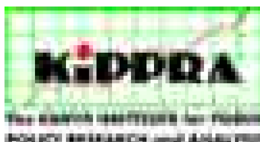
Enhancing sectoral contribution towards reducing poverty, unemployment and inequality in Kenya

KENYA ECONOMIC REPORT 2010

KENYA INSTITUTE FOR PUBLIC POLICY RESEARCH AND ANALYSIS

Kenya Economic Report 2010

Enhancing sectoral contribution towards reducing poverty, unemployment and inequality in Kenya



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Foreword

The *Kenya Economic Report 2010 (KER 2010)* is prepared by the Kenya Institute for Public Policy Research and Analysis (KIPPRA) pursuant to the KIPPRA Act No. 15 of 2006. The report analyzes recent economic developments and medium term prospects for the Kenyan economy for the next three years. The report aims at deepening our understanding of the underlying factors in Kenya's economic performance and prospects. Since it provides an objective assessment of 'where we are' and the prospects under different policy scenarios, it is a critical contribution to policy debate and prescriptions in the design and formulation of our national development agenda.

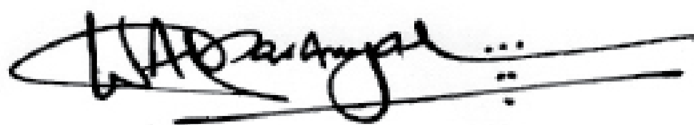
The Kenyan economy continues to record recovery from the multiple shocks of 2008/09. The *Kenya Economic Report 2010 (KER 2010)* predicts that recovery in economic activity is still on track, with an estimated GDP growth of about 5.2 per cent in 2010 and more than 6.0 per cent in 2011. However, the level of economic performance is still below the pre-crisis growth of 7.0 per cent in 2007. Nonetheless, it is very encouraging to note that various reforms are bearing fruit. It is important that the reform momentum is maintained to ensure that the economy is on the path to realization of rapid and sustainable growth as envisaged in Vision 2030.

To realize the medium term target average growth rate of 10 per cent by 2012 2013 as envisaged in the Medium Term Plan (2008-2012), there is need for full commitment to the implementation of planned reforms, including the Vision 2030 flagship projects under the economic, social and political pillars.

The theme of KER 2010, *Enhancing Sectoral Contribution towards Reducing Poverty, Unemployment and Inequality in Kenya*, is timely and significant. There is need for rapid and broad-based growth in order to address the triple challenge of poverty, inequality and unemployment. The report highlights the key challenges and the required reforms. The report also continues to benchmark Kenya's performance against comparator countries and medium term growth targets. This report, therefore, provides useful information to policy makers on the recent developments and prospects. Part I of the report indicates that there is scope for improving macroeconomic management of the economy. Particularly, there is need to maintain macroeconomic stability and enhance fiscal consolidation. While efficient and effective use of public resources remains critical, deepening political and social reforms in the context of the new constitution will enhance social and political stability that is necessary for sustainable growth. Part II of the report highlights a wide range of structural and sector-

specific policy measures that are required to unlock economic potential and enhance the competitiveness of the Kenyan economy. The key sectors of the economy, namely: agriculture, manufacturing, trade, small and micro enterprises, the financial sector, infrastructure and environment are analyzed. Part III presents the medium term prospects for the economy under different policy options, while Part IV delves into how the various sectors of the economy impact poverty, unemployment and inequality.

As the Kenyan economy continues on the recovery path, policy makers and other stakeholders concerned about improving the economic environment should integrate the ideas emerging from the analysis in the KER to strengthen public policy formulation and implementation. This will ensure that recovery to sustainable growth and development is maintained towards realization of the Vision 2030 goals and the Millennium Development Goals (MDGs).



Hon. Wycliffe Ambetsa Oparanya, EGH, MP
Minister of State for Planning, National Development and Vision 2030

Preface

The *Kenya Economic Report* (KER) 2010 is the second in a series of annual reports on the Kenyan economy prepared by the Kenya Institute for Public Policy Research and Analysis (KIPPRA). Pursuant to the KIPPRA Act No. 15 of 2006, the report is prepared in consultation with the Ministry of Planning, National Development and Vision 2030; Ministry of Finance; and the Central Bank of Kenya. The report analyzes recent economic performance and medium term prospects. The theme of KER 2010 is '*Enhancing sectoral contribution towards reducing poverty, unemployment and inequality in Kenya*'. The report, therefore, stresses the need for broad-based sustained growth in order to address the triple challenge of poverty, inequality and unemployment.

The Kenyan economy appears to have weathered the multiple shocks of 2008/09, namely: political crisis, drought, high energy and food prices, and the global financial crisis. The country responded quickly to these challenges by initiating important reforms, including an economic stimulus package. KER 2010 projects that Kenyans can look ahead to continued growth in the next three years. The economy is projected to accelerate from 2.6 per cent registered in 2009 to about 5.2 per cent in 2010 and to more than 6 per cent in 2011. The recovery has been supported by prudent domestic policies as well as recovery of the global economy. The major challenge is to sustain the momentum so that growth can surpass the pre-crisis level to reach the medium term target of 10 per cent per annum. To sustain economic recovery and ensure long term stability, the report emphasizes the need to 'keep going' on political governance reforms, macroeconomic stability, infrastructure investment, avoid mistimed withdrawal of the stimulus package, increased investment in agriculture to enhance food security, support regional integration, and continued policy focus on environmental challenges facing the country. To boost sustainable infrastructure development and effective exploitation of natural resources, the country needs to invest in geophysical exploration networks.

However, there are downside risks to the medium term outlook. A slower global economic recovery could disrupt the pace of Kenya's economic recovery. On the domestic front, KER 2010 recommends that the Grand Coalition deepens political governance reforms to enhance stability and national cohesion. This is critical in fostering government credibility and investor confidence. Although the structure of the economy reflects a large orientation towards the services sector (now accounting for about 60% of GDP), the economy is too vulnerable to weather conditions. The report emphasizes the need for continued investment in alternative sources of

energy, and allocation of more resources to irrigation. Going beyond the global financial crisis, and as the economy gathers growth momentum, there is need to shift the gears of growth from expansionary fiscal and monetary policies to private sector-led growth. This is necessary so as not to undermine medium term macroeconomic stability, a tradition that fiscal and monetary authorities have maintained in the recent past.

KER 2010 also continues to benchmark Kenya's performance against comparator countries and a few selected newly industrialized countries (NB: Date used for cross-country comparison may be different due to data sources). Although Kenya remains the largest economy in the East African Community, its economic performance in 2008 and 2009 was the slowest despite facing almost similar external conditions. This underscores the need for stability and effective management of domestic affairs. While Part I of this report analyzes macro and social sector performance, Part II analyzes the state of the economy at the sector level, namely: agriculture, trade, manufacturing, financial services, tourism, infrastructure and the environment. Part III presents the medium term prospects for the economy under different policy options. Part IV of the report focuses on how the various sectors of the economy impact poverty, unemployment and inequality. The report recommends broad-based growth so as to maximize synergies, employment generation, equity, and poverty reduction.

The overall message from KER 2010 is that Kenya has weathered the multiple shocks that hit the economy in 2008/09. Going forward, the main challenge is to adjust economic policies so as to foster macroeconomic stability, growth, and competitiveness without ignoring social and political reforms that are fundamental for national stability and cohesion.

Dr. Moses M. Ikiara
Executive Director
KIPPRA

Prof. Agnes W. Mwang'ombe
Chair, Board of Directors
KIPPRA

Abbreviations and Acronyms

ACP-EU	African Caribbean Pacific-European Union
AGOA	African Growth and Opportunity Act
AIA	Appropriations-in-Aid
AOA	Agreement on Agriculture
APD	Air Passenger Duty
APR	Annual Progress Review
ARD	Agriculture and Rural Development Strategy
ARVs	Anti-Retrovirals
ASALs	Arid and Semi-Arid Lands
ASDS	Agricultural Sector Development Strategy
ATC	Agreement on Textiles and Clothing
ATMs	Automated Teller Machines
AU	African Union
BCBS	Basel Committee on Banking Supervision
BOD	Burden of Disease
BOPA	Budget Outlook Paper
BPO	Business Process Outsourcing
BRRU	Business Regulatory Reform Unit
BSP	Budget Strategy Paper
CBI	Cross Border Initiative
CBK	Central Bank of Kenya
CDF	Constituency Development Fund
CDMA	Code Division Multiple Access
COMESA	Common Market for Eastern and Southern Africa
CAADP	Comprehensive African Agricultural Development Programme
CPI	Consumer Price Index
CPIA	Country Policy and Institutional Assessment
DAMERs	District Annual Monitoring and Evaluation Reports
DCEC	Directorate on Corruption and Economic Crimes
DMSED	Department of Micro and Small Enterprise Development
EAC	East African Community
ECDE	Early Childhood Development and Education
EDF	European Development Fund

EEZ	Exclusive Economic Zone
EFA	Education for All
EIA	Environmental Impact Assessment
EMCA	Environmental Management and Coordination Act
ERS	Economic Recovery Strategy
ERSWEC	Economic Recovery Strategy for Wealth and Employment Creation
ESF	Exogenous Shock Facility
EU	European Union
EEZ	Exclusive Economic Zone
FDI	Foreign Direct Investment
FDSE	Free Day Secondary Education
FEPA	Framework Agreement on Economic Partnership Agreement
FGM	Female Genital Mutilation
FPE	Free Primary Education
FSB	Financial Stability Board
FTA	Free Trade Area
GATS	General Agreement on Trade in Services
GATT	General Agreement on Tariffs and Trade
GDC	Geothermal Development Company
GDP	Gross Domestic Product
GER	Gross Enrolment Rate
GPI	Gender Parity Index
GSP	Generalized System of Preferences
HDI	Human Development Index
HTDZ	High Technology Development Zone
IASB	International Accounting Standards Board
IATA	International Air Transport Association
IBA	Important Birds Area
ICEA	Insurance Company of East Africa
ICT	Information and Communication Technology
IFMIS	Integrated Financial Management Information System
IGAD	Inter-governmental Authority on Development
IMF	International Monetary Fund
IPPD	Integrated Personnel Payroll Database
IPR	Intellectual Property Protection
IRI	Interactive Radio Instructions
ITN	Insecticide Treated Net
JKUATES	Jomo Kenyatta University of Agriculture and Technology Enterprises
KACC	Kenya Anti-Corruption Commission
KDHS	Kenya Demographic and Health Survey
KKV	*Kazi kwa Vijana*
KDN	Kenya Data Networks
KEBS	Kenya Bureau of Standards
KENET	Kenya Education Network Trust
KeNHA	Kenya National Highways Authority
KER	Kenya Economic Report
KeRRA	Kenya Rural Roads Authority
KESSP	Kenya Education Sector Support Programme
KETRACO	Kenya Electricity Transmission Company
KID	Kenyan Industrial Development
KIHBS	Kenya Integrated Household Budget Survey
KIPI	Kenya Industrial Property Institute

KIRDI	Kenya Industrial Research and Development Institute
KNBS	Kenya National Bureau of Statistics
KNFJKA	Kenya National Federation of Jua Kali Associations
KPOSB	Kenya Post Office Savings Bank
KRB	Kenya Roads Board
KTCIP	Kenya Transparency and Communications Infrastructure Project
KTMM	KIPPRA-Treasury Macro Model
KURA	Kenya Urban Roads Authority
KWS	Kenya Wildlife Service
LAs	Local Authorities
LATF	Local Authorities Transfer Fund
LIMS	Labour Information Management Systems (LIMS)
LPI	Logistics Performance Index
MAMERs	Ministerial Annual Monitoring and Evaluation Reports
MAPSKID	Master Plan Study for Kenyan Industrial Development
MDGs	Millennium Development Goals
MEAs	Multi-lateral Environmental Agreements
MFIs	Micro Finance Institutions
MPER	Ministerial Public Expenditure Review
MSEF	Micro and Small Enterprises Federation
MSEs	Micro and Small Enterprises
MTEF	Medium Term Expenditure Framework
MTP	Medium Term Plan
NCCRS	National Climate Change Response Strategy
NCDs	Non-Communicable Diseases
NCWTO	National Committee on WTO
NER	Net Enrolment Rate
NES	National Exports Strategy
New KCC	New Kenya Cooperative Creameries
NGOs	Non-Governmental Organizations
NIMES	National Integrated Monitoring and Evaluation System
NMIMT	Non-motorized and Intermediate Means of Transport
NPLs	Non-Performing Loans
NRI	Networked Readiness Index
NSE	Nairobi Stock Exchange
NSIC	National Small Industries Corporation
OBLS	Online Business License Service
ODA	Official Development Assistance
OOP	Out of Pocket
OSS	One-Stop Shops
PCCB	Prevention and Combating of Corruption Bureau
PCSC	Public Complaints Standing Committee
PEGR	Poverty Equivalent Growth Rate
PER	Public Expenditure Review
PPA	Power Purchase Agreement
PPOA	Public Procurement Oversight Authority
PPP	Public-Private Partnership
PSDS	Private Sector Development Strategy
PTA	Preferential Trade Area
PTR	Pupil-Teacher Ratio
R&D	Research and Development
REDD	Reduced Emissions from Deforestation and Degradation

RMLF	Road Maintenance Levy Fund
RSIP	Road Sector Investment Programme
SACCOs	Savings and Credit Cooperative Organizations
SAP	Structural Adjustment Programme
SBP	Single Business Permit
SEDA	Small Enterprise Development Agency
SNE	Special Needs Education
SRA	Strategy for Revitalizing Agriculture
SSA	Sub-Sahara Africa
T&T	Travel and Tourism
TB	Tuberculosis
TBA	Traditional Birth Attendants
TIVET	Technical Industrial Vocational Entrepreneurship and Training
TOT	Turnover Tax
TRIPS	Trade Related Intellectual Property Rights
TTCI	Travel and Tourism Competitiveness Index
TTCs	Teacher Training Colleges
TTRI	Trade Tariff Restrictive Index
UNWTO	United Nations World Tourism Organization
UPE	Universal Primary Education
WEF	World Economic Forum
WHO	World Health Organization
YBI	Youth Business International
YEDF	Youth Enterprise Development Fund

Executive Summary

Macroeconomic Performance

The Kenyan economy has weathered the multiple shocks of 2008/09, namely: post-election violence, the global financial crisis, prolonged drought, and high fuel and food prices. The economy is expected to grow by about 5.2 per cent in 2010 up from 1.6 per cent in 2008 and 2.6 per cent in 2009. In 2008, all the major sectors of the economy recorded declining growth, with agriculture and forestry, and hotels and restaurants shrinking by 5.1 per cent and 36.1 per cent, respectively. Real per capita Gross Domestic Product (GDP) declined from Ksh 36,000 in 2007 to Ksh 35,611 in 2008. Recovery in 2009 was supported by improved growth in the tourism sector, with hotel and restaurants registering 42.8 per cent growth. The transport and communication sector registered 6.4 per cent growth compared to 3.1 per cent in 2008. The contraction in the agriculture sector has a drag on growth. This calls for increased investment and reform of the sector to reduce vulnerabilities related to rain-fed agriculture and to enhance productivity.

Inflation declined from about 16 per cent in 2008 to 6.6 per cent in October 2009 and dropped further to below 5.0 per cent in June 2010. This resulted from a change in the methodology of estimating the consumer price index, revision of the basket of goods used in the computation, and a decline in the general price level supported by a prudent monetary policy. The arithmetic mean methodology has an upward bias and had consistently portrayed Kenya as a high-cost investment destination. The new method is in line with international best practice, and with sound macroeconomic management. There is need to revise monetary policy programming to reflect the new inflation.

Analysis of growth in aggregate demand shows that private consumption is the key driver of growth. However, the strong bias towards consumption expenditure relative to investment is reflected in low savings rate and is a challenge for long term growth. The real rate of investment has been increasing slowly but steadily. Kenya's real rate of investment reached 24.0 per cent in 2009. Public investment rate has grown steadily from about 3.4 per cent in 2003 to an estimated 6.4 per cent in 2009, but is still lower than the medium term target of 9.7 per cent. Real private investment as a share of GDP increased from about 16.6 per cent in 2006 to about 17.3 per cent in 2007, and further increased to 18.6 per cent in 2008 before falling to 17.7 per cent in 2009. The medium term target is 22.9 per cent. Kenya's growth remains highly import-dependent. Apart from the need to maintain a competitive exchange rate regime and improve the business environment to

support exports, it is important for the private sector to identify and exploit opportunities for import substitution.

In 2009, domestic savings stood at only 11.1 per cent of GDP, which is far below the medium term target of 17.4 per cent of GDP and much lower than investment rate. Public savings have largely remained negative, while private savings formed the bulk of total domestic savings. Increased efficiency in public expenditure can help reduce the existing savings-investment gap.

The slow growth in 2008/09 led to a total revenue collection of only Ksh 455.8 billion against the target of Ksh 463.8 billion. The Appropriation-in-Aid (AIA) registered an under-collection of Ksh 15 billion. However, there was slow implementation of the budget. The cumulative total expenditure as at February 2010 was Ksh 440 billion, compared to the target of 505.6 billion. Thus the overall fiscal deficit as a percentage of GDP stood at 4.0 per cent compared to the target of 6.1 per cent. The need to allocate resources for implementation of the new constitution, and deepen government financial management reforms cannot be over-emphasized. These reforms will enhance aggregate fiscal discipline, strategic allocation of resources and achievement of value for money in the implementation of government programmes.

The country continues to experience a rapidly growing labour force with a high participation rate relative to the job creation rate. Consequently, unemployment remains a major challenge. Additionally, nine out of every ten jobs are created in the informal sector. The formal sector lags behind in terms of job creation. The government has undertaken various measures to address the unemployment problem, including *Kazi Kwa Vijana*, Women Enterprise Fund, and the Youth Enterprise Development Fund (YEDF) programme. These measures need to be supported by innovative measures such as strong labour market information monitoring systems, mentorship and counselling schemes, introduction of double-shift work schedules, and strengthening of educational and training systems to make more youth employable.

Health

The existence of a positive correlation between health and labour productivity means that the health sector is significant to the revival of the economy. The importance of the health sector is further revealed by the fact that 3 of the total 8 MDGs[1] are on health. The significance of the health sector in Kenya is demonstrated by the amount of resources that are channelled to it. For instance, the government budget allocation rose from 5.73 per cent in the fiscal year 2005/06 to 7.9 per cent in 2008/09. Despite this commendable effort, the increase still falls short of the target for the Abuja Declaration, which requires countries to spend 15 per cent of total government expenditure on health. Furthermore, there are indications of inefficiencies in the utilization of resources. Several studies show that output in the health sector can be increased by 30 per cent without necessarily increasing input.

The performance of the health system can be evaluated on the basis of health care service delivery and outcome measures such as the number of facilities available, health personnel per population, life expectancy, mortality rate and the disease burden. Such measures for Kenya remain low. This calls for efforts to increase the number of health personnel per cadre and improve on their distribution to enhance service delivery. Prevalence of HIV/AIDS, malaria, tuberculosis, respiratory and diarrhoea diseases; inadequate access to life-prolonging drugs; poor medical facilities (as well as low supply of human resources for health) exacerbate the situation.

In terms of health outcomes, the under-five mortality has remained above 100 per 1000 in sub-Saharan Africa (Kenya included) compared to less than 20 per 1000 in some Asian countries. Regional comparison within Kenya indicates that infant

mortality is conspicuously higher in some regions such as Nyanza, Western and Coast.

Education

Despite the overall increase in primary education enrolment, regional disparities in school participation are still persistent across provinces, urban and rural areas. Children from North Eastern Province, urban informal settlements and those with special needs are at a systemic disadvantage in accessing education. Factors contributing to regional disparities in the primary and secondary school participation levels include long distances that children have to cover in order to get to school, especially in Arid and Semi-Arid Lands (ASALs), limited school infrastructure in overpopulated informal settlements in urban areas, indirect schooling costs and retrogressive socio-cultural factors. Some factors constraining attainment of Education for All (EFA) and MDG targets on gender parity include insecure school environment and inadequate sanitation in some schools, which disproportionately affect girls' participation in schooling and retention.

Some of the children in marginalized areas attend non-formal schools. However, most of these institutions (except a few that have been registered with the Ministry of Education and meet the set criteria) do not receive public support in terms of Free Primary Education (FPE) grants for teaching and learning materials, yet they form the main option for accessing education in the disadvantaged areas. On the other hand, ECDE, secondary and university education access rates are still low.

In 2007, about 61.5 per cent of adults attained the minimum literacy level, while only 29.6 per cent of adults had attained the desired mastery in literacy competency. Thus, over 70 per cent of Kenya's adult population have not attained the desired mastery of literacy competency. Average years for schooling in Kenya are estimated at 8.4 years and the education index is relatively low.

High unemployment has been associated with weak linkages between education and training, on one hand, and industry, on the other. There are either no or inadequate employment counselling interventions at tertiary education institutions, and the labour information system has not been developed. Thus, outcomes in the education sector can be improved by sustained investment in skills training, as well as addressing knowledge gaps, linking education and training to labour market needs, and enhancing quality of education at all levels.

Governance

The Government of Kenya is aware of the importance of improving governance by implementing anti-corruption reforms. From 2003, the government introduced a number of anti-corruption reforms. The enactment of the Anti-Corruption and Economic Crimes Act (2003) to address issues of economic crime was one of the major reforms carried out. Also, in Vision 2030, the government indicates its commitment to undertake various governance reforms, including intensifying the anti-corruption programme through better investigation and prosecution.

Despite the reforms that have been introduced, governance indicators do not reveal much progress over the past seven years. According to the Corruption Perception Index, Kenya scores poorly. The Control of Corruption indicator shows that the perception of corruption has not improved, implying that corruption in Kenya still persists. Similarly, the Accountability and Corruption sub-index from the Mo Ibrahim Index of African Governance depicts deterioration of accountability and corruption in Kenya. Corruption has serious repercussions given that it impedes public service delivery and causes resource wastefullness.

Corruption is rampant in Kenya due to several reasons. Inefficient, bureaucratic and cumbersome systems or regulations, and institutional failures

that contribute to inefficiencies that in turn create opportunities for corruption. This weak institutional framework, coupled with high poverty rates, poor remuneration and greed encourage corruption.

To deal with corruption effectively, several measures are proposed, including: carrying out vulnerability assessments of various public institutions with the aim of identifying and repairing weak systems; reducing monopolies and official discretion; enhancing efficiency and transparency (which can be achieved by removing information asymmetries); introducing innovative ways of facilitating the sharing of information between the government and the general public; enhancing corruption investigative capacity (such as giving KACC prosecutorial powers); and legislating the Ombudsman office to enhance independence and effectiveness.

Agriculture

The agricultural sector plays a significant role in Kenya's economic development through provision of food, employment creation, raw materials for agro-industries, and export earnings. The sector contributes about 25 per cent of GDP and supports the livelihoods of about 80 per cent of the population. Crop production is concentrated in the high and medium rainfall areas, while livestock production is predominantly carried out in the arid and semi-arid lands. In addition, the country has vast inland and marine fisheries, and aquaculture (fish farming) is gaining significance.

The critical issues to be addressed in the agricultural sector include: increasing the scale of production, improving productivity, risk mitigation and value addition. To increase agricultural growth, focus should be on promoting efficient technologies, service delivery and supportive policy environment to enhance pro-poor growth. There is need to increase budgetary resources available to the agricultural sector from the current 4.3 per cent to 10 per cent, as agreed by the African Heads of State and Government in Maputo. However, departments in the agricultural sector must rationalize budgetary priorities to better serve national strategic interests to achieve food and nutritional security, create jobs, reduce inequality, and alleviate poverty. In addition to providing information and an enabling agribusiness environment, farmers and traders need to explore marketing options such as commodity hedging and futures markets in order to take advantage of income-earning opportunities in domestic and regional markets.

The main challenge in agro-processing and value addition initiatives is trade-offs between agro-industry development, poverty, and food security objectives. Therefore, a multifaceted approach that will involve increasing access to infrastructure in value-adding inputs, tools, equipment, and technology (and at the same time promoting supportive policies to private entrepreneurs and investors) is critical. Emphasis should be put on liberalization of cross-border trade in agricultural produce and products between partner states. The removal of restrictions on trade will reduce costs, thereby facilitating increased cross-border flow of agricultural commodities.

Manufacturing

Manufacturing activities, which constitute the greatest share of industrial production, accounted for about 10.0 per cent of GDP in 2009. Similarly, the sector contributed 13.3 per cent of the total formal employment.

The international competitiveness of Kenya's manufacturing sector is under intense pressure as industrialized countries increasingly become specialized in manufacturing of high-value and IT-based products. Review of countries with successful industrial development shows that these countries invested heavily in human resource development, have strong legal and institutional frameworks, and have adopted selective strategies and incentives for FDI and local investments.

There are constraints that hinder manufacturing competitiveness in Kenya. The manufacturing sector is still based on agro-processing and production of consumer products. Increasing value addition in agro-processing is naturally the starting point to improve the manufacturing sector, but the country should develop the capacity to produce intermediate goods for local industry, even if it is through import substitution.

Eastern Africa countries constitute the major market for Kenya's manufactured products, but these countries are rapidly widening their industrial establishments and their markets are getting more liberalized. This calls for market diversification as well as tackling supply-side constraints. The government should, for instance, provide incentives for private power production, increase investment in renewable sources of energy, improve urban planning and fast-track institutional reforms.

Further, Kenya should pursue an industry policy framework that strategically reflects the global trend and encompasses domestic economic objectives. Transformation of the manufacturing industry requires planning and implementation of well-defined strategies. The country must expedite the implementation of the industrial master plan, if the 2030 industrial goals are to be achieved. In the medium term, the country targets to increase contribution to GDP to 20 per cent and increase her regional market to 15 per cent (with an envisioned sector growth of 10%). These expectations underpin the need to prioritize the setting up of the earmarked flagship projects, particularly the industrial parks and the special economic zones. To facilitate effective implementation of the master plan, the government may consider setting up a small but highly skilled and resource-supported taskforce to work on industrial transformation.

Small businesses are a core component of the manufacturing sector but small-firm clusters remain locked in low-quality products and low-income markets. It is, therefore, imperative that the government should encourage sub-contracting and other forms of alliances between local firms and multinationals (e.g. through tax subsidies and training).

Financial Services

Through financial intermediation, the financial sector continues to play a key role in the economy. However, its performance in 2008 slowed down due to the rough business environment emanating from post-election violence and the global financial crisis. The sector's real growth declined to 2.7 per cent from 6.7 per cent in 2007. The sector's performance improved in 2009 with a 4.6 per cent growth rate. Several measures were instituted to enhance stability in the sector. These include the enactment of the Proceeds of Crime and Anti-Money Laundering Act 2009, and amendment of the Insurance Act. To increase financial access and lower costs, agent banking was introduced. Various reforms were initiated to boost investors' confidence in the stock market, including binding investment banks and stockbrokers to a code of ethics.

Although the banking sector realized growth in deposits and profitability, it continued to portray an oligopolistic market structure. Also, despite the diversification in products, majority of Kenyans still lack access to formal financial services and products. Efforts by the Monetary Policy Committee of the Central Bank of Kenya to reduce the cost of credit have not been very successful. The lending rates continued to be high, with deposit rates remaining low, implying a high interest rate spread. A weak judicial system (especially in the enforcement of contracts), lack of competitive price offering by banks, and high intermediation costs are some of the factors contributing to high lending rates. This high cost of credit impedes investment growth.

To infuse professionalism into the management of SACCOs, full implementation of the SACCO Act 2008 is required. The licensing of a deposit-taking micro finance institution was a key development in

the micro finance sector. The economy continues to experience a low penetration rate of insurance services mainly due to lack of product innovation in the sector.

To make the financial sector contribute effectively to the realization of Vision 2030 goals, there is need to expand access of financial services and also to reduce the cost of credit.

Trade

Trade has been identified in Vision 2030 as one of the key drivers towards industrialization and economic development in Kenya. Trade plays a significant role in growth and development through linkages with all the sectors of the economy by creating markets through which goods and services reach the consumer. Its role in creating employment, alleviating poverty and achieving desired economic growth is among the most promising paths of industrial development. Further, it provides micro, small and medium enterprises (MSMEs) with opportunities for accessing more favourable prices in international markets, thereby ensuring equitable income distribution. Evidence from developed and newly-industrialized countries shows that trade (both domestic and international) played a significant role in their industrialization process through export-led growth. Moreover, industrialization was made possible through the shifting from reliance on export of agricultural goods to manufactured goods. This subsequently led to increase in their share of world trade.

The trade sector in Kenya has five main components, namely: distribution and wholesale, retail and informal trade, international trade, trade in services, and electronic trade. Wholesale and retail trade form the largest component of domestic trade and provide more opportunities for employment. However, data unavailability impedes critical analysis of this sub-sector.

International trade (exports and imports) has experienced growth in the last decade, even though agricultural products remain predominant. However, this growth has not been favourable to Kenya, as the balance of trade deficit continues to rise. Imports to Kenya have generally outgrown exports. Kenya's leading export commodities are raw agricultural materials (with low world prices) while imports are largely industrial products, petroleum and machinery (with high and increasing world prices). Product and market diversification have remained low. For instance, the top five export products accounted for 46 per cent of total exports, while the top five import products accounted for 42 per cent of total imports. Available evidence shows that Kenya's export trade is greatly influenced by preferential treatment such as the EAC, COMESA, EU-EPAs, AGOA, IGAD, and the WTO. The largest share of Kenyan exports value is accounted for by countries in these different trade blocks. The global financial crisis experienced by the leading world economies indirectly affected Kenya's trade sector through a decline in demand for the exports, and also decline in remittances between 2008 and 2009.

The main challenges facing Kenya's export trade are high levels of export concentration and lack of diversification. There should be a coordinated policy action to shift the export structure towards exports of manufactured products. Another challenge relates to the many regional integration schemes that Kenya is committed to in terms of human capacity in trade negotiation and domestication. Although providing opportunities for employment, the wholesale and retail trade has not received adequate attention and suffers from lack of an appropriate regulatory framework, inefficient supply chain due to poor infrastructure, lack of adequate access to market information, and poor access to finance.

In order for the trade sector to play its leading role in development as well as employment creation, there is need to finalize the trade policy expected to provide a holistic guidance on all trade matters. There is also need for close coordination of bilateral,

regional and multilateral trade negotiations that Kenya is currently participating in. There is need to strengthen partnership with the private sector, especially in negotiating trade protocols and all other trade-related issues.

Micro and Small Enterprises

Kenya's public policy ascribes a significant role to the Micro and Small Enterprise (MSE) sector. Both Vision 2030 and the Medium Term Plan 2008-2012 underline the multiple roles of the sector in creating jobs, accelerating industrial diversification and expansion, ensuring equitable development, and reducing poverty. In 2008, there were an estimated 34,225 MSEs operating in the formal sector, accounting for 75.3 per cent of all establishments. These enterprises employed 832,818 persons (which represents 42.4% of total formal employment) and contributed only 12.2 per cent of the country's manufacturing value added. A 1999 MSE baseline survey shows that the sector's contribution to GDP was 18.4 per cent. These statistics show that whereas the sector absorbs large amounts of labour, the productivity and value addition capacity of the factors employed in the sector are very low. Four factors are considered critical, namely: micro-finance, technology, infrastructure, and the legal and regulatory environment.

In the area of micro finance, estimates show that about 25 per cent of the MSEs hold bank accounts while only 6 per cent of these enterprises have ever applied for a loan from a formal institution. There are various recent micro finance initiatives, including: the launch of the Mbao Pension Scheme in December 2009, licensing of the Credit Reference Bureau (Africa) Ltd in March 2010, and the establishment of a Revolving Fund in the 2010/2011 budget. In order to further improve access to finance by MSEs, efforts should be directed towards establishing a credit guarantee mechanism; licensing more credit reference bureaus to increase competition; deeping MFI outreach among economically, socially and geographically excluded groups; and diversifying MFI products.

In the area of technology, the following interventions have been proposed: encouraging Research and Development (R&D), facilitating sub-contracting, promoting technological transfer, instituting inter-firm linkages, and creating awareness of intellectual property rights with the aim of improving access to technology.

In the area of infrastructure, the recommendations include improving the provision of worksites, which could be aided by encouraging private sector participation; introducing innovative approaches to workspace allocation; and undertaking the necessary legal reforms especially on the laws and regulations governing allocation of workspace.

Lastly, on business regulation, it is recommended that the government deepens reforms relating to business licensing and registration, aimed at making both services more accessible to MSE players. The legal environment governing the operations of MSEs can be highly enhanced through enactment of the MSEs Bill.

Tourism

Tourism is an important sector of the Kenyan economy and operates within a liberalized economic environment characterized by partnership between the government and the private sector. While the public sector plays an important role in policy implementation and regulation, the private sector is mainly involved in the provision of accommodation, transport and entertainment through ownership and management of hotels, lodges, campsites and other tourist facilities, tour companies, and travel agents. The sector now receives close attention from government. However, the sector is highly sensitive to shocks in domestic and international environments.

Currently, the main problem with the tourism sector in Kenya is that it is not meeting the ambitious target set in terms of revenue receipts largely because of low expenditure in the country

by visitors and also due to the short length of stay by the visitors. The problem is caused by several factors. The most important include security and safety, health and hygiene, taxation issues, policy rules, and inappropriate regulations (there is need to pursue Bilateral Air Service Agreements and visa requirements), ICT infrastructure, availability of hotel rooms, airport density and infrastructure, inadequate number and quality of sports stadiums, quality of the environment, and human resources.

While the challenges are many, recommendations focus on the most constraining ones, that is: immediate review of taxation in the travel and tourism sector in consultation with industry players; setting ambitious targets in the areas of security and safety, and health and hygiene to be achieved within three years, and prioritization of the same in the MTEF; establishment of a standing taskforce to continuously identify areas with potential, such as World Heritage sites and development of new tourism products; targeting of specific source markets such as Australia and New Zealand from where visitors tend to stay longer and spend more in Kenya; and promotion of SMEs in the sector through dedicated funds and other incentives.

Infrastructure and Economic Services

Infrastructure is a key pillar of global competitiveness. It is a critical prerequisite for enhanced socio-economic development–a means to realizing the full potentialities inherent in labour abundance, regional markets and the rich natural resource endowments typical of many developing countries. Kenya aspires to be a country firmly interconnected through a network of roads, railways, ports, airports, waterways, and telecommunications infrastructure. The desired economic growth rate of 10 per cent requires huge energy supplies, which should be clean and sustainable.

All infrastructure sectors, namely: energy, transport, water and sanitation, ICT, and construction and housing facilitate economic activities and play a key role in employment creation and reduction of inequality. Transport and communication has been a leading contributor to Kenya's wealth. Its contribution to GDP has averaged about 10 per cent from 2006 to 2009. Electricity and water sectors have recorded low contributions to growth, mainly due to drought conditions experienced between 2006 and 2009. Electricity performance declined to 1.5 per cent in 2008 from 1.7 per cent in 2006, but increased to 2.4 per cent in 2009. National access to improved water sources increased from 41 per cent in 1990 to 57 per cent in 2007. However, there are outstanding disparities in the sector. Rural areas are still far behind urban areas in access to improved water sources by about 40 per cent. However, there has hardly any improvement in access to improved sanitation between 1990 and 2007, and with urban areas more adversely affected.

Much of the funding for infrastructure is from government and development partners. However, in the recent past, there has been increased private sector participation particularly in the ICT sector. Public recurrent and development expenditure on infrastructure increased from Ksh 13.6 billion and Ksh 11.7 billion in 2004/05, respectively, to over Ksh 40 billion and Ksh 90 billion, respectively, in 2009/10 financial year. This has mainly been driven by massive investment in the road and energy sub-sectors. The Road Sector Investment Programme (RSIP) has been put in place to support investment for the entire road network for the next 15 years.

It is evident that the demand for sustainable infrastructure and related economic services will continue to increase as the economy expands. Key recommendations for the sector include the need to increase sector resource allocations to about Ksh 250 billion in order to implement the flagship projects and other medium term infrastructure projects in areas such as water and waste management, road, energy, air and marine transport; review cost of construction inputs; and development of infrastructure master plans for the various regions of the country.

Environment and Natural Resources

Environment and natural resources play a critical role in the economy. However, they receive proportionately less attention in terms of budgetary allocation. In general, the state of environment in Kenya remains precarious and is faced with critical threats such as climate change. In the recent past, the government has renewed its efforts towards environmental conservation and natural resources as demonstrated through rehabilitation, restoration, and conservation of major water towers. There is need to continue mainstreaming environmental concerns in all government departments, and increasing funding to the sector.

Medium Term Prospects

The medium term prospects for the Kenyan economy are largely positive. The economy was hit by multiple shocks in 2008, thereby registering a growth of 1.6 per cent down from 7.0 per cent in 2007. In 2009, the economy was on the path to recovery and registered a growth of 2.6 per cent. The growth of the economy is estimated to accelerate further to about 5.2 per cent in 2010. In the medium term, the economy is projected to grow at 6.6 per cent in 2011, 7.6 per cent in 2012, and 8.9 per cent in 2013, respectively. This recovery is pegged on a favourable international environment, effective implementation of the medium term policy agenda, and favourable weather conditions. International oil prices are also expected to remain stable in the medium term. Under this scenario, economic growth is expected to surpass the pre-crisis level by 2012.

The positive growth is expected to be supported by improved rate of investment, export growth, stable and low interest rates, and low inflation levels. Agricultural growth is expected to be boosted further with increased investment in irrigation. Strong demand will support the industrial sector, and it is expected that tourism will benefit from a favourable global environment.

However, the positive medium term prospects are subject to various challenges and uncertainties, which relate to weather conditions, slippages in implementation of planned reforms, high international oil prices, political development and slow recovery of the global economy. Policy makers will need to adjust economic policies appropriately to respond to any exogenous shocks and remain fully committed to the reform agenda if the projected growth is to be achieved.

Enhancing Sectoral Contribution Towards Reducing Poverty, Unemployment and Inequality

Despite four decades of anti-poverty programmes and government spending, poverty and unemployment are still widespread in Kenya. Inequality also remains a major challenge and manifests itself in different forms. These include: unequal distribution of wealth and income, unequal access to economic and social goods and services, poorly remunerated jobs for the majority of the population, and exclusion of some social groups from participation in social and political processes and other life choices. According to the Kenya Integrated Household Budget Survey (KIHBS) 2005/06, the lowest 10 per cent of Kenyan households in rural areas control only 1.63 per cent of total expenditure, while the top 10 per cent control approximately 36 per cent.

The outcomes of efforts towards poverty reduction depend on: (i) the magnitude of economic growth; the larger the growth, the greater the reduction of poverty; and (ii) changes in inequality accompanying the growth process–an increase in inequality reduces the impact of growth on poverty reduction. This implies that a prudent poverty reduction strategy would have to focus on both the level of growth and the pattern of that growth. In this regard, sectoral composition of growth, the translation of growth into increases in personal income, and progressive changes in the distribution of personal income are important dimensions of any growth or poverty reduction strategy.

Analysis of historical growth episodes reveals that for the period 1994-1997, there was a large redistribution effect that dominated the growth effect, resulting in an increase in poverty by 8.8 percentage points (from 43.2% in 1994 to 52.0% in 1997). The growth effect during the 1997-2005 period was larger in magnitude than the redistribution effect, and therefore poverty declined. Overall, the large redistribution effects in both periods meant that the potential for growth in reducing poverty could not be fully realized.

The different sectors of the economy may contribute to job creation and poverty reduction through various channels, including forward and backward linkages with other sectors, direct sector output growth, and the techniques of production employed in the sector.

The achievement of Vision 2030 goals is largely dependent on creation of equitable growth that benefits all citizens. Our analysis reveals that growth impulses from different sectors of the economy have different impacts on income and employment. However, on the overall, a stimulus in most sectors yields proportionately more male than female labour employment.

In general, it is the rural middle-skilled workers who seem to benefit most from a stimulus targeted to the whole economy. This may partly explain the large effect of agriculture on males and females, with primary school level of education. Very few sectors generate substantial labour demand for unskilled workers. According to KIHBS (2005/06), poverty is concentrated in households with unskilled labour. The most vulnerable are those in lowlands in the rural areas. In the midlands, the sectors that can be stimulated to increase employment of the unskilled include financial services, communication, construction, textiles and footwear, and to some extent transport and rice production. In the highlands, it is a stimulus in public services that would increase employment for unskilled workers the most. In the metropolitan, a stimulus in hotel and restaurants and trade activities generates substantial share of labour demand for unskilled informal labour.

Our analysis reveals a relatively skewed distribution of additional employment arising from an increase in output in most of the sectors. Since few sectors generate additional employment for people with low skills/education, addressing unemployment for such categories, and thus poverty, may require additional measures other than policies that stimulate production of goods and services. In the short term, social protection policies that promote re-distribution would complement growth promotion policies. In the medium and long term, enhancement of skill development programmes is necessary for tackling unemployment. Also, noting that sub-sectors with highest labour effects are agricultural-based, there is need for increased investments in irrigation to reduce the vulnerability of these sub-sectors to rainfall shortfalls and variability.

Relative income distribution by sector shows a very low share of value added accruing to rural unskilled labour (5.7%) in all sectors. The low share of value added for the rural unskilled labour contrasts with that of unskilled labour in the urban areas. The latter category generates a quarter (24.9%) of labour income in the economy, second only to rural skilled labour in the informal sector (26.5%). This may suggest that lack of skills is what may constrain labour earnings in rural areas and may be the push factor for rural-urban migration. The economic potential of rural areas can, therefore, be enhanced by investing more in skill development. About 70 per cent of the agricultural labour income accrues to rural informal skilled labour.

Moreover, the distribution of income is quite skewed. On average, about 44 per cent of an increase in household income due to increase in output in all sectors accrues to the top urban quintile of consumption. Agriculture sub-sectors yield better income distribution, with the fifth urban quintile receiving, on average, 38 per cent of total income. Given this skewed distribution of an increase in

additional income arising from increase in output, addressing poverty in both rural and urban areas may require additional measures other than policies that stimulate production of goods and services. This again calls for social protection policies that promote re-distribution to complement growth promotion policies.

The analysis reveals that the agricultural sub-sectors have the highest effect on employment, as the sector has the highest proportion of its value added as labour income. However, agricultural growth has been very slow since 2007. This is because of its heavy dependence on rainfall. The critical elements for the sector to achieve its potential are irrigation, effectiveness in technological generation and adoption, public investment in rural roads to improve agricultural markets (and therefore raise the efficiency of linkages with non-farm sectors), education, and a shift to higher value crops. The analysis reveals that Kenya needs to focus on both stimulating economic growth and addressing income distribution issues to support poverty reduction and reduce income inequality.

