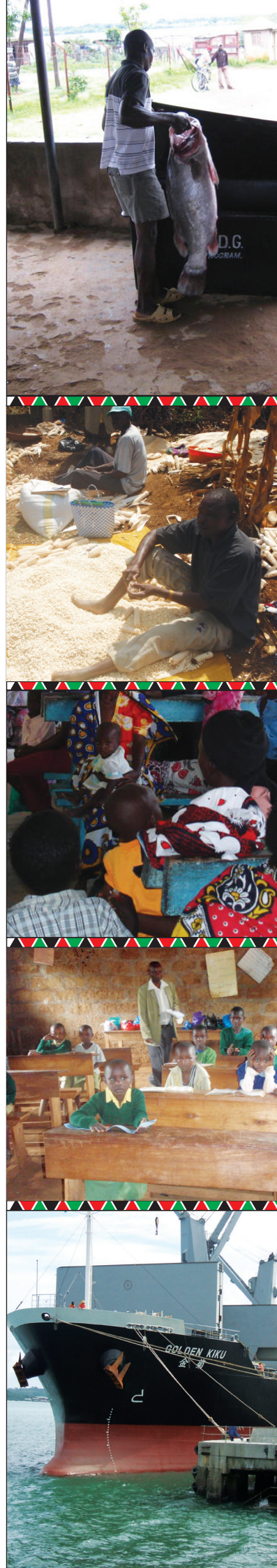




Republic of Kenya

MILLENNIUM DEVELOPMENT GOALS

Status Report for Kenya – 2009



MILLENNIUM DEVELOPMENT GOALS

Status Report for Kenya - 2009

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Table of Contents

Foreword	v
Acknowledgements	vii
Abbreviations and Acronyms	viii

Chapter 1

BACKGROUND

1.1	Introduction	1
1.2	Demographics	1
1.3	Recent economic performance	1
1.4	Overview of the MDGs process in Kenya	2
1.5	Policy setting for the MDGs	3
1.6	MDGs based planning process in Kenya	3
1.7	Milestones in the MDGs in Kenya up to 2009	3
1.8	The MDGs Status Report in perspective	4

Chapter 2

GOAL 1: ERADICATE EXTREME POVERTY AND HUNGER

2.1	Targets and Indicators	5
2.2	People whose income is less than one dollar a day	5
2.3	Full and productive employment	7
2.4	The proportion of people who suffer from hunger	8
2.5	Performance of key agricultural sub sectors	9
2.6	Challenges of addressing hunger in Kenya	13
2.7	Policies and strategies to address poverty	14
2.8	Policy recommendation	15
2.9	Conclusion	16

Chapter 3

GOAL 2 & 3:

ACHIEVE UNIVERSAL PRIMARY EDUCATION

PROMOTE GENDER EQUALITY AND EMPOWER WOMEN

3.1	Overview	17
3.2	GOAL 2: Achieve universal primary education	17
3.3	GOAL 3: Promote gender equality and empower women	20

Chapter 4

GOALS 4, 5 & 6:

REDUCE CHILD MORTALITY

IMPROVE MATERNAL HEALTH

COMBAT HIV and AIDS, MALARIA AND OTHER DISEASES

4.1	Introduction	27
4.2	GOAL 4: Reduce child mortality	27
4.3	GOAL 5: Improve maternal health	28
4.4	GOAL 6: Combat HIV and AIDS, Malaria and other diseases	31
4.5	Health sector policies	34
4.6	Key challenges	35

Chapter 5

GOAL 7: ENSURE ENVIRONMENTAL SUSTAINABILITY

5.1	Introduction	37
5.2	Sustainable development and loss of environmental resources	37
5.3	Access to safe drinking water and basic sanitation	39
5.4	Improvement in the lives of slum dwellers	42
5.5	Achievements and challenges	42
5.6	Ongoing interventions and action plans	46

Chapter 6

GOAL 8: DEVELOP GLOBAL PARTNERSHIP FOR DEVELOPMENT

6.1	Targets and indicators	49
6.2	Trade and market access	49
6.3	Debt sustainability and Foreign Direct Investment	57
6.4	ICT Targets and Indicators	60
6.5	Situation Analysis	60
6.6	Achievements in the ICT Sector	61
6.7	Challenges	62
6.8	Ongoing Interventions	63
6.9	Policy environment	63
6.10	Action points and broad policy recommendations	64

Definition of Terms and Concepts	65
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List of Tables

Table 2.1	Distribution of Kenyan population aged 15-64 by employment status	7
Table 2.2	Unemployment rates in Kenya by age group in per cent (1978 - 2006)	7
Table 2.3	Trends in Child Nutrition Status by Province, 1998 - 2009	9
Table 2.4	Quantity of fish landed 2001 - 2009	9
Table 2.5	Schemes registered and number of families settled	11
Table 2.6	Adjudication sections and family settled	11
Table 2.7	Productive land under irrigation	12
Table 2.8	Traditional NIB schemes under the gazetted land	12
Table 2.9	Non-traditional NIB schemes where the board is providing services	12
Table 2.10	Production Statistics as at end of February 2010	13
<hr/>		
Table 3.1	Primary Gross Enrolment Rate by gender, 1990 - 2009	17
Table 3.2	Primary Net Enrolment Rate by province, 2000 - 2009	17
Table 3.3	Primary School Completion Rates, 2002 - 2008	18
Table 3.4	Literacy Rates by gender and province (15 - 24 years) 2006	18
Table 3.5	Primary Net Enrolment Ratios by gender and province, 2002 - 2009	21
Table 3.6	Gender Parity Index of the Net Enrolment Ratio in primary schools, 2002 - 2009	21
Table 3.7	Secondary Schools Net Enrolment Ratios by gender and province, 2000 - 2008	21
Table 3.8	Secondary GER by gender and province, 2002 - 2009	22
Table 3.9	Gender Parity Index in secondary schools, 2002 - 2009	22
Table 3.10	University and tertiary enrolment	22
Table 3.11	Ratio of females to males in universities and tertiary institutions (2002 - 2009)	23
Table 3.12	Wage employment in non-agricultural sector by Sex	23
Table 3.13	Members of National Assembly by sex, 1988 - 2009	23
Table 3.14	Judicial service establishment in Kenya by grade and gender	24
Table 3.15	Women in executive decision making positions	24
<hr/>		
Table 4.1	Vaccination coverage of children aged 12 - 23 months, 2008 - 2009	28
Table 4.2	Maternal healthcare indicators, 2008 - 2009	29
Table 4.3	Current use of contraceptives by married women	30
Table 4.4	Distribution of HIV prevalence amongst 15 - 49 years by province	32
<hr/>		
Table 5.1	Common Ozone Depleting Substances used in Kenya	38
Table 5.2	Number of threatened species	39
Table 5.3	Trends in access to safe drinking water and improved sanitation	40
Table 5.4	Proportion of urban population living in slums	42
<hr/>		
Table 6.1	Estimates of total exports by destination	51
Table 6.2	Estimates of total imports by origin	51
Table 6.3	Merchandise exports by region, 2003 - 2007	51
Table 6.4	Value of commodity exports, 2000 - 2008	54
Table 6.5	Proportion of developed country imports from Kenya, admitted Duty Free	55
Table 6.6	Average tariffs imposed by developed countries on agricultural products and textiles and clothing from Kenya	55
Table 6.7	Kenya's Public and Publicly Guaranteed debts	57
Table 6.8	Kenya's Debt Service during July - December 2008	58
Table 6.9	Current data on the specific MDG-ICT indicators at national level	60
Table 6.10	Trend analysis of ICT indicators since year 2000	60

List of Figures

Figure 2.1	Agriculture sector GDP growth rates, 1999 - 2009	5
Figure 2.2	Trends of poverty incidences by region	6
Figure 2.3	Expenditure shares for rural households in Kenya	6
Figure 2.4	Trends in unemployment in Kenya by age groups, 1978 - 2005/06	8
Figure 2.5	National cereals status, 2009	8
Figure 2.6	Global Hunger Index for Kenya	8
<hr/>		
Figure 4.1	Trends in Infant and Under-five Mortality	27
Figure 4.2	Trends in Total Fertility Rate, Kenya, 1975 - 2008	31
Figure 4.3	Gender differences in access to ARV treatment in Kenya	33
Figure 4.4	Printed allocations (MOMS & MPHS) versus government printed allocations	34
<hr/>		
Figure 6.1	Kenya's trade balance, 1990 - 2008	50
Figure 6.2	Proportion of Kenya's exports to Africa, 2008	52
Figure 6.3	Proportion of exports by region in 2008	53
Figure 6.4	Development expenditure	57

Foreword

I am happy to write the foreword to this fourth MDGs Status Report for Kenya. The objective of this report is to provide a summary of the status of the MDGs as at 2009 and highlight the key achievements made as well as the challenges faced in the achievement of the MDGs in Kenya. The report also details policy, programme and project interventions being implemented to fast track the achievement of the MDGs and recommends policy changes to accelerate the attainment of the MDG targets by 2015.

Poverty remains a major challenge in the country. Although the proportion of Kenya's population living below the poverty line declined from 52.6% in 1997 to 45.9% in 2005/06, the post-election violence and the multiple crises during the years 2008 and 2009 are likely to have increased the poverty levels. The country will need to scale up and sustain measures aimed at wealth creation in order to alleviate poverty.

The country is on track to achieving universal primary education with gross enrolment ratios having risen from 88.2% in 2002 to 110% in 2009. The primary school net enrolment rate rose from 77.3% in 2002 to 92.9% over the same period of time, while the primary school completion rate improved from 62.8% in 2002 to 83.2% in 2009. The primary to secondary schools transition rates also increased from 59.9% in 2008 to 64.1% in 2009. The enrolment figures for boys and girls in primary school also point to a near gender parity. These improvements are in great part attributed to the implementation of the Free Primary Education policy, continued investment in basic primary school infrastructure and introduction of free tuition in public secondary schools in 2008.

The infant mortality rate decreased to 52 per 1,000 live births in 2008/09 from 77 per 1,000 live births in 2003, while the under-five mortality rate decreased to 74 deaths per 1000 live births in 2008/09 from 115 in 2003. Full immunization coverage has risen to 77.4% in 2008/09 from 65.9% in 2005/06 and 56.8% in 2003. Efforts are needed to bring the figure to 100% by 2015. Other improvements in the health MDG targets include increase in the proportion of births attended by trained health personnel from 42% in 2003 to 43.8% in 2008/09. However, actions are needed to address the maternal mortality ratio which rose from 414 per 100,000 live births in 2003 to 488 per 100,000 in 2008/09. The national HIV prevalence for persons aged 15-49 years reduced from 6.7% in 2003 to 6.3% in 2008/09, while that of youths aged 15 to 24 years similarly declined from 3.8% in 2003 to 3.0% in 2008/09.

In Goal 7, the access to clean water in the country increased from 57% in 2005/06 to 60.4% in 2008/09. The growing population of persons living in slums remains a challenge. There is need for additional focus to improve the performance of the environment, water and sanitation indicators. The report details some of the programme and project interventions such as the Kenya Slum Upgrading Project and other policy changes that are aimed at addressing the challenges.

In Goal 8, on financing of MDGs, the government has prioritized funding of MDGs by increasing funding to sectors that are directly related to the MDGs. The report provides an encouraging picture of the development of the ICT sector in the country. However, more efforts are needed to improve the performance of the trade and ODA related indicators. Specifically, the trade sector has witnessed deterioration in the trade deficit from Kshs. 425,704 millions in 2008 to Kshs 443,146.9 millions in 2009 following the recession in 2008. The government is committed to addressing the trade imbalances. The country has already initiated the Kenya Joint Assistance Strategy, which is now operational with 17 key donors and is expected to improve aid efficiency.

The attainment of the MDG targets is faced with challenges, which include the lack of a conducive policy environment, inadequate human capacity in some sectors and inadequate allocation of resources. As we enter the last five years of the MDGs, it is hoped that this report will be a useful tool for guiding advocacy and policy dialogue for government departments, civil society and development partners towards ensuring the realization of the MDG targets.



Hon. Wycliffe Ambetsa Oparanya, EGH, MP,
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Government of the Republic of Kenya

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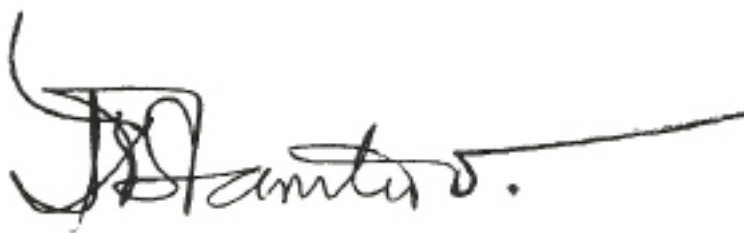
The MDGs Status Report for Kenya 2009 is the fourth, with earlier reports having been produced in 2003, 2005 and 2007. The report is a culmination of various processes by stakeholders. I wish to sincerely thank the Permanent Secretaries from the respective line ministries for their leadership towards the preparation of the MDGs Status report. On the same regard, I express my appreciation to A.K.M Kilele (Director General, KNBS) and Aeneas Chuma (Resident Representative, UNDP Kenya).

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I thank the Minister of State for Planning, National Development and Vision 2030, Hon. Wycliffe Ambetsa Oparanya and Assistant Minister Hon. Peter Kenneth for providing the political leadership for the process. Finally, I wish to extend my esteemed gratitude to the Ambassador of the Republic of Finland, H.E Heli Sirve, Theresa Zitting and Marjaana Virtanen of the Embassy of Finland in Kenya and to the Republic of Finland for the financial and technical support towards the production of this report.



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Permanent Secretary,

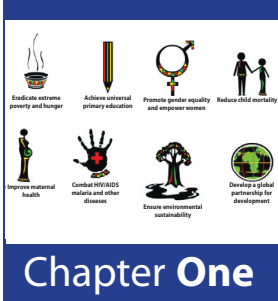
Ministry of State for Planning, National Development & Vision 2030

Abbreviations and Acronyms

ACP	Africa Caribbean Pacific
ACT	Artemisinin Combination Therapy
ADC	Agricultural Development Corporation
AGOA	Africa Growth and Opportunity Act
AfDB	African Development Bank
AIA	Appropriation in Aid
AIDS	Acquired Immunodeficiency Syndrome
ARV	Anti-Retroviral Drugs
ASALs	Arid and Semi-Arid Lands
BPO	Business Process Outsourcing
CBO	Community Based Organization
CDF	Constituency Development Fund
CDMA	Code Division Multiple Access
COMESA	Common Market for Eastern and Southern Africa
CPUE	Catch per Unit Effort
CRC	Convention on the Rights of the Child
C-WES	Constituency Women Enterprise Scheme
DEAP	District Environment Action Plan
DFZ	Livestock Disease Free Zone
DOTS	Directly Observed Treatment Short-course
EAC	East African Community
ECDE	Early Childhood Development Education
EFA	Education For All
EMCA	Environmental Management and Coordination Act of 1999
EMMS	Essential Medicines and Medical Supplies
ERSWEC	Economic Recovery Strategy for Wealth and Employment Creation 2002-07
ESP	Economic Stimulus Programme
FAO	Food and Agriculture Organisation
FBO	Faith Based Organization
FDI	Foreign Direct Investment
FEWS-NET	Famine Early Warning Systems Network
FGM/C	Female Genital Mutilation/Cutting
FMI	Forestry Mainstreaming Initiative
FPE	Free Primary Education
FRA	Forestry Resource Account
FTA	Free Trade Area
GBV	Gender Based Violence
GCCN	Government Common Core Network
GDP	Gross Domestic Product
GER	Gross Enrollment Rate
GOK	Government of Kenya
HIV	Human Immunodeficiency Virus
HMIS	Health Management Information System
HRH	Human Resources for Health
ICT	Information and Communication Technologies
IEC	Information, Education and Communication
IMCI	Integrated Management of Childhood Illnesses
IPT	Intermittent Preventive Treatment of malaria
JFA	Joint Financing Agreement
KAIS	Kenya AIDS Indicator Survey, 2007
KCA	Kenya Communications Amendment Act of 2009

KDHS	Kenya Demographic & Health Survey
KENSUF	Kenya Slum Upgrading Low Cost Housing and Infrastructure Fund
KENSUP	Kenya Slum Upgrading Programme
KEPH	Kenya Essential Package for Health
KFA	Kenya Farmers Association
KHPF	Kenya Health Policy Framework, 1994-2010
KJAS	Kenya Joint Assistance Strategy
KIHBS	Kenya Integrated Household Budget Survey 2005/2006
KIPPRA	Kenya Institute for Public Policy Research and Analysis
KMD	Kenya Meteorological Department
KNBS	Kenya National Bureau of Statistics
KPO	Knowledge Process Outsourcing
Kshs	Kenya Shillings
KTCIP	Kenya Communications Infrastructure Project
KTDA	Kenya Tea Development Agency
LAN	Local Area Network
LATF	Local Authority Transfer Fund
LLITN	Long Lasting Insecticide Treated Net
MDG	Millennium Development Goals
MFN	Most Favoured Nation
MICS	Multiple Indicator Cluster Survey
MOF	Ministry of Finance
MOH	Medical Officer of Health
MOU	Memorandum of Understanding
MOPHS	Ministry of Public Health and Sanitation
MoMS	Ministry of Medical Services
MPND&V2030	Ministry of State for Planning, National Development and Vision 2030
MSY	Maximum Sustainable Yield
MT	Metric tonne
MTP	Medium Term Plan
NASCOP	National AIDS/STI Control Programme
NCPB	National Cereals and Produce Board
NEAP	National Environmental Action Plan
NER	Net Enrolment Ratio
NGO	Non Governmental Organization
NEMA	National Environment Management Authority
NFE	Non-Formal Education
NFS	Non-Formal Schools
NIB	National Irrigation Board
NLTP	National Leprosy & Tuberculosis Control Programme
NMK	Njaa Marufuku Kenya
NOFBI	National Optic Fibre Backbone Initiative
NYS	National Youth Service
OBA	Output Based Aid
ODS	Ozone Depleting Substances
OVC	Orphans and Vulnerable Children
OVI	Orphans and Vulnerable Individuals
PATTEC	Pan African Tsetse and Trypanosomiasis Eradication Campaign
PCR	Primary Completion Rate
PEAP	Provincial Environmental Action Plan
PIU	Project Implementation Unit

PMTCT	Preventing Mother-to-Child Transmission
PPP	Public Private Partnerships
PSDS	Private Sector Development Strategy
SACCO	Savings and Credit Cooperative Society
SADC	Southern Africa Development Cooperation
SFT	Settlement Fund Trustees
SGR	Strategic Grain Reserve
SWAP	Sector Wide Approach
TARDA	Tana and Athi Rivers Development Authority
TB	Tuberculosis
TDIP	Technical Data Information Package
TEAMS	The East African Marine Systems
TIVET	Technical, Industrial, Vocational and Entrepreneurship Training
TNTBs	Tariff and Non-Tariff Barriers
UNDP	United Nations Development Programme
UPE	Universal Primary Education
WFP	World Food Programme
WRMA	Water Resources Management Authority
WSTF	Water Services Trust Fund
WTO	World Trade Organization
WIMAX	Worldwide Interoperability for Microwave Access



Background

1.1 INTRODUCTION

Kenya is located in the Eastern part of the African continent with the South Eastern part bordering the Indian Ocean along a 536 km coastline. The country lies between latitude 5° North and 5° South and Longitude 24° East to 31° East. It is bordered to the northwest by Sudan, to the north by Ethiopia, to the east by Somalia, to the west by Uganda and to the south by Tanzania. The total land area is approximately 582,650 km², 2.3% of which is covered by both inland and marine waters. About 83% of Kenya's land area is arid and semiarid and is considered unfavorable for rain-fed agricultural production. The main economic activities in the country are agriculture, tourism and the service industry.

1.2 DEMOGRAPHICS

The population of Kenya was projected to be approximately 39.4 million in 2009 (KDHS 2008/09), with a population density of 67.7 persons km² and a life expectancy at birth of 58.9 years. The population is estimated to grow at an annual rate of 2.8%. Approximately 80% of Kenya's population is found in the rural areas. The population of persons aged 15 years and below of age is estimated to comprise 43% of the total population. Those aged between 15-64 years constitute 51% while those aged 65 year and above account for 4%. The age dependency ratio in Kenya in 2008/09 was 96, having increased from 92 in 2003. The youth are estimated to comprise 31.6% of the population.

The rate of population growth and the structure of the population are of importance to the attainment of the MDGs. The rapid growth necessitates increased investments in basic social infrastructure and utilities, such as water, sanitation, schools, health facilities and services especially in the rural areas. The structure of the population indicates a need to additional focus to be placed on expansion of livelihood opportunities to cater for the increasing number of youth.

1.3 RECENT ECONOMIC PERFORMANCE

With the implementation of the Economic Recovery Strategy for Wealth and Employment Creation (ERSWEC) during the period 2003-2007, Kenya's economy grew remarkably. The Real GDP growth rate rose from 2.3% in 2003 to 7.1% in 2007. Kenya also managed to reduce the population living below the poverty line from 52.6% in 1997 to 45.9% in 2005/06.

However as a result of the multiple crises of 2007/08, which included the post-election violence, drought, the food, fuel and the global financial crises, the growth rate of Real GDP fell to 1.6% in 2008. The short term shocks affected the key sectors of the economy such as agriculture, manufacturing, transport and tourism and reversed the gains the country had made in poverty reduction during the period 2003-2007. The shocks also resulted into high inflation, poor balance of payments position, among other economic challenges. However, the short rains in the last quarter of 2009, the interventions being implemented within the Kenya's Vision 2030 and its first Medium Term Plan, the 2009/2010 budget, and the Economic Stimulus Programme, economic performance has been on an upward trend registering a growth in GDP of 2.6% in 2009. This growth rate is projected to double in 2010. The government's efforts in tackling poverty in the country has resulted in an increase in GDP per capita, based on current prices, from USD 650 (Kshs. 49,204) in 2007 to USD 793.51 (Kshs. 57,887) in 2009.

1.4 SOCIAL SECTOR PERFORMANCE

The growth in the economy has manifested itself in the social sectors directly related to the MDGs. The total social sector expenditure by the Kenyan Government increased by 50.9% between the years 2006/07 and 2009/10.

1.4.1 Education

The Gross Enrolment Rate for primary education increased from 88.2% in 2002 to 110.0% in 2009. The Net Enrolment Rate also increased from 77.3% in 2002 to 92.9% in 2009. This improvement was mainly as result of implementation of policy initiatives such as the Free Primary Education policy and the Free Tuition in public secondary schools. The recurrent and development budgetary allocation to the Ministry of Education increased by about 22% and 67% respectively between FY 2006/07 and 2009/10 (Economic Survey 2010).

The enrolment of girls in primary and secondary schools has been increasing since 2002 (see Chapter 3 tables 3.1, 3.3, 3.5 and 3.6). The girl to boy ratio in primary school enrolment was 0.958 in 2008 and indicates that gender parity in primary education is likely to be achieved by 2015. Other government interventions to promote gender equality and empower women include the establishment of the Women Enterprise Fund and the presidential

directive on affirmative action to ensure at least 30% of public service positions are occupied by women. The new constitution of Kenya also has provisions to ensure that no more than two thirds of members of representative bodies in each county government are of the same gender.

1.4.2 Health

The health sector has also performed fairly well in the last five years as a result of increased allocation of resources in the sector, better governance, and enhanced management of health delivery systems. Following these initiatives, the under-5 mortality rate decreased from 115/1,000 in 2003 to 74 per 1,000 in 2008/09; the infant mortality rate in 2008/09 was down to 52 deaths per 1,000 live births from 77 in 2003; while malaria incidence increased from 30.8% in 2007 to 32.8 in 2008 and 31% in 2009.

Immunization coverage has steadily increased from 56.8% in 2003 and 65.9 in 2005/06 to 77.4% in 2008/09. In 2008/09 period, it was estimated that 43.8% of births in Kenya were attended to by trained health personnel, while 42.6% of deliveries take place in health facilities. The maternal mortality ratio increased to 488 per 100,000 live births in 2008/09 from 414 per 100,000 live births in 2003. There was an increase in contraceptive use, from 39.3% of married women in 2003 using any method of contraceptive to 45.5% in 2008/09 (KDHS 2008-09).

The national HIV prevalence (age group 15-49 years) was estimated to be 6.3% in 2008/09 down from 7.4% in 2007 (KAIS, 2007) and 6.7% in 2003 (KDHS, 2003). The age group 15-24, which is the primary focus for MDG indicator 6.1, recorded a fall in HIV prevalence to 3% in 2009 from 3.8% in 2007. There are regional disparities with some regions having a HIV prevalence of up to 13.9% amongst the age group 15-64 years. PMTCT services including drugs for prevention of mother-to-child transmission of HIV are available in most public health facilities countrywide. The improvements in the performance of HIV Aids indicators is by large part due to the successful implementation of the Kenya National HIV and Aids Strategic Plans (KNASP I, II and III).

There has been increase in efforts to prevent and control of malaria. The proportion of Kenyan household owning at least one Insecticide Treated Net rose from 5.9% in 2003 (KDHS 2003) to 47.7% in 2007 (KMIS, 2007) and to 55.7% in 2008/9 (KDHS 2008-9). In 2009, 46.7% of children below five years were reported to be sleeping under a mosquito net. This is a marked improvement from 39.2% and 4.6% in the years 2007 and 2003 respectively. The proportion of pregnant women using ITNs rose to 49% in 2008/09 from 4.4% in 2003. The proportion of pregnant women

who received intermittent prophylactic treatment (IPT) increased to 14% in 2009 from 3.9% in 2003. The government is committed to the achievement of the health MDGs and has been increasing the resource allocation to the relevant ministries. The recurrent and development budgetary allocations to the public health sector (Ministry of Health and Ministry of Public Health and Sanitation) were increased by 36% and 77% respectively between FY 2006/07 and 2009/10 (Economic Survey 2010).

1.4.3 Environment, Water and Sanitation

In the water sub sector, there was improved access to safe water with the proportion of households with access to piped water increasing from 49.4%¹ in 2003, 57.0% in 2005/06 to 63.4% in 2008/09. This is as a result of infrastructure investments and the legal and institutional reforms being implemented in the water sub sector. In 2008/09 the proportion of Kenyan households reported to access improved sanitation was 22.6%. The remaining 77.4% were reported to use non-improved sanitation facilities; other shared facilities (25.9%) pit latrines without slabs (37.9%), bush/field (12.1%) and bucket/hanging toilet/latrine (0.4%).

The Government of Kenya is in the process of formulating an External Resources Policy. In 2007, 17 of Kenya's main development partners formed the Kenya Joint Assistance Strategy (KJAS). These developments are expected to enhance development partnerships, ensure increased funding and ensure aid effectiveness as well as debt sustainability.

The government is committed to the achievement of the MDGs by 2015. The country's long term economic development blueprint, the Kenya Vision 2030 was developed with MDGs in mind. The Vision is anchored on three key pillars, namely, Economic, Social and Political. The Vision 2030 has identified a number of flagship projects. At the same time, the Medium Term Plan 2008-12, which constitutes the first phase in the implementation of the Vision 2030, is aimed at accelerating the achievements of the MDGs by 2015. The government has also increased funding to the MDGs-related sectors, which include agriculture, health and education. The emphasis given to the MDGs in the Vision 2030 and the increased funding to the MDGs related sectors shows the Government's commitment to achieve the MDGs targets by 2015.

1.5 OVERVIEW OF THE MDGs PROCESS IN KENYA

Having signed the Millennium Declaration, Kenya initiated its MDGs implementation process in September 2002 when a national stakeholder's workshop was held to build consensus and promote understanding on the significance of MDGs, their

¹ Unweighted data from KDHS 2003



links to the national planning frameworks, and to determine country level reporting. Since then, the Kenya government and its development partners have committed substantial resources towards meeting the country's MDGs. The Government, with support of its development partners, undertook an assessment of Kenya's performance in of the MDG indicators and published the first MDGs Status Report in July 2003.

In 2005, the Ministry of Planning and National Development carried out a needs assessment in each sector to establish the resources required to achieve the MDGs by 2015. The Needs Assessment and Costing Report resulting from the study indicated that for Kenya to achieve the MDGs, more resources needed to be shifted towards key MDGs sectors and that a supportive policy environment was necessary. Compared to the government resources available, the financing gap stood at Kshs 4.1 trillion. An aggressive MDGs mainstreaming and advocacy campaign was launched.

1.5.1 Policy Setting for the MDGs

The economic and social development policies pursued in post-independence Kenya have focused on alleviation of poverty, improvement of literacy levels, and reducing incidence of disease. The Sessional Paper No. 10 of 1965 focused on the elimination of poverty, disease and ignorance. The paper also supported a policy of rapid economic growth. Subsequent national development plans, the Poverty Reduction Strategy Papers, and the Economic Recovery Strategy 2003-07 have pursued goals that were closely focused on growth, poverty reduction, employment and the improvement of the general well being of the people. The Vision 2030 and its first Medium Term Plan 2008-2012 go a step further to identify and respond to regional development priorities in order to promote national equity. These policy processes have the same focus as the MDGs.

1.5.2 MDGs Based Planning Kenya

MDGs-based planning was launched in Kenya in May 2004 as a response to the Millennium Declaration and the challenges faced towards the achievement of the goals by 2015.

Following a tripartite agreement between the Government of Kenya, the Government of Finland and the United Nations Development Programme (UNDP), the project "Mainstreaming MDGs in Kenya's Development Process" (MDGs Project) was launched in July 2004. The objective of the project was to mainstream MDGs in the planning, budgetary and development processes in Kenya. Financial assistance for the project was provided by the Government of Finland. The Government of Kenya was the implementing partner while the UNDP-Kenya office

was to manage the resources. The mainstreaming of MDGs has been successfully carried out as can be evidenced by the Treasury circulars that have been released instructing that all Government planning and budgetary processes to respond to the MDGs and the increased resource allocation to core MDGs sectors. The country's long-term development plan, the Vision 2030 was developed with a MDGs background. The first Medium Term Plan (MTP 2008-2012) is aimed at accelerating the achievements of MDGs by redirecting spending to high priority areas. The corresponding District Development Plans also ensure that local level planning and budgeting in all districts is responsive to the MDGs. The government has also increased allocation of funds to the devolved levels through the Constituency Development Fund (CDF), the Local Authority Transfer Fund (LATF), the Bursary Fund, the Youth and Women's Enterprise Development Funds amongst other devolved funds.

