REPUBLIC OF GHANA

GHANA

MILLENNIUM DEVELOPMENT GOALS

2006 REPORT

TABLE OF CONTENTS

TABLE OF CONTENTS i
LIST OF TABLES AND FIGURES iii
ABBREVIATIONS AND ACRONYMS iv

1.1 BACKGROUND 1
1.2 POLICY CONTEXT 2

2.0 PROGRESS TOWARDS THE ATTAINMENT OF THE MDGS 4

GOAL 1: ERADICATE EXTREME POVERTY 4
Target 1: Halve the proportion of those in extreme poverty, 1990-2015 4
Target 2: Halve the proportion of people who suffer from extreme hunger by 2015 8

GOAL 2: ACHIEVE UNIVERSAL PRIMARY EDUCATION 12
Target 3: Achieve Universal Access to Primary Education by 2015 12

Goal 3: PROMOTE GENDER EQUALITY AND EMPOWER WOMEN 17
Target 4: Eliminate gender disparity in primary and secondary education by 2005. 17

Goal 4: UNDER -FIVE MORTALITY 20
Target 5: Reduce Under-five Mortality Rate by two-thirds by 2015 20

GOAL 5: IMPROVE MATERNAL HEALTH 24
Target 6: Reduce Maternal Mortality Ratio by three-quarters by 2015 24

GOAL 6: COMBAT HIV/AIDS AND MALARIA 27
Target 7: Halt and reverse the spread of HIV/ADS by 2015 27
Target 8: Halt and reverse the Incidence of Malaria 31

Goal 7: ENVIRONMENTAL SUSTAINABILITY 34
Target 9: Integrate the principles of sustainable development into country policies and programmes and reverse loss of environment resources by 2015 34
Target 10: Halve by 2015, the proportion of persons without access to safe drinking water 37

GOAL 8: DEVELOP A GLOBAL PARTNERSHIPS FOR DEVELOPMENT 40

Target 15: Deal comprehensively with LDC debt and make debt sustainable in the long run 40

STATUS AT A GLANCE 44

REFERENCE: 45

LIST OF TABLES AND FIGURES

LIST OF TABLES

Table 1: Trends in the Incidence of Poverty by Region and Location, 1990-2006 5
Table 2: Trends in Gross Enrolment Ratios in Basic Schools, 1991/92 to 2005/06 12
Table 3: Trends in Net Enrolment Rates in Basic Schools, 1991/92 to 2005/06 13
Table 4: Trends in Survival Rates in Basic Schools by Gender, 2003/04 to 2005/06 13
Table 5: Trends in PTR- Basic Schools, 2003/04 to 2005/06 14
Table 6: Trends in National Gender Parity Index (GPI) in Basic Education Sector, 2003/2004-2005/2006 17
Table 7: Estimated number of people living with HIV/AIDS, 2002 -2003 28
Table 8: HIV Prevalence by age group, 2005 and 2006 28
Table 9: ITN Use by High Risk Category, 2004-2006, 2002-2006 (Percent) 32
Table 13: Main source of drinking water for households, 1991/92 – 2005/06 38

LIST OF FIGURES

Figure 1: Comparison of Poverty Rates in Ghana and Sub-Sahara Africa, 1991/2-2005/2006 4
Figure 2: Percentage Increases in Consumption by Income Groups, 1991/2-2005/6 5
Figure 3: Selected Indicators of Under-nourishment Ghana, 1990-2002 8
Figure 4: Trends in Malnutrition in Ghana, 1988 – 2006 (Percent) 9
Figure 5: Trends in Under-five Mortality Indicators in Ghana 1993 -2003 20
Figure 6: Trends in safe motherhood interventions, 1998 – 2003 24
Figure 7: Selected Indicators of Reproductive Health Care, 1988-2006 25
Figure 8: Trends in HIV/AIDS Prevalence Rate in Ghana, 1999-2006 27
Figure 9: Annual Reported Cases of Malaria, 2000-2005 28
Figure 10: Trends in Forest Cover in Ghana, 1990-2005 36
Figure 11: Percentage of households having access to potable water, by locality and standard of living quintiles (25%), 1991/92-2005/06 38
Figure 12: Official Development Assistance Flows to Ghana between 1997-2006 40
Figure 13: Domestic Debt Burden, 2001-2005 41

ABBREVIATIONS AND ACRONYMS

AAGDS	Accelerated Agricultural Growth and Development Strategy
ACSD	Accelerated Child Survival and Development Programme
ANC	Antenatal Care
APRM	African Peer Review Mechanism
ARI	Acute Respiratory Infections
ART	Antiretroviral Therapy
ARV	Antiretroviral Drugs
BOG	Bank of Ghana
CEDAW	Convention on the Elimination of all forms of Discrimination Against Women
CFR	Case Fatality Rate
CHRAJ	Human Rights and Administrative Justice
DAC	Development Assistance Committee
DHMTs	District Health Management Teams
DOVVSU	Domestic Violence and Victim Support Unit
DPT1	Diphtheria, Pertussis and Tetanus Vaccine (1 dose)
EPA	Environmental Protection Agency
EPI	Expanded Program for Immunization
ESP	Education Strategic Plan
FASDEP	Food and Agriculture Sector Development Policy
fCUBE	Free Compulsory Basic Education programme
FP	Family Planning
GDHS	Ghana Demographic and Health Survey
GLSS 4	Ghana Living Standard Survey (Fourth Round)
GLSS 5	Ghana Living Standard Survey (Fifth Round)
GPRS II	Growth and Poverty Reduction Strategy
HIPC	Heavily-Indebted Poor Countries
IDGs	International Development Goals
IMCI	Integrated Management of Childhood Illness
IPT	Intermittent Preventive Treatment
ITNs	Insecticide Treated Nets
JSS	Junior Secondary School
LAP	Land Administration Programme
LBW	Low Birth Weight
LTU	Large Taxpayers Unit
MDAs	Ministries, Departments and Agencies
MDBS	Multi Donor Budget Support
MDGs	Millennium Development Goals
MDRI	Multilateral Debt Relief Initiative
MICS	Multiple Indicator Cluster Survey
MMR	Maternal Mortality Ratio
MoESS	Ministry of Education, Science and Sport
NDPC	National Development Planning Commission
NEPAD	New Partnership for African Development
NFS II	National Strategic Framework II

NGOs	Non-Governmental Organizations
NMCP	National Malaria Control Programme
NTR	Non-Tax Revenues
ODA	Official Development Assistance
OECD	Organization for Economic Co-operation and Development
OPD	Out-Patient Department
OPV	Oral Polio Vaccine
PLWHA	People Living With HIV/AIDS
PMM	Prevention Maternal Mortality Programme
PMTCT	Prevention of Mother-to-Child Transmission of HIV
PNC	Postnatal care
POW	Programme of Work
RBM	Roll Back Malaria
RBM	Roll Back Malaria
SD	Supervised Delivery
TIN	Tax Identification Number
UNDP	United Nations Development Programme
VAS	Vitamin A Supplementation programme
VAST	Vitamin A Supplementation Trials
VCT	Voluntary Counselling and Testing
WHO	World Health Organization

GHANA'S PROGRESS TOWARDS THE MILLENNIUM DEVELOPMENT GOALS IN 2006

1.1 BACKGROUND

In the face of economic stagnation, poverty and deprivation in most developing countries, the international community took steps during the nineties to highlight the need to reduce the level of poverty. Subsequently the quest for an international development agenda to guide the fight against poverty and achieve sustainable development led to the development of a common set of International Development Goals (IDGs) in 1996. The IDGs indeed were the results of an attempt by the Organization for Economic Co-operation and Development (OECD) Development Assistance Committee (DAC) to review past experiences and develop effective mechanisms to address the development gaps in the global economy. Building on the IDGs, about 190 Heads of States and Governments, including Ghana at the 2000 Millennium Summit, adopted these goals in a declaration for a common development framework to improve upon the lives of people living in extreme poverty. Ghana is signatory to the Millennium Declaration, and has since then adopted the Millennium Development Goals (MDGs) as its long-term minimum set of socio-economic development objectives that have influenced the determination of the country's strategic priorities for national development and eradication of poverty and hunger.

Since 2002 conscious efforts have been made by the Government of Ghana to integrate the Millennium Development Goals (MDGs) into the national development policy frameworks, GPRS I (2003-2005) and GPRS II (2006 – 2009).

Progress towards the attainment of these goals have been monitored periodically and so far two reports have been prepared in 2002 and 2004. The 2002 report covered the period before the implementation of the first national development policy framework, **GPRS I** (2003-2005). The 2004 report was produced during the implementation of GPRS I and prior to the formulation of the second development policy framework, **GPRS II** (2006-2009) which focuses on accelerated economic growth and poverty reduction. The reports observed that Ghana's progress towards attaining the MDGs has been mixed. Whereas the country has made significant progress regarding the attainment of poverty, hunger and education related MDGs, progress towards achieving health related targets has been positive with regard to reducing the spread of HIV/AIDS but stagnated with respect to reducing child mortality and maternal mortality.

A number of challenges to the attainment of MDGs were noted in these reports. However, since the publication of the 2004 report, these challenges have been extensively addressed in the GPRS II. In addition a number of policy initiatives have been introduced to accelerate the attainment of the targets of the MDGs. This current report provides an update of progress made in 2006 towards the attainment of MDGs, namely:

- eradication of extreme poverty and hunger;
- achieving universal primary education;
- promoting gender equality and empowerment of women;

- reducing under-five mortality;
- improving maternal health;
- combating HIV/AIDS and Malaria;
- ensuring environmental sustainability; and
- developing a global partnership for development.

For each goal and corresponding indicators and targets, the report analyses the current situation, the policy environment and resource requirements, challenges and opportunities underpinning achievement of the set target and an informed projection on the likelihood of achieving each MDG.

1.2 POLICY CONTEXT

The Ghana Poverty Reduction Strategy (GPRS I) 2003-2005 was formulated to enable Ghana to benefit from debt relief under the Highly Indebted Poor Country Initiative (HIPC) and to position the country in an improved macroeconomic environment for addressing critical issues of poverty on an emergency basis. Thus the focus of GPRS I was to realign the badly distorted macroeconomic environment and improve the conditions for implementation of sectoral policies designed to promote sustainable economic growth and reduce the high incidence of poverty prevalent in the country. The strategy also focused on human development with targeted measures designed to improve access of Ghanaians to basic needs and essential services. These programmes included basic education, safe water and improved health and environmental sanitation.

There was a general increase in expenditure in support of the medium-term priorities of GPRS I with regard to special programmes targeted at the vulnerable and excluded. In this respect, the GPRS I broadly reflected a policy framework that was directed primarily towards the attainment of anti-poverty objectives consistent with the UN's Millennium Development Goals (MDGs). After one year of successful implementation of the GPRS I and the satisfactory attainment of the policy environment required to access the HIPC inflows Ghana reached the completion point in June 2004.

A general assessment[1] of the overall policy environment which emerged from the implementation of GPRS I indicates a positive and significantly stabilized economy, with a potential for attaining higher rates of growth. Consensus from other independent reviews suggest that the pace of economic growth achieved so far, although remarkable over the relatively short-time span of its implementation, has neither been sufficient to reduce the deep rooted incidence of poverty, nor has it been able to radically transform the existing fragile structure of the economy.

In the face of, especially, the recent shocks in the international oil market, and the volatile pricing mechanism for the country's principal export commodities, cocoa and gold, there is no reason to assume that the prevailing stability in the macro-economy and the declining incidence of poverty can be sustained over any reasonable length of time without a bold programme of action designed specifically to project the growth of the economy unto a higher trajectory.

[1] A review of the positive attainment and shortfalls of the GPRS I has been fully documented and disseminated country-wide in the form of five successive Annual Progress Reports (APR) prepared between 2002 and 2006.

Against this background, government decided to embark on the design and implementation of a revised medium term development policy framework with the central objective of accelerating the growth of the economy so that Ghana can achieve middle-income status (with a per capita income of at least US$1000) within a measurable planning period. This is to be achieved through the structural transformation of the economy by developing the private sector, diversifying the export base and increasing agricultural productivity, within a decentralized, democratic environment.

The design and preparation of GPRS II (2006-2009) was guided by practical lessons and experiences drawn from the preparation, implementation and monitoring of GPRS I (2003-2005). It therefore integrates the otherwise disparate development agenda and sectoral commitments that compete for inclusion in the annual national budget into one medium term comprehensive development policy framework.

It also seeks to operationalize various international agreements which are relevant to the poverty reduction objectives, and of which Ghana is signatory. Principal among these are the Millennium Development Goals (MDGs), the New Partnership for African Development (NEPAD) and the African Peer Review Mechanism (APRM), the Convention on the Elimination of all forms of Discrimination Against Women (CEDAW) and the African and Beijing Platforms for Action. It is also consistent with the relevant on-going programmes which government is pursuing with development partners. In contrast to GPRS I, environmental, gender, disability and other crosscutting issues have been mainstreamed into GPRS II

PROGRESS TOWARDS THE ATTAINMENT OF THE MDGS

GOAL 1: ERADICATE EXTREME POVERTY

Target 1: Halve the proportion of those in extreme poverty, 1990-2015

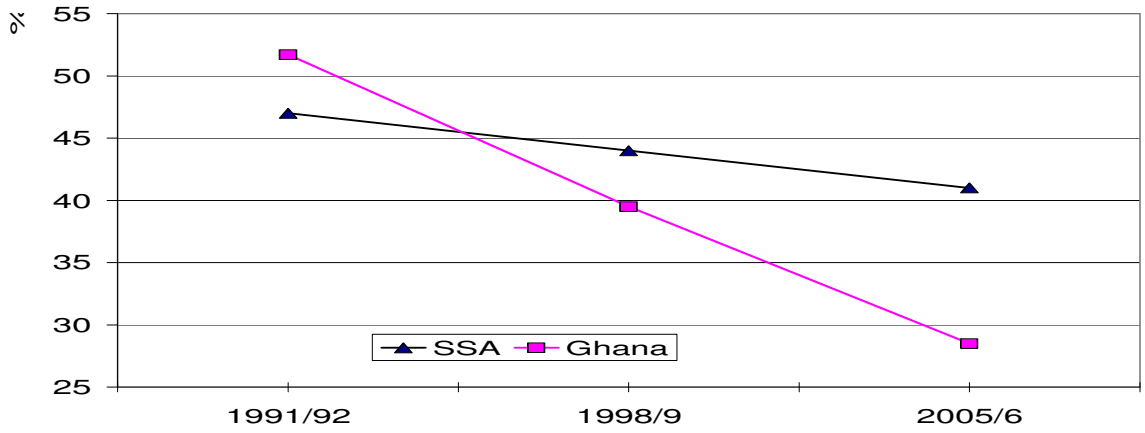
Indicator: Proportion below national basic needs, poverty line

1. STATUS AND TRENDS

1.1 Income poverty

With an overall poverty[2] rate of 51.7% in 1991/92, Ghana began the last decade with a relatively high level of poverty, greater than the Sub-Sahara African average of about 47% during the same period. However this level has seen significant decline over the past two decades. Available data indicate that the country has managed to halve the proportion of people living in extreme poverty from about 36.5% in 1991/92 to about 18.2% in 2005/2006 (Table 1). This means that the MDG 1 of halving the proportion of the population in extreme poverty by 2015 has been achieved well ahead of target date, thereby making Ghana the first Sub-Saharan African country to achieve this MDG. The substantial decline in extreme poverty is also underscored by a significant increase of about 35.5% in real consumption per adult household equivalent between 1998/99 and 2005/06 (World Bank, 2007). The country has also reduced the proportion of the population below the upper poverty line from its high level of 51.7% in 1991/92 to 28.5% in 2005/06 (Figure 1). With this current trend in the decline in overall poverty level, it is possible for the country to reduce the incidence of overall poverty substantially by 2015 (Box 1).