Endnotes

1 MDG 4: *Reduce child mortality* - Reduce by two-thirds, between 1990 and 2015, the under-5 mortality rate

MDG 5: *Improve material health* - Reduce by three quarters, between 1990 and 2015, the maternal mortality rate

MDG 6: *Combat HIV/AIDS, Malaria and Other Diseases* - Halve by 2015 the spread of HIV/AIDS reversed and the others halted

PART I

Macroenomic and Socio-economic Performance

This part provides an analysis of the recent macroeconomic and socio-economic performance in Kenya. It reviews the achievements and challenges, and provides policy recommendations aimed at improving economic growth and reducing poverty. Besides the chapter on macroeconomic performance, there are chapters on health, education and governance. These chapters provide an in-depth analysis and identify the main challenges in these sectors, and make policy recommendations which, if well implemented, would improve the quality of life of citizens.

1

Macroeconomic Performance

Introduction

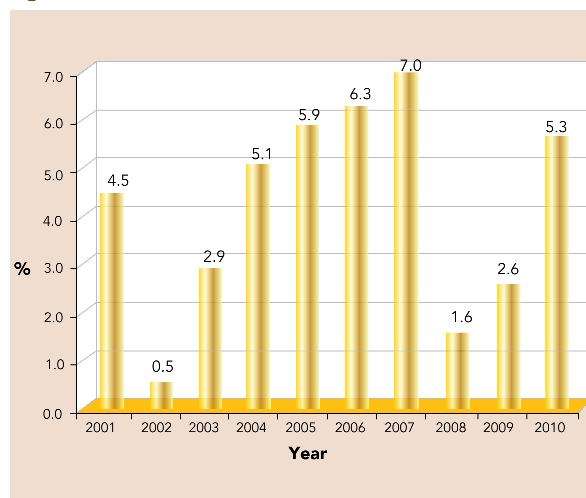
This chapter analyzes Kenya's recent macro-economic performance relative to selected comparator countries and those that Kenya aspires to catch up with. It further identifies challenges and required actions to ensure increased economic growth and macroeconomic stability. The chapter analyzes key aspects of the macro economy including economic growth, inflation and monetary policy, investment and savings, fiscal policy performance, and public financial management as well as employment and labour market developments.

Kenya's Economic Growth

The economy is showing signs of continued recovery from the difficulties encountered in 2008/09. The economic slowdown in 2008, which was caused by a combination of factors including the post-election violence in early 2008, the global financial crisis, drought and high fuel and food prices, restrained growth to 1.6 per cent compared to 7.0 per cent growth rate in 2007. However, there was improved performance of 2.6 per cent growth in 2009 (Figure 1.1), which was attributed in part to the fiscal stimulus package that was put in place by the government, following the global financial crisis, and the political stability after the post-election violence.

The slowdown in economic growth in 2008/09 was higher than population growth, thereby contributing to a contraction in real per capita incomes and an increase in poverty levels. Per capita incomes grew by about 3.7 per cent in 2006/07, but declined by about 1 per cent in 2008/09. The proportion of poor people is estimated to have increased to 48.8 per cent up from 45.9 per cent recorded in 2005/06. In this regard, the slowdown had the impact of reversing most of the gains that had been made in enhancing overall standards of living.

Figure 1.1: Growth in GDP



Source: Kenya National Bureau of Statistics (2010), Economic Survey

At the sectoral level, growth was supported by improved growth in the tourism sector, with the hotel and restaurants sector recording a growth of 42.8 per cent in 2009, compared to a decline of 5.1 per cent in 2008. Manufacturing, however, grew at a slower pace of 2.0 per cent in 2009 compared to 3.5 per cent in 2008. Agriculture and forestry, on the other hand, recorded a contraction of 2.6 per cent in 2009 compared to a contraction of 4.1 per cent in 2008. This continued contraction in agricultural growth was attributed to adverse weather conditions, structural constraints, and depressed demand for horticultural products. The transport and communications sector grew by 6.4 per cent compared to 3.1 per cent in 2008.

Kenya, like many other countries, responded to the global financial crisis by putting in place an economic stimulus package (about Ksh 22 billion). To mitigate the other shocks that slowed down economic growth in 2008, additional measures were designed that focused on areas such as political governance reforms to address the underlying causes of the 2008 post-election violence. These include the constitutional review, electoral reforms and measures aimed at enhancing national cohesion. To address issues related to the perennial drought, the Ministry of Agriculture's budget was increased in the 2008/09 budget to finance irrigated agriculture. This increase was again factored in the 2009/10 budget to build on the gains so far achieved in the agricultural sector. Investment in the energy sector was also stepped up to ensure that the country does not experience shortages and rationing as experienced in 2008/09. Effective implementation of the above policy package is critical for the stability and long-term sustainable growth of the country as envisaged in Vision 2030.

During the year 2009, Kenya continued to face a number of challenges ranging from low investor confidence, food insecurity, unemployment, and the need to enhance governance reforms and sustain macroeconomic stability. However, the passing of the new constitution in August 2010 is expected to inject a new sense of confidence in the political environment, with positive externalities to the economy as a whole.

Sources of Growth

The sectors that contribute significantly to the growth of the Kenyan economy performed dismally in 2009, though marginally stronger than in 2008. Continued contraction in agricultural sector growth dragged overall economic performance by 67 per cent and 21 per cent in 2008 and 2009, respectively. The industrial sector[1] performed poorly in 2009. Its contribution to GDP growth declined from 47 per cent in 2008 to 22 per cent in 2009. The manufacturing sub-sector grew by 2.2 per cent in 2009 compared to 3.6 per cent in 2008. Despite overall weak performance, the construction sub-sector's share in GDP is about 4 per cent, and accounts for about 17.5 per cent of the growth registered in 2009 (Table 1.1).

The construction sub-sector has benefitted immensely from increased investment in infrastructure, and residential and commercial buildings. The weak overall performance in the agricultural and industrial sectors in 2009 is attributed to the 'carry-over' effects of the 2008 post-election violence and supply side factors, including drought and high production costs. Drought conditions contributed to contraction in water and electricity supply in 2009. Industrial transformation has been hampered by the failure to upgrade to the production of intermediate goods. The manufacturing sector is still largely based on agro-processing and production of consumer goods (Chapter 6).

Table 1.1: Sector contribution to GDP growth (%)

	2008	2009
Agriculture, forestry and fishing	-67	-21
Industry	47	22
Services	80	77
Taxes less subsidies on products	40	23

Source: KIPPRA Estimates based on Government of Kenya (2010), Economic Survey

Kenya's economic structure is such that the services sector is the largest and continues to play a major role in Kenya's growth. The main sub-sectors that contributed most to GDP growth in 2009 were transport and communications sector, which contributed 29.5 per cent to GDP growth and, hotels and restaurants sector, 16.2 per cent of growth in 2009. The contribution of hotels and restaurants showed a major bounce-back following a contraction of about 33.3 per cent in 2008. Tourism was largely affected by the post-election violence but various factors such as security and safety, infrastructure, business environment and the need to develop human, cultural and natural resources continues to undermine the sector (Chapter 10).

Table 1.2: Drivers of growth–aggregate demand components (in real terms)

	Growth rates		Shares of GDP (%)	
	2008	2009	2008	2009
Exports of goods and services	7.5	-7	27.7	25.1
Imports of goods and services	6.6	-0.2	40.7	39.6
Government consumption	2.3	5.5	12.7	13.1
Private consumption	-1.3	3.8	75.2	76.0
Investment	9.5	0.6	23.8	24.1

Source: KIPPRA Estimates based on KTMM

Analysis of growth in aggregate demand shows that private consumption is the key driver of growth (Figure 1.2). About three quarters of expenditure on total output is consumption spending by the household sector, and the largest component of household expenditure (46%) is on food and beverages. The continued strong bias towards consumption expenditure relative to investment is reflected in low savings rate, and this is a challenge for long term growth and stability. As will be discussed shortly, the current levels of savings and investment fall far short of the medium-term targets.

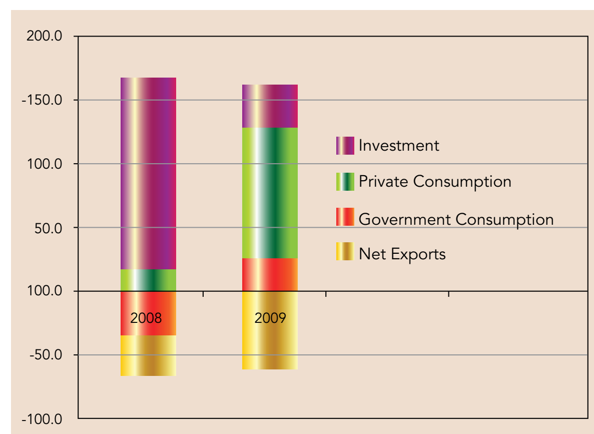
In 2009, there was a slowdown in growth in the main components of expenditure on GDP, except private consumption expenditure and government final consumption expenditure, which grew by 5.5

It is important that Kenya maintains a competitive exchange rate, exploits opportunities for import substitution, and undertakes bold measures to enhance Kenya's export performance, including the planned Special Economic Zones.

per cent and 3.8 per cent, respectively. Growth in gross fixed capital formation reduced to 0.6 per cent in 2009 down from 9.5 per cent in 2008.

Net export of goods and services (the difference between imports and exports) has continued to be negative in the recent past, reflecting a high level of imports relative to our level of exports. Net exports show the difference between foreign spending on Kenyan goods and Kenyan spending on foreign goods. Services accounted for about 38.8 per cent of total exports. In 2009, real exports of goods and services declined by 7.0 per cent compared to a contraction of 0.2 per cent in imports of goods and services. Consequently, Kenya's growth has also been associated with a high current account

Figure 1.2: Source of GDP growth from aggregate demand components



Source: Based on KIPPRA Estimates

deficit (Table 1.2). Similarly, Kenya's share in world trade has stagnated at about 0.05 per cent. The key challenges facing the trade sector are discussed in Chapter 8, and include lack of coherent trade policy and weaknesses in the business environment. It is important that Kenya maintains a competitive exchange rate, exploits opportunities for import substitution, and undertakes bold measures to enhance Kenya's export performance, including the planned Special Economic Zones.

Kenya should, therefore, strive to maintain sustainable external deficits. This means that the country needs to generate enough foreign exchange reserves and enhance its capacity to borrow in order to finance imports required to spur growth. The invisible account of the external current account registered a surplus mainly supported by tourism receipts (discussed in Chapter 10) and current transfers, mainly remittances (to be discussed shortly). Another important item in Kenya's balance of payments is foreign direct investment, which is expected to complement local investment.

Remittances

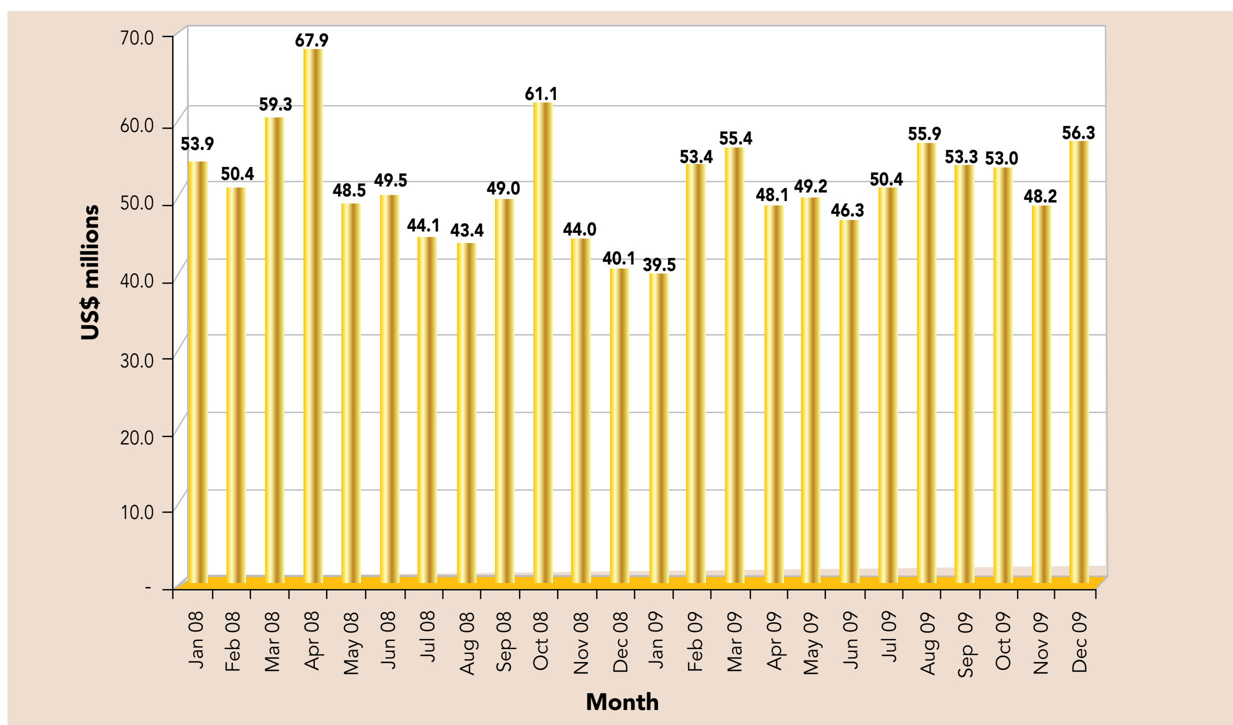
During the period under review, Kenya has continued to experience fluctuating monthly external remittances. The highest was US$ 67.9 millions in April 2008 and the lowest was US$ 39.5 millions in January 2009 as shown in Figure 1.3. However, remittances increased to US$ 56.3 million in December 2009 before declining to US$ 45 million in January 2010. The total external remittances in 2009 declined to US$ 609 million compared to US$ 611 million in 2008. This is largely explained by sluggish global economic performance arising from the global financial crisis.

Foreign Direct Investment (FDI)

In 2008/09, Kenya performed poorly in terms of attracting foreign direct investment. Table 1.3 compares Kenya with some other countries in terms of FDI.

FDI inflows into Kenya recorded a decline of 86.8 per cent. Kenya underperformed in stock of FDI

Figure 1.3: Monthly foreign remittances (US$ millions)



Source: Central Bank of Kenya (various)

Table 1.3: FDI inflows (US$ million)

Country/Year	2007	2008	% change
Korea Rep.	2,628	7,603	189.3
Ghana	855	2,120	148.0
India	25,127	41,554	65.4
Nigeria	12,454	20,279	62.8
South Africa	5,687	9,009	58.4
Seychelles	238	364	52.9
China	83,521	108,312	29.7
Tanzania	647	744	15.0
Indonesia	6,928	7,919	14.3
Mauritius	339	383	13.0
Uganda	733	787	7.4
Malaysia	8,401	8,053	-4.1
Thailand	11,238	10,091	-10.2
Egypt	11,578	9,495	-18.0
Singapore	31,550	22,725	-28.0
Taiwan	7,769	5,432	-30.1
Kenya	**728**	**96**	**-86.8**

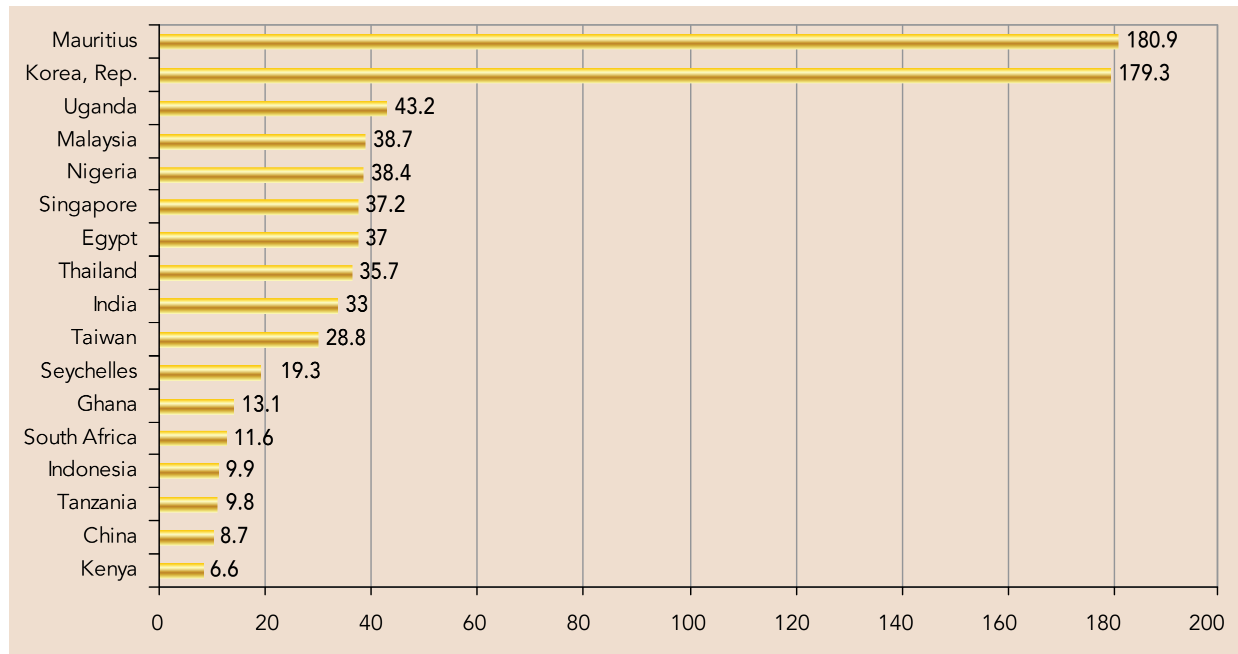
Source: UNCTAD (2009), World Investment Report

inflows as a ratio of gross domestic product for the countries in Table 1.3.

Inflation and Monetary Policy

Low and stable inflation has been recorded in the recent past. This is explained by a general decline in the overall price level following improved agricultural production and adoption of a new methodology in the measurement of the consumer price index. Since October 2009, the country adopted an aggregation method based on the geometric mean in line with the best practice among statistical agencies. The earlier methodology based on arithmetic mean had an upward bias and, therefore, overstated Kenya's inflation. For instance, based on the new method, the inflation rate for October 2009 was estimated at 6.6 per cent compared to 16 per cent based on the arithmetic mean aggregation.

Figure 1.4: FDI stock as a percentage of GDP, 2008



Source: UNCTAD (2009), World Investment Report

The Global Financial Crisis and the Kenyan Economy

The Global Financial Crisis is attributed to the sub-prime mortgage market in the United States of America. Mortgage lenders relaxed their lending conditions and gave loans to borrowers whose credit-worthiness was not guaranteed (sub-prime lending). When the housing bubble burst, the sub-prime borrowers were not able to service their loans. Due to global financial and trade interdependencies, the crisis was rapidly transmitted across the globe, destabilizing financial markets and the banking system and eventually the macro economy, especially growth and employment. In most developing countries, the effects were felt through reduced remittances, less capital inflows and reduced trade. Most countries implemented fiscal and monetary stimulus packages to counter the slowdown in production and reduced aggregate demand brought about by the global economic crisis.

At the peak of the financial crisis in 2008, Kenya was emerging from multiple shocks, namely the post-election violence, prolonged drought and high energy and food prices. The economy recorded 1.6 per cent economic growth in 2008 down from 7.0 per cent recorded in 2007. The Kenya shilling depreciated by about 15.6 per cent between July 2008 and January 2009, mainly on account of a strong dollar and weak external position. The Kenyan authorities responded to the global financial crisis by instituting a counter-cyclical fiscal and monetary stimulus. On the fiscal side, the budget for 2009/10 had a built-in expenditure of about Ksh 22 billion. By January 2010, the Central Bank of Kenya lowered the cash ratio from 6 per cent to 5 per cent and the Central Bank Rate from a high of 9 per cent to 7 per cent. In June 2009, the country received about US$ 200 million from the Exogenous Shock Facility (ESF) of the International Monetary Fund (IMF) to help recover from the impact of higher food and international fuel and fertilizer costs and slowdown in the external demand caused by the global financial crisis.

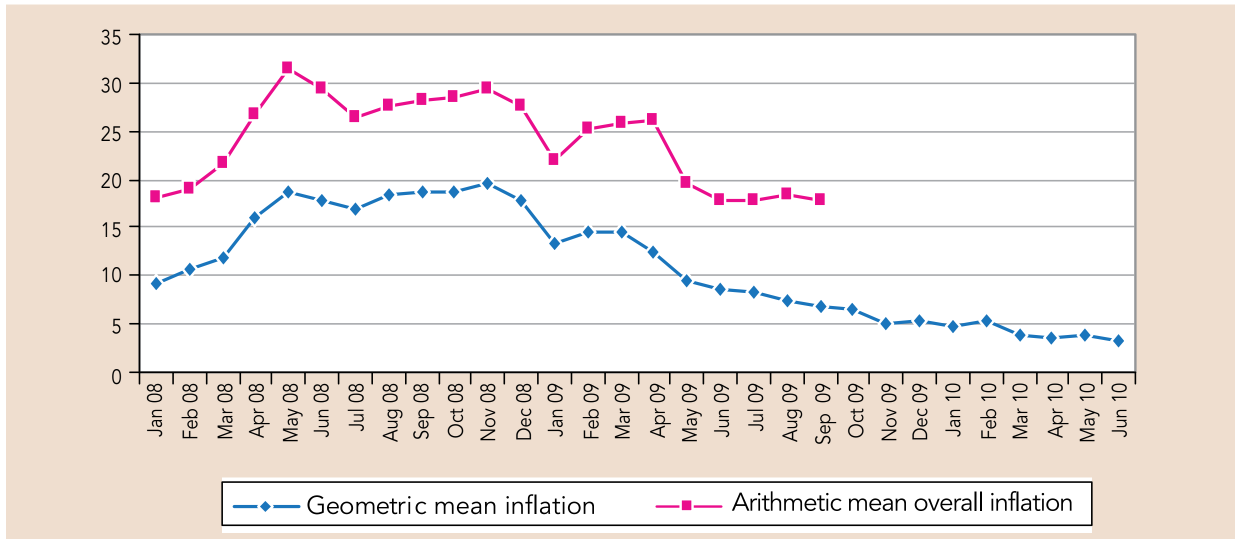
Although the global economy is showing signs of recovery, many analysts contend that the recovery is still very fragile. It is, therefore, important that the government continues with the initiatives to boost domestic demand and ensure that the economy is on a steady path to recovery. The slow down in 2008 was triggered by the political crisis. Therefore, political governance reforms should remain a critical component of the reform package. On the international scene, G-20 leaders mandated the international regulatory agencies and standard-setters, including the Basel Committee on Banking Supervision (BCBS), Financial Stability Board (FSB) and International Accounting Standards Board (IASB) to take active part in designing a global financial regulatory framework. It is important that Monetary Authorities follow closely these developments. In addition, it is advisable that the Central Bank targets to increase foreign reserves to 6 months import cover, consistent with the East African Community agreement and as a buffer.

The consumer basket has also been updated to reflect current consumption patterns, and includes such items as mobile phones, unpacked fresh milk, arrowroots, pork, *wimbi* flour, *njahi (dolichos sp.)*, capsicum (*pilipili hoho*), camel meat, mineral water, laboratory tests, optician services, parking charges, *boda-boda* fares, cell phone airtime, internet costs, school transport and laptops. The new basket comprises 234 commodities compared to the earlier basket of 216. The new basket is based on the Kenya Integrated Household Budget Survey (KIHBS) of 2005/06.

The weights for commodities in the basket have also been revised to be consistent with the share of expenditures to total household consumption expenditures based on the 2005/06 KIHBS (Table

Food inflation is still an important component of Kenya's overall inflation. In this regard, ensuring enhanced food production and productivity will support price stability. Energy prices have also played an important role in inducing inflationary pressures. Development of alternative energy sources may be supportive of macroeconomic stability and growth.

Figure 1.5: Comparing inflation rates using geometric and arithmetic means



Source: Kenya National Bureau of Statistics (2010), Economic Survey

Table 1.4: Composition of expenditure weights for the basket of goods

	Old Broad Item Group	% weight (1993/ 94 UHBS)		New Broad Item Group	% weight (2005/ 06 KIHBS)
1.	Food and non-alcoholic drinks	50.5	1.	Food and non-alcoholic beverages	36.0
2.	Alcohol and tobacco	2.97	2.	Alcoholic drinks, tobacco and narcotics	2.1
3.	Clothing and footwear	9.00	3.	Clothing and footwear	7.4
4.	Housing costs	11.74	4.	Housing, water, electricity, gas and other fuels	18.3
5.	Fuel and power	4.18	5.	Furnishings, household equipment	6.2
6.	Household goods and services	5.82	6.	Health	3.1
7.	Medical goods and services	1.59	7.	Transport	8.7
8.	Transport and communication	5.75	8.	Communication	3.8
9.	Recreation and education	6.02	9.	Recreation and culture	2.3
10.	Personal goods	2.45	10.	Education	3.1
			11.	Restaurant and hotels	4.5
			12.	Miscellaneous goods and services	4.5
	Average all Groups	**100.0**			**100.0**

Source: Kenya National Bureau of Statistics (2010), Economic Survey

1.4). Earlier, in 2008, the broad item groups that contributed to inflation in Kenya (derived from a 1997 update of the 1993/94 Urban Household Budget Survey) were not representative of the current consumption patterns.

Inflationary pressure by December 2008 was due to poor distribution of food from areas of abudance to areas of scarcity, and the poor harvest occasioned by delayed long rains and inadequate short rains. The political turmoil at the beginning of 2008 led

to delays in preparing the land for planting and also caused displacement of farm workers, thus contributing to poor food production. However, the decline in oil prices between June and August 2008 helped ease the overall inflation.

Comparator Country Performance

The level of inflation in a country compared to its competitor countries is important as it tells a lot about its competitiveness and macroeconomic stability. High inflation in a country would undermine international competitiveness.

Figure 1.6 is based on data derived from the IMF statistics and is based on the assumption that real effective exchange rates remained unchanged at their averages for the period. As can be seen, inflation in African countries remained high compared to countries in Asia. Except for Ghana, the inflation rate in Kenya was the highest among comparator African countries in 2008.

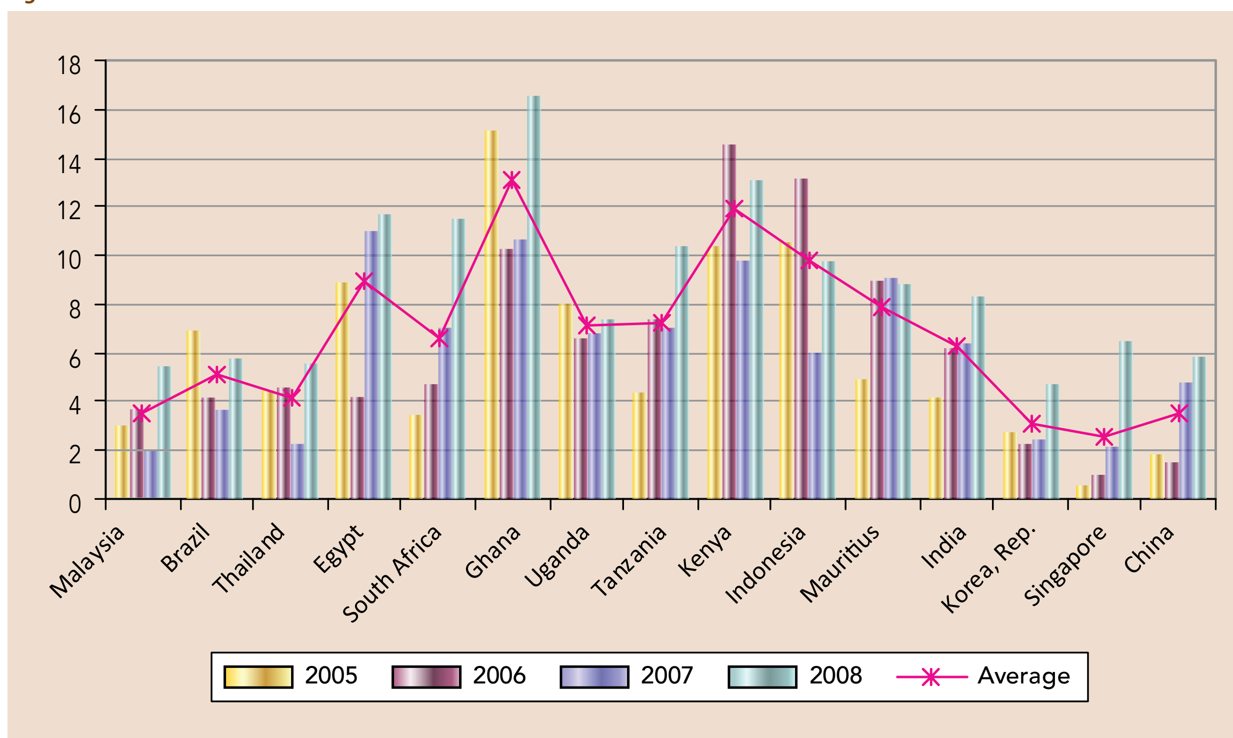
Challenges

It is important that Kenya maintains macroeconomic stability through low and stable price levels that will support low interest rates and a competitive exchange rate. Food inflation is still an important component of Kenya's overall inflation. In this regard, ensuring enhanced food production and productivity will support price stability. Energy prices have also played an important role in inducing inflationary pressures. Development of alternative energy sources may be supportive of macroeconomic stability and growth. Overall, it is expected that monetary authorities will monitor developments in the macro economy and take appropriate actions to enhance price stability.

Recommendations

The Kenya National Bureau of Statistics (KNBS) has started computing inflation based on the new method of geometric mean, which has overcome the problem of overstating inflation rate as previously

Figure 1.6: Inflation for selected countries



Source: World Economic Outlook (2009)

captured through the arithmetic mean method. It is recommended that the Central Bank of Kenya (CBK) continues to maintain a prudent monetary policy in order to sustain a low and stable inflation in the country. Further, the CBK and KNBS should hasten the production of non-tradable and tradable indices, which provide an indication of monetary inflation presuures as well as the degree of the country's competitiveness.

The KNBS should endeavour to put in place a system that ensures that the consumer basket is updated regularly to reflect changing consumer tastes and preferences.

It is advisable that KNBS begins computing and publishing provincial/regional inflation. This will enrich the available information on price dynamics and also help to capture regional differences.

Fiscal efforts towards increasing agricultural production on irrigable land should be given more impetus, and the management of strategic grain reserves enhanced to support price stabilization. Hurriedly planned efforts to stabilize maize prices in 2008/09 were not very successful.

Investment and Savings

Investment

The real rate of investment has been increasing slowly but steadily. Kenya's real rate of investment reached 24 per cent of GDP in 2009. The Economic Recovery Strategy (ERS) had set a target of 24 per cent by 2007. Public investment rate shows a steady growth from about 3.4 per cent in 2003 to an estimated 6.4 per cent in 2009. The medium term target for the public investment rate is 9.7 per cent. On the other hand, performance in real private investment has been mixed. It increased from about 16.7 per cent in 2006 to about 17.3 per cent in 2007, and then increased to 18.6 per cent in 2008 before falling to 17.7 per cent in 2009. The medium term target is 32.6 per cent by 2013 (Table 1.5).

Table 1.5: Private and public investment as a percentage of GDP

Year	Private	Public
2006	16.7	3.4
2007	17.3	4.5
2008	18.6	5.2
2009	17.7	6.4

Source: Kenya National Bureau of Statistics (2010), Economic Survey, and KIPPRA Estimates from the KTMM

Table 1.6: Growth in private and public investment

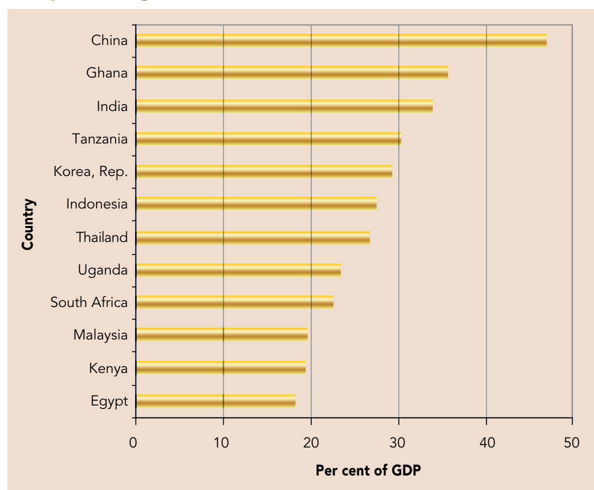
	2007	2008	2009
Private investment	11	9	-2
Public investment	41	18	26

Source: Kenya National Bureau of Statistics (2010), Economic Survey

Growth in real private investment declined from 11 per cent to 9 per cent in 2008 and recorded a contraction of 2 per cent in 2009. Real public investment, on the other hand, has continued to grow by double digits and increased by 26 per cent in 2009. This is a reflection of the major role public investment played in the 2009 recovery process. The current huge public investment in energy, roads and dams will go a long way in crowding in private investment in areas that would otherwise have been considered unattractive for private investment. However, there is need to reverse the declining growth in real private investment that began in 2008 so as to meet the medium term targets and put the economy on a strong path towards the Vision 2030 goals. The Central Bank of Kenya therefore needs to continue playing a leading role in pushing for lower rates in order to reduce the cost of credit, and thus spur private investment.

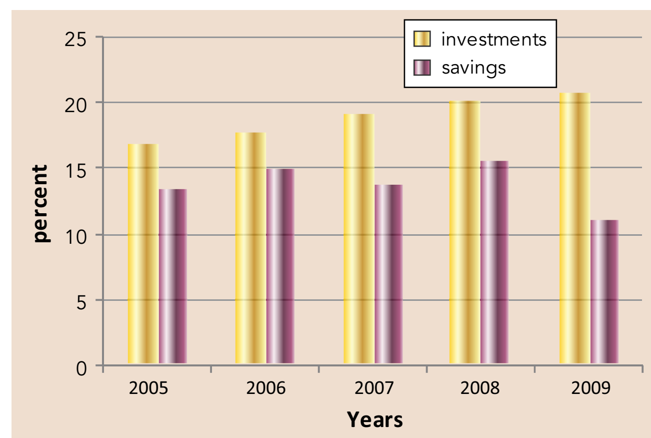
The key determinants of private investment include expected returns from investment, cost and availability of funds to meet investment needs, 'complementarity' with public investment, and the general business environment. Kenya's global ranking in ease of doing business deteriorated to

Figure 1.7: Cross-country comparison of fixed investment as a percentage of GDP, 2008



Source: World Bank (2009)

Figure 1.8: Savings and investment as a percentage of GDP, 2004-2009



Source: Kenya National Bureau of Statistics (2010), Economic Survey

position 95 in 2009 from 82 in 2008 especially with regard to the regulatory framework. Other factors that may have contributed to the slowdown in investment are lack of investor confidence following the post-election violence, and the slowdown in the global economy.

Kenya's investment is comparatively low (19.7% in 2008). In 2008, China had one of the highest investment rates at about 48 per cent. In Africa, Ghana ranks highly with an investment rate estimated at about 36 per cent (Figure 1.7). Kenya's aggregate expenditure is still highly skewed towards consumption expenditure relative to investment, yet more and more investment is required to get the economy to the Vision 2030 goals. At the same time, there is need to bridge the investment savings gap.

Savings

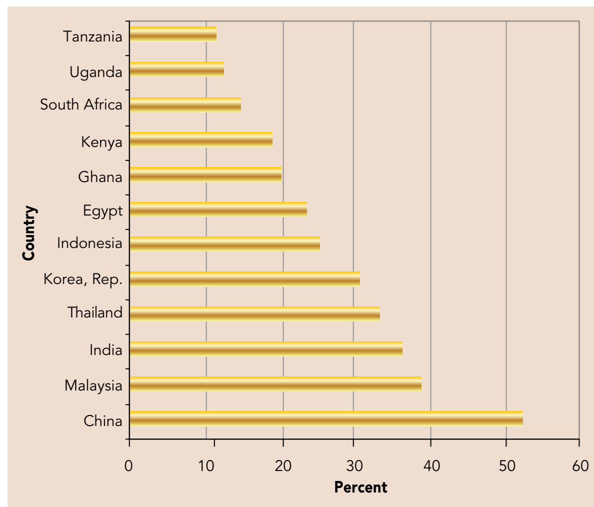
Gross domestic savings as a percentage of GDP decreased from 14.8 per cent in 2006 to 13.7 per cent in 2007 and increased slightly to 15.5 per cent in 2008. In 2009, domestic savings stood at 11.1 per cent of GDP (Figure 1.8), which was far below the medium term target of 27.7 per cent of GDP. This implies that domestic savings are inadequate to finance investment, hence, a savings-investment gap that would require to be filled by foreign savings. Public sector savings have largely remained negative and as a result, private savings form a larger proportion of total domestic savings. Private savings decreased from 17.6 per cent in 2006 to 16.2 per cent in 2007, increased slightly to 17.3 per cent in 2008 and reduced steadily to 12.7 per cent in 2009 (Table 1.7). Government recorded dis-savings of about 2.8 per cent, 2.5 per cent, 1.8 per cent and 1.6 per cent over the same period. The decrease in private savings and investment is attributed to the

Table 1.7: Private and public savings

Year	Public savings Ksh million)	Private savings (Ksh million)	Private savings as a % of GDP	Public savings as a % of GDP
2006	-45,526.4	285,238.4	17.6	-2.8
2007	-45,223.9	295,862.9	16.2	-2.5
2008	-37,738.4	358,760.4	17.3	-1.8
2009	-35,965.2	287,771.21	12.7	-1.6

Source: Kenya National Bureau of Statistics (2010), Economic Survey

Figure 1.9: Cross-country comparison of gross savings as a percentage of GDP, 2008



*Data for Tanzania, Indonesia, Malaysia and Thailand are for 2007
Source: World Bank (2009)

economic slowdown due to the global financial crisis and the post-election violence.

Kenya's savings rate is relatively low. Though higher in the region, it is much lower compared to those countries that Kenya aspires to catch up with (Figure 1.9) and the medium term targets. China recorded the highest gross savings rate of 51 per cent. The rise in savings rates in China and India is mainly structural, and the rates are expected to be maintained with rising income and declining dependency ratios. The low savings rate in Kenya could be attributed to poor economic performance especially in 2008, weak financial intermediation and high dependency ratio, which stands at 84 per cent (KER, 2009).

Challenges and Recommendations

The major challenge is to mobilize savings and channel them to efficient and productive investments. The public sector can contribute to national savings. However, the public sector has remained a dis-saver. Public sector contribution could be enhanced by increasing efficiency, eliminating wasteful spending, generating surpluses, and tax reforms to improve revenue collection.

An efficient financial system is critical in savings mobilization. Similarly, high dependency ratios in the country are a big challenge and call for a review and formulation of a population policy.

Reforms in the financial sector and development of the informal financial sector are necessary. These efforts should take cognisance of the existence of a segmented credit market and the important role played by microfinance. Key reforms for the sector are discussed in Chapter 7.

Availability of savings instruments will contribute positively to savings. Pension schemes should, therefore, be made mandatory and more saving products developed through private pensions and life insurance facilities to meet the savers' requirements.

To increase investment, the government should establish public investment programmes that develop the infrastructural base to boost private investment. Further, the Kenya National Bureau of Statistics should be publishing disaggregated data on private and public investment besides the quarterly data on GDP to allow for in-depth analysis of the dynamics of each type of investment.

There is need for further development of the capital markets to provide an alternative source of investment funds as well as reforms in legal and institutional frameworks to provide a conducive business environment.

To achieve high and sustainable levels of investment, the country needs a more balanced combination of foreign and domestic resources. Boosting domestic savings will require higher rates of economic growth sustained over a long period, an efficient financial system and demographic transition. Official Development Assistance (ODA) could trigger this growth process if it is focused on financing pro-growth public investment, such as economic infrastructure. This would help in crowding in domestic private investment which would result to higher growth and more domestic resources and

investments to sustain the growth. Borrowing from external sources should be guided by the need to ensure sustainability.

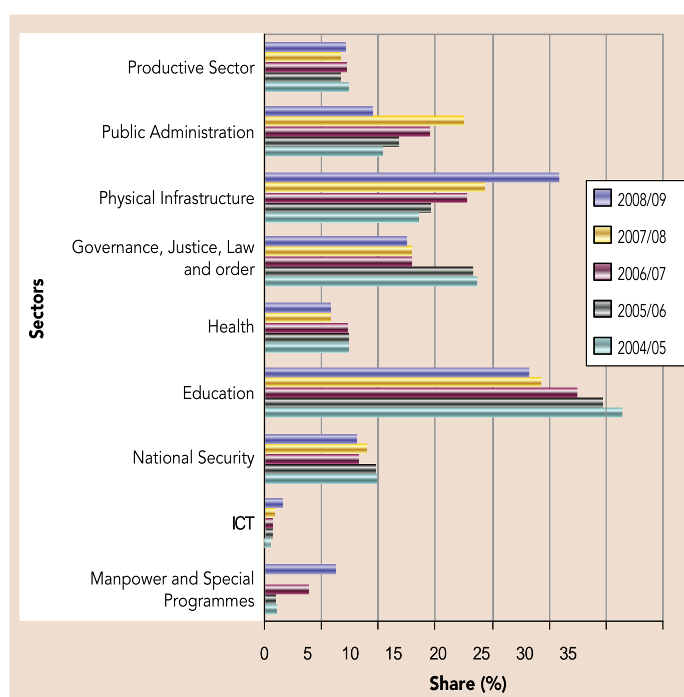
Fiscal Policy and Performance

In 2008/09, Kenya was recovering from the dismal performance in 2007/08 as a result of the post-election violence, high food and fuel prices, unfavourable weather conditions and the global financial crisis. The authorities recognized the need to mitigate the impact of the shocks on the poor and vulnerable, as well as to stimulate the economy. Consequently, fiscal policy in 2009/10 sought to address four key challenges: mitigate shocks on the economy, stimulate the economy, maintain fiscal stability, and continued restructuring of expenditure towards development expenditure. The 2009/10 budget targeted additional expenditure on infrastructure, food security and pro-poor programmes while departing only moderately from its fiscal anchor of a 40 per cent ratio of debt to GDP.