The fact that MDGs cut across multiple sectors within government operations necessitated a focal point to coordinate all the MDGs enabling activities in Kenya. The MDGs Projects Implementation Unit was therefore set up to spearhead MDGs advocacy, coordinate all enabling activities for the achievement of MDGs in Kenya, and to implement the MDGs Mainstreaming Project.

As a result, there have been remarkable achievements on the MDGs and the economy as a whole. As part of the strategy of achieving the MDGs, nine millennium districts were selected for pilot interventions. Based on the best practices in these districts, the MDGs activities would then be scaled up to cover the entire country. These districts were Bondo, Bungoma, Garissa, Kilifi, Meru South, Murang'a, Siaya, Suba and Turkana and were selected because of they had high poverty levels.

1.6 ACHIEVEMENTS IN THE MDGs IN KENYA UP TO 2009

Since the start of the MDGs process in Kenya, several milestones have been realized:

1. Sensitization of all government ministries and other stakeholders on the MDGs and the need for a coordinated approach. Key among these was the sensitization of Members of Parliament (MPs), who have a significant influence on the utilization of the CDF funds and which currently account for a large proportion of government spending.
2. An MDGs Needs Assessment Study was undertaken between 2004 and 2005 to determine the cost of achieving the MDGs. The study found that a total of USD 5.9 billion will be required to finance the full attainment of the MDGs. This report has continued to inform the planning and budgeting process in Kenya.

3. A cabinet directive in March 2005, requiring all ministries to mainstream MDGs in their specific policies, programmes, plans, budgets and operations helped to place MDGs at the center of the country's development process.
 4. The share of both recurrent and development expenditure by key MDG sectors has also been increasing since FY 2004/05.
 5. In the spirit of promoting local partnerships towards the realization of the MDGs, the government has, in partnership with development partners, undertaken pilot initiatives with the aim of developing best practices for replication nationally. These include;
 - a. The Millennium Villages Project of the MDGs Centre, affiliated to the Earth Institute of Columbia. There are currently two millennium villages in Bar Sauri (Nyanza) and Dertu (North Eastern), which provide innovative models for rural communities to lift themselves out of extreme poverty and also to address poverty at the village level through community led-development. The results have been encouraging. For instance in Bar Sauri village, malaria prevalence was significantly reduced, while maize yield also increased significantly.
 - b. In the same vein, nine districts, namely, Kilifi, Garissa, Meru South, Murang'a, Turkana, Bungoma, Bondo, Siaya, Suba and Turkana were selected to be model millennium districts. The focus in the Millennium District has been strengthening district level planning, budgeting, monitoring and evaluation and evidence-based decision making processes. Initial steps have included strengthening district capacities to spearhead these processes as well as enhancing district level information, communication and education capacities for data generation and use through strengthened District Information and Documentation Centers. Capacity building programmes have included identification of district specific "Quick Win" initiatives to fast track the realization of MDGs at district level.
 - c. The civil society has also contributed to the attainment of the MDGs. Examples include non-governmental organizations implementing complementary programmes in Education, Water and Sanitation and Health such as the African Medical Research Foundation (AMREF), the Kenya Red Cross, and CARE.
 - d. The implementation of the Information, Education and Communication (IEC) Strategy has enhanced awareness and advocacy aspects of the MDGs process in Kenya. The MoSPND & V2030 engaged 26 Civil Society Organizations to localize MDGs at the local level in 28 districts and the process is envisaged to be widened. Periodic IEC materials are produced and disseminated to ensure that development activities at all levels are informed by the MDGs agenda.
- The MDG process in Kenya therefore focuses on mainstreaming the MDGs in policy, planning and budgeting and rallying all stakeholders to the MDGs. It also involves engaging the international community in constructive dialogue on the need to honor their pledges to increase official development assistance for the achievement of the Goals as well as reducing the debt burden, improving trade practices, and supporting transfer of appropriate technologies.

1.7 STRUCTURE OF THE MDGs STATUS REPORT

This is the fourth MDG Status report in Kenya. The report is prepared based on the Sector plans, Sector Strategic Plans, the National Medium Term Plan (MTP) and the Kenya's long-term development blue print, the Kenya Vision 2030.

The report details the progress made in the MDG targets. It also highlights the key challenges, interventions and recommends the policy changes needed to accelerate the achievement of the MDGs by 2015.



Chapter Two

Goal 1:

Eradicate Extreme Poverty and Hunger

2.1 TARGETS AND INDICATORS

Target 1A: Halve, between 1990 and 2015, the proportion of people whose income is less than one dollar a day.

Indicators for Monitoring Progress:

- Proportion of population below \$1 (PPP) per day
- Poverty gap ratio
- Share of the poorest quintile (one fifth) in national consumption, where households are divided into quintiles according to their gross consumption

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

Indicators for Monitoring Progress:

- Growth rate of GDP per person employed
- Employment to population ratio
- Proportion of employed people living below \$1 (PPP) per day
- Proportion of own account and contributing family workers in total employment

Target 1C: Halve, between 1990 and 2015, the proportion of people who suffer from hunger

Indicators for Monitoring Progress:

- Prevalence of underweight children under five years of age
- Proportion of population below minimum level of dietary energy consumption

2.2 PEOPLE WHOSE INCOME IS LESS THAN ONE DOLLAR A DAY

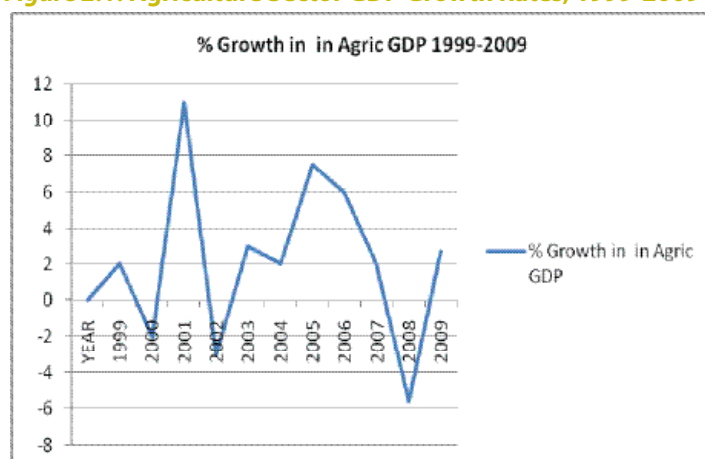
Target 1A: Halve Between 1990 and 2015, the proportion of people whose income is less than one dollar a day

2.2.1 Situation Analysis

The agricultural sector is an important component of national development efforts due to its linkages with other sectors of the economy, including ensuring food security, provision of raw materials for industry, employment creation, and foreign exchange earnings. As shown in *Figure 2.1*, the agricultural

sector performed fairly well between 2003 and 2006 achieving a growth rate of 7% in 2005. The negative growth in various years is attributed to many challenges including erratic weather conditions, rising prices of key inputs, and poorly performing markets. During the last two years, the country has experienced rising food prices caused by both local and international factors. These include increasing demand for food in emerging economies, competition between biofuels and food production/consumption, and high oil prices. Local factors are supply driven and include high input prices, recurrent droughts and floods, and post-election violence witnessed in the early part of 2008.

Figure 2.1: Agriculture Sector GDP Growth Rates, 1999-2009



Source: **Economic Survey various**

Poverty and high food prices are challenges for the achievement of MDGs, particularly MDG 1 of eradicating poverty and hunger by 2015. In Kenya, high food prices, especially of essential foodstuffs, affect the poor net food buyers. The net food buyers include urban residents and small farmers, fisher folks, pastoralists and farm laborers who do not produce enough to meet their food needs. Others negatively affected are net buyers in value terms who sell at low prices at the time of harvest to finance essential needs and buy back at high prices during time of food scarcity.

By implementing the current agricultural policies and programmes as defined in the national development agenda, it is envisaged that the rate of growth in agriculture will peak at 10% in the medium-term. Such level of expansion will enable the country raise rural incomes, reduce hunger and malnutrition, create employment and ultimately reduce the levels of poverty.

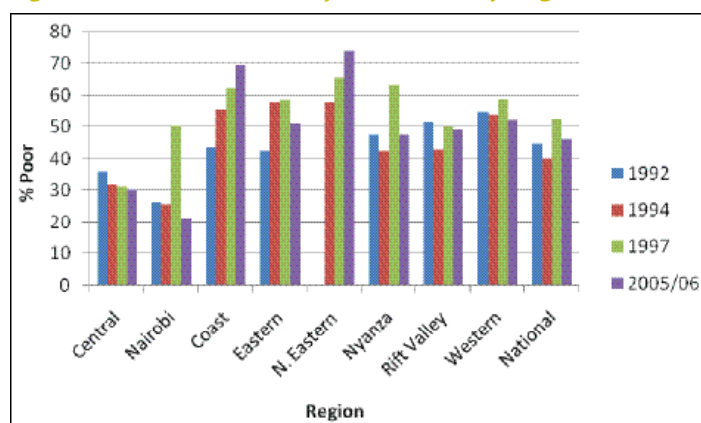
Under the Vision 2030, the agricultural sector is expected to spearhead implementation of key flagship projects that include consolidation of agricultural sector legislation, implementation of a 3-tiered Fertilizer Cost Reduction Programme, development of an Agricultural Land Master Plan, establishment of Livestock Disease Free Zones (DFZs), and the development of the Athi and Tana River deltas. In all cases, emphasis will be put on value addition of farm produce, in order to increase household incomes.

2.2.2 Incidence of Poverty

Kenya continues to suffer from poverty and related problems despite the enormous resources spent on poverty reduction strategies. In Kenya, poverty and food insecurity are twin concerns characterized by the inability of the affected households to acquire sustainable livelihoods. There are pockets of the country with poverty level of over 70%. As shown in *Figure 2.2*, in 2005/06, the incidence of poverty was estimated to be 45.9% and was higher in rural areas than urban, at 49.1% and 33.7%, respectively. The poverty gap ratio was 16.2% in the same year. However, poverty incidence is expected to have increased during 2008-09 due to postelection violence, global economic crisis, global food and fuel crisis, and drought conditions.

Manifestation of household poverty includes poor health, low productivity, vulnerability to hazards, and environmental degradation and unsustainable urbanization, which also pose challenges to the attainment of the MDGs. Rural areas occasionally suffer from other calamities such as floods, drought and environmental degradation. On regional basis, Central province had the least prevalence, while North Eastern and Coast Provinces had highest poverty levels.

Figure 2.2: Trend of Poverty Incidences by Region



Source: KNBS, Welfare monitoring Surveys and KIHBS 2005-06

Some districts like Vihiga, Kericho and Meru made good progress in reducing food poverty over 1994-2005 period. These districts have dairy, tea, coffee

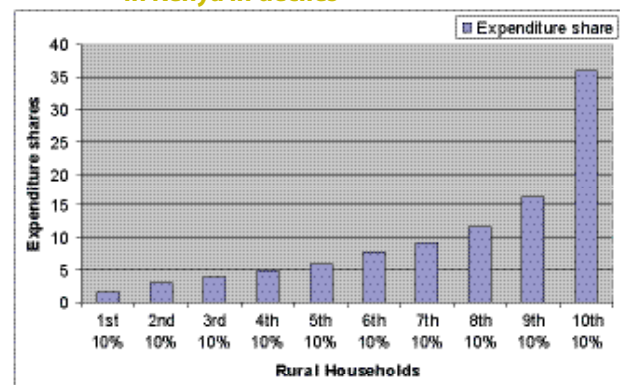
and horticulture farming systems. However, some districts like Kwale, Mandera, Turkana and Marakwet became food poorer within the same period. The poor performing districts are found in marginal and ASAL areas where pastoralism (beef and goat keeping) is the main enterprise. In most cases, the poor are not hungry because there is no food but because they do not have money to buy food. Poverty, which is major cause of hunger, has pushed households to the edge of economic survival. The households with highest family sizes are at greatest risk to food insecurity, and are particularly prone to seasonal food shortages and price increases, which is partly due to poor distribution systems of essential food items.

It is common to find a marginalized community suffering from serious food shortage while a glut is being experienced in high potential areas of the country. Some of the recent government interventions to address this include implementation of projects like ASAL Based Rural livelihood Project addressing productivity and market access issues, and orphan crop seed bulking and distribution. The government also launched Njaa Marufuku Kenya (NMK) programme (a call to eliminate hunger in Kenya). Under the programme, 57 districts have been targeted with the local communities charged with the responsibility of identifying programs and people to benefit from inputs and other support activities. The government has also initiated a cash transfer programme targeting older people, orphan and vulnerable children.

2.2.3 Share of the Poorest Quintile in National Consumption

The population in the three lowest quintiles among the food poor category was estimated at 5.6 million out of a national projected population of about 35.6 million in 2005/06. On the basis of household consumption expenditure (*Figure 2.3*), the poorest 20% of the rural households control only 4.6% of the total household expenditure, while the richest 10% control 35.9%, and the top 30% of the households control 63.8%.

Figure 2.3: Expenditure shares for rural households in Kenya in deciles



Source: KIHBS 2005/06

2.3 FULL AND PRODUCTIVE EMPLOYMENT AND DECENT WORK FOR ALL

Target 1B: Achieve full and Productive Employment and Decent Work for all, including Women and Youth

2.3.1 Incidence of Unemployment in Kenya

At independence in 1963, the government identified poverty and unemployment as major problems facing Kenyans. Forty six years later, and despite numerous policy and programmes efforts, poverty and unemployment continues to afflict many Kenyans. Millions of Kenyans especially youth and women are unemployed, underemployed or are working poor because their labor earnings are below \$1 (PPP) per day in per capita terms.

The number of unemployed Kenyans increased by 3.1% from 1,800,623 in 1998/99 to 1,856,294

in 2005/06 based on the Integrated Labor Force Survey (See Table 2.1). In 2005/2006, the number had increased to 1,856,294 (12.4%), despite the improved economic performance over the same period. Growth in productive employment and income generating opportunities has not kept pace with growth in labor force. The labor force increased from 12 million to 14.5 million over the same period.

The largest rise in working-age population between 1998/99 and 2005/06 was among the youth. In 1998/99, 12,326,232 million Kenyans were in labor force while 3,599,231 were inactive. In 2005/06, the number of Kenyans participating in the labor force rose to 14,564,329 while the inactive increased to 5,266,112. Majority of the inactive are youth. An estimated 10.5 million were employed while 1.8 were million unemployed during 1998/99 period. By 2005/06, the employed rose to about 12.7 million with the unemployed increasing to about 1.85 million.

Table 2.1: Distribution of Kenyan population aged 15-64 by employment status

Age	Employed		Unemployed		Inactive*		Total	
	1998/99	2005/06	1998/99	2005/06	1998/99	2005/06	1998/99	2005/06
15-19	843,909	1,056,015	270,217	352,357	2,349,270	3,210,685	3,463,396	4,619,057
20-24	1,435,405	1,895,834	533,078	605,167	485,067	992,053	2,453,550	3,493,054
25-29	1,584,271	2,088,468	291,679	388,747	165,931	335,359	2,041,881	2,812,574
30-34	1,541,604	1,897,206	185,927	154,360	94,668	169,153	1,822,199	2,221,097
35-39	1,533,196	1,497,662	140,147	122,725	91,739	101,214	1,765,082	1,721,601
40-44	1,128,190	1,357,371	113,165	92,262	68,964	91,978	1,310,319	1,541,611
45-49	992,261	1,070,783	88,596	64,636	67,260	81,760	1,148,117	1,217,179
50-54	702,199	787,417	66,839	38,666	82,769	95,607	851,807	921,690
55-59	412,639	624,308	64,235	26,350	87,107	91,389	563,981	742,047
60-64	351,936	432,972	46,739	11,024	106,457	96,536	505,132	540,532
Total	10,525,609	12,708,035	1,800,623	1,856,294	3,599,231	5,266,112	15,925,463	19,830,441

Source: KNBS

*Inactive labor consists of all persons within the working age who are outside the labor market.

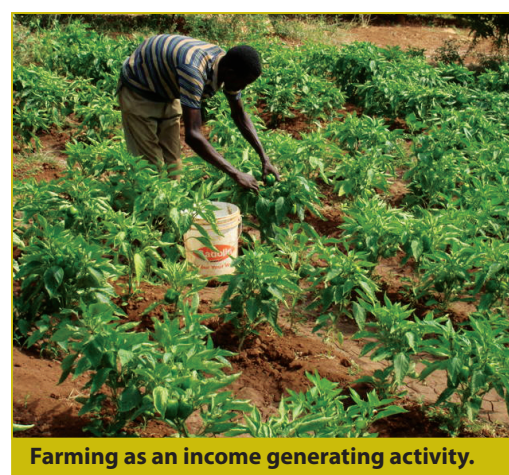
Table 2.2 shows that 6.7% of the labor force was unemployed in 1978, 9.7% in 1986, 25.1% in 1998/1999, and 12.7% in 2005/06. These estimates

shows that open unemployment significantly decreased between 1998/99 and 2005/06.

Table 2.2: Unemployment rates in Kenya by age group in percent (1978-2006)

Age	1978	1986	1998/99	2005/06
15 – 19	26.6	36.2	47	25
20 – 24	18.5	29.2	47.3	24.2
25 – 29	4.8	8.6	25.1	15.7
30 – 34	2	2.7	14.3	7.5
35 – 39	1.8	2.1	12	7.6
40 – 44	0.7	0.7	11.2	6.4
45 – 49	1.1	2	14.7	5.7
50 – 54	1.4	0.9	18.9	4.7
55 – 59	1.5	4.1	40.6	4
60 – 64	3.2		45.2	2.5
Total	6.7	9.7	25.1	12.7

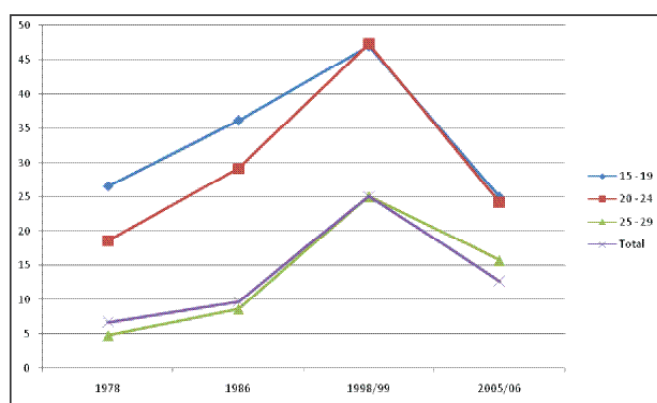
Source: KNBS



Youth, defined here as persons within the 15-35 years age bracket, make up about 36% of the population and over 60% of the total labor force. Youth unemployment rates are relatively high since not all the youths graduating from colleges and universities are absorbed into formal and informal employment.

Figure 2.4 below shows that in 1998/99 the unemployment rate among ages 15-19 years was 24.3%, 27% for 20-24 years and 15.5% for 25-29 years. Unemployment rate in 2005/06 declined with age and was generally lower than those of 1998/99. The youth unemployment rate has remained double that of the national unemployment.

Figure 2.4 : Unemployment in Kenya by age groups, 1978-2005/06



Source: KNBS

The gender disaggregated data on unemployment for 1998/99 and 2005/06 shows that unemployment rates for the females were higher than those of the males for all age groups. Unemployment among females in 2005/06 was 14.3% compared to 11.2% among the males over the same period.

2.4 THE PROPORTION OF PEOPLE WHO SUFFER FROM HUNGER

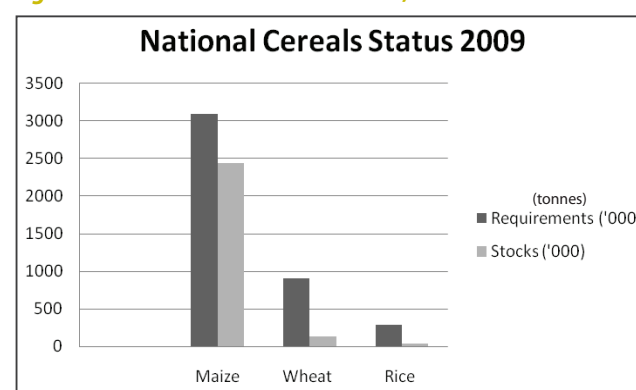
Target 1C: Halve, between 1990 and 2015, the proportion of people who suffer from hunger

2.4.1 The National Cereals Situation

Over the years, the Kenya Government has strived to achieve national, household and individual food security. The Government supports efforts to increase agricultural productivity by revamping the development and application of improved technologies and reviving extension services. In addition, the Government supports purchase and storage of Strategic Grain Reserve (SGR) as well as intervening in stabilizing the price of cereals by participating in the market through NCPB. The success in this effort has been mixed. Currently, 51% of the Kenyan population lack access to adequate food. This inaccessibility to food is closely linked to poverty which stood at 46% in 2005/06.

As illustrated in Figure 2.5, the national supply for staple foods in 2008 was not sufficient to meet the demand. The country produced 2.4 million tons of maize against a national requirement of 3.1 million tons; 360,000 tons of wheat against a national requirement of 900,000 tons; and 120,000 tons of rice against a national requirement of 280,000 tons. Kenya is therefore a food deficit country, and depends on imports to bridge the gap in these staples. With recent global financial crisis and high global food prices, this made the country worse off in terms of foreign exchange reserves. Long term analysis shows that nearly two million people require food relief at any one given time. The situation worsens during periods of drought, heavy rains and/or floods when the number of people requiring food aid rises to 4 million.

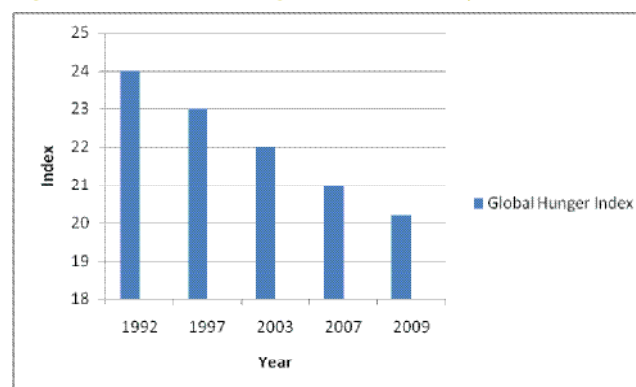
Figure 2.5 : National Cereals Status, 2009



Source: MoA

However, efforts put by the government have somehow yielded fruits. For example, food consumption per capita increased by about 10% between 2001 and 2006. Kenya also managed to reduce hunger by about 12.5% in the period between 1992 and 2007 (Figure 2.6). However, comparative performance by other countries like Ghana and Egypt, which relied more on local production, recorded more impressive reduction in hunger over the same period.

Figure 2.6 : Global Hunger Index for Kenya



Source: Kenya Economic Report 2009, KIPPRA and Global Hunger Index 2009

The regions with high incidences of poverty suffer from food poverty. Long term averages for central province are the lowest in terms of overall poverty and food poverty, whereas North Eastern and Coast provinces score poorly on the same parameters.

2.4.2 Nutrition Status of Children Under Five Years of Age

Children whose weight-for-age is below minus two standard deviations (-2 SD) from the median of the reference population are considered underweight.

The measure reflects the effects of both acute and chronic malnutrition. 20.3% of Kenyan children under five are underweight, 5.6% are classified as severely underweight, while those stunted were estimated to be 29.6%. Peak levels of low weight-for-age are found among children aged 24-35 months, as well as children in North Eastern Province and those whose mothers have no education. Comparison of the 2008-09 KDHS results with those of the 2003 KDHS indicate that there has been an insignificant change in the proportion of children who are underweight (See Table 2.3).

Table 2.3: Trends in Child Nutrition Status by Province, 1998 -2009

Region	Percent underweight (<-2SD)			Percent stunting (<-2SD)		
	1998	2003	2008/09	1998	2003	2008/09
Nairobi	11.4	6.3	10.0	25.7	18.7	22.7
Central	14.3	14.6	16/7	27.5	27.0	25.7
Coast	27.4	25.4	28.5	39.1	34.9	34.0
Eastern	25.7	21.4	25.2	36.8	32.7	32.8
North eastern	-		31.1	-	-	31.1
Nyanza	22.2	15.6	13.7	30.8	31.1	26.9
Rift Valley	24.9	24.0	23.7	33.1	32.0	30.9
Western	19.1	19.0	14.8	35.0	30.2	28.4
Total Rural	23.9	20.6	21.8	34.7	32.0	31.2
Total Urban	13.3	4.7	12.6	24.7	23.5	21.6
Total Nation	22.1	19.1	20.3	33.0	30.6	29.6

Source: KDHS 1998, 2003, 2008-09

2.5 PERFORMANCE OF KEY AGRICULTURAL AND RURAL DEVELOPMENT SUB SECTORS

2.5.1 Fisheries Sub sector

The fisheries sub sector plays an important role in the national economy. The sub sector's contribution to the GDP in 2007 and 2009 was 0.4%. Total fish landings for the years 2007 and 2009 was 136,355 and 145,531 metric tonnes respectively (See Table 2.4). Kenya's fishing communities have relied on fish as a source

of income and protein. The sub sector employs about 80,000 individuals directly and supports about 800,000 individuals indirectly (as processors, traders and other service providers). Fish exports earned Kenya over KShs 5 billion in foreign exchange during the year. Fish plays important roles in its use for direct human consumption and in the production of animal feeds, particularly fishmeal, fish oil and bioactive molecules for the pharmaceutical industry.

Table 2.4: Quantity of Fish Landed 2001-2009

Year	Quantity (MT)	Value (Ksh.'000)
2001	165,225	7,897,992
2002	179,106	8,832,644
2003	119,655	6,956,112
2004	130,614	7,760,806
2005	145,849	7,651,866
2006	158,670	8,566,771
2007	136,355	8,640,000
2008	135,408	11,454,000

Source: Ministry of Fisheries Development



Improved drying of Omena at Tabla beach in Mbita district.

2.5.2 Livestock Sub sector

The subsector is the main source of livelihoods especially in the Arid and Semi-Arid Lands (ASALs). About 83% of Kenya's land area is ASAL where livestock production is best suited. Livestock production therefore has a high potential for contributing to wealth creation and poverty alleviation in ASALs. In the high rainfall areas, immense potential for development of dairy, poultry and pig industries exists. The sub sector is a source of food security, income generation, employment creation and foreign exchange earnings.

Since 2003, dairy production has grown impressively as manifested by an increase in milk production from 2.8 billion in 2002 to 4.2 billion litres in 2007, but declined to 4.0 billion litres in 2009. This has stimulated growth in related industries that manufacture animal feeds, veterinary drugs, packaging materials and other equipment.

The revival of the Kenya Meat Commission in June 2006 and the operationalization of the Landhies Road Meat Depot in Nairobi and the Kibarani factory in Mombasa in 2007 have ensured that farmers are increasingly having a ready market for their animals. In addition, efforts are being made for the construction of satellite abattoirs in Isiolo and Garissa, and rehabilitation of a slaughterhouse in Wajir at a total cost of Kshs. 170 million.

The value of marketed livestock and related products has increased from Kshs 29.7 billion in 2007 to Kshs 36.6 billion in 2009. However, in 2008/9 the sub sector was affected negatively by the prolonged drought that affected productivity and led to increased disease incidences. The improved weather conditions in 2009/10 have reversed the trend.

2.5.3 Cooperatives Sub sector

In pursuit of the Vision 2030, the Ministry of Cooperative Development and Marketing has been implementing key flagship projects and specific priority programmes and actions to address overall national development agenda and specific MDG issues. Overall, the Ministry is contributing to the development of the country through actions to support specific priority programmes.

2.5.3.1 Policy and Legal Reforms

These involve the on-going review of the Cooperative Development Policy, and the enactment of the SACCO Societies Act in 2008. The implementation of the Act had already started and has resulted in the establishment of the SACCO Regulatory Authority and the streamlining of SACCO operations to enhance efficiency.

2.5.3.2 Fertilizer Cost-Reduction Initiative

The Ministry of Cooperative Development and Marketing prepared a Kenya Farmers Association

(KFA) Revival strategy and Business Plan whose implementation was put on hold following the transfer of KFA to the Ministry of Agriculture. The Ministry also recently undertook a nationwide review of the status of District Cooperative Unions and their affiliates to determine those that can take part in the fertilizer procurement and distribution functions. The government also undertook fertilizer subsidy programmes where the rural poor are issued with fertilizers in the first season (Kilimo Plus). In the second season, they are expected to have made profit and can buy the fertilizers on their own (Kilimo Biashara) through soft loans.

2.5.3.3 Enhanced Access to Financial Services

To improve access to financial services, the Ministry has facilitated cooperatives to mobilize savings to increase loanable funds to meet members' credit requirements. SACCOs have also been encouraged to explore and diversify their products and services (e.g. into mortgages), and review their approaches (business process re-engineering, innovation, etc) in relation to their members' needs.

2.5.3.4 Revitalization of Agro-Commodity Cooperatives

The Ministry has continued to facilitate the restructuring of commodity marketing cooperatives and recently promulgated the cooperative sector marketing strategy. Efforts are also underway to promote cooperation and strategic alliances with the private sector-based institutions in market research as well as encourage cooperatives to allocate adequate funding to undertake research on a continuous basis. Other activities have also been initiated under public-private partnerships to revitalize national cooperatives organizations and institutions to improve access to agricultural inputs, enhance value-addition processing, and marketing.

2.5.4 The Lands Sub sector

2.5.4.2.1 Parcel Ownership and Title Holding

In Kenya majority of farmers own the parcels on which they carry out farming activities. A reported 71.7% of agricultural parcels are owned by the farmers cultivating them, out of which only 39.4% have land registration title deeds and thus can be used as collateral to get credit from financial institutions.

2.5.4.2.2 Programmes related to poverty reduction in the Lands sub-sector

The sub sector has three main programmes which contribute to improved food security and poverty alleviation. Some of these programmes are core poverty programmes which are MDGs related. These are outlined here below;

- **Settlement Scheme Programme**

This programme involves settling the poor landless Kenyans on agricultural viable land through the

Settlement Fund Trustees (SFT). This has been through buying private land or acquiring government land and subdividing it into viable units for settling poor people who are landless. The SFT has also been giving land loans on soft terms and development loans to settlers for agricultural development. This initiative has stagnated due to shortage of funds.