Figure 1: Comparison of Poverty Rates in Ghana and Sub-Sahara Africa, 1991/2-2005/2006



Source: Ghana Statistical Services, (2007) Pattern and Trends of Poverty in the 1999-2006.

[2] Extreme poverty refers to the proportion of the population who are unable to afford the basic food needs for the day, while overall poverty refers to the proportion who cannot afford the basic food needs as well as the non-food needs for the day. In Ghana the extreme poverty line is currently anchored at ¢2,884,700, while the overall poverty line (upper poverty) is anchored at ¢3,700,900 (which is equivalent to $1/day/adult) for a year.

It is also worthy of note that the decline in poverty and extreme poverty between 1998/99 and 2005/2006 was evenly distributed more than in the earlier period of 1991/92 - 1998/99. Almost all the localities and regions, with the exception of the Greater Accra and Upper West Regions recorded declines in poverty. The proportion below the upper poverty line in the Greater Accra Region increased from 5.2% in 1998/99 to 11.8% in 2005/2006 which has largely been attributed to increasing migration from rural Ghana to Greater Accra region, while Upper West Region experienced a rise from 83.9% to 88% over the same period.

Table 1: Trends in Poverty Incidence by Region and Location, 1990-2006

Region	Proportion below the lower (Extreme) Poverty line			Proportion below the Upper Poverty line		
	1991/92	1998/99	2005/2006	1991/92	1998/99	2005/2006
Western	42.0	14.0	7.9	60.0	27.0	18.0
Central	24.0	31.0	9.7	44.0	48.0	20.0
Greater Accra	13.0	2.4	6.2	26.0	5.2	11.8
Eastern	35.0	30.4	6.6	48.0	44.0	15.1
Volta	42.0	20.4	15.2	57.0	38.0	31.4
Ashanti	25.0	16.4	11.2	41.0	28.0	20.0
Brong Ahafo	46.0	18.8	14.9	65.0	36.0	29.0
Northern	54.0	57.4	38.7	63.0	69.2	52.3
Upper West	74.0	68.3	79.0	87.9	83.9	88.0
Upper East	53.0	88.0	60.1	67.0	88.0	70.0
Urban	15.1	11.6	5.7	27.7	19.4	11.0
Rural	47.2	34.4	25.6	63.6	49.5	39.0
National	**36.5**	**26.8**	**18.2**	**51.7**	**39.5**	**28.5**

Source: Ghana Statistical Services, (2007) Pattern and Trends of Poverty in the 1999-2006.

It is noteworthy that the gains from the recent reductions in poverty are spread across all income groups as shown in the growth incidence curve in Figure 2a. Figure 2 shows the percentage increases in consumption of the various income groups (starting from the poorest on the left of the horizontal axis to the richest on the right). It can also be seen from Figure 2b that between 1998/9 and 2006/6, the pattern of gains was equitable for a fairly large segment of the population. This indeed contrasts sharply with the situation in the nineties, where the reduction in poverty benefited the rich proportionately more than the poor (Figure 2c).

Figure 2: Percentage Increases in Consumption by Income Groups, 1991/2-2005/6

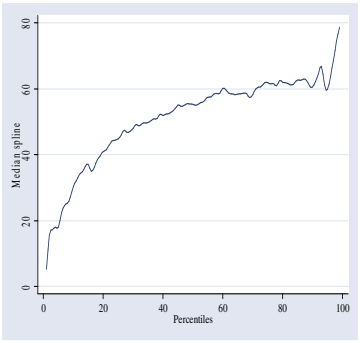


Figure 2a: Growth Incidence Curve 1991/2-2005/6

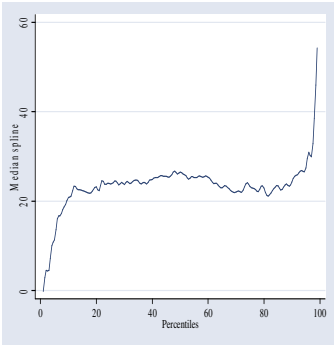


Figure 2b: Growth Incidence Curve 1998/9-2005/6

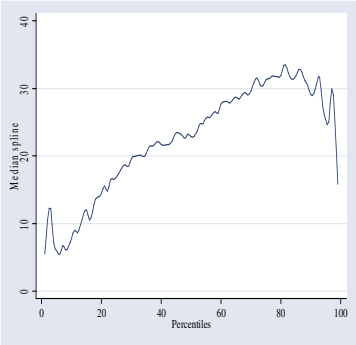


Figure 2c: Growth Incidence Curve 1991/2-1998/9

Source: World Bank, Country Memorandum Report, 2007

1.2 Asset Poverty

The very large reduction in consumption-based poverty observed between 1998-99 and 2005-2006 is also corroborated by "asset-based poverty" trends. Diallo and Wodon (2007), for instance, have found that the national asset-based headcount of poverty decreased from 45.7% in 1997 to 38.9% in 2003. This decrease of 7% is consistent with the ten points decrease found by Coulombe and others (2007) using the last two rounds of the GLSS IV and GLSS V surveys.

2. SUPPORTIVE ENVIRONMENT

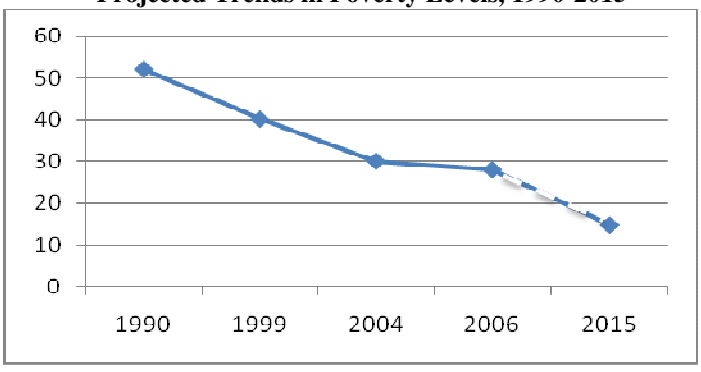
A number of factors appear to have contributed to this substantial decline in poverty observed in Ghana over the past 15 years including high economic growth. Real economic (GDP) growth rates have since 1983 experienced upward trends averaging about 4.5% between 1983 and 2000, and accelerated to an average of 5.3% between 2001 and 2006. The increasing growth rates have also been accompanied by increases in per capita income over time. An analysis of productivity gains over the period 1970-2005 shows an overall annual growth in productivity in Ghana to be about 2.7%, with per capita growth rate lying below 1% due to the high rate of population growth. However, over the period 1991-2005, aggregate growth seems to have accelerated, largely driven by total factor productivity and capital. The sources of the recent economic growth can largely be attributed to the following:

- improving economic policy environment and investment climate;
- rising levels of investments;
- increasing harmonization of aid;
- productivity gains from factor accumulation;
- high commodity (cocoa and gold) prices on the international market;
- large contributions from agriculture, particularly, from the cocoa sub-sector and gradual productivity increases, including from small, privately owned cocoa farms; and
- large increases in domestic demand, complemented by recent increases in export growth.

In addition the debt reliefs granted under the HIPC initiative and MDRI created savings which allowed for significant increases in government's poverty-related expenditures, targeted at improving access of Ghana's population to basic needs and essential services, from 4.7% of GDP in 2001 to 8.5% in 2005.

Box 1: Will target be achieved?

Projected Trends in Poverty Levels, 1990-2015



Ghana has already achieved MDG 1 (halving extreme poverty) well ahead of time and is likely to reduce it further to about 8% by 2015. In addition there are strong indications that the country could reduce the proportion of the population below the upper poverty line to between 21% and 14% by 2015, assuming per capita growth rates between 2% and 4%.

Source: Ghana Statistical Services, (2007) Pattern and Trends of Poverty in the 1999-2006, own calculation.

3. CHALLENGES

Notwithstanding the rapid decline in poverty levels, a number of challenges remain that must be addressed. These include the following:

- ***Wide geographical disparities:*** The three northern regions (Northern, Upper East and Upper West) continue to remain the poorest areas in Ghana, while the southern regions continue to remain less poor. Moreover, poverty reduction seems to be weaker in the savannah areas than elsewhere. There is also a wide urban-rural poverty gap. Poverty levels in the urban areas are on average lower than that of rural areas.
- ***High depth and severity of poverty (poverty gap):*** Even though the rural savannah has less than a quarter of the total population of Ghana, more than 70% of the total number of people whose income levels lie far below the poverty line (i.e., severity of poverty) are found in these areas.
- ***Income inequality:*** It appears that the decline in poverty in the country has been accompanied by some measure of inequality. The inequality measure, using the Gini Index for consumption per adult equivalent, for instance, continued to increase from 0.353 in 1991/92 to 0.378 in 1998/99 and finally 0.394 in 2005/06, even though the increases were slower between 1998/99 and 2005/06 than the earlier years.
- ***Shocks to the economy:*** the country continues to face shocks such as the rising crude oil prices and the energy crisis, which pose major challenges to maintaining the current macroeconomic stability.

4. RESOURCE REQUIREMENTS

The MDGs have been mainstreamed into the various thematic areas of the Growth and Poverty Reduction Strategy (GPRS II). The total resources required to finance the GPRS II over the period 2006 – 2009 is estimated at US$8.06 billion. It is assumed under GPRS II that a substantial proportion of these resources would be allocated to finance the implementation of the MDG-related activities during the 2006-2009. Similarly a preliminary estimate by the Millennium Project for the period 2005-2015 suggests annual investment requirements of about US$1.9 billion to support the attainment of the MDGs. Even though this amount is not limited to the attainment of MDG 1 only, further estimates suggest that an average annual investment expenditure of US$80 per capita would further enhance the country's position to reduce by half the proportion of people living below the upper poverty line by 2015.

Target 2: Halve the proportion of people who suffer from extreme hunger by 2015

Indicator: Food Security and Prevalence of Underweight Children (Children Under- Five)

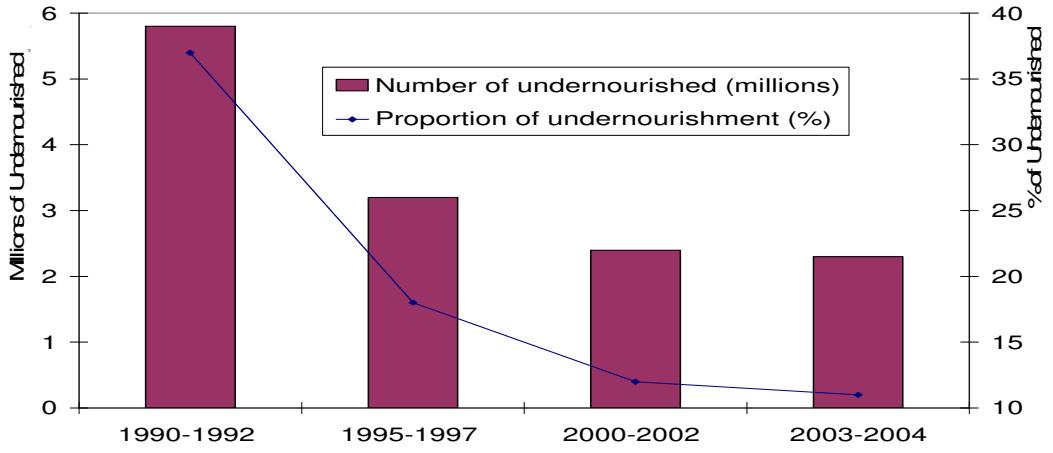
1. STATUS AND TRENDS

Reducing hunger requires sufficient physical supplies of food, adequate access of households to those food supplies through their own production, the market or other sources, and the appropriate utilization of those food supplies to meet the specific dietary needs of individuals. Ghana has experienced great improvements in most of the important standard measures (availability, access and utilization) of food security.

Improvements in agricultural productivity and cultivated land sizes have impacted positively on annual output to raise the agricultural sector growth rate successively from 2.1% in 2000 to 7.5% in 2004 before dropping to 5.7% in 2006. There has been a significant increase in the production of fingerlings from a level of 150,000 in 2003 to about 6.9 million in 2006. These have yielded some positive impact on food availability. Crops and livestock production, for instance, has equally seen upward growth trends from 0.9% in 1990-94 to 4.1% in 1995-1999 and further to 4.6% in 2000-2006. As a result, food production index has risen from 46.5 in 1990 to 121 in 2004, with per capita index of food production rising from 100 to 114 over the same period.

These improvements in food availability have significantly contributed to the decline in malnutrition, with respect to both the number and proportion of undernourished people (Figure 3).

Figure 3: Selected Indicators of Under-Nourishment Ghana, 1990-2002

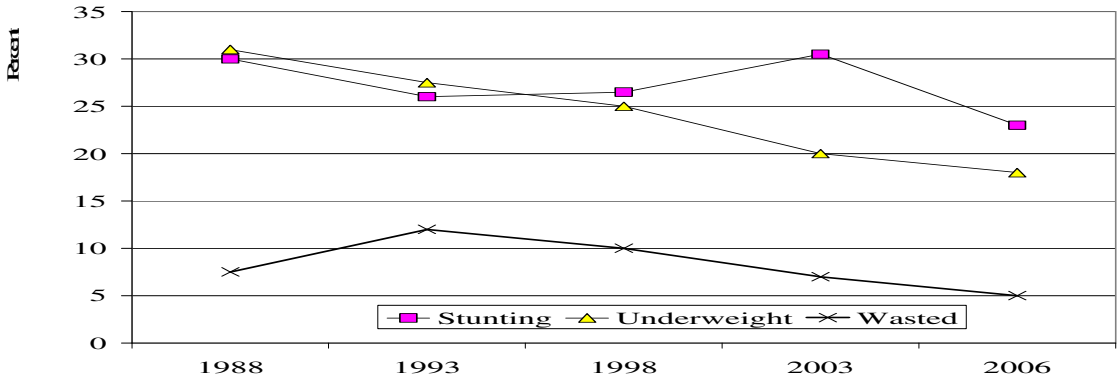


Source: Ghana Statistical Services, Ghana Demographic and Health Survey, 2005

For the periods 1990-1992 and 2003-2004 the total number of undernourished Ghanaians reduced from 5.8 million to 2.3 million, representing a decline from 37% of the total population to 11%. At the same time the country managed to reverse the upward trends with respect to the prevalence of children suffering from wasting and stunting that characterised the late nineties. For instance, the proportion of children aged 0-35 months, suffering from stunting, has reduced to 23% in 2006 after rising successively from 26% in 1993 to 30.5% in 1998. Similarly the incidence of wasting has

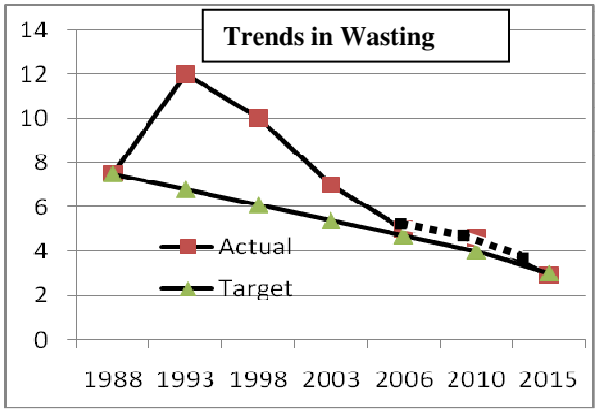
declined from a peak level of 12% in 1993 to 5% in 2006, while the occurrence of underweight has declined from about 30% in 1988 to 18% in 2006 (Figure 4).