Revenue

Total revenue collection cumulative up to February 2010 amounted to Ksh 340.7 billion, which was slightly off target by Ksh 23.0 billion. Out of this total, ordinary revenue was Ksh 313.4 billion while Appropriations-in-Aid (AIA) was Ksh 27.3 billion. The ordinary revenue collection underperformed by Ksh 20.6 billion, a better performance when compared to a similar period in February 2009, registering a growth of 9.7 per cent or Ksh 27.6 billion. The economy's slower recovery than envisaged contributed to the paltry performance in ordinary revenue. For 2008/09, the government's total revenue collection was below the target by Ksh 22.9 billion. Ordinary revenue collection amounted to Ksh 455.8 billion against a target of Ksh 463.8 billion, resulting in an under-collection of Ksh 8.0 billion. The AIA registered an under-collection of Ksh 14.9 billion in 2008/09.

Figure 1.10: Public expenditure allocations by sector, 2004-2009



Source: Ministry of State for Planning, National Development and Vision 2030 (2009), Public Expenditure Review

Expenditure

Cumulative total expenditure up to February 2010 amounted to Ksh 440.0 billion, which was much lower than the target of Ksh 503.6 billion. The bulk of the Ksh 63.5 billion under-spending is under the developments expenditures which had an under-spending of Ksh 62 billion. This under-expenditure is due to cumbersome donor disbursement procedures and slow implementation of the economic stimulus package. In Table 1.8, the aggregate government expenditure increased significantly since 2004/05. As a per cent of GDP, average government expenditure increased from 22.6 in 2004/05 to 26.6 in 2008/09. The education sector expenditure continued to be the highest since 2004/05 as shown in Figure 1.10. However, for the fiscal year 2008/09, the government expenditure on the infrastructure sector surpassed that on the education sector, due to the government efforts to boost the economy through infrastructural investments. For 2008/09, the total government expenditure and net lending amounted to Ksh 595.7 billion, which was lower

than the target of Ksh 676.0 billion. The shortfall of Ksh 80.3 billion was attributed to lower absorption levels by line ministries, and also the lower than expected total revenue collections that affected the exchequer issues to the spending units.

Budgetary allocations and indeed expenditure during 2008/09 were consistent with the national priorities as outlined in Vision 2030. Education; physical infrastructure; governance, justice, law and order; and public administration sectors have always accounted for large shares of public expenditure over the period 2004/05 to 2008/09. However, it is only manpower and special programmes, physical infrastructure, ICT and productive sectors that registered an increase in expenditure share as shown in Figure 1.10.

Fiscal deficit

The fiscal position for February 2010 recorded an overall deficit (after grants) totalling Ksh 88.1 billion, which is below the target of Ksh 118.1 billion. For 2008/09, given the total revenues and the total expenditures (Table 1.8), the overall fiscal deficit (before grants) was Ksh 107.8 billion (4.8% of GDP), which was lower than the target of Ksh 165.2 billion (7.4% of GDP). The fiscal deficit, after grants, amounted to 4.0 per cent of GDP vis-a-vis a target of 6.1 per cent of GDP. For 2009/10, the overall budget deficit including grants is expected to be at the level of Ksh 168.2 billion (6.6% of GDP).

Overall Public Debt

In June 2009, the overall public debt rose to Ksh 1,018.3 billion from a lower position in June 2008 of Ksh 870.6 billion (Table 1.9). Out of this total, the stock of domestic debt in June 2009 recorded a level of Ksh 518.3 billion, which is an increase when compared to June 2008 with a level of Ksh 430.6 billion, which is a net increase of Ksh 87.7 billion. The government debt management strategy determined that the structure of the public debt portfolio should have more domestic debt than foreign debt. Dominance in debt in foreign currency indicates

Table 1.8: Fiscal outturn (% of GDP)

Fiscal Outturn (% of GDP)	2004/05	2005/06	2006/07	2007/08	2008/09*	2009/10**
Total revenue	21.6	20.5	21.6	22.0	21.8	22.3
Revenue	19.8	18.7	19.7	20.2	20.3	20.5
A-I-A	1.8	1.8	1.9	1.8	1.4	1.4
Expenditure and net lending	22.6	25.2	24.3	27.3	26.6	30.3
Recurrent expenditure	19.0	20.2	17.8	20.6	19.4	19.9
Development expenditure	3.4	4.5	4.7	6.7	7.2	10.3
Deficit excluding grants (commitment basis)	-1.0	-4.7	-2.7	-5.2	-4.8	-8.0
Grants	1.1	1.3	0.9	1.3	1.2	1.4
Deficit including grants (commitment basis)	0.1	-3.4	-1.8	-3.9	-3.6	…
Deficit including grants (cash basis)	0.5	-2.4	-2.1	0.4	-5.2	-6.6
Financing	-0.5	2.4	2.1	-0.4	5.2	6.6
Foreign financing	-0.1	0.1	-0.1	0.3	1.8	2.0
Domestic financing	-0.5	2.3	2.2	-0.7	3.4	4.6

Notes: * indicate preliminary results
** indicate estimates from the Budget Policy Statement March 2010

Source: Ministry of Finance Quarterly Budget Review, Q4 2008/09 and Budget Policy Statement, March 2010.

Table 1.9: Central government's public debt, 2004-2009 (Ksh millions)

	2004	2005	2006	2007	2008	2009
Domestic debt (Ksh millions)	306,235	315,573	357,839	404,706	430,612	518,339
External debt (Ksh millions)	443,157	433,976	431,237	396,564	439,967	499,988
Total debt (Ksh millions)	749,392	749,548	789,076	801,270	870,579	1,018,327
GDP (Ksh millions)	1,274,328	1,415,823	1,622,591	1,828,788	2,077,433	2,273,685
Population (million)	34.2	35.1	36.1	37.2	38.3	39.4
Debt per capita (Ksh)	21,912	21,355	21,858	21,540	22,731	25,846
Domestic debt as a % of GDP	24.0	22.3	22.1	22.1	20.7	22.8
External debt as a % of GDP	34.8	30.7	26.6	21.7	21.2	22.0
Total debt as a % of GDP	58.8	52.9	48.6	43.8	41.9	44.8

Source: Kenya National Bureau of Statistics (2010) Economic Survey; and Central Bank of Kenya (2009), Statistical Bulletin, June 2009

Notes: ** Domestic Debt is reported on gross basis
*** Includes public and publicly guaranteed foreign currency loans, end of period exchange rate

significant exposure to exchange rate fluctuations. In line with this strategy, the proportion of overall domestic debt was slightly higher than external debt in June 2009. The proportion of overall debt to GDP increased from 41.9 per cent in June 2008 to 44.8 per cent in June 2009. Consequently, debt per capita increased between 2008 and 2009 by Ksh 3,115 implying that every living Kenyan had a debt of Ksh 25,846 by June 2009 up from Ksh 22,731 in June 2008. The government medium-term strategy is to maintain overall public debt at below 40 per cent of GDP to create space for economic stimulus spending.

In financing the fiscal deficit for 2008/09, external financing was a net borrowing of Ksh 11.8 billion while domestic financing was also a net borrowing of Ksh 69.4 billion. In 2007/08, external financing was still a net borrowing but at a lower level of Ksh 7.0 billion. Total disbursements (inflows) for the year 2008/09 amounted to Ksh 27.8 billion while total external repayments (outflows) of the principal amounted to Ksh 16.0 billion. Overall, in the 2007/08 financial year, the performance in the government's financing position resulted in net repayment of Ksh 13.9 billion.

Debt Service

The external debt service for 2008/09 included the principal repayments amounting to Ksh 17.4 billion and scheduled foreign interest payments totalling Ksh 6.1 billion. The external interest payments for 2007/08 were Ksh 5.7 billion. The domestic debt service included domestic interest payments amounting to Ksh 45.9 billion, which was higher than Ksh 42.2 billion paid in the previous financial year.

From Table 1.10, Kenya's overall fiscal performance compares well with other countries such as India, Mauritius and Tunisia. Countries such as Chile and Singapore have managed to run fiscal surpluses, while Egypt and Ghana have higher fiscal deficits.

The most recent analysis carried out under the joint World Bank-IMF debt sustainability framework concludes that Kenya's risk of debt distress remains moderate.[1] Debt sustainability is assessed in relation

Table 1.10: Cross-country fiscal indicators

Country	Revenue (% of GDP)			Expense (% of GDP)			Fiscal deficit cash (% of GDP)		
	2005	2006	2007	2005	2006	2007	2005	2006	2007
Chile	23.79	25.78	27.49	18.15	17.03	17.28	4.56	7.69	8.82
China	9.62	10.26	..	10.89	11.37	..	-1.62	-1.44	..
Egypt	24.29	28.14	27.12	27.39	32.76	29.34	-6.45	-7.17	-4.56
Ghana	23.69	21.80	25.75	22.75	25.05	29.36	-1.41	-6.74	-7.70
India	12.49	13.43	13.60	15.37	15.48	15.29	-3.27	-2.67	-1.41
Kenya	20.20	18.37	18.94	18.16	19.77	19.69	1.49	-2.33	-3.01
Korea, Rep.	21.79	22.68	24.58	19.72	20.53	18.62	0.91	1.14	4.26
Mauritius	21.43	21.59	20.93	21.20	22.27	21.31	-2.08	-2.98	-2.27
Singapore	19.21	19.11	20.86	13.31	13.94	13.17	6.73	6.56	12.05
South Africa	30.61	31.97	31.93	30.51	30.23	30.02	-0.24	1.41	1.65
Thailand	22.18	20.93	20.30	17.28	16.82	18.39	2.62	1.99	0.14
Tunisia	29.15	29.32	29.98	29.14	28.70	29.03	-3.13	-2.71	-2.16
Uganda	11.98	12.73	_	16.30	16.45	_	-0.11	-1.87	_

Source: World Bank, World Development Indicators (2009)

to policy-dependent debt burden thresholds. Kenya is classified as a medium performer in terms of quality of its policies and institutions as measured by a three-year average of Kenya's score on the World Bank's Country Policy and Institutional Assessment (CPIA)[2] index. Kenya's level of debt is sustainable under stress tests using different scenarios such as: significant fall in GDP; a rise in primary balance; 30 per cent depreciation in the Kenya shilling; and a 10 per cent of GDP increase in borrowing.

Infrastructure bonds

During 2008/09, the government successfully issued the first Infrastructure Bond to raise Ksh 18.5 billion to finance various infrastructure projects on roads, energy, water, irrigation and sanitation. The large over-subscription[3] of the Infrastructure Bond is a clear indication that Kenya's financial market offers an opportunity to tap domestic savings for financing investment in the country's infrastructure. The government's objective is to launch a series of infrastructural bonds to finance targeted projects and emulate other countries such as South Africa, Ghana, Botswana, Nigeria, Malaysia, and Singapore, which have used capital markets to finance infrastructure projects. In February 2010, the Central Bank of Kenya issued the third Infrastructure Bond for a total value of Ksh 14.5 billion; it recorded an excellent performance, with a 243.36 per cent subscription (Central Bank of Kenya, 2010).

Challenges and Policy Recommendations

- According to the current debt sustainability framework, Kenya's current debt level is sustainable; however, long-term debt sustainability depends on a number of factors such as real GDP growth, sound macroeconomic policy and prudent debt management. Therefore, Kenya's biggest challenge is how to enhance Kenya's real GDP growth.
- The current debt-to-GDP ratio is low and debt sustainability is not a serious concern.[4] However, the government needs to maintain prudent debt management strategies to ensure that debt remains sustainable.

- The government should continue to take advantage of the strong domestic financial market as a source of development finance, but at the same time continue with prudent management of public expenditure and public borrowing to ensure that the private sector is not 'crowded-out'.
- Sources of financing the budget deficit are a concern for the government. Currently, the cost of domestic debt is higher than the cost of concessional external debt; the government is trying to shift to the long-term bond market from treasury bills. However, the bond market is relatively fragmented and the secondary market liquidity is very low.
- Prioritization of projects/expenditures should be given emphasis. This will curb the growing fiscal deficit and ensure we spend our resources towards national strategic programmes.

Public Financial Management

Reforms in public expenditure management

Public financial management includes all phases of the budget cycle, comprising budget preparation, execution, internal control and audit, procurement, monitoring and reporting arrangements, and external audit. The broad objectives of public financial management are to achieve overall fiscal discipline, allocation of resources to priority needs, and efficient and effective allocation of public resources. The process begins with consolidation of activities from the grassroots to departmental headquarters and then to the ministries' headquarters. They are further compiled and submitted to the ministries of planning and finance and eventually public hearings before the budget is tabled before Parliament. Figure 1.11 shows the Public Expenditure Review, Medium Term Expenditure Framework and the budget preparation cycle.

There have been various reforms that the government has undertaken in improving public financial management in line with the requirements of the Code of Good Practices on Fiscal Transparency and Best Practices for Budget Transparency of the African Peer Review Mechanism of the New Partnership for Africa's Development.

The public financial management reforms started in earnest in the year 2003 following the Public Expenditure Management Assessment and the Country Financial Accountability Assessments. The main reform areas include budget formulation, execution and monitoring and evaluation as well as risk-based audit approach. The implementation of the new constitution has important implications for public finance management in terms of institutions and structures.

The reforms have had positive achievements in many operational and institutional areas. There is enhanced fiscal information, quarterly revenue allocation publication by the government, the adoption of the due process in procurement and keeping of fiscal deficit as a proportion of GDP within reasonable limits.

The budget process under the Medium Term Expenditure Framework (MTEF) has had continual improvements since it was adopted in 2000. The government has now embarked on performance-based budgeting that lays more emphasis on programme/project outputs and outcomes as opposed to the previous systems that concentrated on tracking input indicators. Public expenditure has been restructured to address poverty alleviation, wealth creation and growth. In this regard, more resources have been channelled to health, education and infrastructure development. The public financial management reforms are aimed at improving effectiveness and efficiency of public resources and ensuring macroeconomic stability.

Budget formulation

The budget formulation process begins with the issuance of the Treasury circular to all accounting officers. The circular provides guidelines for the

Figure 1.11: The PER, MTEF and budget preparation cycle in Kenya

Source: KIPPRA (2006)

preparation process and the time frame. The reforms undertaken with regard to the budget are aimed at increasing transparency in the budget preparation process. This is done through publication and dissemination of the quarterly economic and budget reviews, as well as annual public expenditure reviews. The budget is disseminated through public hearings which are widely publicised through the media. Other budget documents that are disseminated include the Budget Outlook Paper (BOPA), Budget Strategy Paper (BSP) and the MTEF Sector Working Group reports. The budget process starts in September, unlike the past when it started in December. Other reforms include preparing the budgets using the government financial statistics, the 2001 classification system, the development of clear resource allocation guidelines emphasizing the shifting of resources to priority areas in an effort to align budgeting with policy priorities, formation of the Parliamentary Fiscal Analysis and Appropriation Committee to oversee the budget process, and leaving out of the budget estimates pledged but non-committed donor funds.

The challenge that remains is institutionalising the MTEF process down to the sub-national level and the full implementation of the public financial management strategy. It is also important to build capacity in the budget process to ensure minimal deviations between the budget and actual budget outcomes.

Budget execution and reporting

The reforms in budget execution and reporting include the adoption of international standards of budget classification based on the Government Finance Statistics Framework, defining credit limits based on properly designed cash flow planning to improve exchequer releases, the enforcement of expenditure commitment control system and initiation of cost containment measures, and strengthening of control measures for efficient use of the Local Authority Transfer Fund, the Constituency Development Fund and other devolved funds. These reforms have reduced the difference between the budget and the actual budget outturn. The difference between the approved primary budget and the actual primary expenditure outcome shows that in 2005/06, the difference was 0.1 per cent while 2006/07 and 2007/08 recorded -3.9 per cent and -2.2 per cent, respectively. This shows a narrow overspending in 2005/06 and an under-spending in 2006/07 and 2007/08. This means that the country has performed quite well in ensuring that it adheres to the approved budgeted total primary expenditure at the aggregate level, since the deviations from budgeted expenditure are within 5 per cent. The revenue outturn has also been quite impressive, with the difference between the original budgeted and actual domestic revenue receipts showing an under-collection in 2005/06 at -4.6 per cent, -0.6 per cent in 2006/07 and -0.7 per cent in 2007/08. The country's revenue performance has been higher than that of Tanzania and Uganda, and also higher than the average for all sub-Saharan countries. The revenue as share of GDP has been maintained between 20 per cent and 24 per cent of GDP in Kenya.

Payroll and procurement aspects of the budget execution have improved over the past two years. However, the new payroll system has not been fully integrated with the Integrated Financial Management Information System (IFMIS). The Integrated Payroll and Personnel Database system currently covers 95 per cent of the central government's employees, including education and medical staff at the district level, the military and police service. The new procurement legislation has been implemented since 2007, with recorded improvements in the public procurement process.

The main challenge in budget execution is the build-up of expenditure payment arrears, which have taken long to clear. In 2003, the government set up a Pending Bills Committee to help manage the problem. The pending bills reduced from Ksh 10.16 billion at the end of June 2006 to Ksh 8.94 billion at the end of June 2008, representing a 13 per cent

reduction.

Parliamentary oversight

The major reform in the legislature is the establishment and operationalization of the Parliamentary Budget Office, which was established in 2007. Steps are in place to establish an Organic Budget law that would clearly state the roles and responsibilities of all the institutions that participate in the budget process including Parliament.

Management of the decentralised resources and fiscal decentralisation

The government has established a number of decentralisation funds that are aimed at improving service delivery at the grassroots level. Among them is the Constituency Development Fund (CDF), the Local Authorities Transfer Fund (LATF), the Constituency Education Bursary Fund, Constituency HIV/AIDS Control Fund, Youth Enterprise Development Fund, and Women Empowerment Fund.

The government has also institutionalized the management structures for such funds to ensure effective and efficient management. Already, structures for the management of the CDF funds are in place following the enactment of the CDF Act. The CDF managers were hired in December 2007. More reforms have been undertaken, which include the reactivation of the District Development Committees and preparation of quarterly and annual monitoring and evaluation reports. Reforms in the local government include development of financial regulations, and monitoring and evaluation of the local authorities' projects and programmes.

The main challenge to these devolved funds is that there is no clear policy on decentralisation. The recent efforts undertaken by the Interim Independent Boundaries Review Commission were aimed at streamlining the creation of constituencies. Mismanagement of funds is still rife in local authorities, while corruption has been reported in award of contracts of decentralised funds.

Absorptive capacity of spending agencies

The utilisation of budget resources has been low. During 2002/03, the overall absorption rate for both recurrent and development budgets stood at 87.5 per cent compared to 85.8 per cent in 2004/05. The absorption capacity is still a major challenge with regard to the development budget, and there is need to build capacity to improve the absorption rate.

Monitoring and evaluation

The National Integrated Monitoring and Evaluation System (NIMES) was spearheaded by the Monitoring and Evaluation Directorate of the Ministry of State for Planning, National Development and Vision 2030. Its objective is to track the implementation of government policies, programmes and projects under the Economic Recovery Strategy, Millennium Development Goals and the Kenya Vision 2030, to ensure effective and efficient utilization of resources. Under the system, there is a requirement that every government project must have a monitoring and evaluation component to inform the government whether goals, objectives, outcomes and outputs are being met against the inputs.

The NIMES has the following four (4) strategic intervention: namely: i) administrative data collection systems from government, civil society and private sector at central and district level; ii) project monitoring systems at the national and district level; iii) integrating monitoring and evaluation data collection sub-systems and coordination for analysis, research, communication and reporting; and iv) institutional arrangement for coordinating the national monitoring and evaluation system. Various monitoring and evaluation reports are prepared to track the implementation of the programmes and projects. These include the Annual Progress Review (APR), Public Expenditure Review (PER), Ministerial Public Expenditure Review (MPER), District Annual Monitoring and Evaluation Reports (DAMERs), Ministerial Annual

Monitoring and Evaluation Reports (MAMERs) and mid-term reviews of the Medium Term Plan.

The main challenges to the NIMES include lack of institutionalization of the system at the district level, and failure to integrate the system into the budgetary and the performance contracting processes.

Performance contracting in the public sector

The other reform measures include the introduction of performance contracting, which is being implemented in all ministries and cascaded down into all government agencies. On 26 June 2007, Kenya was among the 14 countries that won the prestigious United Nations Public Service Award for its extensive system of performance-based contracting for fostering responsiveness and accountability in the civil service. The next step would be to align the performance contracts to the MTEF process to ensure that funds are availed to implement the targets set out in the contracts. The performance contracting and national integrated monitoring and evaluation system are aimed at improving the predictability of government economic policies to ensure effective and efficient utilization of resources.

Indicators of public financial management reforms

According to the *Public Financial Management Performance Assessment Report for Kenya* published in March 2009, the country's public financial management reform process was evaluated based on seven indicators, namely: i) credibility of the budget; ii) comprehensiveness and transparency; iii) policy-based budget; iv) predictability and control in budget execution; v) accounting, recording and reporting; vi) external scrutiny and audit; and vi) donor practices. The scores are shown in Table 1.11 for 2006 and 2008.

The budget credibility indicator tracks reform progress in the areas of aggregate expenditure outturn, composition of expenditure outturn, revenue outturn compared to original approved budget and the stock and monitoring of expenditure payment arrears. The summary score indicates an impressive improvement in the credibility of the budget in 2008 compared to 2006. The greatest improvement is recorded in revenue forecast with a score of A in 2008 compared to a revised score of C in 2006. This implies that between the two years, actual revenue received exceeded the budgeted receipts and there was a positive trend in both the budgeted and actual amounts collected.

The comprehensiveness and transparency indicator of budget reforms measures the level of comprehensiveness of the information included in the budget documentation, reporting of the extra-budget expenditures, expenditure/income information on donor-funded projects, transparency of inter-governmental fiscal relations, oversight of aggregate fiscal risk, and public access to key fiscal information. The score on this indicator shows non-impressive performance. The main areas of concern is the extent of unreported government operations with a dismal score of D in 2008 compared to D+ in 2006. About 10 per cent of the central government budget is allocated to semi-autonomous government agencies, which prepare their own periodic and annual reports that are scrutinized by the Controller and Auditor General. However, such reports lack essential details and, therefore, in most cases, are deficient in the scope of coverage of the extra-budget expenditure items.

The indicator on policy-based budget measures the gap between the desired and available resources, with the implication on altered priorities due to the resource gap. The score on this indicator shows non-impressive performance. The post-election violence in early 2008 had adverse effects on revenue collection, availability of donor funds, freezes on some expenditure items, and the bond market. However, the situation has normalized and the policy-based budget mechanism is set for further development and alignment to performance contracting based on availability of resources.

Table 1.11: Summary of the public financial management performance scores for Kenya

	Summary of PFM Performance scoring	Revised Score 2006	Score 2008
A	Credibility of the Budget		
	1. Aggregate expenditure outturn compared to original approved budget	C	B
	2. Composition of expenditure outturn compared to original approved budget	A	B
	3. Aggregate revenue outturn compared to original approved budget	C	A
	4. Stock and monitoring of expenditure payment arrears	B	B
B	Comprehensiveness and Transparency		
	5. Classification of the budget	C	C
	6. Comprehensiveness of the information included in the budget documentation	B	B
	7. Extent of unreported government operations	D+	D
	8. Transparency of inter-governmental fiscal relations	B	B
	9. Oversight of aggregate fiscal risk from other public sector entities	C	C
	10. Public access to key fiscal information	B	B
C	Budget Cycle		
C(i)	Policy-based Budgeting		
	11. Orderliness and participation in the annual budget process	B	C+
	12. Multi-year perspective in fiscal planning, expenditure policy and budgeting	C	C+
C(ii)	Predictability and Control in Budget Execution		
	13. Transparency of taxpayer obligations and liabilities	B	B+
	14. Effectiveness of measures for taxpayer registration and tax assessment	C+	B
	15. Effectiveness in collection of tax payments	D+	D+
	16. Predictability in the availability of funds for commitment of expenditures	B+	B+
	17. Recording and management of cash balances, debt and guarantees	B	B
	18. Effectiveness of payroll control	D+	C+
	19. Competition, value for money and controls in procurement	B	B
	20. Effectiveness of internal controls for non-salary expenditure	C	C
	21. Effectiveness of internal audit	C	C+
C(iii)	Accounting, Recording and Reporting		
	22. Timeliness and regularity of accounts reconciliation	C	C+
	23. Availability of information on resources received by service delivery units	B	D
	24. Quality and timeliness of in-year budget reports	C+	C+
	25. Quality and timeliness of annual financial statements	D+	D+
C(iv)	External Scrutiny and Audit		
	26. Scope, nature and follow-up of external audit	D+	C+
	27. Legislative scrutiny of annual budget law	D+	D+
D	Donor Practices		
D-1	Predictability of direct budget support	D	D
D-2	Financial information provided by donors for budgeting and reporting on project and programme aid	D	D+
D-3	Proportion of aid that is managed by use of national procedures	D	D

Source: European Union (2009)

Predictability and control in budget execution recorded an impressive performance, with tax revenue collection increasing by 29 per cent over the period (2004/05 to 2006/07). The management of domestic debt has been more prudent, with the arrears going down, meaning that the budget is now largely predictable. There is also controlled cash management and timely releases from the exchequer to budget holders. However, use of contingency funds for purposes other than emergency has been observed and resulted in some audit queries. With regard to budget execution, there have been improvements in procurement and payroll management. However, there is need for increased roll-out of the integrated payroll and personnel database system and integrating it with the Integrated Financial Management Information System. The areas needing urgent improvement include effectiveness in collection of tax payments, effectiveness of payroll control and effectiveness of internal audit.

The performance with regard to accounting, recording and reporting is not impressive. However, the roll-out of the Integrated Personnel Payroll Databank (IPPD) and IFMIS is set to improve the situation. The current limitation is that IPPD is not fully rolled out to all ministries and field offices, while other modules of IFMIS are not in use. Only the modules for general ledger, accounts payable and purchasing are installed and IFMIS is currently used for expenditure returns and commitment control. Bank reconciliation and cash management modules are yet to be installed. This impacted negatively on availability of information on resources received by service delivery units and the quality and timeliness of annual financial statements in 2008.

External scrutiny and audit is quite impressive as a result of improved efficiency in the office of the Controller and Auditor General; through better organization, increased systematic training, the introduction of new and computer-assisted audit methods, and adoption of successive application of international audit standards. The Kenya National Audit Office has increased its coverage to 100 per cent of the central government annually. However, there is still a huge backlog of audit work with regard to local authorities. The main weakness has been the long delay in presentation of audit reports to Parliament but this has greatly improved. The remaining challenge is the delay with which Parliament attends to the audit reports and queries and the delay in government response.

The indicator on donor practices shows poor performance as there is little and unpredictable budget support, poor reporting on some of the loan-financed projects and large flows provided as Appropriations-in-Aid using donor systems.

Achievements in public financial management

The major achievement during the implementation of the public financial management reforms is that the budget has become a more credible instrument in terms of revenue collection and distribution of resources. This is evidenced by the containment and reduction in the arrears, timely release of funds, and direct disbursement to institutional levels, thus improvement in budget access.

The essential budget documents are readily available on government websites and also at affordable prices at the Government Printer.

There is improved and timely involvement of the Parliamentary committees and Members of Parliament in the earlier stages of budget preparation and hearings. However, there is still little time allocated for discussion of the budget in the House.

The MTEF budget process has improved since

it began in 2000. The preparation of the budget through the sector working groups ensures that the budget is policy-based, as sector strategic papers are prepared and sectoral priorities proposed for funding. However, allocation of resource ceilings brings up the gap between the desired funding and the allocated resources, necessitating the scaling down of priorities, instead of sourcing external/ donor funding for all the priorities.

Before the post-election violence in early 2008, revenue collection had expanded by 29 per cent over the past three years (2004/05-2006/07) due to improved tax systems. This implied improved budget predictability and control in budget execution.

Challenges

The challenges in public financial management in Kenya include the variation between the budget and the budget outturn and sometimes unexpected freeze on certain cost items. This disrupts the planned programmes, whose funding is frozen or reduced.

The other challenge is that IFMIS and IPPD are not fully integrated and rolled out to field offices. Mechanisms for budget analysis of transfers and extra-budget funds should be considered. Capacity building is needed to ensure that both IFMIS and IPPD are effectively and efficiently used to improve public financial management. This includes training of personnel and deployment of the systems to cover even the devolved funds.

The other challenge is to ensure efficient implementation and analysis of the MTEF process in order to translate into increased allocative efficiency of resources to meet the Millennium Development Goals and the Kenya Vision 2030 goals.

More than 10 per cent of the national budget is allocated to semi-autonomous government agencies and even though the amounts are shown in budget books, there is usually insufficient reporting on the expenditure of the funds. Most of the extra-budget funds are not captured in periodic reports of the budget and, thereby, tracking the effective and efficient utilization of these funds becomes difficult.

The programmatic budgeting is not fully appreciated and some agencies still rely on the incremental budgeting as opposed to output-based budgeting. Evidence of incremental budgeting implies that no radical changes have been achieved in ensuring that resources are channelled to priority areas.

Policy Recommendations

There is need to deepen the MTEF budget process to strongly link policy, planning and budgeting. More stakeholders should be included in the budget process and the MTEF process should be cascaded to the sub-national level. The MTEF budgetary process should also be firmly grounded on a legal framework. Further, there is need to ensure full implementation of the public financial management strategy.

It is recommended that there should be capacity building to increase the budget absorption levels and minimize the deviations between budgeted amounts and the actual budget outturn.

The integrated payroll and personnel database should be fully integrated with the Integrated Financial Management Information System and ensure it covers all government employees.

It is recommended that proper budgeting and planning is undertaken so that there are no expenditure arrears spilling over into a new fiscal year.

Prompt enactment of an organic budget law would streamline the process and ensure clear responsibilities of all the stakeholders involved.

Further, the National Integrated Monitoring and Evaluation System needs to be integrated in the

budget process and cascaded to the district level.

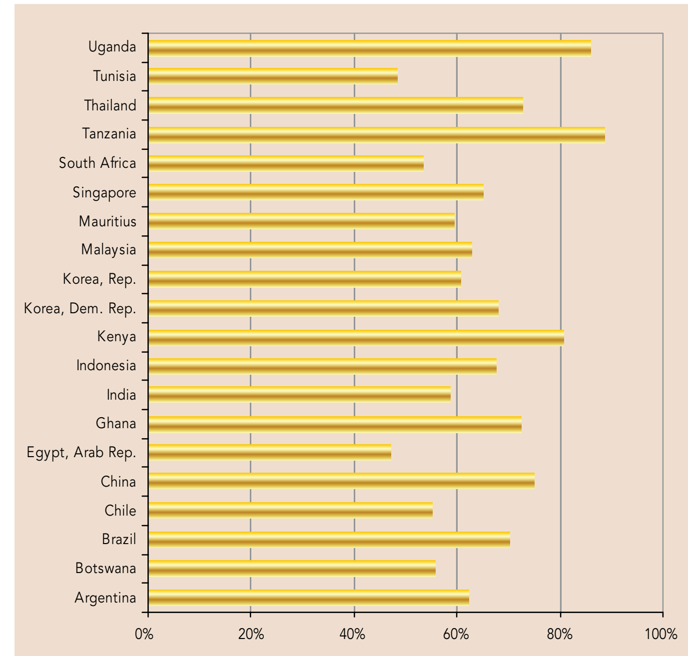
Performance contracting should be aligned to the Medium Term Expenditure Framework process to ensure funds are available for the implementation of the targets set out in the contracts.

There should also be a clear policy to guide the management and utilization of the devolved funds. All devolved funds should be under a single legislation to curb misuse and corruption.

The reforms being undertaken in the local authorities need to be hastened to involve more public participation for transparency and accountability.

The fight against corruption should be intensified to ensure effective and efficient utilization of public resources so that Kenyans get the value of their money in terms of effective and efficient service delivery.

Figure 1.12: Labour participation rate, 2007 (% of total population ages 15+)[5]



Source: World Bank (2009), World Development Indicators

Employment and Labour Market Developments

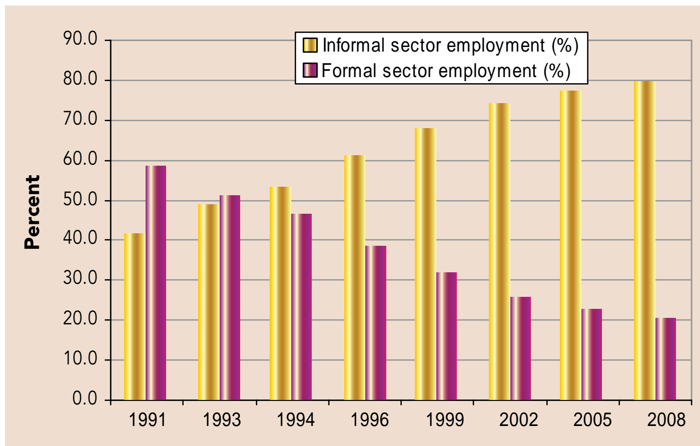
Recent performance in employment and the labour market

The labour market in Kenya continues to experience formidable challenges. First, the country is faced with a rapid growth in the labour force and a high labour force participation rate relative to the rate of job creation. The most recent official statistics indicate that open unemployment stood at 12.7 per cent of the labour force (KIHBS, 2008). Second, the informal sector (characterized by low earnings, poor working conditions and lack of social protection) is over-extended and fast-growing. Third, workers have experienced a decline in real wage earnings, and most of them are concentrated in low-paying jobs. Fourth, the country's manufacturing sector is faced with a relatively higher labour unit cost, which is a major factor causing poor industrial competitiveness.

Labour force

The size of the labour force and its participation rate are important labour market measures because they represent the size of labour resources available for the production of the nation's goods and services. The World Development Indicators (2009) show that there were 17.4 million Kenyans in the labour force in 2007 or 46.3 per cent of the total population. In the same year, Kenya's labour force participation rate was 80.8 per cent (Figure 1.12). In other words, 80.8 per cent of those aged 15 and above were either working or looking for work. Among the comparator countries, this was one of the highest participation rates. The respective participation rates for Kenyan men and women in 2007 were 87.3 per cent and 74.4 per cent, respectively, implying lower participation of females in the labour market. In addition, Kenya's average annual labour force growth between 2000 and 2007 was 2.9 per cent, second to Uganda's 3.3

Figure 1.13: Sectoral shares in total employment (1991-2008)



Source: Government of Kenya (various), Economic Surveys

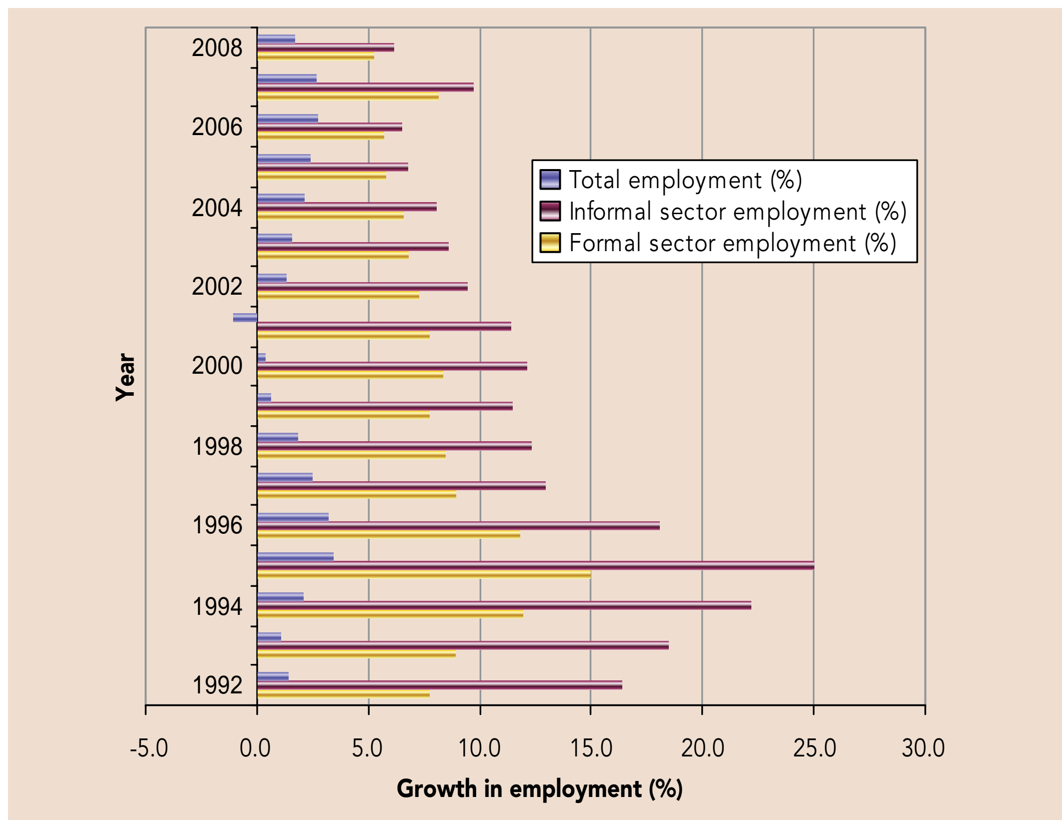
per cent. This rate is the second highest among the comparator countries.

Employment

In 2008, there was a slowdown in employment expansion. The economy created 493,000 jobs in 2008 compared to 712,000 jobs the previous year, representing a decline of 30.8 per cent. This was mainly due to the low economic growth recorded during the year. A disturbing feature of the labour market is the fact that employment continues to be a predominantly informal phenomenon. This feature, which started to emerge in 1994, has seen the informal sector quickly outpace the formal sector not only in terms of the relative share in employment but also in creating relatively more new jobs, and in growing at a relatively faster rate (Figures 1.13 and 1.14). In the 1990s, as the formal sector underwent restructuring and rationalized its labour force, many formal sector workers got retrenched and became redundant, thus joining the informal sector.

Although the proximate causes of the informal sector phenomenon have not been established at the empirical level, it is believed that informal sector growth in Kenya is driven by two main factors. First, the informal sector has grown as a response to an

Figure 1.14: Growth in employment



Source: Government of Kenya (Various), Economic Surveys

institutional framework that imposes high costs to formality. Such costs include burdensome business registration and licensing procedures, stringent labour regulations, and complex tax procedures. Second, the informal sector has emerged to absorb the excess labour supply occasioned by the failure of formal wage employment to expand at a pace that would absorb the labour force.

In 2008, about nine out of every ten new jobs were created in the informal sector, with the formal sector lagging behind. In the same year, growth of the informal sector employment was almost three times the growth of formal sector employment. It is surprising that employment grew more rapidly in the 1990s compared to the 2000s whereas the economy (real GDP growth) expanded more rapidly in the 2000s relative to the 1990s. Therefore, it seems that the high economic growth in the 2000s was not accompanied with higher growth in formal employment. Figure 1.14 shows that growth in employment has been declining over time. This reflects the weakening capacity of the economy to create employment.

There are clear spatial disparities in informal sector employment. It is mainly a rural phenomenon and is heavily concentrated in three provinces. Two thirds of informal sector employees are based in rural areas (mainly in the agricultural sector), with only one third in urban areas. Two thirds of informal sector employment is accounted for by Nairobi, Rift Valley and Central Provinces, while one-third is accounted for by the remaining five provinces.

Unemployment

Unemployment is a major problem facing Kenya's labour market. It is particularly more severe among the youth. Labour force analysis based on the Kenya Integrated Household Budget Survey (2005/2006) indicates that open unemployment among the youth aged 15-24 was nearly 25 per cent, which was about double the overall open unemployment rate of 12.7 per cent. Some of the factors contributing to the high open unemployment rate include rapid growth of the population and the labour force, skills mismatch, information problems in the labour market, structural adjustment programmes, high cost of labour, and low economic growth.

Increase in unemployment has both economic and social impacts. Economic effects of unemployment include a reduction in the country's capacity to produce goods and services, a reduction in consumption and savings, and a lower capacity to service loans. Social impacts of unemployment include loss of pride, confidence, self respect and influence among the unemployed. Unemployment also imposes a strain on the family, leads to rejection by working companions, and could lead to an increase in crime.

Apart from the open unemployment challenge, the labour market is also characterized by high rates of under-employment and an increasing number of the working poor. There are clear indications that under-employment is growing since the proportion of under-employed workers has grown from 5 per cent in 1999 to 21 per cent in 2006.

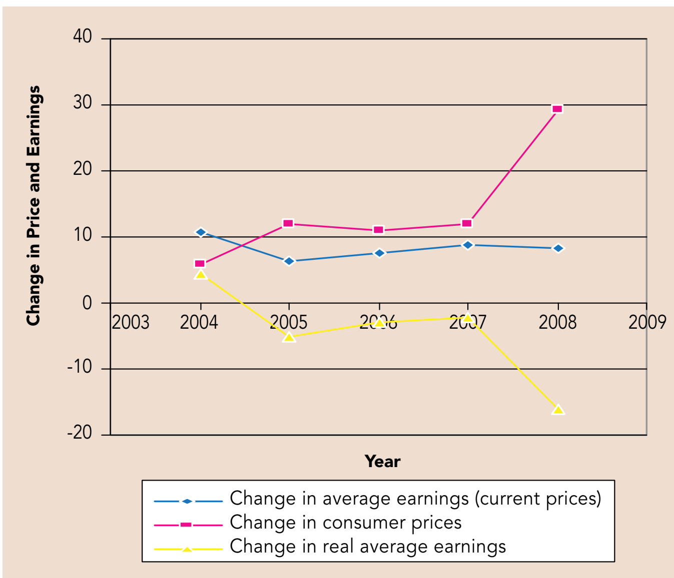
Wage earnings

During 2008, real average wage earnings per

Figure 1.15: Real average wage earnings per employee

Source: Government of Kenya (2009), Economic Survey

Figure 1.16: Labour earnings and consumer prices

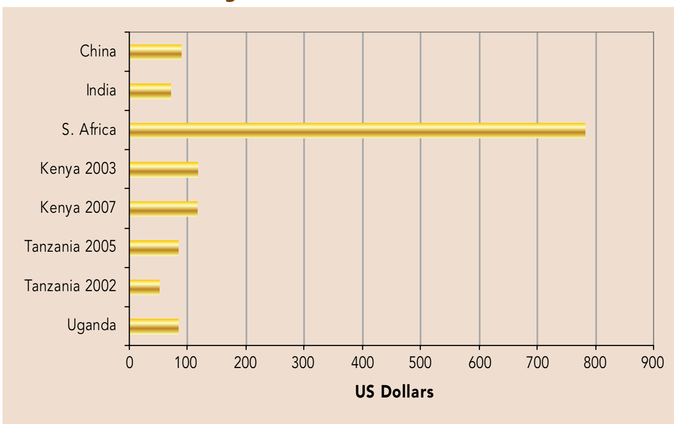


Source: Government of Kenya (2009), Economic Survey

employee in the private sector were 1.08 times the real average wage earnings in the public sector (Figure 1.15). Two thirds of wage employment is accounted for by the private sector. The highest paying sectors in Kenya are: (i) finance, insurance, real estate and business services; (ii) trade, restaurants and hotels; and (iii) electricity and water. Wage employment is concentrated in sectors with the lowest average wage earnings per employee.