Management of settlement schemes has been done by provision of basic infrastructure especially access roads,

water facilities, schools and dispensaries. Provision of such basic social and physical infrastructure spur economic activities in these settlement schemes and enable beneficiaries to repay the loans.

Table 2.5 shows the number of farms purchased, number of families settled, and settlement farms registered from 2003 to date.

Table 2.5: Schemes registered and number of Families Settled

Year	2003/4	2004/5	2005/6	2006/7	2007/8	2008/9
No. of farms purchased	1	-	-	3	7	-
Settlement Schemes registered	3	5	10	15	8	2
Number of families settled	473	1,057	12,804	13,691	16,500	17,266
Number of informal settlements regularized	-	-	-	1	5	2
Number of adjudication cases heard and finalized	-	-	-	11,010	8,410	12,787

Source: Ministry of Lands 2007; "-" means no data

• Land Adjudication Programme

The programme entails ascertaining rights and interests on customary/trust land areas and thus facilitates security of land tenure, which leads to improved utilization of land. This has been done

through registering of adjudication sections by giving the individuals security of tenure. Table 9 shows the number of adjudication sections finalized and the number of families settled.

Table 2.6: Adjudication Sections and Family Settled

Year	2003/04	2004/05	2005/06	2006/07	2007/08	2008/09
Adjudication sections finalized	11	19	16	30	30	30
Families settled	768,959	40,321	20,291	51,148	28,101	-

Source: Ministry of Lands; "-" means no data

• Land Delivery and Management

The Ministry of Lands guarantees land rights and security of tenure by issuing title deeds to individuals. When property rights are secured, individuals have an opportunity to invest by using the title deeds as collateral to access credit. This reduces poverty by increasing farmers' income. The sub sector has initiated a programme to deal with the insecurity of tenure to land especially among the rural poor in the whole country. The ministry issued a total of 166,401 title deeds in 2009.

• 10-Mile Coastal strip Resettlement programme

This is one of the programmes the Ministry has initiated to solve the land problems along the ten mile coastal strip. This involves identifying squatters, regularizing their settlements and also settling the landless in the area by issuing them with title deeds. The programme has entered the implementation stage and so far over 10,000 titles to land have been issued.

• Regularization of informal settlements

Majority of urban and rural poor live in informal settlements or slums. The Ministry has been regularizing

the informal settlements by registering and issuing title deeds to the residents. This empowers the slum dwellers to own properties and be able to access credit facilities.

2.5.5 Water and Irrigation Sub sector

An estimated 83% of Kenya comprises of ASALs and the country cannot therefore rely only on rain-fed agriculture. Irrigation and drainage is especially pertinent in the face of recurrent droughts, floods and prolonged dry spells. Kenya has an irrigation potential of 539,000 ha (based on surface water availability) and a drainage/flood protection potential of 600,000 ha, of which only 110,000 ha (20%) of irrigation and 30,000 ha (5%) of drainage have been developed. However, the rate of irrigation development in the country has been slow, with expansion of new irrigated/drained area attaining about 5,000 ha per year, a growth rate of less than 0.5% (See Table 2.6).

If water storage facilities (in flowing streams) were to be widely developed, the current irrigation potential could be increased up to 1.3 million ha. The ASALs alone have 9.2 million hectares of land endowed with

crop production potential if irrigated. This irrigable area is equivalent to the total farmland in high and medium potential areas in the country. Since the limiting factor is water, the national irrigation

potential can be substantially increased through water harvesting and storage, the exploitation of groundwater resources, and improvement in water use efficiency.

Table 2.7: Productive Land under Irrigation

Performance Measure	2005/06	2006/07	2007/08	2008/09
Total area under irrigation (ha)	107,800	114,000	119,200	121,371
Annual increase in land under irrigation (ha)	6,000	6,200	5,200	4,021

Source: **Ministry of Water and Irrigation**

Tables 2.8 and 2.9 show the area under irrigation in the traditional and non-traditional National Irrigation

Board (NIB) schemes.

Table 2.8: Traditional NIB Schemes under the Gazetted Land

Scheme	AREA UNDER IRRIGATION (HA)		
	Before Expansion	Current Acreage	Future Expansion
Bura	80	2,000	6,500
Hola	0	450	3,500
Perkerra	496	240	5,000
Ahero	867	1,200	3,100
West Kano	890	890	1,390
Lower Nzoia Phase I/Bunyala	213.7	480	3,500
Mwea	6,400	8,000	10,000
Total	8,946.7	13,260	32,990

Source: **Ministry of Water and Irrigation 2010**

Table 2.9: Non-traditional NIB Schemes where the Board is providing services

Scheme	AREA UNDER IRRIGATION (HA)		
	Before Expansion	Current Acreage	Future Expansion
Kibwezi	0	200	650
South West Kano	0	480	1,690
Eldume & Sandai	100	200	200
Maugo	43	60	120
Lower Nzoia Phase II/ Rwambwa Mudembi	10	100	3,500
Total	153	1,040	6,160

Source: **Ministry of Water and Irrigation 2010**

There are also new schemes at the National Irrigation Board (NIB) to be funded through GOK and development partners. These schemes are located all over the country and have a total area of 102,825 ha. Under the Economic Stimulus Programme, acquisition of assorted farm inputs and infrastructural development were facilitated by the government during 2009/10 financial year at a cost of Kshs 31 million. This programme is implemented through the ministries of Agriculture, Water and Irrigation, Youth Affairs and Sports, and Regional Development. The programme is being implemented in irrigation schemes spread in 19 selected districts in the country with a total acreage of 14,020 ha of which 5,640 ha is

for maize and 8,380 ha is devoted to rice cultivation (See Table 2.9). The Ministry of Fisheries Development is also constructing fish ponds under the programme. The objective is to train 14,000 fish farmers on pond management and commercial fish farming, build 200 fish ponds per constituency in 140 constituencies countrywide, and refurbish 15 Government fish farms. The construction started in November 2009 and is progressing smoothly countrywide. 200 fish ponds have been constructed in 140 constituencies under the Economic Stimulus Programme (ESP) will produce over 5,000 tonnes of fish valued at Kshs 0.5 billion at the farm gate. This will be realized between June and October 2010.

Table 2.10: Production Statistics as at End of February 2010 (90 kg bag for maize and 80 kg bag paddy rice)

No	Project	Institution	Crop	Target acres	Acres achieved	Target Yield Per acres (Bags)	Actual yield (Bags)	Target Prod. (Bags)	Actual Prod. (Bags)	Prod Variance
1	Bura	NIB	Maize	5,000	4,800	25		125,000	Not harvested	
2	Hola	NIB	Maize	1,125	1,240	25	25	28,125	3,000 from 120 acre	
3	Bura	NYS	Maize	3,000	432	25		75,000	Not harvested	
4	Hola	NYS	Maize	1,375	20	25		34,375	Not harvested	
5	Perkerra	NIB	Maize	600	600	25		15,000	Not harvested	
6	TDIP	TARDA	Maize	2,500	550	25		62,500	2,500	
7	Kibwezi	NIB	Maize	500	500	25		12,500	Not harvested	
TOTAL MAIZE				14,100				352,500		
8	Ahero	NIB	Rice	3,000	2,500	30	25	90,000	7,500 from 300 ac	
9	West Kano	NIB	Rice	2,250	2,250	30	25	67,500	10,000 from 400 ac	
10	Bunyala	NIB	Rice	1,200	1,600	30	25	36,000	6,000 from 240 ac	
11	Mwea	NIB	Rice	10,000	18,000	30	25	300,000	75,000 from 3,000	
12	S W. Kano	NIB	Rice	3,000	2,000	30		90,000	Not harvested	
13	TDIP	TARDA	Rice	1,500	Nil	15	Nil	22,500	Nil	Negative 22,500
TOTAL RICE				20,950						

Source: Ministry of Agriculture

2.6 CHALLENGES IN ADDRESSING HUNGER IN KENYA

Inadequate legal and policy frameworks: There are more than 130 pieces of legislation; some overlap and contradict each other while others are obsolete. This, coupled with policies that have not been revised for a long time to incorporate current socioeconomic environment, makes agricultural development a formidable task.

Low application of modern technology: The use of appropriate modern science and technology in production is still limited. Although Kenya has a well-developed agricultural research infrastructure, there is lack of research-extension-farmer linkages and demand-driven research. Dissemination of research findings is not adequately undertaken.

Agricultural land fragmentation: This has limited the application of modern technology in agricultural activities, thus reducing the output level. Population increase and urban sprawl have continually reduced land available for agricultural production.

Inadequate quality control systems: The marketing of crops, livestock and fisheries products has faced challenges due to poor packaging, damage during transportation, poor handling and quality control.

Inadequate market and marketing infrastructure: Marketing of agricultural produce continues to be adversely affected by lack of market information and supportive infrastructure. The dependence on a few external market outlets makes agricultural exports very vulnerable to changes in demand and unexpected non-trade barriers in foreign markets.

Diseases and pests: Pests and diseases results into pre-harvest and post-harvest losses. In addition, diseases such as Avian Influenza and Rift Valley fever continue to pose challenges in improving livestock productivity and limiting external trade.

Low access to financial services and affordable credit: The financial system has not been supportive of agricultural activities. The high interest rates make it difficult for most farmers and fisher folk to access credit. The development of banking products suitable for farmers and fisher folk has been slow. This limits the ability of farmers and fisher folk to save as well as access to credit.

Climate change and environmental degradation: Over the last three decades, the frequency and severity of droughts and floods has increased, resulting in crop failures and pasture shortage. There has been increased land degradation and water pollution, which has greatly reduced the potential for crop, livestock and fisheries productivity.

Poor infrastructure: Underdeveloped rural roads and other key physical infrastructure have led to high transport costs for agricultural products to the markets as well as farm inputs. This has continued to reduce competitiveness of Kenyan agricultural products in the international market. In addition, energy sources in rural areas are expensive and often not available, reducing investment in cold storage facilities, irrigation and agro-processing.

High cost, adulteration and low application of key inputs: The cost of agricultural inputs has escalated over the years making them unaffordable and increasing the cost of production. This has resulted in low application and adulteration of inputs, thus leading to declining quality and productivity in the sector.

Poor governance in agricultural institutions: Well managed producer and marketing organizations are vital to the performance of the sector. They provide economies of scale in dealing with credit and marketing of inputs and outputs. Poor management and governance has continued to be a major constraint to the attainment of their full potential. The regulatory aspects of some of the institutions have impeded their performance and needs to be addressed.

Staffing levels: The staff numbers are not adequate to satisfy the deployment needs and requirements at various operational levels. This is particularly so with the increased number of administrative units (districts). This is a main challenge in performance since deployment of staff needs to be done on the basis of grades, skills and experience in relation to workload.

2.7 POLICIES AND STRATEGIES TO ADDRESS POVERTY

The first Medium Term Plan under the Vision 2030 outlines strategies to address poverty. Alongside the MTP, the government has put in place other short-term and long-term measures to spearhead socioeconomic development and address core priorities especially poverty. Accordingly, different sectors have developed sectoral development plans aimed at accelerating economic growth towards reducing poverty. Some of these are outlined below:

Economic Recovery Strategy for Wealthy and Employment Creation 2003-2007: The strategy was prepared to address the challenges of poor economic growth, and focused on policies and programmes necessary to spur rapid economic growth, wealth and employment creation and poverty reduction. Key sectors of the economy were revitalized that included agriculture, livestock, fisheries, tourism, forestry, trade and industry.

Strategy for Revitalizing Agriculture: the government launched the strategy in 2004 as sectoral response to ERS. The strategy sets out the vision of the government to transform Kenya's agriculture into profitable, commercially oriented and internationally and regionally competitive activity, while conserving the environment. The strategy planned to increase real agricultural output by an average of 3.1% during 2003-2007 and reach 5% by 2007. This target was achieved, reaching an average of 5.2% by 2007 with highest being 6.2% in 2006. However, these gains were reversed by the shocks of the post-election violence, the global food crisis, escalating fuel and fertilizer prices of 2008 to the extent that the sector grew by negative 5.7% in 2008. The strategy has since been revised to Agriculture Sector Development Strategy (ASDS).

Water Master Plan: the plan aims at provision of water for both domestic and agricultural activities through rehabilitation of existing non-functional water facilities.

Roads 2000: this involves improvement of the road system to facilitate movement of agricultural products from the inaccessible high productive rural areas to markets.

Pan African Tsetse Eradication Campaign: This campaign, funded by the African Development Bank (AfDB) covers 39 districts aimed at eradicating Tsetse fly and reducing the incidence of trypanosomiasis.

ASAL Based Livelihood project: Targets to reduce poverty in arid and semi-arid areas of Kenya

Small Holders Dairy Commercialization: covering 21 districts which is addressing low productivity and marketing in the dairy industry.

Improvement of fish farming enterprise: targeting the unemployed youth, upgrading of six fish landing sites along Lake Victoria to international standards, and promotion of beach management units are some of the efforts geared towards improvement of management of fisheries resources.

The Ministry of Youth and Sports is undertaking the following to assist the youth in the country: implementation of youth affirmative action policy; public works programmes, providing training and experience; labour export schemes; micro and small enterprise development funds (youth and women enterprises development funds); and establishment of youth empowerment centres.

The National Land Policy Formulation: The National Land Policy Formulation has been approved by the Cabinet, and the Sessional paper is being finalized for discussion and adoption by Parliament. The policy will provide an overall framework and define key measures required to address the critical issues of land administration, access to land, land use planning, restitution of historical injustices, environmental degradation, conflicts, unplanned proliferation of informal urban settlements, outdated legal framework, institutional framework, and information management.

Formulation of a National Land Use Plan/ Spatial Plan: This will entail preparation of a framework that will guide physical development programmes for the next 50 years and beyond as outlined in the Kenya Vision 2030. The National Land Use Policy will be the basis upon which the National Land Use Plan will be developed. The sectoral land use plans, including agriculture master plan, will be part of the National Land Use Plan. The Ministry has developed draft concept papers of National Land Use Policy and National Land Use Plan.

Acceleration of establishment and finalization of settlement and adjudication programmes: A crash programme has been carried out countrywide to finalize the adjudication sections that are still pending and also establish settlement schemes. However, this has been slow due to unavailability of human and financial resources.

Policy initiatives to mitigate food insecurity: This includes efforts to increase agricultural productivity by revamping the development and application of improved technologies and reviving extension services; and supporting the purchase and storage of the Strategic Grain Reserve (SGR) as well as intervening in stabilizing the price of cereals by participating in the

market through NCPB.

Other short-term interventions include:

1. Adoption of a targeted subsidy scheme for the vulnerable groups and OVIs;
2. Recent Government waiver of duty on imported maize by the private sector from 16th January 2009 to 17th June 2010;
3. Raising of producer purchase price by NCPB from Kshs 1,700 to Kshs 2,300 per 90 kg bag;
4. Importation of 11 million bags of maize by Government and private sector;
5. Bulk importation 163,000 MT of fertilizer of which 63,000 MT were to be imported by Government and 100,000 MT by ADC, KTDA and NCPB;
6. Plans to raise the volume of the Strategic Grain Reserve (SGR) from the current 4 million bags to 6 million bags and onto 8 million bags by 2010 and to include other foodstuffs like sorghums, millets, beans, powdered milk and livestock feeds (hay). Moreover, it is intended to change its name to the Strategic Food Reserve (SFR) as the types of food held under SFR will have been widened considerably.
7. Livestock off-take made during drought to cushion pastoralists against low prices.

2.8. POLICY RECOMMENDATIONS

- The need to implement the East African Community (EAC) free trade in agricultural commodities based on agreed EAC commodity specifications that encourage direct delivery of maize to NCPB depots/ millers by farmers and traders from the EAC member states
- The need to improve emergency prediction and response capacity through GOK and its partners to ensure that the wealth of existing early warning information systems is well coordinated and adequately resourced to play relevant roles in disaster prediction and preparedness to ensure their involvements in developing long-term solutions
- Protection of the current food assistance programmes to ensure that current emergency food relief operations continue to provide basic food needs to people affected by various calamities
- The need for the expansion of food relief and or cash transfers to include urban households for the purpose of averting deterioration of household food security.
- Labour safety net interventions need to be considered to broaden income access options in times of hardships while building local physical and social assets especially for communities in the marginal agricultural areas and pastoral/agro-pastoral and peri-urban livelihoods
- The need to institute input subsidies for farmers to enhance production and minimize the structural deficit in the production of key food crops.

- Isolation and remoteness are a function of poor infrastructure, poor services and lack of access to efficient communication systems. Indeed, improvement of small scale infrastructure including feeder roads, links farmers to main markets are necessary to open up a wide range of market opportunities to vulnerable populations in the deficit and surplus areas
- Accelerated implementation of the strategy for revitalization of agriculture (SRA) as an appropriate strategic framework within which the Government and its partners can work together to rapidly increase agricultural production
- Expansion of public spending for rural infrastructure, services and agricultural science and research and technology, and ensure the Government allocates at least 10% of its budget to the agricultural sector based on Maputo Declaration.
- The need to institute well managed irrigation facilities in marginal agricultural areas to help avert declining food insecurity as past irrigation interventions have been highly successful in enhancing household food security. More irrigation facilities ought to be expanded and sustained
- The need to invest and promote small-scale postharvest value-adding practices to improve on-farm storage and conservation techniques

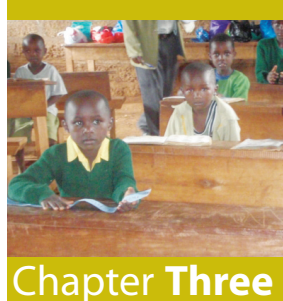
- The need for improvement of livestock handling and marketing infrastructure to facilitate the operationalization of the Disease Free Zones (DFZs) initiative
- There is need to invest in livestock export market and slaughters by promoting local processing of livestock products and by-products i.e. investing in infrastructure to facilitate linkage between primary and terminal markets

2.9 CONCLUSION

The Government is committed to implementing the MDGs in order to reduce significantly the number of food insecure populations particularly those living in extreme poverty. However, Kenya remains a low income, food deficit country with an aggregate household food security index of 71.7 (with FAO ranking it 51 out of 61 countries). The eradication of extreme hunger by 2015 thus remains a major challenge, and will require sustained and collaborative efforts amongst all stakeholders. Overall, there is need to accelerate and sustain high rates of economic growth by developing mechanisms for achieving high savings, investment rates, labour productivity, as well as reduction of political risks and the cost of doing business.



Dairy goats and Poultry keeping as a means to meet household nutritional requirements and as an alternative source of income for rural communities.



Chapter Three

Goals 2 & 3:

Achieve Universal Primary Education Promote Gender Equality and Empower Women

3.1 OVERVIEW

The education-related goals under the MDG framework are those aimed at ensuring all children access quality primary education irrespective of race, economic status, ethnic background or gender. Government policies have been developed to ensure that these goals are realized through several ministries which include Education; Local Government; Gender, Children and Social Development; Higher Education, Science and Technology; and Development of Northern Kenya and other Arid Lands. MDG Goal 2 aims at ensuring the country is on track towards full achievement of Universal Primary Education (UPE) while Goal 3 aims at promoting participation in education and economic, political and social life by ensuring that there is gender parity at all levels of education and in the improvement of the position and condition of women.

3.2 GOAL 2: ACHIEVE UNIVERSAL PRIMARY EDUCATION

3.2.1 Target 2A

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

3.2.2 Indicators of Progress

The education sector in Kenya tracks progress towards achievement of the target through the following benchmarks: net enrollment in primary education, proportion of pupils starting Grade 1 who reach the last Grade of primary, and literacy rates of 15-24 year olds – women and men (See *Tables 3.1, 3.2 and 3.3*).

3.2.3 Status and Trends

Since the introduction of Free Primary Education (FPE) in January 2003 and subsequent adoption of Sessional Paper No. 1 of 2005 on a Policy Framework for Education, Training and Research, enrolment in primary education has increased from 5.9 million in 2002 to 8.6 million in 2009. The Government has increased funding to education in order to sustain the Free Education Programme.

Gross Enrolment in Primary Education

The national Gross Enrollment Ratio (GER) at primary level rose from 88.2% in 2002 to 110.0% in 2009 as indicated in *Table 3.1*. The GER for girls increased from 87.5% to 107.2% while that of boys increased from 88.9% to 112.8% over the same period. A GER of over 100% shows that children outside the national primary school age are enrolled in primary school, mainly as overage children for the primary education cycle.

Table 3.1: Primary Schools Gross Enrolment Ratios by Gender, 1990-2009 (%)

Gender\Year	1990	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Boys	104.0	89.0	88.0	88.9	105.0	108.0	109.9	109.3	110.7	112.2	112.8
Girls	99.6	88.4	87.3	87.5	100.5	101.6	104.4	105.5	104.4	107.3	107.2
Total	101.8	88.7	87.6	88.2	102.8	104.8	107.2	107.4	107.6	109.8	110.0

Source: MOE, Education Statistical Booklet 2003-2007; EMIS, 2009, EMIS 1999, EMIS 2000, EMIS 2001, EMIS 2002

Net Enrolment in Primary Education

The Net Enrollment Ratio (NER) has also been on an increasing trend between 2002 and 2009 as shown in *Table 3.2*. The NER increased from 77.3% in 2002 to 92.9% in 2009, which means that 7% of eligible age children were not accessing primary education

in 2009. There are wide regional disparities, e.g. the 2009 NER for North Eastern Province was 35.5% as compared to 92.9% nationally. This means that North Eastern province is unlikely to meet the MDG target of 100% access in primary education by 2015.

Table 3.2: Primary Schools Net Enrollment Ratios by Province, 2000-2009 (%)

Region\Year	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Nairobi	26.0	40.9	27.3	37.7	38.3	40.1	32.9	46.2	60.7	60.8
Central	78.7	81.7	85.6	83.9	81.6	87.4	83.0	82.5	83.5	83.7
Coast	49.4	56.2	55.7	63.5	70.3	74.2	71.8	80.8	82.4	82.6
Eastern	79.3	84.9	89.6	90.4	91.5	94.3	95.3	98.3	98.4	98.6
N. Eastern	15.4	15.3	17.0	21.6	19.6	23.0	22.6	27.5	31.9	35.5
Nyanza	80.0	91.0	89.4	95.8	96.6	97.8	97.8	98.3	98.5	98.7
Rift Valley	69.5	74.6	81.3	83.1	86.6	86.6	90.8	97.8	98.0	98.2
Western	76.8	89.4	93.7	95.3	98.2	96.8	96.8	99.0	99.3	99.5
National	67.8	75.1	77.3	80.4	82.1	83.2	86.5	91.6	92.5	92.9

Source: MOE, Education Statistical Booklet 2003-2007; EMIS, 2009, EMIS 1999, EMIS 2000, EMIS 2001, EMIS 2002

Proportion of pupils starting Grade 1 who reach the last Grade of primary

There has been progress in retention rate, with the primary completion rate (PCR) increasing from 62.8% in 2002 to 81.0% in 2007 and marginally dropping to 79.5% in 2008, as indicated in *Table 3.3*. Nairobi and North Eastern provinces had the lowest PCRs recording

55.4% and 36.5%, respectively. Factors contributing to the low figures for Nairobi include the proliferation of private schools and informal education centers, where enrolment data is not adequately captured as well as pupil transfers from Nairobi to upcountry boarding schools; while in North Eastern this can be attributed to the low participation in formal schooling.

Table 3.3: Primary School Completion Rates, 2002-2008 (%)

Region\Year	2002		2003		2004		2005		2006		2007		2008	
	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls
Nairobi	37.4	40.1	39.3	42.5	43.3	46.6	46.4	50.8	48.5	52.4	53.7	57.2	53.1	56.4
Central	78.7	80.0	82.5	84.4	91.5	92.1	91.0	89.8	85.8	82.3	87.3	85.1	87.3	85.3
Coast	54.0	36.6	59.5	40.2	69.2	47.3	73.7	50.0	80.2	53.2	88.0	58.8	87.9	58.4
Eastern	65.8	65.2	73.2	71.3	83.5	79.1	85.4	78.5	83.2	75.9	88.3	80.0	88.1	80.2
N. Eastern	28.5	11.3	32.7	14.2	39.0	14.8	39.1	15.4	42.7	15.7	49.9	21.7	50.1	22.5
Nyanza	73.6	59.3	80.2	63.7	88.0	69.8	89.3	69.7	86.7	68.0	89.9	72.0	89.4	72.1
Rift Valley	69.1	64.0	75.1	69.8	84.1	76.6	88.0	79.8	88.1	78.1	93.5	83.2	93.5	83.4
Western	65.3	60.3	72.2	66.9	84.5	75.5	85.9	74.9	85.7	75.0	92.9	81.6	92.8	81.5
National	65.5	60.1	71.3	65.2	80.3	72.1	82.4	72.8	81.6	71.1	86.5	75.7	85.1	75.3
Overall	62.8		68.2		76.2		77.6		76.3		81.0		79.5	

Source: MOE Education Statistical Booklet 2003-2007; EMIS, 2002, and 2009

Though the proportion of pupils completing the primary education cycle in 2008 was 79.5%, North Eastern falls below the national average as only 22.5% of girls completed primary education as compared to boys at 50.1%. These low figures suggest that it will be difficult to achieve 100% universal completion rate by 2015 nationally, which also poses a challenge on transition and progression of children, especially girls from primary to higher levels of education.

Literacy levels for 15-24 year old women and men.

The Kenya Integrated Household Budget Survey 2005/06 indicated that the literacy rates for 15-24 age cohort was 82.7%. The literacy rates for male was 83.1% while that of female was 82.3%. There were notable regional disparities with North Eastern, Coast and Rift Valley provinces registering the lowest literacy levels at 41%, 75.2% and 78.9%, respectively; compared with Nairobi at 87.1% and Central province at 89.7%.

Table 3.4: Literacy Rates by Gender and Province (15-24 years) 2006 (%)

	LITERACY		
	Male	Female	Total
Nairobi	89.2	85.6	87.4
Central	89.3	90	89.7
Coast	80.6	70.4	75.5
Eastern	82	85.5	83.75
N. Eastern	55.8	23.7	39.75
Nyanza	91.6	89.3	90.45
Rift Valley	79.1	78.8	79
Western	81.2	84.6	82.9
National	83.1	82.3	82.7

Source: Kenya Integrated Household Budget Survey 2005/06



Achievement of gender parity is essential for universal primary school education targets to be met.

Female literacy levels were lowest in North Eastern province at only 25.7% compared to 90% in Central province. The lowest literacy rate for males was also reported in North Eastern at 55.8% compared to the highest of 91.6% in Nyanza province. These low figures indicate an urgent need for measures to ensure regional parity in education attainment.

3.2.4 Achievements towards Attainment of Universal Primary Education

The introduction of Free Primary Education (FPE) in January 2003 led to remarkable increase in access to primary education. The number of pupils in formal public primary schools increased from 5.9 million in 2002 to 7.12 million in 2004 and further to 8.6 million (4.4 million boys and 4.2 million girls) in 2008. Additionally, there were 300,000 children in non-formal schools (NFS) and non-formal education (NFE) centres in 2008. In an effort to enhance education opportunities in Arid and Semi-Arid Lands (ASALs), the Ministry of Education provides grants for low cost boarding primary schools.

In an effort to improve access to education, the Government has established an infrastructure development programme at both primary and secondary school levels to build new schools and improve existing ones. In order to refocus and address regional disparities, the Government established the Ministry of Development of Northern Kenya and other Arid Lands to develop and implement specific strategies in ASAL areas including those aimed at improving access to education for marginalised communities. To enhance transition, retention and completion at secondary school, several initiatives have been undertaken such as the Constituencies Bursary Fund and the waiving of tuition fees in public secondary schools.

The Government has strengthened its assessment systems for children with special educational needs. The number of new cases of children assessed increased from 516 in 2007 to 917 in 2008. However, there is limited number of physical facilities to provide education to children with special needs, with only 30,000 children with special needs admitted in special schools and integrated programmes under the regular schools out of the 80,000 children assessed.

In addition to the above efforts, the Government has successfully implemented a School Nutrition and Health Programme targeting the ASAL and urban slums in order to ensure children are retained in schools, as well as launched a Home Grown School Meals programme targeting 540,000 children previously falling under the WFP-supported School Meals programme in an effort to improve access and performance. In the arid and semi-arid districts, more than 1.5 million children are currently receiving meals in schools through GOK and WFP programmes. Estimates suggest that more than 1 million vulnerable children are still in need of school meals, mainly in areas considered food insecure.

3.2.5 Challenges

The Government has taken measures to ensure the achievement of universal access to primary education. Despite these efforts, there are still challenges that need to be urgently addressed if the MDG goal is to be achieved. The following are some of those challenges:

- Shortage of teachers resulting in high pupil/teacher ratios in most of the public schools;
- Overcrowding in schools especially those in urban slums, ASAL areas, pockets of poverty and densely populated areas;
- Inadequate and poor infrastructure including water and sanitation in schools, especially in rural areas and urban slums as a result of increased enrollment;
- Impact of HIV/AIDS on teachers and children resulting in high number of orphans and vulnerable children;
- Poor nutritional and health practices at home leave children more vulnerable to disease and negatively impacts learning.
- Inadequate equipment and teachers for children with special needs;
- Low quality of education offered in non-formal education centers that do not have proper linkage with the formal education system;
- Inadequate capacity to conduct in-service training of teachers so as to adopt alternative curriculum delivery methods;
- Low transition rates from primary to secondary in some regions have led to high wastage rates, which demotivates children and parents from investing in continuous education;
- Diminished community support due to the high poverty levels leading to greater financial burden on the Government;

3.2.6 Interventions

The Government has continued to allocate substantial resources towards programmes in education sector despite the competing needs of other sectors. To date, education remains one of the country's highest development priorities with the sector budget accounting for about 6.5% of the country's GDP. The total Government spending on education (both recurrent and development) has ranged between 20% and 27% over the last five years. In addition, the devolved funds such as the Constituency Development Fund (CDF) and Local Authority Transfer Fund (LATF) have also been funding the sector. The Economic Stimulus Programme (ESP) has set a large portion of its budget to invest in school infrastructure. These interventions increase the likelihood that the goal of UPE will be achieved by 2015. However, more will need to be done in addressing the regional disparities.

