actually deteriorated from the 2000 figure of 1.9 percent. The regions that recorded the largest improvement were the Volta, the Brong Ahafo and Eastern regions.

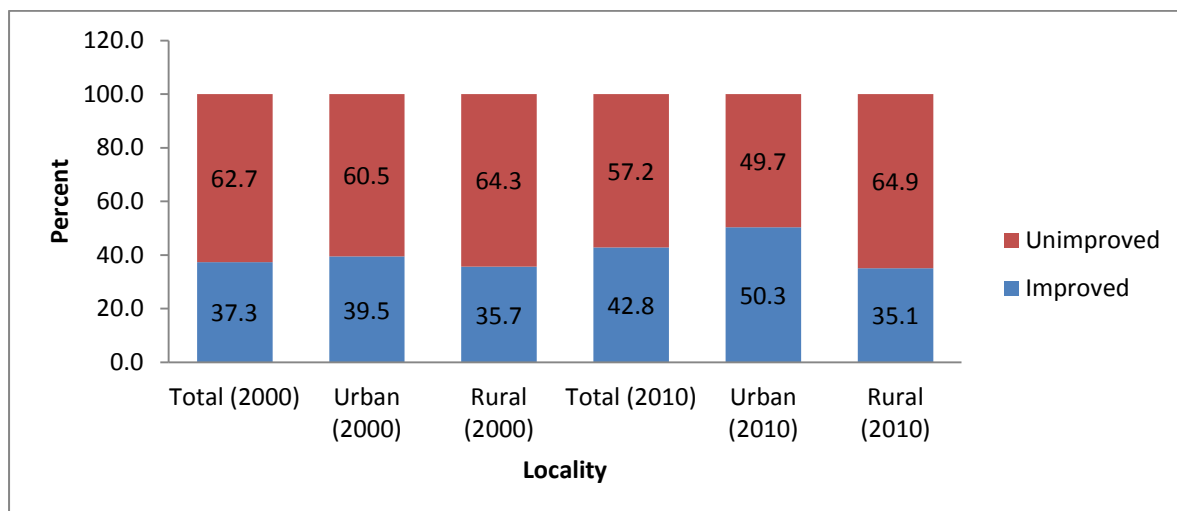
Table 3.14: Proportion of the population with access to improved (WC) sanitation by locality and region

Region	2000			2010			Growth Rate (2000 & 2010)
	All	Urban	Rural	All	Urban	Rural	
All Regions	8.4	17.3	1.5	13.6	24.3	2.7	61.5
Western	7.0	15.6	2.1	12.2	25.4	2.7	75.1
Central	4.8	10.5	1.4	8.4	14.5	3.2	75.1
Gr. Accra	24.6	26.6	10.2	32.3	34.0	15.9	31.2
Volta	2.4	6.9	0.7	5.2	12.3	1.6	116.6
Eastern	4.0	9.5	1.2	7.9	15.1	2.5	96.8
Ashanti	11.9	21.9	1.3	22.3	33.8	4.8	88.1
Brong Ahafo	2.8	6.2	0.8	5.6	10.6	1.7	101.3
Northern	1.9	4.0	1.1	1.5	3.5	0.6	-22.3
Upper East	2.0	7.4	1.0	2.4	8.5	0.8	20.5
Upper West	2.1	7.4	0.9	2.2	9.2	0.8	3.9

Source: Ghana Statistical Service, 2000 and 2010 Population and Housing Census

As previously mentioned, it is noteworthy that the definition for improved sanitation has so far been restricted narrowly to access to WC in order to be consistent with the previous reports. However, if we are to go strictly by the WHO definition as previously mentioned (and also as outlined in Appendix 13), the 2010 PHC data suggest that improved sanitation is actually itching closer to the 2015 MDG target. Defined as the population with access to WC, KVIP and Pit latrine, provided they are not public, improved sanitation is 42.8 percent, an increase of about six percentage points from the 2000 figure, as shown in Figure 3.31 below. The improvement was largely attributed to the phasing out of bucket/pan latrines and the increase in KVIP in the urban areas, as no significant change was recorded in the rural areas.

Figure 3.31: Proportion of the population with access to improved and unimproved sanitation by locality, 2000 and 2010

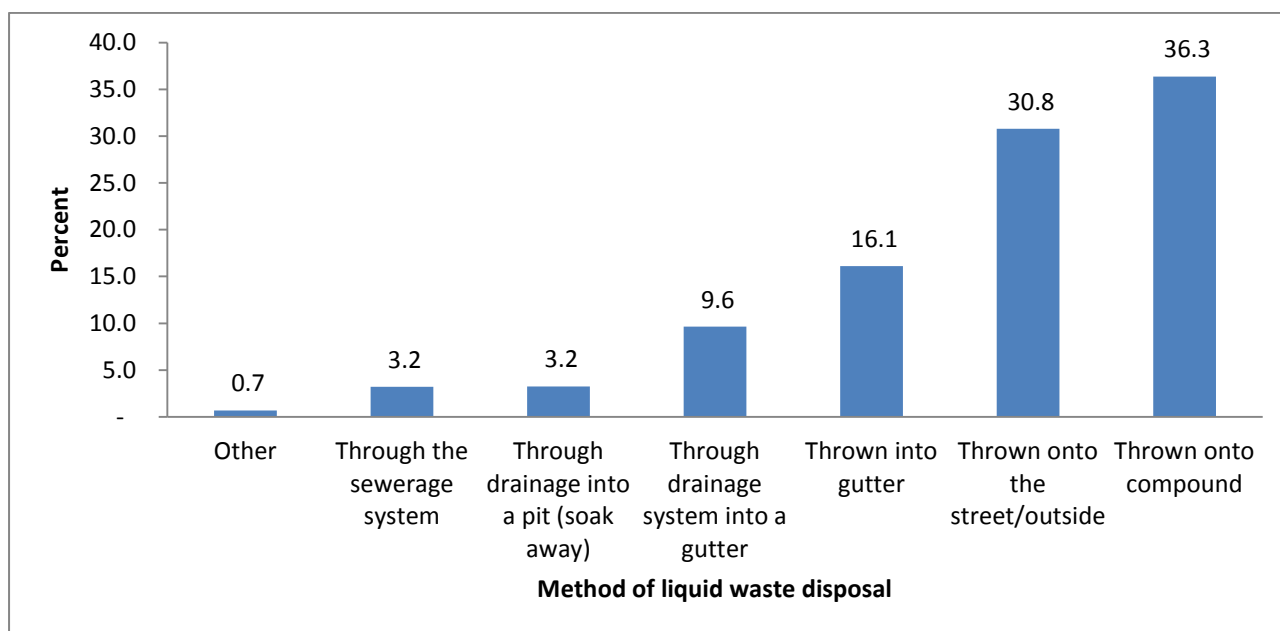


Source: Ghana Statistical Service, 2000 and 2010 Population and Housing Census

Liquid and Solid Waste Disposal

A further examination of the 2010 PHC data reveal that the disposal of liquid and solid wastes still remain a great challenge for the country. Figure 3.32 shows that more than 67 percent of the population disposed of their liquid wastes either throwing them onto the street/outside (30.8%) or onto their compounds (36.3%). As a matter of fact, only about 26 percent of the entire population throws their liquid wastes into either the gutter (16.1%) or the drainage into gutter (9.6%) while the remaining six percent throw the waste into the sewage or the soak away system.

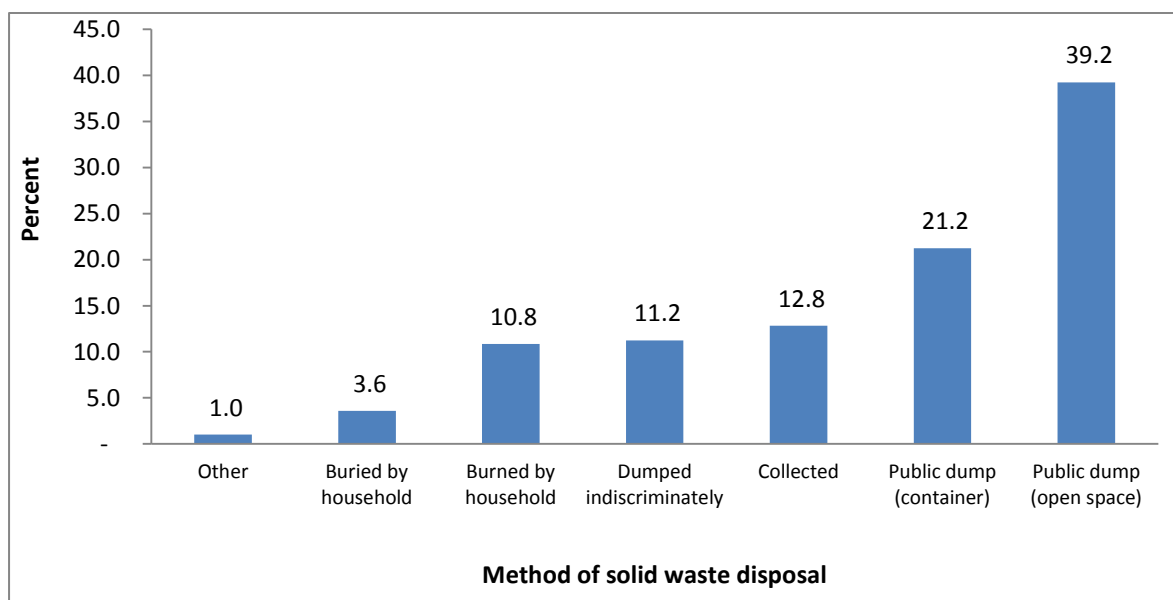
Figure 3.32: Proportion of the population disposing liquid waste by method of disposal



Source: Ghana Statistical Service, 2010 Population and Housing Census

Regarding solid waste disposal, more than 50 percent of the population disposed off it either by dumping them in an open space (39.2%) or by dumping them indiscriminately (11.2%). A container dumping and collection by waste collectors, which mainly occurred in the urban areas, were 21.2 percent and 12.8 percent respectively. A significant proportion of the population also burned (10.8%) or buried (3.6%). (Figure 3.33)

Figure 3.33: Proportion of population disposing solid waste by method



Source: Ghana Statistical Service, 2010 Population and Housing Census

Key Policy Measures and Challenges

Several policy interventions have been introduced in the last decade or so by government with support from its development partners to improve access to safe water and sanitation in both urban and rural areas of the country. Access to safe water, sanitation and the observation

of good hygiene practices for improving the health status of the people is of critical concern to Government. The Government believes that a healthy population is not only an asset by itself, but also facilitates sustained poverty reduction and socio-economic growth.

The policy objectives of the erstwhile GPRS II and the current GSGDA are to address issues such as the following: inadequate access to quality and affordable water; poor water resource management; inadequate access to sanitation facilities and poor sanitation service delivery; inaccessible and unfriendly environmental, water and sanitation facilities; poor environmental sanitation; poor hygiene practices and inadequate hygiene education; and inadequate financing of environmental sanitation services. Ministry of Water Resources, Works and Housing (MWRWH) working through the Community Water and Sanitation Agency (CWSA) in the rural areas and the Ghana Water Company in the urban areas have been put in place to ensure the realisation of government's policy on water and sanitation. With regard to the provision of safe drinking water, huge investments have been made to either build or rehabilitate water treatment plants at the district and regional levels which have improved significantly water delivery system in the country. Several NGOs and DPs have been in the forefront of providing boreholes and public stand pipes in many rural communities particularly in the northern parts of the country.