Although Kenya boasts of a number of labour market institutions (including the Central Organization of Trade Unions, Federation of Kenya Employers and the Industrial Court) that are supposed to protect the welfare of workers, there has been a persistent decline in the real earnings of labourers. From 2004-2008, real average earnings shrunk by 24.4 per cent but the worst annual decline was recorded in 2008.[6] This is explained by the fact that actual earnings have remained fairly constant and have failed to keep pace with the rising cost of living as shown in Figure 1.16. This deterioration of wages (reduction in employee welfare) has adverse consequences for the productivity and competitiveness of the economy.

Figure 1.17: Median monthly wages for production workers, manufacturing sector



Source: Larossi (2009)

An assessment of the investment climate in Kenya, Tanzania, Uganda, China, India and South Africa by the World Bank in 2007 considered various factors, including wages, labour productivity and unit labour costs. Figure 1.17 shows the median monthly wage in US dollars paid to full-time production workers in 2007. Kenya's median wage is higher than wages reported in Uganda and Tanzania, as well as those paid to workers in China and India. However, in terms of labour productivity, Kenyan workers were reported to be far more productive than their colleagues in Uganda, Tanzania and India, but only marginally more productive than workers in China. Unit labour cost analysis indicates that labour costs in Kenya are lower than in Tanzania and much lower than in Uganda but higher than those in China and India. Therefore, the main contributor to Kenya's unit cost is the relatively higher wages paid by firms.

Labour market efficiency and flexibility

The efficiency and flexibility of labour markets are critical for ensuring that labour is allocated to its most efficient use in the economy. Efficient labour markets are characterized by worker incentives that reflect employee effort, job opportunities that correspond to available skills, and workers rights as well as mobility of workers. Efficient and flexible labour markets also act as an incentive for new investments. Kenya is ranked position 40 out of 132 countries with respect to labour market efficiency (Table 1.12). The indicators used to estimate the labour market efficiency index include indices for

Table 1.12: Labour market efficiency

	Labour Efficiency	Market	Rigidity of Employment	Hiring and firing practices	Pay and productivity	Flexibility of wage determination	Firing costs (week of wages)
Year	*2009-2010*	*2009-2010*	*2008*	*2008-2009*	*2008-2009*	*2008-2009*	*2008*
Measure	*Index/7*	*Rank/133*	*Index/0-100*	*Index/1-7*	*Index/1-7*	*Index/1-7*	*In weeks of wages*
Argentina	3.59	123	35	2.7	2.9	3.1	95
Botswana	4.47	58	20	3.9	3.8	4.3	90
Brazil	4.27	80	46	2.9	4.0	4.2	37
Chile	4.69	41	24	3.3	4.5	5.7	52
China	4.74	32	27	3.8	4.9	5.3	91
Egypt	3.46	126	27	3.8	3.6	5.2	132
Ghana	4.06	100	37	3.8	3.1	4.2	178
India	4.23	83	30	3.2	4.2	5.3	56
Indonesia	4.30	75	40	4.3	4.5	4.7	108
Ireland	4.86	22	17	3.8	3.9	3.2	24
Kenya	**4.69**	**40**	**17**	**4.6**	**4.2**	**5.0**	**47**
Korea Rep	4.22	84	45	3.1	4.5	5.5	91
Malaysia	4.74	31	10	4.2	5.0	5.3	75
Mauritius	4.32	74	23	3.5	3.9	4.4	35
Seychelles							
Singapore	5.91	1	0	5.9	5.7	6.2	4
South Africa	4.15	90	42	2.5	3.4	3.3	24
Taiwan	4.85	24	53	4.8	5.4	5.8	91
Tanzania	4.24	82	63	3.5	3.4	4.0	18
Tunisia	4.07	98	49	3.9	4.0	3.9	17
Uganda	4.76	30	3	5.2	3.0	6.2	13

Source: Global Competitiveness Report (2009-2010)

Notes: Rigidity of employment index on a 0-100 (worst) scale; Hiring and firing practices (1=impeded by regulations to 7=flexibility determined by employers); Pay and productivity (1=not related to worker productivity and 7=strongly related to worker productivity); and Flexibility of wage determination (1=by a centralized bargaining process and 7=up to each individual company).

cooperation in labour-employer relations; flexibility of wage determination; rigidity in employment; hiring and firing practices; firing costs; pay and productivity; reliance on professional management; brain drain; and female participation in the labour force.

Kenya's overall labour market efficiency rank (40) is lower than that of countries such as Singapore (1), Malaysia (31), and China (32). However, the ranking represents a marked improvement from the 2007 rank of 60 and is better than most of the other African countries including Botswana (58), Egypt (126), Ghana (100) and South Africa (90). The challenge for Kenya is to improve on her labour market efficiency for enhanced economic performance.

Kenya is ranked in position 20 out of 133 countries with an index of 17 in the rigidity of employment measure, which suggests that Kenya's labour market is generally less rigid. The country fares better than all the other comparator countries except Uganda (3) with respect to employment rigidity. The hiring and firing practices index of 4.6 and the rank of 23 suggest that there is a perception of good flexibility in hiring and firing compared to the other countries. Wage determination is also relatively flexible in Kenya given the score of 5 out of the possible 7.

Firing cost measures the cost of advance notice requirements, severance payments and penalties due when terminating a redundant worker, expressed in weekly wages. If the firing costs add up to 8 or fewer weeks of salary, a score of 0 is assigned for the purpose of calculating the aggregate ease of doing business ranking. The firing costs in Kenya are lower than in Korea, Malaysia, Chile and Argentina. Although the firing costs are higher than those in South Africa, Mauritius and Singapore, it is unlikely that the firing costs prohibit the labour market competitiveness in Kenya.

Labour market policies and programmes

During this period, interventions in the labour market were designed to help address the problem of unemployment, particularly among the youth and women. Four main interventions are notable in this regard. These are the Women Enterprise Fund, the Youth Enterprise Development Fund (YEDF), *Kazi kwa Vijana* (Jobs for the Youth) programme and the women employment affirmative action; this is intended to ensure that at least 30 per cent of new employees recruited into the public service are women. The Women Enterprise Fund was launched in May 2009 as part of the government's commitment to one of the Millennium Development Goals on gender equality and women empowerment. The fund provides credit to support women expand or start new businesses for wealth and employment creation. The government allocated Ksh 1 billion and Ksh 315 million in 2007/08 and 2008/09, respectively. According to the Ministry of Gender, Children and Social Development, disbursements to date are Ksh 682 million to over 92,000 women countrywide. Women can borrow from as little as Ksh 1,000 to as much as Ksh 500,000 but approvals of the advisory board are sought for any amounts exceeding Ksh 500,000.

The YEDF was launched in 2006 to assist young entrepreneurs to access financial services. The objectives of the fund are to lend funds to youth through micro-finance institutions, attract and facilitate investment in micro and small enterprise (MSE) oriented commercial infrastructure such as business and industrial parks and business incubators; support MSEs of youth to develop linkages with large firms; facilitate marketing of products and services of youth enterprises in domestic and international markets; and facilitate employment of youth in the international labour market.

The *Kazi kwa Vijana* (KKV) programme was launched in March 2009 to enable the beneficiaries earn income and be able to overcome the risk of hunger and starvation. The target was to create jobs for 200,000 to 300,000 youth in labour intensive activities in projects lasting 3 to 6 months. Some of these projects include the "Trees for Jobs" project implemented by the Ministry of Forestry and Wildlife; Rehabilitation of Irrigation Schemes by the Ministry of Water; and the Nairobi River Basin Rehabilitation and Restoration by the Ministry of Environment and Natural Resources.

With effect from April 2009, the government reviewed the mandatory retirement age for public servants from 55 to 60 years. This was done to forestall the retirement of productive professional and technical employees under the 55 year rule as well as to harmonize the retirement age with other East African countries.

Conclusion and Policy Recommendations

Unemployment

Unemployment in Kenya can be addressed in various ways. These include: (a) establishing programmes that quicken the transition from school to work, including job counselling bureaus, industrial mentorship programmes and employers-employee consortia. Labour Market Information Systems (LMIS) should be established to collect data and collate available information on demand and supply of various types of workers by skill, location and region as well as in assessing the trend and forecasting future demands; (b) introducing a two-shift system (7 a.m.- 4 p.m. and 4 p.m. -12 midnight). This could be introduced slowly beginning with services such as processing of licenses/permits, identification documents, printing, among others; (c) providing incentives for employment-intensive sub-sectors in agriculture, manufacturing (furniture, textiles, leather products, beverages, food products, etc.), construction, retail trade, tourism and information and communication technologies (ICT); (d) developing labour export programmes through foreign missions abroad. Such programmes would put in place mechanisms to export surplus labour and attract remittances revenue; (e) introducing a wage subsidy to target those that are most vulnerable to unemployment including young college and university graduates; (f) developing employment protection legislation which may provide fairness and basic security to employees, and force employers to adopt a longer-term time horizon for human resource development and encourage cooperative labour relations; (g) promoting youth entrepreneurship by supporting internship programmes for young graduates, introducing business plan competitions and entrepreneurship clubs in universities; (h) strengthening education and training systems, especially technical education, with the objective of improving the employability of the youth. This should be guided by a skills audit so that education and training are properly targeted; (i) establishment of Special Economic Zones (SEZs) to attract FDI and create employment opportunities. This will require improvement in different forms of infrastructure, such as power supply. In addition, investors prefer locations with expedited Customs and administrative procedures.

Informal Sector

Although the informal sector in Kenya is large and growing, information about the sector has not been properly documented. Kenya's statistics on the informal sector are limited to the number of persons engaged in the sector by province and activity but there is no data on entitlements, benefits, conditions of work and social protection of employees in the sector. Similarly, the productive activities undertaken in the sector, conditions and constraints of operation and links of the informal sector with the formal sector are not documented. To enhance the capacity to design effective policy and programmes, the country needs to invest in a national survey that will map the magnitude of the sector, its causes, conditions and constraints of operation and linkages with the formal sector. This will help establish programmes and policy packages that aim at increasing the quantity and quality of employment, those that lower business regulations, lower corruption, simplify business registration procedures and improve physical infrastructure. However, the long term objective is to reduce the size of the informal economy and need for an informal economy by ensuring high and sustained growth accompanied by fast growth of the formal sector.

Labour force

A rapidly expanding labour supply requires an equally rapidly expanding labour demand in order to avoid the problem of unemployment. Thus, the GDP has to grow faster than the 2.3 per cent per annum. This requires policies that encourage total factor productivity growth and value addition in production. By implication, this suggests that

greater investments be made in new technology, innovation, staff training and skills upgrading, and infrastructure.

Wage policy

The inter-connectedness of the labour market and the macro economy is best illustrated by the falling real wages in Kenya. To address this problem, the wage policy should be considered in an integrated manner, linking workers welfare concerns to macroeconomic policy (especially inflation policy), cost of living, labour productivity, social justice, and democratic participation. In such a manner, wages would be adjusted to reflect both productivity increases and cost of living while considering the consequences of wage increases on global competitiveness.

End notes

1 See Medium Term Debt Strategy 2009/10-2011/12. Office of the Deputy Prime Minister and Ministry of Finance, page 21.

2 To rate and compare the quality of country policies and institutions, the World Bank developed an instrument called the Country Policy and Institutional Assessment (CPIA). Each year, countries receive a grade between 1 (the lowest) and 6 (the highest) based on 16 criteria. The results of the rating exercise are an important factor determining the maximum share of resources available for any given recipient country. The system only applies to very poor countries that are eligible for concessional resources administered by the International Development Association (IDA).

3 Its debut issue in the first quarter of 2009 received a subscription rate of 145 per cent, while the second had 238 per cent, and the third issue received a subscription of 243 per cent.

4 See Medium Term Debt Strategy 2009/10-2011/12, Office of the Deputy Prime Minister and Ministry of Finance, page 21.

5 Note that the definition of labour force (age bracket) varies across countries.

6 The real average earnings are not adjusted for the composition of the workforce.

Health

Introduction

The performance of the health sector is measured by health service delivery and outcomes. Some key health indicators are public expenditure on health, and services such as the number of health facilities and personnel. Health outcomes include life expectancy, under 5, child and maternal mortality rates as well as the disease burden.

Public Expenditure and Policy Review

Public expenditure on health in Kenya has remained a challenge given that it has never reached the Abuja target of 15 per cent. Indeed, existing studies reveal inefficiencies in the public health sector of up to 30 per cent, hence the need to improve both technical and allocative efficiencies. The government appreciates the role of health in economic development and poverty alleviation and there seems to be renewed effort in tackling the existing challenges, with commitment to spend more on health and other social sectors. For instance, in the 2010/11 budget, the government undertook to improve the health sector by allocating Ksh 1 billion towards the recruitment of 15 additional nurses and 5 public health technicians in each constituency together with allocating Ksh 265 million towards the purchase of 5 additional motor cycles, for operations and maintenance expenses, employment of 10 community workers and provision of medical supplies in each constituency countrywide.

In the current financial year, the government allocated Ksh 5 million in each constituency towards expanding healthcare facilities to include wards for children and adults. Several other issues that the government is undertaking in the current financial year to improve the health sector include:

- Purchase of 300 ambulances for use in healthcare facilities.
- Strengthening the management of the medical supplies chain through the Kenya Medical Supply Agency-KEMSA's procurement capacity.
- Ksh 4.4 billion allocated for purchase of drugs and another Ksh 900 million for anti-retrovirals (ARVs).

Table 2.1 shows the Ministry of Health's expenditure disaggregated into recurrent and development expenditure. A combination of both represent almost 2 per cent of the country's GDP. Note the declining trend of recurrent expenditure proportion vis-à-vis development.

The latest National Health Accounts of 2005/06 indicate that the government contributed about

Table 2.1: Ministry of Health expenditure 2002/03-2009/10 (Ksh millions)

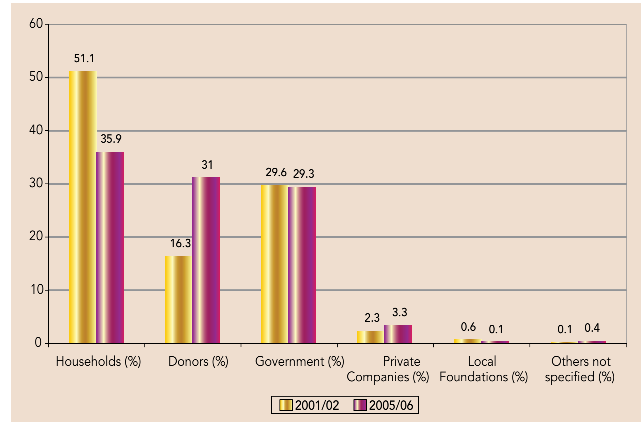
	2002/03 Actual	2003/04 Actual	2004/05 Actual	2005/06 Actual	2006/07 Actual	2007/08 Actual	2008/09 Actual	2009/10 Estimates
Recurrent	14,405	15,438	17,417	19,765	21,542	23,518	25,552	28,185
Development	945	1,003	1,741	3,242	5,988	9,609	9,293	18,826
Total	15,351	16,441	19,158	23,007	27,530	33,127	34,845	47,011
Per Capita Ksh	469.4	487.9	552.9	646.3	750.6	983.0	850.0	
Per Capita $	6.1	6.4	7.4	9.1	10.9	13.8	11.6	
Recurrent (%)	94	94	91	86	78	87	73	59
Development (%)	6	6	9	14	22	13	27	41
Total (%)	100	100	100	100	100	100	100	100
Ministry of Health expenditure (Gross) as % of total government expenditure								
Recurrent	8.69	7.76	7.66	6.29	7.5	6.7	6.6	6.7
Development	5.12	2.77	2.01	3.73	7.7	5.8	4.7	7.3
Total	8.33	6.99	6.1	5.73	7.6	6.4	6.7	7.0
Ministry of Health expenditure (Gross) as % of GDP								
Recurrent	1.4	1.4	1.4	1.3	1.2	1.1	1.2	
Development	0.1	0.1	0.1	0.2	0.3	0.6	0.2	
Total	1.5	1.5	1.5	1.5	1.5	1.7	1.4	

Source: Ministry of Health (Public Expenditure Tracking Survey 2008), Facts and Figures (2010)

29.3 per cent of the total health care financing in the country. Other contributions were by donors (31%), households (35.9%), and private companies and local foundations (3.4%). Figure 2.1 summarizes data from the national health accounts surveys, showing the sources of funds for fiscal years 2001/02 and 2005/06. It presents the sources of funds used to finance the health sector by source. In the two evaluations, households have emerged as the major financiers of the health sector mainly through out-of-pocket expenditures. However, their contribution reduced from 51.1 per cent in 2001/02 to 35.9 per cent in 2005/06. This is a good indication of equity because it reveals that households are being relieved of the burden of financing health care, which is further important to efforts aimed at reducing poverty. Besides, donors have almost doubled their funding from 16.3 per cent to 31 per cent, with the share of government resources allocated to the health sector remaining constant.

Further analysis of Figure 2.1 reveals that without donor assistance, the burden of financing the health sector would most probably fall on the households, with serious implications on poverty reduction efforts. This qualifies donors as key stakeholders in Kenya's health system.

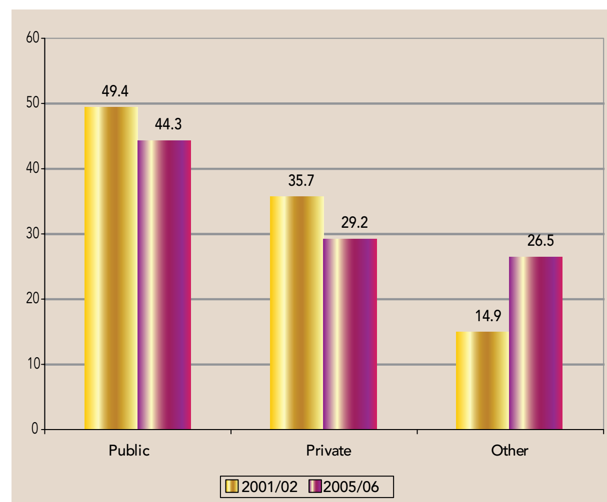
Figure 2.1: Sources of funds for health financing (proportions), Kenya



Source: Government of Kenya (2009a)

Figure 2.2 compares public and private sector health financing. In 2005/06, Kenya spent approximately Ksh 71 billion (US$ 964.4 million) on health care compared with Ksh 57 billion (US$ 726.4 million) in 2001/02, an increase of 24 per cent (Government of Kenya, 2009a). The public sector managed 49.4 per cent of the resources compared to 35.7 per cent by the private sector in 2001/02. The private sector also includes the out-of-pocket households' spending. Donors and NGOs managed the balance of 14.9 per cent of that financial year.

Figure 2.2: Provider distribution as a percentage of total health expenditure, Kenya

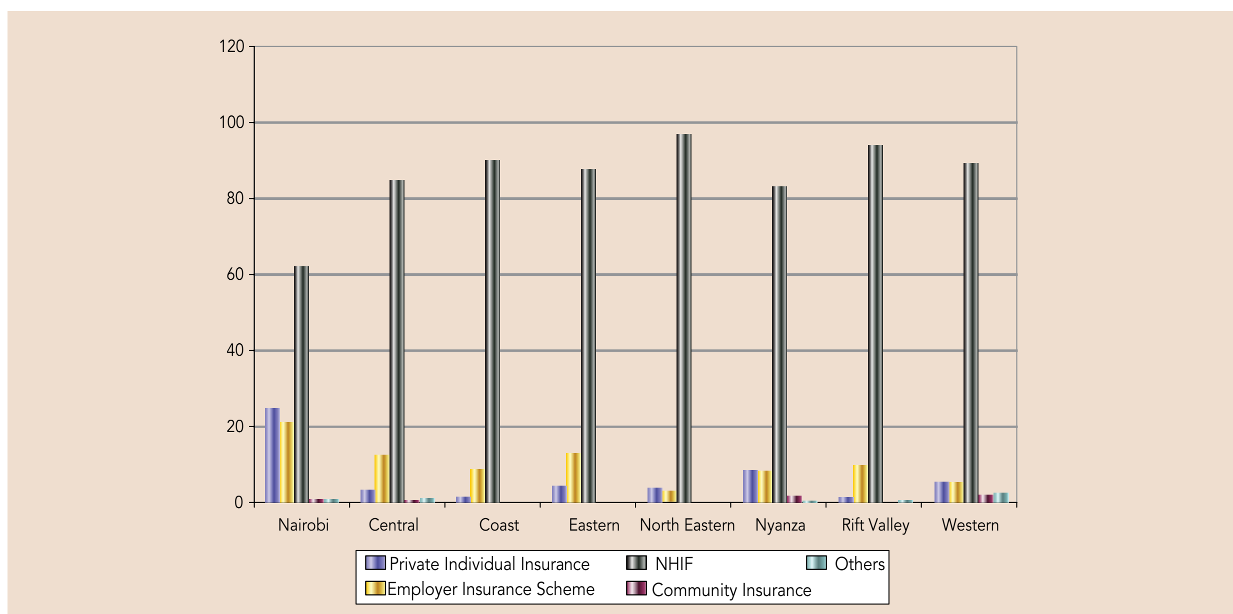


Source: Government of Kenya (2009a)

The 2006 household expenditure and utilization survey provided further analysis for health expenditures by key equity-related variables (Government of Kenya, 2009b). The inpatient out of pocket (OOP) expenditure, and per capita OOP spending by province is highest in Nairobi and lowest in North Eastern Province; by age is highest for people aged 65 and above and lowest for those aged 0-4 years; by education is highest among post-secondary graduates, and lowest among those with primary level education and below, and finally by marital status is highest for married people. Besides, for outpatient services, by province, residents of Nairobi was highest, and Western Province lowest (about 5 times lower than Nairobi), higher in urban than rural areas.

In terms of insurance uptake, only about 10 per cent of the population have some form of insurance cover, with coverage being reported to have stagnated from 2003. By region, Nairobi has the highest coverage (approximately 25%) while the lowest is North Eastern Province. Figure 2.3 presents the

Figure 2.3: Distribution of insured people by type of health insurance coverage and province



Source: Government of Kenya (2010)

distribution of insured people by type of health insurance coverage and province.

National health insurance through the National Hospital Insurance Fund (NHIF) seems to be the dominant insurance provider in all the eight provinces. This may be attributed to the fact that contributions to NHIF are mandatory to all individuals working in the formal sector. In the recent past, there has also been a drive to recruit members from the informal sector, which is gaining popularity. Otherwise, in terms of private insurance, Nairobi leads with approximately 25 per cent while Rift Valley trails with 1.3 per cent.

Many families face high cost of medical treatment, especially due to HIV/AIDS, yet the majority cannot obtain health insurance coverage, leading to impoverishment of affected families. Health insurance coverage will need to increase beyond 10 per cent of the population to reach all Kenyans. NHIF coverage is the most affordable (at Ksh 160 per month for the self-employed), though for inpatient bed coverage only. The Fund's high share of 60 per cent of the insured Kenyans may be due to a good network of offices that facilitate payments by members, recruitment of new members and reimbursement of claims. Policy proposals yet to be implemented include extending cover to outpatients, and additional fees besides bed.

Canada, Germany and Australia are some of the countries with universal comprehensive health insurance funded from taxpayers. India matches Kenya in coverage of 10 per cent of the population (World Health Organization, 2003). Participation of private health insurance providers is essential if coverage is to surpass 10 per cent of the population under insurance cover. Tax incentives by the government, such as those offered in Italy, Austria, Belgium and Denmark, among others in the OECD (Colombo and Tapay, 2004) can help widen the scope. Private voluntary health insurance is a desirable alternative to public provision especially when the latter is too expensive (World Bank, 2007). Private health insurers should extend their pool beyond large urban centres, bearing in mind that there is strength in numbers. This will increase their revenue, allowing possibilities of lower premiums. They should also extend cover to pregnancy and HIV/AIDS.

PharmAccess aims to improve access to quality basic health care, including HIV/AIDS treatment and care through subsidized premium health insurance product for low-income workers in Africa, and they

Table 2.2: Human Development Index (selected countries), 2007

HDI value	Life Expectancy at birth (years)	Adult literacy rate (% ages 15 and above)	Combined gross enrolment ratio (%)	GDP per capita (PPP US$)
1. Norway (0.971)	1. Japan (82.7)	1. Georgia (100.0)	1. Australia (114.2)	1. Liechtenstein (85,382)
145. Madagascar (0.543)	150. Tanzania (55.0)	105. Belize (75.1)	136. Nepal (60.8)	147. Senegal (1,666)
146. Bangladesh (0.543)	151. Ethiopia (54.7)	106. Comoros (75.1)	137. Swaziland (60.1)	148. Sao Tome and Principe (1,638)
147. Kenya (0.543)	**152. Kenya (53.6)**	**107. Kenya (73.6)**	**138. Kenya (59.6)**	**149. Kenya (1,542)**
148. Papua New Guinea (0.541)	153. Congo (53.5)	108. Uganda (73.6)	139. Lao People's Democratic Republic (59.6)	150. Lesotho (1,541)
149. Haiti (0.532)	154. Botswana (53.4)	109. Guatemala (73.2)	140. Congo (58.6)	151. Chad (1,477)
182. Niger (0.340)	176. Afghanistan (43.6)	151. Mali (26.2)	177. Djibouti (25.5)	181. Congo DR (298)

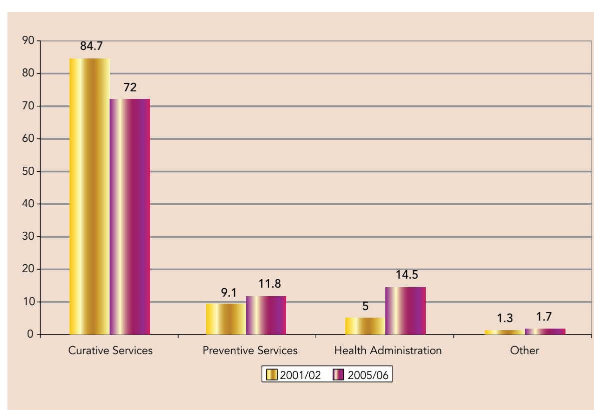
Source: Human Development Report, 2004/5-2007/8 (2009)

have already reached 30 African countries, including Kenya, Uganda, Zimbabwe, South Africa, Nigeria and Zambia, among others. They facilitate women groups, farmers, fishermen and co-operatives to obtain tailor-made schemes.[1] Jamii Bora offers health insurance to the poor, especially those living in urban slums, with health care accessible from about 40 partner health institutions spread across the country.[2] NHIF in partnership with Co-operative Insurance Company (CIC) have also launched a low cost health insurance scheme for about 100,000 Kenya Women Finance Trust (KWFT) members, which includes HIV/AIDS and pregnancy cover, similar to another offered by African Air Rescue (AAR).[3] Mutual and community health schemes such as Ghana's District Mutual Health Insurance Schemes (DMHIS) (Yevutsey and Aikins, 2010), India's Community-Based Health Insurance (CBHI) and Uganda's Microcare,[4] among others, should be encouraged in Kenya.

Expenditure on curative and preventive/promotive health care

Curative health is allocated a higher share in health spending compared to promotive and preventive health. However, there has been a sustained effort to increase the amount of resources allocated to preventive and promotive health care but the main bottleneck is the burden of disease facing Kenyans, which is skewed towards communicable diseases,

Figure 2.4: Function distribution as a percentage of total health expenditure, Kenya



Source: Government of Kenya, 2009a

hence requiring more resources for curative services. Figure 2.4 presents proportions on the distribution of health expenditures to particular functions.

Curative services consume a larger proportion of resources in the health sector compared to preventive services, with 84.7 per cent and 72 per cent and 9.1 and 11.8 per cent for fiscal years 2001/02 and 2005/06, respectively. However, there seems to be an effort to channel more resources to preventive services as well as reduce the amount that goes to curative services, or hold the latter constant.

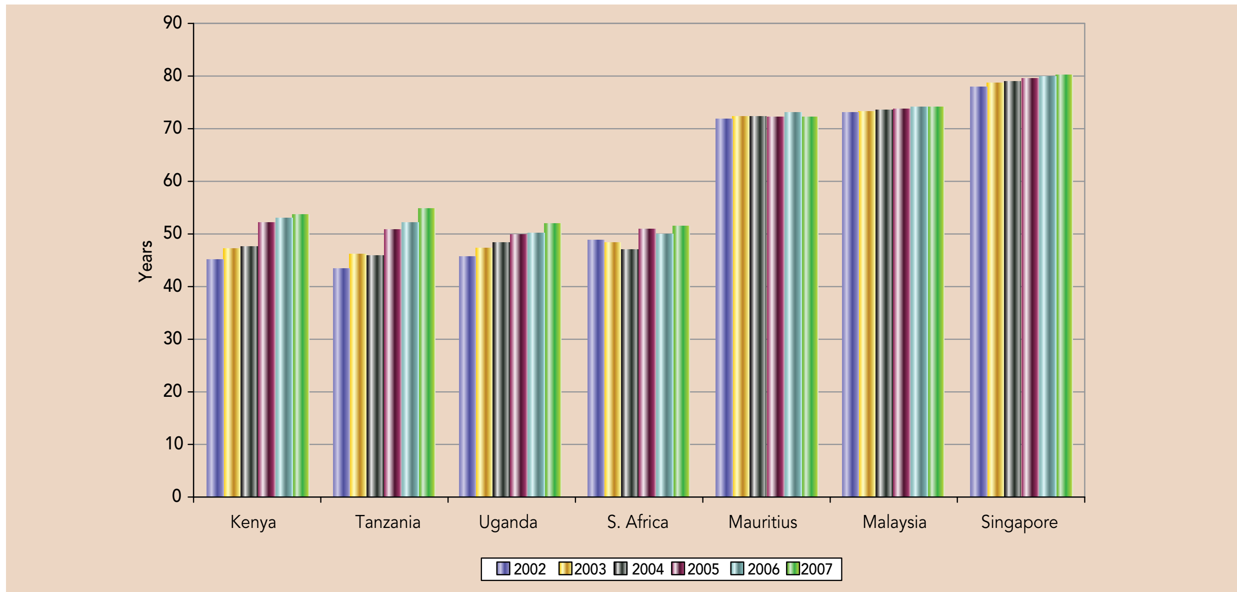
Human Development Index: A focus on life expectancy

The Human Development Index (HDI) looks beyond GDP to a broader definition of wellbeing. It provides a composite measure of the three dimensions of human development that include: living a long and healthy life (life expectancy), being educated (adult literacy and gross enrolment in education) and having a high standard of living (measured by purchasing power parity income). The HDI ranges between 0 and 1, with zero (0) denoting very low levels of welfare and one(1) high levels of welfare.

Table 2.2 shows that Kenya's HDI value in 2007 was 0.543, with a rank of 147th out of 182 countries. Norway had the highest HDI value at 0.971 and was ranked 1st, while Niger had the lowest at 0.340 and was ranked 182nd. Kenya's life expectancy at birth was 53.6 years, which fell short of the leader Japan by 29.1 years. The combined gross enrolment ratio was lower than the adult literacy rate at 59.6 per cent and 73.6 per cent, respectively, which also fell short of countries that had the highest rates at 114.2 per cent (Australia) and 100 per cent (Georgia). In terms of GDP per capita, Kenya ranked 149th with 1,541 in Purchasing Power Parity (PPP) US$, compared to Liechtenstein with 85,382 in PPP US$, which was ranked 1st.

Life expectancy as a component of the HDI is discussed so as to understand Kenya's perspective.

Figure 2.5: Life expectancy at birth for various selected countries



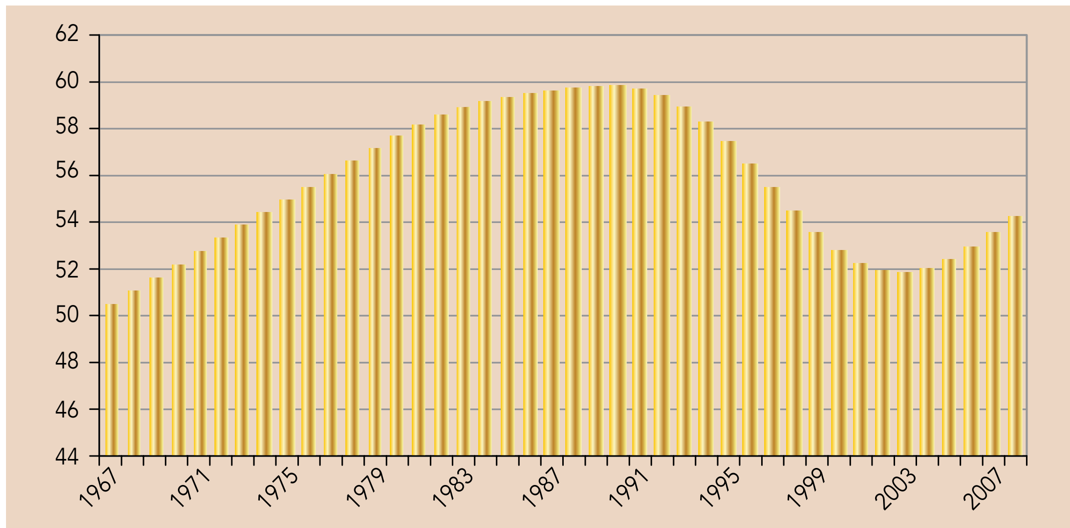
Source: UNDP (various), Human Development Report

Other components such as literacy, enrolment rates and GDP per capita have been addressed in different parts of the report, but not necessarily compared to HDI.

Life expectancy at birth refers to the expected number of years to be lived by a group of people born in the same year if mortality at each age does not change. It measures the overall quality of life given that it summarizes mortality at all ages. Figure 2.6, Table 2.3 and Figure 2.7 show life expectancy for Kenya and other selected countries.

African countries, especially those in the sub-Saharan region, have low life expectancies ranging between 45 and 55 years. Kenya's life expectancy at birth was 53.6 years in 2007, which compared favourably with her East African counterparts such as Uganda (51.9), Tanzania (55.0), South Africa (51.5), and Mozambique (47.8). Figure 2.6 shows the trend in

Figure 2.6: Kenya–Life expectancy at birth: Total (years)



Source: Trading Economics (http///www.tradingeconomics.com/billing/analytics.aspx

Table 2.3. Human Development Indicators for selected countries

Country	Life Expectancy 2008	Life Expectancy 2010	HDI 2010	Rank 2010 out of 182
Kenya	54.70	55.6	0.470	128
Tanzania	51.45	56.9	0.398	148
Uganda	52.34	54.1	0.422	143
South Africa	48.89	52.0	0.597	110
Mauritius	73.75	72.1	0.701	72
Malaysia	73.03	74.7	0.744	57
Singapore	81.89	80.7	0.846	27

Source: WHO (2010)

life expectancy at birth for Kenya since 1968. There is a smooth and sharp upward trend up to 1991, reaching nearly 60 years, followed by a very sharp drop to 52 years by 2005, and rising to 55 years by 2010. The sharp drop may be attributed to a number of factors, which include: insecurity, politically-instigated clashes, increased road accidents, and the burden of disease, especially HIV/AIDS, malaria and others.

The advent of HIV/AIDS and the lack of access to life-prolonging drugs by people living with HIV/AIDS seem to be the main reasons behind the low life expectancy at birth. This is further compounded by a significant burden of disease associated with accidents and injuries caused by road accidents

Table 2.4: Projected life expectancy in Kenya

Period	Without HIV Male	Without HIV Female	With HIV Male	With HIV Female
1980-1985	58.8	66.5	58.7	66.2
1985-1990	60.3	66.7	59.6	65.9
1990-1995	61.3	67.9	56.2	63
1995-2000	62.3	69.1	51	56.4
2000-2005	63.2	70.2	51.4	55.5
2005-2010	64.2	71.1	55.7	61
2010-2015	65.1	71.9	59.5	65.2
2015-2020	66.1	72.8	61.3	66.6

Source: Government of Kenya (2008); Revised Population Projections for Kenya, 2000-2020

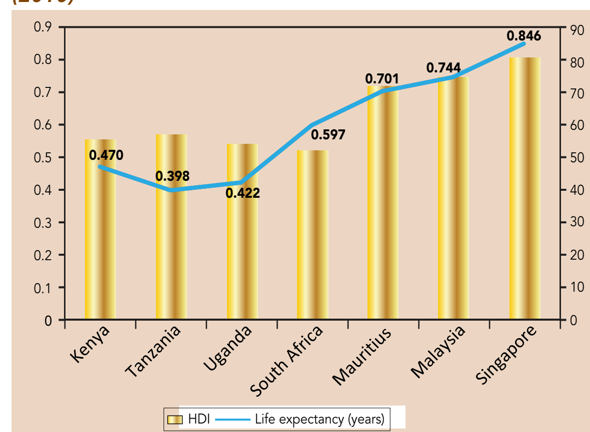
and crime. However, life expectancy is expected to improve given the numerous reforms that have been undertaken and those that are ongoing. The reforms would impact positively on the livelihood of Kenyans, including more budget allocations towards ARV provision in the 2010/11 budget.

HIV/AIDS seems to be the major factor affecting life expectancy at birth in Kenya. A comparison is made between life expectancy with and without HIV/AIDS. The gender dimension is also included and the data (together with the projections) are presented in Table 2.4.

Females are expected to live an average of 7 years longer than males with or without HIV/AIDS. In the initial period (1980-1985), life expectancy with and without HIV was almost similar because HIV/AIDS had not spread as much as it has in the present period. However, the variations between life expectancy at birth with and without HIV increased systematically with the spread of the virus. In the present period (2005-2010), the variation is about 11 years for both genders. It is clear, therefore, that HIV/AIDS has significantly reduced life expectancy in Kenya, and there is need for concerted efforts to contain the HIV/AIDS epidemic.

Countries that have relatively high life expectancy values at birth enjoy higher HDI as earlier noted and as shown in Figure 2.7.

Figure 2.7: HDI and life expectancy for selected countries (2010)



Source: Human Development Report (2009)

High life expectancy at birth can be attributed to a number of factors, including: high per capita incomes, access to education and better health care among others. For instance, countries such as Malaysia and Singapore have high incomes per capita, hence, the ability to spend more on health and education, which are known to have a positive impact on life expectancy. High life expectancy also means that populations can devote most of their initial life years on acquisition of human capital, which comes in handy later in their lives, a phenomenon that is associated with developed countries. Developing countries, on the other hand, are associated with lower life expectancies, a situation that aggravates the problems of orphaned and vulnerable children, increasing dependency ratios and consequently reducing savings.

Service Delivery Outputs/Outcomes

Percentage number of deliveries attended by skilled staff

Increasing the proportion of babies that are delivered in health facilities under a skilled health staff is an important factor in reducing health risks to both the mother and the baby. Proper medical attention and hygienic conditions during delivery have been shown to reduce the risks of complications and infections that can cause morbidity and mortality to either the mother or the baby (Kenya Demographic and Health Survey, 2008-09). Table 2.5 shows percentage births delivered in health facilities by province.

In most provinces and in the country in general, births delivered in health facilities declined since 1994 but have surpassed the 1993 level in Nairobi, Nyanza, Coast, North Eastern provinces and, to a small extent, Central Province. Eastern, Rift Valley and Western provinces are still below the 1993 level and so is the country average. The situation is not any better in North Eastern Province, where less than 20 per cent of deliveries take place in health facilities. However, North Eastern Province shows the greatest

Table 2.5: Percentage distribution of births delivered in health facilities by province

Province	1993 (KDHS)	1994 (WMSII)	1998 (KDHS)	2003 (KDHS)	2006 (KIHBS)	2008 (KDHS)
Nairobi	79.0	80.9	75.6	77.9	77	89.4
Central	72.5	75.5	69.2	66.9	71.8	73.0
Eastern	45.9	52.5	49.0	37.7	37.6	42.8
Rift Valley	38.9	36.0	36.1	35.9	33.6	32.9
Nyanza	37.6	47.6	35.6	36.2	46.7	44.2
Coast	30.9	32.7	33.0	31.2	31.7	44.4
Western	32.6	32.4	26.6	28.4	25.7	25.3
North Eastern	-	2.8	-	7.7	11.7	17.3
Kenya	44.0	47.2	42.1	40.1	39.1	42.6

Source: Ministry of Health (2007), Facts and Figures; Kenya Demographic and Health Survey (2008-09)

improvement from 2.8 per cent in 1994 to 17.3 per cent (in 2008) of births delivered in health facilities. This is attributed to the improvements in level 2 facilities, together with campaigns encouraging mothers to deliver in health facilities. This is also consistent with the finding in KDHS 2008-09 that there is an overall decline in the use of home-based antenatal care from 22 per cent to 3 per cent. However, the presence of few health facilities, which are not accessible in terms of distances and terrain, coupled with cultural factors, play a key role in the utilization of health facilities.

Various campaigns to sensitize prospective mothers to deliver in health facilities or at least seek trained personnel, especially during the first delivery, are ongoing. This is expected to reduce maternal and infant mortality. Efforts are being made to identify retired medical personnel living in these areas so as to utilize them as community health workers and birth attendants.