The other strategies and action plans that the government has been pursuing to attain UPE include:

- Expansion of infrastructure through construction of additional facilities and expanding the existing ones. These include construction of new primary schools, rehabilitation of the existing ones, and construction and rehabilitation of equipment
- Implementation of the school feeding programme which targets children mainly in poverty stricken areas in ASALs and urban slums
- Support to development of physical facilities in schools as well as encouraging day schools (as they are relatively affordable compared with boarding schools) in an attempt to make secondary education more affordable and accessible
- Review of the Education Act to provide a legal framework that reflects the various education sector goals and policy priorities
- Enhancement of the school bursary fund with a view to supporting children from poor families
- Deployment of additional teachers in primary and secondary schools as a means of maintaining realistic pupil-teacher ratios

3.2.7 Policy Recommendations

The Government is pursuing policy priorities to accelerate the achievement of universal primary education. These include:

- Improving quality and efficiency of education through teacher training and redeployment
- Improving learning environment by increasing availability of learning and teaching materials and reforming the curriculum to focus on core skills
- Promoting a more efficient development of secondary education, that would subsequently improve access, equity and quality of education at this level
- Promotion of Early Childhood Development Education (ECDE) by integrating it into primary education and strengthening partnerships with communities and private sector
- Strengthening accountability and governance at school level by involving communities in decision-making
- Ensuring quality management capacities amongst education managers and other personnel involved in education at all levels
- Expanding capacity and opportunities by constructing at least one additional secondary school in each constituency in order to absorb the increasing number of students joining secondary schools as result of FPE
- Expanding opportunities for children from marginalized areas by establishing alternative modes of delivering the school curriculum e.g. use of mobile schools in ASALs
- Developing a school health, nutrition and meals strategy to improve inter-sectoral collaboration.

3.2.8 Associated Risks

- Future funding in education may be unstable as a result of other competing social needs e.g. health, housing, and infrastructure
- Overreliance on programmes supported by development partners to deliver some sector priorities
- Community support may not be guaranteed due to high levels of poverty and increasing cost of providing education.

3.3 GOAL 3: PROMOTE GENDER EQUALITY AND EMPOWER WOMEN

3.3.1 Target and Indicators

Target

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

Indicators

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

3.3.2 Gender Equality in Education

The government recognizes that every child has a right to education, and that the primary responsibility of providing education lies with the State. The Children's Act of 2001 recognizes provision of basic education as a basic human right that every Kenyan child should enjoy, and promotes equal educational opportunities for both girls and boys. The Gender in Education Policy provides guidelines of mainstreaming specific issues related to both boys and girls in programmatic interventions.



Universal primary education: adequate school infrastructure is critical for optimum performance.

Table 3.5: Primary Net Enrolment Ratios by Gender and Province, 2002-2009 (%)

Region\Yr.	2002		2003		2004		2005		2006		2007		2008		2009		Total
	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls	
Nairobi	25.4	29.5	35.5	40.3	35.9	41.1	39.2	40.9	38.8	41.6	49.5	51.8	61.8	59.7	61.9	59.8	60.8
Central	83.5	87.8	83.6	84.2	81.4	81.8	87.9	87	83	83	84.4	80.7	85.6	81.5	85.8	81.7	83.7
Coast	58.2	53.2	66.9	60.1	72.8	67.7	75.1	73.3	72.3	71.2	84.6	77	85.7	79.2	85.9	79.4	82.6
Eastern	87.7	91.6	90.4	90.3	91.4	91.5	94.9	93.8	96.9	95.8	98.7	97.8	98.9	97.9	99.1	98.1	98.6
N. Eastern	19.6	14.1	26.1	16.2	23.6	14.9	26.6	18.8	25.9	18.8	33.1	20.8	39.3	24.5	39.5	24.6	35.5
Nyanza	88.9	89.6	96.2	95.4	96.9	96.2	98.4	97.2	98.4	97.2	98.4	98.2	98.7	98.4	98.9	98.6	98.7
Rift Valley	81.1	81.5	84.1	82	87.8	85.4	87.9	85.3	91.8	89.8	98.3	94	98.9	97.2	99.1	97.4	98.2
Western	95.4	91.7	97.5	93.2	99.3	97.2	99.1	94.6	99.1	94.6	99.1	98.9	99.5	99.1	99.7	99.3	99.5
National	76.5	78	80.8	80	82.2	82	83.8	82.6	86.5	86.5	94.1	89	94.6	90.5	94.8	90.7	92.9
Overall	77.3		80.4		82.1		83.2		86.5		91.6		92.5		92.9		

Source: Ministry of Education

The overall access to primary education as measured by NER increased from 77.3% in 2002 (76.5% for boys and for 78% for girls) to 92.9% in 2009 (94.8% for boys and 90.7% for girls). In North Eastern province the NER increased from 17.0% (19.6% boys and 14.1% for girls) in 2002 to 35.5% (39.5% for boys and 24.6% for girls) in 2009. This shows that

the region falls way below the national average.

At the national level, Kenya has attained gender parity in enrollment at primary school level. However, as shown in Table 3.5 there are gender disparities in some regions.

Table 3.6: Gender Parity Index of the Net Enrolment Ratio in Primary Schools, 2002-09 (%)

Region\Year	2002	2003	2004	2005	2006	2007	2008	2009
Nairobi	1.161	1.135	1.145	1.043	1.072	1.046	0.966	0.967
Central	1.051	1.007	1.005	0.990	1.000	0.956	0.952	0.962
Coast	0.914	0.898	0.930	0.976	0.985	0.910	0.924	0.934
Eastern	1.044	0.999	1.001	0.988	0.989	0.991	0.990	0.980
N. Eastern	0.719	0.621	0.631	0.707	0.726	0.628	0.623	0.622
Nyanza	1.008	0.992	0.993	0.988	0.988	0.998	0.997	0.999
Rift Valley	1.005	0.975	0.973	0.970	0.978	0.956	0.983	0.993
Western	0.961	0.956	0.979	0.955	0.955	0.998	0.996	0.997
TOTAL	1.020	0.990	0.998	0.986	1.000	0.946	0.957	0.958

Source: Ministry of Education, 2009

At secondary school level, the NER increased from 28.5% (29.7% for boys and 27.4% for girls) in 2003 to 42.5% (46.3% for boys and 38.8% for girls) in 2008. Regionally, central province had the highest NER of 57.2% for boys and 57.6% for girls in 2008, which shows that the province

has achieved gender parity in enrolment at this level. At the other extreme, North Eastern province had the lowest NER with that of boys standing at 10.2% and that of girls at 6.4% in 2008.

Table 3.7: Secondary Schools Net Enrolment Ratios by Gender and Province, 2000-2008 (%)

Region\Yr.	2000		2003		2004		2005		2006		2007		2008	
	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls
Nairobi	10.5	7.1	16.4	8.7	30.3	19.0	23.8	17.2	25.2	17.5	39.9	31.3	40.2	32.3
Central	20.1	24.6	42.4	46.4	44.8	45.1	42.6	42.8	48.3	47.6	53.3	51.3	57.2	57.6
Coast	7.3	7.8	22.7	18.3	26.7	19.5	20.6	18.3	25.9	20.7	29.2	22.7	31.2	25.7
Eastern	13.1	14.4	33.2	32.9	35.2	33.5	33.8	32.3	36.0	33.7	43.6	37.5	44.1	38.3
N. Eastern	3.2	2.0	14.0	2.6	6.1	3.0	6.4	3.2	8.6	3.6	9.7	4.4	10.2	6.4
Nyanza	18.8	15.6	32.4	28.6	31.9	23.1	35.8	26.3	37.7	28.7	44.4	30.6	47.6	32.7
Rift Valley	11.7	11.5	27.6	24.3	29.9	24.5	29.0	24.2	34.3	28.1	37.4	30.8	39.5	32.5
Western	15.3	16.4	28.3	29.5	31.9	29.0	32.2	27.1	31.5	28.6	40.0	32.8	41.3	35.6
TOTAL	13.9	14.0	29.7	27.4	32.1	27.6	31.3	27.2	34.6	29.9	40.4	33.3	46.3	38.8
Overall	14.0		28.5		29.8		29.3		32.2		36.8		42.5	

Source: Ministry of Education, 2009

Some of the reasons for the low enrolment in some regions include cultural practices, limited infrastructure and amenities especially school water, sanitation and hygiene facilities and the burden of household responsibilities. Girls also drop out of school on account of pregnancies.

early marriages and gender violence within communities and school environments. The participation levels of girls in secondary school education in comparison to boys are shown in *Tables 3.7, 3.8 and 3.9*.

Table 3.8 Secondary GER by Gender and Province, 2002-2009 (%)

Region\Yr.	2002		2003		2004		2005		2006		2007		2008		2009	
	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls
Nairobi	29.8	15.7	16.4	8.7	30.3	19	23.8	17.2	25.2	17.5	39.9	31.3	40.2	32.3	43.0	34.4
Central	47	50.6	42.4	46.4	44.8	45.1	42.6	42.8	48.3	47.6	53.3	51.3	57.2	57.6	61.2	61.3
Coast	19.9	15.6	22.7	18.3	26.7	19.5	20.6	18.3	25.9	20.7	29.2	22.7	31.2	25.7	33.4	27.4
Eastern	29.3	28.7	33.2	32.9	35.2	33.5	33.8	32.3	36	33.7	43.6	37.5	44.1	38.3	47.2	40.8
N. Eastern	4.8	2.7	14	2.6	6.1	3	6.4	3.2	8.6	3.6	9.7	4.4	10.2	6.4	10.9	6.8
Nyanza	34.2	25.2	32.4	28.6	31.9	23.1	35.8	26.3	37.7	28.7	44.4	30.6	47.6	32.7	50.9	34.8
Rift Valley	27.3	22.8	27.6	24.3	29.9	24.5	29	24.2	34.3	28.1	37.4	30.8	39.5	32.5	42.3	34.6
Western	27.6	27.3	28.3	29.5	31.9	29	32.2	27.1	31.5	28.6	40	32.8	41.3	35.6	44.2	37.9
National	29.8	26.4	29.7	27.4	32.1	27.6	31.3	27.2	34.6	29.9	40.4	33.3	46.3	38.8	49.5	41.3
Overall	29.8		26.4		29.7		27.4		29.3		32.2		42.5		45.3	

Source: Ministry of Education, 2009

Table 3.9: Gender Parity Index of the Gross Enrolment Ratio in Secondary Schools, 2002-09 (%)

Region\Yr.	2002	2003	2004	2005	2006	2007	2008	2009
Nairobi	0.527	0.530	0.627	0.723	0.694	0.784	0.803	0.800
Central	1.077	1.094	1.007	1.005	0.986	0.962	1.007	1.002
Coast	0.784	0.806	0.730	0.888	0.799	0.777	0.824	0.820
Eastern	0.980	0.991	0.952	0.956	0.936	0.860	0.868	0.864
N. Eastern	0.563	0.186	0.492	0.500	0.419	0.454	0.627	0.625
Nyanza	0.737	0.883	0.724	0.735	0.761	0.689	0.687	0.684
Rift Valley	0.835	0.880	0.819	0.834	0.819	0.824	0.823	0.819
Western	0.989	1.042	0.909	0.842	0.908	0.820	0.862	0.858
National Average	0.886	0.923	0.860	0.869	0.864	0.824	0.838	0.834

Source: Ministry of Education, 2009

Total enrolment in public Technical, Industrial, Vocational and Entrepreneurship Training (TIVET) institutions increased from 70,512 in 2006 to 89,506 in 2009, with female enrolment constituting about 48%. Enrolment in universities increased from 92,316 in 2006 to 159,742 (100,087 males and 59,655 females) in 2009/10. The relatively lower admissions of female students into universities reflect the cumulative effects of the factors

that hinder girls' participation, good performance and progress at lower levels. As an affirmative action, the Government put the university admission's cut-off points for females at one point lower than that of males as one way to address this gap. The *Table 3.10* below shows university and tertiary enrolments between 2002/3 and 2008/9.

Table 3.10: University and Tertiary Enrolment

	2002/3		2003/4		2004/5		2005/6		2006/7		2007/8		2008/9		2009/10	
	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F
University	51,109	29,862	51,500	30,592	57,591	33,550	58,805	33,511	68,345	43,884	70,775	47,464	73,543	49,304	100,087	59,655
Teacher Training	10,542	9,635	10,580	10,628	10,560	11,279	11,069	11,266	11,268	11,352	11,428	11,480	12,422	11,806	13,029	13,295
TIVET / Polytechnics	26,629	25,625	29,001	27,341	33,916	32,812	36,070	34,442	36,541	34,626	38,942	37,574	43,915	41,285	46,122	43,384

Source: **Ministry of Education**

Table 3.11 shows low participation by women at university level while their participation at tertiary level is almost at parity.

Table 3.11: Ratio of Females to Males in Universities and Tertiary Institutions (2002-2009)

SECTOR	2002	2003	2004	2005	2006	2007	2008	2009
University	0.584	0.594	0.583	0.570	0.642	0.671	0.670	0.596
Teacher Training	0.914	1.005	1.068	1.018	1.007	1.005	0.950	1.020
TIVET /Polytechnics	0.962	0.943	0.967	0.955	0.948	0.965	0.940	0.941

Source: **Ministry of Education**

3.3.3 Women in Non-agricultural Wage Employment

Majority of women are engaged in subsistence and smallholder agricultural production. Currently, about 70% of the country's marketed agricultural production is contributed by smallholder farmers depending largely on household labor inputs by women. However, women's labor contribution is not yet adequately captured in the system of national accounts. This also applies to women's household chores such as cooking, fetching firewood, collection of water, and care for other family members, including children.

On average, male labor force participation rate in non-agricultural wage employment (excluding the informal sector) has remained higher than that of females and the gap has not changed much over the years as depicted in Table 3.12. The data shows that Building and Construction sector engages more than 80% of the male labor force, while females constitute over 40% of the staffing in the Education Services sector.

Table 3.12: Wage Employment in Non-agricultural Sector by Sex, (000s)

Year	Women	Men	Total	% Women
2000	423	960.1	1,383.1	30.6
2001	418.7	945.9	1,364.6	30.7
2002	425.5	960.5	1,386	30.7
2003	432.7	978.5	1,411.2	30.7
2004	441.6	1,001.5	1,443.1	30.6
2005	465.7	1,014.7	1,480.4	31.5
2006	476.9	1,048.2	1,525.1	31.3
2007	488.3	1,081.6	1,569.9	31.1
2008	499.5	1,103.7	1,603.2	31.2
2009*	517.1	1,141.9	1,659.0	31.2

Source: **Economic Survey, various issues.** * Provisional

3.3.4 Women in Leadership and Decision Making Levels

Women's participation in leadership and decision making levels has been quite low over the years but marked progress has been made in the recent past, although more still needs to be done. As shown in Table 3.13, the number of women Members of Parliament doubled from 9 to 18 between 1998 and 2002 General Election, went up further to 19 in the 2007 General Election, and stands at 22 (9.9%) as of May 2009.

Table 3.13: Members of National Assembly by Sex, 1988 – 2009

Year	Women	Men	Total	% Women
1988	3	197	200	1.5
1992	7	193	200	3.5
1997	8	214	222	3.6
1998	9	213	222	4.1
2002	18	204	222	8.1
June-06	18	204	222	8.1
2007	19	203	222	8.6
April-08	21	200	219	8.7
May-2009	22	200	222	9.9

Source: **Interim Independent Electoral Commission of Kenya.**

Table 3.14 Judicial Service Establishment in Kenya by Grade and Gender

Rank	2003				Feb 2005				June 2007				June 2009			
	F	M	Total	% F	F	M	Total	% F	F	M	Total	% F	F	M	Total	% F
Chief Justice	0	1	1	0	0	1	1	0	0	1	1	0	0	1	1	0
Court of Appeal Judges	1	10	11	9.1	0	9	9	0	0	10	10	0	1	9	10	10
High Court Judges	9	42	51	17.6	10	39	49	20.4	11	38	49	22.4	12	36	48	25
Chief Magistrates	6	8	14	42.9	4	5	9	44.4	5	9	14	35.7	5	9	14	35.7
Senior Principal Magistrates and Principal Magistrates	9	13	22	40.9	15	30	45	33.3	17	35	52	32.7	17	36	53	32.08
Senior Resident Magistrates	32	55	87	36.8	36	66	102	35.29	39	63	102	38.2	38	62	100	38
Resident Magistrates	53	71	124	42.7	33	44	77	42.86	59	75	134	44.0	47	69	116	40.5
Chief Kadhi/ Kadhis	0	17	17	0	0	17	17	0	0	17	17	0	0	17	17	0
Total	110	217	327	33.6	100	222	309	32.4	129	242	371	34.8	120	239	359	33.4

Source: **Judiciary**

As shown in the *Tables 3.14* and *3.15*, these modest achievements are not confined to the National Assembly, but also reflected in the various positions and appointments in the public service including parastatals, the Judiciary

and local authorities. With the exception of the Judiciary, women representation is less than the 30% stipulated in the affirmative action.

Table 3.15: Women in Executive Decision Making Positions

Rank	June 2003				June 2006				April 2008				May 2009			
	F	M	Total	% F	F	M	Total	% F	F	M	Total	% F	F	M	Total	% F
President	0	1	1	0	0	1	1	0	0	1	1	0	0	1	1	0
Prime Minister	0	0	0	0	0	0	0	0	0	1	1	0	0	1	1	0
Deputy Prime Minister	0	0	0	0	0	0	0	0	0	2	2	0	0	2	2	0
Ministers	3	26	29	10.3	2	32	34	5.8	7	35	42	16.7	6	34	40	15
Assistant Ministers.	4	39	43	9.3	6	40	46	13	6	46	52	11.5	6	46	52	11.5
National Assembly	18	204	222	8.1	18	204	222	8.1	19	200	219	8.7	21	201	222	9.9
Ambassadors/ High Commissioners	7	27	34	20.6	11	29	40	27.5	11	29	40	27.5	11	29	40	27.5
Permanent Secretary (PS)	3	21	24	12.5	5	25	30	19.4	6	38	44	13.6	7	37	44	15.9
Provincial Commissioners (PC)	0	8	8	0	0	8	8	0	0	8	8	0	1	7	8	0
Deputy Secretaries	19	75	94	20.2	21	77	98	21.8	33	92	125	26.4	33	92	125	26.4
Councillors	377	2,460	2,837	13.3	377	2,460	2,837	13.3	393	2,093	2,486	15.8	393	2,093	2,486	15.8
Lawyers	1,645	3,179	4,824	34.1	1,708	3,277	4,985	34.3	1,763	3,334	5,097	34.6	1,763	3,334	5,097	34.6
Total	2,076	6,040	8,116	25.6	2,148	6,153	8,301	25.9	2,238	5,879	8,117	27.6	2,241	5,877	8,118	27.6

Source: **Interim Independent Electoral Commission of Kenya; Judiciary; Ministry of State for Public Service**

3.3.5 Challenges

While women account for slightly more than half of the total population (50.7%) and comprise a large voting population, they are still under represented in strategic decision-making processes. Despite the existence of policies, legislative reforms, plans and programmes, gender disparities still exist in legal, social, economic and political levels; and access to and control of resources and opportunities. Overall, the implementation of policies and laws has been slow; a situation attributed to gaps in the laws and delayed enactment of gender related legislation.

The challenges inhibiting the achievement of gender equality include:

- Cultural and traditional practices and beliefs that result in girls dropping out of school early and therefore limits the chances of the girl child from completing primary school education. This has generated regional disparities with some regions registering low NER and transition rates from primary to secondary school compared with the national average;
- Inadequate resources for gender equality work. The resources allocated to gender mainstreaming programmes especially for the implementation of the existing gender related policies has not been adequate;
- Increased violence against women which is characterised by physical, sexual or psychological harm or threats of such acts;
- Limited access of women to productive resources such as land and discrimination of daughters in land inheritance.

3.3.6 Interventions

- Provision of Free Primary and Free Day Secondary Education which accord equal basic educational opportunities to boys and girls;
- Implementation of affirmative action in recruitment, employment and appointment in the public sector; in admission of female students to public universities; and allowing girls who drop out of primary and secondary schools due to pregnancies to re-enter and complete their education. The Government has also expanded intake into public universities and increased the proportions of students studying science related courses to 50%, with at least one third of these being women;
- The development of a National Policy on Gender and Development which is intended to facilitate the mainstreaming of the needs and concerns of men and women in all areas in the development process. The policy includes legal and institutional reforms that can ensure that obstacles to equitable sustainable development are removed. To implement the policy, a Plan of Action (2008-2012) on the policy has been prepared. In addition Sessional paper No. 2 of 2006

on Gender Equality and Development provides a framework for gender mainstreaming in the country;

- The formulation of a National Land Policy with gender equity as one of the policy principles to address issues on land ownership and inheritance;
- The enactment of Children's Act 2001 gives effect to the United Nations Convention on the Rights of the Child (CRC) and the African Charter on the Rights and Welfare of the Child and addresses related issues such as early marriages, FGM/C, rights to survival, health and medical care, education, protection from child labor, sexual exploitation, prostitution, harmful drugs, and legal assistance by the Government. The Children Policy has also been prepared and Plan of Action on it developed;
- The establishment of Women Enterprise Development Fund to provide money for on-lending to women entrepreneurs through micro finance institutions and Constituency Women Enterprise Scheme (W-WES). The fund also facilitates training opportunities to women entrepreneurs and capacity building of beneficiaries;
- Gender and Education Policy which mainstreams gender issues in education has been developed and is being implemented;
- The establishment and strengthening of institutions to address gender issues including National Commission on Gender and Development, and Gender units in all line Ministries and state corporations to facilitate the process of engendering important national processes such as the national budget and to ensure equitable participation of both women and men in development;
- The preparation of Kenya Gender Data Sheet 2008 which provides a general gender scorecard across social, economical, political and health arena and as a guide for interventions among stakeholders dealing with gender concerns;
- A National Policy on Female Genital Mutilation has been passed by parliament to provide guidelines to the stakeholders involved in FGM programming and to safeguard the rights of girls and women regarding the practice. The National Plan of Action for Elimination of Female Genital Mutilation has been developed and is being implemented.

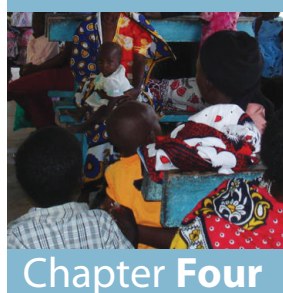
• Establishment of Gender Based Violence Recovery Centre at the Nairobi Women Hospital and other Advisory Centres in Thika and Mombasa.

- The inclusion of an indicator on gender mainstreaming in the Performance Contract Guidelines in the public sector with specific activities addressing gender issues.
- Construction of girls' primary boarding facilities in North Eastern province and other arid areas as a strategy of increasing the enrolment and school completion rates for girls in those areas.

- The Political Parties Act (2007) which provides for one third representation of women in political parties.

3.3.7 Policy Recommendations

- Eliminate discrimination in traditions, policies and laws which violate women's rights, and ease the burden on women of social problems emanating from poverty, unemployment, poor health, child bearing and childcare roles, illiteracy, gender based violence (GBV) and negative cultural practices;
- Lobby and advocate for enactment and implementation.
- There is need to create partnerships and networks for resource mobilization and implementation of programmes and activities aimed at gender equity and equality;
- Provision of adequate resources for the agencies dealing with gender related issues;
- Increase awareness and provide education on women's reproductive health and rights (including negative cultural practices);
- Increase facilities and services to comprehensively address prevention, management and rehabilitation programmes on gender based violence;
- Build relevant capacities to mainstream gender.



Chapter Four

Goals 4, 5 & 6:

Reduce Child Mortality Improve Maternal Health

Combat HIV and AIDS, Malaria and other diseases

4.1 INTRODUCTION

Since independence, the Kenya Government has given high priority to the improvement of the health status of Kenyans. This is in recognition that good health is a prerequisite to socioeconomic development of the country. The Government, in a number of policy documents and successive National Development Plans, has emphasized that the provision of health services should meet the basic needs of the population and be geared towards providing health services within easy reach. It has also put considerable emphasis on preventative, promotive, and rehabilitative health services without ignoring curative services.

The overall policy guidance for the health sector is through the Government of Kenya Vision 2030 and the Kenya Health Policy Framework (KHPF, 1994-2010).

4.2 GOAL 4: REDUCE CHILD MORTALITY

Target: Reduce by two thirds, between 1990 and 2015, the less than five mortality rate.

Indicators for monitoring progress

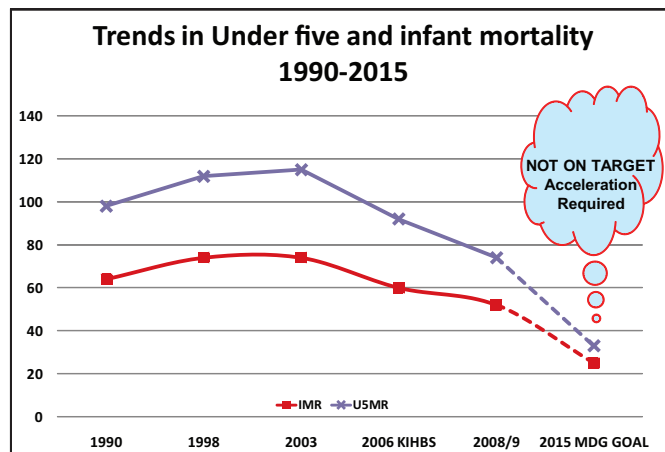
- Under five mortality rate
- Infant mortality rate
- Proportion of one year old children immunized against measles

Future development of every nation depends on the health of the children. Attainment of MDG 4 would go a long way in securing the future of the nation. Its attainment is dependent on scientifically proven interventions such as prenatal care, essential obstetric and newborn care, immunization, use of insecticide treated nets, breastfeeding, vitamin A supplementation, and appropriate management of common childhood illnesses including oral rehydration therapy and zinc for diarrhoea treatment.

4.2.1 Status and trends in child health

All levels of child mortality rates continue to follow a declining trend. The KDHS 2008-9 places the infant mortality rate (IMR) at 52 per 1000 live births for the years 2008-9 down from 77 per 1,000 live births in 2003. The under five mortality similarly reduced to 74 death for every 1000 live births in 2008-9 from 115 deaths for every 1000 live births in 2003. This is a significant improvement

Figure 4.1 : Trends in Infant and Under-Five Mortality



Improvement in trends of infant and under-five mortality (see Figure 4.1) is partly attributed to reduction in malaria related deaths from intensive malaria control activities such as free or low cost insecticides treated nets, indoor residual spray (IRS), case Management including introduction of Artemisinin Combination Therapy (ACT). Other interventions include: reduction in measles deaths through routine immunization and National Immunization Days, introduction of H. influenza B vaccine in Dec 2001, intensive HIV control measures, improved PMTCT, anti-retroviral therapy for children, Integrated Management of Childhood Illness (IMCI) at facility and community levels, and intensified Vitamin A deficiency control.

However, for the country to achieve the MDG targets, there is need to scale up the interventions targeting the indicators that have improved and pay more attention to those that are doing poorly. For example, there has been marginal reduction in neonatal mortality rate which currently contributes to 60% of infant mortality rates and 42% of the under-five mortality rates. This stagnation in neonatal mortality is attributed to gaps in the skills and competencies in maternal and newborn care and low utilization of health facilities by pregnant women.

Table 4.1: Vaccination Coverage of children aged 12-23 months by background characteristics, 2008-09

Background characteristic	BCG	DPT 1	DPT 2	DPT 3	Polio 0	Polio 1	Polio 2	Polio 3	Measles	All	No Vaccinations	% with a Vaccination card seen
Sex												
Male	94.6	94.7	91.1	82.9	58.4	95.5	92.7	84.8	84.1	75.3	4.1	68.8
Female	96.6	97.0	95.2	89.8	60.2	97.2	95.4	90.2	85.9	79.5	2.3	72.0
Residence												
Urban	96.2	96.9	94.7	87.7	61.7	97.1	95.6	88.5	90.4	80.9	2.4	55.3
Rural	95.4	95.5	92.7	86.0	58.6	96.1	93.6	87.2	83.4	76.3	3.5	74.9
Province												
Nairobi	93.8	95.0	88.5	82.2	65.2	94.6	90.2	82.9	87.6	73.1	3.9	41.8
Central	90.7	92.7	92.7	92.2	73.5	92.7	92.7	92.3	88.3	85.8	7.3	75.6
Coast	96.5	96.5	95.1	86.7	50.8	96.6	94.8	87.1	85.4	75.8	3.0	78.0
Eastern	97.5	97.1	96.4	91.7	76.2	97.3	97.1	91.5	88.7	84.2	2.5	87.3
Nyanza	93.0	93.6	88.3	77.0	55.2	95.1	90.7	80.5	78.0	64.6	4.4	62.2
Rift Valley	99.2	98.6	97.4	92.9	62.6	98.7	97.1	92.7	89.3	85.0	0.8	68.7
Western	93.1	93.9	90.0	81.5	38.3	95.5	93.5	83.5	77.7	73.1	4.2	75.4
North Eastern	85.0	85.9	74.4	57.1	31.1	87.2	74.5	65.5	78.9	48.3	12.8	47.8
Mother's Education												
No education	93.8	93.8	90.2	81.2	43.3	94.6	89.2	80.6	78.8	67.4	5.0	76.8
Primary incomplete	95.4	95.7	90.7	82.7	55.3	95.9	92.5	83.9	80.1	71.2	3.6	74.7
Primary complete	95.4	95.5	94.6	87.8	60.8	96.5	95.1	90.6	87.0	80.3	2.8	71.0
Secondary+	97.0	97.4	96.0	92.1	70.2	97.6	97.2	91.6	92.1	87.0	2.2	60.7
Total	95.6	95.8	93.1	86.4	59.3	96.4	94.1	87.5	85.0	77.4	3.2	70.4

Source: KNBS; KDHS 2008-9

NB: Polio 0 is the polio vaccination given at birth. "All" means all the following antigens; BCG, measles and three doses each of DPT and polio vaccine (excluding the polio vaccine given at birth)

The proportion of children aged 12-23 months who are fully immunized increased from 56.8% in 2003 to 77.4% in 2008/09, while proportion of children who have never received any of the recommended vaccinations reduced from 7.4% in 2003 to 3.2% in 2008-9. The proportion of children who are immunized against measles from 12-23 months rose from 72.5 to 85.0% during the same period. These figures are still of concern since they are below the national target of 80%. The highest proportion of children fully vaccinated was in Central Province (85.8%), followed by Rift Valley Province with 85%. Nyanza Provinces and North Eastern have the lowest proportion of children fully vaccinated with figures of 64.6% and 48.3% respectively. This differential is due to different challenges faced by provinces in accessing health services. However, there has been an increase in the proportion of children in North Eastern Province who are fully immunized from 8.8% in 2003 to 48.3% in 2008-09.