Access to improved sanitation has also received even greater attention in recent times. This includes initiatives such as the MDG Acceleration Framework (MAF) for Sanitation in order to fast track the attainment of MDG 7C by 2015; the Coastal Development Programme aimed at keeping the coastal line clean; the establishment of the Urban Environmental Sanitation Project, involving the construction of primary storm water drains in various places across the country to improve sanitation and ensure sustainable environment; and the introduction of Sanitation Guards under the National Youth Employment Programme to assist Environmental Health Officers in intensifying education and enforcing sanitation laws.

Challenges

Although the MDG target on access to an improved water source appears to be on track, the increase from 2000 is marginal and there is also a possible indication of a decline given the 2008 GDHS results. This should be a matter of critical concern to the Government. In particular, the fast pace of urbanisation and the need to meet the growing demand for water for consumption, industry and commerce, remain a challenge. There also exist substantial regional variations in access to safe water which needs to be addressed.

The challenges facing the country's bid to meet the MDG 7 target on sanitation is enormous and require an urgent multi-stakeholder action plan to address them. Lack of toilet facilities in most homes across the country is a major challenge despite an increase in KVIP in the last decades. Open defecations ("known popularly as "free range") at landfills, in gutters and along the beaches, particularly among the rural poor have become serious health hazards.

A major problem with waste management in Ghana, specifically in the regional capital cities like Accra and Kumasi is the lack of appropriate dumping sites. In Accra, in particular, whilst rubbish continues to pile-up at open landfill sites in the Weija-Oblogo disused quarry and the Teshie-Nungua site, residents around Kwabenya protest the construction of a new managed facility. Moreover, lack of resources and logistics compound the problem in most of the big cities particularly Accra and Kumasi. There are not enough waste containers or waste vehicles - the metropolitan assemblies are simply overwhelmed with the amount of refuse being generated and indiscriminately disposed of. It is acknowledged that whilst institutions

such as Zoomlion are assisting to clean up, the delays in clearing up piled-up refuse and the attitudes of residents were hampering effective garbage disposal efforts.

In sum, the challenges facing access to improved sanitation including solid waste disposal include the following:

- poor development planning/poor infrastructure (population growing faster than waste management development)
- inadequate funding for logistics, infrastructure and landfills
- attitudes of the general public towards sanitation
- ineffective coordination of sanitation delivery agencies at the regional and district levels.

Target 7.D: By 2020, to have achieved a significant improvement in the lives of at least 100 million slum dwellers

Indicators 7.10: Proportion of urban population living in slums

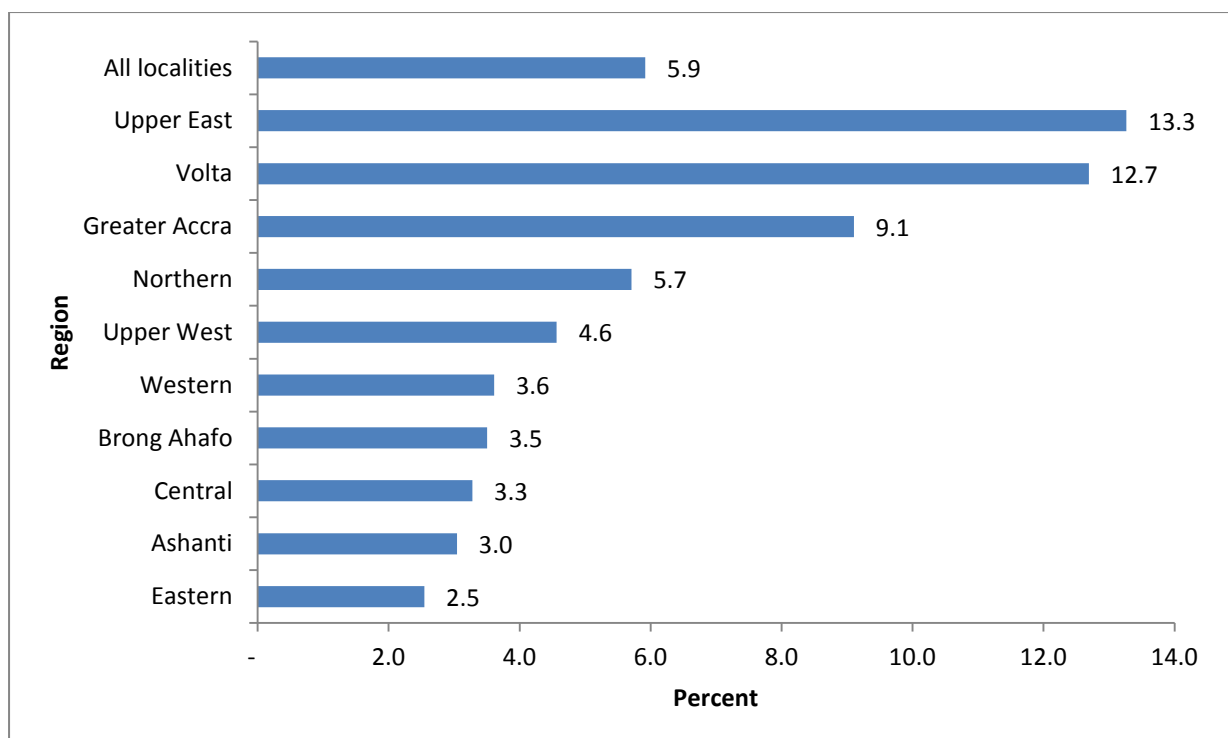
UN-Habitat (2003) defines a slum household as a group of individuals living under the same roof who lack one or more (in some cities, two or more) of the following conditions: security of tenure, structural quality and durability of dwellings, access to safe water, access to sanitation facilities and sufficient living area. The indicator is intended to provide an overview of the share of urban population living in conditions of poverty and physical and environmental deprivation. According to UNO (2008), the actual proportion of people living in slums is measured by a proxy, represented by the urban population living in households with at least one of the four characteristics: a) lack of access to improved water supply; b) lack of access to improved sanitation; c) overcrowding (3 or more persons per room); and dwellings made of non-durable material.

Ghana's progress towards achieving the MDG target 7 on reducing the proportion of the urban population living in slums, remains slow. The increase in population, the rapid rise in rural-urban migration, limited supply of land, and regulatory frameworks that do not address the needs of the urban poor has led to an increase in the creation of slums (NDPC, 2011). According to the 2010 census, the urban population grew to 12.5 million showing a growth rate of 4.2 percent per annum during 2000 to 2010. While this rapid urbanisation is occurring, it is estimated that Ghana's housing backlog or deficit currently stands at about 1.7 million units with the most vulnerable being the urban and rural poor. The MWRH further estimates that about 43 percent of urban dwellers in Ghana live in slums with 1.3 million living in Accra alone. In 2001, the slum population for Ghana was estimated at five million people growing at a rate of 1.83 percent per annum scattered in all the major cities in the country and was projected to reach 5.8 million by 2010. In terms of its share of the total population, the proportion of people living in slums in Ghana has declined consistently from 27.2 percent in 1990 to about 19.6 percent in 2008 (NDPC, 2011). In what follows, based on the latest 2010 PHC, we assess the slum and housing situation in Ghana, using the various proxies for slum as described above.

Proportion of Urban Population without Access to Secure Housing⁴

The indicator is intended to provide an overview of the share of urban population living in conditions of poverty and physical and environmental deprivation. One of the proxies for a slum is the proportion of urban population living in dwellings made of non-durable material or in makeshift houses. According to the 2010 PHC data on type of dwelling units, about six percent of the urban population live in houses classified as huts, improvised home (kiosk /container), quarters attached to a shop or uncompleted building. Figure 3.34 shows that the Upper West (13.3%), the Volta (12.7%) and the Greater Accra (9.1%) regions have the highest proportion of slum populations as per type of accommodation, while the Eastern (2.5%) and Ashanti regions (3.0%) have the least. This is based on the dwellings categorization mentioned earlier. However, according to MWRH (2011), the population with access to secure housing will increase by only six percent by 2020, and therefore if the current pattern continues, a significant proportion (about 14%) of the population will still be living in slum housing by 2020.

Figure 3.34: Percentage of population living in slums (type of accommodation), 2010



Source: Ghana Statistical Service, 2010 Population and Housing Census

In terms of tenure security or house holding arrangements, about 23 percent of urban population live in houses which can best be described as rent free (21.2%), perching (0.5%) or Squatting (0.4%).

⁴ The Ghana Statistical Services (GSS) defines a secure house in Ghana as “...a structurally separate and independent place of abode such that a person or group of persons can isolate themselves from the hazards of climate such as storms and the sun”. However, this type of housing is only a small proportion of dwelling units in the country which is broadly defined as “a specific area or space occupied by a particular household and therefore need not necessarily be the same as a house”.

Table 3.15: Proportion of households by tenure/holding arrangements by locality, 2000 and 2010

Type	2000			2010		
	All localities	Urban	Rural	All localities	Urban	Rural
Owning	57.4	41.4	71.7	47.2	32.7	65.5
Renting	22.1	35.8	9.9	31.1	45.0	13.5
Rent free	19.5	21.6	17.6	20.8	21.2	20.3
Perching	1.0	1.2	0.8	0.5	0.5	0.4
Squatting	N.A	N.A	N.A	0.3	0.4	0.1
Other	N.A	N.A	N.A	0.2	0.2	0.1
Total	100.0	100.0	100.0	100.0	100.0	100.0

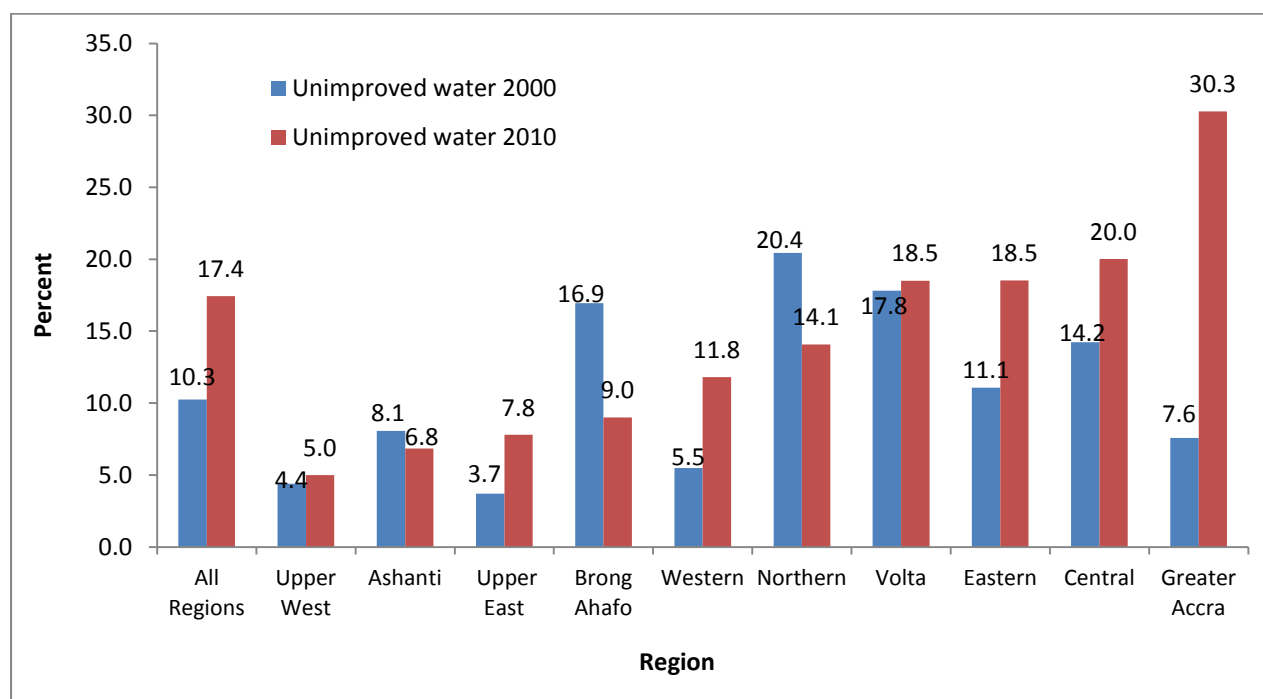
Source: Ghana Statistical Service, 2000 and 2010 Population and Housing Census