As shown in Table 2.6, nearly 80 per cent of births in Kenya are assisted by either trained personnel or untrained but experienced Traditional Birth Attendants (TBAs). In 2006, only 50 per cent of births were assisted by trained personnel–i.e. doctors, nurses/midwifes and trained TBAs. Untrained TBAs undertook 27 per cent of the

Table 2.6: Trends of births by assistance during delivery

Attendant during delivery	1993 (KDHS)	1994 (WMSII)	1998 (KDHS)	2003 (KDHS)	2006 (KIHBS)	2008 (KDHS)
Nurse/midwife	33.1	34.2	32.0	30.2	28.5	27.8
Trained TBA	8.7	26.5	11.3		11.7	27.6
Doctor	12.3	14.9	12.3	11.4	10.5	16.0
Untrained TBA	12.4	0.0	9.9	28.0	27.4	0.5
Self	10.1	8.6	10.2	8.0	7.3	6.8
Other/relative	23.4	15.8	24.3	22.4	14.6	21.2
Total	100.0	100.0	100.0	100.0	100.0	100.0
Unskilled birth attendants	45.4	49.1	44.3	41.6	39.0	28.5
Skilled birth attendants	54.6	50.9	55.7	58.4	61.0	71.5
Total	100.0	100.0	100.0	100.0	100.0	100.0

Source: Ministry of Health (2007), Facts and Figures 2008, 2010

deliveries. Self-assisted births have declined to about 7.0 per cent while assistance by relatives or others to about 15 per cent. KDHS 2009 indicates that 43.8 per cent of deliveries were attended to by skilled birth attendants, while 56.2 per cent were attended to by unskilled attendants.

The handling of a newborn during child birth increases or reduces the life expectancy of both the mother and the child. In this case, it is important for the government and other stakeholders to initiate and step up awareness campaigns aimed at convincing mothers to deliver in health facilities where they are sure of receiving professional assistance during delivery.

Distribution of health personnel

The other important measure of health services delivery is the health personnel per given population. However, their distribution is more important than the ratio at the national level because there is inequality in the distribution of health workers in Kenya. There has been a marked decline of available medical personnel from 2004, especially among nurses and clinical officers, though in 2008/09 there were some signs of recovery for registered nurses. The decline is attributed to international migration of the personnel, attrition due to among others, deaths especially from HIV/AIDS, as well as retirement without commensurate replacement. Replacement of staff in the Ministry of Health was

Table 2.7: Number of medical personnel per 100,000 population

Type /Year	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009*
Doctors	15.3	15.2	15.1	15.3	15.7	15	16	17	17	17
Dentists	2.5	2.5	2.6	2.7	2.6	3	2	3	3	3
Pharmacists	5.7	5.8	5.9	5.8	8.8	7	7	7	7	7
Pharm. Tech	4.2	4.3	4.3	4.3	5.1	5	5	5	5	5
Regis. Nurses	31.2	30.9	31.0	33.1	31.9	30	30	33	37	40
Enrol. Nurses	94.5	93.5	94.6	100.2	95.5	90	88	86	83	81
Clinical Off.	15.2	15.2	15.2	15.7	15.5	14	15	16	13	15
Public H. Off.	3.1	3.4	3.3	3.6	4.1	4	4	5	18	18
Public H. Tech.	17.0	17.3	17.3	19.4	18.3	17	17	16	16	15
Total	**189**	**189**	**189**	**192**	**198**	**186**	**185**	**188**	**203**	**204**

Source: Statistical Abstracts 2008/9 (HMIS) *Provisional.

affected negatively by the mid-1990s employment freeze that followed from the Structural Adjustment Programme (SAPs).

Table 2.7 shows the number of key personnel available per 100,000 population.

Available data on distribution of health workers in Kenya reveals that there is a slant towards the urban areas. This solidifies the common belief that health workers are concentrated mainly in urban areas, worsening the ability of rural health facilities offering quality health care. Table 2.8 presents data on the distribution of doctors, clinical officers and nurses in Kenya with the aim of revealing the disparities. For instance, North Eastern, Nyanza, and Western provinces have lower ratios compared with the rest of the provinces.

Table 2.8: Distribution of doctors, clinical officers and nurses (per 100,000 population)

Province	Doctors	Clinical Officers	Nurses
Central	4	7	73
Coast	4	7	50
Eastern	3	6	56
North Eastern	1	6	28
Nyanza	2	2	40
Rift Valley	3	3	49
Western	2	6	45
Nairobi*	6	5	34
Kenya	4	7	49

Source: Gondi, *et al.* (2005), *Value for Nairobi includes only Ministry staff

Table 2.9 presents the total numbers and distribution of key medical staff by regions per 100,000 population.

In terms of the doctor ratio, the worst hit provinces are: North Eastern, Nyanza, and Western. Clinical officers seem to be fewer in Nyanza and Rift Valley provinces, whereas nurses seem to be fewer in North Eastern and Nairobi.

Table 2.10 further reveals that the lower level facilities (health centres and dispensaries), which are mostly located in rural areas, are understaffed given that they account for very low proportions of relevant staff cadres.

The distribution of all medical staff favours the district and sub-district hospitals, which account for a majority in terms of proportions with doctors (63.2%), clinical officers (70.1%), registered nurses (64.0%), and enrolled nurses (51.0%). The largest

Table 2.10: Understaffed dispensaries and health centres

Health Facility	Number	Percent of total
Dispensaries (1,536)		
Dispensary with no nurse	143	9.3
Dispensary with one nurse only	749	48.8
Dispensary with two nurses	425	27.7
Health centres (440)		
HC with less than 3 nurses	214	48.6

Source: Gondi, O., Otieno C., and James, J. (2006)

Table 2.9: Total numbers and distribution (%) of medical staff in facilities

	Provincial hospital		District/Sub-district hospital		Health Centre		Dispensary	
No. of facilities	7		132		440		1,536	
Doctors	306	35.3%	547	63.2%	9	1.0%	3	0.3%
Clinical officers	210	10.3%	1,427	70.1%	318	15.6%	82	4.0%
Nurses								
Registered	528	16.5%	2,049	64.0%	393	12.3%	230	7.2%
Enrolled	1,571	13.1%	6,123	51.0%	1,902	15.8%	2,416	20.1%
All nurses	2,099	13.7%	8,172	53.7%	2,295	15.1%	2,646	17.4%
All staff	2,615	14.4%	10,148	56.0%	2,622	14.5%	2,731	15.1%

Source: Gondi, *et al*. (2005)

concentration of clinical officers is at the district and sub-district hospital level, although there has been a policy shift in staffing level 2 and 3 health facilities.

Furthermore, almost half of the dispensaries were staffed by a single nurse. Again, nearly half of the health centres were staffed by fewer than 3 nurses (Gondi, *et al*, 2005). Table 2.10 reveals that 9.3 per cent of government dispensaries had no nurse, while almost half (48.8%) had only one nurse. As for the health centres, almost half (48.6%) had less than three nurses only.

Distribution of health facilities

Besides health personnel, the number of health facilities also determines availability of health services. Table 2.11 shows the number of health facilities by region and by controlling agency, respectively. It reveals that the number of facilities increased from about 4,499 in 2002 to 4,912 in 2005 and to 6,696 in 2009.

An interesting observation is that the number of health facilities declined in some provinces. This was mainly attributed to non-gazettement of health facilities due to resource requirements as stipulated in the norms and standards of 2006. It should further be noted that the Constituency Development Fund has led to a sharp increase in the construction of health facilities without consultations with the Ministry of Health, leading to the aforementioned problems.

Fertility

Although fertility rates have declined almost universally in all the countries, they are much higher in less developed countries than middle and high income countries. Among the developing countries,

Table 2.12: Total fertility rate: Number of children born per woman

	2000-2005	2005	2007	2008
Kenya	**5.00**	**4.96**	**5.0**	**4.71**
Uganda	6.75	6.46	6.7	6.81
Tanzania	5.66	4.16	5.2	4.62
South Africa	2.80	2.64	2.7	2.43
Egypt	3.17	1.93	2.9	2.72
Tunisia	2.04	1.93	2.0	1.73
Ghana	4.39	3.84	3.8	3.78
Mauritius	1.91	1.86	1.7	1.83
Botswana	3.18	2.90	2.9	2.66
Seychelles	2.10	2.10	1.7	1.73
Korea, Republic	1.24	1.21	1.3	1.20
Singapore	1.35	1.26	1.3	1.08
Indonesia	2.38	2.18	2.2	2.34
Malaysia	2.87	2.60	2.6	2.98
Thailand	1.83	1.85	1.9	1.64
India	3.11	2.81	2.7	2.76
China	1.70	1.70	1.7	1.77
Chile	2.00	1.94	1.9	1.95
Brazil	2.25	1.90	2.2	2.22

Source: United Nations World Population Prospects, World Development Indicators (2009)

Table 2.11: Number of health institutions by region

	2002	2003	2004	2005	2006	2007	2008	2009
Nairobi	356	361	377	389	409	347	387	406
Central	819	829	868	894	972	556	1199	1251
Coast	519	525	550	566	624	717	723	770
Eastern	778	788	824	849	952	1079	942	1106
North Eastern	127	127	135	139	162	164	198	232
Nyanza	466	472	494	509	601	761	716	773
Rift Valley	1082	1096	1146	1181	1308	1573	1648	1732
Western	352	357	373	385	443	392	377	426
Total	**4,499**	**4,555**	**4,767**	**4,912**	**5,471**	**5,589**	**6,190**	**6,696**

Source: Economic Survey (2010)

considerable differences exist. Fertility rates are high in Africa and the Middle East but below replacement rates in East Asia, Central and Eastern Europe.

It has been observed that poorer families tend to have more children than richer ones. Similarly, poorer countries have higher population growth rates as compared to richer ones. Comparing the fertility rate of Kenya with that of China and Singapore (Table 2.12), there is a lot that Kenya needs to borrow so as to evaluate its population policy and align it to the economic growth strategy. Kenya's population policy targets as included in the current health policy framework are summarized in Table 2.13.

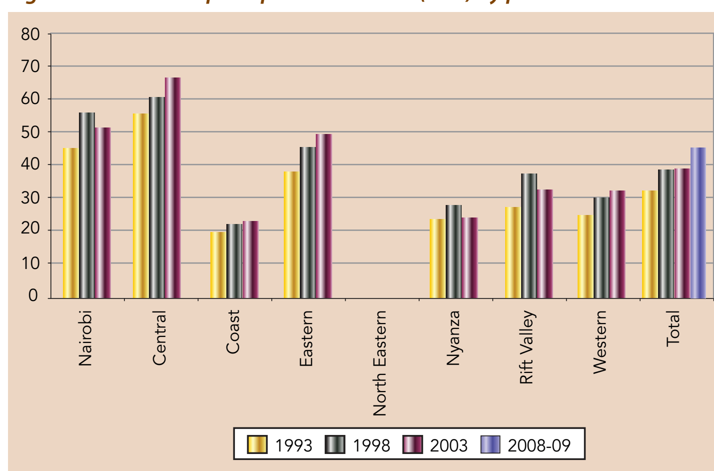
There are three major components of population change: fertility, mortality and international migration. International migration is the most difficult growth component to assess because data is inadequate (Government of Kenya, 2006). There is no reason to believe, nevertheless, that international migration has been a significant factor in population change in Kenya. The management of population growth has, however, been successful given the impressive progress achieved in areas of family planning and maternal education over the last two decades. However, more still needs to be done if Kenya is to enjoy a sustainable economic growth rate. Available data shows declining fertility trends across all the provinces. Figure 2.8 presents the CPR for Kenya by province.

Table 2.13: Population policy targets

Target area		Targets
Demographic	(i)	Reduction of the infant mortality rate (per 1,000 live births) from 67 in 1995 to 66 by the year 2000 to 63 by 2005 and to 59 by 2010.
	(ii)	Reduction of the maternal mortality ratio (per 100,000 births) from 365 in 1995 to 230 by 2005 and 170 by 2010.
	(iii)	Reduction of the total fertility rate from 5 in 1995 to 4 by the year 2000 to 3.5 by 2005 and 2.5 by 2010
	(iv)	Increase in the Contraceptive Prevalence Rate (CPR) from 33 per cent in 1993 to 43 per cent by the year 2000 to 53 by 2005 and to 62 by 2010
Health Services	(i)	Increase in full immunisation coverage from 80 percent in 1995 to 98 per cent by the year 2010.
	(ii)	Increase in professionally attended deliveries from 45 per cent in 1995, to 90 per cent by the year 2010

Source: Kenya Demographic and Health Survey (2003)

Figure 2.8: Contraceptive prevalence rate (CPR) by province



Source: Kenya Demographic and Health Survey (1993, 1998, 2003, 2008-09)

There has been an improvement in the uptake of contraceptives in all the provinces, especially Coast, Nyanza, Rift Valley, and Western. Table 2.14 presents the trends in fertility rates by province. Fertility rates are highest in North Eastern Province and lowest in Nairobi. It is observed that fertility rates remain high, hence the need to increase the CPR by addressing unmet needs in the population.

Under-five mortality

The differences in the health status of middle and low income countries are large. As indicated by Table 2.15, under-five mortality has remained below 20 per 1000 in some Asian countries while it has been above 100 per 1000 in the sub-Saharan Africa, Kenya included.

Table 2.14: Trends in total fertility rate by province

Province/ Residence	1993	1998	1999	2003	2006	2008-09
Nairobi	3.4	2.6	3	2.7	2.8	2.8
Central	3.9	3.7	3.8	3.4	3.2	3.4
Coast	5.3	5.1	5.2	4.9	5.6	4.8
Eastern	5.9	4.7	5.2	4.8	5.0	4.4
North Eastern	n.a.	n.a.	7.0	5.8	7.2	5.9
Nyanza	5.8	5	5.5	5.6	5.4	5.4
Rift Valley	5.7	5.3	5.8	5.8	5.8	4.7
Western	6.4	5.6	6	5.8	5.8	5.6
Residence						
Urban	3.4	3.1	2.7	3.3	3.2	2.9
Rural	5.8	5.2	5.8	5.4	5.5	5.2
Kenya	5.4	4.7	5.0	4.9	5.0	4.6

Source: Kenya Demographic and Health Survey (1993, 1998, 2003, 2008-09)

In sub-Saharan African countries, malaria accounts for the greatest proportion of mortality in children. Other diseases that account for mortality include HIV/AIDS, problems in the first months of life (which depend strongly on the quality and availability of prenatal services), acute respiratory infections, diarrhoeal diseases, and measles. These diseases, along with malnutrition, remain significant causes of avoidable child deaths. According to UNICEF (2009), globally, more than 24,000 children die everyday (about 8.8 million annually), mostly from preventable causes such as childbirth complications (40%), pneumonia (19%), diarrhoea (18%), malaria (8%), HIV/AIDS (3%) and measles (2%). Ninety-nine per cent (99%) of these deaths take place in the developing world and mostly it is children from poor households. Six million of the annual deaths could be prevented through simple affordable strategies such as better nutrition, birth spacing, skilled birth attendants, vaccination, early recognition and treatment of childhood diseases such as measles. Yet, only half of the world's regions are making sufficient progress towards MDG4 (UNICEF, 2008), showing lack of political goodwill to reduce child mortality by two thirds by 2015.

Table 2.15: Under 5 mortality 2005-2009

Country	2005	2006	2007	2008	2009
Argentina	17	16	15	15	14
Botswana	66	61	59	59	57
Brazil	26	24	23	22	21
Chile	9	9	9	9	9
China	25	24	22	21	19
Egypt	30	28	25	23	21
Ghana	84	80	76	72	69
India	77	74	71	68	66
Indonesia	46	44	42	41	39
Kenya	93	91	88	86	84
Korea	6	5	5	5	5
Malaysia	8	7	7	6	6
Mauritius	15	16	16	17	17
Seychelles	13	13	13	13	12
Singapore	3	3	3	3	3
South Africa	79	75	69	65	62
Tanzania	123	119	116	111	108
Thailand	16	15	15	14	14
Tunisia	23	23	22	21	21
Uganda	139	136	133	130	128

Source: World Bank Indicators (2010)

Regional comparison within Kenya (Table 2.17) indicates that infant mortality is conspicuously higher in some provinces such as Nyanza, Western and Coast as compared to the rest of the provinces. These are the same regions where poverty levels are high and carry a larger burden of malaria.

From the 2008-09 KDHS survey, neonatal mortality increased from 25 to 35 in the last 10 years but then declined again in the last 5 years, which may be an indication of better maternal neonatal/prenatal and antenatal/postnatal health care services. Table 2.14 presents trends in mortality rates for various age groups in the past 14 years.

Similarly, postnatal mortality has declined steadily within the last 15 years from 34 to 21 children per 1000. Infant mortality has also declined from 59 to 52 per 1000, with child and under-five mortality showing similar trends.

Table 2.16: Mortality rates trend for various groups–neonatal to under-five

Years preceding the survey	Neonatal mortality	Postnatal mortality	Infant mortality	Child mortality	Under-five mortality
0-5	31	21	52	23	74
5-9	35	32	67	29	95
10-14	25	34	59	37	93

Source: Kenya National Bureau of Statistics (2010)

Table 2.17: Trends in infant mortality rate by province

Province	1989 KDHS	1993 KDHS	1998 KDHS	1999 census	2000 MICS	2003 KDHS	2008-9 KDHS
Central	37	31	27	37	36	44	42
Nairobi	46	44	41	50	51	67	60
Rift Valley	35	45	50	51	48	61	48
Eastern	43	47	53	44	57	56	39
Western	75	64	64	101	87	80	65
Coast	107	68	70	86	65	78	71
Nyanza	94	128	135	112	117	133	95
North Eastern	n.a.	n.a.	n.a.	65	n.a.	91	57
Residence:							
Urban	57	46	55	n.a.	59	61	63
Rural	59	65	74	n.a.	73	79	58
Gender:							
Males	63	67	75	n.a.	75	84	
Females	54	59	67	n.a.	65	67	
KENYA	59	62	71	77	73	77	

Source: Kenya National Bureau of Statistics (2010)

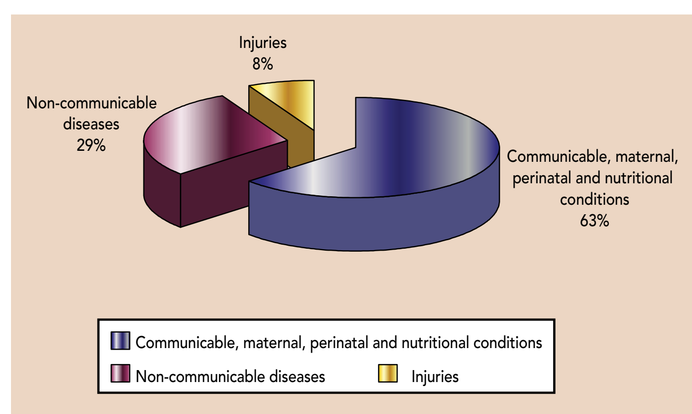
This may be attributed to improved medical services such as immunization against diseases such as measles, increased use of ITN, proper child spacing, and better child nutrition. Table 2.18 presents trends in early childhood mortality rates, which strengthen the above discussion.

The burden of disease

Availability of consistent and comparative data on the Burden of Disease (BOD) and injuries in a population is an important input to health policy and planning processes. Information on the burden of disease in Kenya is obtained from the World Health Organization (WHO) GBD Study of 2004, whose data was updated in 2008. Figure 2.9 presents the burden of disease by disease and injury groups.

Of the total burden of disease, communicable, maternal, and perinatal diseases (together with nutritional conditions) account for the largest proportion with 63 per cent. This group of diseases and nutritional deficiencies include: infectious and parasitic diseases, respiratory infections, maternal conditions, perinatal conditions, and nutritional deficiencies. The non-communicable diseases which comprise of: malignant and other neoplasms, diabetes

Figure 2.9: Burden of disease by disease and injury groups (proportions)



Source: World Health Organization (2008)

Table 2.18: Trends in early childhood mortality rates

Survey year	Approximate calendar period	Infant mortality	Under-five mortality
1998	1993-1997	74	121
2003	1998-2002	77	115
2008-09	2003-2007	52	74

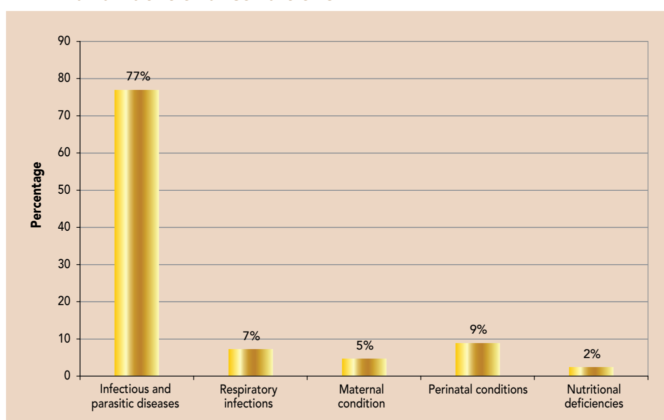
Source: Kenya National Bureau of Statistics (2010)

mellitus, endocrine disorders, neuropsychiatric conditions, sense organ disease, cardiovascular disease, respiratory disease, digestive disease, genitourinary disease, skin disease, musculoskeletal disease, congenital anomalies and oral conditions come in second, contributing 29 per cent to the burden of disease in Kenya. Injuries (including both intended and unintended) account for 8 per cent of the burden of disease. The major cause of injuries is traffic accidents, which account for high fatalities each year.

Figure 2.10 describes the contribution by disease to the burden of disease associated to communicable, maternal, perinatal and nutritional conditions. Infectious and parasitic diseases account for the largest proportion to the disease burden. The reason for this large contribution is that HIV/AIDS, tuberculosis (TB) and malaria fall into this category. Of the total burden associated with infectious and parasitic diseases, HIV/AIDS accounts for the largest proportion at 61 per cent, with 12 and 9 per cent for TB and malaria, respectively.

The scope of HIV/AIDS in Kenya is well documented in the Kenya AIDS Indicator Survey 2007 (Government of Kenya, 2009). The survey suggests that 7.1 per cent of Kenyan adults aged 15-64 years were infected with HIV. This age group forms the total labour force, which contributes

Figure 2.10: Contribution by disease to the burden of disease associated to communicable, maternal, perinatal and nutritional conditions

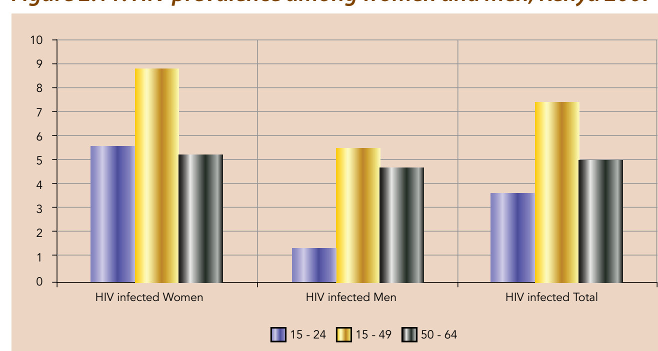


Source: World Health Organization (2008)

enormously to the country's economic performance or Gross Domestic Product (GDP).

A significantly greater proportion of women (8.4%) than men (5.4%) were infected with HIV. There were an estimated 863,000 women and 519,000 men aged 15-64 years living with HIV. The data presented in Figure 2.11 reveals the gender dimension of HIV/AIDS. Women shoulder a larger burden of this disease not only in terms of infections but also as caregivers, hence a huge reduction in economic productivity.

Figure 2.11: HIV prevalence among women and men, Kenya 2007



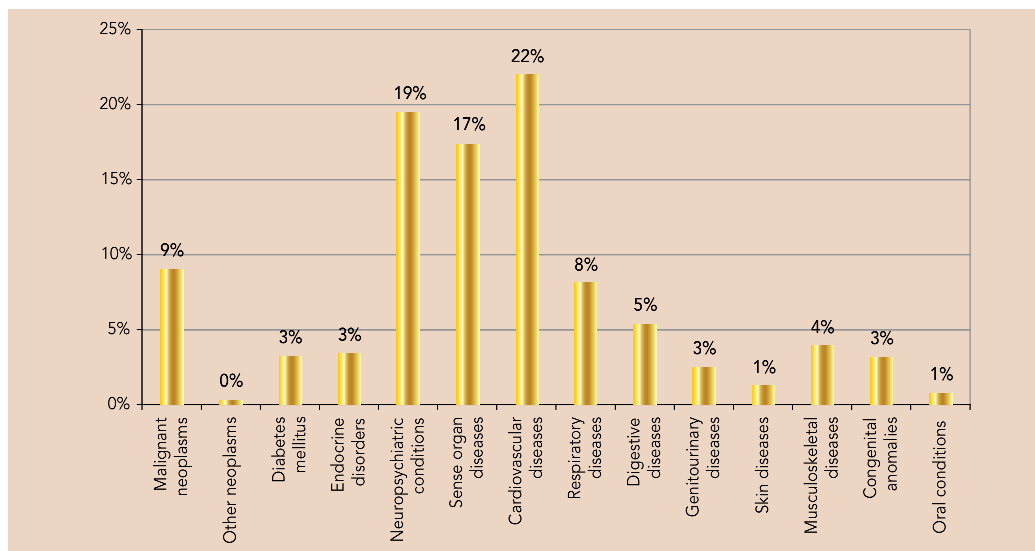
Source: Government of Kenya (2009c)

This suggests that funding of HIV/AIDS programmes should be gender-sensitive so as to ensure that resources are directed where they are greatly needed.

Figure 2.12 presents the contribution by disease to the burden of disease associated with Non-Communicable Diseases (NCDs). Their contributions to the burden of disease is as follows: malignant and other neoplasms (9%), diabetes mellitus (3%), endocrine disorders (3%), neuropsychiatric conditions (19%), sense organ disease (17%), cardiovascular disease (22%), respiratory disease (8%), digestive disease (5%), genitourinary disease (3%), skin disease (1%), musculoskeletal disease (4%), congenital anomalies (3%) and oral conditions (1%).

Although infectious diseases continue to account for the larger share of the global burden of disease,

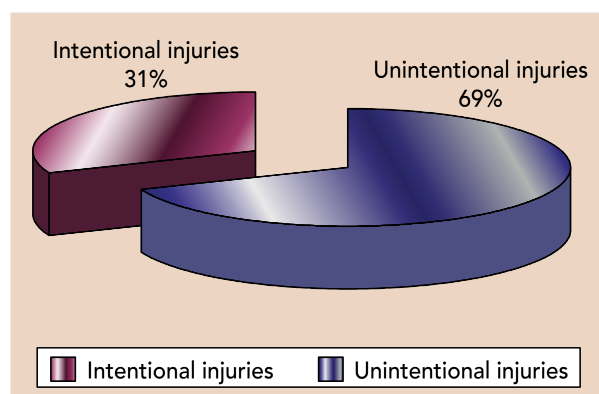
Figure 2.12: Contribution by disease to the burden of disease associated with non-communicable diseases, 2008



Source: World Health Organization (2008)

the burden share of NCDs is growing. While communicable diseases are largely associated with young populations in developing countries, NCDs are primarily associated with aging populations and developed countries. For a decade or so, observers have talked of a 'double burden of disease' in developing countries, distinguishing between the 'unfinished agenda' of communicable diseases among younger populations and the 'emerging agenda' of NCDs at older ages.[5] Since provision of health care is critical for development, these concerns are pertinent for resource-constrained countries such as Kenya, which must consequently take advantage of opportunities to curb disease.

Figure 2.13: Contribution by injury type to the burden of disease associated with injuries



Source: World Health Organization (2008)

Figure 2.13 presents the contribution of injuries to the burden of disease.

Unintentional injuries, which account for 69 per cent of total injuries comprise of: road traffic accidents, poisonings, falls, fires, drowning and other unintentional injuries not specified. The intentional injuries include self-inflicted injuries, violence and war.

Conclusion and Recommendations

Kenya has made commendable progress in the health sector in the past decade, though a lot more needs to be done. Public health expenditure remains a key component of the success of the health sector strategies, where more resources need to be channelled while ensuring that existing ones are used in an efficient manner. This would in the long run reduce the burden shouldered by households in health financing as earlier revealed through the National Health Accounts. There is also the general shift in resources from curative to preventive services. This is a welcome move, though the country still faces a huge burden of disease that requires more resources to be channelled to the curative services.

The uptake of health insurance, especially voluntary health insurance, has not been very encouraging given the available data. There is need to reverse the trend given that there are enormous benefits associated with insurance in the case of illnesses that are expensive to treat.

Life expectancy is low in Kenya relative to other countries. However, there is a lot of optimism given that the health sector is moving in the right direction. Most of the indicators presented earlier, especially at regional level, are showing signs of improvement.

Distribution of health resources appears to be unequal across provinces. Of the health resources analysed, both human resources and health facilities are not equitably distributed across the country, and this has an impact on health service delivery. However, with the existence of norms and standards for health service provision, there is every reason to believe that with their implementation, health service provision would improve.

In light of the above insights, the government and other stakeholders should undertake to do the following:

- Institute measures to increase both technical and allocative efficiencies through use of norms, standards and guidelines together with stringent but efficient financial systems.
- Increase funding to the health sector through innovative healthcare financing strategies, for instance, further increasing insurance coverage.
- Shift more resources to preventive healthcare so as to reduce the incidence of mortality, which necessitates increases in the curative budget. Provinces with high infant mortality will need specific measures such as provision of mosquito nets and infant food supplements.
- Address unmet needs in family planning and improve on the distribution of commodities for family planning. This should also be complemented by improving male involvement in family planning.
- Conduct robust campaigns on the importance of women delivering in health facilities or under the supervision of a qualified birth attendant.
- Address the issue of inequality in the distribution of health facilities and health workers by implementing the available norms and standards in health service delivery.

Endnotes

1 http://www.pharmaccess.org

2 http://www.guardian.co.uk/journalismcompetition/professional-insurance-uninsurable

3 http://www.onlyinsurance.com/

4 http://www.un.org/esa/sustdev/publications/africa_casestudies/microcare.pdf

5 See Gwatkin, D.R. and P. Heuveline (1997), 'Improving the health of the world's poor: Communicable diseases among young people remain central', British Medical Journal, No. 7107 Volume 315.

3 Education

Introduction

The Kenya Vision 2030 and its First Medium Term Plan (2008-2012) identify education and training as key sectors under the social pillar that would enable the country develop requisite human capital for sustainable development (Government of Kenya, 2007a and 2008).The government has implemented various reforms and interventions towards increasing access to education. Some of the recent reforms include the reintroduction of Free Primary Education (FPE) in 2003, the implementation of Free Day Secondary Education (FDSE) in 2008 and implementation of various programmes under the Kenya Education Sector Support Programme (KESSP) 2005-2010 (Government of Kenya, 2005a). Although the government aimed to integrate Early Childhood Development Education (ECDE) into primary education by 2010 (Government of Kenya, 2005a and 2005b), the sub-sector is yet to receive full support in terms of teachers and teaching and learning materials through public funding due to financial constraints. Emphasis has been placed on higher levels of education attainment and training given their importance in the acquisition of knowledge and new skills, for competitive and adaptive human resource that is crucial for productivity gains and sustainable development.

Overall, the performance of the education sector depends on a number of factors, key among them: the levels of resource allocation, the cost of education and levels of private investment in education.

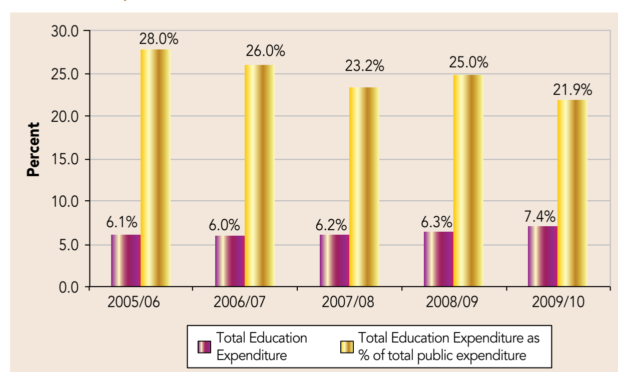
This chapter focuses on public spending on education and analysis of key performance indicators, namely: access and participation, education index, equity, quality and internal efficiency during the last five years; and linkages between education and training; and skill needs and availability.

Public Expenditure on Education

Provision of education in Kenya is funded by the public sector, households and other stakeholders including private entrepreneurs, Non-Governmental Organizations (NGOs) and development partners. The sector receives one of the highest levels of public funding. In 2005/06, the total education expenditure as a percentage of GDP was 6.1 per cent and 7.1 per cent in 2009/10 (Figure 3.1).

Although education financing as a percentage of total government expenditure was 28.0 per cent in 2005/6 and 21.9 per cent in 2009/10, public expenditure on education increased in absolute

Figure 3.1: Public expenditure on education as a percentage of GDP, Kenya



Data Source: Appropriation Accounts and Economic Survey, Various

Table 3.1: Public education spending as a percentage of total government spending and GNP, 2007

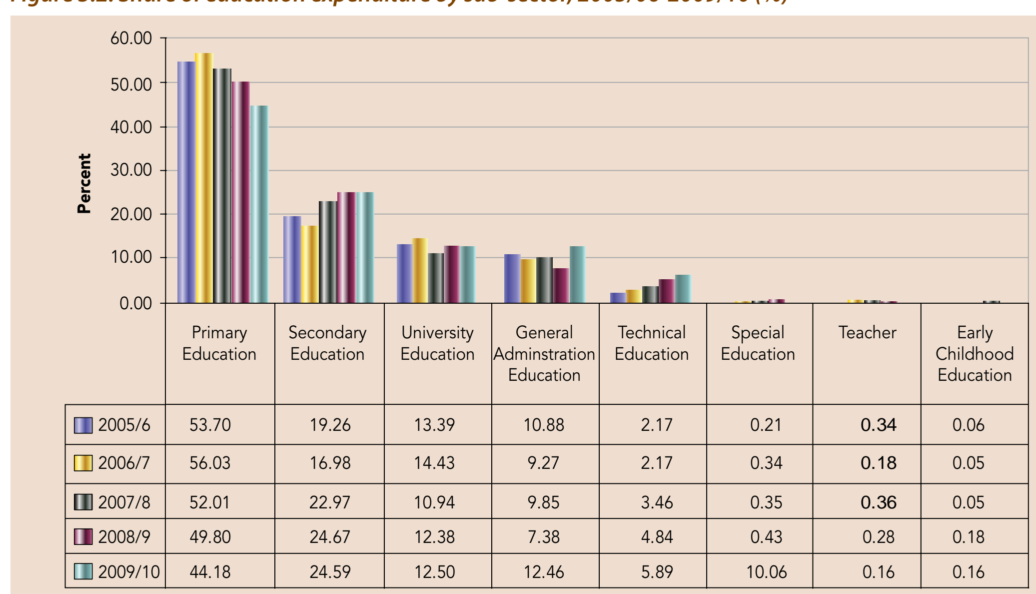
	Total public expenditure on education as	
	% of total government Expenditure	% of GNP
South Africa	17.4	5.5
Korea	15.3	4.4
India	…	3.2
Argentina	14.0	4.6
United Kingdom	12.5	5.4
Kenya	**23.5**	**7.0**
Malaysia	25.2	4.7
Uganda	18.3	5.3

Source: UNESCO (2010)

terms during the review period. In 2007, total public expenditure on education as a percentage of GNP was relatively high (23.5%) for Kenya, compared to some comparator countries such as South Africa (17.4%). Total education expenditure as a percentage of total government expenditure for Kenya was higher than for most comparator countries (Table 3.2). Nonetheless, higher public expenditure is expected for Kenya given its relatively lower achievements in post-primary access rates and literacy levels compared to the group of middle income countries such as Malaysia.

With regard to the allocation of the total education budget across sub-sectors, in 2009/10 the primary school sub-sector, with a share of 44 per cent, received the highest share of government expenditure on education. Secondary and university sub-sectors received 25 per cent and 13 per cent of the total education budget, respectively (Figure 3.2). Overall, the high allocation to primary education is consistent with the Millennium Development Goals (MDGs) and Education for All (EFA) goals on attaining a Net Enrolment Rate (NER) and

Figure 3.2: Share of education expenditure by sub-sector, 2005/06-2009/10 (%)



	Primary Education	Secondary Education	University Education	General Adminstration Education	Technical Education	Special Education	Teacher	Early Childhood Education
2005/6	53.70	19.26	13.39	10.88	2.17	0.21	0.34	0.06
2006/7	56.03	16.98	14.43	9.27	2.17	0.34	0.18	0.05
2007/8	52.01	22.97	10.94	9.85	3.46	0.35	0.36	0.05
2008/9	49.80	24.67	12.38	7.38	4.84	0.43	0.28	0.18
2009/10	44.18	24.59	12.50	12.46	5.89	10.06	0.16	0.16

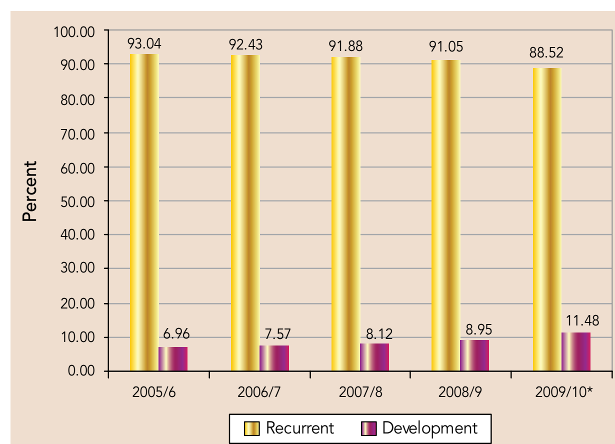
Source: Appropriation Accounts and Economic Survey (various); * Estimates

completion rate of 100 per cent at primary education level by 2015.

The increase in the share of financing going to the secondary sub-sector from about 22 per cent in 2005/6 to nearly 25 per cent in 2009/10 can be attributed to: transfer of grants to schools under the Free Day Secondary Education programme for teaching and learning materials and other operational costs; bursary allocation for bright students from poor households and vulnerable groups; and development grants allocation and infrastructure development in marginalised areas. The share of financing going to secondary education is also expected to increase as the transition rate from primary education to secondary education increases to meet the 2012 target of 75 per cent (Government of Kenya, 2008). Overall, there is need to increase the share of financing sub-sectors that are currently under-funded including ECDE, technical education, special education and teacher training.

In 2009/10, about 89 per cent of the total education expenditure was recurrent, down from 93 per cent in 2005/06. As shown in Figure 3.3, development funding was estimated at 11 per cent of the total education budget in 2009/10 up from 7 per cent in 2005/06. The increasing level of development expenditure is a positive trend given the inadequate infrastructure and poor sanitation facilities in most marginalised areas, notably Arid and Semi-Arid Lands (ASALs) and urban informal settlements.

Figure 3.3: Recurrent and development expenditure on education



Source: Appropriation Accounts and Economic Survey, Various; * Estimates

Per capita expenditure on education

Data provided in Table 3.2 shows estimated government (recurrent) spending per student enrolled in the respective levels of education. Primary education public unit spending increased from Ksh 6,251 in 2005 to Ksh 7,978 in 2009 at current prices.

Table 3.2: Per capita expenditure on education by level, 2005-2009 (Ksh)

	2005	2006	2007	2008	2009
Unit public spending (Ksh)					
Primary	6,251	6,862	7,457	7,781	7,978
Secondary	20,783	24,918	29,485	29,484	27,574
Technical	24,651	32,302	43,474	55,318	83,761
University	113,867	143,353	138,417	137,707	113,779
As ratio to primary education					
Secondary	3.3	3.6	4.0	3.8	3.5
Technical	3.9	4.7	5.8	7.1	10.5
University	18.2	20.9	18.6	17.7	14.3
GDP per capita*	40,292	44,899	49,204	54,371	57,887
As % GDP per capita					
Primary	15.51	15.28	15.16	14.31	13.78
Secondary	51.58	55.50	59.92	54.23	47.63
Technical	61.18	71.94	88.35	101.74	144.70
University	282.61	319.28	281.31	253.27	196.55

Source: *Economic surveys (various); Authors' computations

The unit spending for secondary education (27,574) was 3.5 times that of primary education in 2009 and 48 per cent of Gross Domestic Product (GDP) per capita. University and technical education public unit spending (Ksh 83,761 and 113,779) were 10.5 times and 14 times that of primary education, respectively. Therefore, unit spending on education increases with level of education. To ensure sustainable financing of education and training, it is important that public-private partnerships are institutionalized and strengthened, especially at tertiary level.

Table 3.3: Gross enrolment rate and net enrolment rate, 2005-2009

Pre-Primary	2005	2006	2007	2008	2009
Gross Enrolment Rate	57.9	58.8	59	59.8	60.6
Net Enrolment Rate	32.9	33.6	42.1	43.0	49.0
Primary					
Gross Enrolment Rate	107.6	103.8	108.9	109.8	110.0
Net Enrolment Rate	82.8	83.5	91.6	92.5	92.9
Secondary					
Gross Enrolment Rate	28.8	32.4	38.0	42.5	45.3
Net Enrolment Rate	20.5	22.5	24.2	28.9	35.8

Source: Government of Kenya (2010)

Performance of the Education Sector

Access and participation levels

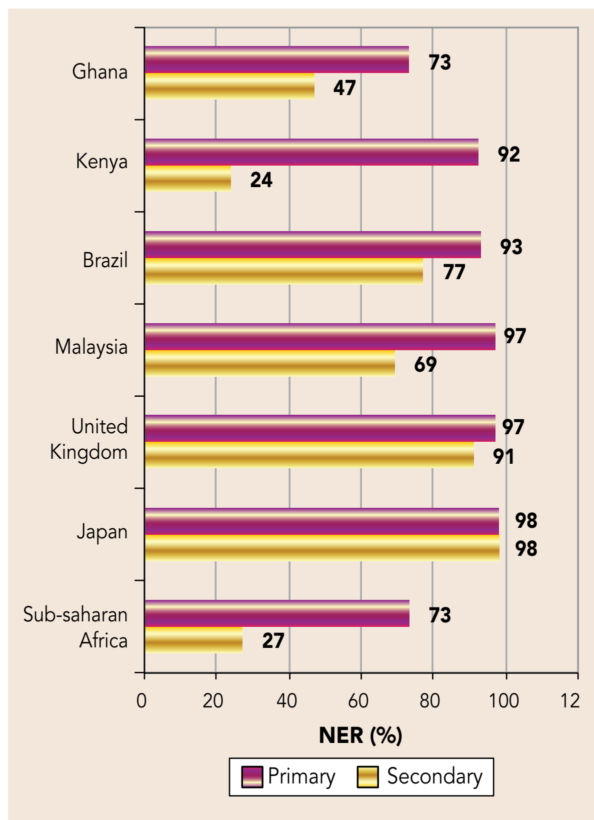
Kenya is on track towards attaining the Millennium Development Goals on universal primary education and gender equity at primary and secondary education. In 2009, primary gross and net enrolment rates increased from 107.6 per cent and 82.8 per cent in 2005 to 110 per cent and 92.9 per cent in 2009, respectively. Participation rates are, however, low at ECDE and post-primary education. For instance, gross and net enrolment rates in ECDE increased from 57.9 per cent and 32.9 per cent in 2005 to 60.6 per cent and 49 per cent in 2009, respectively. Secondary gross enrolment rate increased from 28.8 per cent in 2005 to 45.3 per cent in 2009, while net enrolment rate rose from 20.5 per cent in 2005 to 35.8 per cent in 2009 (Table 3.3).