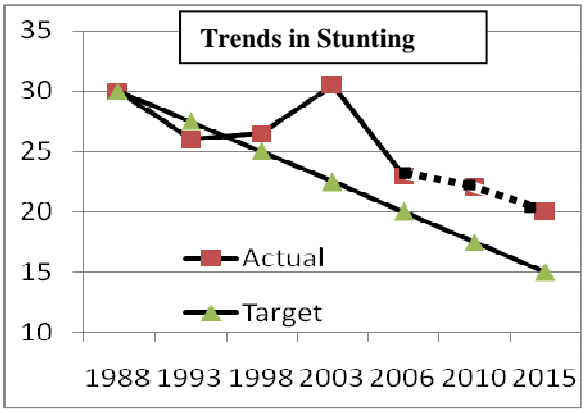
Figure 4: Trends in Malnutrition in Ghana, 1988 – 2006 (Percent)

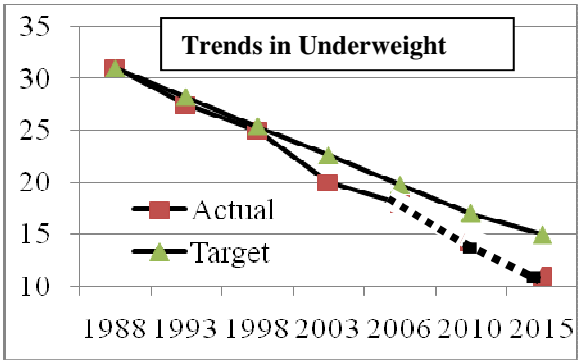


Source: GDHS 2003, MICS 2007

Box 2: Will target be achieved?







There is no doubt that malnutrition still remains a challenge in Ghana, particularly in famine-prone areas and this contributes to about half of child mortality in the country. However based on trend analysis of the various nutrition indicators depicted above, Ghana can potentially achieve Target 2 of MDG 1 of reducing by half the number of people suffering from extreme hunger by 2015.

Source: GDHS 2003, MICS 2007, own calculation

2. CHALLENGES

- ***High malnutrition especially among children:*** Despite the observed declines in the levels, malnutrition is still high with about 18% of children younger than three years of age suffering from low height-for-age (which is a symptom of malnutrition).

- ***The increasing but relatively low levels of food productivity:*** The challenge to food production and hence food availability in Ghana is the relatively low yields in production as reflected in the stagnating levels of kilogram-yield per person for the various foodstuffs. Kilogram-yield per person of food production over time has remained almost the same over the years. It appears that Ghanaian farmers are typically engaged in land expansion instead of intensive use of modern inputs and methods.
- ***Large geographical differences:*** The reported decline in malnutrition in Ghana is marked with wide geographical differences. Childhood malnutrition, for instance, is lower in such urban areas as Accra than in the rural areas of Ghana.
- ***High Protein energy and micronutrient malnutrition:*** High protein energy malnutrition and micronutrient deficiency (e.g. vitamin A, iodine, and iron deficiency) are still common in Ghana, particularly among women and children with wide geographical variations. A nutritional survey conducted in 2005 in Northern Ghana for instance, found that 69% of pregnant women have iron deficiency anaemia. Additionally, iodine deficiency disorders are prevalent, affecting over 30% of the population in the iodine deficiency zones.

3. SUPPORTIVE ENVIRONMENT

The recent gains in reducing the incidence of malnutrition can be attributed to the following policy actions initiated by government and other stakeholders:

Initiation of programmes to reduce malnutrition: This includes a National Plan for Action for Food and Nutrition in April 1993 in response to the recommendation of the International Conference on Nutrition. A micronutrient deficiency control programme was also established with sub-committees for iodine, vitamin A, and iron. These were also complemented with programmes to promote vitamin A supplementation of pregnant and lactating mothers using existing health facilities, home and school gardens through production and consumption of vitamin A-rich foods, drying of vitamin A-rich foods at the community level by women's groups, and legislation for food fortification. NGO programmes also distribute vitamin A capsules to children.

Safe Motherhood Programmes: These were also strengthened to promote early breastfeeding, family planning, de-worming of children and reducing micronutrient deficiencies. A Vitamin A Supplementation Programme (VAS), implemented annually with the help of some NGOs over the years, achieved a national coverage of 98.6% in 2005.

Introduction of child welfare clinics: District Health Management Teams (DHMTs) were also made to institute Child Welfare Clinics to monitor children at risk of malnutrition. Such clinics promote and advocate exclusive breast feeding practices, engage in nutritional education and assessment and also designate deserving health facilities as "Baby Friendly".

The National Health Insurance Scheme: Another major pro-poor health intervention is the establishment of the National Health Insurance Scheme in 2003 to remove financial barriers to health care and nutritional services, particularly for the poor and vulnerable sections of the population.

Agricultural Programmes: In order to raise the level of food security the government has since 1991 implemented a series of programmes, sector policies, and strategies to provide the supportive policy environment for accelerated agricultural development. These include the Medium Term Agricultural Development Programme 1991-2000, the Accelerated Agricultural Growth and Development Strategy (AAGDS, 2001), Food and Agriculture Sector Development Policy (FASDEP I & II) and other efforts to modernise agriculture under the GRPS I & II.

The NEPAD School Feeding Programme: The introduction of the Ghana-NEPAD school feeding programme in 2001 has also played a role in reducing malnutrition, especially, among school children. As at 2006 a total number of 44,710 pupils have benefited from the School Feeding Programme since its inception in 2001.

4. RESOURCE REQUIREMENTS

Even though the country has significantly reduced the level of malnutrition over the last few years, malnutrition continues to remain a serious problem in the country particularly in the famine-prone regions where large investments are required to eradicate it. The Millennium Project (2005), for instance, predicts annual investment needs of about US$117 million for Ghana over the period 2005-2015 to scale up interventions aimed at attaining the MDG 1, Target 2.

GOAL 2: ACHIEVE UNIVERSAL PRIMARY EDUCATION

Target 3: Achieve Universal Access to Primary Education by 2015

Indicator: Gross and net enrolment ratios in basic schools

1. STATUS AND TRENDS

The Government of Ghana has long before the MDGs recognised basic education as a fundamental building block of the economy. To this end the government has embarked upon several educational reforms and instituted new policy measures toward making education more accessible to all; seeking sustainable means of funding education; and improving on the quality of education. The results of these policy interventions have been encouraging.

Gross Enrolment Ratio (GER): The GER has shown significant improvement in response to the policy measures implemented by the government to improve basic school enrolment. Over the period, gross primary school enrolment increased successively from 74% in 1991/92 to 87.5% in 2005, and then to 92.1% in 2006 (Table 2).

Table 2: Trends in Gross Enrolment Ratios in Basic Schools, 1991/92 to 2005/06

Gross Enrolment Ratio	1991/92 - 2003/2004	2002/03 - 2004/2005	2005/2006	Target 2006	Target Achievement
Kindergarten:					
National	**55.6%**	**60.1%**	**75.2%**	**64.5%**	**Exceeded**
Northern	26.2%	29.3%	30.8%		
Upper East	25.6%	28.6%	30.9%		
Upper West	19.3%	21.9%	30.9%		
Deprived districts	42.1%	48.0%	50.4%		
Primary:					
National	**74% - 86.3%**	**85.7% -87.5%**	**92.1%**	**90.9%**	**Exceeded**
Northern	70.5%	72.7%	76.2%	77.6%	Not achieved
Upper East	77.1%	80.4%	84.4%	84.3%	Achieved
Upper West	74.1%	77.3%	81.1%	81.5%	Achieved
Deprived districts	70.1%	80.1%	84.3%		
Junior Secondary School:					
National	**70.2%**	**72.80%**	**74.7%**	**75.6%**	**Not achieved**
Deprived Districts					

Source: Ministry of Education and Sports, Preliminary Education Sector Performance Report 2005-06

The national average gross enrolment ratio of 92.1% exceeded even the GPRS II target of 90.9% in 2006. The growth in primary school enrolment for the three deprived northern regions (Northern, Upper East and Upper West) has been particularly encouraging for all except the Northern region, and exceeded the targets set in the GPRS II. This suggests that the MDG target of attaining a 100% enrolment for all children may be achieved faster if effort is made to increase enrolment in the Northern Region.

Net Enrolment Ratio (NER): The NER indicates the number of appropriately aged pupils/students enrolled in schools as proportion of total number of children in the relevant age groups. Available data shows that the NER at the primary level has risen from 45.2% in 1991/92 to 69.2% in 2005/06

(Table 3). It is important to note that the improvement in the NER was observed across the entire country including the rural, deprived regions and the Northern, Upper East and Upper West regions.

Table 3: Trends in Net Enrolment Rates in Basic Schools, 1991/92 to 2005/06

Net Enrolment Rate	1991/92 - 2003/2004	2004/2005	2005/2006	Target 2006	Target Achievement
Primary:					
National	**46.2- 55.6%**	**59.1%**	**69.2%**	**61.7%**	**Exceeded**
Northern	49.0%	52.4%	65.4%		
Upper East	53.2%	55.5%	69.0%		
Upper West	49.7%	54.5%	70.0%		
Deprived Districts					
Sex					
Male	56.5%	60.0%	69.8%		
Female	54.7%	59.3%	68.1%		
Junior Secondary School:					
National		**70.3%**	**74.5%**		

Source: Ministry of Education and Sports, Preliminary Education Sector Performance Report 2005-06

Despite increasing overall enrolment, Table 4 reveals a disturbing picture of an increasing proportion of pupils failing to complete school after enrolment. At the primary level, survival rate decreased from the peak level of 82.6% in 2004/2005 to 75.6% in 2005/2006, while some improvements have been recorded in JSS survival ratios from 85.5% in 2004/2005 to 86.6% in 2005/2006. Analysis of non-completion rate by grade indicates that non-completion occurs mostly at grades 1 to 4 (MoESS 2006), while more males (78.4%) than females (72.4%) are likely to complete their primary school education.

Table 4: Trends in Survival Rates in Basic Schools by Gender, 2003/04 to 2005/06

Survival Rates	2003/2004	2004/2005	2005/2006	Target 2006	Target Achievement
Primary					
National	**83.2%**	**82.6%**	**75.6%**	**84.4%**	Not achieved
Males	85.1%	84.7%	78.4%	85.5%	Not achieved
Females	81.1%	80.3%	72.4%	83.3%	Not achieved
Junior Secondary School					
National	**86.0%**	**85.5%**	**86.6%**	**87.9%**	Missed
Males	88.0%	88.5%	87.4%	88.7%	Missed
Females	83.7%	82.9%	85.6%	87.0%	Missed

Source: Ministry of Education, Science and Sports, Preliminary Education Sector Performance Report, 2006

Construction/rehabilitation of classrooms: A basic pre-requisite for attaining the MDG on universal basic education is availability of adequate number of classrooms in good condition. The government has consequently embarked upon the construction of new and the rehabilitation of old school classrooms. By the end of 2003, 685 three-unit classroom blocks were constructed nationwide, with 61.3% of them located in the three northern regions. In 2004, 216 out of the 440 six-unit classroom blocks were completed, out of this about 22% were constructed in the three

northern regions. In addition construction works of 85 (six-unit) classroom blocks were started, with about 65 classroom blocks close to completion by the end of 2006.

Pupil-Teacher Ratio (PTR): The PTR, which is a proxy for measuring the quality of education, has shown mixed results. Available data indicate that PTR at the primary level increased from 1:34 in 2004/05 to 1:35.7 in 2005/06 (Table 5), indicating an increasing work load for teachers because of the increases in enrolment in recent years. However the deprived regions of Northern Ghana appear to be making progress by registering successive improvements in PTR.

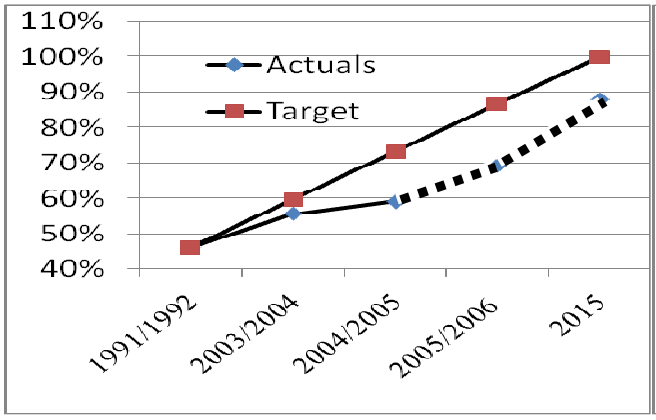
Table 5: Trends in PTR- Basic Schools, 2003/04 to 2005/06

	2003/2004	2004/2005	2005/2006	Target 2006	Target Achievement
Primary					
National	**34.0**	**34.9**	**35.7**	**34.1**	**Missed**
Northern Region	38.6	40.2	38.0	35.0	Missed
Upper East	58.9	57.4	48.0	44.0	Missed
Upper West	46.2	49.0	40.0	35.0	Missed
Deprived Districts	39.5	41.9		35.0	
Junior Secondary School					
National	**18.6**	**19.0**	**19.4**	**20.2**	**Slow Progress**
Northern Region	24.0	25.4	22.9	20.2	Missed
Upper East	25.1	25.1	24.9	20.2	Missed
Upper West	20.3	24.1	22.0	20.2	Missed
Deprived Districts	20.9	22.0	22.5	20.2	Missed

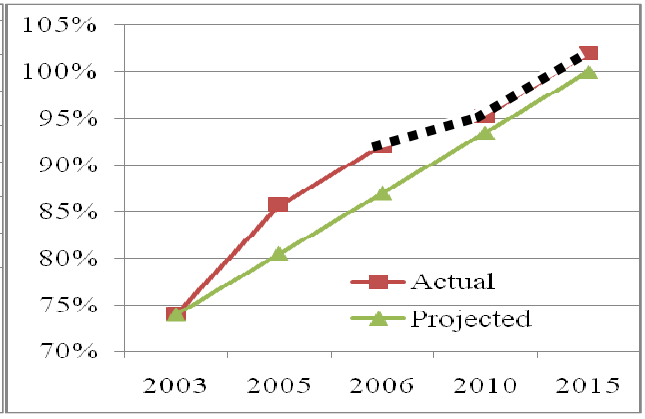
Source: Ministry of Education, Science and Sports, Preliminary Education Sector Performance Report, 2006

Box 3: Will Target be Achieved?

Trends in Net Primary Enrolment Ratios



Trends in Gross Primary Enrolment Ratios



The above trends show that more needs to be done if Ghana is to achieve a net primary ratio of 100% by 2015.

Source: Ministry of Education and Sports, Preliminary Education Sector Performance Report 2005-06, own calculation

CHALLENGES

In spite of apparent successes in moving towards achieving the MDG target of universal primary education, the country continues to face difficulties that constrain enrolment. These include:

- ***Inadequate number of schools in good condition:*** Although the number of primary schools has increased substantially, the available school buildings and other basic inputs are still not sufficient to cater for the increasing number of potential pupils resulting from the introduction of the capitation grant and the school feeding programme.
- ***Costs of education remain relatively high for some poor parents:*** School fees have been abolished, but some poor parents still face the difficulty in providing school uniforms for their children and this drives poor parents away from enrolling their children in school.
- ***Quality of education is still a problem:*** The availability of teaching and learning materials has not improved sufficiently to make an impact on the quality of education. Other factors that contribute to poor quality of education include poor educational infrastructure, low level of teacher commitment due to poor working conditions and low motivation of students.
- ***Lack of proper supervision of schools:*** This results, partly, from the lack of community involvement in the supervision of the schools in the communities. Thus the communities do not see themselves as partners in the provision of education.
- ***Problem of the Girl Child Education and Training*:** Girl child primary school enrolment is rising, but there is inadequate attention given to their retention beyond primary school.
- ***High PTR affects quality of education:*** Deprived areas continue to encounter serious difficulties in attracting trained teachers. This, together with the difficulty of the state to provide incentives to teachers to accept postings to these areas, contribute to affect negatively the quality of education, particularly, in deprived areas.
- ***Weak district level management and accountability:*** Many heads of educational institutions have weak management skills to ensure proper use of resources, particularly, in deprived areas.