Note: Data not collected in 2000 on squatting and other

Proportion of Urban Population without access to Improved water supply or Improved Sanitation

According to the 2010 PHC data, 17.4 percent of the urban population does not have access to improved water sources. The situation has actually deteriorated over the last 10 years with 10.3 percent not having access in 2000. By this definition, the Greater Accra Region has the largest number of its urban population living in slums as about 30 percent do not have access to improved water sources (Figure 3.35).

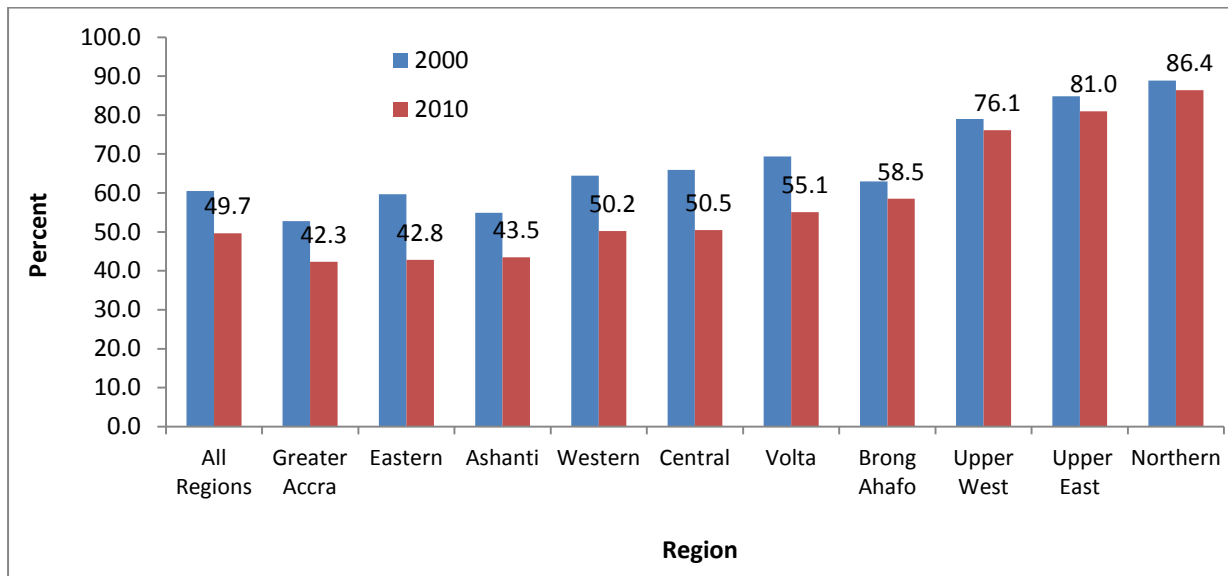
Figure 3.35: Proportion of urban population without access to improved water sources



Source: Ghana Statistical Service, 2000 and 2010 Population and Housing Census

If lack of access to improved sanitation is used as a proxy for slum, the proportion of the urban population living in slum conditions is even higher. Approximately 50 percent of the urban population has no access to improved sanitation such as WC, private KVIP and Pit latrine (Figure 3.36). By this definition, about 86.4 percent and 81 percent of Northern and Upper East regions' urban population live in slum conditions while for the Greater Accra, Eastern and Ashanti regions this is a little over 40 percent.

Figure 3.36: Proportion of urban population without access to improved sanitation



Source: Ghana Statistical Service, 2000 and 2010 Population and Housing Census

Number of Persons per Room

The 1996 United Nations Conference on Human Settlements stressed on the number of person per room as a measure of provision of sufficient living space and avoidance of overcrowding, particularly in the urban areas. Moreover, crowding, or housing density, is a key measure of housing quality. Also housing, apart from being shelter, often functions as an important place for social interaction and caring for children, thus ensuring respite from, social instability, insecurity and violence. The three most commonly used measures of crowding are persons per room, floor area per person and households per dwelling unit. The number of persons per room indicator is calculated by dividing the number of people who live in the household by the total number of rooms they occupy. A low indicator denotes low crowding (density), and it is considered overcrowding if there are three or more persons per room.

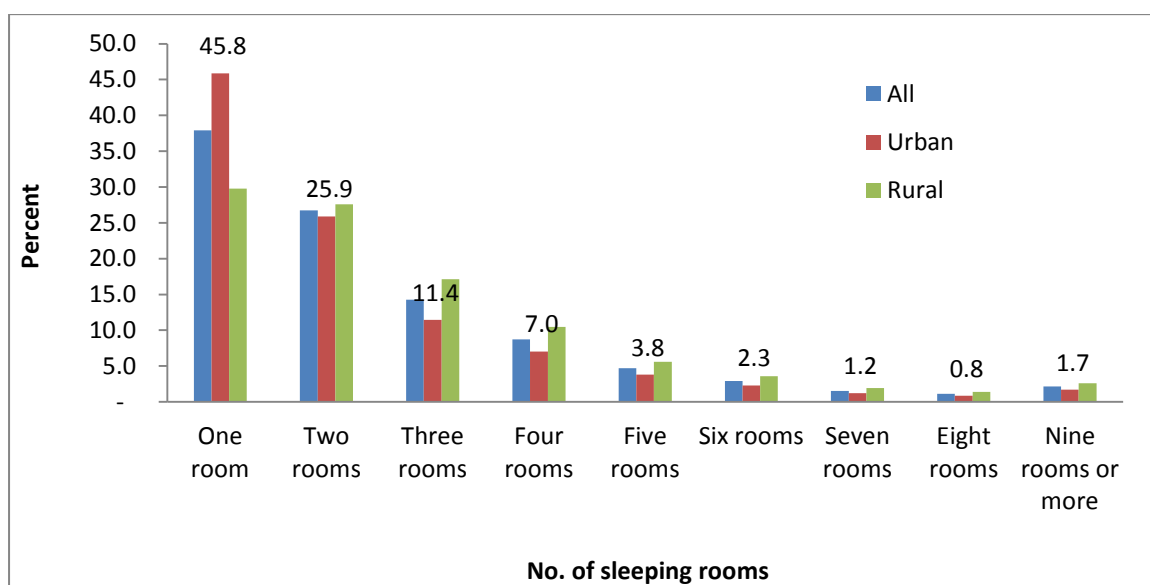
Table 3.16: Number of persons per sleeping rooms by locality, 2010

	All localities	Urban	Rural
All sleeping rooms	4.4	4.0	4.9
One room	3.1	3.0	3.2
Two rooms	4.8	4.7	5.1
Three rooms	6.2	5.9	6.5
Four rooms	7.2	6.7	7.6
Five rooms	8.2	7.6	8.6
Six rooms	9.0	8.5	9.4
Seven rooms	9.7	9.2	10.1
Eight rooms	10.4	10.1	10.7
Nine rooms or more	12.3	12.1	12.4

Source: Ghana Statistical Service, 2010 Population and Housing Census

The 2010 PHC results indicate that on the average more than three people sleep in one room nationwide (Table 3.16). The ratio appears to be lower in the urban areas (1:3) than in the rural area (1:3.2). However, in terms of numbers, Figure 3.37 shows that more than 45.8 percent of the urban population belongs to households that occupy only one sleeping room. The proportion significantly reduces as the number of households occupying more than one room increases. For example, while households occupying two bedrooms constitute about 26 percent of the urban population, only 7 percent are in four bed rooms.

Figure 3.37: Proportion of the urban population in number of sleeping rooms households occupy



Source: Ghana Statistical Service, 2010 Population and Housing Census

Key Policy Measures and Challenges

The implications of the rapid urbanization in the cities of Ghana, particularly Accra and Kumasi, is that governments and City Authorities will have difficulty of mobilizing adequate resources for development in order to reduce slum and shanty towns expanding so that the contribution of the cities towards economic growth, social development and alleviation of poverty will be strengthened. This therefore requires concerted efforts on the part of government and city authorities as well as all stakeholders to formulate policies that will have a lasting solution to the problem. It is in light of this that the Government of Ghana has introduced a number of interventions and initiatives to try to curb slumming in the big cities and to introduce affordable housing units across the country to close the huge housing deficit the country is facing. The specific policy objectives for housing in the Ghana Shared Growth and Development Agenda (GSGDA) include: (i) Increase in access to safe, adequate and affordable housing; (ii) Improve housing delivery in rural areas; (iii) Upgrade existing slums and prevent the occurrence of new ones.

To achieve the above set objectives, a National Housing Policy which has an overall goal of providing adequate, decent and affordable housing that is accessible and sustainable with infrastructural facilities using private enterprise, with government as facilitator or partner where appropriate has been prepared and is ready for submission to Cabinet. Furthermore, the Ministry of Water Resources Works and Housing with support from the UN-Habitat is in a process of launching a report known as the Ghana Housing Sector Profile that provides information and an in-depth understanding of the structure and functioning of the housing sector and the role housing policies play in influencing housing markets and the provision of affordable housing options.

Again, in order to ensure sustainable urban development through the upgrading of slum areas, the government initiated The Slum Upgrading Facility (SUF) in collaboration with the UN-Habitat in 2008. The SUF operated under the premise that slums can be upgraded successfully when slum dwellers are involved in the planning and design of upgrading projects and able to work collaboratively with a range of other key stakeholders. This policy intervention was immediately followed by the SUF establishing two Local Finance Facilities (LFF's) in 2009, which was managed under a joint secretariat called the Ghana Slum Upgrading Facility Secretariat located at the Institute of Local Government Studies. The two facilities have a series of projects that are being evaluated to ascertain their financial viability prior to approval for implementation.

Finally, some of the specific government interventions in the affordable housing scheme include the Government of Ghana Affordable Housing Programme comprising 4720 housing units which are at various stages of completion at Borteyman, Kpone, Asokore-Mampong, Koforidua, Tamale and Wa. The projects have been funded from HIPC and SSNIT sources. To date the total amount of money expended on all six (6) project sites is about GH¢70.0 million of which GH¢40.0 million is from HIPC sources and GH¢30.0 million loan facility from SSNIT.