Kenya is on track towards attaining the Millennium Development Goals on universal primary education and gender equity at primary and secondary education. In 2009, primary gross and net enrolment rates increased from 107.6 per cent and 82.8 per cent in 2005 to 110 per cent and 92.9 per cent in 2009. Participation rates are, however, low at ECDE and post-primary education.

The underlying causes of the relatively low enrolment rate especially at secondary education and primary education in marginalized areas include: high poverty levels; inadequate educational facilities and other infrastructure–especially in ASAL areas and urban slums; and socio-cultural factors–including Female Genital Mutilation (FGM) and early marriages. In order to mitigate the effects of these challenges and reduce inequalities in access to education, some of the interventions that can be implemented in addition to the Free Primary Education (FPE) and Free Day Secondary Education (FDSE) policies include: expansion of school feeding programmes to cover areas with high poverty rates; expansion of school infrastructure and construction of supportive infrastructure like roads and water supply.

Comparative data in Figure 3.4 indicates that Kenya's NERs at the primary and secondary levels are above the sub-Sahara Africa (SSA) averages of 73 per cent and 27 per cent, respectively. However, Kenya's secondary school NER of 24 per cent in 2007 and 35.8 per cent in 2009 was lower than for Malaysia (69%) and Brazil (77%), but slightly higher than the sub-Saharan average of 27 per cent. Evidently, although there is considerable progress in primary education participation levels, there is need for enhanced access to secondary education.

Figure 3.4: Primary and secondary net enrolment rates for selected countries, 2007



Source: UNESCO (2009); Ministry of Education, EMIS

The country has also recorded a substantial increase in the number of learning institutions in the country. In 2009, for example, there were 38,247 ECDE centres, 26,667 primary schools, 6,971 secondary schools, 105 primary teacher training colleges and 31 universities in the country (Government of Kenya, 2010). During the same period, the enrolment was 1.91 million children in ECDE centres, 8.8 million pupils in primary schools, 1.51 million students in secondary schools, 177,735 students in universities, 163,340 students in non-formal schools, 189,000 adult education learners, about 26,324 trainees in teacher training institutions and 71,513 students in technical education institutions. This expansion can be attributed to increased development financing for the sector, both by the government (including Constituency Development Fund financing) and private sector investment in the sector.

Table 3.4: Education index for selected countries, 2005-2007

	2005	2006	2007
Kenya	**0.693**	**0.69**	**0.69**
South Africa	0.806	0.84	0.843
Egypt	0.732	0.697	0.697
Mauritius	0.813	0.836	0.839
Uganda	0.655	0.692	0.698
Tanzania	0.631	0.661	0.673
Korea, Republic	0.98	0.988	0.988
Singapore	0.908	0.911	0.913
Malaysia	0.839	0.848	0.851
Thailand	0.855	0.886	0.888
India	0.62	0.638	0.643
China	0.837	0.849	0.851
Brazil	0.883	0.888	0.891
Japan	0.946	0.949	0.949
United Kingdom	0.97	0.957	0.957

Source: Human Development Reports (2006, 2007, 2008 and 2009)

Education index

Another measure of education performance is the education index; a weighted average of the adult literacy index and the combined primary, secondary, and tertiary gross enrolment index. In the computation of the education index, the adult literacy index and Gross Enrolment Rate (GER) index are given weights of 2/3 and 1/3, respectively. In 2007, Kenya achieved an education index of 0.69, which is below that of South Africa (0.84), Mauritius (0.84) and Korea Republic (0.99) (Table 3.4).

The comparatively low and stagnant education index for Kenya can be attributed to the low adult literacy rate as well as low GER at the post-primary levels of education. The adult literacy rate for Kenya was 74 per cent in 2007. Although the rate was higher than the SSA average of 59 per cent, it was lower than that of most middle income countries (Figure 3.5). Further, the average number of schooling years for Kenya is 8.4 years, implying majority of Kenyans have only obtained primary education.

The combined (primary, secondary and tertiary) GER for Kenya was 59.6 per cent in 2007 which was lower than that of South Africa (76.8%), Mauritius (76.9%) and the Republic of Korea (98.5%). Kenya's GER at the primary level of education was 108.9 per cent in 2008, while that of secondary education was only 42.5 per cent. Access rates were much lower at the tertiary education level, with data indicating that Kenya has less than four people in a thousand enrolled in tertiary institutions (Table 3.5). A related challenge that can be observed from the analysis is the relatively lower percentage of females enrolled in Kenya's tertiary education (36%).

The low access rates at the secondary and tertiary levels of education imply that interventions to boost access to secondary and tertiary levels of education would form a key strategy to improve the combined GER index for Kenya and gender parity.[1]

On the other hand, low education index could imply that majority of the Kenyan labour force has not attained basic education skills and/or the required technical skills and knowledge for improved labour productivity, competitiveness and innovation. Indeed, the highest level of education completed by majority of Kenyans (86.4%) is primary education. This is followed by secondary education (25%), pre-primary education (9.5%), none or other (4.1%), and university education (1.2 per cent) (Government of Kenya, 2007a and 2007b).

Table 3.5: Tertiary education enrolment per thousand and female enrolment–school year ending 2007

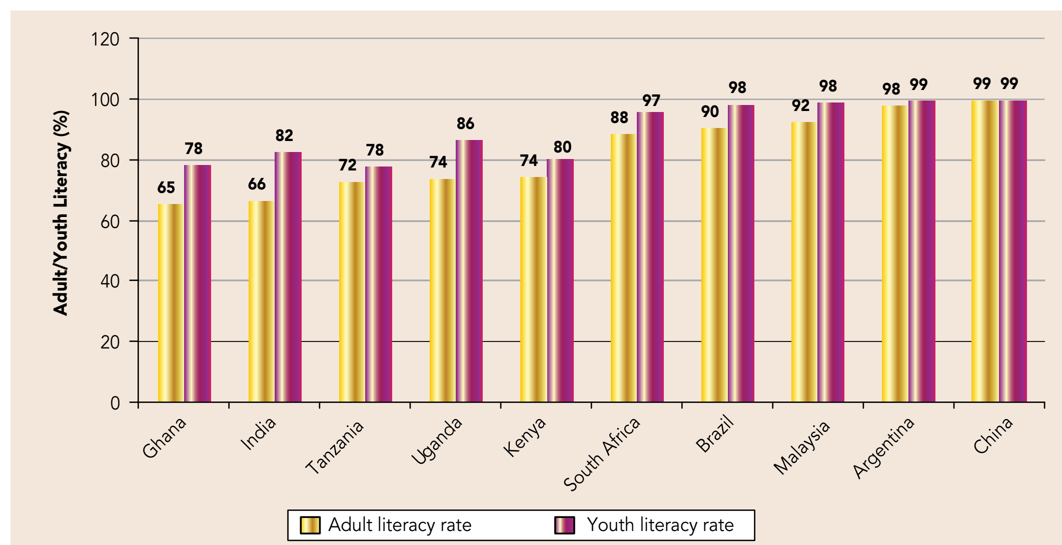
	Tertiary Education Enrolment Per 1000 Population	Total Enrolment in Tertiary Education (000)	% Female
Brazil	27.5	5,273	56
China	19.1	25,346	48
India	11.0	12,853	40
Japan	31.5	4,033	46
Kenya	**3.7**	**140**	**36**
Malaysia	28.2	749	54
South Africa	15.3	741	55
United Kingdom	38.9	2,363	57

Source: UNESCO (2010), and authors' calculations

Literacy levels

Using 2007 data for selected countries, it can be seen that the adult literacy rate was 74 per cent for Kenya compared to 98 per cent for Argentina and 92 per cent for Malaysia. Enrolment in science, engineering, manufacturing and construction courses is over 40 per cent in Korea and Malaysia compared to

Figure 3.5: Adult and youth literacy rates for selected countries, 2007



Source: UNESCO (2010)

Kenya's 29 per cent. The adult literacy rate is still low in relation to the comparator countries such as South Africa (82%) and Malaysia (92%). The high illiteracy rate of 26 per cent for Kenya can be attributed to the low access and participation rate at post-primary education, and regional inequalities in education service delivery. Youth literacy rate for Kenya was 80 per cent during the same period.

Being able to read and write (literacy) may, however, hide aspects of literacy that may be particularly crucial for the achievement of high and sustained economic growth and development. As an example, according to the Kenya National Adult Literacy Survey in 2007, about 61.5 per cent of adults attained minimum literacy level while only 29.6 per cent of adults had attained desired mastery in literacy competency, implying that over 70 per cent of Kenya's adult population have not attained the desired mastery of literacy competency.

For Kenya to be able to enhance and sustain its social and economic development, it needs to address the inadequacies and bottlenecks in its social sectors which, apart from improving learning outcomes entails: improving health outcomes and reducing poverty among the population. Some of the areas that require improvement include the need to increase enrolment and retention rates in all levels of education through improved access to quality post-primary education, and improved access to basic education in ASALs and urban informal settlements.

Gender equity

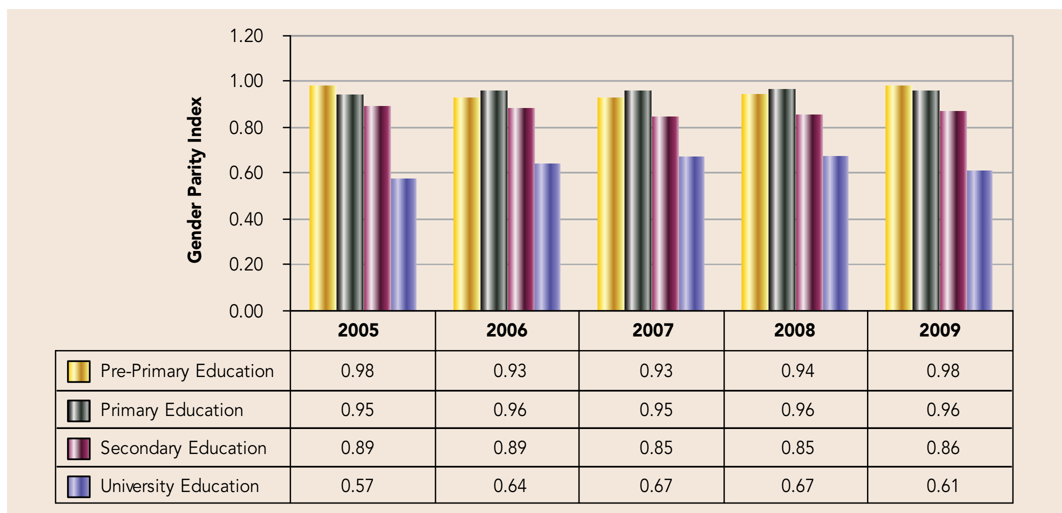
The Gender Parity Index (GPI) measures equity in access to education for both boys and girls. Gender parity in enrolment has been improving and the gap is relatively low in primary education. Primary education GPI was 0.95 in 2005 and 0.96 in 2009. At secondary education, the GPI was 0.89 and 0.86 in the respective years (Figure 3.6).

Factors contributing to gender inequality include insecure school environment, and inadequate sanitation in some schools that disproportionately affects girls' participation in schooling and retention. It is also important to observe that the inequalities at tertiary education, if not addressed, have implications on female participation in the labour market.

Resource utilization

Pupil-Teacher Ratio (PTR), average school size, and class size show levels of resource utilization in the education sector. The norms for primary PTR and class size are 40 and 50 students, respectively, while

Figure 3.6: Primary, secondary and university Gender Parity Index, 2005-2010



	2005	2006	2007	2008	2009
Pre-Primary Education	0.98	0.93	0.93	0.94	0.98
Primary Education	0.95	0.96	0.95	0.96	0.96
Secondary Education	0.89	0.89	0.85	0.85	0.86
University Education	0.57	0.64	0.67	0.67	0.61

Source: Ministry of Education, EMIS

Table 3.6: Resource utilization, 2007

	Pupil Teacher Ratio		Average School Size		Class Size	
Province	**Primary**	**Secondary**	**Primary**	**Secondary**	**Primary**	**Secondary**
Coast	53	24	544	359	39	34
Central	39	21	450	288	36	33
Eastern	39	22	322	274	32	33
Nairobi	47	17	1052	449	46	34
Rift Valley	43	23	390	272	35	34
Western	53	24	578	328	39	33
Nyanza	45	23	361	256	34	30
North Eastern	63	22	343	226	37	33
Total	**43**	**18**	**410**	**284**	**36**	**33**

Source: Ministry of Education, EMIS

at secondary school level, the PTR and class size targets are 35:1 and 45:1, respectively.

In 2007, the primary PTR ranged between 39 and 63, in Central and North Eastern provinces, respectively. The lowest school size was recorded in Rift Valley (390 pupils) and highest in Nairobi (1,052 pupils). The lowest class size was recorded in Eastern Province (32 pupils) while the highest was about 46 students, as recorded in Nairobi Province (Table 3.6).

At secondary school level, the PTR was 18:1 in 2007, with Nairobi Province recording a low of 17:1 and Western and Coast provinces recording a high of 24:1. The low PTRs were indicative of teacher under-utilization at the secondary level of education. The national class size was 33 students ranging from 30 in Nyanza, and 34 students per class in Coast, Rift Valley and Nairobi provinces, and was lower than the national target of 35:1. The average national school size was 284 students, with Nairobi Province recording a high of 449 students and North Eastern Province a low of 226 students.

Low class size and PTR in the affected regions imply under-utilization of physical and human resources and associated high unit costs. One contributing factor to this scenario relates to the existence of small schools or low school enrolment. On the other hand, high PTR especially at primary school level in Nairobi Province indicates overcrowding of classrooms, especially in informal settlements, and has a negative effect on the quality of education.

Another challenge affecting the sector and threatening the attainment of EFA and Universal

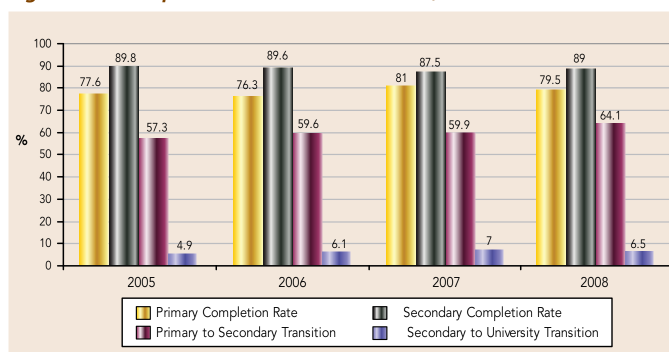
Table 3.7: Survival rate through the education system in Kenya

Survival rates	1994 - 2006 (Cohort 1)			1995 - 2008 (Cohort 2)		
	Boys	**Girls**	**Total**	**Boys**	**Girls**	**Total**
Survival rate from Class 1 to 5 (%)	67.6	72.2	69.8	68.9	73.7	71.3
Survival rate from Class 1 to 8 (%)	53.3	53.2	53.3	53.8	53.7	53.8
Survival (transition) rate from Class 8 to Form 1 (%)	42.4	40.4	41.4	42.7	41.2	42.0
Survival rate from Class 1 to Form 1 (%)	22.6	21.5	22.1	23.0	22.1	22.6
Survival rate from Form 1 to Form 4 (%)	100.0	98.9	99.4	91.6	85.3	88.4
Survival rate from Class 1 to Form 4 (%)	22.6	21.2	21.9	21.1	18.9	20.0
Survival rate from Class 1 to University level (%)	2.1	1.3	1.7	1.7	0.9	1.3
Survival rate from Form 4 to University level (%)	7.5	4.0	5.9	8.1	4.6	6.3

Source: Ministry of Education, EMIS Section

Primary Education (UPE) goals relates to the effects of HIV/AIDS. The number of HIV/AIDS orphans and other vulnerable children was estimated at 1.2 million in 2008 and about 1.8 per cent of the country's total teaching force (of 245,000 teachers) die annually (Government of Kenya, 2010). Overall, HIV/AIDS erodes the quality of education, weakens demand and access in education, and affects overall curriculum delivery in education. Some intervention measures to address the challenge include prevention, care and support.

Figure 3.8: Completion and transition rates, 2005-2008



Source: Government of Kenya (2009); Ministry of Education, EMIS

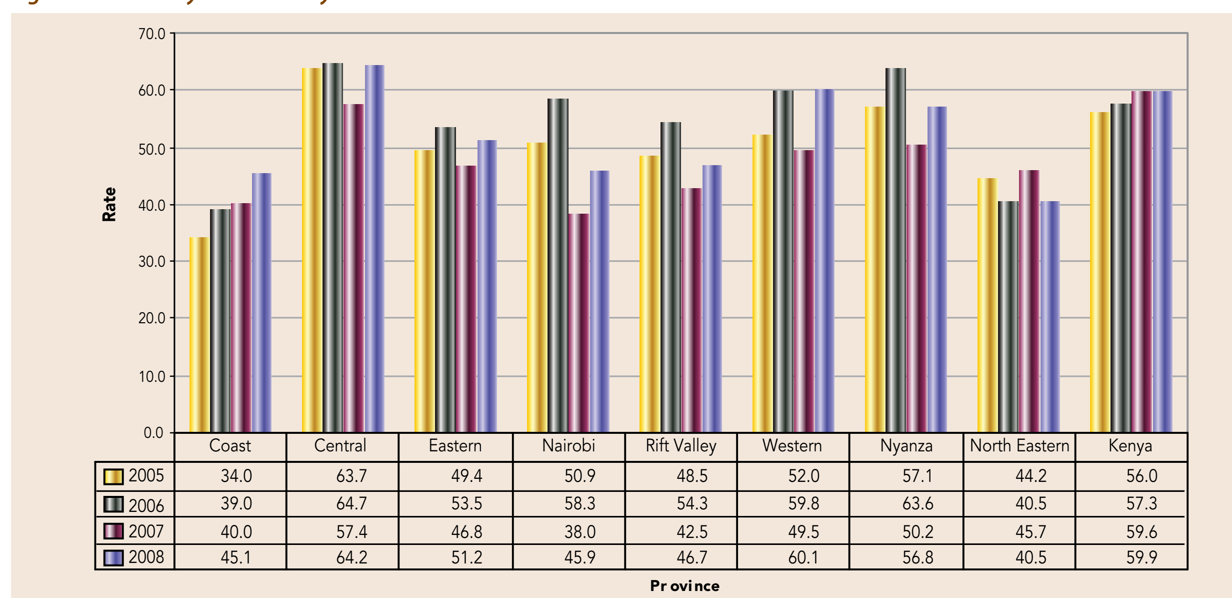
Internal efficiency

Table 3.7 presents the survival rate from grade 1 to tertiary education by gender for two student cohorts. Using the 1995-2008 cohort, about 71 per cent of pupils enrolled in Class 1 in 1995 progressed to Class 5, while 53.8 per cent made it to Class 8. This indicates that although the primary education system has the ability to increase participation rates, its ability to sustain them at an increasing rate seems to be weak.

Survival within secondary education level is, however, relatively high implying high efficiency within the secondary education level. For instance, using the 1995-2008 education cohort, 88.4 per cent of the enrolled population completed secondary education. Consequently, the main challenge relates to increasing entry into secondary education level, since those who enrol actually survive to the final grade. However, the rate declined from 99.4 per cent as recorded by the previous cohort. Transition through secondary education is affected to some extent by inadequate capacity in some regions, low educational attainment levels among some Class 8 graduates, affordability, and socio-cultural factors, among others.

Transition from secondary to university education is relatively low compared to transition from primary

Figure 3.7: Primary to secondary school transition rates



	Coast	Central	Eastern	Nairobi	Rift Valley	Western	Nyanza	North Eastern	Kenya
2005	34.0	63.7	49.4	50.9	48.5	52.0	57.1	44.2	56.0
2006	39.0	64.7	53.5	58.3	54.3	59.8	63.6	40.5	57.3
2007	40.0	57.4	46.8	38.0	42.5	49.5	50.2	45.7	59.6
2008	45.1	64.2	51.2	45.9	46.7	60.1	56.8	40.5	59.9

Source: Government of Kenya (2009)

Table 3.8: Number of special needs institutions by category, 2003 and 2007

Category	2003	2007
Primary Special Schools	97	109
Units/Integrated	1,100	1,340
Secondary Special Schools	7	7
Vocational/Technical	5	5
Diploma Colleges (Integrated), Kenya Institute of Special Education	1	1
Universities (integrated)	2	2
Primary Teachers College	2	3
Total	**1,215**	**1,467**

Source: MoE, EMIS

to secondary education. The highest rate achieved recently was a transition rate of 7 per cent in 2007 and 6.5 per cent in 2008.

Access to special needs education

Special Needs Education (SNE) constitutes education and training programmes targeting children with disabilities (notably mental, physical, visual and hearing disabilities), gifted or talented. Table 3.9 shows the number of special needs education institutions in the country by category for the period between 2003 and 2007.

There has not been significant increase in the number of special needs education institutions by category during the period 2003-2007. This has implications on the access and participation of children with special needs. The enrolments increased by 126 per cent from 91,769 in 2003 to 207,761 in 2007 due to the improved SNE funding, which had enabled the institutions to expand their facilities and improve learning standards as well as establishment of special units in existing public schools.

The challenges of some categories of pupils with special needs have not been addressed. Examples of these are children with behavioural difficulties and those with various forms of learning difficulties, such as attention deficit. Those with relatively mild difficulties are often integrated into mainstream schools. Due to cultural beliefs and stigma, many children with special educational needs are not receiving any education (UNESCO, 2005). Facilities, teaching aids and learning materials are inadequate. Mainstream school buildings, in particular toilets in most schools, are not conducive for the physically disabled.

Emphasis on academic performance creates an atmosphere that is not favourable towards children who have learning difficulties, posing a challenge to the integration and inclusion of children with disabilities into the education system. All these challenges need to be addressed to ensure improved access to schooling among the disadvantaged groups.

Access to tertiary education

In the 2008/09 academic year, 6.5 per cent of KCSE candidates were admitted to universities locally. Although students who are not admitted to universities are expected to join other middle level colleges for certificate and diploma courses, those who are enrolled constitute only 13.7 per cent of KCSE candidates (Table 3.9). These are mainly Technical Industrial Vocational Entrepreneurship

Table 3.9: Admission trends to public universities, 2005/6-2008/9

Academic Year	Total Form 4 enrolment	% Qualified (c+ and above)	% Admitted-University	JAB % Qualified Admitted	% Admitted to TIVET	% Admitted to TTCs
2005/06	222,676	26	4.9	18.9	10.6	4.4
2006/07	260,665	26	6.1	23.5	9.1	3.8
2007/08	243,319	26	7.0	27.0	10.5	4.2
2008/09	276,192	27	6.5	24.2	10.3	3.4

Source: Joint Admissions Board and Statistical Abstract (2008, 2009, 2010)

and Training (TIVET) and Teacher Training Colleges (TTCs). It is estimated that over 60 per cent of secondary education graduates do not get places in tertiary education institutions. It is, therefore, important that investment in post-secondary education especially in technical programmes is enhanced.

Current interventions towards expanding tertiary education are articulated in the draft strategies for university and TIVET. They include expansion of individual universities through creation of constituent universities, encouraging the role of other stakeholders through public-private partnerships, upgrading of two polytechnics (Mombasa and Kenya polytechnics) to university status, strengthening the Commission for Higher Education, and emphasising on revitalization of TIVET among others.

However, more is required in ensuring education and training programmes contribute to the development of requisite skills for sustainable development. Possible interventions include expanding tertiary education to accommodate additional graduates from the expanding secondary education, supporting creation of centres of excellence, and promoting youth employment.

Ensuring relevance and employability could involve: effective guidance and counselling on choice of programmes based on academic skills; developing appropriate labour market information systems; conducting tracer studies in order to track education and train graduates (outputs) into the labour market while giving feedback for review and improvement of skills development; ensuring graduates are absorbed in the labour market; and undertaking skills inventory to inform areas for skills training in the country. On the other hand, education and training graduates who do not have access to gainful employment should be supported to start income-generating programmes, besides upgrading their skills.

Table 3.10: Unemployment rates in Kenya, by education level (%)

	Unemployment rates		
Educational Attainment	**Total**	**Males**	**Females**
Total	10.1	8.4	11.9
None	9.5	7.0	11.1
Pre-Primary	13.9	12.4	15.2
Standard 1 complete	9.6	8.7	10.3
Standard 1-4	8.2	7.3	9.2
Standard 5-8	9.8	8.2	11.6
Form 1-4	12.0	10.2	14.5
Form 5-6	7.8	5.1	14.6
University	11.2	7.7	18.9

Source: Wambugu, Munga and Onsomu (2009) and Kenya National Bureau of Statistics (2003)

Education Attainment and Unemployment in Kenya

As indicated above, it may be expected that with increasing education levels, unemployment rates would decrease *ceteris paribus*. This may not be necessarily the case, partly because, apart from educational attainment, many other factors are expected to influence unemployment. The most recent labour force survey data for Kenya provides the evidence of this possibility, with university graduates having higher unemployment rates (Table 3.10) than graduates from all primary school levels (above pre-primary). This may indicate that school leavers may not be equipped with necessary knowledge, skills and technology, rendering them unemployable. It may also be possible that the relatively well-educated individuals may be queuing for better jobs and/or the relatively well-educated youth who take up informal jobs do so as a coping mechanism as they continue to search for better paying job opportunities.

To address the unemployment problem, the government has implemented various interventions, including: emphasizing on technical skills development in education delivery. However, open unemployment and under-employment are a major socio-economic challenge. It is possible that the problem may not be strictly in the education

system, but a manifestation of economic and social challenges, including high population growth, slow and un-sustained economic growth to enable creation of adequate productive job opportunities in the formal sectors, weak linkages between education and training and the labour market, rural-urban migration, implementation of SAPs starting early 1990s, and reduced public investment to create the required jobs in the modern economy (Wambugu *et al*., 2009). Although the informal sector provides substantial job opportunities, especially in urban areas, the sector is associated with low returns and may not assist the majority of the under-employed youth. Consequently, there is need to increase investment and growth for creation of high quality jobs, absorption of skilled and educated labour force, and increased productivity.

Other factors explaining unemployment (or its probability) in Kenya include: economic performance and labour market segmentation and expectations among potential employees; queuing behaviour and associated aspirations for better quality jobs; a weak labour information system; and weak employment policies. The next sub-section expounds on the inverse relationship between education and unemployment.

Employability, Educational Attainment and Skills Mismatch

One of the common forms of lack of employability among the youth is lack of the necessary education and relevant training that can enable the youth get jobs. There are also cases of the working poor (Wambugu *et al*., 2009). To a large extent, education does not guard against unemployment, but rather it increases individual earnings by opening opportunities for the educated population to access working opportunities especially in the formal private and public sectors. Further, as the youth gain initial experience, higher education increases the employment incidence and enhances occupational mobility (World Bank, 2004). Overall, university education and technical training play a critical role in human development while reducing the risk of being openly unemployed or under-employed through its effect in increasing individual earnings.

While increasing access to primary education is critical in laying the foundation for entry into higher education, stimulating access to primary education is effective in reducing poverty, inequalities and unemployment when concerned individuals take initiatives to undertake post-primary education, especially secondary, technical training, and university education.

Consequently, while increasing access to primary education is critical in laying the foundation for entry into higher education, stimulating access to primary education is effective in reducing poverty, inequalities and unemployment when concerned individuals take initiatives to undertake post-primary education, especially secondary, technical training, and university education. This calls for a comprehensive approach in managing the flow of children across all levels of education until the attainment of higher education and entry into productive employment.

Assessment of skills needs and availability at firm level

New skills needs are brought about by various factors, including employers' new demand on employees, globalization, technological change and changes in organizational structures at the workplace (Onsomu *et al*., 2007). Skills availability concerns skills that exist in a particular industry/firm, sector and/or country. This includes competencies

Table 3.11: New employees demonstrating the required skills

Industry (n= 116)	Strongly Disagree	Disagree	Undecided	Agree	Strongly agree
Manufacturing (25)	1 (4%)	6 (24%)	5 (20%)	12 (48%)	1 (4%)
Financial institutions (28)	1 (3.6%)	1 (3.6%)	0	24 (85.7%)	2 (7.1%)
Insurance (3)	0	0	0	2 (66.7%)	1 (33.3%)
ICT (18)	0	0	1 (5.6%)	14 (77.8%)	3 (16.7%)
Hotels (19)	1 (5.3%)	4 (21.1%)	1 (5.3%)	10 (52.6%)	3 (15.8%)
Transport (10)	0	0	0	8 (80%)	2 (20%)
Travel (13)	1 (7.7%)	1 (7.7%)	0	9 (69.2)	2 (15.4%)
All firms	4 (3%)	12 (10%)	7 (6%)	79 (68%)	14 (12%)

Source: Onsomu, Ngware and Manda (2007)

attained through formal education and training, on the job training and experience. It is these skills that comprise overall human capital and has effects on firm outputs. Skills can be either technical or generic. Technical skills are attained through long term education and/or training, are specific and involve knowledge depth. Generic skills, on the other hand, concern people's skills, character, personal qualities and interpersonal relations and can be obtained through either experience and/or short term training such as communication skills, problem solving, and critical thinking, leadership, and information skills.

At a professional level, there is demand for multi-skilled professionals with specialist and technical skills, while at the firm level, continuous changes in the organizational structures call for change from traditional production/operational systems to modern methods of production. According to Onsomu *et al.* (2007), there is dire need for generic and specialist skills in the major firms in the country. Specific skills needed include people skills, communication skills, specialized technical skills, among others.

For the manufacturing and services firms surveyed during a KIPPRA survey in 2007, skills development had been identified as a major obstacle to firm productivity. Tables 3.11 and 3.12 present the main skills demanded, skills available and those lacking in a sample of 128 firms. Except for the firms in the transport industry, all other types of firms indicated that there are certain sector-specific skills that are not available in abundance in the market.

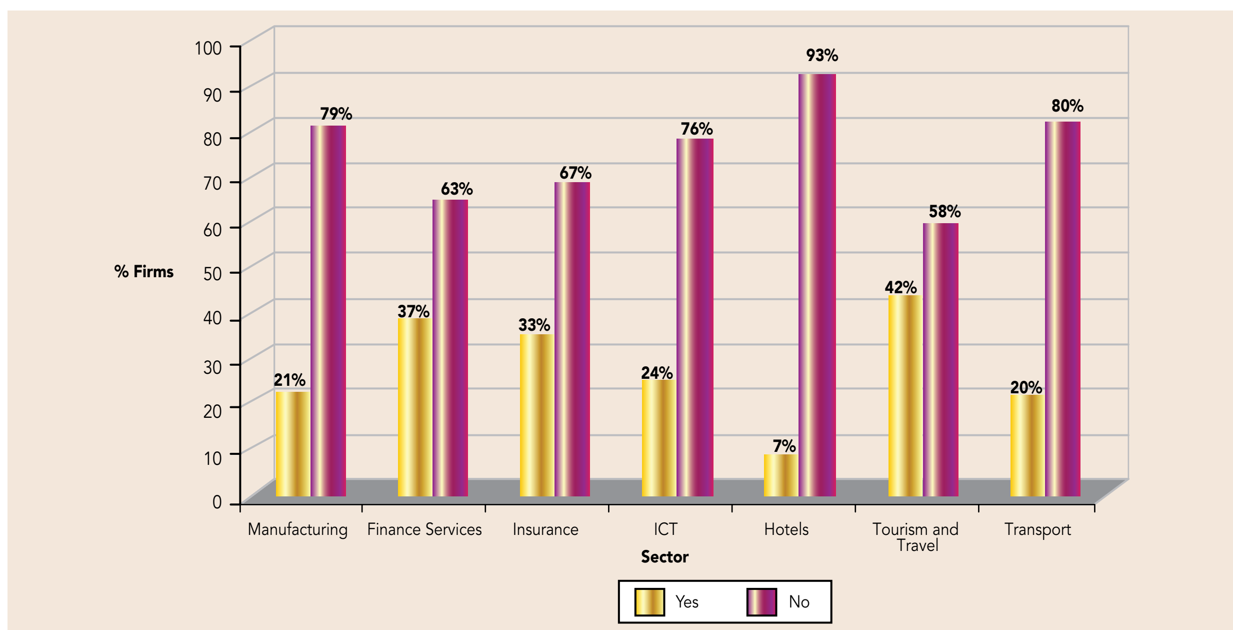
Although 80 per cent of the respondents either agreed or strongly agreed that the newly employed employees demonstrated the required skills (Table 3.11), the firms at the same time indicated that

Table 3.12: Skills that cannot be sourced from the local labour market

Industry	Yes	Skills unable to source
Manufacturing	10 (38%)	Engineering skills with experience
		Modern manufacturing system/business
		Enterprise resource planning
		Technical planning
		Plastic technology
		Technical skills and experienced managerial skills
ICT	4 (23.5%)	Broadcasting technical skills
		Managerial skills
		ICT skills
		Technical skills
Hotels	1 (4.8%)	Preparing Indian cuisine
Transport	3 (30%)	Reach truck operators
		Advanced mechanical technology
Travel	2 (14.3%)	Specialist skills (not specified)
		Chinese language

Source: Onsomu, Ngware and Manda (2007)

Figure 3.9: Firms with communication strategy on skills needs (%)



Source: Onsomu *et al.* (2007)

high technology skills such as engineering in the manufacturing sector, are not readily available in the local labour market (Table 3.12). Factors explaining the scarcity of skills include: limited technical capacity for training staff in high technology skills (especially in manufacturing); migration of skilled workers from Kenya; scarcity of relevant training opportunities in Kenya; inadequate exposure during technical training, and technological changes.

Analysis on skills requirement and level of employee demonstration of required skills by firm type reveals that for company-specific skills, manufacturing, finance, tourism and travel indicated wide disparities in terms of skills required and demonstrated, in that order. Consequently, in such types of firms, on-the-job-training and/or internship programmes are more relevant. In other types of firms such as ICT, hotels and transport, the disparity between company-specific skills requirement and demonstration of the same by employees was negligible or non-existent. This could be an indication that training institutions are able to supply manpower, which can demonstrate or have the relevant skills to such firms. The foregoing observations partly confirm the widely held perception of the mismatch between skills need and skills supplied. Perhaps this is one of the factors explaining unemployment among tertiary education graduates.

Linkages between Education and Training, Industry and Labour Market

Education and industry linkages are weak despite their importance, particularly in communicating information on skills needs from industry to formal learning institutions and, hence, likelihood of reducing the possibility of open unemployment and giving cognisance to globalization, technological, and production changes. However, a significant proportion of firms in the country have no system in place to enable education and training institutions know the varied skills needs at firm level.

For instance, in the hotels sector, 93 per cent of the firms did not have a communication strategy of skills needs to education and training institutions. The percentage of firms without systems of communicating their training needs is equally high: manufacturing (79%); financial services (63%);

information communication technology (76%); tourism and hotels (58%); insurance (67%) (Figure 3.9). The high level of existence of communication systems in the tourism and hotels sector is attributed to the role played by the Kenya Utalii College, under the Ministry of Tourism, which offers specialized training for the hotels sector and other tourism-related courses.

Policy Recommendations

ECDE

At ECDE, the government should clarify the roles of various stakeholders in the sector and identify sustainable funding sources.

Primary education

To sustain access gains recorded in primary school education, it is important to address the quality, inclusion, literacy, learning achievements and attainment within and at the end of each education cycle which, if not addressed, would continue to reduce transition across levels.

With support from other stakeholders, the government should expand and ensure equitable distribution of schools and facilities for children with special needs across regions, address gender disparities by increasing the number of female teachers in ASAL areas and areas with low enrolment among girls, and ensure schools have access to adequate sanitation facilities.

Secondary education

The government should fully implement the policies in Sessional Paper No. 1 of 2005 on integrating secondary education as part of basic education by adopting a policy on automatic transition from primary to secondary education.

Making post-primary education, especially secondary and university education and technical training more accessible is an important step for developing employable and skilled labour force. Whereas the government is initiating various programmes towards creation of jobs especially in the informal sector, it is imperative that all sectors of the economy are stimulated to grow at a higher and sustainable rate so as to ensure creation of quality and productive jobs in the modern economy.

Apart from the FPE and FDSE policies, some of the interventions that can be intensified to boost Kenya's education sector and/or education index include: enhancement of access to adult education services and provision of incentives for "second chance programmes", such as informal education and skills training targeting out-of-school youth.

Tertiary education and skills training

Interventions for enhancing linkages between industry and training institutions include support for apprenticeship, attachment training, industry participation in curriculum development, sponsorship and private sector/industry participation in training policy development processes.

Development of Labour Information Management Systems (LIMS) and undertaking tracer studies for tertiary education graduates and absorption into the labour market are critical. There should be adequate mechanisms for sharing labour information between both formal (public and private) and informal sectors with tertiary education institutions. Mechanisms for direct job placement after tertiary education should be explored.

Endnotes

1 See UNESCO Institute of Statistics (UIS) http://stats.uis.unesco.org/org/unesco and the EFA 2010 Report.

Governance

Introduction

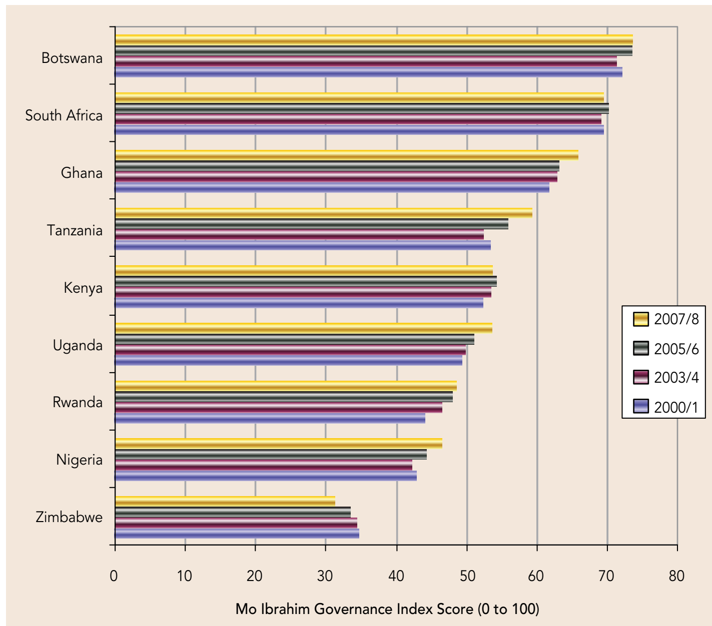
Governance is the process through which governments are held accountable in their responsibility of allocating resources equally and effectively through policies and institutions. The quality of governance adopted by a particular country, therefore, has an effect on the country's level of poverty. When governance is ineffective, resources are wasted, service delivery by the public sector to the general public is poor, and the population (especially the poor) lack social, economic and legal protection. Additionally, poor governance weakens institutions. In fact, a study by Kaufmann *et al*. (1999) reveals that there is a strong causal relationship between better governance and better development outcomes.

The Government of Kenya is aware of the importance of implementing governance reforms. According to Kenya's Vision 2030, some of the reforms the government is committed to undertake include: intensifying the anti-corruption programme in place through better investigation and prosecution, elimination of discretionary decision-making in the public service, and introducing further reforms in public education, and judicial and legal programmes. Vision 2030 also envisages strengthening the democratic process through decentralization of decision-making and equitable distribution of resources.

The Constitution of Kenya (2010), which was promulgated in August 2010, also entrenches issues of good governance. According to Section 10(2), for instance, good governance, integrity, transparency and accountability from part of the country's national values and principles. The effect of the Constitution is already being experienced with respect to corruption, where public officers implicated have had to vacate office while investigations are ongoing.

There are a few indices that have been developed to monitor governance across different countries, majority of which were developed within the last few years; for instance, the World Bank Worldwide Governance Indicators[1] was initiated in 1996 and the Mo Ibrahim Index of African Governance[2] was first published in 2007. This chapter relies on these indices to provide a cross-country analysis of certain relevant indices.

Figure 4.1: Index of African governance: Country comparisons



Source: Mo Ibrahim Index of African Governance

Figure 4.1 illustrates the Mo Ibrahim Index of African Governance for the period 2000/1-2007/8 for selected African countries. The Mo Ibrahim Index of African Governance transforms the data to a scale of 0 to 100, where 100 is the best score possible.

As indicated in Figure 4.1, governance in Kenya has not experienced much improvement over the past several years; in fact, it declined in 2007/8. However, countries such as Ghana, Tanzania, Uganda and Rwanda have been consistently experiencing improved governance, while Botswana and South Africa have been leading other African countries with respect to good governance. Governance is, however, a very general term that has several different dimensions. This chapter focuses on the effects of corruption on governance.

Corruption

Corruption can refer to a myriad of acts, including: bribery, extortion, nepotism, fraud and embezzlement. Corruption occurs in the private and public sector and has the effect of weakening institutions and wasting resources. Corruption also has a serious direct effect on the welfare of the population, especially the poor, as it often diverts resources from the poor to the rich while also compromising the delivery of public goods and services.

According to the 2009 *National Enterprise Survey on Corruption*, the level of corruption in Kenya is still high (76.5%), with the main causes being: greed, poverty, poor remuneration, unemployment, bad governance and cultural reasons. The survey reveals that 35 per cent of enterprises pay between 1-10 per cent of their revenue as unofficial revenue to public officials annually. The survey also identified corruption as one of the major obstacles affecting enterprise growth, since it increases the cost of doing business. This practice ultimately discourages local and foreign investment and compromises political legitimacy. Corruption can also contribute to environmental and social degradation. All in all, corruption has far reaching crippling effects on any economy.

Efforts in combating corruption in Kenya (from 2003 to date)

As indicated in Kenya Vision 2030, corruption is a key area of governance that the government has committed to address, given that it impedes service delivery to the public and causes waste of resources, which is the premise of governance. From 2003, the government introduced a number of anti-corruption reforms. One of the major reforms was the enactment of the Anti-Corruption and Economic Crimes Act (2003), which was introduced to address issues of economic crime, which refers to any offence in which individuals purposely act in an illegal manner for financial gain. The Act also provides for the establishment of the Kenya Anti-Corruption Commission (KACC), which is mandated to investigate corruption cases.