2. SUPPORTIVE ENVIRONMENT

Significant progress has been made in improving the necessary supportive environment for the attainment of the MDG on universal access to basic education in Ghana by 2015. The key policy interventions implemented in this respect include the following:

- A constitutional requirement exists for free and compulsory basic education for all children of school age.
- A number of plans and programmes have been launched to ensure the fulfilment of this constitutional requirement. These include the Free Compulsory Basic Education programme (fCUBE), Education Strategic Plan (ESP) 2003, the Capitation Grant, which makes basic school free from any form of school fees and the newly introduced NEPAD School Feeding Programme.
- The introduction of the District Assemblies sponsorship programmes for trainee teachers who are expected to be posted back and teach in their sponsor districts.
- Intensified posting of qualified national service personnel as teachers to the rural areas.
- The new policy of the Ministry of Education, Science and Sports to achieve a textbook ratio of 1:1 in the three core subjects (English, Mathematics and Integrated Science), for all basic schools in the country.

- Mainstreaming of Millennium Development Goals on achieving Universal Primary education by 2015 and Gender Parity by 2008 into the GPRS II.

4. RESOURCE REQUIREMENTS

Several estimates exist with respect to resource requirements to finance the achievement of the MDG of universal primary education. In a preliminary resource needs assessment, the Ghana Education Service estimates that the country would need to spend about US$260.1 million annually to be able to achieve this goal. GPRS II also projects an estimated amount of US$1.5 billion to fund the education related Millennium Development Goal over its implementing period of 2006-2009. The Millennium Project on its part estimates annual resource needs of about US$427 million over the period 2005-2015.

Goal 3: PROMOTE GENDER EQUALITY AND EMPOWER WOMEN

Target 4: Eliminate gender disparity in primary and secondary education by 2005.

Indicator: Ratio of females to males in primary and secondary schools

1. STATUS AND TRENDS

In Ghana, gender issues have been mainstreamed into the country's development policy framework (GPRS II). In this regard specific minimum goals and targets for gender equality have been set, which are consistent with the Millennium Development Goal of eliminating gender disparity at the primary and secondary school levels by 2005 and at all levels of education no later than 2015.

The Gender Parity Index (GPI) is the ratio of boys to girls enrolment, with the balance of parity being 1. Reports from the Ghana Education Service reveal that progress towards achieving gender parity in basic education has been slow and has therefore missed the target set for 2005. The GPRS II has, therefore revised the target date for ensuring parity in basic education and targeted Gender Parity Index (GPI) of 1 at all levels of basic education by year 2009.

Even though the country missed the GPI target by the initially set date of 2005, available data reveals that the GPI improved from 0.92 to 0.95 in 2001/2002 and 2005/ 2006 respectively (Table 6). The index is lower at the junior secondary school level than at the primary level. But the GPI at the junior secondary school level improved significantly from 62 females to 100 males in 1990 to 93 females to 100 males in 2005/ 2006. Generally the GPI has always been high at the kindergarten level, and reached 1.03 in 2005/2006 where there were more girls than boys at the kindergarten level. At this level the country appears to have achieved the MDG target of eradicating gender disparity in education at the kindergarten levels.

Table 6: Trends in National Gender Parity Index (GPI) in Basic Education Sector, 2003/2004-2005/2006

	2003/2004	2004/2005	2005/2006	Target 2006	Target Achievement
GPI					
KG	0.98	0.98	1.03	1.00	Missed
Primary	0.93	0.93	0.95	1.00	Missed
JSS	0.88	0.88	0.93	0.94	Missed

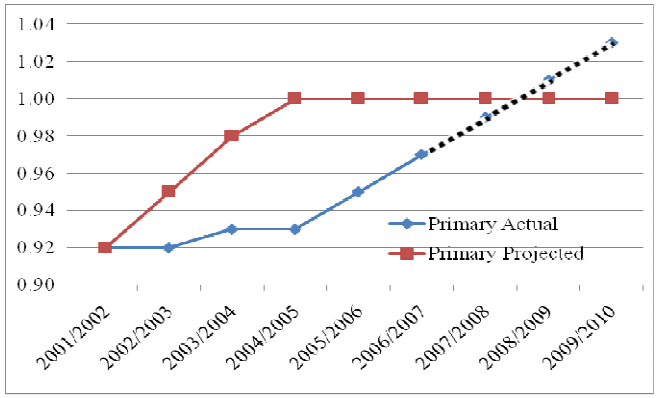
Source: Ministry of Education, Science and Sports, Preliminary Education Sector Performance Report, 2006

In spite of this progress, the national GPI at the primary school level is marked with wide regional differences. Some regions in the deprived northern part of Ghana performed better with this indicator compared with the south. The Upper East Region and Upper West Region, for instance, score GPI ratios of 0.98 and 1.02 respectively as compared to the national average of 0.95. It is only in the Northern Region that the indicator falls below the national average. The GPI is currently estimated at 0.81 in the Northern Region.

Also the gender parity index at the higher educational level appears to have improved over time, the rate of improvements still remains below that of the basic levels of education. The gap tends to widen in favour of boys as one climbs the educational ladder. Moreover, the drop-out rate of girls still remains higher than that of boys.

Box 4: Will Target be Achieved?

Trends in National Gender Parity Index (GPI)



Even though the gender equality target had not been achieved by the set date of 2005, there is ample evidence that the target could be achieved by the end of 2008/2009. But this requires a continuation of the current efforts of promoting the education of the girl child. It must, however, be mentioned that although equality of access for boys and girls to Junior secondary can be achieved, it appears this cannot happen before 2008/2009.

Source: Ministry of Education, Science and Sports, Preliminary Education Sector Performance Report, 2006, own estimation.

2. CHALLENGES

The girl child education is more challenged by socio-economic as well as cultural barriers than the boy child education in Ghana. Poor households, for instance, tend to educate their boys at the expense of their girls partly due to perceived high direct cost of schooling of the girl child and ignorance about the ability of the girl child to perform well in school. Moreover, socio-cultural practices such gender socialization, early marriages, customary fostering, puberty rites and Trokosi (female ritual servitude) tend to affect the girl child education negatively in Ghana. Furthermore gender parity in secondary schools is hampered because girls are usually withdrawn from school to help in household chores and family businesses more than boys.

Besides the above-mentioned socio-cultural problems, government efforts towards achieving the MDG of equal access to education for boys and girls face several other challenges including:

- developing appropriate strategies for achieving gender equality in education that take into account the need for changes in attitudes, values and cultural practices;
- financing the expansion and strengthening of incentive and scholarship schemes for girls;
- improving the quality and relevance of basic education for girls and their parents or households;
- increasing the transition rate for girls to senior secondary schools;
- sensitizing parents and communities about the importance of girls' education; and
- under funding of agencies and institutions dealing with girl child abuses such as the Domestic Violence and Victim Support Unit (DOVVSU) of the Police Service, Commission on Human Rights and Administrative Justice (CHRAJ), and delays in the administration of justice by the courts.

3. SUPPORTIVE ENVIRONMENT

A number of specific tangible measures have been instituted that have led to improvements in gender parity in enrolments. These include the appointment of a Minister responsible for, among other things, girl-child education. A Girls' Education Unit has also been established since 1997 at the Ministry of Education to provide equal access to education and educational opportunities, and to improve the status of women and girls. The unit emphasizes increasing girls' enrolment, reducing the dropout rate of girls and increasing the transition rate for girls to senior secondary school.
There is a policy to mainstream pre-school education in all basic schools, which is currently being implemented. This has the potential to eliminate gender enrolment disparities at the primary level particularly since disparities are currently minimal at that level.

Other measures proposed or already being implemented to improve girls' enrolment at the basic level include the following:

- provision of material support including school uniforms, stationery, school bags and food rations for girls. In 2006, about 42,232 girls benefited from the Take Home Ration for Girls (P4-JSS3) programme. In addition about 5,220 bicycles have been provided to girls who commute long distances to schools in deprived districts in four regions (Central Region, Northern Region, Upper East Region and Upper West Region);
- district and national level scholarship programmes for girls. For example, about 919 girls were awarded scholarship under the Complementary Education Scholarship Programme in West Gonja and Bole Districts in the Northern region in 2006;
- the proposed implementation of gender differentiated capitation grants that provides relatively higher levels of funding for female pupils to address gender disparities;
- ensuring that separate sanitation facilities are available for female pupils;
- eliminating gender stereotyping in educational materials;
- encouraging the recruitment and deployment of female teachers as role models;
- instituting systems / processes to ensure girl child security while at school; and
- sensitizing parents and communities on the importance of girls education through the "Send Your Girl Child to School Campaign".

4. RESOURCE REQUIREMENTS

Among the gender issues that had been mainstreamed into the GPRS II include gender equality in access to basic education. For the period (2006-2009), an annual investment expenditure of US$9.6 million was earmarked in the GPRS II towards the promotion of gender equality and empowerment of women. However, under the Millennium Project an annual investment requirement of about US$51 million has been projected over the period 2005-2015.

Goal 4: UNDER -FIVE MORTALITY

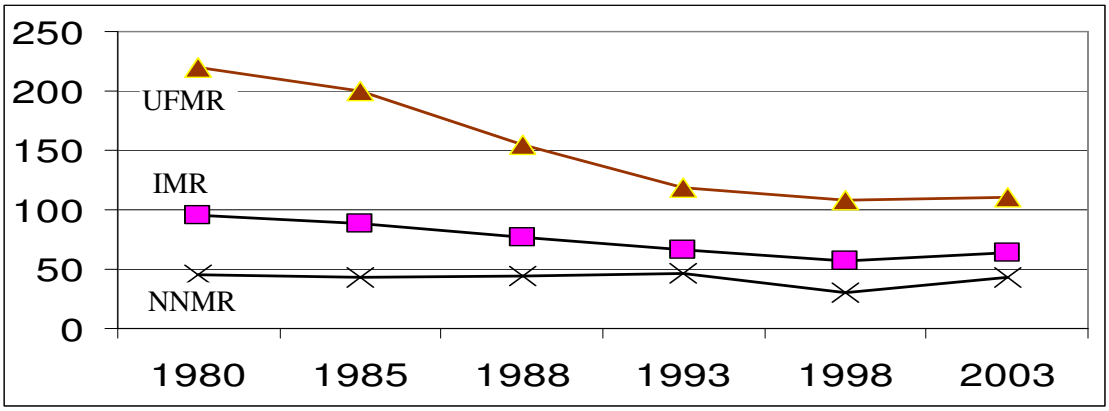
Target 5: Reduce Under-five Mortality Rate by two-thirds by 2015

Indicator: Under-five mortality rate

1. STATUS AND TRENDS

Available data in Ghana indicates that under-five mortality rates have reduced from 155 in 1983-1987 to 111 per 1,000 births during the period 1999-2006. Recent evidence indicates, however, that the decline in child mortality over the last six years appears to be stagnating. Data from the four Ghana Demographic and Health Surveys (GDHS) conducted in 1988, 1993, 1998, and 2003, indicate that significant decline in both infant and under-five mortality observed in the three earlier surveys appears to have stagnated during the five year period preceding the 2003 GDHS. The stagnation seems to have continued in the last four years. Available data from the recent Multiple Indicator Cluster Survey (MICS, 2006) confirms this observation. After declining successively from 122 deaths per 1,000 live births in 1990 to 98 deaths per 1,000 live births in 1998, the under-5 mortality rate appears to have stagnated at 111 deaths per 1,000 live births during the period of 2003 and 2006. This appears to have been caused largely by a sharp increase in the neonatal mortality rate from 30 per 1,000 live births in 1998 to 43 per 1,000 during the period prior to the 2003 (GDHS 2005) (Figure 5).

Figure 5: Trends in Under-five Mortality Indicators in Ghana 1993 -2003



Source: Ghana Statistical Services, Ghana Demographic and Health Survey, 2005

The implication for the high level of child mortality is that one in every nine Ghanaian children dies before reaching the age of five years. Again evidence from the GDHS (2005) shows that neonatal mortality in 2003 still remains high at 43 deaths per 1,000 live births, while post neonatal mortality rate also remains at 21 deaths per 1,000 live births. There also exist wide geographical differences in child mortality rates, in which case, mortality levels in rural areas are consistently higher than in the urban areas. Currently under-five mortality rate in rural areas is estimated at 114 per 1,000 live births compared with 106 in urban areas (MICS, 2006). This is consistent with the pattern observed in 2003 in which under-five mortality in the rural areas was 118 per 1,000 live births as against 93 for the urban areas. Similarly, under-five mortality rates have been found to be the lowest in the

Western region with 66 per 1,000 live births compared to 191 per 1,000 live births in the Upper West.

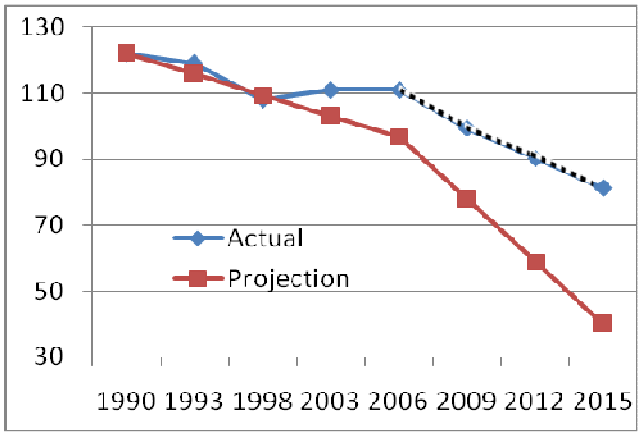
The probabilities of mortality among males and females under five years have also been found to vary. Under-five mortality rate (U5MR) experienced by female children (89 deaths per 1000 births) is almost two thirds of what is experienced by male children (131 deaths per 1000). The differences are usually attributed to the biological advantage enjoyed by female children over male children in the early years of child birth.

The sluggish decline in the child mortality rates in Ghana is attributed, in part, to the high levels of malnutrition among children and acute respiratory infections (ARI), diarrhoea, anaemia, measles, malaria, low rate of vaccination and other neonatal causes. Together these health problems account for 50% of all childhood admissions and 30% of all childhood deaths. The 2005 Ghana Demographic and Health Survey (GDHS) report indicates that all these factors are associated with elevated risk of mortality. Access to safe water, adequate sanitation and safe shelter are also important factors in child health and mortality. In Ghana, the slow progress made in the provision of safe water and sanitation (CWIQ, 2003) and the poor housing conditions in the country, especially the country's inability to stop the development of urban slums impedes the country's efforts to reduce U5MR.

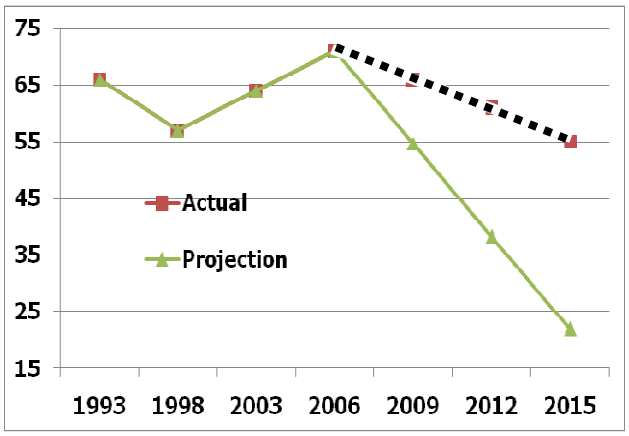
Notwithstanding the challenges associated with the implementation of policies and programmes for reducing child morbidity and mortality, major progress has been made in recent times in specific areas including, child survival interventions. Available data indicates that under-five malaria case fatality has declined steadily from 3.7% to 2.1% during the period 2002-2006, while annualized non-polio rate of 1.4/100,000 children under 15 years was achieved at the end of 2005. Additionally, immunization coverage in all regions in Ghana increased from 71.9% in 2005 to 84.5% in 2006.

Box 5: Will Target be Achieved?

Trends in Under-five Rates in Ghana, 1990-2015



Trends in Infant Mortality Rates in Ghana, 1990 -2015



In the face of the sluggish decline in the child and infant mortality rates, it is not likely for the country to achieve the MDG of reducing under-five mortality rate by two-thirds by 2015 unless efforts are intensified.