Challenges

In spite of these government efforts, progress towards improving significantly the lives of slum dwellers by 2015 is very slow. The situation does not seem to be abating and conditions in slum areas in the country appear to be deteriorating with poor sanitation conditions, lack of access to potable water and spiraling makeshift housing units and squatters spreading in the

country's big cities. The challenges facing slum dwellings today are many, but we will focus on three, namely, institutional challenges, inadequate housing and poor utility service provision. We explain these in detail below:

- **Institutional:** The institutional challenges identified include weak enforcement of development control and planning regulations. Because of this weak institutional and regulatory framework, which often affect the management of land and planning, migrants settle anywhere for a long time without being noticed by the City Authorities, and they multiply in number until their existence begins to pose social and developmental challenges to the city and its inhabitants and the nation as a whole. This has created a situation where planning in the city is done mostly after development had taken place with forced ejections and demolitions. The ineffectiveness of the town and city planning agencies have been attributed to inadequate qualified and motivated staff to carry out their mandates of ensuring orderly development of the city.
- **Housing:** Difficulty in land acquisition and high cost of building materials as well as lack of financing have been identified as the major constraints slum dwellers and developers alike face. This situation does not compare favourably with the large household sizes in the slum communities, making it difficult for the city authorities to control slum growth since without the slum the people virtually have no alternative accommodation.
- **Utility Service Provisions:** The city authorities also face real challenge in their quest to ensure efficient supply of utilities like water, electricity, sanitation and roads to the slum communities due to their unauthorized locations and weak structures, as well as illegal connections and inaccessibility.

Goal 8: Develop a global partnership for development

Target 8.F: In cooperation with the private sector, make available the benefits of new technologies, especially information and communications

Indicators:

- 8.14: Telephone lines per 100 population
- 8.15: Cellular subscribers per 100 population
- 8.16: Internet users per 100 population

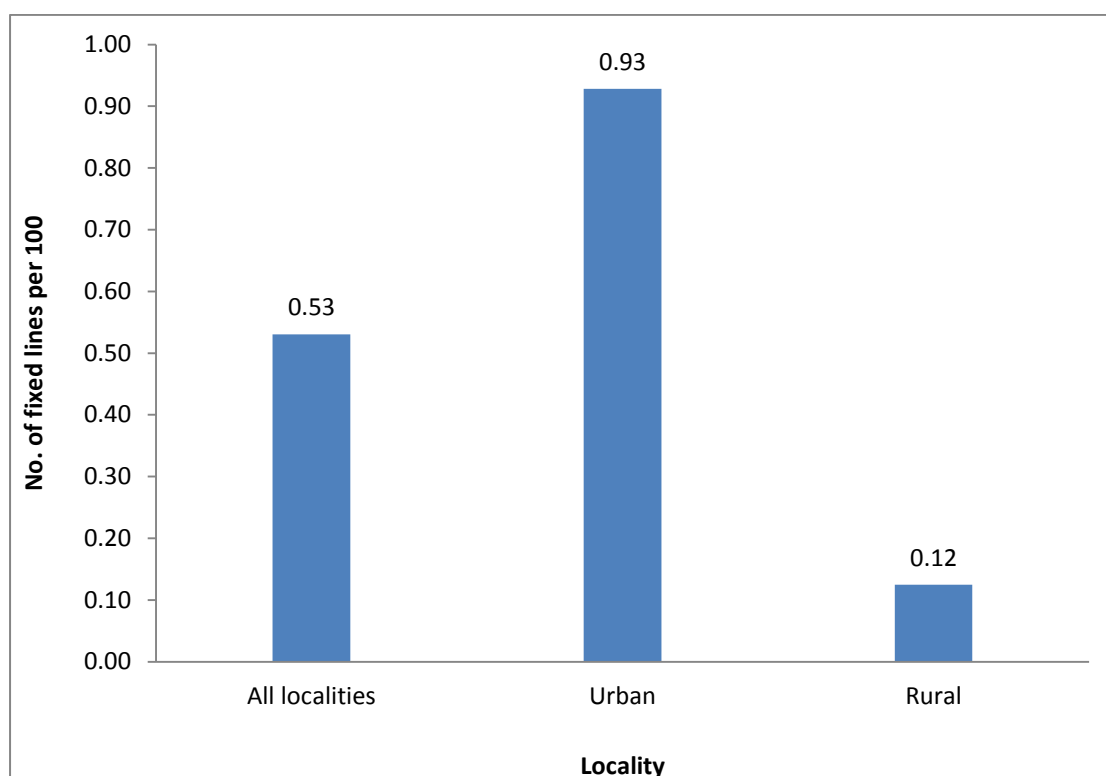
Ghana has experienced a phenomenal growth in Information Communication Technology (ICT) penetration in every facet of the economy - business, education, governance and agriculture - over the last two decades. The speed with which ICT is developing and its impact on socio-economic activities cannot be overemphasized as it is constantly growing in importance in terms of its contribution to GDP, and employment (mostly the youth). The drivers of the ICT industry currently are the mobile phones and internet services. According to the National Communication Authority (NCA), as at August 2012, the total cellular/mobile voice subscriber base in Ghana stood at 24,438,983, which is 98 percent of the Ghanaian population estimated at 25million. Moreover, the subscribers of internet service have been growing in leaps and bounds over time. It stood at 11 percent or 1,296,047 in 2009, rising to 16 percent in 2010. By 2011 there were over four million subscribers (a rate of 21%), according to the NCA.

The importance of these ICT indicators as tools for monitoring progress towards MDG, Goal 8 stem from the fact that effective communication among those involved in the development process is not possible without the necessary infrastructure (UNDP, 2003). It is widely acknowledged that personal computers and telephone lines allow people to exchange experiences and learn from each other, enabling higher returns on investment and avoiding problems of duplication or missing information. The use of ICT can make Governments more transparent, thereby reducing corruption and leading to better governance. Moreover, ICT can not only help people in rural areas find out about market prices and sell their products at a better price, but also it can also help to overcome traditional barriers to better education by making books available online and opening the door to e-learning. The following therefore assesses the country's progress towards the ICT target of Goal 8 using the three indicators, fixed telephone lines, cellular/mobile phones subscribers and internet subscribers per 100 population.

Indicator 8.14: Fixed telephone lines per 100 population

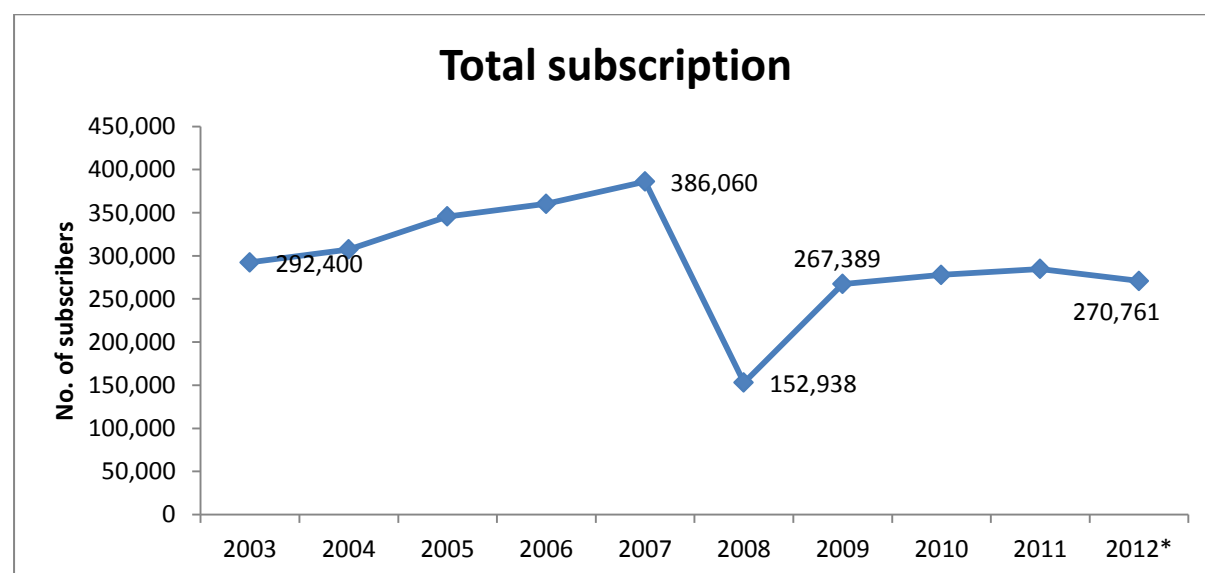
The indicator is measured as the total fixed telephone lines divided by the population and multiplied by 100 (UN, 2003). According to the 2010 PHC, the total number of households with fixed line is 127,694, implying that the number of fixed telephones (if we assumed that each household will have one fixed telephone line) per 100 population is 0.53. This minimal rate appears to be in line with figures recently released by NCA. According to NCA, fixed line subscriptions continued to decline, reaching 270,761 in August 2012, from over 289,000 in February 2012 (see Figure 3.39). With the estimated population of 25 million, it means fixed lines per 100 subscriptions are just 1.08. The discrepancy with the PHC figure may be due to the fact that the NCA figure includes both commercial telephone lines (i.e., in offices and institutions) and households while the PHC data captured only the latter. Figure 3.38 shows that fixed line usages are almost non-existence in the rural areas as only 0.12 of fixed lines per 100 population are available. The declining trend is, however, not too surprising as it is much more convenient and easy, if not cheaper, to own mobile phone now than fixed lines. The decline, may therefore be attributable more to a replacement of the fixed line in households with cellular phones which serve people's needs better than the fixed lines which are fast becoming irrelevant in homes.

Figure 3.38: Fixed telephone lines per 100 population



Source: Ghana Statistical Service, 2010 Population and Housing Census

Figure 3.39: Trends in national fixed lines subscriptions 2003-2012



Source: National Communication Authority

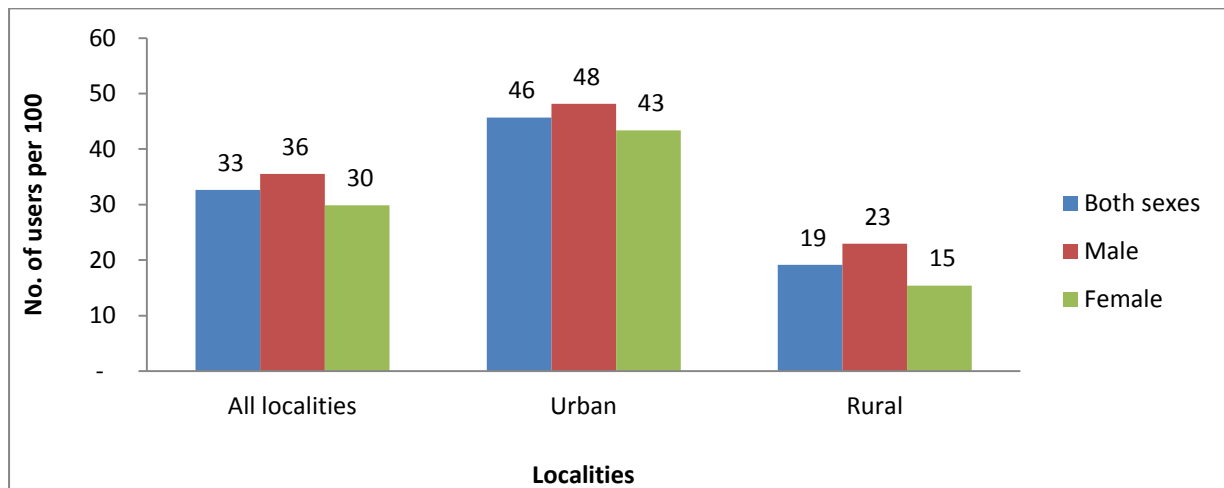
Note: "*" means data up to August 2012

Indicator 8.15: Cellular/mobile phone subscribers per 100 population

This is computed by dividing the total cellular subscribers by the population and multiplying by 100. As previously mentioned, mobile phone penetration is almost 98 percent in the

country. However, this does not necessarily mean over 24 million Ghanaians have mobile phone lines, because some individuals have more than one mobile line, while others do not have. This is somewhat manifested by the fact that the 2010 PHC data show a far less penetration rate. Figure 3.40 indicates that mobile phone subscription per 100 population as at 2010 is 33 percent. This figure is higher among males (36%) than their female counterparts (30%). The figure also reveals that rural penetration (19 per 100) is far less than in urban areas (46 per 100).