The KACC is, however, likely to be transformed soon. As provided in the Constitution of Kenya (2010), a

statute establishing an Ethic and Anti-Corruption Commission should be in place by August 2011. KACC is, therefore, likely to be transformed to the Ethics and Anti-Corruption Commission.[3] The Commission will therefore be anchored in the Constitution with an element of independence. The Constitution of Kenya 2010 also provides for the legislation on leadership and integrity (Chapter 6 of the Constitution), which is to be enacted two years from August 2010.

There are a number of commissions, committees and statutes that have been introduced, some of which are:

Commissions of enquiry: The establishment of various commissions of enquiry, such as the Commission of Inquiry on the Goldenberg Scandal; The Commission of Inquiry on Illegal and Irregular Allocation of Public Land (often referred to as the Ndung'u Commission of Inquiry); and the Committee that was set up to investigate the Ethics and Integrity of the Judiciary in Kenya, all of which uncovered cases of massive corruption.

Anti-Corruption relevant laws: Other than the Anti-Corruption and Economic Crimes Act (2003), several other anti-corruption laws have been enacted, which include; The Public Officers Ethics Act (2003) which requires all public officials and their families to declare their wealth; and the Public Procurement and Disposal Act (2005), which streamlines public procurement procedures, thus removing opportunities for corruption and addresses the structural weaknesses in procurement practices.

Other pieces of legislation that assist directly or indirectly in combating corruption include; the Public Audit Act (2003); the Financial Management Act (2003); the Privatization Act (2005)[4] and The Witness Protection Act (2006), which was later amended by the Witness Protection (Amendment) Act passed in 2010. This Act provides official government protection to whistle-blowers. The Witness Protection (Amendment) Act introduces an independent Witness Protection Agency to replace the Witness Protection Unit. The Proceeds of Crime and Money Laundering Act (2009) was assented by the President in December 2009. It is aimed at addressing money laundering as an offence, and provides for the identification, tracing, freezing, seizure and confiscation of the proceeds of crime.

The establishment of various committees, which include: the Cabinet Committee on Anti-Corruption in 2003 with the mandate to oversee the implementation of government policies on corruption and review the progress on the fight against corruption; the Ethics and Integrity Committee, which was also established in the same year with the mandate of assessing the extent of corruption within the judiciary; and the National Anti-Corruption Campaign Steering Committee, which was established in 2004 to spearhead a national campaign against corruption, are some of the committees.

The Public Accounts Committee and Public Investments Committee are parliamentary oversight committees charged with overseeing public revenue and expenditure.

The Public Complaints Standing Committee (PCSC), also referred to as the Ombudsman, was established in 2007. The establishment of the Ombudsman was meant to enhance good governance and improve management in public institutions. The Ombudsman's main mandate is to investigate and act on allegations of unethical conduct within the government. The functions of the PCSC, according to the gazette notice, include: receiving and documenting all complaints against public officers in ministries, parastatals/state corporations and other public institutions; enquire into the allegations; oversee, co-ordinate, monitor and follow up specific action; and review regulations, processes and procedures in public service and make recommendations. As at the end of 2009, the PCSC had received over 2,400 complaints since its establishment in 2007. However, only 25 per cent of the complaints have been resolved. This is largely

because PCSC is not able to effectively implement its mandate in its current structure.[5] Most of the complaints lodged relate to delays; injustice or misuse of office.

Other anti-corruption initiatives include:

- The launch of a five-year National Campaign against Corruption in 2003, which is supported by the World Bank, Transparency International, religious organizations and private sector players.
- The establishment of special anti-corruption courts under the Anti-Corruption and Economic Crimes Act (2003).
- The establishment of the Efficiency Monitoring Unit and Anti-Corruption Unit, Serious Fraud Unit, and Asset Forfeiture Unit.
- Internationally, Kenya ratified the United Nations Convention Against Corruption in December 2003.
- At the regional level, Kenya ratified the African Union (AU) Convention on Preventing and Combating Corruption in March 2007. Kenya is also a member of the East African Association of Anti-Corruption Authorities and has, under the auspices of the East African Community, developed a draft East African Protocol on Preventing and Combating Corruption.
- The introduction of performance contracts in all public agencies, which include all ministries, local authorities and public enterprises that determine goals and targets for measuring the agency's performance. They are used to benchmark performance and enhance good governance and accountability.
- The review of wages of public sector officers such as the police force.
- A workshop on strategies to fight/eliminate corruption in the public service for members of the public sector, specifically Permanent Secretaries, accounting officers and chief executives of state corporations, was organized in February 2010, which came up with a number of action points and resolutions. Key among them is for all public institutions to develop anti-corruption action plans, to develop a code of conduct, and to establish Corruption Prevention Committees within their institutions.

Table 4.1: Transparency International Corruption Perception Index

Year	2003	2004	2005	2006	2007	2008	2009
Index	1.9	2.1	2.1	2.2	2.1	2.1	2.2
Rank / No. of countries	122/133	131/145	145/159	142/163	150/179	147/180	146/180
The Corruption Perception Index is an index of the perceptions of the degree of corruption as viewed by business people and country analysts through expert assessments and opinion surveys where there's an index 10 as the highest level referring to highly clean and 0 is the lowest index referring to highly corrupt.							

Source: Transparency International Corruption Perception Index

Despite the reforms and statutes, incidences of corruption have not reduced. Table 4.1 provides the trend of Kenya's Corruption Perception Index in the last seven years, which indicates that levels of corruption remain largely unchanged. This is largely due to the magnitude of the problem. Corruption in Kenya is widespread to the extent that current reforms may not have the expected impact, at least in the short-tem. The legal reforms may, however, reduce or remove opportunities for rent seeking and criminalize some activities. However, some additional institutional reforms are required. Bureaucracies inherent in the public sector, monopolies and discretion, information asymmetry, and institutional weakness are some of the reasons why levels of corruption remain unchanged.

As indicated in Table 4.2, majority of the cases reported to KACC over the years fell outside the mandate of KACC and were referred to the relevant institutions. Out of the total 32,460 cases that were reported to KACC between 2004 and 2009 for instance, only 19.5 per cent (6,357 cases) were investigated by KACC, of which a total of 556 cases were reported to the Attorney General. Between 2005 and 2009, 99 convictions were obtained.

Table 4.2: Number of cases reported by KACC, 2004-2009

Type of Case	2004	2005	2006	2007	2008	2009
Total cases reported to KACC	2,838	5,978	8,575	6,728	3,868	4,473
• **Corruption cases for investigation by KACC**	**195**	**755**	**1,447**	**1,527**	**1,038**	**1,395**
• Criminal cases referred to other investigative agencies	998	824	1,075	554	171	170
• Criminal cases referred to public service	1,040	1,423	1,548	865	445	605
• Pending more information	22	35	88	92	61	84
• Complainants advised on the right authority to report	83	1,284	3,517	2,411	1,576	1,558
• Complainants advised to seek civil redress	388	1,052	638	1,124	473	537
• No further action	112	305	262	125	104	124
Number of corruption reports to the Attorney General (for prosecution)	21	66	128	122	126	93
Corruption cases registered	-	70	102	93	76	83
Convictions obtained	-	32	28	22	11	6

Source: Economic Survey (2009) and (2010)

According to the KACC 2008-2009 Annual Report, during the period under review, 122 reports on concluded investigations were made to the Attorney General, with 94 (77%) cases recommended for prosecution; 13 corruption cases taken to court; 7 corruption cases completed; illegally acquired assets with an estimated value of Ksh 5.61 billion traced; corruptly acquired public assets valued Ksh 148.3 million recovered and other 147 cases have been filed for recovery of public assets and embezzled funds. KACC also prevented economic crimes by disrupting corruption networks in seven institutions.[6] As part of KACC's corruption prevention mandate, the Commission reviewed systems, policies and procedures in certain institutions and identified loopholes and made certain recommendations.[7]

A major challenge faced by KACC in carrying out this mandate is that KACC lacks the legal power to enforce the recommendations. Some of the government institutions that have been identified as having high levels of corruption in both the *KACC National Corruption Survey 2008* and the *Transparency International Kenya Bribery Index 2008* include local authorities, Ministry of Lands, Immigration Department and the Kenya Police. KACC, however, has reviewed a number of these institutions with the aim of identifying areas that present opportunities for corruption and given recommendations. For instance, a review of the Immigration Department

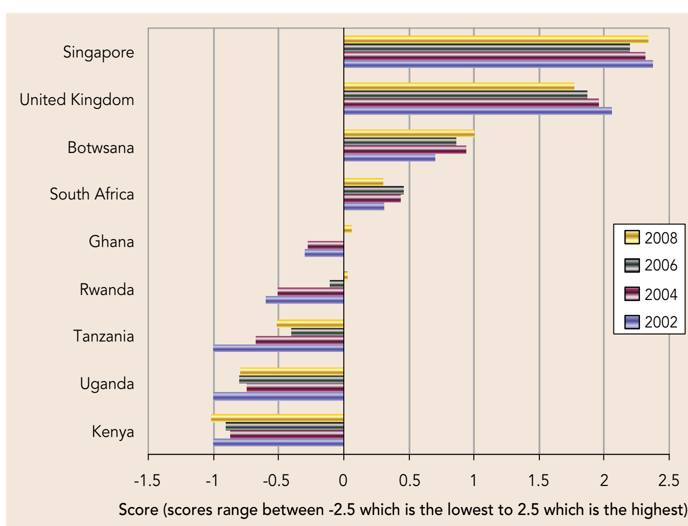
Table 4.3: Number of corruption cases reported to police stations, 2004-2009

Corruption-related offence	2004	2005	2006	2007	2008	2009
Soliciting for bribes	37	38	78	82	24	26
Accepting bribes	24	11	44	6	5	14
Accepting free gifts	2	7	5	7	1	1
Demanding by false pretence	3	7	18	32	3	13
Other corruption offences	31	42	88	53	10	156
Sub-total	96	73	173	180	43	210
Offences involving police officers						
Soliciting for bribes	16	108	93	19	2	15
Accepting bribes	2	12	10	3	0	4
Accepting free gifts	-	5	4	1	0	0
Demanding by false pretence	3	21	21	0	0	5
Other corruption offences	143	14	7	30	56	116
Sub-total	164	160	135	53	58	140

Source: Economic Survey (2009) and (2010)

was undertaken in 2006, the Municipal Council of Mombasa in 2005, and the Nairobi City Council in 2007. KACC also undertook a study on the Traffic Police Department, which examined the reasons behind corrupt activities within the road transport system, with the aim of establishing the root causes of corruption in the Traffic Police Department and provide recommendations. However, given that KACC does not have the legal mandate to enforce these recommendations, implementation of the KACC recommendations are left to the discretion of relevant agencies.

Figure 4.2: Worldwide governance indicators–Control of Corruption Index of selected countries



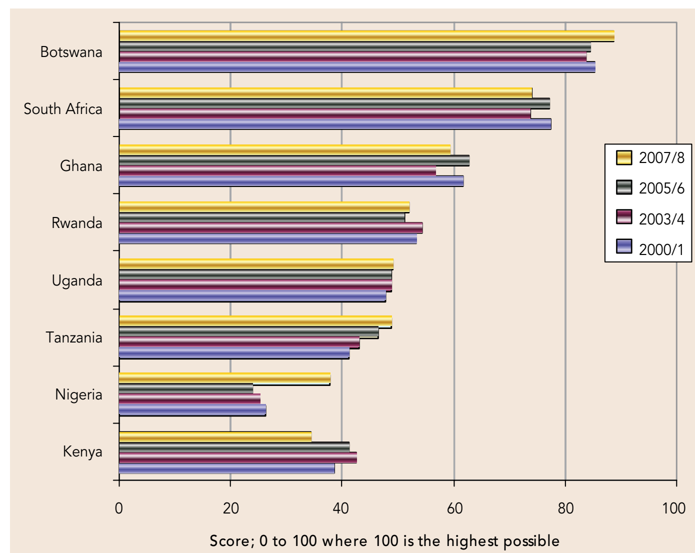
Source: Worldwide Governance Indicators

The number of corruption cases reported to the police are summarized in Table 4.3. There is no discernable trend over the past six years, although the reported cases of corruption peaked in 2006 and 2007 (the two years that KACC also experienced the largest number of cases).

Kenya's Performance in Comparison with Other Countries

The Worldwide Governance Indicators–Control of Corruption Index captures perceptions of the extent to which public power is exercised for private gain, including both petty and grand forms of corruption.

Figure 4.3: Mo Ibrahim Index of African Governance–Accountability and Corruption Index of selected countries



Source: Mo Ibrahim Index of African Governance

As indicated in Figure 4.2, the perception of corruption in Kenya has not improved. In fact, in both Figures 4.2 and 4.3, there are no signs of improvement; in fact, one perception of corruption is deteriorating.

The Mo Ibrahim Index of African Governance – Accountability and Corruption Index depicts a similar picture as indicated in Figure 4.3, where accountability in Kenya seems to be deteriorating and corruption is high. This index evaluates the accountability of public officials and the level of corruption in a country.

Both the Worldwide Governance Indicators and the Mo Ibrahim Index depict Botswana and South Africa as the two least corrupt countries in Africa. According to the 2009 Corruption Perception Index, Botswana emerged the least corrupt country in Africa with a score of 5.6 (ranked 37), out of 10, where 10 refers to least corrupt/highly clean countries. Singapore was the least corrupt Asian county with a Corruption Perception Index score of 9.2 out of 10 (ranked 3). This is also illustrated by the Worldwide Governance Indicators, which indicate that the control of corruption in Singapore is very

good, even better than that of developed countries such as the United Kingdom.

The two indices also reveal that countries such as Rwanda and Tanzania have shown some consistent improvements over the years. Based on the indices as well as the statistics, it is evident that levels of corruption in Kenya are not reducing. It is likely that the institutional and legal framework in place in the country is ineffective in combating corruption.

Why is corruption (or the perception of corruption) still so rampant in Kenya?

The hypothesis by Klitgaard (1998) will form the basis of our analysis as to why corruption still persists in Kenya. Countries that struggle fighting corruption are often faced with insufficient will or insufficient capacities to prevent corruption. Accordingly, Klitgaard (1998) establishes the following corruption equation:

$$C = M + D - A$$

Where, **C** stands for corruption, **M** for monopoly, **D** for discretion, and **A** for accountability. Corruption, therefore, occurs when one has monopoly power over a good or service and the discretion to decide when, how and at how much this good or service is delivered and is not accountable. Corruption, therefore, thrives where the systems are complex and have ample official discretion.

Myint (2000) changed the formula slightly to:

$$C = R + D - A$$

Where, **C** stands for corruption, **R** for economic rent, **D** for discretionary powers, and **A** for accountability. In this case, corruption can be said to exist where there is a monopoly power over a good or service, where someone has a unique asset which then allows them to set a price they want and earn economic rent or monopoly profit. According to Myint (2000), economic rent occurs when there are a large number of laws, rules, regulations, and administrative procedures that tend to restrict business and economic activity, thus creating opportunities for rent seeking.

Inefficient, bureaucratic and cumbersome systems or regulations, therefore, contribute to inefficiencies that then create opportunities for corruption. An important factor contributing to the success of Singapore in combating corruption is the government's efforts at reducing administrative red tape and bureaucracies (UNDP, 2005). Singapore has since been ranked highly by the World Bank's *Ease of Doing Business* annual survey. The *Ease of Doing Business* country ranks are derived from various other indicators that attempt to give a picture on the business climate. The first rank is given to the best performer, who currently is Singapore, where the process of starting a business is said to be only three days.[8] Singapore has also introduced e-government systems that include an internet-based government procurement system and e-Citizen where one can file their taxes, register a marriage, baby, car or pet, apply for passport etc (UNDP, 2010).

Despite the licensing reforms in Kenya, such as the recommendations of the *Working Committee on Regulatory Reforms for Business Activities in Kenya* and the introduction of the Single Business Permit, businesses still have to comply with multiple licensing requirements and deal with multiple licensing authorities. According to *Doing Business* (2010), the process of starting a business in Kenya takes 34 days, 11 times more than it does in Singapore. According to Klitgaard (1998), the costs and benefits of a system with unnecessary red tape and bureaucracy often outweigh the benefits of reduced corruption. This, coupled with high poverty rates contributes to corrupt activities where one makes 'informal payments' to 'speed-up' an otherwise bureaucratic and time consuming process or procedure.

Studies (such as Tanzi, 1998 and Klitgaard, 1998) reveal that institutional weaknesses create opportunities for corruption. One institutional weakness in Kenya is evidenced by the KACC, which lacks prosecutorial powers and, therefore,

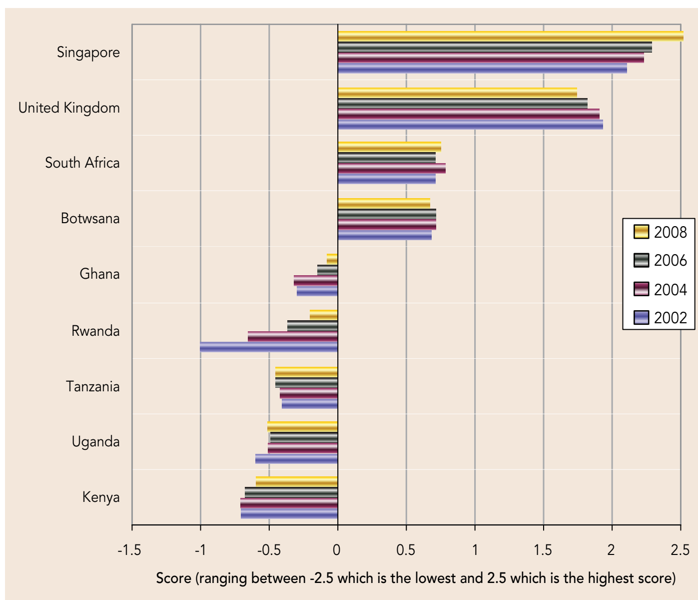
relies on the Attorney General to prosecute. KACC also lacks the legal provision to enforce any corruption-prevention recommendations they may make. Institutional weaknesses are also present within the PSCS (the Ombudsman) as the members of the PSCS were appointed by the President, to whom they prepare and submit reports. This may raise issues of accountability and efficiency. For the Ombudsman to perform its job effectively, it should be independent of the Executive. The PSCS also lacks the legal mandate to operate effectively as there is no statute in place that establishes and governs it.

Some of the regulatory weaknesses as articulated in the 2008-2009 KACC Annual Report include lack of a National Anti-Corruption Policy and/or Strategy and also lack of a Freedom of Information Statute, which would facilitate anti-corruption initiatives.

Additional best practices

Effectiveness within the government is, therefore, crucial when addressing corruption. Countries with lack of transparency have weak rule of law; unclear processes and procedures are likely to be more susceptible to corruption (Figure 4.4).

Figure 4.4: Worldwide governance indicators–Government Effectiveness Index



Source: Worldwide Governance Indicators

Table 4.4: Comparisons of key indicators with other countries

Country	GDP per capita (PPP) US$ (2007)	HDI (2007)	Ease of doing business rank
Singapore	49,704	0.944	1
United Kingdom	45,442	0.947	5
Botswana	6,544	0.694	45
South Africa	5,914	0.683	34
Kenya	**645**	**0.541**	**95**
Tanzania	400	0.530	112
Uganda	381	0.514	131

Source: Human Development Report (2009) and World Bank (2009)

Countries such as Singapore, the United Kingdom, South Africa and Botswana, which score highly with respect to Government Effectiveness Index, are also ranked high in the World Bank's *Ease of Doing Business* (Table 4.4).

Another common element with countries with low levels of corruption is the creation of independent anti-corruption agencies, through comprehensive anti-corruption legislature. In most cases, the anti-corruption legislation and the respective body were introduced after reports of corruption within the public sector emerged. In Botswana, the Directorate on Corruption and Economic Crimes (DCEC), which was established in 1994, receives and investigates all corruption complaints and prosecutes offenders (Economic Commission for Africa-ECA, 2005). DCEC has been very successful and reports high conviction rates and large fines that are in excess of its operating costs (UNDP, 1997b). According to the two indices indicated earlier (Figure 4.3 and Figure 4.4), curbing corruption in Tanzania has been improving over the years, which maybe attributed to the Prevention and Combating of Corruption Bureau (PCCB), established under the Prevention and Combating of Corruption Act (2007). The PCCB of Tanzania is able to prosecute corruption cases (following the approval of the Director of Public Prosecutions).[9]

Effective anti-corruption policies and laws have a very important role to play in combating corruption

as evidenced in Singapore and South Africa. The anti-corruption laws in Singapore have been reviewed periodically whenever inefficiencies emerge. In fact, the success in Singapore in combating corruption is attributable to the comprehensiveness of its anti-corruption legal framework. The penalties imposed on persons convicted of corruption also serve as a deterrent to corruption. The convictions in Singapore attract heavy fines and lengthy prison terms, and the convicted are also ordered by the court to repay the full amount of the bribe they received. The courts in Singapore can also order the confiscation of property obtained through corruption. Additionally, punishment is given to both the recipient and the supplier of the bribe. The anti-corruption strategy launched in 1959 and the subsequent anti-corruption policies in Singapore are also credited for the country's success in combating corruption. The increase in wages in the public service was one important outcome of the anti-corruption policies (UNDP, 2005).

As is the case in Singapore, the comprehensive anti-corruption legislative framework present in South Africa is key to the country's success in combating corruption. One important establishment in South Africa is the presence of legislation that empowers the public to require information from the public sector (Promotion of Access to Information Act, 2000). The public are also in a position to challenge administrative decisions. This Act was enacted *'to give effect to the constitutional right of access to any information held by the State'*. South Africa also introduced the Public Service Anti-Corruption Strategy in 2002 to provide a comprehensive framework to combat and prevent corruption in the public service (UNDP, 2005)

Klitgaard (1998) indicates that wages and standards of living also have a role to play in curbing corruption. Table 4.4 reveals that countries such as Singapore,[10] United Kingdom, even Botswana and South Africa where corruption levels are low, the Human Development Index (HDI)[11] is high.

Policy Issues and Recommendations

As indicated earlier, the government has introduced various anti-corruption measures but they seem to be ineffective and, therefore, not causing visible changes with regard to governance indicators. Kenya should learn from other countries such as Singapore, Botswana and South Africa, which have experienced good governance and low levels of corruption. Drawing on the best practices and the conceptual framework of corruption by Klitgaard (1998), the following recommendations are proposed:

Tracing the source

According to Klitgaard (1998), combating corruption starts with improving systems, which can be undertaken by carrying out vulnerability assessments with the aim of identifying and repairing corrupt systems. Some of the successful anti-corruption strategies involve the public in diagnosing corrupt systems through consultative processes, including surveys and the use of ICT. In this regard, the government should introduce innovative interactive forums that would facilitate the sharing of information between the government and the general public, where people can share their experiences in certain government offices. Such a forum would operate differently from the Ombudsman whose main aim is to deal with public complaints. It is often hard for public sector officers to know how inefficient systems and processes are without interacting with the public. It is, therefore, important to involve the public in identifying inefficient systems, especially those that are easily corrupted.

Monopolies and discretion

To deal with monopolies and economic rent seeking, the government should institute policies and structures that would reduce opportunities for corruption. One way of achieving this is by availing information to the public. The Constitution of Kenya

(2010) has provisions for access to information under the Bill of Rights, which states that '*every citizen has the right of access to information held by the State*' and goes on to state that '*the State shall publish and publicize any important information affecting the nation'*. This is an important development for Kenya. In countries such as South Africa, access to information is a constitutional and legal right. Currently in Kenya, information especially on public services, policies, procedures and systems is not availed easily to the public, thus creating information asymmetries where only a few people have it, and thus creating official discretion. This encourages corruption. A Freedom of Information Statute is important to facilitate access to information available with the government. The government should hasten the enactment of this legislation.

The government established an e-governance programme in 2004 with the aim of using ICT to facilitate service delivery and to provide information to the public. Such strategies should also be enhanced to ensure that they: are well adopted; are widely recognized; encourage transparency and efficiency; and provide relevant up to date information, which is accessible to all.

Another important strategy to address official discretion and to enhance transparency is by ensuring every employee (in the private and the public sector) has clearly defined roles, responsibilities, rules and limits. Checks and balances should also be introduced to ensure there is no opportunity for corruption.

Wages in the public Sector

Low public sector wages have been identified as a contributor to corrupt activities. Although the government has introduced some reforms including the review of public sector wages and introducing performance contracts, such anti-corruption measures should be done through a holistic approach where wage revisions are undertaken simultaneously with institutional and legislative reforms to effectively combat and prevent corruption in the public sector.

Legal, regulatory and institutional reforms

The Anti-corruption agency: One major challenge often noted of the Kenya Anti-Corruption Commission is that it lacks prosecutorial powers. In Botswana, a country which has had success in combating corruption, the anti-corruption authority has adequate powers of investigation and prosecution. The KACC is also not very effective in undertaking its corruption prevention mandate largely because it lacks the legal power to enforce its recommendations. Enforcement and prosecutorial powers should be given to the Ethics and Anti-Corruption Commission. An efficient feedback mechanism should also be institutionalized to ensure that recommendations by the Commission are effectively addressed by the respective government agencies. The relevant government agencies should also be legally obligated to address complaints (for example from the Ombudsman) and implement KACC's and/or the Ethics and Anti-Corruption Commission's recommendations.

Article 79 of the Constitution of Kenya (2010) requires the government to enact legislation that will establish an independent Ethics and Anti-Corruption Commission. The government should therefore take consideration of these recommendations while drafting the legislation. The law should also clarify the outcome of the current KACC once the law is enacted, in order to effectively address the issue through a transition clause.

The Ombudsman Office: As indicated earlier, the Ombudsman office (the PSCS) lacks the legal mandate to act and, therefore, faces difficulty in conducting investigations and accessing information. Ideally, an Ombudsman office should also be established as an independent institute, which is currently not the case in Kenya. The draft Ombudsman Bill should, therefore, address the issues that render the Ombudsman ineffective.

National Anti-Corruption Policy and/or Strategy: Kenya lacks a National Anti-Corruption Policy and/

or Strategy which, as evidenced in countries such as Singapore, has an important role to play in combating corruption. The government should prioritize the development of a National Anti-Corruption Policy and/or Strategy.

Doing Business: As indicated in Table 4.4, the regulation in the business environment can lead to opportunities for corruption. Related processes and procedures should therefore be clear and devoid of unneccessary bureaucracies. It is hoped that this will be addressed once the Business Regulations Bill (2010) is enacted.

Endnotes

[1] Worldwide Governance Indicators are generated by the World Bank and reports aggregate and individual governance indicators for 212 countries and territories over the period 1996–2008. The indicators are based on the following six dimensions of governance:

- Voice and accountability
- Political stability and absence of violence/ terrorism
- Government effectiveness
- Regulatory quality
- Rule of law
- Control of corruption

[2] The Mo Ibrahim Index of African Governance is published by the Mo Ibrahim Foundation. It was developed by a team at the Kennedy School of Government at Harvard University with guidance from a panel of eminent African academics and corporate leaders. The Mo Ibrahim Index ranks the performance of 48 sub-Sahara Africa countries. The Index measures the degree to which each of the following political goods are provided;

- Safety and security
- Rule of law
- Participation and human rights
- Sustainable economy opportunity
- Human development

[3] This is the most likely outcome. However, the Constitution of Kenya is silent on what will happen to the current KACC. It is not clear whether it will be transformed to the Ethics and Anti-Corruption Commission.

[4] The Privatization Act (2005) came into operation on 1st January 2008. It provides the legal framework for the privatization of public assets and operations through the formulation and implementation of a privatization programme. The Act also establishes the Privatization Commission which, among other functions, manages and implements the privatization programme.

[5] The Public Complaints Standing Committee (PCSC) was established by a Gazette Notice No. 5826 of June 2007 by His Excellency the President, but it lacks the proper legal framework to enable it to effectively carry out its mandate.

[6] The seven institutions are Kenya Sugar Board, Mombasa Old Port, Kenya Ports Authority, Ministry of Education, East African Portland Cement, Youth Enterprise Development Fund, and Kenya Pipeline Company. The corruption networks disrupted included irregular approvals, irregular payments, improper procurement, tax evasion and embezzlement.

[7] Risk assessment was carried out in five institutions, namely: Local Authority Transfer Fund, Kenya Maritime Authority, Pensions Department, National Registration Bureau, and Nairobi City Council.

[8] www.doingbusiness.org

[9] Prior to the enactment of the Prevention and Combating of Corruption Act in 2007, which established the Prevention and Combating of Corruption Bureau, there was a Prevention of Corruption Bureau which was established and governed by the Prevention of Corruption Act which was abolished. More information available from http://www.business-anti-corruption.com/country-profiles/

[10] Public sector wages in Singapore are amongst the highest in the world. Annual salary reviews are carried out with comparisons made with equivalent job markets or qualifications (UNDP, 2010).

[11] HDI is a composite index that measures the average achievement of human development with respect to a long and healthy life, access to knowledge and a decent standard of living as well as data on per capita GDP (PPP).

PART II

Sectoral Performance

This part analyses performance in key sectors of the economy, namely: Agriculture, Manufacturing, Financial Services, Trade, Micro and Small Enterprises, Tourism, Infrastructure, and Environment and Natural Resources. The key challenges and required policy actions are provided for each sector.

5

Agriculture

Introduction

The agricultural sector plays a significant role in Kenya's economic development by providing food, employment, raw materials for agro-industries and export earnings. The sector contributes about 25 per cent of Gross Domestic Product (GDP) and supports the livelihoods of about 80 per cent of the population. In 2008/09, Kenya experienced a severe drought, which dampened growth expectations even as the country was reeling from the adverse effects of the 2007/08 post-election violence. The livestock sector was particularly adversely affected due to shortage of pasture and water. In 2009/10, there was some recovery for both the crop and livestock production systems due to favourable weather. However, the good harvests from crop farming brought into sharp focus the deficient food storage infrastructure in the country.

The agricultural sector provides food and employment for both skilled and unskilled labour, raw materials for agro-industries, and foreign exchange earnings from exports. It is therefore a source of income for those farmers and investors who can generate marketable surpluses. The agricultural sector therefore contributes to the attainment of major policy goals of economic development, poverty alleviation and reduction of inequality. Overall, the agricultural sector is crucial in realizing the various targets set out in the Millennium Development Goals (MDGs) and the Comprehensive African Agricultural Development Programme (CAADP), especially that of reducing hunger and malnutrition.

During the period under review, the sector registered modest overall performance as a result of the global financial crisis, and high fuel and food prices.

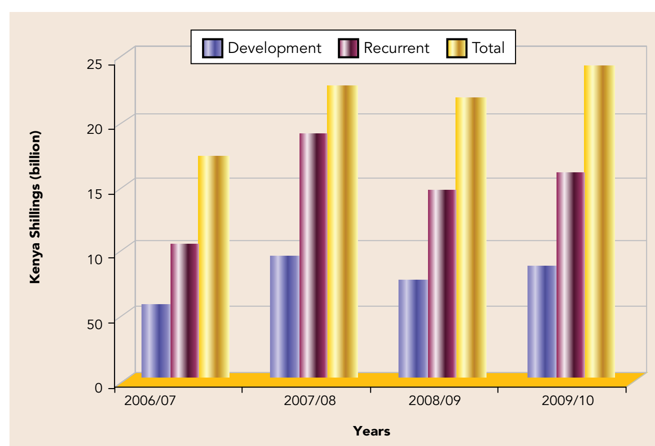
Resource Allocation and Expenditure Review

Policy agenda and sectoral budget

The main policy agenda informing investments and budget allocations in the agricultural sector are spelt out in the Strategy for Revitalizing Agriculture (SRA, 2004-2014), Agricultural Sector Development Strategy (ASDS, 2009-2020) and the First Medium

In 2009/10, there was some recovery for both the crop and livestock production systems due to favourable weather. However, the good harvests from crop farming brought into sharp focus the deficient food storage infrastructure in the country.

Figure 5.1: Actual expenditure in the agricultural and rural development sector (Ksh billions)



Source: Ministry of Finance

Term Plan for Vision 2030. Major emphasis is laid on increasing agricultural productivity, expanding irrigated agriculture, commercializing agriculture, and improving governance in the sector through various institutional reforms.

The Maputo Declaration by Heads of Government called for increased resource allocation to the agricultural sector to 10 per cent of national expenditure by the year 2010. Kenya's resource allocation to the sector is currently around 4.3 per cent. In recent years, however, allocations for development expenditure have increased considerably (Figure 5.1). Due to drought, there is often budget recall from various ministries to meet emergency food security expenses in some years.

Expenditure patterns

Between 2006/07 and 2009/10, total expenditure in the agricultural and rural development sector increased from Ksh 16.9 billion to 23.9 billion. However, total expenditure in the agriculture and rural development sector declined marginally to Ksh 21.4 billion in 2008/09, compared to 22.3 billion in 2007/08, perhaps due to expansion of government size as a result of the post-election coalition government. The biggest gain in this increased level of funding to the agricultural sector is in the development budget, which increased from Ksh 5.4 billion in 2006 to about Ksh 8.3 billion in 2009/10, with the exception in 2007/08 when Ksh 9.0 billion was allocated. However, the budget share of total expenditure is still relatively small. The sector was allocated a paltry 4.0 per cent of total government budget in 2002/03, which has incrementally increased to about 4.24 per cent of the total budget in 2009. More needs to be done to mobilize financial resources to the agricultural sector in order to tackle poverty, unemployment and inequality in Kenya. Table 5.1 shows the increasing concerns about the absorption capacity of the development budget when compared to the recurrent budget. Absorption capacity is lowest in the Ministry of Livestock Development.

Table 5.1: Budget absorption capacity (%) in the agricultural sector

Ministries	Recurrent				Development			
	2005/06	2006/07	2007/08	2008/9	2005/06	2006/07	2007/08	2008/9
Agriculture	80	97	134	96	70	123	110	106
Cooperatives and Marketing	83	111	99	97	59	84	80	59
Lands	98	106	109	101	82	29	77	54
Livestock	102	102	111	96	7	33	40	48
Fisheries	N/A	N/A	93	96	N/A	N/A	91	53
Overall	88	100	117	97	36	86	82	84

Source: Ministry of Finance

Performance Indicators

Land utilization

Kenya has a surface area of about 587,000 km^2, out of which land area is about 576,000 km^2 (58 million hectares) and 11,000 km^2 is under water. About 84 per cent of the land is classified as Arid and Semi-arid Lands (ASALs) while 16 per cent is arable land. Pastoralism accounts for 50 per cent of land utilization in the ASALs, while ranching and other livestock keeping activities account for 31 per cent, and 19 per cent is devoted to agro-pastoralism. The remaining 16 per cent is dominated by crop and dairy farming, with cropland and grazing land each occupying 31 per cent and 30 per cent, respectively, while forests occupy 22 per cent, game parks 12 per cent and about 5 per cent is devoted to urban centres, markets, homesteads and infrastructure. Of the arable land, smallholding, medium and large farms take up to 39 per cent, 46 per cent and 15 per cent, respectively. These support about 3.5 million holdings with an average farm size of 1.2 hectares (Kenya National Bureau of Statistics, 2009). Since the country has a net positive population growth, average farm size is declining. In some parts of the country, land is becoming almost uneconomic to support even a single individual, and this is likely to be a source of social conflict.

Land issues play an important part in Kenya's political, economic and social life. With population growth, land will continue to become an increasingly scarce asset in per capita terms. Depending on how the land policy and political factors play out, bringing more of the arid and semi-arid lands into greater economic utilization, either for food production (say through irrigation) or human settlement will be necessary. In the long term, strategic land-use planning, accelerated land amalgamation and purposively nucleating human settlements to facilitate provision of social amenities (e.g., water, electricity and sanitation) while releasing land in the high rainfall areas for other economic activities should be the land-use pathway.

Average farm size is declining in the country. In some parts of the country, land is becoming almost uneconomic to support a single individual, which then could continue to be a source of social conflict.

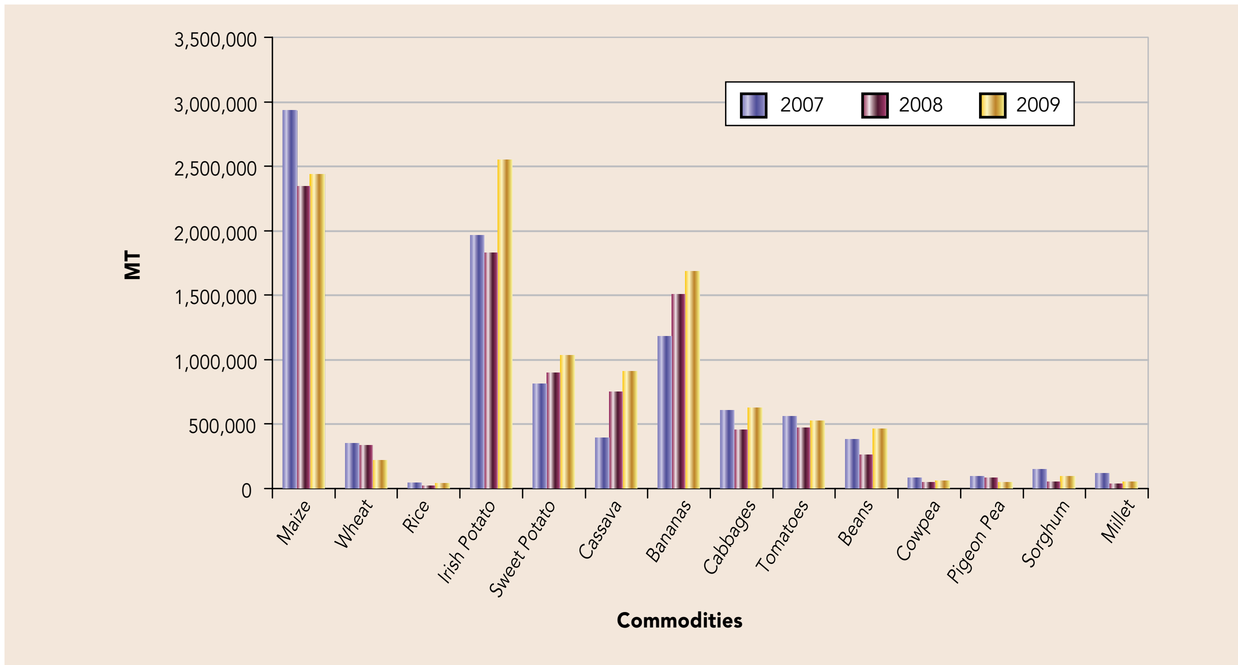
Food crop production

Since 2007, there has been a gradual and significant decline in production of major food crops. The most significant decline has been in maize, beans and drought-tolerant crops such as sorghum and millet. This could be partly attributed to the post-election violence at the close of 2007, which led to substantial losses at farm level because crops were not harvested and/or not planted in the subsequent season in the affected areas. Incidentally, there is some increase in the production of indigenous food crops such as cassava and sweet potatoes, which is a positive supply response from the farming community in the light of frequent drought-induced famine.

Figure 5.2 shows that output levels are not sufficient to meet consumption levels. Estimates indicate that between 20 and 25 per cent of the population is food insecure at different times of the year, especially in periods just before major harvest times. Despite considerable development of improved technologies (such as seed varieties and innovations by various research institutes), the farming community shows low levels of uptake of improved technology for a variety of social, economic and technical reasons. This is one of the major challenges to both the public and private sectors in increasing agricultural productivity in the coming years. Indications are that only a third of the output levels are achieved when compared with experimental data.

In many parts of Kenya, the youth do not seem interested in taking up farming as an economic

Figure 5.2: Production of major food crops in Kenya (MT), 2007-2009



Source: Kenya National Bureau of Statistics (2007)

Since 2007, there has been a gradual and significant decline in production of major food crops in the country. The most significant decline has been in maize, beans and drought-tolerant crops such as sorghum and millet.

activity. Finding innovative ways of making agri-business sustainably attractive to future farmers is crucial to enabling the country feed its increasing population. There is need to facilitate adoption of water-harvesting technologies to reduce risks associated with rainfall failure, encourage the optimal use of external inputs such as fertilizer, create incentives to produce surpluses and thus encourage development of domestic markets. Such technologies range from building of earth dams, furrow irrigation, and use of collection tanks, to more sophisticated technologies such as drip irrigation.

Agricultural marketing

The development of marketing infrastructure for agriculture requires the collective effort of different line ministries and stakeholders. Most markets in many parts of the country generally lack adequate basic facilities for storage, cooling and ripening, and platforms for display of fresh produce. In some of these markets, the requisite infrastructure for marketing activities is outmoded. In most markets, the trading area is not organized according to produce types but, instead, traders operate from any available space. Only a few markets have designated spaces for farm produce and non-farm market activities. In addition, the markets lack proper sanitation (such as running water, toilets, and disposal bins). Brokers have made themselves an integral part of the marketing channel, which has led to information asymmetry, a therefore barrier to entry. Efforts should be made to streamline marketing channels to ensure that farmers get optimal benefits from their produce.

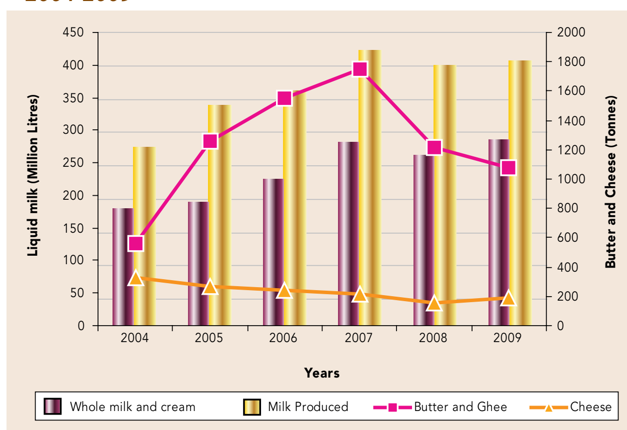
Decentralized funds could be used to provide infrastructure in terms of feeder roads, build and/or

expand wholesale markets, and improve sanitation in the markets. It is also critical to review all relevant legislation relating to fresh and processed farm products in terms of packaging, quality, handling, labelling and health standards with a view to making them relevant, and establishing effective and efficient frameworks and mechanisms for surveillance and enforcement.