There is no significant difference between immunization coverage for boys and girls in 2008-9 (75.3% and 79.5% respectively).

4.3 GOAL 5: IMPROVE MATERNAL HEALTH

Target 5A: Reduce by three quarters between 1990 and 2015, the maternal mortality ratio
Indicators for monitoring progress

- Maternal mortality ratio
- Proportion of births attended by skilled personnel

Target 5B: Achieve by 2015, the universal access to reproductive health
Indicators for monitoring progress

- Contraceptive prevalence rate
- Adolescent birth rate
- Ante-natal care coverage (women making at least one and at least four ante natal visits)
- Unmet need for family planning

Maternal health is a key measure of the health systems capacity in a country. This is because maternal health is integrated and intertwined into all aspects of the health systems. The health of a mother is the backbone



of the family and the community. When the mother dies, the fabric of the whole family is shattered and leads to poor health outcomes of the spouse and children. Maternal health is influenced by the quality of prenatal, ante-natal, intrapartum and postpartum care.

4.3.1 Status and trends on maternal health

The maternal mortality ratio (MMR) increased from 414 per 100,000 live births in 2003 to 488 per 100,000 live births while in 2008/09. These high figures are largely attributed to the low uptake of maternal services. The proportion of births attended to by a skilled attendant increased from 42% in 2003 to 43.8% in 2008/09, despite the availability of the MCH services at all public health facilities. Less than half (42.6%) of births are delivered at health facilities (see Table 4.2).

The national figures mask major disparities between urban and rural areas and provinces. For example, delivery by skilled attendance for Nairobi and North Eastern is 88.9 % and 31.6% respectively. This differential is due to different challenges faced by provinces in accessing health services.

Majority of maternal deaths are due to direct and preventable obstetric complications such as hemorrhage, sepsis, eclampsia, abortion and obstructed labour. The factors contributing to the low proportion of births in health facilities and the high maternal mortality ratios include:

- Poverty
- Limited physical access to health facilities
- Limited skills at delivery
- Poor client management

Table 4.2: Maternal Care Indicators, 2008-09

Background characteristic	Percentage with antenatal care from a health professional	Percentage whose last live birth was protected against neonatal tetanus	Percentage delivered by a health professional	Percentage delivered in a health facility
Residence				
Urban	95.8	74.1	74.8	74.7
Rural	90.3	72.0	36.8	35.4
Province				
Nairobi	96.4	73.5	88.9	89.4
Central	92.7	81.8	73.8	73.0
Coast	94.5	77.7	45.6	44.4
Eastern	93.4	76.6	43.1	42.8
Nyanza	93.6	73.9	45.5	44.2
Rift Valley	88.4	65.1	33.7	32.9
Western	91.5	72.2	25.8	25.3
North Eastern	69.5	63.1	31.6	17.3
Total	91.5	72.5	43.8	42.6
Health professional includes doctor, nurse or midwife				
Neonatal tetanus coverage: includes mothers with two injections during the pregnancy of the last live birth, or two or more injections (the last within 3 years of the last live birth), or three or more injections (the last within 5 years of the last live birth), or four or more injections (the last within ten years of the last live birth), or five or more injections prior to the last live birth				

Source: KNBS; KDHS 2008-09

The poor performance of maternal indicators is due to weaknesses in the health systems such human resources, infrastructure, and referral systems. Negative socio-cultural practices which are rampant in some communities such as female genital mutilation and early marriages continue to impact negatively on maternal health.

4.3.2 Contraceptive Use

The contraceptive prevalence rate has increased from 39.3% to 45.5% in the last five years while that

of women using a modern method has increased from 31.5% to 39.4% in the same period. There is regional disparity in modern contraceptive use rates ranging from 66.7% of married women in Central province to 3.5% in North Eastern Provinces. These differentials are due to myths and misconceptions on contraceptives, socio-cultural practices and access to health facilities. The unmet need for family planning stood at 25.6% in 2008/09 from 24.5% in 2003.

Table 4.3: current use of contraceptives by married women according to background characteristics

Background characteristic	Any method	Modern							Traditional						
		Any modern method	Female sterilization	Pill	IUD	Injectables	Implant	Male condom	LAM	Any traditional method	Periodic abstinence	Withdrawal	Folk method	Not currently using	Total
Age															
15-19	22.5	19.6	0.0	3.2	0.0	14.4	0.0	1.7	0.2	2.9	1.3	1.2	0.5	77.5	100.0
20-24	35.7	30.4	0.1	5.8	0.2	21.1	0.6	2.1	0.5	5.2	3.3	0.9	1.0	64.3	100.0
25-29	45.3	41.3	0.5	8.1	0.9	26.5	3.1	1.7	0.5	4.0	2.9	0.5	0.6	54.7	100.0
30-34	54.9	48.8	4.8	8.5	1.4	28.9	2.9	1.6	0.8	6.0	4.9	0.9	0.2	45.1	100.0
35-39	51.2	41.2	6.3	7.3	3.7	19.4	1.9	2.4	0.3	10.0	8.3	0.3	1.4	48.8	100.0
40-44	52.5	46.6	13.7	9.1	3.3	16.7	1.9	1.3	0.7	5.9	5.0	0.4	0.5	47.5	100.0
45-49	40.4	32.4	14.0	5.1	1.8	8.6	1.0	1.7	0.0	8.0	7.0	0.5	0.6	59.6	100.0
Residence															
Urban	53.1	46.6	3.0	11.1	2.9	23.5	2.7	2.7	0.8	6.5	5.6	0.5	0.3	46.9	100.0
Rural	43.1	37.2	5.3	6.1	1.2	21.0	1.7	1.5	0.4	5.9	4.4	0.7	0.8	56.9	100.0
Province															
Nairobi	55.3	49.0	2.7	13.8	3.9	18.2	4.4	4.4	1.7	6.3	5.6	0.4	0.3	44.7	100.0
Central	66.7	62.5	8.1	19.4	5.1	25.7	3.2	0.7	0.3	4.2	2.4	1.2	0.6	33.3	100.0
Coast	34.3	29.7	2.1	5.4	0.7	17.8	1.4	1.5	0.8	4.6	4.0	0.6	0.0	65.7	100.0
Eastern	52.0	43.8	3.9	9.1	1.4	26.5	1.6	0.6	0.6	8.3	7.1	0.9	0.3	48.0	100.0
Nyanza	37.3	32.9	5.7	3.1	0.4	18.0	1.8	3.6	0.3	4.4	2.6	0.4	1.4	62.7	100.0
Rift Valley	42.4	34.7	4.1	3.7	0.9	23.0	1.7	1.0	0.2	7.7	6.1	0.9	0.7	57.6	100.0
Western	46.5	41.1	7.9	5.9	0.8	22.2	1.2	2.8	0.3	5.4	4.0	0.1	1.3	53.5	100.0
North Eastern	3.5	3.5	0.0	0.3	0.0	2.1	0.6	0.0	0.4	0.0	0.0	0.0	0.0	96.5	100.0
Education															
No education	14.1	12.0	2.6	0.7	0.0	7.2	0.4	0.6	0.5	2.1	1.5	0.2	0.3	85.9	100.0
Primary incomplete	40.3	34.8	5.4	4.1	0.8	21.4	1.1	1.7	0.5	5.4	3.6	0.8	1.0	59.7	100.0
Primary complete	48.2	41.8	4.8	7.3	1.0	25.8	1.3	1.3	0.3	6.4	5.1	0.4	0.9	51.8	100.0
Secondary +	59.8	52.1	5.0	12.8	3.4	23.3	4.0	2.9	0.7	7.7	6.5	0.9	0.4	40.2	100.0
Living children															
0	14.7	10.5	0.0	3.4	0.0	3.7	0.9	2.5	0.0	4.2	2.2	1.0	1.0	85.3	100.0
1-2	47.0	42.1	0.9	9.9	1.8	24.4	2.2	2.6	0.4	4.9	3.7	0.6	0.6	53.0	100.0
3-4	53.2	46.4	5.5	7.6	2.1	26.3	2.7	1.6	0.6	6.8	5.4	0.7	0.7	46.8	100.0
5+	41.2	34.2	10.3	4.1	0.8	16.4	1.0	0.8	0.7	7.0	5.7	0.5	0.8	58.8	100.0
Total	45.5	39.4	4.8	7.2	1.6	21.6	1.9	1.8	0.5	6.0	4.7	0.7	0.7	54.5	100.0

Source: Kenya Demographic and Health Survey 2008-09

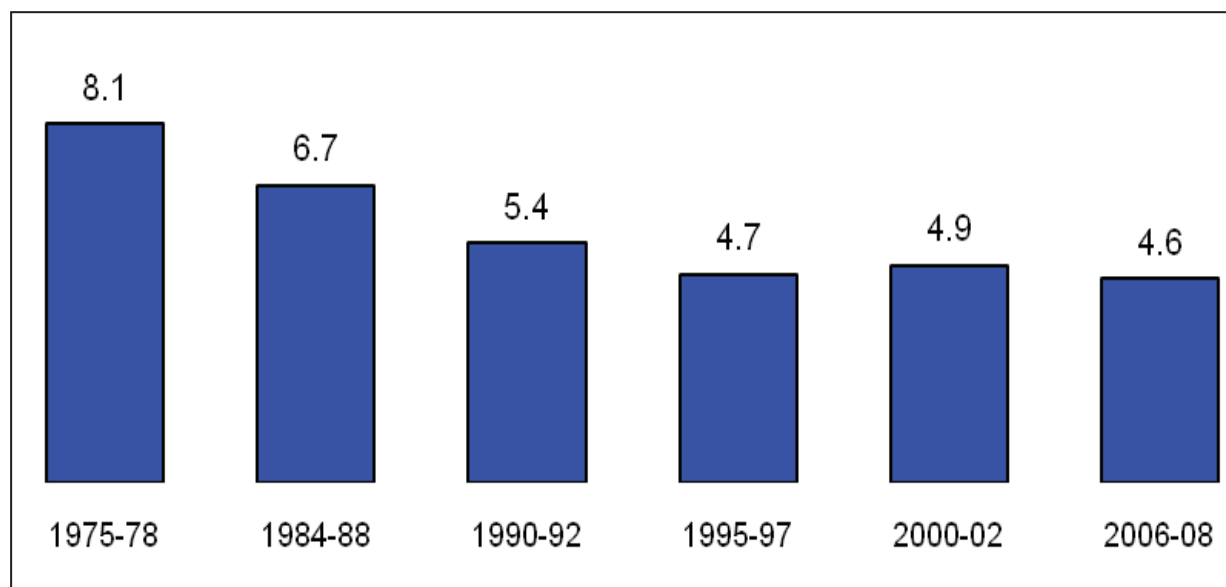
Note: If more than one method is used, only the most effective method is considered in this tabulation. LAM = Lactational amenorrhoea method.



The adolescent birth rate reduced from 114 per 1,000 women to 103 per 1,000 women between 2003 and 2008/09. The proportion of pregnant women who made at least 1 visit to Ante-natal clinics increased from 87.8% to 90.6% between 2003 and 2008/09 while that of women making 4 or more ante-natal visits declined to 47.1% in 2008-9 from 52% in 2003.

As depicted in *Table 4.2* the total fertility rate has reduced from 4.9% in 2003 to 4.6% in 2008/09 which is the lowest ever recorded since independence. Some of the contributing factors to this improved status include the sustained availability of contraceptive commodities and advocacy for family planning.

Figure 4.2: Trends in Total Fertility Rate, Kenya, 1975 - 2008*



* The first four surveys excluded North Eastern Province and several northern districts in Eastern and Rift Valley provinces

4.4 GOAL 6: COMBAT HIV and AIDS, MALARIA AND OTHER DISEASES

Target 6A: Have halted by 2015 and begun to reverse the spread of HIV and AIDS

Indicators for monitoring progress

- HIV prevalence among population aged 15-24 years
- Condom use at last high risk sex
- Proportion of population age 15-24 years with comprehensive correct knowledge of HIV and AIDS
- Ratio of school attendance of orphans to school attendance of non orphans aged 10-14 years

Target 6B: Achieve, by 2010, universal access to treatment for HIV and AIDS for all those who need it

Indicators for monitoring progress

- Proportion of population with advanced HIV infection with access to anti retroviral drugs

Target 6C: Have halted by 2015 and began to reverse the incidence of malaria and other major diseases

Indicators for monitoring progress;

- Incidence and death rates associated with malaria
- Proportion of children under five sleeping under insecticide treated bed nets
- Proportion of children under five with fever who are treated with appropriate anti malarial drugs
- Incidence, prevalence and death rates associated with tuberculosis
- Proportion of TB cases detected and cured under directly observed treatment short course

HIV and AIDS pandemic has reversed the gains made towards attaining health for all Kenyans and has adversely affected the socio-economic development of the nation. Emergence of HIV has resulted in increase in TB morbidity and mortality. Malaria remains the greatest cause of death especially in children under five and pregnant women.

Attainment of MDG 6 is dependent on evidence-based approaches. These include prevention of new infections, prompt case detection and appropriate care and treatment. Some of the specific interventions include use of insecticide treated bed nets, intermittent preventive

treatment (IPT) for malaria in pregnancy, appropriate condom use in the prevention of HIV and active case detection for TB.

4.4.1 Status and trends in combating HIV and AIDS, Malaria and TB

HIV and AIDS:

The overall HIV prevalence rate among adults 15-49 years was estimated to be 6.3% (KDHS 2008-9) down from 7.4% in 2007 (KAIS 2007) and 6.7% in 2003 (KDHS 2003).

According to the Kenya AIDS Indicator Survey (KAIS), 2007, HIV prevalence rate among young people aged 15-24 was 3.8% compared to 3.6% in 2003 (KDHS 2003). This is a worrying trend given that this group of young people represents the largest proportion of the general population and they are also the future of the nation. There are also gender differentials in this age group with women being 5.2 times more likely to be infected than men of the same age group (12.0% and 2.3% respectively). This is due to the biological predisposition of females to sexually transmitted infections, socio-cultural issues, poverty and economic disempowerment for women.

There are notable regional differences in HIV prevalence amongst persons aged 15-49 years with Nyanza province having the highest prevalence at 13.9% while North Eastern province has the lowest at 0.9% (See Table 4.4). These differences are due to socio-cultural practices surrounding sexual and reproductive health issues and sex for favour (transactional sex). The trends are also heavily influenced by socioeconomic factors such as high levels of poverty, school drop-out especially among girls, and unemployment among young people, increasing exposure to different forms of sexual orientation through negative consequences of media technology and the emergence of most-at-risk populations. Other risk factors are those related to the female gender that make them vulnerable which may be biological e.g. efficiency of infectivity when exposed to risk of infection, among other reasons. The postelection challenges of 2007-2008 snowballed into disrupting HIV related services such as the supply chain management to make condoms reach the consumers; disruption of supply of ARV drugs, prevention services and those to support orphans and vulnerable children. As a result, many clients were lost to follow-up and/or disrupted their treatment and support regimen, thereby increasing the risk factors for the spread of HIV, impact of HIV and AIDS as well as the emergency of resistance to available treatment combinations.

Table 4.4: Distribution of HIV prevalence amongst 15-49 years by province

Province	HIV Prevalence (%)		
	Female	Male	Total
Nairobi	10.8	3.4	7.0
Central	6.2	2.6	4.6
Nyanza	16.0	11.4	13.9
Eastern	3.8	3.0	3.5
Western	9.2	3.4	6.6
Coast	5.8	2.3	4.2
Rift Valley	6.3	2.8	4.7
North Eastern	0.9	0.9	0.9

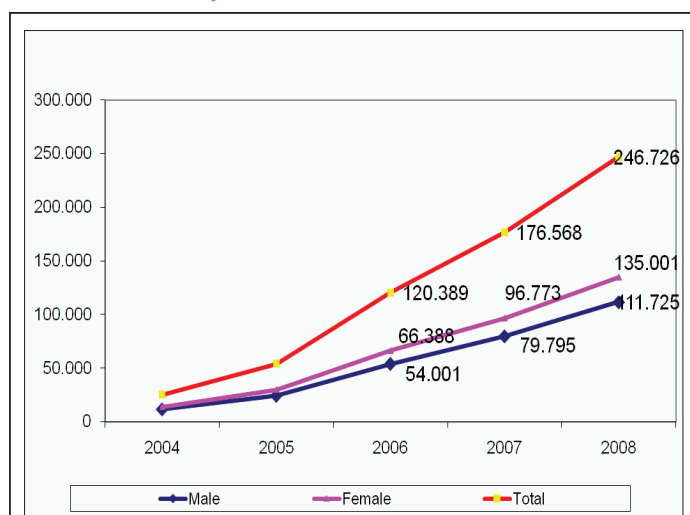
Source: **KDHS 2008-9**

Comprehensive knowledge of HIV and AIDS amongst youths aged 15-24 years stood at 48.7% in 2008/09 from 44.4% in 2007. Condom use at high risk sex slightly increased from 35.2% to 48% between 2003 and 2008.

Access to ART among those eligible-based on a CD4 (a measure of degree of lowered immunity) count of 250 cells/uL or less- of those with advanced HIV infection is 40.5% based on KAIS, 2007. In all the regions, there is disparity between those eligible for ARVs and those actually receiving treatment. The difference in numbers is highest in the regions with the highest HIV prevalence rate.

These disparities are mainly due to inadequate resources (human, financial, infrastructure and equipment) for service delivery. There is inadequate coverage of paediatric ARV services throughout the country due to delayed introduction of this service for children and lack of expertise for the same.

Figure 4.3: Gender differences in access to ARV treatment in Kenya



Source: NASCOP

Malaria

The malaria prevalence rate for children below 5 years (1-59 months) was 7.6% in 2007 according to Malaria Indicator Survey of 2007. The proportion of children under five sleeping under insecticide treated bed nets has increased ten-fold from 4.6% to 46.7% between 2003 and 2008/09 (KDHS) with 48.6% of fever cases in the same age group receiving appropriate treatment in 2008. This figure was 45.5% in 2003. These trends point to a need for actions to accelerate the attainment of universal coverage.

Tuberculosis

Death rate due to Tuberculosis (TB) has remained constant at 5% since 2003 but dropped slightly to 4% by 2009. The incidence of TB has remained unacceptably high at 326/100,000 in 2009. The

proportion of TB cases detected who are cured under directly observed treatment has risen from 78% in the year 2000 to 85.6% in 2007. By 2009, the treatment success rate for sputum positive TB cases had risen to 88%, which demonstrates significant improvement in the performance of the national Directly Observed Treatment short course (DOTS) programme.

4.4.2 Challenges facing the health sector

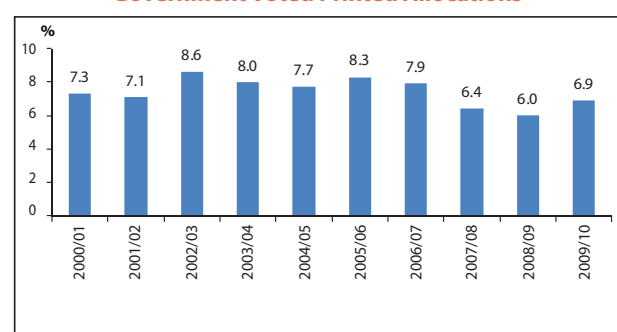
The health sector as a whole is faced by a various challenges that slow down the achievements of the MDGs targets. The challenges that affect the child health, maternal and reproductive health as well as combating HIV and AIDS malaria and other diseases includes the following;

- Inadequate human resource, which has been occasioned by lack of resources to recruit more health workers despite the country having adequate trained health workers from the training institutions.
- Low staff competence especially in essential obstetrics and family planning newborn care and management of childhood illnesses. The pre-service curriculum is not impacting adequate competencies in these areas and this requires urgent attention by the Ministries of Public Health & Sanitation, Ministry of Medical Services and Ministry of Higher Education, Science and Technology, to address the issues of student/lecturer ratios, student/patient ratio and availability of training models and equipment.
- Poor health seeking behaviour and inadequate early recognition of danger signs in pregnancy and child care practices among care givers. This is due to lack of information as well as lethargy on the part of communities which is aggravated by negative cultural beliefs.
- Inadequate financial resources for reproductive health and child survival. The budget for maternal and child health declined in 2009/2010. However, in the year 2010/11, the government allocated Kshs 69 million for child nutrition.
- Poor geographical access to health services and high cost of medical services. The opportunities for accessing health services are hampered by the lack of health facilities in some areas. Despite the policy on free services for the under-fives in health facilities, some facilities flout this policy with negative repercussions for the children
- High poverty levels make it difficult for some families to seek and access to health services
- Low male involvement in maternal health
- Myths and misconception regarding family planning methods
- Provider bias of family planning methods
- Low staff competence especially in integrated management of HIV and AIDS, Malaria, TB and related illnesses.

The Government has taken lead in addressing these challenges by:

- Development of the National Health Sector Strategic Plan and implementation of Annual Operation Plans (AoP). These documents address the priorities and the joint implementation and funding with development partners
- Working in collaboration with Partners and other stakeholders through the established coordination mechanisms, in order to harness all the available resources and avoid duplications
- Developing the Child Survival Strategy and the Child Health Policy (the latter is in draft form). These documents identify the priority interventions/actions to address child health problems
- Developing the Human Resource for Health Strategic Plan. This document addresses the human resource gaps, needs and costs for addressing these gaps. The ministries of health are engaging the Ministry of Finance on how to implement this plan in a scheduled manner due to the financial implications.
- Developing and implementing Community Health Strategy (CHS) to ensure that communities and individuals take charge of their own health
- Implementation of the community Integrated Management of Childhood Illness (IMCI) and home and community based health care as part of the Community Health Strategy. This is where the ministries have community level health worker (Community Health Workers and Community Health Extension Workers) addressing the needs of specific households.
- Exempting children under five from payment under the Government policy on cost-sharing.
- Continued training of human resource (both pre-service and in-service) to meet the demand for both the public and the private sectors.
- Improving sanitation, access to safe water and hygienic conditions which contribute to mortality through waterborne diseases and unsanitary practices.
- Improving immunization coverage as well as preventive and curative health care services for diseases closely related to child and infant mortality such as diarrhoea and acute respiratory infections.
- Addressing inequalities in healthcare access with emphasis through exemption of the poor from cost sharing.
- Developing the Reproductive Health policy and a Road map to accelerate maternal and new born care
- Developing Family Planning Policy Guidelines and Strategy to Scale up Long Term and Permanent Methods of Contraception
- Implementation of community reproductive health and community midwifery as part of the Community Strategy
- Exempting pregnant women from paying for antenatal care and family planning and delivery at levels 2 and 3.
- Capital investment in constituency-based health care provision such as construction of model health centers in each constituency and employment of 20 nurses per constituency among others
- Developing disease specific strategic plans (HIV/AIDS, TB and Malaria)
- Decentralization of health services
- Economic Stimulus Package focusing on health Policy recommendations/policy environment that may promote or accelerate the achievement of MDGs
- Finalizing and implementing a stable financing mechanism for the health sector: The financing framework has been approved by the National Economic and Social Council and is in the process of finalization to move towards a National Social Insurance Scheme
- Task sharing of some interventions such as community distribution of contraceptives, caesarean section by clinical officers, post abortion care and anaesthesiology by nurses.
- Task sharing of some interventions such as zinc for diarrhoea, vitamin A and antibiotics for pneumonia to the community in hard-to reach areas. This involves training community health workers to offer some clinical services.
- Introduction of newer vaccine antigens such as pneumococcal for pneumonia and rotavirus vaccine for diarrhea prevention.
- Accelerate the process of task sharing in terms to scale up access of Artemisinin based anti-malaria drugs by the community.
- Increasing the coverage of Output Based Aid (OBA)
- Social protection interventions focusing on OVC, older persons

Figure 4.4: Printed Allocations (MOMS & MPHS) versus Government Voted Printed Allocations



Source: Estimates of Development and Recurrent Expenditure (various)

4.5 THE RISKS FOR THE HEALTH-RELATED MDGS INCLUDE:

- Political uncertainty
- Natural disasters (drought, famine and floods)
- Poverty

Recent positive developments

- A pro-poor Healthcare Financing Strategy is being finalised, and implementation strategies are being piloted.
- Sector coordination and engagement to support the Health SWAP is improving, and a Joint Financing Arrangement (JFA) for pooling investments is being finalised between MOHs, MOF and Development Partners (DPs).

• The Health Sector Services Fund (HSSF) and Hospital Management Services Fund (HMSF) have been gazetted and are being finalized to enable transfers of operational funds directly to GOK and FBO/NGO health facilities.

- A review of the Kenya Health Policy Framework (1994-2010) is underway to inform development of a new Policy Framework and new sector strategic plan(s) from 2012.
- MOHs and DPs are increasingly prioritising health systems strengthening in order to ensure equitable delivery of quality services on the ground.
- Work is underway to strengthen public-private partnerships for health service delivery, with both not-for-profit (FBOs, NGOs) and for-profit private sector service providers. An MOU between MOHs and FBOs is now in place, and for-profit providers are now becoming more engaged in sector coordination structures.
- New efforts to improve on identifying, targeting and monitoring delivery of services to under served and disadvantaged populations, including urban poor and rural hard-to-reach areas, are in progress.
- GOK and DPs are increasing their focus on promotion and preventive efforts. The MOPHS Community Strategy is being implemented, community units are being established, and community health workers are being trained to provide information and basic community-based services.

4.6 KEY CHALLENGES REQUIRING ATTENTION

Sector financing

- GOK public funding for the health sector continues to be inadequate, and for 2009/10 covers just 43% of estimated sector requirements. The GOK budget for health is 6.9% of the total budget in 2009/10. This is below the Abuja target of 15% and is estimated to be at USD 14 per capita, which is also below the WHO recommended USD 34 per capita for basic services and USD 80 per capita for comprehensive

services. Increases in GOK health sector budgets in the recent years have been absorbed by higher recurrent expenditure to support administration and management structures for the two new ministries and newly-formed districts. Spending of development funds remains poor. There is need to increase the absorption capacity of the relevant ministries.

Governance / partnerships

- DP investments represent 58% of resources available to the sector in 2009/10, but these are still largely project-based (88% off-budget) and are not yet well coordinated or harmonised to most effectively target sector priorities. DP support for critical interventions such as HIV/AIDS treatment is unsustainable over the long term. Weak financial management capacity and systems remains a key obstacle to DPs channeling funds through GOK.
- Public-private partnership work is in progress, but needs to be accelerated to facilitate equitable access to the Kenya essential package of health services (KEPH) through private providers producing public goods.

Management support

- *Health systems strengthening to improve service delivery urgently needs focused attention:* many health facilities lack adequate numbers of qualified staff (HRH), and stock-outs of essential medicines and medical supplies (EMMS) are common. Geographic access to basic primary healthcare and referral services is an issue in many rural areas.
- *HMIS reporting and analysis:* reliability of HMIS data for annual monitoring of progress is a concern. Reporting rates from facilities and districts are still poor making accurate analysis of progress and trends difficult.

Service delivery

- *Child Health, maternal and reproductive health:* while the 2008-09 KDHS indicates gains in child health outcomes since 2003, more recent MOH and HMIS data suggest that attention still needs to be paid to increasing and sustaining coverage of key interventions including immunisation, LLITNs and nutrition. Maternal and reproductive health and family planning outcomes are still poor and need urgent attention.
- *Improving access for the poor:* physical access to services is a challenge particularly in poorer districts, and user fees continue to be an obstacle to poor populations.



The Minister of State for Planning, National development and Vision 2030 (seated 7th from left) with chief officers of Local Authorities and civic leaders at a workshop to sensitise Local Authorities on the MDGs.



The Nairobi City skyline viewed from Uhuru Park; The role of Local Authorities in ensuring proper environmental planning and management is crucial in making urban areas attractive to both local and foreign investors.



Chapter Five

Goal 7:

Ensure Environmental Sustainability

5.1 TARGETS AND INDICATORS

The first two targets under MDG Goal 7 are:

- **Target 7A:** Integrate the principles of sustainable development into country policies and programmes and reverse the loss of environmental resources, and
- **Target 7B:** Reduce biodiversity loss, achieving, by 2010, a significant reduction in the rate of loss

The indicators for measuring progress under the MDG framework are:

- Proportion of land area covered by forest
- CO₂ emissions, total, per capita and per USD 1 GDP (PPP)
- Consumption of ozone-depleting substances
- Proportion of fish stocks within safe biological limits
- Proportion of total water resources used
- Proportion of terrestrial and marine areas protected
- Proportion of species threatened with extinction

In Kenya, the indicators developed at the national level are:

- Fish catch per unit effort (CPUE)
- Fish index of biotic integrity (IBI)
- Water bird species living planet index (composite LPI)
- LPI Flamingo
- Management interventions index (DPSIR)
- Water quality indicator (WQI)
- Wetland economic value
- Human development index
- Population and absolute poverty in wetlands
- Loss of wetlands to agriculture

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

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

Indicators for measuring progress

- Proportion of population using an improved drinking water source.
- Proportion of population using an improved sanitation facility.
- Proportion of urban population living in slums.

5.2 SUSTAINABLE DEVELOPMENT AND LOSS OF ENVIRONMENTAL RESOURCES

5.2.1 The National Policy Framework

The Kenya Government's commitment in integrating the principles of sustainable development into country policies and programmes and in reversing the loss of environmental resources has been articulated in various policy documents such as the Sessional Paper no. 6 of 1999 on Environment and Development, the Economic Recovery Strategy for Wealth and Employment Creation 2003-2007, Vision 2030, and the Medium-Term Plan 2008-2012. Other policy documents include Forest Act 2005, Water Act 2002, Forest Policy 2007, National Land Policy 2009, National Housing Policy 2004, and other sector-specific plans for the period 2008-2012. The Government ministries directly involved in environmental issues are Environment and Mineral Resources, Water and Irrigation, Forestry and Wildlife, Fisheries Development, Housing, and Lands.

The Environmental Management and Coordination Act (EMCA) of 1999 provides a comprehensive legislative framework for the management of the environment in the country. The legislation provided for the creation of the National Environment Management Authority (NEMA), a competent authority mandated to safeguard and enhance environmental quality through coordination, research, facilitation and enforcement. The organization has an important responsibility coordinating the preparation of Environmental Action Plans (EAPs) at district, provincial and national levels. The country has also ratified and domesticated various multilateral environmental agreements.