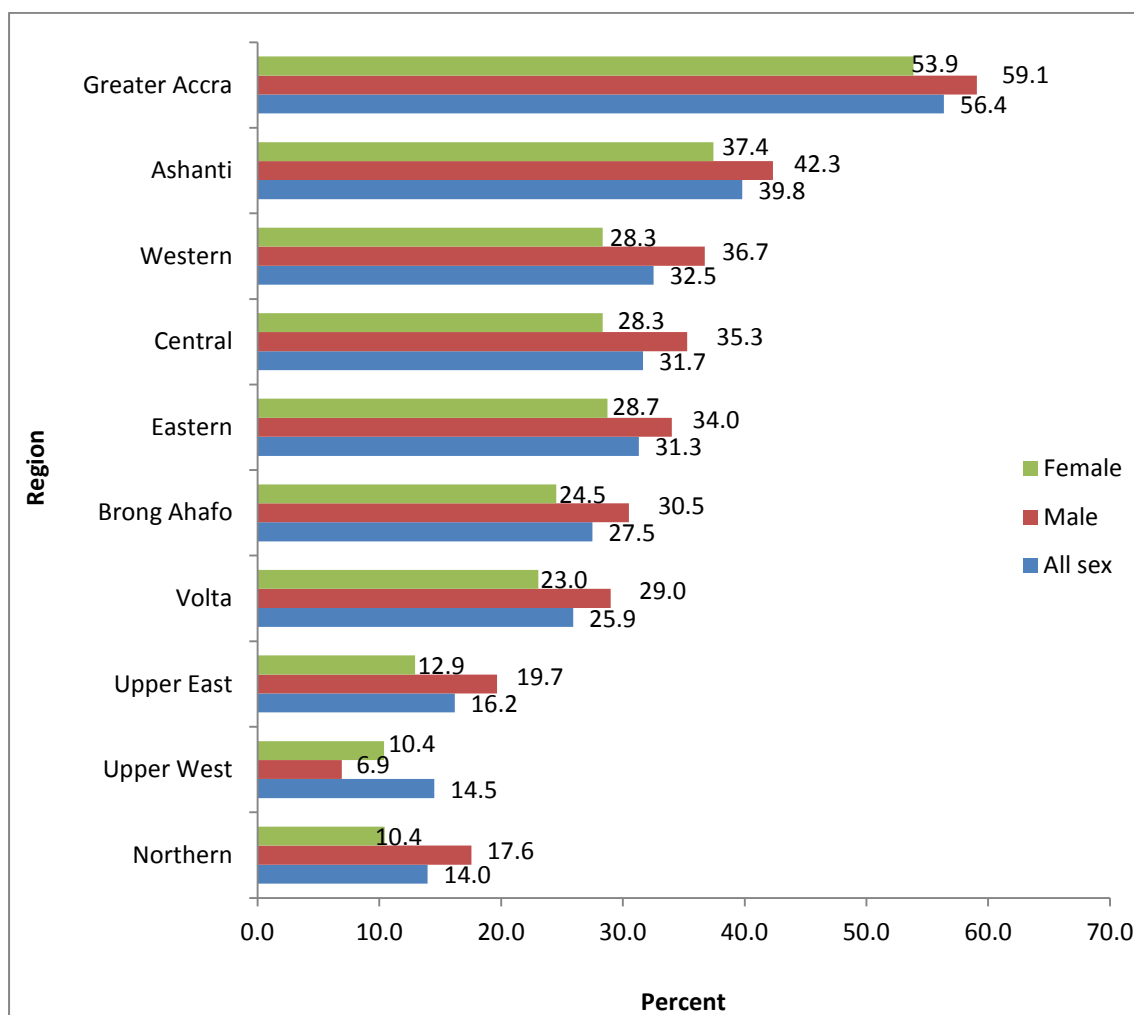
Figures 3.40: Mobile phone subscription per 100 population by sex and locality



Source: Ghana Statistical Service, 2010 Population and Housing Census

The disparities in mobile usage are much more pronounced at the regional level. While the Greater Accra Region has 56 subscriptions per 100 population, the Northern Region has only 14 subscriptions per 100 inhabitants. It is also noteworthy that although the Upper East Region comes next to the Northern region with only 14.5 subscription per 100 inhabitant, it is the only region where mobile penetration is higher among female (10.6 subscription per 100) than males (6.9 subscription per 100) (See Figure 3.41).

Figure 3.41: Mobile phone subscription per 100 population by region and sex

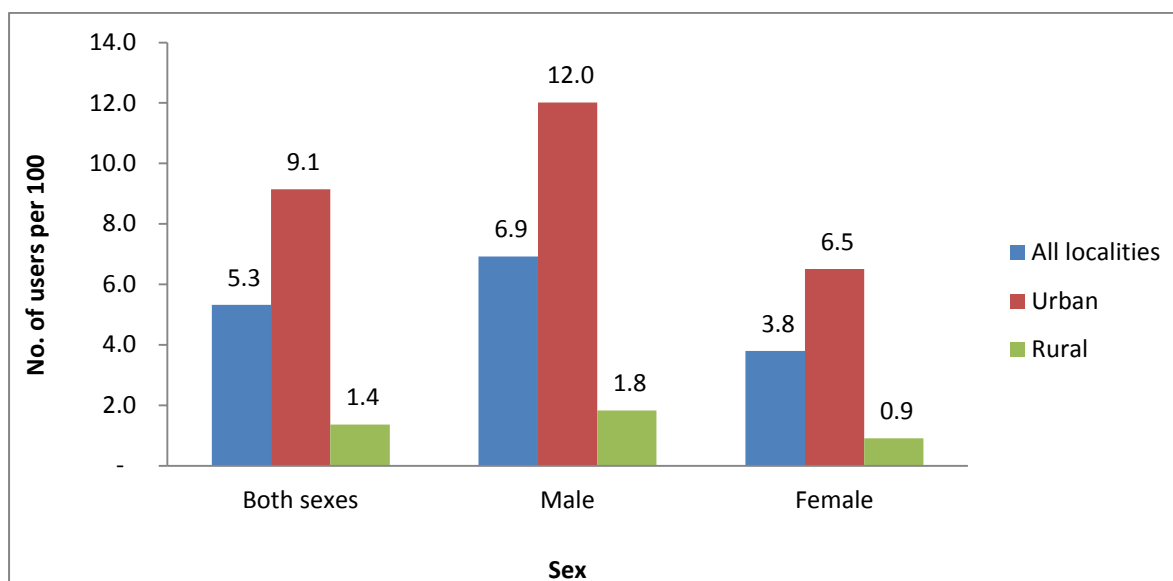


Source: Ghana Statistical Service, 2010 Population and Housing Census

Indicator 8.16: Internet users per 100 population

Like the previous indicators, internet users per 100 population is computed by dividing the total number of Internet users by the population and multiplying by 100. Although, internet usage access has experienced enormous growth, the rate of penetration remains very low. According to the 2010 PHC, internet subscription per 100 population stood at 5.3 (see Figure 3.42 below). Here again, urban usage surpasses rural usage by more than seven percentage point. Internet usage among females (3.8 subscriptions per 100) also appears to be much less than among their male counterparts (6.9 subscriptions per 100). The difference becomes greater for those in the urban areas. It is significant to note, however, that although the penetration appears much lower, it is consistent with data for Sub Saharan African where internet usage per 100 population is 6 as at 2008, that is, about one in almost 17 people are on line in developing countries (African Economic Outlook, 2012) Moreover, a distinction has to be made between subscribers and usage. Nowadays with the advent of mobile internet, one does not have to subscribe before having access or using internet. It is also important to note that access does not necessarily mean usage as people may have access but do not use. In any case, the rate might be much greater if these two are taken into consideration.

Figure 3.42: Internet usage per 100 population



Source: Ghana Statistical Service, 2010 Population and Housing Census

Key Policy Measures and Challenges

The Government of Ghana and other agencies including development partners and the private sector have over the years made several strides in initiating policies to develop the ICT infrastructure so as to bridge the digital divide between Ghana and the developed world. The main policy objectives for the information communication technology in GSGDA (2010- 13) are the promotion of rapid development and deployment of the ICT infrastructure, strengthening of the institutional and regulatory framework for managing the ICT sector, the promotion and use of ICT in all sectors of the economy. Key policy interventions in recent times include the following:

- The Ghana National ICT Development Policy (ICT4D) has been developed and passed by Parliament in 2003. It is a policy statement aimed at realizing the vision to transform Ghana into an information-rich knowledge-based society and economy through the development, deployment and exploitation of ICTs within the economy and society. The ICT policy has four year rolling plans and an operational life span of between 15 to 20 years. The 14 priority areas of the Policy concentrate on promoting rapid ICT physical infrastructure development, modernize agriculture and facilitate development of the private sector.
- Another prominent intervention is the development of a national fibre optic network called Voltacom Project by the nation's power hub; the Volta River Authority. A consolidated national gateway monitoring system was installed in 2010. This was done by Ministry of Communication through the National Communication Authority (NCA). The system was to help the sector accelerate the development of mobile telephony throughout Ghana and also create the environment for a competitive terrain to enhance the delivery of affordable ICT services. Under this sector, the Ministry supervised the implementation of the 2nd phase of the Fibre Backbone Project.
- The government in conjunction the National Information Technology Agency (NITA) pursued the e-Government network infrastructure project aimed at creating a platform for the use of shared services among the MDAs nationwide. It helped to facilitate

communication within Government. In this regard, 8 communication masts were constructed to facilitate the deployment of WIMAX.