Source: Ghana Statistical Services, Ghana Demographic and Health Survey, 2005, own estimation

3. CHALLENGES

The number of challenges to the attainment of targets set under this MDG, include the following:

Sustainability in financing child welfare programmes: Most programmes under EPI, including polio eradication are largely funded by donors. The short-term nature of such donor support does not ensure effective long-term sustainability of the programmes.

Non-medical preventive health care: There is the need to give more attention to non-medical preventive health care such as improved sanitation, potable water, education, etc.

School Feeding Programme: The school feeding programme in kindergartens is likely to impact positively on nutrition of children, but its expansion from the pilot stage has been slow due to financial constraints.

Data constraints on child health: There is the need for a nationwide survey on child health care, with the view to collecting detailed reliable data for comprehensive analysis of child health care. Most of the information on child health care stems from micro-censuses and this does not allow proper analysis of child mortality rates.

3. SUPPORTIVE ENVIRONMENT

In response to the prevailing high childhood mortality in the country, key specific interventions which have been implemented over the years to improve child survival and development include:

Integrated Management of Childhood Illness (IMCI): The Integrated Management of Childhood Illness (IMCI), since its introduction in 1999 in Ghana, has contributed towards improving the quality of care provided to children under-five years of age. The three main components of the strategy include: 1) improve case management skills of health-care staff; 2) improve overall health systems; 3) improve family and community health practices. It has since then moved from a pilot stage in only four districts in 1999 to 18 districts in 2003, 49 in 2004 and further to 89 of the 138 districts in Ghana in 2006. One hundred percent Vitamin A supplementation coverage was achieved in children between 6-59 months old in 2005 and 2006.

Expanded Programme on Immunization (EPI): The Expanded Programme on Immunization (EPI), as one of the key child health interventions, has been implemented in Ghana since 1978 through a combination of routine and mass immunization exercises. As in most developing countries, immunization against the six immunizable childhood diseases (i.e., diphtheria, measles, pertussis, poliomyelitis, tetanus, and tuberculosis) has been instituted as part of Ghana's primary health care programme.

The EPI has progressed substantially in the last decade. At present the coverage of pentavalent vaccine, for instance, is about 80% in most districts. BCG coverage, for instance, is about 93% as at 2003. Similarly experiences from recent exercises of the polio eradication initiative have been very encouraging but with large geographical variations as far as coverage and impact are concerned.

Ghana, like many other developing countries has also given child and maternal health care an added importance in its development policy framework and has mainstreamed child and maternal health related interventions in the GPRS II. These include various interventions such as the following:

- IMCI
- West-African Accelerated Child Survival and Development Programme (ACSD)
- EPI
- Neonatal care
- Nutrition Programme
- Macroeconomics and Health Initiative
- Malaria Control – Roll Back Malaria (RBM)
- Diarrhoea prevention and management

4. RESOURCE REQUIREMENTS

The Ghana Macroeconomics and Health Initiative Report estimates the total cost of scaling up investments in health to achieve the health related MDGs including water and sanitation to be about US$7,662 million for the period 2002-2015. Out of this about US$620 million is estimated to be the investment requirements to achieve the MDG target of reducing child mortality rate by two-thirds by 2015. The Millennium Project also estimates about US$598 million in terms of annual resource requirements for the period 2005-2015 for achieving all the health related MDGs.

GOAL 5: IMPROVE MATERNAL HEALTH

Target 6: Reduce Maternal Mortality Ratio by Three-Quarters by 2015

Indicator: Maternal mortality per 100,000

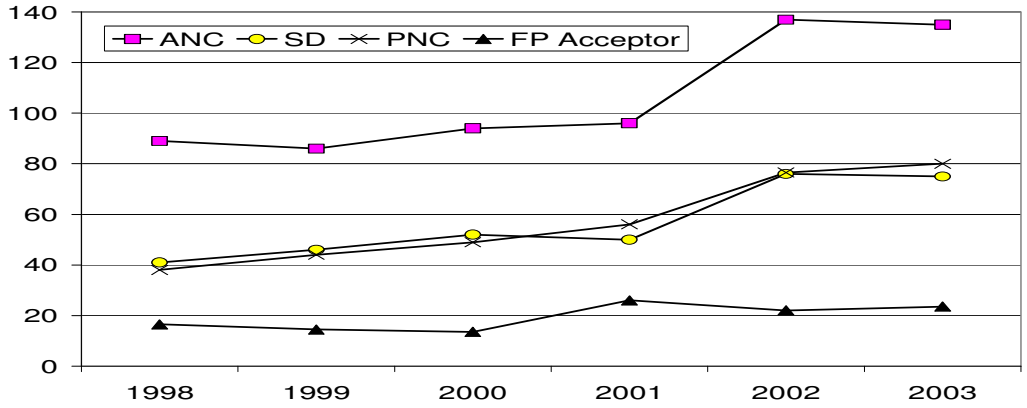
1. STATUS AND TRENDS

In the past various interventions have been initiated in Ghana to address the major health problems of females, and particularly, to bring down the high levels of maternal mortality. A list of selected health interventions aimed at addressing the problems of maternal health includes the following:

- Safe-Motherhood Initiative;
- Ghana VAST Survival Programme;
- Maternal Health Project (1997/1998);
- Prevention Maternal Mortality Programme (PMM);
- Making Pregnancy Safer Initiative;
- Prevention and Management of Safe Abortion Programme;
- Intermittent Preventive Treatment (IPT);
- Maternal and Neonatal Health Programme; and
- Roll Back Malaria Programme.

These interventions have impacted positively on a number of maternal health indicators as reflected in improvements in Antenatal Care (ANC), Supervised Delivery (SD), Postnatal Care (PNC) and Family Planning (FP) acceptor rates (Figure 6). As at 2006 ANC was available in over 93% of all health facilities in Ghana, after having grown successively from 88% in 2002. Similarly coverage levels of tetanus toxoid in Ghana have been found to have increased from 70% in 1988 to 88% in 2006, with over 50% of women receiving at least two doses of tetanus toxoid for their recent birth.

Figure 6: Trends in safe motherhood interventions, 1998 – 2003

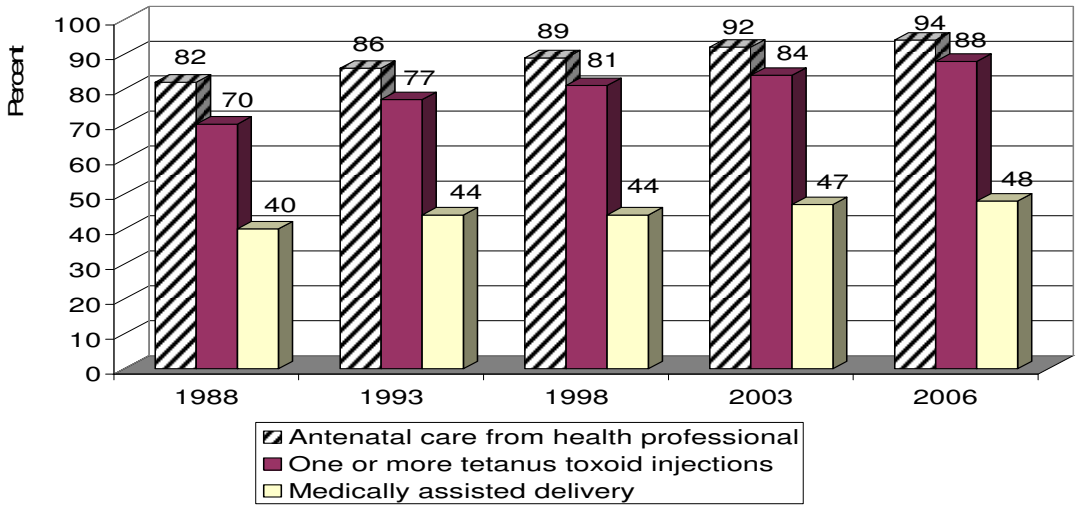


Source: Ghana Statistical Services, Ghana Demographic and Health Survey, 2005

Due to improved access to health facilities and maternal care, more women in labour are now receiving delivery assistance from trained medical personnel. Hence the proportion of women in labour, who are assisted by trained medical personnel has improved from 40% in 1988 to about 48% in 2006 (Figure 7). The adoption of IPT as the strategy for reducing the incidence and complications of malaria in pregnancy since 2003 has also led to sustained improvements and ensured effective

risk detection, management of complications and improvement in pregnancy output. At the same time uptake of postnatal care (PNC) among mothers and babies up to six weeks after delivery to maintain the physical and psychological well-being of the mother and child is also on the increase. There are, however, wide geographical differences, ranging from 88% of antenatal registrants in the Upper West Region to 37% of antenatal registrants in the Western region (GDHS 2005).

Figure 7: Selected Indicators of Reproductive Health Care, 1988-2006



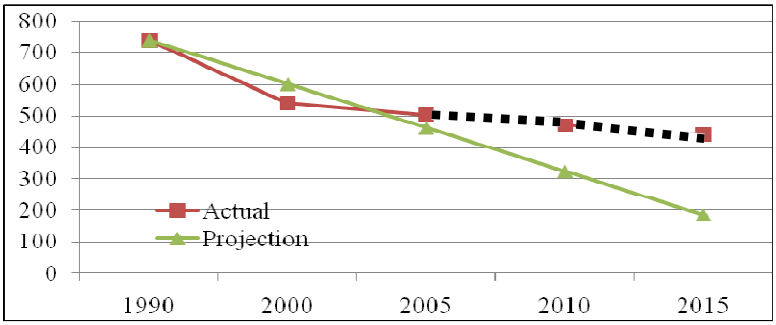
Source: Ghana Statistical Services, Ghana Demographic and Health Survey, 2005, Ministry of Health, GHS Programme of Work 2006.

The effects of these interventions on female health have led to successive declines in maternal mortality rate from 740 deaths per 100,000 live births in 1990 to about 503 per 100,000 in 2005 (MOH 2006). Other evidence, however, puts the current maternal mortality rate of Ghana at a range of a predicted ratio of 214 (WHO 1999) to about of 586 (Hill 2001) per 100,000 live births. There are however, considerable differences between the regions, with the deprived northern regions showing MMR of over 800 maternal deaths per 100,000 live births.

Despite these improvements maternal mortality rate is still relatively high and improvements are very slow. With this slow performance it appears unlikely that the goal of reducing maternal mortality rate by three quarters by 2015 can be achieved.

Box 6: Will Target be Achieved?

Trends Estimates in Maternal Mortality Rates, 1990-2015



Improvements in reducing maternal mortality, in spite of the many interventions, have been very slow. In the light of this it appears unlikely that the goal of reducing maternal mortality rate by three quarters by 2015 may be achieved.

Source: Ghana Statistical Services, Ghana Demographic and Health Survey, 2005, own calculation

3. CHALLENGES

Various reasons have been attributed to the high maternal mortality rate in Ghana. According to the Ghana Service Provision Assessment Survey (2003) the lack of family planning services in most health facilities appear to be hampering efforts at improving maternal health care. The result of the survey also show that only 70% of health facilities offer postnatal care and this lends credence to the low levels of BCG, DPT1 and OPV0 in Ghana, albeit improving.

Other key challenges that have been identified include:

- maternal mortality rates remains relatively high in Ghana.
- relatively low spread of facilities with services for maternal health care.
- relatively low uptake of services available by expectant mothers;
- lack of detailed comprehensive data on maternal health care for proper scientific analysis of maternal health; and
- lack of systems and plans to monitor and evaluate progress of maternal health programmes.

3. SUPPORTIVE ENVIRONMENT

In response to the prevailing high maternal mortality in the country, the following initiatives are being pursued:

- development and implementation of high impact yielding strategies for under-five and maternal health care and malnutrition;
- improving access to reproductive health services through the effort of developing, at least, one fully functioning and well equipped hospital in each district to handle maternal health complications;
- expanded community-based health service delivery;
- continuous training and upgrading of skills of people engaged in traditional maternal health service delivery;
- continued advocacy for district assemblies and DHMTs to dedicate a percentage of their resources for MNC;
- development of guidelines for neonatal care; and
- establishment of the process of making maternal death a notifiable event backed by legislation.

4. RESOURCE REQUIREMENTS

The Ghana Macroeconomics and Health Initiative Report, on its part, estimates resource requirement of about US$790 to scale up investments over the period 2002-2015 with the view to reducing maternal mortality by three-quarters by 2015.

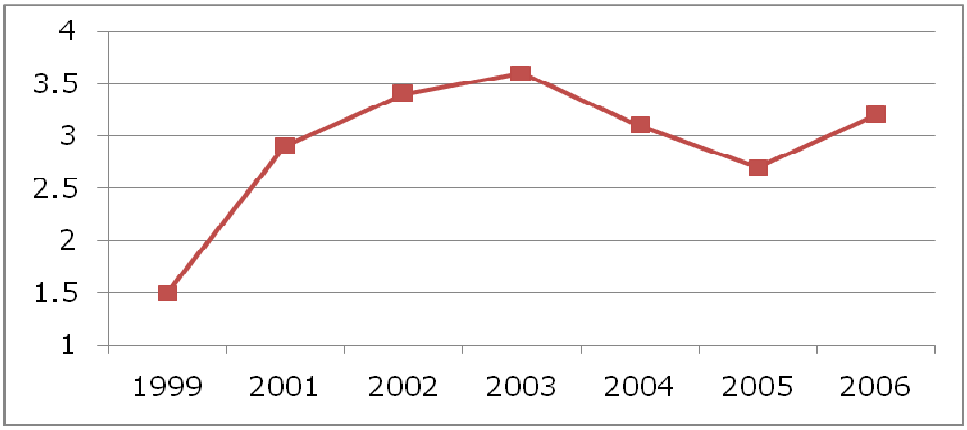
GOAL 6: COMBAT HIV/AIDS AND MALARIA

Target 7: Halt and reverse the spread of HIV/ADS by 2015

1. STATUS AND TRENDS

Recent sentinel surveillance reports together with reports from antenatal clinics show stabilisation of the national prevalence rate of HIV/AIDS at 3.2% in 2006 (Figure 8). The current rate represents a decline from 3.6% in 2003, but an increase from the 2.7% level recorded in 2005. According to the Ghana Aids Commission the current up-and-down movement in the prevalence rate signals only a levelling or stabilization of the epidemic. HIV-1 accounts for 92% of HIV cases in Ghana, while 7.4% of reported HIV cases are dual infections with HIV-1 and HIV-2. Only 0.5% of HIV cases were exclusively HIV-2. The latest surveillance report reveals that HIV sero-prevalence among sexually transmitted patients and blood donors is 17% and 4%, respectively. Mother-to-child-transmission accounts for 15% of all new infections, while heterosexual transmission accounts for 75-80% of all HIV/AIDS infections.

Figure 8: Trends in HIV/AIDS Prevalence Rate in Ghana, 1999-2006



Source: Ghana Aids Commission

It is estimated that between 364,000 and 372,000 adults between the ages of 15 and 49 have been infected with the HIV virus. In addition between 25,000 and 32,000 children under the age of 15 years are estimated to be living with the HIV/AIDS virus, with about 20,000 children in Ghana rendered orphans as a result of the disease (Table 7).

The distribution pattern of adult infections shows that almost 90% of the cumulative AIDS cases are between the ages of 15-49 years (Table 8), with females accounting for about 63%. The spread of the HIV/AIDs infection seems to be relatively more widespread among commercial sex workers (CSW) in the major regional capitals, where HIV/AIDS accounts for nearly 76% and 82% of all sexually transmitted disease (STD) among CSWs in Accra and Kumasi respectively.

This pattern notwithstanding, HIV/AIDs awareness remains relatively high among the population with about 98% of women and 99% of men being aware of the disease due to the intensification of prevention programmes through civic education on prevention of HIV/AIDS infections.