The overall objective of attaining sustainable development and management will be achieved through targeted activities that aim at economic, ecological and equity goals. The management of the environment and natural resources has assumed a global significance with clearly instituted management and governance structures. The major environmental concerns in Kenya include environmental degradation, environmental hazards and disasters, impacts of climate change, decreasing forest cover, deteriorating water and air quality, solid waste management, unplanned human settlements, environmental pollution, and loss of biodiversity. The environment forms the bedrock of productive sectors and is key to poverty reduction and improvement of livelihoods.

There is need for further institutional reforms for effective enforcement the EMCA, especially to



A pair of Giraffes at the Ruma National Park in Suba district; conservation of wildlife as part of the reduction of biodiversity loss.

complete the process of its harmonization with other sectoral policies and legislation such as National Land Policy, National Livestock Policy 2006, draft Fisheries Policy 2005, draft ASALs Policy 2004, Sessional Paper No. 4 of 2004 on Energy, Energy Act 2006, draft Forest Policy 2005, Water Act 2002 and National Water Policy 1999, National Environmental and Sanitation policy, draft final Wildlife Policy-2007, and the Minerals and Mining Policy 2007.

5.2.2 Targets and Indicators

Biodiversity indicators are information tools that summarize data on complex environmental-related issues. Kenya developed indicators through ecosystem-based site task forces, which were scaled to national level. These indicators can be used to assess the level of performance of interventions being put in place to address threats and pressures on inland wetland biodiversity in the country. The indicators are a measure of effectiveness of interventions at national level, and can act as a guide to effective biodiversity management systems and the type of mitigation measures that can improve the status of biodiversity.

Decreased forest cover in Kenya is due to forest invasions. For example during the period 2005 to 2008, there were forest invasions in Cherengany, Mau and Samburu which led to decrease in indigenous forest cover. Other causes include deforestation as a result of expansion of human settlements, excisions, and other changes in land use, forest fires and illegal logging.

5.2.2.2 CO₂ Emissions, Total per Capita and per USD 1 GDP (PPP)

Carbon pollution is one of the leading environmental health problems in the country affecting both rural and urban populations. Carbon pollution results mainly from industries and the increasing number of motor vehicles on the Kenyan roads. Although the quality of air in Kenya is not regularly monitored, it is believed to be below the WHO recommended levels. For instance, the PM10 pollution level in Nairobi is about 42 micrograms per cubic meter, attributed mainly to high concentration of industries and vehicles.

5.2.2.3 Consumption of Ozone Depleting Substances

Since early 1970s, it was recognized that man-made chemicals were responsible for the depletion of the Ozone Layer. The Ozone Layer acts like a filter that screens out harmful rays of the sun. Depletion of the Ozone Layer results in high amounts of sun's rays, UV-B radiation reaching the earth's surface. Consequences of UV-B radiation includes (a) damage to human health, including skin cancer, impairment of body immune system, and eye cataract; (b) damage to the genetic material (DNA) leading to mutation of the affected organism; (c) damage to crops e.g. peas, beans, cabbages, tomatoes, potatoes, and soya beans, amongst others; (d) damage to forests e.g. conifer; (e) inhibition of photosynthesis or mobility of sea weeds (phytoplankton's) including damage to aquatic fauna planktons, larvae of fish, shrimp, and crab essential to food chain of the sea; and (f) degradation of paints, rubbers, wood, and plastics used in buildings.

Table 5.1: Common Ozone Depleting Substances Used in Kenya

Types of ODS	Amount in circulation (tonnes)	Remarks
CFCs	19.5	Importation banned effective January 2009
HCFCs	52.8	
HFCs	48.9	Safer and mainly used in flower farms
Methan sodium	6.8	
Concentrates	3.2	

Source: National Environment Management Authority (NEMA)

Kenya has ratified and domesticated the Montreal Protocol which monitors reduction of ODS. Kenya has developed Ozone Depleting Substance Regulations of 2007, and Air Quality Regulations 2009 are awaiting gazette to control emission of toxic and obnoxious substances. In order to control emission of methane from dumping sites, Kenya has also developed solid waste regulations 2006.

5.2.2.4 Proportion of Fish Stocks within Safe Biological Limits

Fisheries production in Kenya comes from aquaculture and capture fisheries, which are further divided into marine and freshwater. Capture fisheries accounts for about 96% of the national nominal production. There has been a decline in the fish stocks in most of the country's waters. For example, in Lake Victoria, 140,000 metric tons were landed in 1989; which steadily increased to 214,709 metric tons in 1999 (the highest ever recorded landing); and dropped to 134,709 metric tons in 2008 (a drop of 80,000 metric tons). This is despite the increased fishing effort in form of fisheries, fishing gears and crafts over the years. This is a clear indication that the lake is being exploited beyond the Maximum Sustainable Yield (MSY). The decline is both in productivity and species composition. For example, Lake Victoria had over 200 fish species but is today dominated by only three species while only less than 50 still exist. It is estimated that proportion of fish within safe biological limits are Lake Victoria (95%), Lake Turkana (85%), Lake Naivasha (75%) and Indian Ocean (90%).

5.2.2.5 Proportion of Terrestrial and Marine Areas Protected

Protected areas in Kenya are estimated to cover 7,194,000 ha, or 12.3% of the total land area of

58,037,000 ha. This estimate excludes marine and littoral protected areas¹. Marine and littoral protected areas are estimated to cover 355 hectares. Kenya has a 536km long coastline, and the marine and littoral area is calculated by extending 200 nautical miles perpendicular from the coastline to coincide approximately with the continental shelf. Thus, 355 ha of protected area in the marine and littoral zone are considered to be low.

83% of Kenya's land area is classified as arid and semi arid, ranging from desert landscapes to rangelands and other sparsely vegetated areas that support grasses, shrubs and a few trees. Agro-ecosystems have become the dominant land use in the Kenyan highlands and elsewhere, accounting for about 19% of the country's land area. Ecosystems characterized by human settlements and built environment cover only about 0.2% of Kenya's land area. However about 33% of the population lives in the urban areas. The percentage of protected area on land is considered to exceed the ideal of 12% per country in global terms. However, species loss continues and management of protected areas remains a significant challenge.

5.2.2.6 Proportion of Species Threatened With Extinction

The country is home to over 6,500 plant species, more than 260 of which are found nowhere else in the world (see Table 5.3). With more than 1,000 bird species and over 350 species of mammals, Kenya ranks second highest among African countries in species richness for these animal groups.

Table 5.2: Number of Threatened Species

Species	Year	Total Known Species	Year	Number of threatened species
Higher Plants	1992-2002	6506	2002	98
Mammals	1992-2002	359	2002	51
Breeding Birds	1992-2002	344	2002	24
Reptiles	1992-2003	261	2002	5
Amphibians	1992-2003	63	2002	x
Fish	1992-2003	314	1992 - 2002	18

Source: IUCN red list of threatened species

5.3 ACCESS TO SAFE DRINKING WATER AND BASIC SANITATION

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

Indicators for monitoring progress

- Proportion of population using an improved drinking water source
- Proportion of population using an improved sanitation facility

¹ Littoral zone is the biogeographic zone between the high- and low-water marks.

5.3.1 Proportion of Population Using an Improved Drinking Water Source

Access to sufficient and quality drinking water is a basic human right and should therefore be viewed as a common good that should be accessible to all. Water is considered safe if it is obtained from the following sources: piped water, borehole, protected spring, and protected well. In 2005/06, about 57% of households were reported to be using water from sources considered safe. This figure had risen to 63.4% in 2008/09. The proportion of urban households using

water from clean sources was 90.8% in 2008/09 while 53.8% of the rural households obtained their water from sources considered safe. The high figures for urban access to safe water, however, mask significant challenges experienced by urban residents especially those living in urban slums and other informal settlements. These challenges include the cost of water which is usually sold from communal taps. In the rural areas, challenges include long distances to clean water sources. More efforts are needed to ensure that Kenya meets the MDG target on water by 2015.

Table 5.3: Trends in Access to Safe Drinking Water and Improved Sanitation (%)

	1990	2000	2003	2005/2006	2007	2009	2015
SAFE DRINKING WATER							
Urban	N/A	89.7	83.2	82.8	91.6	91.0	96
Rural	31.0	43.5	50.6	50.1	51.9	53.1	76
Kenyan population (millions)	21.4	30.2*	32.1*	33.4*	35.6*	40*	
IMPROVED SANITATION							
Urban	N/A	94.8		95.3			98
Improved sanitation: Rural	N/A	76.6		80.4			88

* Estimated Population

Source: KNBS, Multiple Indicator Cluster Surveys 2000, World Bank MDGs Survey, Kenya AIDS Indicator Survey 2007, Kenya Demographic & Health Survey 2008/2009, and Kenya Integrated Household Budget Survey 2005/2006.

Data from the Ministry of Water and Irrigation shows that, as of 2008, the proportion of people with improved drinking water sources was highest within the area served by the Lake Victoria North Water Services Board (66%), Athi Water Services Board (64%)

and Coast Water Services Board (48%). The coverage statistics for other areas were Lake Victoria South Water Services Board (48%), Rift Valley Water Services Board (46%), Tana Water Services Board (41%) and Northern Water Services Board (42%).



Residents of Mombasa town, queue for water during the drought period of the year 2009. Water scarcity remains a big challenge in meeting the MDGs.

5.3.2 Proportion of Population Using an Improved Sanitation Facility

Sanitation coverage countrywide is about 50%. Living conditions in the settlements of the urban poor are appalling due to the unsanitary environment, and uncontrolled disposal of excreta that pollutes the water sources from which most of the informal providers draw water. Sustainable access to safe water and basic sanitation in terms of quality and quantity is far from being realized.

Flush toilets and pit latrines are considered as adequate means of human waste disposal. Nationally, 84% of the Kenya households use adequate human waste disposal facilities compared to 80.4% reported in the Welfare Monitoring Survey II of 1994. A reported 99.7% of households in Central Province use adequate sanitation facilities followed by Western province at 96.2%.

A reported 56% of urban households in Kenya use latrines compared to 78.8% of rural households. An estimated 49.3% of latrines in urban areas and 41.1% in rural areas are shallow (less than 10 ft). In Nairobi, 89% of the households in the low income settlements/slums use shallow pit latrines. The sanitation coverage is low and the existing facilities/latrines pollute surface and ground water. This poses major challenges in improving environmental health and reducing waterborne diseases because of widespread pollution.

The risk of on-site sanitation facilities polluting water resources is less in the rural than in the urban areas. The National Water Services Strategy estimated that access to safe sanitation facilities in the urban areas is only 55% and in the rural areas only 45% (estimation based on the requirements of human rights to sanitation). However, more than 50% of this population is said to access sanitation through the use of traditional pit latrines, which cause contamination of ground and surface water sources. Communities therefore have to play the key role in sanitation development, and promote technologies with the highest economic

benefits for the users, provide dignity, and minimize water pollution. Therefore, latrines should be restricted to areas where the risks of ground and surface water pollution are minimal. There is also need for standards for low cost water and sanitation technologies which take into account technical and cultural elements as well as hygiene, environmental, and sustainability of management.

5.3.3 Sanitation in Schools

The Ministry of Water and Irrigation undertook a sample survey to assess the sanitary facilities and hand-washing practice in schools. The survey included the type of the toilet/latrines in use, depth of the latrine, and cleanliness of the latrines/toilets. Overall, 20% of the schools use flush toilets, 10% use pour flush, 21% use VIP, 35% use improved traditional latrine, 13% use traditional pit latrine with slabs, while 2% use pit latrine without slab. In addition, 89% of the pit latrines in schools are more than 20 feet deep, 10% of the schools had 15-19 feet. Only one percent of the schools have pit whose depth is 8-14 feet. Of the sampled schools, 78% of the schools latrines were cleaned daily, 11% twice a day, 4% three times a week, 3% twice a week, and 4% were cleaned once a week.

Only 1% of students practiced hand-washing with soap and clean water after visiting toilet. The students are highly aware of the importance of hand washing with soap and water, as 73% of the students thought it was very important to wash hands with soap before eating, and 74% thought it was very important to wash hands with soap after visiting toilets. One of the barriers of hand-washing is accessibility to water and soap.

Very few schools provide hand-washing facilities near the toilets and eating places, as only 18% of the sampled schools provided water and hand-washing facilities near toilets for teachers, staff and students. Only 15% provided hand-washing facilities near eating places and only 8% had water and hand-washing facilities near school latrines/toilets.



Complete Urine diverting dehydrating toilets (UDDT) in Kyaemba Primary School, Mumias.

5.3.4 Garbage Disposal

According to Kenya Integrated Household Survey 2005/2006, more than half of the households in rural areas dispose garbage by dumping it on farms or gardens within their homesteads. Though this is a convenient and cost-free method of waste disposal, it contributes immensely to environment degradation especially if the waste is composed of non-biodegradable materials. In rural areas, 21.2% of households use garbage pits and 17.3% burn their garbage. These two methods are considered effective and environmentally sustainable. In the urban areas, the most common method of garbage disposal is through garbage pits (25.8%), followed by public garbage heap (22.4%). In Nairobi, 36.1% of households reported that garbage is collected by private firms and it also appears this practice is growing in other urban centres.

5.4 IMPROVEMENT IN THE LIVES OF SLUM DWELLERS

Target 7D: By 2020 to have achieved a significant improvement in the lives of at least 100 million slum dwellers (See *Table 5.4* for the estimated population of slum dwellers in Kenya)

Indicator for measuring progress

- Proportion of urban population living in slums

The actual proportion of people living in slums is measured by a proxy, represented by the urban population living in households with at least one of the four characteristics: (a) lack of access to improved water supply; (b) lack of access to improved sanitation; (c) overcrowding (3 or more persons per room); and (d) dwellings made of nondurable material.

Table 5.4: Proportion of Urban Population Living in Slums

Year	National Population (m)	Urban Population (m)	Slum Population (m)	Percent urban	Share of slum population in total urban	Urban population with access to safe water	Urban population with access to improved sanitation	Urban population with access to durable housing
1999	29.5	10	7	34	70	75	32	88
2001	31.3	11	8	34	71	87	53	80
2005	35.1	13	9	36	71	59	42	80
2006	36.1	15	9	36.1	60		45	80
2007	37.2	15	10	38	67	37	30	80
2008	38.3	14	10	35	71		50	81

Source: Kenya National Bureau of Statistics 2006

5.5 ACHIEVEMENTS AND CHALLENGES

5.5.1 General Economic Conditions and Policy Framework

The Government has developed various national and sector plans to integrate environmental concerns into development planning in Kenya, e.g. Vision 2030, Medium Term Plan 2008-2012, and the Environment, Water and Sanitation sector plan for 2008-2012. In addition, environmental education and awareness creation continue to be undertaken countrywide. The Government has also developed a national climate change response strategy. Regulations have been developed and are being implemented on environmental management e.g. Air Quality 2009, Ozone Depleting Substances 2007, Environment Impact Assessment (EIA)/Environmental Audit (EA) 2003, Noise Control and Vibration 2009, and Biodiversity 2006.

A number of challenges still remain. For example, environmental degradation due to unsustainable land use practices, diminishing viable agricultural land due to population pressure and lack of land use planning, human-wildlife conflict and compensation, pollution,

alien and invasive species (e.g. *Ipomea kituensis*, *Prosopis juliflora*, and water hyacinth), and effects of climate change on human, biodiversity and on the environment. There is inadequate resource allocation for the sector, inadequate institutional technical capacity, and low level of environmental education and awareness which contribute to low enforcement of policies and regulations. Pollution and poor waste management are some of the leading environmental health problems in the country affecting both rural and urban populations.

There have been remarkable land use changes over the years, especially for agriculture and rural and urban development, which have negatively affected the habitat quantity and ecosystem quality. Furthermore, these changes have been exacerbated by lack of a national land use policy.

Globally, climate change is resulting in direct physiological impacts on individual species, changes in abiotic factors, changed opportunities for reproduction and recruitment, and altered interactions among species. Climate change may also produce more conducive conditions for the establishment



and spread of invasive species, as well as change the suitability of microclimates for native species and the nature of interactions among native communities. There is, however, inadequate data on the impacts of climate change on biodiversity.

Most of forestry protected areas were established without due regard to the surrounding landscapes. Consequently, boundaries between protected areas and the wider landscapes and communities are becoming distinct through the erection of fences and other barriers. The rigid boundaries between protected areas and the surrounding landscapes have compromised integrated and effective management of many ecosystems. Conservation and management of forests outside protected areas have not been integrated into the broader protected area management and there are limited partnerships between communities living adjacent to protected forested areas.

However, the finalization of the National Land Policy in December 2009 is expected to improve the overall framework and define key measures required to address the critical issues of land administration, access to land, land use planning, restitution of historical injustices, environmental degradation, conflicts, unplanned proliferation of informal urban settlements, outdated legal framework, institutional framework, and information management.

There is urgent need for appropriate adaptation and mitigation measures to reduce the adverse effects of climate change and related laws and national strategy, to implement the National Land Policy, and prepare a land use plan so as to guide sustainable development.

In general, the risks that affect the efforts to achieve MDG goal 7 include (a) natural disasters such as floods, earthquakes and fires, (b) civil unrest, increased pollution and global warming, and (c) increased pollution from industry.

5.5.2 Forests

The Government has reclaimed 25,000 hectares of land that was illegally settled in the Mau Forest Complex and the indigenous biodiversity will be restored through self regeneration. A Forestry Mainstreaming Initiative (FMI) was launched in April 2009 to integrate the principles of sustainable development in country's policies and programmes by establishing a satellite Forestry Resource Account (FRA) for Kenya.

Forestry habitats provide an important resource base for rural people's livelihoods. However, rapid increase in populations and other complex socioeconomic factors have put enormous pressure on the limited productive land, thus forcing the rural poor to resort to poor land use practices for subsistence. Poor cultivation methods, deforestation, tree logging, charcoal burning and overgrazing are main factors

which have increasingly led to an overall habitat loss and degradation, fragmentation of remaining habitats and conversion to other types of systems.

Given the enormous and competing social challenges such as poverty, healthcare, security, and education, forestry conservation and management receives relatively fewer resources. Efficient and effective forestry conservation and management requires adequate resource, regular assessments, and strategic actions aimed at addressing forestry's priority issues.

Where benefits accruing from forests are not well understood or appreciated by community members, the communities have little motivation to protect the forests. Consequently, they watch, connive, while others take part in forest destruction. Others request for forests to be excised for other uses.

Forestry resources are found both within and outside protected areas. Currently there are inadequate incentives to motivate communities and land owners to adopt land use practices that are compatible with sustainable forestry and wildlife conservation and management.

Accurate scientific data on forestry resources is critical for informed decision making by the forestry managers and other stakeholders. Yet, investment in long-term action-oriented scientific studies of forestry ecosystems and the management and dissemination of forestry data is significantly low. This has impaired understanding of the ecosystem principles and rational decision making and the overall promotion and development of the sector.

5.5.3 Water and Sanitation

Water sector reforms guided by the Water Act 2002 were rolled out, which has resulted to the creation of various institutions with specific roles and functions in the categories of policy and supervision, regulatory and service delivery. Over the last two years, an additional 2.37 million people have been provided with access to clean drinking water, out of which 1.3 million people are in rural areas and 1.07 million people are in urban areas. This was mainly through:

- Rehabilitation and expansion of Mzima pipeline by 50km producing 10,000m³/day of water;
- Urban water supplies infrastructure put under rehabilitation and expansion in 26 medium size towns
- 140 boreholes drilled and equipped mainly in Nairobi and ASAL areas.
- 160 small dams and water pans constructed and rehabilitated in ASAL areas.

In addition, 180 new rural water and sanitation projects were constructed and 244 rehabilitated in rural areas, and water and sewerage schemes in urban

areas such as Eldoret, Garissa and Nyeri and Phase One of the Kisumu water and sanitation programme have been completed. The rehabilitation and restoration of Nairobi river basins through Public-Private-Partnership (PPP) is ongoing.

A particular area of concern is the very low efficiency of waste water treatment: Only about 19% or 2.7 million population equivalents (PE) of the waste water in towns (14 million PE) is captured by the sewerage systems, while 81% (11.34 million PE) of the raw sewage is discharged to the environment untreated. Only 60% (1.6 million PE) from the 19% of waste water entering the sewer network reaches the treatment plants. Therefore, only 1.6 million out of 14 million wastewater arrives finally at the treatment plants where treatment efficiency is at around 20% in average. The survey carried out in 2009 (Kloss report) on sewerage systems estimates that a maximum of 450,000 people countrywide connected to sewerage systems can claim to have access to environmentally sound systems. This means that over 95% of human waste is either penetrating untreated into groundwater or diverted into the surface water courses. The cause for this is the low percentage of sewage collected by sewer networks, the insufficient operation of sewage treatment plants, and the absence of treatment facilities for on-site sanitation.

The rapid increase in demand occasioned by degradation of water catchments, rapid population growth and urbanization reveals that Kenya is a water scarce country. In 1992, the per capita freshwater supply was estimated at only 647m³. The per capita storage of surface water declined from 11.4m³ per annum in 1969 to 4.3m³ per annum in 1999. Unless stringent measures are taken, it is projected that by end of 2010, the renewable freshwater supply will have fallen to only just over 500 m³ per capita per annum, and by 2020, to 235m³. This is far below the international standards of 1000m³ per capita, and far below Kenya's neighbours, Uganda and Tanzania, which have annual per capita renewable water supplies of 2,940m³ and 2,696m³ per capita, respectively.

Scarcity of freshwater in the country continues to present an ideal investment climate for the mineral water business, with firms dealing in the sub-sector experiencing tremendous growth. The opportunity is also being exploited by unlicensed bottled water companies distributing low-priced water through local kiosks and handcars.

5.5.4 Slum Upgrading

The Kenya Slum Upgrading Programme (KENSUP) is involved in the physical upgrading of slums. So far, 38 projects have been implemented mainly in Nairobi, Kisumu and Mombasa which house approximately 2 million slum dwellers. The programme has developed 1,800 decanting houses to create space for development of decent shelters within Kibera slums,

and over 600 slum dwellers were recently relocated to the decanting houses.

A unit has been set up for promotion of use of low cost building technologies, where building technology centers will be built and operationalised in all the 210 constituencies. To date, 37 centers have been established. Slum settlements throughout the country are targeted to benefit from these centers in terms of putting up durable low cost housing.

Other achievements include development of 430 housing units in Mavoko to provide shelter to those currently staying in Mavoko Athi River slums; provision of 10 water and sanitation facilities to serve approximately 5,000 people in Soweto East Kibera slums in Nairobi; provision of water supply to approximately 3,000 slum dwellers in Bandani, Kisumu; and collaboration with water companies and World Bank in provision of water to selected slums in Nairobi and Mombasa.

A number of slum residents have been given security of tenure by registering and issuing title deeds to residents of the slums, which has resulted into development of more durable decent shelters in urban centres such as Kakamega, Embu and Nairobi. In 2006/07, a total of 128,232 title deeds were issued in one informal settlement, while in 2007/08 166,296 title deeds were issued in five informal settlements.

The high rate of urbanization and unemployment, coupled with migration of people to urban areas has led to a proliferation of slums. Slum settlements have no formal tenure arrangements. Their high densities, haphazard developments, lack of planning, poor housing, lack of infrastructure, their religious, cultural and political inclinations, etc, are some of the conditions that pose a challenge in proposing the type of tenure that can best fit their situation. In addition, conflicts abound between tenants and landlords due to their varied interests, while other competing interest groups (e.g. NGOs, CBOs, FBOs, Central Government, Local Authorities and donor agencies) have conflicting interests in slum upgrading and are therefore a major drawback to the programme. The Sessional Paper No. 4 on National Housing Policy for Kenya, which was developed in 2004 to set the pace for the development of a National Housing Policy recognizes the roles of the government as an enabler, partner and catalyst in the housing delivery process. Efforts are needed to facilitate the private sector in housing finance, production and construction roles, and in enabling low and middle income households to access housing. The participation of other key stakeholders such as the local authorities, parastatals and state corporations, cooperatives, employers, civil society organizations including NGOs and CBOs, research institutions, developers and individual citizens is also needed in order to attain the national housing goals.



An appropriate building technology center constructed using Stabilized Soil Blocks (SSB) in Kakamega.



BEFORE

Decanting housing units at Langata constituency



AFTER

5.6 ONGOING INTERVENTIONS AND ACTION PLANS

The policy and programme-based interventions include:

- Legal and institutional reforms including harmonization of sectoral statutes, the inclusion of the private sector and the donor community in the planning process through consultative forums, and innovative Private-Public Partnership arrangements to strengthen governance in the sector
- The integration of environmental concerns into the development and planning processes through national action plans such as the National Environmental Action Plan (NEAP), District Environment Action Plans (DEAPs), and Provincial Environmental Action Plans (PEAPs)
- Mainstreaming of the Kenya national climate change response strategy, and design of adaptation policies and actions to tackle current and future problems resulting from or being exacerbated by climate change
- The ongoing initiative to develop an environment policy (to replace Sessional Paper No. 6 of 1999 on Environment and Development) will contribute significantly to achieving MDG by providing guidelines on proper utilization of natural resources
- Revision of Environmental Management and Coordination Act (EMCA 1999)
- Resettlement of those who are illegally staying on the Mau complex and the rehabilitation of the restored land
- The Nairobi Rivers Basin programme which is aimed at restoring the river into its natural state through joint partnership in rehabilitating the river and supporting the activities
- Environmental Education and Awareness Creation Initiative through schools
- The development and the enactment of the Forest Act 2005, Draft Wildlife Policy and Draft Forest Policy
- Banning of forest exploitation
- Awareness creation on the Government's approach to participatory management of natural resources and empowerment of local communities through facilitating their organization into legally recognized management groups
- Preparation of a National Land Use Plan/ Spatial Plan to guide physical development programmes for the next 50 years and beyond as provided for in the Kenya Vision 2030
- Implementation of the new Minerals and Mining Policy that provides for (a) optimal utilization of mineral resources through value addition, (b) environmentally friendly extraction of minerals in line with EMCA 1999, (c) rehabilitation of disused mines and quarries, and (d) the issue of abnormal mercury levels in streams in gold mining areas

- Mapping of areas prone to geological hazards e.g. landslides
- Development of a waste management system
- Clean Development Mechanisms (CDM)
- Updated Kenya Forestry Master Plan 2009

In Kenya, the most vulnerable sectors include agriculture, tourism, infrastructure, health, and natural resources (forestry, wildlife, fisheries and marine). As part of improving rural livelihoods and reducing pressure on the natural resource base, a number of interventions will be initiated. These include:

- Enhancing systems for conveying climate information by strengthening KMD's Early Warning System to disseminate projected weather patterns to farmers in order to make them more resilient to climate change impacts e.g. through altering the timing of planting dates to adapt to changing conditions for crop production
- Promotion of Conservation Agriculture (CA), which aims to achieve sustainable and profitable agriculture through the application of the three CA principles: minimal soil disturbance, permanent soil cover and crop rotations
- Promoting greater agricultural research and development to produce crop varieties that can withstand projected climate variability
- Strengthening integrated pest management systems to cope with increased threats from insects, pathogens, and weeds.
- Development of proper food storage facilities to cater for surplus harvest, in addition to promotion of traditional and modern food preservation methods.

The Government is in the process of drilling 50 boreholes in low income areas to serve 600,000 people in Nairobi, 450 water tanks have been distributed in slum areas/low income areas, and 500 private borehole owners have been invited for negotiations on sharing of water with neighbors and beyond. A study on new water sources for Nairobi area is currently ongoing. In the rest of the country, over 200 boreholes have been drilled and equipped over the last 12 months, and cattle troughs and kiosks constructed in affected areas to serve 1,200,000 people and 400,000 livestock.

Other initiatives in water and sanitation include: (a) enforcing water quality standards and effective policing by Water Resources Management Authority (WRMA); (b) construction of five large dams to increase national water storage capacity; (c) strengthening of the Water Services Trust Fund (WSTF) to fund water projects which focuses on the rural and urban poor; and (d) expansion of urban water supply and sanitation in the satellite/dormitory towns around Nairobi, Mombasa, Kisumu and Nakuru.



The interventions for improvement of welfare in the slums include:

- Accelerating sustainable access to safe water by formalizing connections, mapping of informal settlements for setting pro-poor tariffs, and providing appropriate outlets etc
- Increasing sustainability of sewerage systems and investments by ensuring that development funding has a wastewater management/ sanitation component.
- Establishment of Kenya Slum Upgrading Low Cost Housing and Infrastructure Fund (KENSUF) as a central depository of all mobilized financial resources for slum upgrading.
- Low income housing projects under National Housing Corporation to ease the demand for low cost housing and prevent new slum formation in urban areas
- The Kenya Government is committed to facilitate the construction of at least 150,000 housing units in

urban areas and improvement of 300,000 housing units in rural areas annually

- A comprehensive housing bill to provide legal basis for regulation, coordination, guidance, monitoring and evaluation of housing and human settlement is awaiting cabinet approval, and a building code bill to regulate planning and construction has also been initiated
- The Government has been engaging with development partners to mobilize resources for slum improvement, in addition to devolved funds such as CDF and LATF
- The Government has put in place housing incentives to encourage developers to do low cost housing
- Community mobilization, mapping/identification of slum residents and preparation of settlement upgrading plans with communities and local authorities
- Planning for pro-poor growth aimed at supporting delivery of serviced land for housing.





Chapter Six

Goal 8:

Develop Global Partnership for Development

6.1 TARGETS AND INDICATORS

Target 8A: Develop further an open, rule-based, predictable, non-discriminatory trading and financial system (includes a commitment to good governance, development and poverty reduction – both nationally and internationally).

Indicators for monitoring progress

Proportion of total developed country imports (by value and excluding arms) from Kenya admitted free of duty.

Average tariffs imposed by developed countries on agricultural products and textiles and clothing from developing countries.

The targets for the indicators are:

- 100 per cent exports from Kenya entering developed country markets duty free
- 0 per cent tariffs on Kenya's agricultural, textile and clothing products

Target 8D: Deal comprehensively with the debt problems of developing countries through national and international measures in order to make debt sustainable in the long term.