- Again, the Kofi Annan ICT Centre of Excellence which is a joint Ghana/India project was established in 2003, through a partnership between the Government of Ghana and the Government of India. It is a state-of-the-art facility working to stimulate the growth of the ICT Sector in the Economic Community of West African States (ECOWAS) and provides an enabling environment for innovation, teaching and learning as well as practical research on the application of ICT4D in Africa to produce the human capacity needed for the emerging ICT Industry in Ghana and the Sub-region.
- The recently introduced Subscriber Identity Module (SIM) Card Registration is also another milestone achievement in the ICT sector. It involves the implementation of the policy on national registration of SIM Cards and at the end of June 2011, 85 percent of Ghanaian phone users have been properly registered.
- Introduction of the Mobile Number Portability (MNP): MNP, implemented in July 2011 by NCA, is a system that allows mobile phone users to move from one mobile network to another and still retain their original number.
- National Digital Broadcasting Migration - The National Digital Broadcasting Migration Implementation Committee has been inaugurated and the ministry is monitoring its activities to ensure the smooth migration process from analogue to digital terrestrial broadcasting in line with international standards. Ghana's compliance to international technical standards will be adopted by December 2014 ahead of the International deadline of 2015. The completion of the digital broadcasting migration will lead to improved choice and quality of service for consumers including better picture and sound quality, and more programme channels on one frequency. Since the channel will run on one frequency there will be spectrum release which will be resold for other telecom service. This will promote spectrum dividend for future use and generate a new revenue stream for government.

Challenges

Notwithstanding these, various initiatives and massive investments in ICT infrastructure by government and its partners, the sector is still faces a number of challenges. These include the following:

- Poor service delivery in recent times: the frequent network or connection lost by major mobile phone operator services remains a major concern by the regulator, NCA, and the general public.
- Inadequate penetration or expansion of internet services to SHS and JSS across the country.
- Lack of capacity at the NCA: The regulator, the NCA, improving and building its capacity to be more visible and credible and acquired the regulatory skills to effectively guide the growth of the sector.
- The regulator should intervene in the Internet market to engender dynamism to promote growth of the industry. The Internet market should be made competitive

so as to attract adequate foreign investment, buy-ups and mergers as epitomised in the mobile telephone market.

- Unavailability of standards for mast construction.
- Infrastructure to bring access to rural areas, including for example electricity for charging phones/ computers etc and infrastructure to bring internet and to increase mobile phone coverage.

Chapter Four

Conclusion and Recommendations

4.1 Introduction

Ghana has made considerable progress in achieving the MDG. Yet substantial challenges remain to achieve most of the target by 2015. The overall assessment of Ghana's progress toward the MDGs reveals that, while progress has generally been positive, performance has been mixed across indicators, regions and localities. While significant progress has been made in some key MDG targets such as poverty eradication, education and access to safe water, the overall pace of progress, based on current trends, is insufficient to achieve many of MDGs such as under-five, infant and maternal mortalities as well as improved sanitation facilities by the target date of 2015. With only just about two (2) years to the target year, a lot more efforts are needed to reduce the current worrying levels of some of these targets. It is well acknowledged that most of these targets, no matter the interventions by government and other stakeholders, will not be achieved by 2015. In what follows we discuss some policy recommendation that will be needed to improve on the targets discussed so far in this report.

4.2 Decent and Sustainable Employment Generation

Since the start of the Structural Adjustment Programme, the emphasis of governments has been on how to grow Ghana's economy. The belief is that higher economic growth will engender higher incomes because of high employments that will ensue. The reality however is that the unprecedented growth rates like the periods of the SAP in the 1980s and in recent times had failed to create decent employment for Ghanaians. The quality of growth and the distributional effect of the growth process are critical, if the unemployment in the country, particularly among the youth, and the vulnerable nature of many jobs within the informal sector are to reduce.

In particular, government must see productive and decent employment generation as the best and sustainable means of alleviating poverty in Ghana. Consequently, treating employment generation as a core of government policies must be a priority. This calls for a review of current macroeconomic and sectoral policy with the introduction of targeted and more employment oriented initiatives to reverse the problem of weak employment friendly growth. Measures to sustain macroeconomic stability must be complemented with targeted interventions towards the promotion of private sector development. This includes rapid infrastructural development, review of external trade policies to support the growth of domestic manufacturing enterprise, and measures to ensure the flow of affordable credit to SMEs.

Again, there should be strategies for promoting more decent and sustainable jobs in both the formal and informal economies. This should include supporting selected industrial products to be produced domestically in labour-intensive environment (e.g. construction and building materials, agricultural equipment, motor vehicles, etc); value addition and processing of primary products rather than exporting in their raw state, expanding technical and vocational education and training systems like ICESS and Competency Based Training (CBT) to provide resources (inputs); and offering technical support for SMEs, as well as promoting entrepreneurial development.

4.3 Universal Basic Education

The slowdown of enrolment growth at all levels of basic education reflects the significant challenge the education sector faces in expanding access to the remaining out of school children and meeting the universal basic education target of MDG 2. Alternative approaches need to be devised to enroll this hard to reach group. This involves strengthening the capitation grant, expanding coverage of the school feeding programme to other deprived areas, providing free school uniform and exercise books; construction/rehabilitation of schools and classrooms, particularly those under trees, and ensuring the full implementation of the FCUBE programme to ease some of the cost of educational expenses on parents and guardians. And also improving access to schools (and understanding why pupils don't attend). On infrastructure and safety -emphasis should be on separate toilet facilities for boys and girls etc; and finally ensuring properly qualified staff and that teaching staff are present, improved quality of teaching.

4.4 Promoting Gender Equality and Women Empowerment

Over the last two decades or so women empowerment and gender mainstreaming into socio-economic development of the country has received enormous attention. However, significant challenges still remain for women's participation in access to education particularly at the secondary and tertiary levels, governance and top management positions. The low share of women in non-agriculture wage employment and their underrepresentation in national Parliament and other political and senior management level positions require stronger policy effort to improve gender equality and promote women empowerment. Introducing such support scheme as tax rebate for employers who offer the mandatory three month paid maternity leave for women as stipulated in the Labour Act (Act 651) will help promote access to wage employment by women. In addition, political parties must be encouraged to reserve a proportion of "safe parliamentary seats" for only women to compete as a means to getting more women into Parliament. That will in turn facilitate the appointment of more women into government. Besides, government must increase its commitment in promoting women's involvement in decision making at the local level by appointing more women to the DCE/MCEs positions.

Moreover, women empowerment should also go beyond politics and a lot more emphasis should be put on economic empowerment as well. In particular, access to finance, is one area where most women have been marginalised and excluded. This is because financial imperfections, such as information and transactions costs, may be especially binding on the poor women who lack collateral and credit histories. Lack of inclusive financial system suggests that poor women may be forced to rely on an alternative high cost informal credit market or on their own internally generated meagre resources. Thus, their ability to invest in their children's education, build profitable enterprises, or actively participate in and benefit from the growing opportunities is limited. Therefore ensuring that women have equal access to affordable finance will enhance income earning capacity, and they will generally enjoy an improved quality of life.

4.5 Maternal and Infant Mortality

The maternal mortality rate in the country today is unacceptable and unnecessary. It therefore requires a doubling of efforts from government and all stakeholders. A national Action Campaign should be declared around the themes that were recently suggested by Ghana MAF

(2010) which are likely to have a greater impact on maternal health both within the short-run and the long-run. These three key interventions are family planning (FP); skilled delivery services (SD); and emergency obstetrics and neonatal care (EmONC). It has recently emerged that despite the focus on FP in recent past, the number of FP acceptors decreased by almost 25 percent in 2010 compared to 2009, and in 2010 it was at 23.5 percent (Ghana Health Review, 2010). FP is an essential component of the strategy to reach the MDGs, and it is recommended that education on family planning should be stepped up as a medium to long term measure and to introduce a FP indicator in the monitoring framework.

Moreover, transportation, distance and emergency referrals still remain a problem in many districts. The majority of hospitals across the country do not have ambulance services. Although it is well acknowledged that regional and district hospitals are well equipped to handle complicated labour cases, the main issue is how to timely transport women in labour to these facilities. Although the national ambulance service has been in place for some time now, its coverage is not only limited and unable to ensure district based services, but also it is said to be too expensive for poor families to bear. Additionally, the EmONC is being implemented in all 10 regions, but according to the Health Sector Review (2010), it is not yet at full complement of required resources (midwives, equipment). It is therefore recommended that in order to accelerate the achievement of MDG 5 by 2015, the ambulance services should be scaled up and made available in all district hospitals.

There is also an urgent need to carry out studies into the factors underlying voluntary self-exclusion that lead to low institutional deliveries, and adopt best local practices to encourage institutional deliveries. More specifically, research should focus on demand other than only on the supply side. Particularly, careful empirical analysis of why ANC, SBA and FP indicators have substantially decreased in some regions and districts such as Volta Region.

While we discuss reducing maternal deaths as Goal 5, it invariably links up with Goal 4 which is reducing Child Mortality. Women who attend ANC frequently and are delivered in a health facility assisted by skilled health personnel will be more likely to have a healthy child and have access to the routine national immunization for both mother and child. Thus efforts to encourage women to visit their health facilities and maternal health campaign in general should have a positive ripple effect on infant mortality rate. Besides, awareness creation to promote healthy and nutritious infant food, exclusive breast feeding in the first six months and immunization campaign should be intensified.

4.6 Improving Sanitation

The challenges facing the country's effort at meeting the MDG 7 target on sanitation are huge and require urgent multi-stakeholder action plan to address them. The country continues to face unhygienic conditions such as poor toilet facilities, liquid and solid waste disposal challenges as a result of poor development planning/poor infrastructure, inadequate funding for logistics, infrastructure and landfills and ineffective coordination of sanitation delivery agencies at the regional and district levels. Ghana therefore needs to improve on its strategies to expedite the progress towards MDG 7, especially sanitation. At the current pace of increase in the use of improved sanitation, the number of people in Ghana who would be without improved toilet facilities will be 18.7 million by 2015. Ghana has also developed another MAF for Sanitation in order to fast track the attainment of MDG 7C by 2015, dubbed "Go Sanitation Go" (GSG). The three key strategic intervention areas identified for improving basic sanitation under the MDG Acceleration Framework (MAF) are, scaling-up

Community-Led Total Sanitation (CLTS) country-wide, implementing decentralised treatment/disposal systems incorporating harvesting/re-use of biogas, and rolling out targeted Micro-finance credit scheme for household latrine construction. Government and development partners should work together to mobilise resources for the implementation of MAF for sanitation and other interventions.

There is also the urgent need to effect attitudinal and behavioural change in the people through extensive educational and awareness creation programmes of maintaining healthy lifestyles and good sanitary conditions.

4.7 Reliable ICT services

Although the country has witnessed a phenomenal growth in ICT usage, the nature of services provided by some of the telecom companies needs to be greatly improved. There is the need for the National Communication Authority to sign performance based agreements with these providers on month by month basis to ensure value for money for the growing users. And penalties should be imposed if such contracts are not observed to deter them from taking their unsuspecting clients for granted and ensure improved services.

4.8 Data for Planning, Monitoring and Evaluation

Finally, improved data and monitoring tools are crucial for devising appropriate policies and interventions needed to achieve the MDGs. Although some progress is being made, reliable statistics for monitoring development remain inadequate in the country. There is therefore the need for a more conscious effort on the part of government and development partners to take keen interest in investing in the production and publication of regular, accurate and timely data and statistics to facilitate effective planning, monitoring and evaluation of policy interventions and the progress towards MDGs and beyond. Building such capacity for an effective data gathering and M&E demands increased and well-coordinated financial and technical support from government and development partners.