Table 7: Estimated number of people living with HIV/AIDS, 2002 -2003

	Best estimates: 2002 - 2003	2003 Low – High Range	2004-2006 Low – High Range
Estimated Adult (15-49) Prevalence	3.4 – 3.6	2.8 – 4.2	2.2 – 2.7
Number of Infected Adults (15-49)	336,000 – 352,000	282,000 – 400,000	364,000-372,000
Number of Infected Children (0-14)	23,500 – 26,000	21,000 – 31,000	25,000-32,000
Number of AIDS Deaths	26,000 – 29,000	23,500 – 35,300	25,000-37,000

Source: National AIDS/STD Control Programme, "Estimating National HIV Prevalence," Technical Report, 11/03.

Table 8: HIV Prevalence by age group, 2005 and 2006

Age group	2005	2006	% increase
National	**2.7%**	**3.2%**	0.5%
15-19	0.8%	1.4%	0.6%
20-24	2.4%	2.4%	0.0%
25-29	3.6%	4.2%	0.6%

Source: Ghana Aids Commission; NAACP, 2006

Treatment, Care and Anti-retroviral Therapy (ART)

Ghana has developed two rolling HIV/AIDS Strategic Frameworks (2001-2005 and 2006-2009) to halt and reverse the prevalence of HIV/AIDS in the country. To ensure proper and co-ordinated implementation of the national response, a Programme of Work (POW) has been developed for the period 2006-2010 on the basis of some intervention areas identified in the National Strategic Framework II (2006-2009). The co-ordinated efforts by government to halt the HIV/AIDS pandemic have started to achieve results. For instance, there has been an increase in Antiretroviral (ARV) therapy sites from three in 2003 to five in 2006. According to the latest estimates, about 7,338 people were receiving ART in June, 2006 (7,070 adults and 268 children). The number of sites providing services for voluntary counselling and testing has also increased from 14 as at the end of 2003 to 113 by September 2005, while 53% of all districts are estimated to have at least one facility providing voluntary counselling and testing (VCT) services. VCT service users are charged 5,000 cedis and ART and laboratory examinations require a 50,000 cedis monthly contribution from patients. Prevention of Mother-to-Child Transmission of HIV/AIDS (PMTCT), the treatment of certain opportunistic infections and CD4 tests are provided free of charge. Services for preventing mother-to-child transmissions are also available in 53% of districts. The National Business Coalition for HIV/AIDS was launched in 2006 to support HIV/AIDS activities undertaken by businesses and also to act as the focal point for the co-ordination of business sector response to the HIV/AIDS menace.

2. CHALLENGES

The country is still grappling with how to convert the high levels of awareness into behavioural change, and therefore programmes that target high risk and vulnerable groups is required.

Treatment, Care and Support for HIV/AIDS Patients: There is an extensive unmet need for treatment, care and support, especially, for patients with HIV/AIDS in the country.

Lack of resources to finance the scaling-up of access to treatment, care and support for PLWHA: Estimates of resources to accelerate free access to treatment, care and support for 80% of PLWHA in need of such services by 2010 run into US$550 million. This leaves a huge resource gap that must be covered when compared with the available resource flow to the sector.

The urgent need for a mechanism to coordinate effective use of HIV/AIDS resources: Presently there is no mechanism for systematic monitoring and reporting on direct funding of activities by development partners as part of the national response, despite the fact that direct funding has been estimated to account for more than 76% of all funds for the national response.

The need for a systematic tracking of national funds spent on HIV-related activities: By law, 1% of the District Assemblies Common Fund is to be used for HIV-related activities, but there is no countrywide data on the actual use of the fund.

The need to enhance the capacity of the Ghana AIDS Commission to coordinate the national response: Currently, the Commission's Secretariat lacks a strong unit for programming, and for monitoring and evaluation of the national response.

3. SUPPORTIVE ENVIRONMENT

In 2001 the Government of Ghana earmarked 15% of its health budget for HIV/AIDS activities, and all MDAs were requested to create an HIV/AIDS budget line. In addition MMDAs were also to set aside 1% of its budget for local HIV/AIDS activities. Several development partners have also provided funding and other support to activities aimed at addressing Ghana's HIV/AIDS epidemic. The Global Fund to Fight AIDS, Tuberculosis and Malaria (The Global Fund) has approved substantial sums of money for voluntary testing and counselling activities as well as treatment. The Round 5 of the Global Fund brought into Ghana about US$97 million to support HIV/AIDS activities over the period 2006 - 2010. In addition about US$12 million from multilateral partners, and US$25 million from the World Bank, as well as about US$8 million from bilateral donors have been mobilized for HIV/AIDS activities. As part of its Treatment Acceleration Project, the World Bank has also approved US$60 million in funding to expand access to ART in Ghana, Burkina Faso and Mozambique.

In response to the current surge in HIV/AIDS prevalence rate the following initiatives are being pursued:

- continue rapid scale-up of provision of antiretroviral combination therapy (ART) for people with advanced HIV from 4,000 in 2005 to about 5,300 in 2006;
- establishment of at least one ARV treatment centre in each region;

- establishment of at least one VCT/PMTCT site in each district;
- keep 15,000 patients on ARV; and
- undertake behavior change communication activities with special emphasis on high risk groups.

3. RESOURCE REQUIREMENTS

According to the Ghana Macroeconomics and Health Initiative Report the country requires about US$967 million over the period 2002-2015 to be able to achieve this MDG. This seems to be far greater than resources so far mobilized under the various arrangements indicated above.

Target 8: Halt and reverse the Incidence of Malaria

4. STATUS AND TRENDS

Malaria in Ghana is the single most important cause of mortality and morbidity especially among children under-five years and pregnant women. It accounts for about 44.5% of all outpatient illnesses, 36.9% of all admissions and 19% of all deaths in health facilities in Ghana. The disease is responsible for a substantial number of miscarriages and low birth weight babies among pregnant women. Among this group, malaria accounts for 13.8% of OPD attendance, 10.6% of admissions and 9.4% of deaths that occur every year.

Intensive government efforts at controlling malaria in Ghana have therefore had a long history. In 1992 the country launched a 5-year (1993-1997) National Malaria Control Action Plan with the focus on capacity building for improved disease management in health facilities. This was followed in 1998 with the Roll Back Malaria (RBM) programme and the 'Medium Term Strategic Plan for Malaria Control in Ghana' (1998-2002), which had the goal to halve the malaria burden by 2010. The government has also committed itself to the Abuja Declaration on Roll Back Malaria in Africa, which similarly seeks to achieve specific targets on malaria prevention and control within certain specified time limits. Also a new strategic National Malaria Control Programme (NMCP) has recently been initiated in the country to promote the use and availability of Insecticide Treated Nets (ITNs). This programme aims to reduce mortality and morbidity due to malaria by 25% by 2008 through improved case management, implementation of multiple prevention methods, focused research and improved partnerships. Apart from these, there are increased efforts to enhance malaria prevention, through the promotion of chemoprophylaxis for pregnant women and improved environmental sanitation. In addition a new Anti-Malaria Drug Policy based on Artesunate-Amodia-quine, has been introduced and expanded into all the 138 districts of the country as alternative to existing anti-malaria drugs, which have become malaria resistant. The government has also adopted measures to improve malaria case management, through the preparation of treatment protocols.

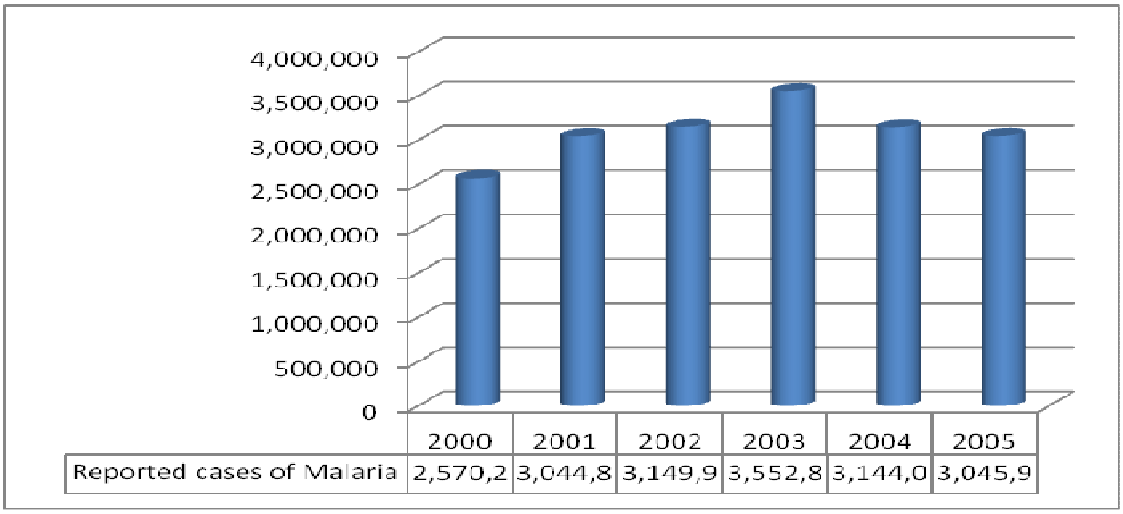
As a result of these programmes the use of ITNs has gone up substantially from 3.5% in 2002 for children less than 5 years of age to 32.3% in 2006 and from 2.7% of pregnant women to 46.3% during this period (Table 9). To prevent poor health outcomes like miscarriages and low birth weights among pregnant women emanating from malaria, the country has been implementing the IPT programme that provides chemoprophylaxis for all women during pregnancy. In 2006, it was observed that all district health facilities were implementing the Intermittent Preventive Treatment (IPT) policy. During the same year about 230,269 pregnant women were estimated to have received two doses or more of the treatment. The coverage of IPT during pregnancy has also improved from 20% in 2004 to 51% in 2005. There has also been a decrease in under-five malaria case fatality rate from 2.4% in 2005 to 2.1% in 2006 against a target of 2% set for the year. The overall improvement in malaria prevention and control is also reflected in the decline in reported cases of malaria in the various health facilities (Figure 9). This is, particularly, noticeable in the decline in OPD cases, malaria admissions and deaths in the 20 Global Fund targeted districts, as reported by the Ghana Health Service (GHS). There have also been reductions in Case Fatality Rates (CFR), Low Birth Weight (LBW) and malaria cases as well as anaemia in pregnancy in these districts.

Table 9: ITN Use by High Risk Category, 2004-2006, 2002-2006 (Percent)

	2002	2004	2005	2006
Children under 5 years	3.5	9.1	26	32.3
Pregnant women	2.7	7.8	26.8	46.3

Source: Malaria Control Program Report, 2006.

Figure 9: Annual Reported Cases of Malaria, 2000-2005



Source: Malaria Control Program Report, 2006.

5. CHALLENGES

In spite of sustained efforts on the part of the government to prevent and control, as well as properly manage malaria cases in Ghana, reported malaria cases continue to be high, as reflected by case fatality ratios. The biggest challenge for the government is how to consolidate the gains so far achieved by effectively coordinating and refocusing the numerous programmes towards a common goal and avoid duplication and waste of resources.

Another challenge is how to financially sustain the numerous programmes aimed at malaria control and prevention in the face of other competing health demands like HIV/AIDS.

6. SUPPORTIVE ENVIRONMENT

Several programmes have been initiated to prevent and control malaria. New effective methods for prevention, control and treatment have been introduced over time. The government has also committed itself to the Abuja Declaration on Roll Back Malaria in Africa, which similarly seeks to achieve specific targets on malaria prevention and control with time limits. A new strategic National Malaria Control Programme (NMCP) has recently been initiated in the country to promote the availability and use of ITNs through public-private sector partnership. Other newly introduced malaria prevention efforts include promoting chemoprophylaxis for pregnant women and improving environmental sanitation.

A new Anti-Malaria Drug Policy, Artesunate-Amodiaquine, has been recently introduced in the country as alternative to existing malaria drugs, which seem to show signs of malaria resistance. New treatment protocols for malaria have also been prepared and adopted as part of the measures to improve malaria case management.

7. RESOURCE REQUIREMENTS

Over the period 2002-2015 the Ghana Macroeconomics and Health Initiative Report estimates investment requirements for achieving this goal at about US$788 million. This constitutes an estimated annual incremental resource requirement equivalent to 0.45% of Gross Domestic Product over the same period.

Goal 7: ENVIRONMENTAL SUSTAINABILITY

Target 9: Integrate the principles of sustainable development into country policies and programmes and reverse loss of environment resources by 2015

Indicator: Proportion of land area covered by forest

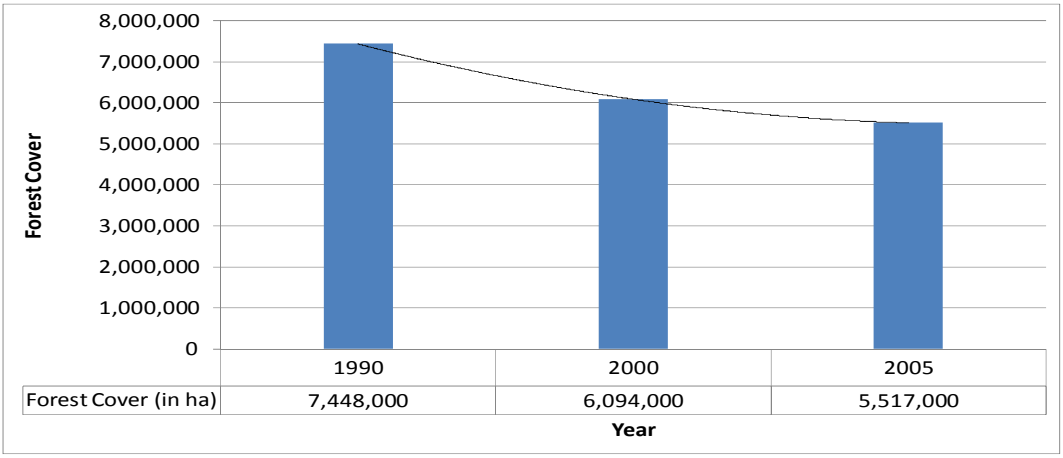
1. STATUS AND TRENDS

The long term development of the country and the sustainability of livelihoods of some of the poorest communities appear to be threatened by poor exploration practices of natural resources, especially lands and forests. A UNDP report (2003) for instance, estimates that the country has lost about 79% of its forest cover since the beginning of the 20th century. Between 1990 and 2000, Ghana lost an average of 135,400 hectares of its forest cover per annum, representing an average annual deforestation rate of 1.82%. This however increased to 1.89% between 2000 and 2005, accounting for 115,400 hectares of forest lost per annum. Primary forest cover accounted for 353,000 hectares in 2005, while plantation cover amounted to 160,000 hectares. The total forest area (including both conserved area and degraded section) as well as plantation cover amounted to 5,357,000 hectares in 2005.

TOTAL FOREST COVER:		
Forest 1990 (ha)		7,448,000
Forest 2000 (ha)		6,094,000
Forest 2005 (ha)		5,517,000
Annual Change 1990-2000 (ha | %)	(135,400)	-1.82%
Annual Change 2000-2005 (ha | %)	(115,400)	-1.89%
Total Change 1990-2005 (ha | %)	(1,931,000)	-25.93%
PRIMARY FOREST COVER:		
Primary 1990 (ha)		353,000
Primary 2000 (ha)		353,000
Primary 2005 (ha)		353,000
Annual Change 1990-2000 (ha | %)	-	0.0%
Annual Change 2000-2005 (ha | %)	-	0.0%
Total Change 1990-2005 (ha | %)	-	0.0%
PLANTATIONS:		50,000
Other 1990 (ha)		60,000
Other 2000 (ha)		160,000
Other 2005 (ha)		
Annual Change 1990-2000 (ha | %)	1,000	2.0%
Annual Change 2000-2005 (ha | %)	20,000	33.3%
Total Change 1990-2005 (ha | %)	110,000	220.0%
TOTAL DEGRADATION/CONSERVSION (Forest area + Wooded Area-Plantations)		
Other 1990 (ha)		7,398,000
Other 2000 (ha)		6,034,000
Other 2005 (ha)		5,357,000
Annual Change 1990-2000 (ha | %)	(136,400)	-1.84%
Annual Change 2000-2005 (ha | %)	(135,400)	-2.24%
Total Change 1990-2005 (ha | %)	(2,041,000)	-27.59%

In total, the country lost about 25.9% of its forest cover (accounting for 1,931,000 hectares) between 1990 and 2005 (Figure 10).