Indicator for monitoring progress

Debt service as a percentage of exports of goods and services

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

Indicators for monitoring progress

Telephone lines per 100 population
Cellular subscribers per 100 population
Internet users per 100 population

6.2 TRADE AND MARKET ACCESS

Target 12: Develop further an open, rule based predictable non-discriminatory trading and financial system

Indicators for monitoring progress

Proportion of total developed country imports (by value and excluding arms from developing countries and least developed countries, admitted free of duty (Includes a commitment to good governance, development and poverty reduction – both nationally and internationally)

6.2.1 Situation Analysis

The creation of a favourable business environment has been a critical reform agenda towards improving Kenya's market access both locally and internationally. Trade contributes immensely to Kenya's gross domestic product (GDP) through exports, imports and employment creation among other channels. Improving market access locally and internationally therefore can stimulate rapid expansion of international trade, which in turn can accelerate the pace of economic growth in Kenya. The Vision 2030 trade sector plan underpins the importance of international trade to Kenya and provides a roadmap towards revitalizing the wholesale and retail trade. In addition, it suggests improvement of the manufacturing sector which acts as both absorber and producer of tradable goods utilized both locally and internationally. Various policies developed to ensure expansion of trade include the Private Sector Development Strategy (PSDS), Medium Term Plan 2008-2012 and the National Trade Policy.

The development of wholesale hubs, retail markets and producer business groups has been initiated to accelerate the expansion of internal trade. Regionally, Kenya actively participates in the East African Community (EAC) and the Common Market for Eastern and Southern Africa (COMESA). The signing of the COMESA and EAC Customs Union and the East African Community Common Market Protocol are among Kenya's crucial achievements in regional integration. This will further deepen Kenya's access to the regional markets. Kenya's major trading partners are in Africa especially within the EAC and COMESA region. Consequently, Kenya continues to aggressively deepen trade with the EAC, COMESA and the rest of Africa.

Kenya is also continually pursuing bilateral trade arrangements with countries including China, South Africa and India. Currently, Kenya enjoys buoyant bilateral trade with countries such as United Kingdom, USA and Pakistan. For example, Kenya trades with the USA under Africa Growth and Opportunity Act (AGOA) arrangement. However, a critical look at the AGOA trade shows that Kenya experiences a trade deficit which calls for more efforts to ensure increased exports to USA.

Kenya is also among countries negotiating the conclusion of the ACP/EU Economic Partnership Agreement (EPA). An EAC-EU interim agreement was reached in 2007. The negotiations towards the EPA are

done through both the ESA-EU and EAC-EU trade negotiations arrangements. Trade agreements at bilateral and regional levels complement the trade agreements by countries at the multilateral level. Kenya is an active member of the World Trade Organization (WTO), which is a clear indication of the country's commitment to free trade arrangements that accelerate her pace of economic growth.

Since the launch of MDGs in the year 2000, Kenya has made substantial progress in the realization of MDG Goal 8 particularly on market access. However, there is still need for further policy interventions to ensure the realization of the goal by the year 2015.

6.2.2 Kenya's Trade Statistics

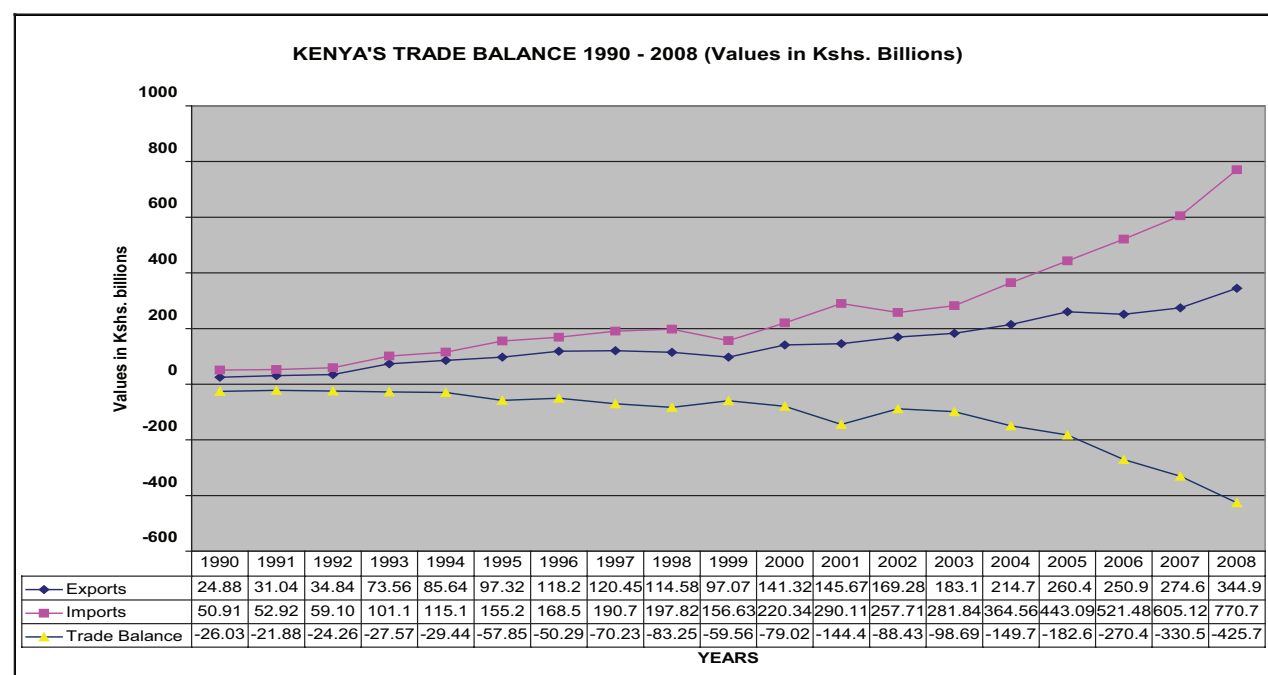
Major indicators of Kenya's participation in international trade include merchandise trade balance, terms of trade, volume of trade, current account balance, and overall balance of payments position. Exports enhance the country's foreign exchange earnings and create employments, while imports have to a great extent provided a continuous supply of finished goods for consumption and intermediate goods for industrial use as inputs. Overall, international trade has contributed immensely to Kenya's economic development efforts. Kenya's market access or trade performance with the rest of the world can, in part, be reflected through her exports, imports or total trade as shown below.

6.2.2.1 Exports, Imports and Trade Balance

Trade has increasingly become the cornerstone of the Kenya's economic development in the 21st century. Kenya's trade share of GDP in 2007 stood at about 55.4%. In 2007, merchandise trade contributed about 60.6% of total exports while services constituted about 38.8%. Trade in services also continues to be critical in Kenya's quest for sustainable economic growth and development. In 2007, services accounted for about 60% of Kenya's GDP with leading contributors being transport and communication, postal and telecommunications, and wholesale and retail trade.

Figure 6.1 below shows the trends in exports, imports and trade balance between 1990 and 2008. Overall, the volume of international trade between Kenya and the rest of the world has been increasing over the years. While exports and imports exhibit an increasing trend, imports have been increasing more rapidly than exports and hence the widening trade balance deficit as shown in Figure 1. The increase in trade and the widening of the trade balance were not rapid until the year 2000 after which trade exhibited a rapid rise coupled with a widening trade balance. The trends can be attributed to the Government efforts to enhance Kenyan market access more so after the adoption of the MDGs in the year 2000.

Figure 6.1: Kenya's Trade Balance 1990 - 2008



Source: Economic Surveys and Statistical Abstracts (various issues)

Tables 6.1 and 6.2 shows Kenya's exports and imports according to their leading destination and origin, respectively. In addition, Table 6.3 shows the proportion of Kenya's merchandise exports by region between 2003 and 2008.

Table 6.1: Total Exports estimates by destination (Kshs millions)

Destination	Years				
	2004	2005	2006	2007	2008
Africa	101,853	120,790	108,306	124,010	162,541
Europe	60,933	66,451	71,415	79,277	98,513
Asia	33,038	38,692	37,915	46,224	57,241
America	6,066	13,259	21,487	20,520	22,054
Australia and Oceania	618	894	723	1,232	680
Others	12,329	20,336	11,147	3,340	3,284
Total	214,793	260,422	250,993	274,603	344,947

Source: **Economic Survey and Statistical Abstract 2009**

As shown in Table 6.1, Kenya's leading destinations are Africa, Europe, Asia and America. As shown in Table 6.2, Kenya's leading import origin in descending order includes Asia, Europe, Africa and America. Over the years, Asia has remained a leading origin of Kenya's imports. Traditionally, Middle East is the major source of imports from Asia. But from 2005 to 2008, the Far

East, China and India, contributed large volumes of Kenya's imports. This shows the emergence of China and India as among Kenya's leading trading partners. Between 2005 and 2008, Kenya's imports from the Middle East and Far East increased from Kshs 107,742 million to Kshs 183,900 million and Kshs 111,159 million to Kshs 284,870 million, respectively.

Table 6.2: Total Imports estimates by Origin (Kshs millions)

Origin	Years				
	2004	2005	2006	2007	2008
Asia	186,046	218,901	286,292	334,108	468,770
Europe	98,555	106,070	135,534	141,095	166,459
Africa	52,435	62,698	63,613	72,039	85,991
America	24,458	51,828	32,327	55,448	43,577
Australia and Oceania	1,462	1,647	3,092	1,871	1,792
Others	1,600	1,948	626	569	155
Total	364,557	443,092	521,484	605,112	770,651

Source: **Economic Survey and Statistical Abstract 2009**

Table 6.3: Proportion of Merchandise Exports by Region 2003-2007 (%)

REGION	2003	2004	2005	2006	2007	2008
COMESA	33.72	34.82	34.57	30.05	31.39	32.3
European Union	28.48	26.43	24.02	26.09	26.44	25.9
Rest of Africa	12.49	12.58	11.81	13.10	13.77	14.8
Far East & Australia	11.97	12.19	11.74	11.52	12.28	12.2
Middle East	3.61	3.48	3.46	3.87	5.00	4.6
America	1.53	2.10	4.63	8.10	7.02	5.9
Rest of W. Europe	1.48	1.03	0.88	1.55	1.54	1.6
Eastern Europe	0.93	0.91	0.61	0.81	0.89	1.1
All Other Countries	5.79	6.47	8.27	4.90	1.67	1.6
Total Exports	100.00	100.00	100.00	100.00	100.00	100.00

Source: **Economic Survey and Statistical Abstract 2009**

The African continent and in particular the EAC and COMESA countries are increasingly becoming key market for Kenya's exports. Countries like Uganda, Tanzania, Egypt and South Africa (a member of the Southern Africa Development Cooperation-SADC) are among Kenya's key trading partners.

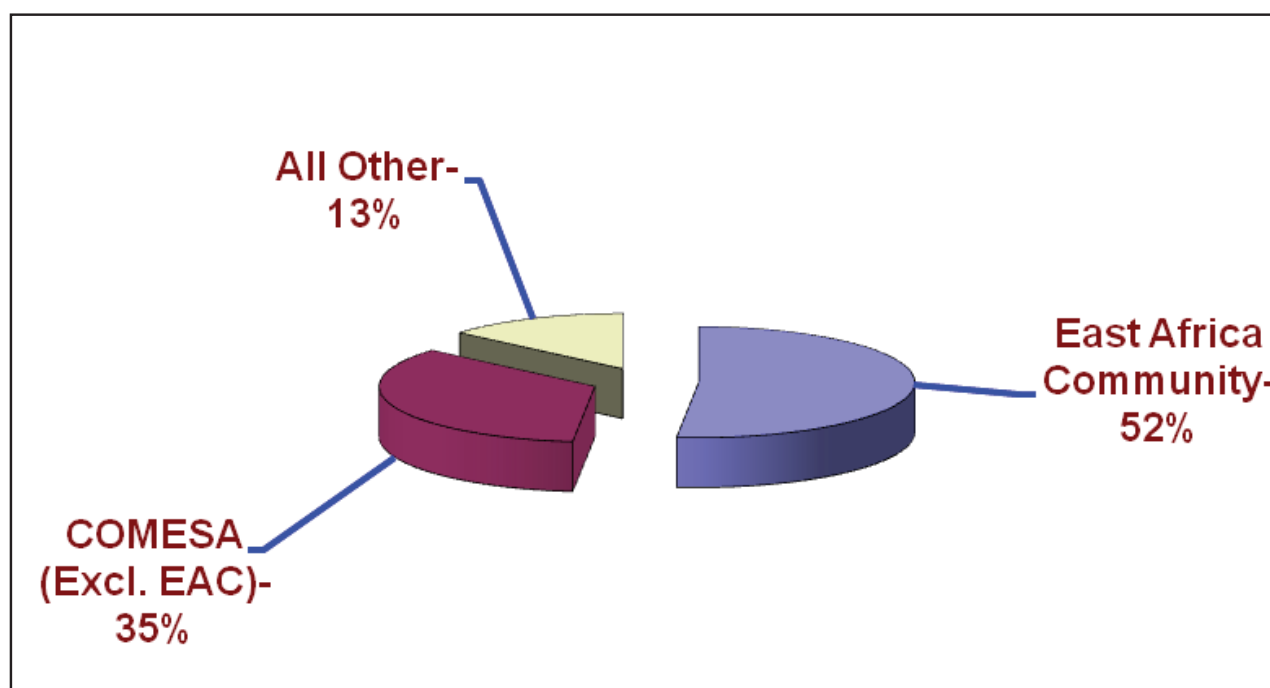
The share of the African continent in total exports increased from 45.1% in 2007 to 47.1% in 2008, an indication of Kenya's increased access to the African market. In 2007 and 2008, the growth of exports to Africa improved from 14.5% to 31.1%. This buoyant increase in exports to Africa could be associated with improved trade between Kenya and both Egypt and South Africa. Trade with Egypt improved by about Kshs 6,118 million between 2007 and 2008 while trade with South Africa increased by 52.2% due to her increased demand of soda ash from Kenya.

Table 6.3 and Figure 6.2 also show that a larger proportion of Kenyans exports to Africa are destined to the COMESA region and in particular, Uganda and Tanzania. Despite Kenya's growing trade with the African continent, greater prospects lies in further

deepening of trade in Africa especially within and between the COMESA, SADC and the Economic Community of West African States (ECOWAS) markets. In addition, the bulk of Kenya's exports are destined to the European Union (EU) as also shown by Table 6.1, Table 6.3 and Figure 6.3. Both COMESA and the EU constituted a 58.2% market share of Kenya's exports in 2008. Kenya continues to enjoy a booming trade with the European Union recording an increase of 22.8% in 2008 compared to 10.9% in 2007.

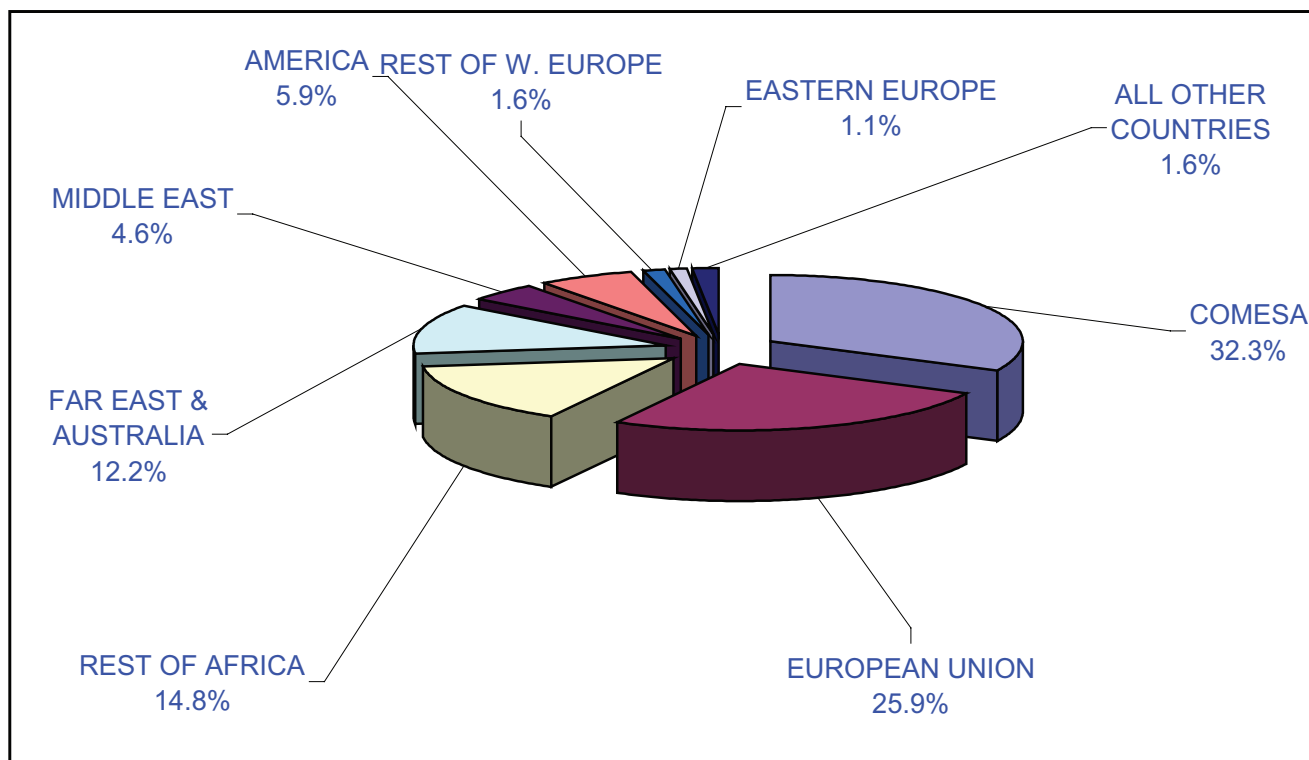
Table 6.2 also indicates that Kenya recorded an import increase from the African continent. In 2007, imports grew by 13.2% compared with an increase of 19.4% in 2008. Imports from the American continent decreased by 21.4% in 2008 due to a decline in imports from the USA estimated at about 38.1%. Figures 6.2 and 6.3 shows the proportion of Kenyans exports to Africa and the rest of the world, which shows the growing importance of the African and Asian markets. It is apparent that sustaining and expanding trade within the African continent especially at EAC and COMESA level becomes Kenya's greatest responsibility.

Figure 6.2: Proportion of Kenya's Exports to Africa 2008



Source: Export Promotion Council 2009

Figure 6.3: Proportion of Exports by Region in 2008



Source: **Export Promotion Council 2009**

Overall, the value of total exports has increased in the past five years from about Kshs 214,793 million in 2004 to Kshs 344,947 million in 2008. This implies that Kenya's efforts need to concentrate on deepening and widening access to traditional and emerging markets, respectively. Imports value increased over the same period from Kshs 364,557 million to Kshs 770,651 million. Consequently, the trade balance widened from about Kshs 149,764 million to Kshs 425,704 million over the same period.

In 2008, the trade balance deficit deteriorated by 28.8% as a result of widening from Kshs 330,454 million in 2007 to Kshs 425,705 million in 2008. The

export-import cover ratio declined from 45.4% in 2007 to 44.8% in 2008 showing that imports are increasing more rapidly than exports. The value of exports increased in 2008 by 23.3% compared to an increase in imports by 27.4%. Key export sectors that accounted for 51.3% are horticulture, tea, textile and apparels, and soda ash. Overall, Kenya's exports are mainly primary products from the agriculture sector as shown in *Table 6.4*. Manufactured products in Kenya's export basket include iron and steel, pharmaceutical products, cement and essential oils. This underpins Kenya's continued efforts towards value addition and product diversification in the manufacturing sector.

Table 6.4: Value of Commodity Exports: 2000-2008 (Kshs billions)

	PRODUCT	2000	2001	2002	2003	2004	2005	2006	2007	2008*
1	Horticulture	21.22	19.85	28.33	36.49	39.54	44.71	48.81	56.72	71.18
2	Tea	31.15	34.49	34.38	33.01	36.07	44.37	47.35	46.75	63.81
3	Apparels & clothing accessories		0.60	0.71	1.06	1.28	14.87	16.56	16.17	17.45
4	Soda ash	1.44	1.99	2.13	2.39	5.36	3.86	3.98	5.42	13.19
5	Iron and steel	2.61	3.67	4.12	4.05	7.53	8.85	9.03	8.22	10.82
6	Coffee	11.71	7.46	6.54	6.29	6.94	9.06	9.14	10.43	10.13
7	Tobacco and tobacco manufactures	2.17	2.89	3.45	2.98	2.95	5.14	7.87	8.53	9.05
8	Cement	1.36	1.03	1.48	1.98	1.96	2.86	3.85	4.61	7.25
9	Essential oils	2.12	2.47	2.45	2.84	3.12	5.89	3.78	4.42	6.43
10	Articles of plastics	2.10	2.57	2.99	2.60	3.14	4.39	4.94	4.44	6.14
11	Fish and fish preparations	2.95	3.86	4.21	4.01	4.18	4.61	3.97	4.12	5.13
12	Animal and vegetable oils	1.20	1.30	2.28	2.41	2.51	2.56	2.45	3.45	4.85
13	Medicinal and pharmaceutical products	2.35	1.57	1.70	2.15	2.27	2.65	3.00	4.44	4.46
14	Petroleum products	9.43	12.35	3.90	0.07	1.10	6.47	4.30	7.72	4.22
15	Sugar confectionery	1.33	1.58	1.88	1.83	2.01	2.60	2.69	3.05	3.46
16	Footwear	1.14	1.20	1.55	1.46	1.79	1.95	2.28	3.03	2.62
17	All other**	47.06	46.80	67.19	77.56	93.05	95.61	77.01	83.08	104.76
	Total exports	141.32	145.67	169.28	183.15	214.79	260.42	250.99	274.60	344.95

* Provisional

Source: **Economic Survey and Statistical Abstract (various issues)**

Kenya experienced an import surge from 16.0% in 2007 to 27.4% in 2008. Kenya's major imports are crude petroleum and petroleum products, machinery, and transport equipment such as motor vehicles. Overall, the volume of trade grew over the same period from 13.9% to 26.8%. Kenya also recorded a balance of payments deficit of Kshs 33,161 million in 2008 from a surplus of Kshs 63,250 million in 2007 attributed to decreased net capital inflows and a widening trade balance. In addition, the current account deficit increased from Kshs 69,638 million in 2007 to Kshs 136,851 million in 2008. Despite the trade deficits experienced, Kenya recorded a lower surplus in the capital and financial account of Kshs 81,055 million in 2008 compared to a higher surplus in 2007 of Kshs 150,090 million. This is because of a recorded decline

in the inflow of the foreign direct investment and short term capital inflows to the country. These pessimistic developments in international trade in Kenya reflect the slower economic growth performance experienced in 2008. This can be attributed to the aftermath of the postelection violence in early 2008 and financial crisis in 2008, both of which exacerbated the investment environment and/or investor confidence.

6.2.2 Indicators for Monitoring Progress

The MDG goal 8 on developing a global partnership for development gives international trade indicators that are intended to improve market access of developing countries and least developed countries' exports to the developed economy markets. The two indicators are reflected for Kenya in *Tables 6.5 and 6.6*.

Table 6.5: Proportion of Developed Country imports (by value and excluding arms) from Kenya, admitted Duty Free

Year	Total Trade Value (1000 US\$)	Free Trade Value(1000 US\$)	Ratio (%)
1996	1,094,517	1,051,915	92.82
1997	1,093,345	1,013,205	92.67
1998	1,095,135	997,045	92.74
1999	740,041	665,509	89.93
2000	875,337	792,727	90.56
2001	928,029	828,165	89.24
2002	1,028,209	995,916	96.86
2003	1,206,780	1,177,120	97.54
2004	1,500,884	1,455,757	96.99
2005	1,613,310	1,553,998	96.32
2006	1,732,737	1,703,141	98.29
2007	1,837,316	1,812,963	98.67

Source: International Trade Centre/UNCTAD/WTO

As shown in *Table 6.5*, the proportion of value of Kenya's exports admitted duty-free to developed countries has been increasing since the year 2000. The table shows that market access increase from 90.56% in 2000 to 98.67% in 2007.

Table 6.6 shows the average tariffs imposed on Kenyan agricultural products, textiles and clothing by the developed countries. The tariffs are categorized as Most Favoured Nation (MFN) treatment and preferential treatment (PT). The MFN principle requires

member states of the WTO to accord each other the most favourable tariff or regulatory treatment that will ensure every country benefits without additional negotiating efforts at the Multilateral trading system (MTS). Preferential tariffs are extended to trading partners who have free trade agreements e.g. bilateral agreements. *Table 6.6* shows that both kinds of tariffs have been declining over the years which reflect improved access of Kenya products to the developed countries.

Table 6.6: Average tariffs imposed by developed countries on agricultural products and textiles and clothing from Kenya

Year	Average Tariff (%)	
	Most Favoured Nation (MFN)	Preferential
1996	9.55	5.03
1997	9.36	4.96
1998	9.22	4.83
1999	8.51	4.86
2000	8.34	4.71
2001	8.21	4.71
2002	8.20	2.67
2003	8.03	2.64
2004	8.05	2.57
2005	7.97	2.73
2006	7.80	2.48
2007	7.99	2.41

Source: International Trade Centre/UNCTAD/WTO

6.2.3 Challenges and/or Constraints in the Trade Sector

The Kenya's trade sector has experienced growth since the inception of the MDGs in the year 2000. International trade with the rest of the world has increased as shown by Kenya's trade statistics. However, the widening trade balance deficit is an indication of the challenges or constraints that are faced by the trade sector and thus have inhibited the growth of domestic and international trade. They include the following:

(i) Poor trade and investment environment

Poor trade and investment environment continues to be an impediment to the expansion of the trade sector despite the progress already made towards its improvement. In order to improve trade and investment within Kenya and with the rest of the world, Kenya continues to improve the trade and investment regulatory legislations, and building physical infrastructure including roads, and modernization and expansion of the port of Mombasa. In addition, in the period 2010/12, the country is in the process of developing retail markets and wholesale hubs that meet global standards.

(ii) Escalation of Tariffs and Non-Tariff Barriers (TNTBs)

International market access of Kenyan exports continues to be subjected to tariffs and non-tariff barriers (TNTBs). Despite commitments of countries at the multilateral trading system to trade openness, many developed countries have adopted non-tariff and/or technical barriers to limit access to their markets. Kenya strives to increase the quantity of her manufactured or value added exports to developed country markets, but they are likely to be subjected to more TNTBs. Tariff escalation therefore inhibits access of Kenya's manufactures to the developed countries and also poses challenge of de-industrialization. To a large extent, primary products are subjected to lower tariffs compared with manufactured products, which is an incentive to continue trading in primary exports. Access of value added products to the developed country markets duty free can further promote industrialization in Kenya. This calls for persistent participation in trade negotiations at bilateral, regional and multilateral levels to improve exports of value added products. In addition, there is need to explore new international markets.

(iii) Reliance on few international markets

Table 6.1 shows that Kenya's major export destinations are Africa and the EU, which take up to about 70% of her exports. Table 6.3 and Figures 6.2 and 6.3 shows that COMESA and EAC takes the bulk of Kenya's exports to Africa. Therefore, within Africa and EU, a huge market access potential remains untapped. The other markets such as America and

Asia too remain underutilized by Kenya. There is therefore evidence of within and between regional market access disparities of Kenya's exports. To overcome this challenge, Kenya needs to deepen access to traditional markets and devise strategies to reduce the within and between regional market access disparities in Africa, EU and the rest of the world.

(iv) Erosion of preferential market access

The new trading arrangements under the WTO which have paved the way for the Most Favoured Nation (MFN) principle continue to erode the gains by Kenya from the preferential market access due to stiff competition from her trading partners. The MFN principle requires WTO Member States to accord each other equal treatment without resorting to new round of trade negotiations with member countries that have entered a new free trade agreement. Kenya will continue the efforts to improve the competitiveness of her export products so as to adapt to global changing standards and/or requirements.

(v) Membership to Multiple Regional Trading Blocs

Kenya is a member of various regional trading blocs such as the EAC and COMESA which can pose a challenge to integration initiatives. As Kenya integrates further into the EAC, it has to ensure that the efforts are harmonized with those at the COMESA level. With other members of the EAC and COMESA belonging to the Southern African Development Community (SADC), trade diversion challenges may arise during the integration process including the accession to the respective custom unions. Kenya is engaged in harmonization of integration policies in EAC, COMESA and SADC through EAC/COMESA and SADC Tripartite Free Trade Area (FTA).

(vi) Financial Crisis and Climate Change

Financial crisis and climate change are also emerging challenges to the expansion of Kenya's trade with the rest of the world. Changing climate patterns can interfere with agricultural production and reduce Kenya's exports which are dominated by primary products. The droughts due to climate change and the financial crisis that Kenya experienced in 2008 could explain a part of the slow growth of the trade sector. Kenya's trade performance continued to improve at the height of the financial crisis in 2008, which can be partly attributed to the fact that most of Kenya's trade is concentrated on Africa and Asia which were not heavily affected by the global financial crisis.

6.2.4 Policy Recommendations

The National Trade Policy, the Medium Term Plan

of the Vision 2030 (MTP 2008-2012), Private Sector Development Strategy (PSDS) and the Trade Sector Plan are policy documents in the trade sector which provide means to improve domestic and international trade market access. Drawn on these policy documents, the following are ongoing initiatives to improve Kenya's domestic trade and trade with the rest of the world.

- (i) Establishing an Export Development Fund
- (ii) Revamping of Kenya's Overseas Commercial Representation.
- (iii) Development of Special Economic Zones: A draft Special Economic Zones (SEZs) policy and Bill have been prepared. They seek to transform the Export Processing Zones (EPZs) to Special Economic Zones. In addition, the EPZ Authority will be transformed into the SEZ Authority.
- (iv) Development of wholesale hubs and producer business groups with a pilot project in Maragua, then extended to towns including Eldoret, Mombasa and Kisumu.
- (v) Building at least 10 "Tier 1" retail markets in Kenya's major towns with a pilot in Athi River. A "Tier 1" retail market is a multilane outlet that offers variety and exceptionally high quality of goods and services that are of international standards.

6.3 DEBT SUSTAINABILITY AND FOREIGN DIRECT INVESTMENT

The Government has taken major steps in the drive to meet the MDGs targets by increasing funding to all the MDGs-related sectors. However, the successful implementation of these plans and strategies has sometimes been hampered by limitations in financing. The international community needs therefore, to support the country's efforts through debt relief and other measures. In particular, it is important for Kenya to have a comprehensive debt sustainability framework in order to achieve the MDGs.