Reference

- Ghana MAF (2010) “Country Action Plan for Maternal Health, 2010”, United Nations
- Ghana MAF (2011) “Go Sanitation Go: Country Action Plan for Sanitation, 2011”, United Nations
- Government of Ghana (2011) “Implementation of the Ghana Shared Growth and Development Agenda 2010-2013: 2010 Annual Progress Report”, National Development Planning Commission
- Government of Ghana, (2005) “Growth and poverty Reduction Strategy (GPRS II), 2006-2009”, Volume 1: Policy Framework
- Ghana Government, (2010) “Ghana Shared Growth and Development Agenda 2010-2013”
- Environmental Protection Agency (2007) “Ghana Environment Sector Study (GESS)” Accra
- GSS (2007) “Pattern and Trends of Poverty in Ghana 1991-2006”, Ghana Statistical Service
- ILO (2009) “Guide to the new Millennium Development Goals Employment Indicators, including the full set of Decent Work Indicators” International Labour Office, Geneva, available at <http://www.ilo.org/trends>
- NDPC (2010) “2008 Ghana Millennium Development Goals Report”, Republic of Ghana
- Overbosch, G. B., Nsowah-Nuamah, N. Van Den Boom, G and Damnyag, L. (2004), “Determinants of Antenatal Care Use in Ghana, Journal African Economics, 13: 277-301
- Sparreboom and Baah-Boateng (2011) “Ghana – Economic Growth and Better Labour Market outcomes, but challenges remain” in Sparreboom and Albee (ed.) “Towards Decent Work in sub-Saharan Africa: Monitoring MDG Employment Indicators” , International Labour office, Geneva
- UNICEF (2010) “Analysis of Out of School Children in Ghana: Ghana Demographic and Health Survey, GDHS” 2003-2008
- United Nations (2011) “The Millennium Development Goals Report 2011”, United Nations, New York
- United Nations Development Group (2003) “Indicators for Monitoring the Millennium Development Goals: Definitions, Rationale, Concepts and Source” Document No. ST/ESA/STAT/SER.F/95, New York

West Africa Club Secretariat / OECD (2011) “Emerging good practice in combating the worst forms of child labour in West African cocoa growing communities” Paper No. SWAC/OECD2011, Available at:
<http://www.oecd.org/swac/publications/49069653.pdf>

World Bank (2011) “Tackling Poverty in Northern Ghana”, World Bank, Washington D.C., March 2011

Appendix

Table A1: MDG goals and targets tracked

Goals and Targets (from the Millennium Declaration)	Indicators for monitoring progress
Goal 1: Eradicate extreme poverty and hunger	
Target 1.B: Achieve full and productive employment and decent work for all, including women and young people	1.5 Employment-to-population ratio 1.7 Proportion of own-account and contributing family workers in total employment
Goal 2: Achieve universal primary education	
Target 2.A: Ensure that, by 2015, children everywhere, boys and girls alike, will be able to complete a full course of primary schooling	2.1 Net enrolment ratio in primary education 2.2 Proportion of pupils starting grade 1 who reach last grade of primary 2.3 Literacy rate of 15-24 year-olds, women and men
Goal 3: Promote gender equality and empower women	
Target 3.A: Eliminate gender disparity in primary and secondary education, preferably by 2005, and in all levels of education no later than 2015	3.1 Ratios of girls to boys in primary, secondary and tertiary education 3.2 Share of women in wage employment in the non-agricultural sector 3.3 Proportion of seats held by women in national parliament
Goal 4: Reduce child mortality	
Target 4.A: Reduce by two-thirds, between 1990 and 2015, the under-five mortality rate	4.1 Under-five mortality rate 4.2 Infant mortality rate
Goal 5: Improve maternal health	
Target 5.A: Reduce by three quarters, between 1990 and 2015, the maternal mortality ratio	5.1 Maternal mortality ratio
Target 5.B: Achieve, by 2015, universal access to reproductive health	5.4 Adolescent birth rate
Goal 7: Ensure environmental sustainability	
Target 7.C: Halve, by 2015, the proportion of people without sustainable access to safe drinking water and basic sanitation	7.8 Proportion of population using an improved drinking water source 7.9 Proportion of population using an improved sanitation facility
Target 7.D: By 2020, to have achieved a significant improvement in the lives of at least 100 million slum dwellers	7.10 Proportion of urban population living in slums
Goal 8: Develop a global partnership for development	
Target 8.F: In cooperation with the private sector, make available the benefits of new technologies, especially information and communications	8.14 Fixed telephone lines per 100 inhabitants 8.15 Mobile cellular subscriptions per 100 inhabitants 8.16 Internet users per 100 inhabitants

Table A2: Unemployment rate by sex, locality and region

		Both Sexes	Male	Female
Western	All localities	5.9	48.5	51.5
	Urban	8.8	48.6	51.4
	Rural	3.8	48.3	51.7
Central	All localities	5.7	44.6	55.4
	Urban	7.5	44.8	55.2
	Rural	4.1	44.2	55.8
Greater Accra	All localities	8.3	46.9	53.1
	Urban	8.4	47.1	52.9
	Rural	6.6	44.0	56.0
Volta	All localities	4.1	45.1	54.9
	Urban	5.8	45.5	54.5
	Rural	3.3	44.8	55.2
Eastern	All localities	5.7	44.6	55.4
	Urban	7.6	45.0	55.0
	Rural	4.2	44.1	55.9
Ashanti	All localities	6.9	41.3	58.7
	Urban	8.5	41.1	58.9
	Rural	4.6	42.1	57.9
Brong Ahafo	All localities	4.3	41.9	58.1
	Urban	6.4	40.7	59.3
	Rural	2.7	44.1	55.9
Northern	All localities	3.7	45.7	54.3
	Urban	7.7	47.2	52.8
	Rural	2.1	43.5	56.5
Upper East	All localities	3.4	46.2	53.8
	Urban	7.7	46.1	53.9
	Rural	2.3	46.4	53.6
Upper West	All localities	4.1	44.9	55.1
	Urban	11.5	45.3	54.7
	Rural	2.9	44.6	55.4
Total	All localities	5.8	44.8	55.2
	Urban	8.0	44.9	55.1
	Rural	3.5	44.4	55.6

Source: Ghana Statistical Service, 2010 Population and Housing Census

Table A3: Employment rate by sex, locality and region

		Employment Rate		
		Both Sexes	Male	Female
Western	All localities	94.1	94.4	93.8
	Urban	91.2	91.2	91.2
	Rural	96.2	96.5	95.9
Central	All localities	94.3	94.5	94.2
	Urban	92.5	92.6	92.4
	Rural	95.9	96.1	95.7
Greater Accra	All localities	91.7	92.1	91.3
	Urban	91.6	91.9	91.2
	Rural	93.4	94.1	92.6
Volta	All localities	95.9	96.1	95.8
	Urban	94.2	94.3	94.1
	Rural	96.7	96.9	96.6
Eastern	All localities	94.3	94.8	93.9
	Urban	92.4	92.6	92.2
	Rural	95.8	96.3	95.3
Ashanti	All localities	93.1	94.1	92.1
	Urban	91.5	92.7	90.4
	Rural	95.4	96.1	94.8
Brong Ahafo	All localities	95.7	96.3	95.0
	Urban	93.6	94.4	92.8
	Rural	97.3	97.7	96.9
Northern	All localities	96.3	96.6	96.0
	Urban	92.3	92.8	91.8
	Rural	97.9	98.1	97.6
Upper East	All localities	96.6	96.7	96.6
	Urban	92.3	92.6	92.1
	Rural	97.7	97.7	97.7
Upper West	All localities	95.9	96.1	95.7
	Urban	88.5	89.2	87.9
	Rural	97.1	97.3	97.0
Total	All localities	94.2	94.6	93.7
	Urban	92.0	92.5	91.5
	Rural	96.5	96.8	96.1

Source: Ghana Statistical Service, 2010 Population and Housing Census

Table A4: Proportion of own account and contributory family member in total employment 15 years and older by sex, locality and region

	Locality	Both sexes (%)	Male (%)	Female (%)
Total	Total	72.4	63.7	80.6
	Urban	59.4	46.5	71.4
	Rural	85.4	80.6	90.0
Western	Total	71.2	61.3	81.4
	Urban	58.0	42.1	73.1
	Rural	80.1	73.4	87.4
Central	Total	75.3	64.5	84.5
	Urban	65.8	50.8	78.3
	Rural	83.2	75.6	89.8
Greater Accra	Total	52.2	38.0	66.1
	Urban	51.0	36.6	65.0
	Rural	65.1	52.5	77.7
Volta	Total	82.8	76.8	88.1
	Urban	70.7	60.7	79.4
	Rural	88.5	84.2	92.3
Eastern	Total	76.6	69.3	83.6
	Urban	65.3	53.2	75.7
	Rural	84.6	79.8	89.6
Ashanti	Total	66.9	56.9	76.6
	Urban	57.1	44.3	69.3
	Rural	81.5	75.3	87.7
Brong Ahafo	Total	78.6	73.1	84.0
	Urban	68.8	60.1	76.6
	Rural	85.8	81.9	89.8
Northern	Total	87.2	84.4	89.9
	Urban	73.1	65.7	80.6
	Rural	92.3	91.4	93.2
Upper East	Total	87.4	84.3	90.2
	Urban	71.0	63.1	78.2
	Rural	91.4	89.5	93.0
Upper West	Total	87.6	84.7	90.3
	Urban	60.0	50.5	68.9
	Rural	92.1	90.3	93.7

Source: Ghana Statistical Service, 2000 and 2010 Population and Housing Census

Table A5: Under-five mortality rate by region and period of computation

Region	2000 census*	DHS 2003**	DHS 2008***	2010 census ****
Western	161	106	65	82
Central	163	102	106	94
G/Accra	152	113	56	72
Volta	174	129	57	87
Eastern	144	94	88	75
Ashanti	146	116	79	80
B/Ahafo	164	95	86	87
Northern	199	148	139	116
U/west	226	191	90	117
U/East	179	96	146	128

Sources: Ghana Statistical Service, *2000 Census ** DHS 2003, ***2008 and ****2010 Census

Table A6: Maternal births and deaths by age group

	Number of live births in the last 12 months	Number of female deaths in last 12 months	Pregnancy related Deaths	MMR
Total	623,700	33,347	3,026	485.2
12-14	917	1,311	52	5670.7
15-19	40,307	2,647	228	565.7
20-24	126,417	3,350	480	379.7
25-29	167,306	3,809	600	358.6
30-34	130,724	4,821	666	509.5
35-39	92,751	4,636	463	499.2
40-44	41,898	4,714	308	735.1
45-49	14,742	3,858	146	990.4
50-54	8,638	4,201	83	960.9

Source: Ghana Statistical Service, 2010 Population and Housing Census

Table A7: Ratio of females to males in primary, secondary and tertiary education by locality and region, 2000 and 2010