Figure 10: Trends in Forest Cover in Ghana, 1990 – 2005 (in hectares)



Source: Rainforest Alliance, 2006/FAO

The causes of the loss of Ghana's natural resource are varied. They include mainly poor enforcement of regulations on natural resource utilization, inefficient management of forest resources and the dependence on fuel-wood by the poor. There is even the fear that environmental resource degradation has increased on account of increased mining activities as well as high level of pollution from the manufacturing sector. Recent reports of outcries of residents in areas with high levels of mining and manufacturing activities about pollution of rivers and land degradation bear testimony to the serious environmental problems in the country. The problems seem to have been compounded by the high level of real estate development in recent years and other construction activities with the associated high demand for and poor utilisation of wood products as construction materials.

The government has recognized the importance of the environment as a prerequisite for accelerated sustainable development. It has therefore initiated programmes geared towards balancing the quest for high economic growth with sustainable exploitation of the resources, and mainstreamed the principles of sustainable development into its current national development policy framework, the Growth and Poverty Reduction Strategy (GPRS II). Efforts towards the restoration of degraded forest reserves have also been enhanced. In 2005, the restoration of 60,000 hectares of degraded forest reserve was fast tracked and completed earlier than the target date of 2008.

In order to harmonise land policies and the legal framework with customary land law practices so as to ensure greater transparency in land administration and the enforcement of property rights, the government in 2003 initiated the Land Administration Program (LAP). This land reform programme seeks to improve upon the land tenure system with respect to access and efficient land use as well as streamline ownership and title processes. Progress has been made since the initiation of the reform programme, particularly, in the issuing of Land Title. The Environmental Protection Agency (EPA), as the agency responsible for ensuring environmental sanity in the country has also initiated numerous programmes towards addressing environmental concerns in the country. Among other things, it has, in collaboration with the National Development Planning Commission (NDPC),

conducted a Strategic Environmental Assessment of the Growth and Poverty Reduction Strategy (GPRS II) to ensure that environmental concerns are adequately reflected in the nation's development policy framework.

2. CHALLENGES

The major challenge today is to restore the degraded areas and increase participation of key actors in environmental management and sustainable use of environmental resources. In this regard the limited government capacity for environmental management needs to be improved significantly.

Another challenge is to identify robust and meaningful indicators which can be measured to provide insights into the impact of environmental degradation on poverty reduction. Until now, issues of human development and the environment have generally been addressed separately, without due acknowledgement of their inter linkages.

3. SUPPORTIVE ENVIRONMENT

A number of initiatives being implemented to reverse the loss of environmental resources include:

- restoration of 60,000 hectares of degraded forest reserve took place in 2005, earlier than the target date of 2008;
- continuation of the plantation development programme;
- extension of competitive bidding in the allocation of logging rights for existing natural and planted timber;
- undertaking a pilot forest yield assessment programme in 12 forest reserves to determine the scientific basis for the conversion of all existing timber leases;
- training of 300 people in the use of bamboo for furniture making, crafts and construction work as part of the sensitisation programme on the economic potentials of lesser known species as alternative to timber.

4. RESOURCE REQUIREMENTS

Estimate of resource requirements for achieving this goal is currently not available. However a World Bank's Country Environmental Assessment study conducted in 2006 put the total cost of current environmental degradation at nearly US $850 million or 10.0% of GDP. The degradation of natural assets (agricultural soils, forests and savanna woodlands, coastal fisheries, wildlife resources, and Lake Volta's environment) costs at least US$520 million annually (6.0% of Ghana's annual GDP) and health effects account for nearly US $330 million or 3.8% of GDP.

Target 10: Halve by 2015, the proportion of persons without access to safe drinking water

Indicator: The proportion of population with sustainable access to an improved water source

1. STATUS AND TRENDS

Improving access to potable water and sanitation is critical to achieving favourable health outcomes, since in Ghana an estimated 70% of all diseases are caused by lack of clean water and proper sanitation. In 2006, it was reported that about 44.5% and 12% of all outpatient visits to health facilities in Ghana were the result of malaria and other water related diseases respectively. Malaria is transmitted by mosquitoes, whose spread is caused largely by poor sanitation and drainage. On the other hand health problems such as diarrhoea, skin diseases, acute eye infections, cholera and dysentery, typhoid and infectious hepatitis, trachoma and scabies are consequences of poor drinking water. Besides these direct health costs, there are other indirect economic costs connected with the lack of potable water and poor sanitation.

These hidden costs emanate from the loss of significant energy and time wasted by individuals and households, particularly women and children, in fetching and storing water from distant streams. Accelerating access to safe drinking water and sanitation will therefore not only improve the health of Ghanaians, but also increase productivity and reduce poverty.

Recent estimates indicate improvements in the trends of access to potable drinking water of both the urban and rural population over time. Overall access has increased from 42% of the population in 1998/1999 to a little over 63% in 2005/2006. The poor and the rural population seem to have benefited more from the improvement in access to safe drinking water than the urban and affluent population. It is estimated that access to potable drinking water by the lowest 25% of the rural poor, has increased from 32% in 1991/92 to 64% in 2005/6, while the proportion of the lowest urban poor with access to potable water has increased only from 55% to 76% during the same period (Figure 11). On the other hand while access to potable water by the richest quintile of the population in the urban areas increased by only 7% from 84% to 91% between 1991/2 and 1998/99, access by the rural rich increased by 26% from 41% to 67% during the same period.

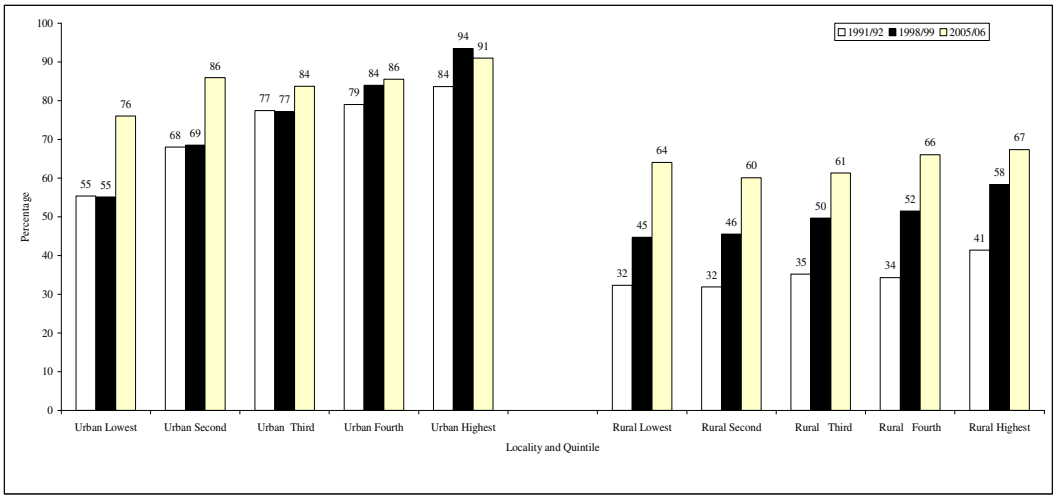
These improvements have contributed to a massive reduction in the proportion of urban and rural populations which depend on natural sources for their drinking water. For instance, while the proportion of urban population using natural sources as their main source of drinking water reduced from 9.9% in 1991/92 to 2.5% in 2005/06 that of rural population also witnessed a substantial reduction from 48.9% to 25.9% during this period (Table 13).

Table 13: Main source of drinking water of households, 1991/92 – 2005/06

	Urban	Rural	Urban	Rural	Urban	Rural
	1991/92		1998/99		2005/06	
Inside pipe	38.4	2.6	34.1	3.2	34.4	2.6
Water vendor	3.6	0.4	6.8	1.7	4.4	0.6
Neighbour/Private	21.7	2.4	28.7	5.5	27.1	4.6
Public standpipe	13.4	8.5	14.3	11.2	15.5	7.0
Borehole	2.5	21.2	1.5	28.5	6.1	48.9
Well	10.5	16.1	7.7	14.5	9.9	10.6
Natural sources	9.9	48.9	7	35.4	2.5	25.9
All	100	100	100	100	100	100

Source: Ghana Statistical Services, (2007) Pattern and Trends of Poverty in the 1999-2006.

Figure 11: Percentage of households having access to potable water, by locality and standard of living quintiles (25%), 1991/92-2005/06



Source: Ghana Statistical Services, (2007) Pattern and Trends of Poverty in the 1999-2006.

2. CHALLENGES

The key challenges identified in this sector include:

Enormous Investment Requirement: The biggest challenge facing the sector is how to mobilize the financial resources required to maintain the enormous water infrastructure.

Regional disparities in access to Water: Despite substantial improvements in the supply of potable water in recent years, the difference in access between the rural poor and the urban rich remains high.

Water Losses: In spite of the enormous capital investment in the water sector, a substantial proportion of potable water produced is wasted and does not get to the consumer.

Uninterrupted Water Supply: Uninterrupted supply of potable water still remains a serious problem.

3. SUPPORTIVE ENVIRONMENT

A number of initiatives being implemented to improve access to safe water include:

- adoption of the sector-wide approach to rural water provision as a means of ensuring geographical equity in the distribution of investments;
- completion and adoption of a new sector Strategic Investment Plan. This is a follow up of the first ten year strategic plan of 1994, which was reviewed in 2004.
- increasing the levels of capital investment in the water sector, with emphasis on guinea worm endemic areas. In this connection HIPC funds were used to construct 156 boreholes fitted with hand pumps in guinea worm endemic communities in 2005.
- district Assemblies have been supported to prepare Strategic Water and Sanitation Plans.
- extending water distribution networks especially to low income consumers;
- strengthening the management of on-going investments in deprived regions;
- ensuring timely disbursement of recurrent budget to Community Water and Sanitation Agency (CWSA);
- ensuring timely disbursement of the District Assembly Common Fund;
- strengthening partnerships in water provision, and supporting the introduction of private sector management and operation of the water supply systems under management and/or lease contract arrangement and to disseminate information on safe water;
- improving community owned and managed water supply systems; and
- strengthening human resource capacity in water management and dissemination of information on water conservation.

4. RESOURCE REQUIREMENTS

Various estimates of resource requirements for achieving this goal exist in Ghana. The Macroeconomics and Health Initiative Report, for instance, estimates two scenarios, the base and ideal scenarios, in terms of total resource requirements over the period 2002-2015 for achieving this goal. The base scenario estimates about US$732 million, while the ideal scenario estimates about US$850 million for achieving this goal over the same period. Using different assumptions the Millennium Project estimates an annual resource requirement of about US$179 million over the period 2005-2015.

GOAL 8: DEVELOP A GLOBAL PARTNERSHIPS FOR DEVELOPMENT

Target 15: Deal comprehensively with LDC debt and make debt sustainable in the long run

Indicator: Debt service as a percentage of export

1. STATUS AND TRENDS

The MDG 8 revolves around two themes: Partnerships for Development and Resource Mobilization for Development, which give indications of how a government is dealing comprehensively with the country's public debt and making the debt sustainable in the long-term.

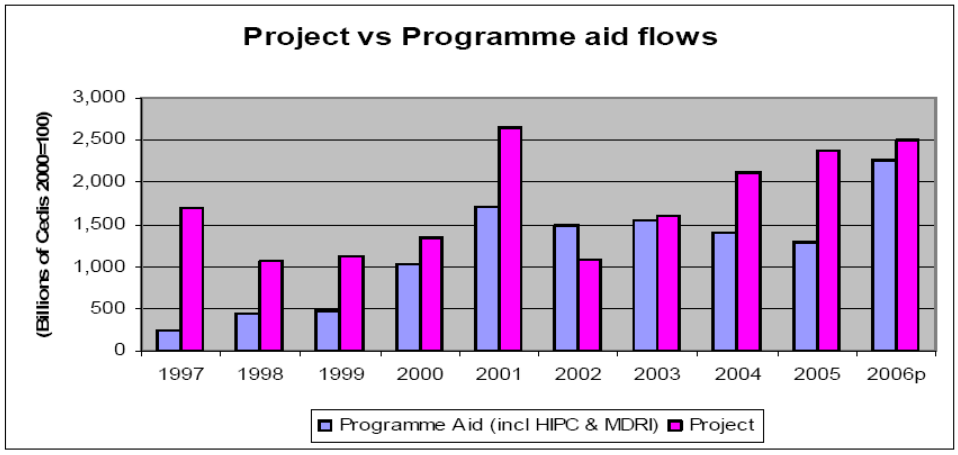
1.1 Partnerships for Development

Strengthening the partnership between Ghana and her Development Partners has been central to the formulation, implementation and monitoring of both the GPRS I & II. The principles of the partnership are based on the Paris Declaration and include:

- strengthening country's ownership of the development process;
- ensuring the alignment of development partners' support on national priority;
- ensuring harmonization of donor procedures and country systems;
- managing resources on the basis of desired results and use of information to improve decision making; and
- ensuring mutual accountability in relation to resource flow and results achieved through the implementation of national strategy.

The results of improved Government and Donor Partnership have influenced the current aid architecture in Ghana with mutual benefits to both parties. The new relationship has contributed to increased technical and financial support for the implementation of the GPRS I & II from both bilateral and multilateral donors. An analysis of the ODA flows to Ghana shows that both project and programme aid to finance the national development strategies experienced significant increases over the period of 1997-2006 (Figure 12). The relative levels of both types of aid, in spite of the different trends, remained relatively higher than their levels in the second half of the nineties.

Figure 12: Official Development Assistance Flows to Ghana between 1997-2006



Source: ADMU, Ministry of Finance and Economic Planning

Available information from OECD-DAC shows that ODA flows to Ghana increased steadily (in real terms) and reached a peak of 18% of Gross National Income in 2004. It must be pointed out that OECD-DAC data are based on financial commitments by development agencies and are generally substantially in excess of actual ODA receipts as recorded in-country. In 2005, ODA receipts by GoG were estimated by the MoFEP to have reached in excess of US$1 billion, equivalent to 9% of GDP. Accounting for a significant proportion of the total flows was programme aid, which included HIPC debt relief and MDBS disbursements. In absolute terms, the MDBS has accounted for an average of about US $300 million of budget support on an annual basis since 2003.

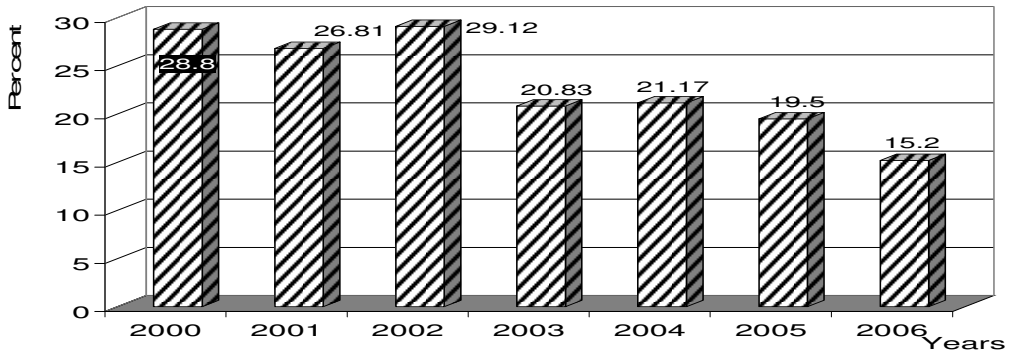
1.2 Dealing Comprehensively with the Debt Problem

Debt Burden:

The total national debt of Ghana, comprising foreign and domestic debts has gone through changes over the last two decades. The stock of external debt rose successively during the nineties from US$3.4 billion in 1990 to about $6.93 billion by the end of 2000, reflecting an increase from 56% of GDP to 111.4% of GDP, while the debt service ratio rose from 7.8% in 1990 to 22.3% in 2000. This rapid increase sent the ratio of NPV of the external debt to fiscal revenue and to export spiralling to about 557% and 152% respectively in 2000, leading to a debt overhang. The interest payments on external and domestic debt consequently rose in nominal terms by 110.8% and 70% respectively in 2000, with the absolute payments of national debt service far exceeding the total capital (investment) expenditure of the state.