6.3.1 Situation Analysis

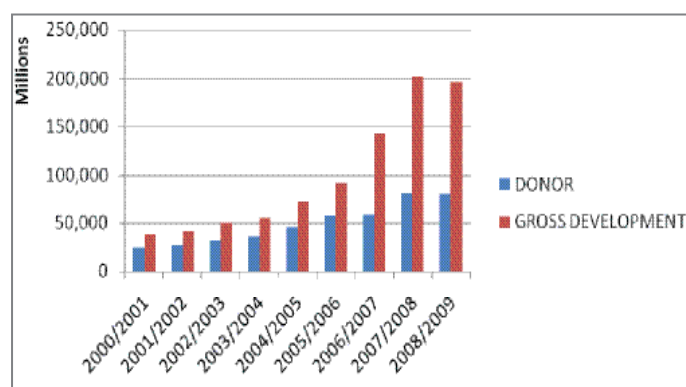
Judging from the slow pace of progress towards meeting the MDGs in Kenya, it is important that the internal efforts to attain the MDGs be supported by the international community in terms of finance, access to markets, and removing the burden of external debt. As at December 2008 Kenya's public debt stock amounted to Kshs 971.6 billion equivalents to 46.34% of GDP. Out of this, the domestic debts constituted Kshs 456.2 billion while external debts stock stood at Kshs 515.4 billion. Debt servicing continues to commit a huge portion of domestic resources, thus leaving inadequate funds to implement MDGs.

Table 6.7: Kenya's Public and Publicly Guaranteed debts (Kshs Millions)

	June 2007	June 2008	December 2008
EXTERNAL			
Bilateral	141,706	153,201	187,235
Multilateral	240,259	268,223	305,881
Commercial banks	574	0	-
Suppliers credit	18,427	18,543	22,274
Sub-total	400,966	439,967	515,390
DOMESTIC			
Central Bank	36,182	45,862	49,131
Commercial Banks	186,802	182,905	204,936
TOTAL BANKS	222,984	228,767	254,067
Non Banks	181,704	201,844	202,161
Sub-total	404,688	430,611	456,228
Grand Total Gross	805,654	870,578	971,618
Less On-Lending	(-5,701)	(-5,701)	(-5,701)
Less Government Deposits	(-65,687)	(-92,861)	(-98,902)
Grand Total Net	734,266	772,016	867,015

Despite the increase in official development assistance (ODA) commitments, Kenya has experienced a general decline in disbursements. The development expenditures from the donors as a percentage of total Government development vote have been declining as shown in the graph below. This decline has been occasioned by delays in payments, and conditionalities relating to procurements.

Figure 6.4: Development Expenditure



Source: **Estimates of development Expenditure 2001-2009.**

In the area of economic growth and macroeconomic stability, the government has strengthened private sector participation in economic activity by creating an enabling environment for the private sector to take the lead in growth creation. The government has remained a facilitator by ensuring that both fiscal and monetary policies strongly support macroeconomic stability, while fiscal strategy has ensured a strong revenue base and reasonable taxes on business. Monetary policy has supported a low inflation regime and providing sufficient credit to the private sector

for investment in order to stimulate growth. The fiscal discipline inculcated in all spending units has created efficiency gains and these have allowed an expenditure shift towards infrastructure, social programmes, agriculture, and service delivery.

The high external debt service has been having adverse effects on the growth of the economy and attainment of the MDGs. From July 2008 to December 2008, the total debt service (principal and interest) stood at Kshs 10.05 billion (see *Table 6.8*).

Table 6.8: Kenya's Debt Service during July-December 2008 (Kshs. million)

Category	Principal	Interest	Total
Bilateral			
Austria	85.38	26.19	111.57
Denmark	73.08	-	73.08
France	404.93	151.79	556.72
Italy	531.68	20.49	552.17
Japan	1,641.22	454.36	2,095.58
Saudi Fund	201.66	32.76	234.42
Spain	48.82	19.62	68.44
USA	53.92	60.13	114.05
Belgium	85.33	19.38	104.71
China	-	31.28	31.28
Germany	-	0.09	0.09
Kuwait	47.97	14.47	62.44
Netherlands	89.68	12.04	101.72
Korea	24.07	12.71	36.78
Total Bilateral	3,287.74	855.31	4,143.05
Multilateral			
ADB/ADF	28.53	284.76	313.29
BADEA	0.00	1.40	1.40
EEC	90.89	20.13	111.02
EIB	796.51	98.21	894.72
IMF	681.95	122.74	804.69
IDA	2,754.00	915.63	3,669.63
OPEC	72.19	13.34	85.53
NDF	18.54	8.61	27.15
Total Multilateral	4,442.61	1,464.82	5,907.43
Grand Total	7,730.35	2,320.13	10,050.48

Source: Central Bank of Kenya

6.3.2 Challenges And Policy Recommendations

The main challenges include:

- (a) Inadequate financial resources to meet the MDGs
- (b) High indebtedness to debt service
- (c) Lengthy and stringent donor requirements
- (d) Governance impediments e.g. corruption perception and institutional weaknesses
- (e) Inadequate technical/human capacity and necessary equipment
- (f) Multiplicity of donor assistance leading to duplication and wastage

The proposed interventions include:

- (a) Pursue debt cancellation initiatives without conditions. In particular, the international community should consider Kenya for debt cancellation/relief as it qualifies to be a HIPC under the second and third criteria.
- (b) Improved absorption capacity of the donor funds. The government is developing an electronic project management system that will be used by both the government and the donors to monitor the implementation of the projects throughout the implementation period.

- (c) Strengthen governance structures which include the police reforms
- (d) Improve business environment to encourage private sector investment. Various reforms in improving physical infrastructures and reducing the business licences are being undertaken.

The global economic crisis is expected to adversely affect our economy due to the tightening of the global credit conditions, lower Foreign Direct Investment (FDI) and likely decline in donor disbursements in the medium term. This is mainly because advanced countries are spending more resources on rescue packages and fiscal stimulus programmes in their own economies.

The Government is committed to developing a vibrant and globally competitive financial sector through reforming the banking sector to facilitate consolidation, improving coverage in pensions sector, and deepening capital markets by accessing international capital. The reforms in the public finance and debt management have made the Government to receive favourable ratings from reputable credit rating agencies.



ICTs and new Technologies, especially Information and Communications

6.4 TARGETS AND INDICATORS

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

Indicators:

- Telephone lines per 100 population
- Cellular subscriber per 100 population
- Internet users per 100 population

6.5 SITUATION ANALYSIS

In 1997 the government carried out reforms in the Information and Communication Technologies (ICT) sector as part of the wider economic reforms aimed at fast tracking the development of the sector, minimizing the commercial role of government in the sector as well as facilitating the private sector to assume a predominant role in the provision of communication services. The monopoly of Kenya Posts and Telecommunications Corporation was split into Communications Commission of Kenya (CCK) as the regulator; Telkom Kenya as the National telecommunications operator; Postal Corporation for provision of postal services; National Communication Secretariat for policy and advisory services; and Appeals Tribunal for dispute resolution. The general thrust of restructuring of the ICT sector as articulated in the Postal and Telecommunications Sector Policy Statement of 1997 was to optimize the sectors' contribution to the development of the Kenyan economy by ensuring the availability of efficient, reliable and affordable communication services throughout the country.

In January 2009, further reforms were introduced in the ICT sector with the enactment of Kenya Communications Amendment Act of 2009 (KCA Amendment Act 2009) which encompasses the whole of the ICT sector including e-transactions such as e-commerce, e-education etc.

The specific MDG targets in the Information and Communications Technology (ICT) sector in Kenya include:

- **Target A:** To increase the penetration of Fixed Telephone lines per 100 people from 0.16 lines in rural areas and 4 lines in urban areas in 1999 to 1 line in rural areas and 20 lines in urban areas by 2015.
- **Target B:** To increase cellular subscribers from less than one percent in 1999 to more than 20% by 2015.
- **Target C:** To increase Internet users from less than one percent in 1999 to over 20% by 2015.

Table 6.9 and 6.10 below provide a summary of Kenya's achievements in the above targets.

Table 6.9: Current Data on the Specific MDG-ICT Indicators at National Level Per 100 Population

Indicator	March 2010
Fixed telephone lines per 100 population	1.4
Cellular subscriber per 100 population	36.4
Internet users per 100 population	10

Source: **Ministry of Information and Communication**

Table 6.10: Trend analysis of the indicators since year 2000

	2000	2001	2002	2003	2004	2005	2006	2007	2008
Number of fixed wire line subscribers	313,470	326,482	331,718	328,358	299,225	286,729	272,003	264,882	252,615
Number of fixed wireless subscribers	-	-	-	-	-	-	-	-	-
	10,685	193,064	274,449						
Mobile phone subscribers (millions)	0.180	0.4	0.9	1.6	2.24	4.6	6.5	9.3	12.9
Estimated Internet Users (millions)	-	0.2	0.4	1.0	1.05	1.4	1.7	2.7	3.4
Internet Service Providers	43	66	72	76	78	58	73	50	127
Licensed cybercafes and telephone bureaus	-	-	-	51	70	90	100	-	390
Private letter Boxes (PCK)	351,441	388,281	394,121	397,731	395,811	399,667	409,966	412,306	414,616
Licensed Courier Operators	21	40	52	63	74	90	105	140	148
Teledensity %			1.1	1	0.9	0.9	0.9	1.4	1.4
Tele-Accessibility %			4.1	6.1	8.8	14.6	19.9	35	36.4

Source: **Communications Commission of Kenya and Economic Survey, 2006 and 2009**

6.6 ACHIEVEMENTS IN THE ICT SECTOR

6.6.1 Policy and Regulatory Measures in Place

- i. Enactment of Media Act in 2007 which established the Media Council of Kenya to regulate the media industry as well as provide clear guidance on cross media ownership, licensing, ethical standards and self regulation.
 - ii. Enactment of the Kenya Communications Amendment Act 2009 to address various challenges which come with rapid technological changes in the ICT sector. The Act will among other things provide: -
 - (a) The formal introduction of the 3 tiers of broadcasting (i.e. public, private and community);
 - (b) Laws and regulations to regulate the same;
 - (c) The transformation of Kenya Broadcasting Corporation to a public broadcaster
 - (d) Introduction of legislation to define Kenyan programming and the licensing of broadcasters, etc
 - (e) Introduction of legislation that can potentially be used to introduce local content quotas, specific programme genres (e.g. documentaries, drama, children's programmes), the payment of annual fees by broadcasters based on proportions of revenue, advertising restrictions (e.g. tobacco products), and programme standards or codes (e.g. unbiased news coverage and current affairs programmes).
 - iii. Adoption of unified licensing framework which will consist of the following broad market segments:
 - a) Network facilities provider**
Licensees under this category shall own, operate any form of communication infrastructure, based on satellite, terrestrial, mobile or fixed lines
 - b) Application Service Provider**
Licensees under this category will provide all forms of services to end users using network services of a facility provider
 - c) Contents Service Provider**
Licensees under this category shall provide contents service material, other information services and data services
- iv. Introduction of mobile money transfer and mobile banking services provided by mobile phone companies have contributed to increased access to banking services especially among the residents of remote areas.
- v. Introduction of cross border one network tariff-free roaming services within East African countries.
 - vi. Since the liberalization of the air waves in 1990s, Kenya has now nine television stations that broadcast locally. There are 48 licensed radio stations out of which 26 are operational. Kenyans

can now tune to radios that broadcast news and information in their local dialects making radio the most popular source of knowledge in Kenya. Kenya is served by five mainstream dailies, six weekly newspapers and hundreds of other alternative media publications. Several other international dailies and those from neighbouring countries can be found locally in the news stands.

- vii. To improve quality and access to telephony and Internet, Telkom Kenya Ltd introduced Kenstream wireless in July 2006 to compliment landline-based Kenstream services. It also rolled out a broadband wireless connectivity in rural areas using Code Division Multiple Access (CDMA) and WIMAX. The corporation also completed digital expansion project, which has seen improvement in services.
- viii. The government was able to lower local and global telephony costs through the liberalization of international gateways interconnection rates for call between mobile and fixed, and those between mobile to mobile.

6.6.2 ICT Infrastructure Development

(a) Project I: The East African Marine Systems (TEAMS)

The laying of 5,500km of undersea Fibre Optic Cable from Mombasa to Fujairah in the United Arab Emirates (UAE) has been done.

The benefits of the project include:

- Increase in Kenya's competitiveness both as an investment destination as well as a trade and communication hub.
- Bringing the power of high speed, high bandwidth connectivity to Kenya thereby enabling new services and products
- Reduction of costs for global connectivity leading to lower tariffs and changes for the end user. There will also be savings on payouts to foreign telecommunications facility providers and transit facility providers.

(b) Project II: National Optic Fibre Backbone Infrastructure

The laying of 5,000km of terrestrial fibre optic cable has been done. The project will complement the undersea fibre optic cable and thus facilitate universal access to ICTs throughout the country.

The project has the following specific objectives:

- a) To connect all districts and major towns in the country with a bandwidth.
- b) To provide bandwidth to learning and social institutions
- c) To open up rural areas by providing alternative investment opportunities through the use of information and communication technology.
- d) To facilitate the establishment of district data and information centers.

6.7 CHALLENGES

A distinctive feature of ICT is that it is dynamic and poses major challenges in keeping pace with new technologies. In addition, using and benefiting from ICT requires learning, training, affordable access to the technology, information relevant to the user and a great amount of support to create enabling environments. The challenges are many and they fall in a few categories. The following are some of these challenges and how they hinder ICT use for economic empowerment of communities.

Inadequate ICT Infrastructure

If ICT is to be used for economic empowerment, access to affordable services and availability of infrastructure is a major requirement. Access to ICT is highly dependent on telecommunications infrastructure, particularly if focusing on telephone service, faxes, e-mail and the Internet.

High Cost of Access and Lack of Affordable Solutions

Even when infrastructure is available, affordable access is a concern in most developing countries. The recent shift in policy towards more universal access reflects concerns related to the cost of infrastructure as well as consumers' ability to pay for services, particularly in rural and poor areas. Some of the solutions being developed cannot be fully utilized due to the high costs. There are universal access policies that aim at reducing the costs. The Government has started investing in policies such as expansion of public telephones and ICT access points.

Language and Content Limitations

Lack of local and community related content as well as content in local languages continues to be a major barrier in use of ICT for economic empowerment. ICT can only be useful and meaningful, particularly to rural and poor women, if they provide relevant information and the tools needed to address women's needs and demands. Multimedia tools are essential, as they can be developed to provide information both in spoken and written languages. The challenge is to develop content that is relevant and useful to communities in their own language. ICT advocates must work hard to ensure that such content is developed and that funds are allocated for these activities.

Unfavorable Regulatory and Legislative Framework

Lack of institutional and legal framework to implement automated services including electronic transactions has continued to hinder the growth of the sector. The development of a regulatory regime that is technology-neutral in respect of allowing the emergence and convergence of ICT technologies, and in allowing the evolution of business models will support the long-term development of the sector.

International Telecommunications Industry

The global integration of the telecommunications poses challenges in the long-term planning and development, including the following:

- The potential impact of international accounting settlement rates on countries such as Kenya that receive more international telephone calls than they originate
- Continued evolution of technology increases difficulties in ensuring regulatory compliance and minimizing by-pass and other evasive techniques
- Confronting the increasing threats of data interference, identity theft and other forms of cyber-crime
- Increased openness to the impact of foreign cultural values and practices

Slow adoption of ICT by Government

There is slow adoption of information technology and promotion of e-government systems for online access and provision of Government services. The government can play a catalytic role in the development of the sector through the demonstration of effective adoption of information technology through online access to information. There are many standalone systems that don't talk to each other leading to a lot of duplications. There is need to bridge the "islands of automation" by allowing sharing of information among agencies.

High Competition and Technology Changes

The level of competition in the communications sector has increased significantly since the liberalization of the telecommunications and broadcast media regimes. This has led to a large increase in the number of providers, a decrease in the cost of international telephone calls, and a quantum increase in the tele-density. However, convergence has impacted on the level of competition in the sector. This convergence includes the convergence of services over a single access device and traditional operators offering bundled services. This has led to economies of scale and concentration of ownership. It will be important to balance the long-term development of technology and business models with the maintenance of adequate levels of competition in the sector.

Human Resource Development Constraints

The rapid pace of change and technological advance is not at par with the capacity development to maintain and support the systems. With a great percentage of semi-illiterate people and large proportions of people accustomed to their local and regional languages, ICT faces tremendous challenge to be effectively used by communities.

Inadequate Research, Innovation and Protection of Intellectual Property

The long-term development of the sector will require enhanced capacity in research and innovation and increased capacity to produce new ICT products and services. Similarly, the framework for protecting



intellectual property rights requires strengthening and increasing public awareness regarding the importance of intellectual property rights.

Limited Spectrum Capacity

There has been an exponential growth in the demand for spectrum. In some areas such as broadcasting and mobile broadband, this increased demand has resulted in the limited availability of FM frequencies for analogue broadcast and the need to review current allocations to ensure full utilization of the spectrum. Challenges in spectrum management include the capacity to anticipate the needs of users, and to manage the various demands for spectrum to avoid conflict among potential users.

e-waste management

Disposal of obsolete equipment, gadgets, parts, etc, is posing a major threat to the environment and there is no policy in place to address the problem.

6.8 ONGOING INTERVENTIONS

A key ongoing intervention is the promotion of business process outsourcing (BPO). BPO is targeted to enable the expansion and initialization of enterprises such as call centers, human resources, accounting and payroll outsourcing, transcription services, etc. Knowledge Process Outsourcing (KPO) is the mainstay of outsourcing. In order to realize the benefits of BPO, the Government plans to complete the TEAMS, NOFBI, and KTCIP infrastructural projects and also empower the sector to develop content and market Kenya as a BPO destination. To realize the five-year goal of creating more than 7,500 direct BPO jobs and of increasing its contribution to GDP, the following programme components will be implemented within the medium-term plan period.

Project 1: Establishment of an ICT Park

In order to make Kenya the top off shoring destination in Africa, an ICT Park will be established. The ICT Park is expected to generate employment among youth and young professionals especially in back office operations besides serving like an incubation centre.

Project II: Government Common Core Network

The Government Common Core Network (GCCN) is meant to serve as a shared and secure interoperable government-wide ICT architecture. The system will integrate work processes and information flows, improve inter-ministerial sharing of databases and exchange of information. This will eliminate duplication and redundancies, improve public access to government services, and ensure responsiveness in reporting, monitoring and evaluation.

Project III: Local and Wide Area Networks

Local Area Networks (LANs) have been installed in all Government Ministry headquarters. In addition LANs need to be put in place in the provincial and district headquarters. Currently, the project has been

implemented in five provincial headquarters. These LANs will eventually be linked to GCCN to form the basis of a national information infrastructure that will allow for seamless communication in government. The target is to complete the project during the medium term plan period.

Project IV: Kenya Transparency Communication Infrastructure

The Government is implementing the Kenya Transparency Communication Infrastructure Programme (KTCIP) to ensure equity in the provision of ICT services. The programme is being funded by the World Bank to the tune of Kshs 7 billion to establish digital villages and to offer bandwidth subsidy support to social and learning institutions. The project has a timeline of five years since 2007.

Project V: Analogue to Digital Migration by 2015

The Ministry of Information and Communications launched the digital migration plan in 2007 and is expected to be finalized by 2015. The switch over is expected to take place by 2012.

6.9 POLICY ENVIRONMENT TO PROMOTE ACHIEVEMENT OF ICT TARGETS

Policy, Legal and Institutional Framework

The harnessing, promotion and development of ICT and BPO requires a sound and clear policy, legal and institutional framework that will define the environment of operation and set a framework that will allow for the sector to thrive in the future. The Government has been at the forefront in ensuring that the legal and regulatory framework does not bar growth, but the legal and regulatory framework normally lags behind ICT development due to the rapid technological changes in the sector. In spite of this, a clear policy and legal structure will be able to guide the development of the sector in future without compromising service delivery.

Energy

The ICT Sector expects the energy sector to generate sufficient and reliable energy and increase efficiency in its consumption. Vision 2030 proposes intensified application of science, technology and innovation to raise productivity and efficiency levels across the three pillars. There is therefore need for the Government to reform the education sector so as to facilitate development of a skilled workforce. More resources should be devoted to developing and exploiting opportunities in Science, Technology and Innovations sector as well as promote and build local entrepreneurship.

Security

It is important that adequate security is provided to attract investment in the growing ICT sector.

The expansion of internet is likely to open many new opportunities for criminals to exploit online vulnerability to commit cyber crime acts or attack the country's critical infrastructure. The ICT sector and the security sub-sector will develop and put in place mechanisms to address these emerging challenges.

Education and Training

Kenya intends to create a globally competitive and adaptive human resource base to meet the requirements of a rapidly industrializing economy. IT literacy should become an essential requirement for all Kenyans. It is expected that the education and training sector will promote the development of this much needed human capital for the ICT Sector.

Industry and Trade

ICT offers enormous opportunity to exploit e-commerce. Therefore adequate reforms in the Trade and Industry sector will greatly enhance e-commerce. The reforms should include policy measures that foster the development of e-business to transform traditional industries into ICT-enabled businesses, and enhance international trade in ICT-related products and services.

The enabling sector will carry out only one ICT benchmarking. This entails visiting already developed ICT players to learn about their approach in addressing ICT enabling sectors demands especially in the areas of energy, skilled manpower development, security and reforms in trade and industry.

ICT Human Resource Capacity Building and Utilization Policy

Human resource plays an important role in the use of ICT. There is therefore need to ensure that the training adheres to appropriate standards. Moreover, there is need to ensure that ICT players use a considerable proportion of locals in their operations. In addition it will be important to have ICT players represented in relevant non-ICT boards and committees so that ICT requirements are incorporated at the onset of every project.

6.10 ACTION POINTS AND BROAD POLICY RECOMMENDATIONS

The actions that have not been implemented include establishment of Universal Access Fund to facilitate service provision in rural and marginalized areas; and review of KBC Act to facilitate reforms in the broadcasting sector. The main action points to set the stage for progress in the ICT sector include:

- Preparation of e-waste management policy to safeguard the public against hazardous waste emanating from disposal of ICT related waste
- Preparation of universal service fund guideline: In order to provide services in the marginal areas, KCA Act 2009 has recommended the establishment of Universal Access Fund to subsidise cost of providing service in these areas but the guidelines for the establishment of the fund have not been prepared.
- Preparation of regulations to implement KCA amendments 2009: After KCA was enacted the guidelines to implement the Act have not been prepared.

In addition, the broad policy recommendations should include:

- Institutionalize ICT sector to make it possible to position the country in the modern world economy by harnessing the best possible human capital, research technology and innovation in a coordinated manner.
- Adequately fund the sector and develop the national ICT infrastructure to bridge the digital divide within the country.
- Enhance and fast-track the implementation of Public Private Partnership (PPP) for successful investment coordination and relationships.
- Develop a strong national research and innovation policy.
- Strictly implement intellectual and property rights law.

The ICT sector also faces risks in the form of insecurity (e.g. vandalism of telecommunications equipment and facilities), political uncertainty (e.g. postelection violence and related incidents).

Definition of Terms and Concepts

Ante Natal Care Coverage - Percentage of women who used antenatal care provided by skilled health personnel for reasons related to pregnancy (at least once) during pregnancy, as a percentage of live births in a given time period. It is recommended by WHO that at least four visits are made during the pregnancy and the timing (ideally, antenatal care should be initiated within the first 12 weeks of pregnancy) of the first visit are more useful

Adolescent Birth Rate/age-specific fertility rate for women aged 15-19 - The adolescent birth rate measures the annual number of births to women 15 to 19 years of age per 1,000 women in that age group. It represents the risk of childbearing among adolescent women 15 to 19 years of age.

Biodiversity - the variety of life at all its levels, from genes (both plants and animals) to ecosystems, and the ecological and evolutionary processes that sustain it.

Child Mortality Rate (expressed per 1,000 live births) is the probability of a child aged one year dying before reaching the age of five, subject to current age specific mortality rates

Condom use at last high-risk sex is the percentage of young people aged 15-24 reporting the use of condom during sexual intercourse with a non-regular sexual partner in the last 12 months

Constituency: a geographical area represented in parliament by an elected representative known as a member of parliament (MP). There are a total of 210 such areas in Kenya.

Contraceptive prevalence rate is the percentage of women who are practicing, or whose sexual partners are practicing any form of contraception. It is usually reported for women ages 15-19 in marital or consensual unions.

Debt service as a percentage of Exports of Goods and services: External debt service refers to principal repayments and interest payments made to nonresidents in foreign currency, goods and services

Dependency ratio: This is a measure of the number of people who are unable to work either because of being too young or too old. It is derived by dividing the total number of persons under 15 years or over 65 by the total working-age population (15-64 years)

Early childhood care and Development (ECCD) centre: a place where a group of children aged less than 6 years are under the care of an adult, and are offered a structured and purposeful set of learning activities

either in a formal institution or as part of a non-formal child development program. The centre could be a classroom attached to a primary school, a church, a social or special hall, a garage, backyard, some one's house or under a tree.

Forest- land area with trees occupying more than 0.1 ha crown cover of at least 30% with trees having a height of at least 2 meters.

Gender parity index (GPI): ratio of boys to girls in primary, secondary and tertiary education. To standardize the effects of the population structure of the appropriate age groups, the GPI of the Gross Enrolment Ratio (GER) for each level of education is normally used. GPI varies between 0 (maximum gender parity) and 1 (gender parity)

Gross Enrolment Ratio: Total enrolment in a specific level of education, regardless of age, expressed as a percentage of the eligible official school-age population corresponding to the same level of education in a given school year

Infant mortality Rate (IMR) is the probability (expressed as a rate per 1,000 live births) of a child born in a specific year dying before reaching the age of one, if subject to current age-specific mortality rates

Levels of Education: Group's education programs into an ordered series of categories broadly corresponding to the overall knowledge, skills and capabilities required of participants if they are to have a reasonable expectation of successfully completing the program in these categories. These categories represent broad steps of educational progression from very elementary to more complex experiences

Literacy Rate of 15-24 year-olds, or the youth literacy rates, is the percentage of the population 15-24 years old who can both read and write, with understanding, a short simple statement on everyday life.

Maternal mortality ratio -The maternal mortality ratio (MMR) is the annual number of female deaths from any cause related to or aggravated by pregnancy or its management (excluding accidental or incidental causes) during pregnancy and childbirth or within 42 days of termination of pregnancy, irrespective of the duration and site of the pregnancy, for a specified year (expressed per 100,000 live births).

Net Enrolment ratio in primary Education is the ratio of the number of children of official school age (as defined by the national education system) who are enrolled in primary school to the total population of children of the official age.

PM10 Pollution - Particulate matter pollution.

Prevalence and Death Rates associated with malaria.
prevalence of malaria is the number of cases of malaria per 100,000 people, and death rates associated with malaria refers to the number of deaths caused by malaria per 100,000 people

Prevalence of underweight children under 5 years of Age: prevalence of (moderately or severely) underweight children is the percentage of children under five years old whose weight for age is less than minus two standard deviation from the median for the international reference population ages 0-59 months.

Proportion of population with sustainable access to an improved water source, Urban and Rural, is the

Proportion of pupils starting Grade 1 who reach Grade 8 is the percentage of a cohort of pupils enrolled in grade 1 of the primary level of education in a given school year who are expected to reach grade 8.

Proportion of Total Water Resources Used - Proportion of total renewable (fresh) water resources withdrawn is the total volume of groundwater and surface water withdrawn from their sources for human use in the agricultural, domestic and industrial sectors, expressed as a percentage of the total volume of water available annually through the hydrological cycle (total actual renewable water resources).

Proportion of children under five who are treated with appropriate anti-malarial drugs - the proportion of children ages 0-59 months who were ill with fever in the two weeks before the survey and who received appropriate anti-malarial drugs. In the period covered by this report, appropriate anti malarial treatment comprises of Artemisinin Combination Therapy (ACT).

Share of poorest Quintiles in the National consumption is the income that accrues to the poorest fifth of the population.

*Skilled birth attendant*² is an “an accredited health professional – such as a midwife, doctor or nurse – who has been educated and/or trained to proficiency in

66



the skills needed to manage normal (uncomplicated) pregnancies, childbirth and the immediate postnatal period, and in the identification, management and referral of complications in women and newborns”.

Special Needs Education: Educational interventions and support designed to address special education needs. However, a large proportion of disabled children are in fact educated in institutions of the regular system.

Sustainable development - development that meets the needs of the present without compromising the ability of the future generations to meet their own needs”. It contains within it two key concepts: the concept of needs, in particular the essential needs of the world’s poor, to which overriding priority should be given; and the idea of limitations imposed by the state of technology and social organization on the environment’s ability to meet present and future needs”

TIVET- Technical, Vocational Education, and Training: Education and training designed to lead learners

to acquire the practical skills, know-how and understanding necessary for employment in a particular occupation or trade or class of occupation or trades. Successful completion of such programs normally leads to labor market relevant vocational qualification recognized by the competent authorities in the country

Under-five Mortality Rate is the probability (expressed as a rate per 1,000 live births) of a child born in a specific year dying before the age of five, if subject to current age-specific mortality rates.

Unmet Need for Family Planning – Percentage of Women who are fertile and sexually active but are not using any method of contraception, and report not wanting any more children. The measure points to the gap between women’s reproductive intentions and their contraceptive behaviour. *For MDG monitoring, unmet need is expressed as a percentage based on women who are married or in a consensual union.*

This image shows a full page of a notebook or ledger. It features a series of horizontal blue lines spaced evenly down the page. A single vertical red line runs along the left edge, creating a narrow margin. The top-left corner contains the word "Notes" in a bold, black font. The rest of the page is blank, ready for writing.

This image shows a blank sheet of white paper designed for taking notes. At the top left, there is a blue rectangular header containing the word "Notes" in white, bold, sans-serif font. The rest of the page is filled with horizontal light blue lines, providing space for writing. The lines are evenly spaced and extend across the width of the page.

This image shows a full page of blank, lined paper. It features approximately 20 horizontal blue lines spaced evenly across the page, typical of notebook or primary writing paper. The background is white, and there are no margins, text, or other markings present.

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