		2000			2010		
		Primary	Secondary	Tertiary	Primary	Secondary	Tertiary
All regions	Total	0.96	0.84	0.58	0.95	0.88	0.71
	Urban	1.02	0.94	0.62	1.01	0.97	0.73
	Rural	0.91	0.72	0.5	0.9	0.78	0.6
Western	Total	0.95	0.82	0.64	0.96	0.87	0.71
	Urban	1.03	0.95	0.69	1.01	0.97	0.76
	Rural	0.91	0.72	0.58	0.92	0.78	0.52
Central	Total	0.95	0.83	0.65	0.96	0.95	0.67
	Urban	1.01	0.93	0.71	1.00	1.02	0.71
	Rural	0.92	0.76	0.57	0.93	0.88	0.54
Greater Accra	Total	1.04	0.98	0.63	1.04	1.02	0.84
	Urban	1.05	1.00	0.64	1.05	1.03	0.83
	Rural	0.96	0.81	0.51	0.97	0.89	1.04
Volta	Total	0.96	0.80	0.49	0.93	0.80	0.69
	Urban	1.02	0.90	0.56	1.01	0.88	0.75
	Rural	0.93	0.76	0.45	0.90	0.75	0.59
Eastern	Total	0.94	0.81	0.59	0.93	0.86	0.75
	Urban	1.02	0.93	0.59	1.00	0.95	0.78
	Rural	0.91	0.73	0.60	0.88	0.76	0.65
Ashanti	Total	0.97	0.88	0.66	0.97	0.92	0.69
	Urban	1.02	0.97	0.68	1.02	0.98	0.68
	Rural	0.92	0.76	0.60	0.92	0.79	0.75
Brong Ahafo	Total	0.94	0.79	0.53	0.94	0.82	0.62
	Urban	1.00	0.90	0.52	0.99	0.91	0.66
	Rural	0.90	0.70	0.53	0.90	0.72	0.43
Northern	Total	0.82	0.58	0.35	0.88	0.71	0.47
	Urban	0.90	0.68	0.40	0.94	0.78	0.49
	Rural	0.76	0.48	0.29	0.86	0.65	0.42
Upper East	Total	0.90	0.74	0.48	0.91	0.87	0.49
	Urban	0.99	0.89	0.59	0.96	0.96	0.58
	Rural	0.88	0.67	0.43	0.89	0.83	0.40
Upper West	Total	0.95	0.80	0.49	0.95	0.86	0.54
	Urban	1.04	0.91	0.53	1.07	0.98	0.49
	Rural	0.92	0.75	0.47	0.93	0.82	0.61

Source: Ghana Statistical Service, 2010 Population and Housing Census

Table A8: Classification of improved and unimproved water sources

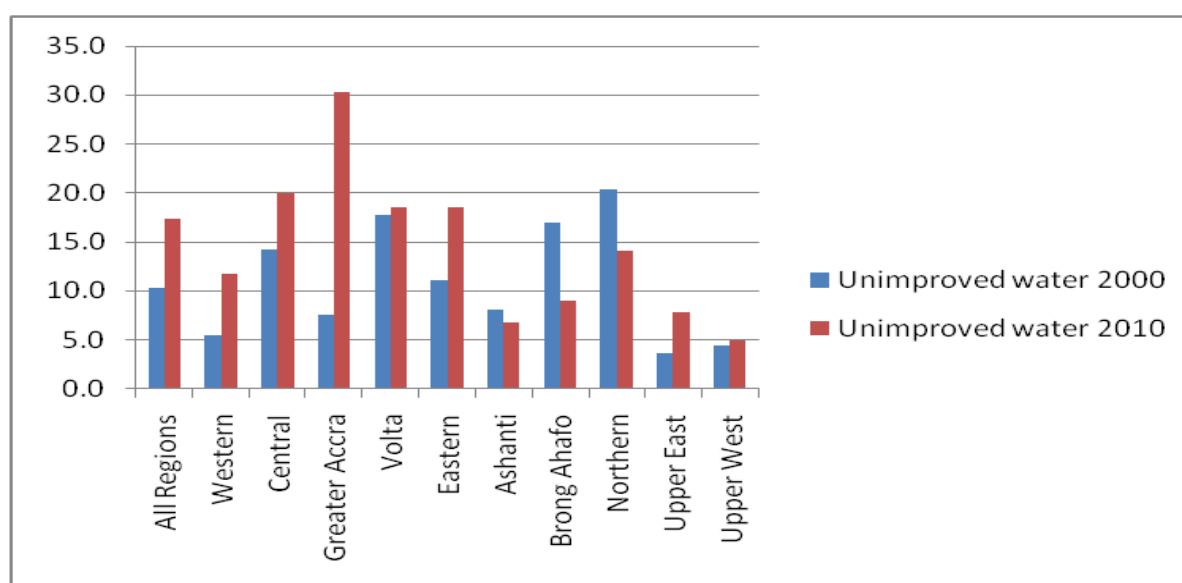
Improved water sources	Unimproved water sources
▪ Household connection	▪ Unprotected well
▪ Borehole	▪ Unprotected spring
▪ Protected dug well	▪ Bucket
▪ Protected spring	▪ Rivers or ponds
▪ Public standpipe	▪ Vendor-provided water
	▪ Tanker truck water
	▪ Bottled (& sachet) water

Source: UNDP, 2003

Table A9: Percentage of urban population using unimproved water and sanitation

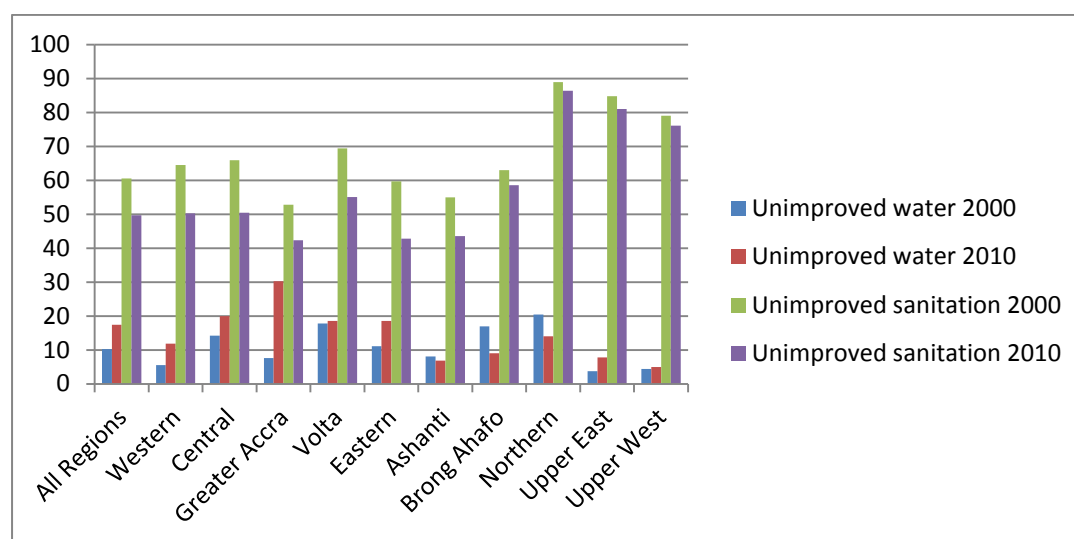
	Unimproved water		Unimproved sanitation	
	2000	2010	2000	2010
All Regions	10.3	17.4	60.5	49.7
Western	5.5	11.8	64.5	50.2
Central	14.2	20.0	65.9	50.5
Greater Accra	7.6	30.3	52.8	42.3
Volta	17.8	18.5	69.3	55.1
Eastern	11.1	18.5	59.7	42.8
Ashanti	8.1	6.8	54.9	43.5
Brong Ahafo	16.9	9.0	63.0	58.5
Northern	20.4	14.1	88.9	86.4
Upper East	3.7	7.8	84.8	81.0
Upper West	4.4	5.0	79.0	76.1

Source: Ghana Statistical Service, 2010 Population and Housing Census

Figure A1: Unimproved water source by region

Source: Ghana Statistical Service, 2000 and 2010 Population and Housing Census

Figure A2: Unimproved water and sanitation 2000 and 2010



Source: Ghana Statistical Service, 2010 Population and Housing Census

Table A10: Improved and unimproved water sources by region

	2000		2010		% Growth Rate
	Improved	Unimproved	Improved	Unimproved	
Western	71.6	28.4	71.5	28.5	-0.3
Central	79.6	20.4	78.1	21.9	-1.9
Greater Accra	88.5	11.5	69.0	31.0	-22.0
Volta	60.6	39.4	67.8	32.2	11.8
Eastern	70.5	29.5	72.5	27.5	2.8
Ashanti	82.4	17.6	89.2	10.8	8.3
Brong Ahafo	67.5	32.5	78.3	21.7	16.0
Northern	55.1	44.9	68.4	31.6	24.1
Upper East	91.8	8.2	87.8	12.2	-4.4
Upper West	86.3	13.7	89.1	10.9	3.2

Source: Ghana Statistical Service, 2000 and 2010 Population and Housing Census

Table A11: Classification of improved and unimproved sanitation facility

Improved Sanitation Facilities	Unimproved Sanitation Facilities
✓ Flush or pour-flush to piped sewer system, piped sewer system and pit latrine	✓ Flush or pour-flush to elsewhere
✓ Ventilated improved pit latrine (VIP)	✓ Pit latrine without slab or open pit
✓ Composting toilet	✓ Bucket
	✓ Hanging toilet or hanging latrine
	✓ No facilities/bush/field (open defecation)

Source: UN, 2003

Table A12: Proportion of population using toilet facility by locality

	2000			2010		
	All localities	Urban	Rural	All localities	Urban	Rural
No facilities (bush/beach/field)	23.4	11.3	32.8	24.4	10.8	38.2
WC	8.4	17.3	1.5	13.6	24.3	2.7
Pit latrine	22.3	12.4	30.0	19.5	13.5	25.7
KVIP	6.6	9.7	4.2	9.7	12.6	6.7
Bucket/Pan	3.6	6.4	1.4	0.6	1.1	0.2
Public toilet (WC/KVIP/Pit/Pan etc)	28.9	35.8	23.6	31.8	37.3	26.1
Facility in another house	6.5	6.8	6.3	N.A	N.A	N.A
Other	0.2	0.2	0.2	0.4	0.4	0.4
Total	100.0	100.0	100.0	100.0	100.0	100.0

Source: Ghana Statistical Service, 2000 and 2010 Population and Housing Census

Table A13: Proportion of households by ownership type by locality

	2000			2010		
	All localities	Urban	Rural	All localities	Urban	Rural
Owned by household member	57.4	41.4	71.7	52.7	39.7	69.1
Being purchased (e.g. mortgage)	1.1	1.6	0.7	0.8	1.1	0.6
Relative not a household member	12.5	13.3	11.7	15.6	16.2	14.8
Other private individual	19.3	30.1	9.7	26.3	37.3	12.5
Private employer	4.1	5.1	3.3	1.5	1.6	1.4
Other private agency	0.4	0.6	0.2	0.4	0.5	0.2
Public/Gov't ownership	2.0	3.3	0.8	2.2	3.1	1.0
Other	3.1	4.6	1.9	0.4	0.5	0.3
Total	100.0	100.0	100.0	100.0	100.0	100.0

Source: Ghana Statistical Service, 2010 Population and Housing Census