As a result of a combination of appropriate fiscal and monetary policies and debt relief under the enhanced Heavily-Indebted Poor Countries (HIPC) Initiative and the Multilateral Debt Relief Initiative (MDRI), the external debt stock was reduced by about 65% from the 2000 level to about US$2,143.79 million by the end of September 2006. Debt burden, as measured by the external debt-GDP and debt service ratios has declined from about 107.5% and 24% in 2002 to 64.5% and below 10% respectively in 2006. In addition the government also restructured the debt portfolio. The result is that, at the end of 2006 most of the external debt (82%) was in the form of long term debt, with a large proportion or about 72% owed to multilateral agencies. These factors underscore the government's effectiveness in achieving progress towards reducing the debt burden and changing the debt structure, and thus making the economic environment favourable for long-term sustainable development.

Figure 13: Domestic Debt Burden, 2001-2005



In addition to the high stock of external debts in 2000, the country's domestic debt burden was also high at about ¢7,842.33 billion, with a potentially unsustainable interest payment equivalent to about 14.6% of total government expenditure, or higher than domestically financed total investments of about 12.7%. Another dimension of the problem is the fact that a large share of the domestic debt consisted of short-term treasury bills and short-term advances.

In order to reduce and restructure the domestic debt stock and deal comprehensively with the domestic debt burden of the country the government pursued a two pronged policy. This effort was aimed at widening the scope for financing poverty reduction expenditures and creating adequate opportunities for the participation of private sector operators. The expected outcome of this policy measure was to increase credit to the private sector as share of domestic credit. The first policy involved applying 20% of HIPC funds to domestic debt amortization, while the second one focused on the development of medium term and long-term instruments to restructure the composition of the debt. These measures were also supported by a concerted effort to reduce the rate of growth of the domestic debt stock by operating within a context of programmed borrowings.

Using the HIPC funds and through the prudent government debt policy, the domestic debt burden, as measured by the ratio of the domestic debt relative to the GDP, has been reduced from a peak of 29.1% in 2000 to about 15.2% in 2006 (Figure 13). With the second policy measure the government was able to develop medium and long term instruments to promote and develop the bond market. Through the new securities, the government was also able to lengthen the average maturity of government domestic debt and reduce concentration in specific maturities. The securities and bonds so far developed include the following:

- The GoG Index-Linked Bond and Cocoa Bills introduced since 2002 enabled the government shift away from 90-day to medium and long-term credit regime;
- Medium Term Bonds: 2-3 year Floating Rate Notes with the interest rates tied to Treasury Bill interest rates and 2-3 Year Fixed Rate Notes were also introduced in 2004;
- In 2005, two new BOG instruments – the 14-day and 28-day Bank of Ghana bills were introduced along side the already existing bills

2. SUPPORTIVE ENVIRONMENT

Improved Fiscal Resource Mobilization: The main policy measures to improve domestic resource mobilization included the strengthening of revenue collection institutions and District Assemblies for tax collection and the improvement of collection of non-tax revenue. The specific policy measures and programmes instituted by the government included the following:

- restructuring and strengthening the revenue collection institutions of the central government and the MMDAs;
- implementation of the Tax Identification Number (TIN) in all revenue agencies is now functional;
- launching of the Large Tax Payers Unit (LTP);
- improving the collection of Non-Tax Revenues (NTR);
  - introduction of proper accounting for Non-Tax Revenues collections. NTR accounts have been opened for all Ministries, Departments and Agencies (MDAs) at the Bank of

Ghana and all MDAs are expected to transfer all their collections including those from the regions and districts into these accounts on a regular basis,
- introduction of a Dividend Policy to guide State Owned Enterprises and Joint Venture companies in the declaration of dividends
- release of funds to 18 MDAs to implement revenue enhancement measures;
- tracking of illegal operators in MDAs behind forgery and duplication of Value Books;
- pilot system for the tracking and validating of retained Internally Generated Funds for selected MDAs.

There were also other measures to make the public debt sustainable in the long-term. The key objectives of these measures included the following:

- restructure the public debt;
- maintain the acquisition of loans at concessionary rate with a minimum grant element of 35%;
- seek more programme aid to support the implementation of the budget;
- implement measures to minimise the cost of external borrowing, including the margin of risk on variable rate lending and the insurance premium on export credit facilities
- improve the price mechanism for the issuance of debt in order to lower borrowing costs;
- diversify the choice and maturity of debt instruments available on the market;
- pursuit of stable price and exchange rate policies;
- passage of the Banking Law which restricted government borrowing to 10% of expected revenues;
- passage of the Procurement, Financial Administration and Internal Audit Agency Acts to ensure greater accountability and transparency in procurement; and
- de-regulate the petroleum sector.

3. CHALLENGES

Crude oil prices: The economy of Ghana is now seriously challenged by a major threat from the prevailing upward movements in oil prices on the international market. Even though the government has managed to deregulate the petroleum sector, it nonetheless requires foreign currency from the limited export earnings to pay for the rising imports. This could be a source of pressure on the management of the economy should there be shortages in foreign currency inflows.

Ability to resist over-borrowing: The success of management of the debt burden has created the necessary fiscal space required to finance additional development programmes, especially in the social sectors. However this has the potential for creating an environment for government to embark on a new round of borrowing, which could promote a regime of new indebtedness.

Donor fatigue: Improvement in donor-government relations was accompanied by increasing donor inflows, which further widened the fiscal space for additional investment. The over-reliance on these inflows could however create serious financing gaps for the country when donor fatigue emerges.

STATUS AT A GLANCE

GHANA'S PROGRESS TOWARDS THE MILLENIUM DEVELOPMENT GOALS

Goals	Will goal be reached?				State of supportive environment			
Extreme poverty and hunger								
Halve the proportion of people below the national poverty line by 2015	Probably	Potentially	**Achieved**	Lack of data	**Strong**	Fair	*Weak but improving*	Weak
Halve the proportion of people who suffer from hunger	Probably	**Potentially**	Achieved	Lack of data	**Strong**	Fair	*Weak but improving*	Weak
Universal primary education								
Achieve universal access to primary education by 2015	**Probably**	Potentially	Unlikely	Lack of data	Strong	**Fair**	*Weak but improving*	Weak
Gender equality								
Eliminate gender disparity in primary and junior secondary education by 2005	**Probably**	Potentially	Unlikely	Lack of data	**Strong**	Fair	*Weak but improving*	Weak
Achieve equal access for boys and girls to senior secondary by 2005	**Probably**	Potentially	Unlikely	Lack of data	Strong	**Fair**	*Weak but improving*	Weak
Under-five mortality								
Reduce under-five mortality by two-thirds by 2015	Probably	Potentially	**Unlikely**	Lack of data	Strong	**Fair**	*Weak but improving*	Weak
Maternal mortality								
Reduce maternal mortality ratio by three-quarters by 2015	Probably	Potentially	Unlikely	**Lack of data**	Strong	**Fair**	*Weak but improving*	Weak
HIV/AIDS & Malaria								
Halt and reverse the spread of HIV/AIDS by 2015	Probably	**Potentially**	Unlikely	Lack of data	**Strong**	Fair	*Weak but improving*	Weak
Halt and reverse the incidence of malaria	Probably	Potentially	Unlikely	**Lack of data**	**Strong**	Fair	*Weak but improving*	Weak
Ensure environmental sustainability								
Integrate the principles of sustainable development into the country policies and programmes and reverse the loss of environmental resources.	Probably	Potentially	**Unlikely**	Lack of data	**Strong**	Fair	*Weak but improving*	Weak
Half the proportion of people without access to safe drinking water by 2015	**Probably**	Potentially	Unlikely	Lack of data	**Strong**	Fair	*Weak but improving*	Weak
Global partnership for development								
Deal comprehensively with debt and make debt sustainable in the long term	Probably	**Potentially**	Unlikely	Lack of data	**Strong**	Fair	*Weak but improving*	Weak

QUANTIFIABLE PROGRESS TOWARDS THE MILLENIUM DEVELOPMENT GOALS

Goals/Targets	Indicator	Indicator Status							MDG Target
		1999	2001	2002	2003	2004	2005	2006	2015
Goal 1. Eradicate extreme poverty and hunger									
a. Halve the proportion of people below the extreme poverty line by 2015	Proportion below extreme poverty (national basic needs) line (%)	26.8	-	-	-	-	-	18.0	18.5
	Proportion below upper poverty line (%)	39.5	-	-	-	-	-	28.5	25.8
b. Halve the proportion of people who suffer from hunger	Under five children who are malnourished (%)	24.9	-	-	22	-	-	18	15
Goal 2: Achieve Universal primary education									
Achieve universal access to primary education by 2015	Net Primary Enrolment ratio (%)	-	-	59	55.9	55.6	59.1	68.8	100
Goal 3: Promote Gender equality and Empower Women									
a. Eliminate gender disparity in primary and junior secondary education by 2009	Ratio of females to males in primary schools (%)	-	-	0.92	0.77	0.93	0.95	0.95	1.0
	Ratio of females to males in junior secondary schools (%)	-	-	0.88	0.88	0.88	0.88	0.88	1.0
b. Achieve equal access for boys and girls to senior secondary by 2009	Ratio of females to males in senior secondary school	-	-	-	-	-	-	-	-
	Percentage of female enrolment in SSS (%)	-	-	-	-	-	43.5	49.5	-
Goal 4: Under-five Mortality									
Reduce under-five mortality by two-thirds by 2015	Under-five mortality Rate (per 1000 live births)	108 (1998)	-	-	111	-	-	111	53
Goal 5. Maternal Mortality									
Reduce maternal mortality ratio by three-quarters by 2015	Maternal mortality ratio (Institutional)	-	2.60	2.04	2.05	1.87	1.97	1.87	0.54

Goals/Targets	Indicator	Indicator Status							MDG Target
		1999	2001	2002	2003	2004	2005	2006	2015
Goal 6. Combat HIV/AIDS & Malaria									
a. Halt and reverse the spread of HIV/AIDS by 2015	National HIV prevalence Rate	1.5%	2.9%	3.4%	3.6%	3.1%	2.7%	3.2%	≤1.5%
b. Halt and reverse the incidence of malaria	Under Five Malaria case fatality (Institutional)	-	-	2.9%	2.8%	2.7%	2.4%	2.1%	-
Goal 7: Ensure Environmental Sustainability									
a. Integrate the principles of sustainable development into the country policies and programmes and reverse the loss of environmental resources.	a. Proportion of land area covered by forest (ha/annum)	6,229,400(27.4 % of total land area)	-	-	-	-	5,517,000(24.3 % of land area)	-	≥7,448,000ha
	b. Annual rate of deforestation (%)	1.82 (135,400 ha)	1.89 (115,400ha)	-	-	-	1.7 (93,789 ha)	-	≤1.82%
b. Half the proportion of people without access to safe drinking water by 2015	Proportion of population with access to safe drinking water	-	-	-	-	-	-	-	75
	-Urban	-	-	-	-	54.5%	55.0%	56.0%	-
	-Rural	-	-	-	46.4%	51.7%	52.0%	53.2%	-
Goal 8: Global partnership for development									
Deal comprehensively with debt and make debt sustainable in the long term	External Debt service as a percentage of exports of goods & services	-	10.1%	10.2%	5.2%	5.6%	5.8%	3.2%	-

BIBLIOGRAPHY:

Bogetic, Z., M. Bussolo, et al. (2007). Ghana's Growth Story. Ghana CEM: Meeting the Challenge of Accelerated and Shared Growth, World Bank, Accra Office.

Bogetić, Z., M. Bussolo, X.Ye, D. Medvedev, Q. Wodon and D. Boakye. (2007). "Ghana's Growth Story- How to accelerate growth and achieve MDGs?" Volume 1 of the *Ghana Country Economic Memorandum,* World Bank, Washington D.C.

Coulombe, H. and Q. Wodon. (2007). Poverty, Livelihoods, and Access to Basic Services in Ghana: An Overview. Ghana CEM: Meeting the Challenge of Accelerated and Shared Growth, World Bank, Accra Office.

Diallo, A. B. and Q. Wodon. (2007). "Demographic Transition Towards Smaller Household Sizes and Basic Infrastructure Needs in Developing Countries." *Economics Bulletin,* Vol. 15, No. 11 pp. 1-11.

GHS. (2001). *Roll Back Malaria Baseline Survey 2001*. Malaria Control Programme. Ghana Health Service. Accra, Ghana.

GHS. (2003). Estimating National HIV Prevalence. Technical Report, 11/03. National AIDS/STD Control Programme. Ghana Health Service. Accra, Ghana.

GHS. (2006). *HIV Sentinel Survey report 2003.* National AIDS/STI Control Programme. Ghana Health Service. Accra, Ghana.

GHS (2006). 2005 Annual Report of the Reproductive and Child Health Unit. Public Health Division, Ghana Health Service. Accra, Ghana.

GSS. (1990). Ghana Living Standard Survey, Report of the First Round (GLSS 1), Ghana Statistical Service. Accra, Ghana.

GSS. (2000). Ghana Living Standard Survey. Report of the Fourth Round (GLSS 4), Ghana Statistical Service. Accra, Ghana.

GSS. (2002). *The 2000 Population and Housing Census, summary report of final results.* Accra, Ghana: Ghana Statistical Service.

GSS and MI. (1999). Ghana Demographic and Health Survey 1998. Calverton, Maryland: Ghana Statistical Service and Macro International Inc.

GSS and MI. (2005). Ghana Demographic and Health Survey 2003. Calverton, Maryland: Ghana Statistical Service and Macro International Inc.

GSS. (2007). Pattern and Trends of Poverty in the 1999-2006. Accra, Ghana.

GSS .(2007). Ghana Living Standard Survey. Report of the Fifth Round (GLSS 5), Ghana Statistical Service, Accra.

GSS, Ministry of Health (Health Research Unit), and ORC Macro. (2003). Ghana Service Provision Assessment Survey, Calverton, Maryland: Ghana Statistical Service and ORC Macro.

NDPC. (2007). 2006 Annual Progress Report on the Implementation of the Growth and Poverty Reduction Strategy (GPRS II) 2006 – 2009. Government of Ghana, National Development Planning Commission.

NDPC. (2003). Ghana Poverty Reduction Strategy (GPRS I), 2003-2005. An Agenda for Growth and Prosperity (GPRS). National Development Planning Commission. Government of Ghana. Accra, Ghana.

MICS. (2007). *Monitoring the Situation of Children and Women:* Findings from the Ghana Multiple Indicator Cluster Survey 2006. Preliminary Report. ROG, Ghana Statistical Service, USAID, UNICEF, February 2007.

MOFEP (various years). The Budget Statement and Economic Policy of the Government. Ministry of Finance and Economic Planning. Government of Ghana. Accra, Ghana.

Teal, F. (2002) Export Growth and Trade Policy in Ghana in the Twentieth Century. *The World Economy* 25 (9): 1319–37.

UNDP. (2004). Ghana Human Development Report 2004. UNDP and Institute of Statistical, Social and Economic Research. Accra, Ghana.

WHO. (2001). Macroeconomics and Health: Investing in Health for Economic Development, Report of Commission on Macroeconomics and Health, WHO, Geneva.

World Bank. (2007). Ghana: Meeting the Challenge of Accelerated and Shared Growth: Country Economic Memorandum: Vols. I, II, III, PREM 4, Africa Region.