Livestock production

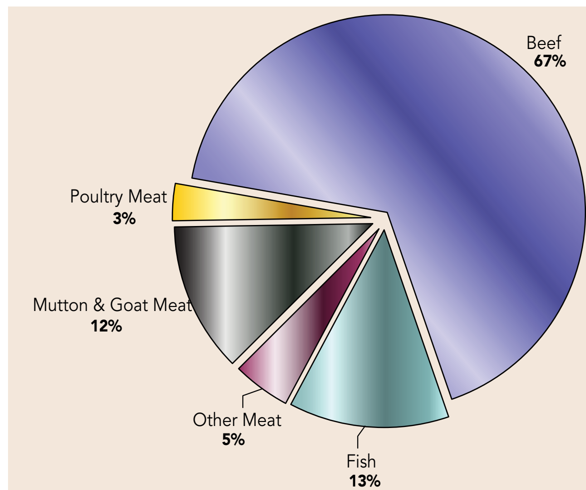
Milk production has substantially increased from about 270 million litres in 2004 to exceed 399 million litres in 2009 (Figure 5.3). The slight drop in production was occasioned by political disruption. However, there was a dramatic turnaround of the dairy sector largely due to favourable weather and timely payments to dairy farmers. The volumes of milk products such as whole milk, butter, ghee and cheese depend on the quantities of milk produced. Nonetheless, there is potential for growth in agro-processing in the dairy industry, though it requires to be exploited by offering incentives to attract long term investors. In 2009/10, there were substantial surpluses that led to farmers being unable to sell milk to dairy processors, especially the Kenya Cooperative Creameries (New KCC), including the small-scale private operators who have played a critical role in absorbing milk from smallholder farmers since the liberalization of the milk industry.

Figure 5.3: Milk production and milk products in Kenya, 2004-2009



Source: Kenya Dairy Board

Figure 5.4: Proportion of meat consumption per capita in 2009



Source: Kenya National Bureau of Statistics, National Food Balance Sheets 2010

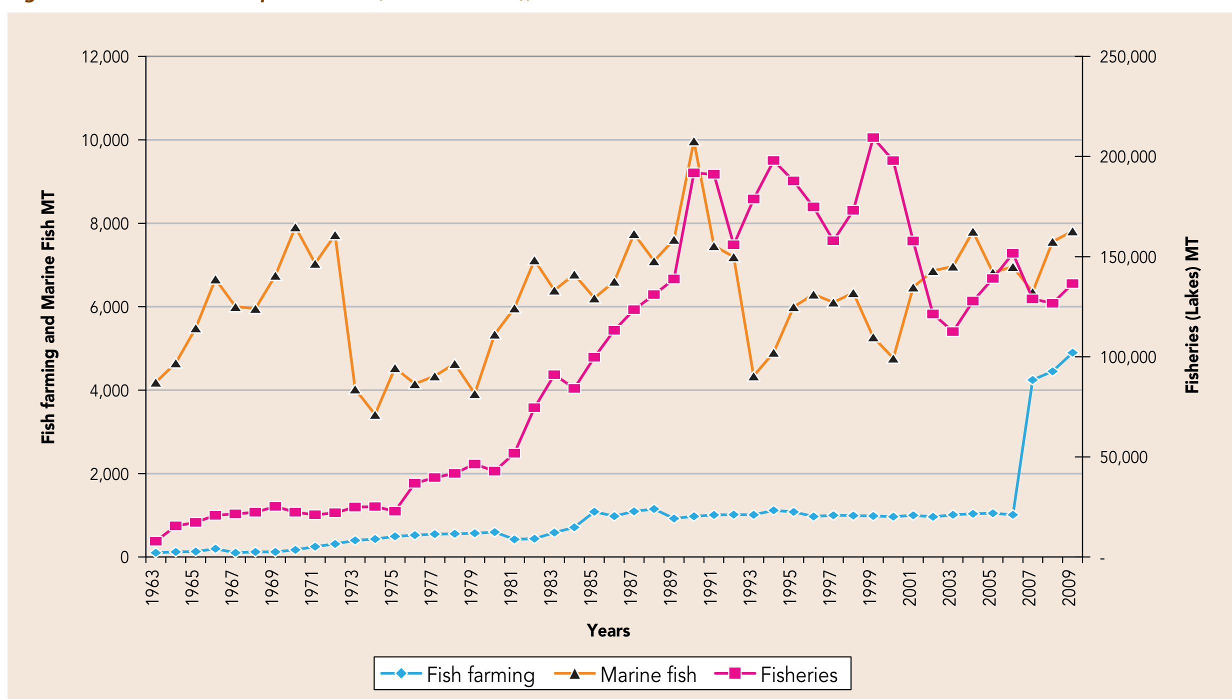
The dairy industry also employs about 800,000 farmers, and many more people are involved in the transportation, processing and retailing chains.

Being largely an arid and semi-arid country, livestock production in Kenya is dominated by cattle, sheep and goats. However, poultry is spread all over the country while pig production is conducted in the highlands. Based on the 1999 census and available livestock data, per capita meat consumption is estimated at 17.3 kg/year. Figure 5.4 provides a volumetric illustration of the contribution of various livestock species to the national meat market. By and large, meat from cattle (beef) forms the largest share of the animal sources of proteins consumed by Kenyans.

Fish production

Kenya has a 640km of coastline and a declared Exclusive Economic Zone (EEZ) of up to 200 nautical miles. The opportunity for marine fish production is estimated at 150,000 metric tonnes per year. However, a very small per cent (6% i.e., 7,000 MT) is harvested. Marine harvest has marginally increased from about 5,000 MT in 1999 to about 8,000 MT in 2009. Kenyan fishermen have not been able to exploit the marine fisheries because of the heavy investment needed for deep-sea fishing.

Figure 5.5: Volume of fish production (metric tonnes), 1963-2009



Source: Ministry of Fisheries Development

Fish yield from capture fisheries have declined over time. The capture fisheries production (from lakes) has declined from about 210,000 MT in 1999 to about 137,000 MT in 2009 (Figure 5.5), with few signs of this fish production recovering in the near future. In response to this decline, there has been a rapid increase in fish farming (i.e. aquaculture) to service market demand. For example, harvest from fish farms has increased four-fold between 1999 and 2009. This provides nutritious food to the population as well as employment and income. Fish farming currently contributes 2.5 per cent of fish production and has the potential to contribute about 50 per cent of total fishery output; its utilization requires moderate investments and technology. Since aquaculture permits the culture of a wide variety of aquaculture species, it can positively continue to contribute towards food security, income generation and job creation.

Table 5.2: Annual percent change of the weighted average CPI by commodity category, 2005-2009

Year	Cereals	Proteins	Fruits	Vegetables	Indigenous, Roots and Tubers	Average Inflation for Food Crops
2005	0.17	0.21	0.77	0.36	0.24	0.35
2006	0.08	0.22	1.29	1.96	1.54	1.02
2007	0.17	0.26	0.91	1.04	1.02	0.68
2008	0.52	0.35	1.91	2.88	2.80	1.69
2009	-0.31	-0.25	-1.35	-1.52	-1.51	-0.99
Average inflation across years	0.12	0.16	0.71	0.94	0.82	0.55

Source: Kenya National Bureau of Statistics

Food inflation

For the last five years, the annual weighted average Consumer Price Index (CPI) has been increasing for all food items by an estimated 55 per cent, which is way above the average wage increase (Table 5.2). Annually, the overall CPI for food crops has been sporadic, with the highest inflation recorded in 2008 attributed to post-election violence and erratic weather patterns that led to less predictable supply and thus high demand for the various commodities.

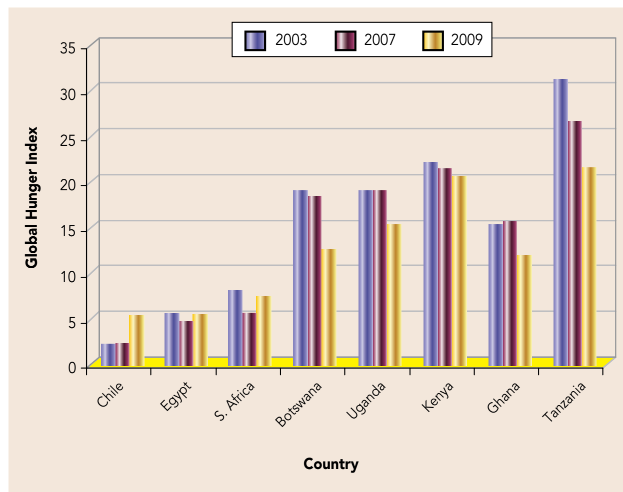
Across the period, the annual weighted average CPI for cereals (e.g. maize, rice, wheat) changed by an average of 12 per cent while that of vegetables (e.g. cabbage, carrots and *sukuma wiki*) registered 94 per cent, which is the highest, taking into account the seasonality in production. Indigenous foods, roots and tubers such as Irish potatoes, sweet potatoes and beans (82%) and fruits such as coconuts, oranges and paw paws registered 71 per cent change. Proteins (e.g., milk, fish and beef) registered the least contribution of 16 per cent.

Fruits, vegetables, pulses, roots and tubers have had the highest CPI for the last five years because they are perishable and bulky, often leading to high transaction costs. One viable intervention would be to promote processing and/or value addition on these commodities to enhance shelf-life and facilitate wider distribution. Besides price considerations, a majority of Kenyans do not seem to like to consume processed or stored food items, which is an attitudinal impediment to development of long term storage infrastructure essential for price arbitrage and year-long food availability. Therefore, it important for the Kenyan population to be encouraged to adapt to consuming processed and stored food items, which are critical to agro-business entrepreneurial development.

Food security status

The food situation in Kenya can be described as alarming due to high levels of hunger amongst its population. In the last few years, many countries have experienced the effects of high and volatile

Figure 5.6: Global hunger index for selected countries, 2003-2009



Source: IFPRI (2009)

food and fuel prices, along with the global financial crisis. These events are particularly crucial to the survival of the poor and vulnerable households in different ways. The global hunger index for Kenya indicates that between 20 and 30 per cent of the population does not attain the minimum dietary requirements to sustain a healthy and productive life. This high level of hunger and malnutrition tends to preoccupy many people with basic survival issues away from greater development matters such as political empowerment, economic participation and socio-economic well-being.

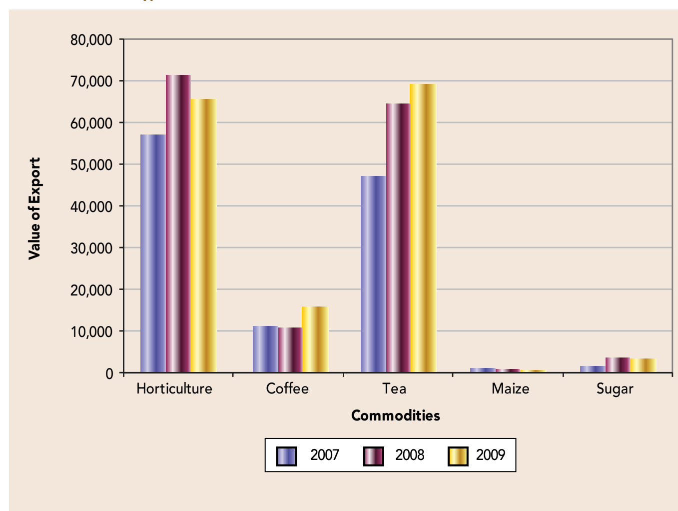
In the last decade, Kenya's progress in reducing hunger has achieved only marginal results compared to other countries such as Botswana, Ghana, Tanzania and Uganda (Figure 5.6). Besides greater high-level political attention to problems associated with hunger, these countries have invested more in increasing production of indigenous foods (tubers, root crops and bananas). There are many useful lessons that Kenya can draw from these countries in terms of reducing hunger and malnutrition by implementing specific nation-wide programmes to increase food production and distribution, engaging in beneficial trade arrangements to promote food availability and careful use of natural resources for food production (e.g., land, water, energy).

Trends in agricultural exports

Kenya's major agricultural exports are tea, horticulture and coffee (Figure 5.7). In 2009, tea, horticulture, coffee and articles of apparels and clothing accessories accounted for 50.5 per cent of total domestic exports. There has been a sharp rise in the value of tea exports, resulting in reasonable financial payouts to tea farmers. The horticultural industry (flowers, fruits, vegetables and nuts) has expanded despite global financial hardships. Maize and sugar exports are almost negligible.

The leading market for Kenya's agricultural exports is Africa, with Uganda and Tanzania serving as the top export destinations. Other major African export destinations of Kenyan goods and services are the Democratic Republic of Congo, Egypt, Rwanda and Sudan. The African region constituted 47.2 per cent of all exports (mainly assorted manufactured goods). Kenya's next largest market is the European Union (EU), mainly the United Kingdom, Netherlands, Germany and France. Kenya's share in 2009 declined to 25.5 per cent from 25.9 per cent in 2008 (tea, horticulture and coffee). In Asia, main destinations of Kenyan goods include Pakistan, India and the United Arab Emirates. Exports to Asia accounted for 17.2 per cent of total exports (tea, crude minerals, etc). The United States of America is also an important customer[1](Economic Survey, 2010). Despite this impressive diversity, there is need to diversify export destinations further, as well as seek new international markets.

Figure 5.7: Value of major agricultural exports (Ksh millions), 2007-2009



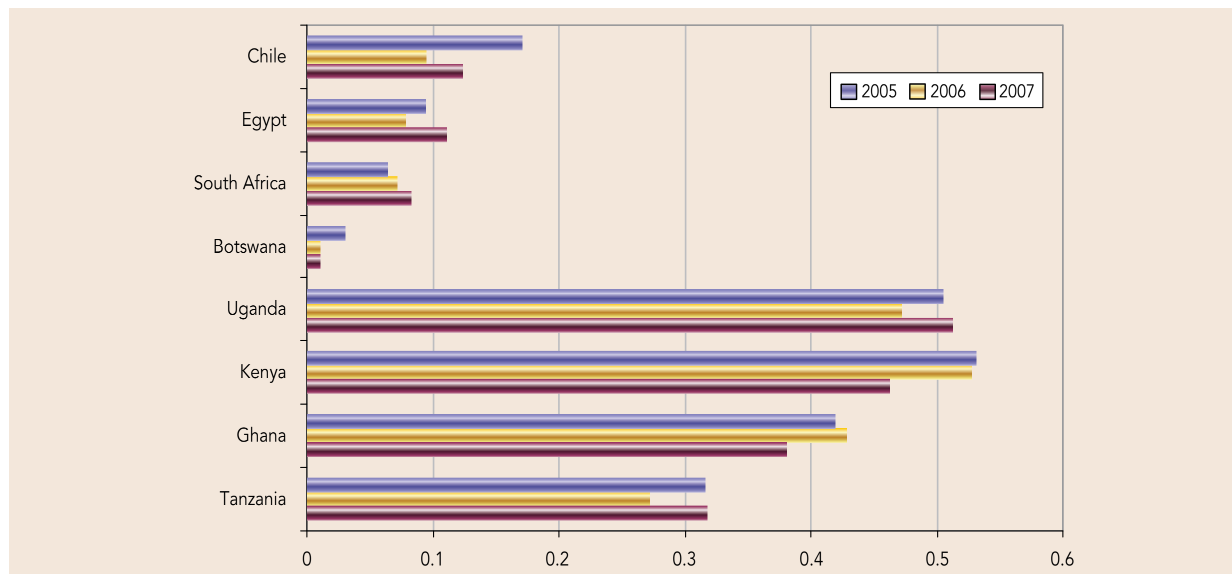
Source: Kenya National Bureau of Statistics

Like its Eastern African neighbours, Kenya is heavily dependent on agricultural sector exports while Botswana, South Africa and Egypt do not depend much on agriculture in relative terms (Figure 5.8). Despite structural impediments, the country needs to diversify and strengthen the non-agricultural sector, which will, in complex ways, increase the growing demand for the agricultural sector's goods while also serving other long term developmental goals as encapsulated in Kenya Vision 2030 and other major government policy documents. Additional interventions towards adding value to products and services exported from the country include the formation of Brand Kenya, a parastatal charged with branding Kenyan produce and services. Indeed, the government, through the National Social and Economic Council, in 2010 has focused on value addition of some selected commodities with the aim of enhancing domestic and international trade. These commodities include: tea, coffee, cotton, pyrethrum, fruits, vegetables, nuts, leather, hides and skins, most of which are exported in raw form (limited value addition).

Trends in agricultural imports

Kenya mainly imports wheat, sugar and maize products. There was a sharp rise in maize imports in 2009 mainly due to poor weather that led to decline in domestic production and also due to the aftershock effects of the post-election violence that may have kept a large part of agricultural land uncultivated. An interesting revelation is that Kenya has been importing tea products despite the fact that it is the leading exporter of tea to the global market. Imports of cotton have almost stagnated, indicating the processing capacity of local fabric manufacturers (Figure 5.9). Other minor agricultural imports include rice, sugar, textile fibres, animal/vegetable fats and oils.

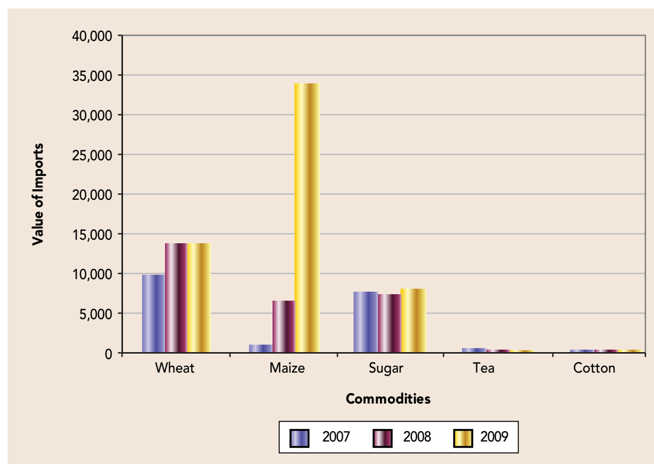
Figure 5.8: Share of agricultural exports in total exports, 2005-2007



Source: FAOSTAT (2009)

The share of agricultural imports in total imports for Kenya is relatively small (10%) and compares relatively well to other non-oil producing agricultural countries such as Tanzania (Figure 5.10). Of the selected countries, Egypt has the highest component (about 20%) of its imports being agricultural products while South Africa has the lowest share (slightly above 5% in 2007). However, the product composition indicates that there is increasing demand for wheat products, which can be partly attributed to low productivity and consumption habits of the urban middle and upper income levels

Figure 5.9: Value of major agricultural imports (Ksh millions) 2007-2009



Source: Kenya National Bureau of Statistics

of society. Efforts, therefore, should be made to enhance the local productivity of crops such as wheat and rice. Generally, as disposable incomes increase, many people tend to shift away from starchy foods. For instance, neighbouring Uganda has already put in necessary measures to increase the production of dry land rice (New rice for Africa - Nerica) because its annual rate of increase in rice consumption is rising in double digits.

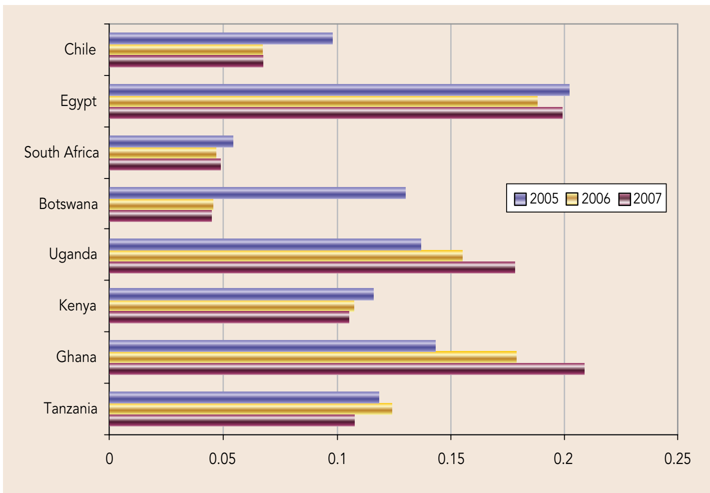
The top 10 imports by Uganda from the rest of the world include wheat, palm oil, refined sugar, raw centrifugal sugar, sorghum, dry peas, rice, fatty acids, beer of barley and hydrogenated oil. Those imported by Tanzania include wheat, palm oil, refined sugar, fatty acids, raw centrifugal sugar, malt, soybean oil, distilled alcohol and non-alcoholic beverages. [2]

Employment Trends

Labour absorption in agriculture

Statistics on labour employment in the agricultural and rural development sector are rather vague from most sources. In 2006, about 6.4 million households were actively engaged in agricultural activities, although some sources put this number at about 4.4 million households. Current estimates indicate that

Figure 5:10: Share of agricultural imports in total imports (%)



Data Source: FAOSTAT (2009)

about 68 per cent of the total labour force is engaged in agriculture. Most workers in rural areas with more reliable rainfall often practise crop farming, while those in arid and semi-arid lands predominantly engage in livestock activities.

Women are involved in the non-traditional, high-value agro-chains (i.e. horticulture and fish products), with their employment in such sectors ranging between 50 per cent and 90 per cent. However, they tend to be involved in lower paid and more labour-intensive areas as casual, temporary and seasonal staff (UNIDO *et.al.*, 2008).

Employment by industry

Agriculture and forestry absorb about 340,000 workers both in the private and public sector who are involved in mixed farming; large plantations of coffee, tea, sugar, and sisal; ranches; processing cooperatives; logging and charcoal burning; fishing and agricultural services. The annual average rate of growth of employment expansion in the agricultural and forestry sub-sector is about 2.0 per cent.

The share of the agro-industries in Kenya's manufacturing sector is close to 75 per cent. In terms of employment composition, rural industries account for approximately one fifth of rural non-farm employment, consisting mostly of occupations in agro-industries. These agro-industries include dairy processors; sugar factories; slaughter houses; fish processors; fruits and vegetables processors; grain millers; manufacturers of feeds; fertilizer and pesticides; spinning, weaving and textiles; and manufacturers of food products. The manufacturing sector employs about 264,000 workers. The annual average rate of growth of employment expansion in the agricultural and forestry sub-sector is about 2 per cent (Kenya National Bureau of Statistics, 2009). Other activities such as wholesale and retail trade, construction, transport, logistics and communications are typically associated with agro-related manufacturers and agribusiness. Community, social and personal services employ the bulk of the population both in the private and public sector compared to other sectors in the economy (Figure 5.11).

Policy Directions

Promoting irrigation and technologies for pro-poor growth

Increased agricultural growth should focus on promoting small-scale irrigation and technologies that promote pro-poor growth based on both the demand and supply-push strategies. These include: intensifying sustainable production and marketing systems, strengthening research and extension services, improving input distribution, building capacity among farmers' organizations, promoting commodity chain development, and improving export competitiveness. The sources of growth then will be: increased scale of production, increased productivity, risk mitigation and value addition. Short term measures to increase productivity have been implemented, such as farm input subsidies (seeds, fertlizer), which lower the overall production cost and increases profitability. This makes farming an attractive venture as it cushions farm household income.

Sources of risk in agriculture include: weather (frost, floods and drought), market collapse, price

Figure 5:11: Wage employment by industry, 2007-2009

Source: Kenya National Bureau of Statistics, Statistical Abstracts

fluctuations, and labour unrests. Agriculture is being practised in an increasingly globalized and complex environment. Innovation will play a critical role especially in promoting efficient technologies to farmers, which will enable them produce optimally from scarce resources, especially water. However, close monitoring and follow up mechanisms should be instituted to ensure that these technologies are implemented and promoted to ensure pro-poor growth and ensure no wastage of public funds. For the relevant departments to perform these roles adequately, there will be need to continually increase budgetary resources available to the agricultural sector from the current low 4.3 per cent towards 10 per cent of national expenditure (budget), as agreed by African Heads of State and Government in Maputo. The same departments must rationalize budgetary priorities to better serve national strategic interests to achieve food and nutritional security, create jobs, reduce inequality and alleviate poverty.

Promoting value addition

Rising per capita incomes, technological advances, trade liberalization, urbanization and commercial small-scale farming are among the factors that have led to the growth of the agribusiness and agro-industry. In addition, changing diets have led to demand for high-value commodities, processed products, and pre-prepared foods. The challenge is the trade-offs between agro-industry development, poverty and food security objectives. Therefore, focus should be on increasing access and infrastructure in value-adding inputs, tools, equipment, and technology and at the same time promoting supportive policies to private entrepreneurs and investors who are important in the chain between farmers' production, value-adding and marketing. Besides the commodities (e.g. cotton, tea, horticulture, hides and skins) that the government has prioritized for value addition, there is need to devote more resources to other commodities such as potatoes, bananas, fish, and meat (especially during droughts).

Enhancing agricultural markets

Increased production will lead to surpluses as experienced in the recent past for milk and maize. Measures can be taken to ensure that these surpluses are marketed through such interventions

as increasing access and availability of market information, investments in infrastructure for physical markets, transport and logistics, ICT, storage and processing. The individual sub-sectors/ industries should be encouraged to provide for quality requirements/standards, self-regulation and monitoring to ensure that high quality products are provided to the end users, thus assuring price and market. These initiatives will require concerted efforts of all the stakeholders, which can be achieved through private public partnerships. In addition to providing information and an enabling agribusiness environment, farmers need to explore marketing options such as commodity hedging and futures markets in order to take advantage of income-earning opportunities. An efficient domestic market will provide a springboard for products to penetrate both local and international markets, which will in turn provide for the expansion of local capacity, create employment and enhance livelihoods.

Expanding regional agricultural trade

The overall objective in Agriculture and Rural Development Strategy for the East African Community (ARD-EAC) is to achieve food security and rational agricultural production. Emphasis is on liberalization of cross-border trade in agricultural produce and products between partner states. Removal of restrictions on trade will reduce costs, thereby facilitating increased cross-border flow of agricultural commodities. This regional commerce will allow industries to grow and compete effectively. With a combined population of about 80 million, there is adequate market to support this development. Regional integration also provides a platform to push for regional agenda with a strong voice at international forums especially in trade negotiations, therefore safeguarding the interests of East Africans.

Endnotes

[1] Export Promotion Council (EPC), www.epckenya. org

[2] Sourced from the FAOSTAT website

6 Manufacturing

Introduction

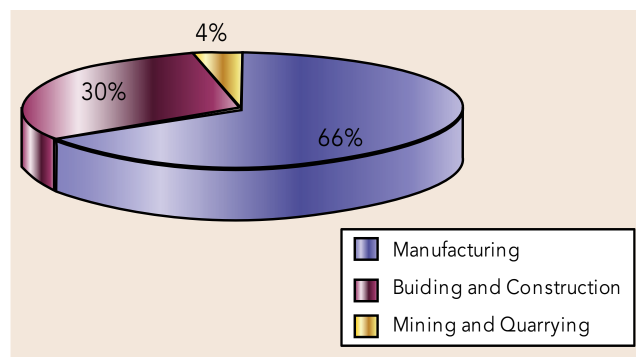
Manufacturing, mining and quarrying, and building and construction constitute the industrial sector of an economy. However, this chapter focuses on the contribution of manufacturing in Kenya's economy. Despite recent difficulties relating to the post-election violence and the global financial crisis, the manufacturing sector still plays a significant role in Kenya's economy. Indeed, manufacturing is identified in Vision 2030 as key to addressing incidences of high poverty levels and unemployment, which are the major contemporary challenges in Kenya.

Overview of Recent Performance

The manufacturing industry has contributed about 10 per cent to GDP over the years. As shown in Figure 6.1, manufacturing activities account for the greatest share of industrial production. In comparison, building and construction, and mining and quarrying contributed 4.4 and 0.5 per cent, respectively. Similarly, the manufacturing sector contributed 13.3 per cent of the total formal employment, whereas the building and construction and mining and quarrying contributed 4.7 per cent and 0.3 per cent, respectively. Therefore, the manufacturing sector forms the core of the 'industry' in the country.

Overall, the growth of the manufacturing industry declined in 2009, compared to its growth in 2008. The sector recorded a growth of 2.0 per cent compared to its 2008 growth of 3.6 per cent (Kenya National Bureau of Statistics, 2010). Food, beverages and tobacco, which constitute the largest manufacturing sub-sectors, grew by 5.1 per cent, -3.4 per cent and -9.5 per cent, respectively. Production in paper and paper products went down by 40.0 per cent and printing and publishing declined by 28.0 per cent compared to other levels in 2008. The

Figure 6.1: Sub-sector percentage share of industrial GDP



Source: Kenya National Bureau of Statistics (2010)

dismal performance has largely been attributed to lack of raw materials and high costs of production. Substantial positive growth was, however, recorded in leather and footwear (14.5%) and non-metallic minerals (14.3%).

Employment in the formal manufacturing sector improved in 2009, registering a growth of 0.3 per cent on 264,095 persons employed in 2008. This improvement was also recorded in informal manufacturing, which employed 1.76 million persons (21% of the total informal employment) compared to 1.64 million in 2008 (Kenya National Bureau of Statistics, 2010). Of the total wage employment in the manufacturing sector in 2008, food, beverages and tobacco contributed 33.8 per cent, whereas textile and garments contributed 23.4 per cent (Table 6.1). The two sub-sectors continued to be the major source of employment in the sector in 2009.

From an export perspective, the growth in various sub-sectors in manufacturing was mixed. Compared to 2008, there was positive growth in processed foods and beverages, petroleum products, wire products and metal containers in 2009. Textile and garments and related accessories; wood, paper and paperboard; and plastics recorded decline in growth.

Table 6.1: Structure of employment in manufacturing

Sub-sector	Employment in 2005	% Employment in manufacturing sector 2005	Employment in 2006	% Employment in manufacturing sector 2006	Employment in 2007	% Employment in manufacturing sector 2007	Employment in 2008	% Employment in manufacturing sector 2008
Food, beverages and tobacco	85297	34.46	86569	34.12	88470	33.85	89379	33.84
Textile and garments	59400	24.00	60886	23.99	61889	23.68	61728	23.40
Metal and allied	20945	8.46	21187	8.35	21869	8.37	22113	8.37
Leather products and footwear	1894	0.77	1830	0.72	2924	0.68	2974	0.86
Paper and Paperboard	8367	3.38	8440	3.33	8518	3.26	8593	3.25
Timber, wood products and furniture	14130	5.71	14147	5.58	14184	5.43	14220	5.38
Chemical, drugs and medicine	15196	6.14	15544	6.13	16010	6.13	15322	5.80
Pottery, glass, cement and non-metallic mineral	7784	3.14	8611	3.39	9961	3.81	10400	3.94
Plastic and rubber	10494	4.24	11385	4.49	12597	4.82	12370	4.68
Professional and scientific equipment	382	0.15	391	0.15	401	0.15	411	0.16
Motor assembly and components	3125	1.26	3086	1.22	3041	1.16	5628	2.13
Electrical and electronics	3039	1.23	3026	1.19	3016	1.15	3024	1.15
Other manufactured products	5233	2.11	6363	2.51	7342	2.81	7043	2.67
Printing, publishing and allied	8559	3.46	8825	3.48	9051	3.46	8842	3.34
Shipbuilding, railroad equipment and air craft repair	3671	1.48	3461	1.36	2226	1.23	2109	0.80
Total	247516	100.00	253751	100.00	261345	100.00	264095	100.00

Source: Kenya National Bureau of Statistics, Statistical Abstracts (2007, 2008, 2009)

Table 6.2: Comparison of the manufacturing sector's performance in 2009 with Vision 2030 and MTP targets

Performance	Targets
Contribution to GDP: 9.53 %	Contribution to GDP - 20% by 2012
Eastern Africa market share: 7%	Target : 15% by 2012
Annual growth rate: 2.5%	Target: 10% by 2012

Source: Kenya National Bureau of Statistics

Performance, Targets and International Benchmarking

Kenya visualises being a globally competitive and prosperous nation with a high quality of life by the year 2030. To achieve this, the country will have to be transformed into a newly-industrialized middle income nation with high living standards and with reduced inequality.

The performance of Kenya's manufacturing sector in terms of contribution to GDP is far below that of Singapore (31%), Malaysia (48%), Indonesia (47%) and Egypt (36%) (World Bank, 2009a). Similarly, the sector's share exports compare unfavourably with Singapore (80%), Malaysia (74%), and Indonesia (45%) (World Bank, 2009b). Thus, the envisioned prosperity in 2030 calls for local industries to be more efficient while at the same time increasing the competitiveness of domestic products. Similarly, raising per capita income will require clear interventions that target labour productivity and labour utilization. Such interventions will constitute skills improvement, increasing the capital stock and technological improvements.

The manufacturing sector is expected to play a pivotal role in the country's industrialization and employment creation. Kenya has traditionally based its manufacturing sector on agro-processing and production of consumer products. The sector's growth will, therefore, have to be robust and structurally diversified to hasten its competitiveness. Table 6.2 shows the earmarked goals of the manufacturing sector by 2012 and 2030 in key performance indicators.

As clearly indicated in Kenya Vision 2030, these goals will be achieved through strengthening local production, expanding regional markets and identifying global market niches for the country's manufactured products. For these strategic initiatives to be effective, the government will also have to focus on building a more favourable business environment. As shown in Table 6.3, Kenya's performance in having an effective anti-monopoly policy, improving overall infrastructure, lowering crime rates, and adherence to intellectual

Table 6.3: International benchmarking of Kenya's business environment

Performance indicator	Period	Kenya	Selected countries
1. Intellectual Property Protection (Scale 1=Weak and not enforced and 7=Strong and enforced)	2008	3.1	China (3.9), Egypt (3.6) Malaysia (4.8), Uganda (2.7), Thailand (3.7), Singapore (6.3), S. Korea (5.0)3
2. Business costs of crime and violence (1=Imposes significant costs; 7=Does not impose significant costs)	2007	2.9	Malaysia (4.6), Egypt (5.8), Korea Republic (5.5), Indonesia (5.3), Singapore (6.4) 3
3. Overall infrastructure (1=Un-developed; 7=Extensive & efficient by international standards)	2007	2.9	Malaysia (5.6), Singapore (6.7), Korea (5.6), South Africa (4.5), Egypt (3.9)3
4. Effectiveness of anti-monopoly policy; 1=Not effective, 7=Effective and promotes competition)	2007	3.9	South Africa (5.5), Malaysia (5.5), Egypt (3.3), Korea Republic (5.1)3

Sources : Global Competitiveness Report (2008-09)

property rights is poor. These areas play a key role in improving industrial development.

Outstanding Challenges and Policy Options

There are various constraints that hinder manufacturing competitiveness in Kenya. One challenge is low value addition and diversification. As Table 6.4 shows, manufacturing contributed only 13 per cent to GDP in 2008 when compared to China (49%), Malaysia (48%) and Korea Republic (37%). Another challenge is low productivity. Indeed, Kenya lacks international competitiveness in specialized manufacturing of high-value and IT-based products that include electronics, electrical products, machinery and equipment, motor vehicles and parts, computers and ancillary parts. Similarly, the sector's growth is hampered by low investment, low research and development, narrow export base, poor physical infrastructure (i.e. energy, water, roads including lack of integrated transportation policy), and the influx of counterfeit and substandard goods.

The government has embarked on various reforms to address the challenges facing the manufacturing sector. For instance, the Anti-counterfeit Act 2008 was enacted in December 2008, and surveys on resource endowment in different regions in Kenya have been done. To address low value addition and diversification, the government, in conjunction with the World Bank, is undertaking an MSME competitive project, which has value addition sub-components for coffee, cotton, hides and skins.

Kenya can learn from the performance of the Newly Industrialized Countries (NICs), particularly on the industrial strategies these countries pursued. Overall, these countries adopted industrialization

Table 6.4: Performance of the manufacturing sector in a few selected countries

	Valued Added as % of GDP														
	Agriculture					Manufacturing					Services				
	2003	2005	2006	2007	2008	2003	2005	2006	2007	2008	2003	2005	2006	2007	2008
Argentina	11	9.4	9	8	9	35	35.6	35.4	36	34	54	55	55.6	56	57
Botswana	2	2	2	-	-	48	53.5	53.5	-	-	50	44.5	44.5	-	-
Brazil	6	5.6	5.1	5	7	21	30.3	30.9	31	28	73	64	64	64	65
China	15	12.5	11.9	12	11	53	47.3	47	48	49	32	40.1	41.1	40	40
Egypt	16	14.9	-	13	14	34	36	-	36	36	50	49.0		51	50
Ghana	35	35.7	37.7	36	32	25	23.2	21.2	25	26	40	39.4	41.1	38	42
India	23	18.3	17.5	18	18	26	27.3	27.7	29	29	53	54.4	54.7	53	53
Indonesia	17	13.1	11.9	14	14	44	44.9	41.7	47	48	40	42.0	46.3	39	37
Kenya	**17**	**27.7**	**27.9**	**23**	**21**	**19**	**18.5**	**17.4**	**19**	**13**	**64**	**54.4**	**54.8**	**58**	**65**
Korea Rep.	3	3.4	3.2	3	3	35	40.3	39.6	39	37	62	56.3	57.3	58	60
Malaysia	9	8.7	8.3	9	10	49	51.8	51.6	51	48	42	39.6	40.1	41	42
Singapore	0	0.1	0.1	0	0	35	33.8	34.7	31	28	65	66.1	65.2	69	72
South Africa	4	2.2	2.5	3	3	31	30.3	30.5	31	31	65	67.1	67	66	66
Thailand	9	10	9.8	11	12	41	44.2	45.8	44	46	50	45.9	44.4	45	43
Tanzania	43	46.1	45.3	45	45	17	16.9	17.4	17	17	40	37	37.3	37	37
Uganda	33	32.7	31.7	29	23	22	24.8	24.6	18	26	45	42.5	43.7	53	52

Source: World Development Report (2005, 2009, 2010), World Development Indicators (2007)

strategies that were oriented to changes in the global environment, market requirements and in response to national goals. The phasing of the industrial policies in NIC emphasized diversification of the economy from traditional trade in minerals and primary agricultural commodities to manufactured goods and exportable services, which allowed the countries to raise incomes and benefit from the world economy through increased exports. Specifically, for Kenya to achieve competitiveness in manufacturing and meet Vision 2030 goals, the country requires a competitive market environment, macroeconomic stability, and appropriate institutional and physical infrastructure, and efficient and focused bureaucracy. In addition, countries that have achieved successful industrial development invested heavily in human resource development, have strong legal and institutional framework, and have adopted selective and targeted strategies and incentives for FDI and local investments. Appropriate interventions need to be targeted to each of the following policy challenges:

- Kenya's manufacturing sector is still based on agro-processing and production of consumer products. The inability of Kenya to undertake the second stage of import substitution that focuses on production of intermediate goods denied the country the momentum to transform its production structure to production of high value yielding exports. Increasing value addition in agro-processing is naturally the starting point to improve the manufacturing sector but the country should develop the capacity to produce intermediate goods for the local industry through, say, import substitution, or joint ventureship through private-public partnerships. The government's plan to create Special Economic Zones (SEZs) as one of the Vision 2030 flagship projects provides a window where provision of investment incentives could be targeted to manufactures of intermediate goods, particularly of light machinery.

- Eastern African countries constitute the major market for Kenya's manufactured products but these countries are rapidly widening their industrial establishment and their markets are getting more liberalised. The challenge with this development is the missed opportunities since this market will be limited for a country that targets to markedly increase her industrial base. There is need to diversify market destination for manufactured products, and the government should provide incentives for private power production, increase investment in renewable sources of energy, improve urban planning, and fast track institutional reforms.

- There is need to have an industry policy framework that strategically reflects the global trend patterns and encompasses domestic economic objectives. Strategic transformation of the manufacturing industry requires planning and implementation of well-defined strategies. The Industrial Master Plan (the product of MAPSKID)[1] is a remarkable starting point for industrial development in Kenya, because it identifies preconditions for industrial transformation. The Industrial Master Plan requires immediate implementation if the 2030 industrial goals are to be achieved. To facilitate effective implementation of the master plan, the government may consider setting up a small but highly skilled and resource-supported taskforce to work on industrial transformation.

- Small businesses are a core component of the manufacturing sector but small-firm clusters remain locked in low-quality products and low-income markets. The government should encourage subcontracting and other forms of alliances between local firms and multinationals, say through tax subsidies and training.

Endnotes

[1] MAPSKID- Master Plan for Study of Kenya Industrial Development.

Financial Services

Introduction

The financial sector includes banking, capital markets, informal financial services and other non-banking financial institutions such as insurance and pension schemes. Through financial intermediation, financial services play a key role in the development process. In 2008, the performance of the financial sector slowed down due to the tough business environment occasioned by the post-election violence and the global financial crisis. The sector's real growth declined to 2.7 per cent from 6.7 per cent in 2007. However, in 2009 the sector improved, achieving a 4.6 per cent growth rate.

This chapter tracks the main policy changes and performance of selected indicators in the financial sector. Policy options intended to make the sector play its role effectively are also recommended.

Policy Changes

Several policy changes were witnessed in the financial services sector. This includes putting in place the value capping policy aimed at enhancing safety and efficiency of the payment process and instruments, by reducing the systemic importance of the Automated Clearing House.[1] To enhance stability in the sector, the Proceeds of Crime and Anti-Money Laundering Act 2009 were enacted. Through amendment of the Banking Act 2009, agent banking was introduced as a way of increasing financial access and lowering costs.[2] Financial sector regulators (Central Bank of Kenya, Retirement Benefits Authority, Capital Markets Authority, Insurance Regulatory Authority) signed a memorandum of understanding in an effort to curb risks and shocks within the financial system. The regulations governing the establishment and supervision of credit reference bureaus in Kenya became operational. Credit Reference Bureau Africa Ltd became the first bureau to be licensed.

To enhance the practice of good corporate governance and ensure stability in the insurance industry, shareholding in an insurance company by a single person either directly or indirectly was restricted to 25 per cent Similarly, anyone directly or indirectly owning, controlling, or is beneficially entitled to more than 20 per cent of the shares of an insurance company cannot be involved in the day to day management of the company. In the pension scheme sector, funded schemes for civil servants can only invest in government securities and infrastructure bonds issued by public institutions. This is to guard against use of members' funds in suspect investments.

To boost investors' confidence in the stock market, various reforms were initiated. These include disclosure requirements by all licensees, securing of professional indemnity insurance to cover liabilities arising from cases of negligence or omissions by all market intermediaries that collect funds from the public, and requirement for investment banks and stockbrokers to increase their share capital to Ksh 250 million and Ksh 50 million, respectively. Other critical reforms include making corporate governance guidelines mandatory for licensees handling public funds, and a requirement that will see all licensees fully automate their back offices. To promote integrity and ethical conduct of business, investment banks and stockbrokers will now be bound by a code of ethics. Similarly, a centralized complaints and enquiries handling centre managed by the NSE was established. Finally, to boost the raising of capital for expansion and growth through the stock market, the listing fee was reduced from 0.3 per cent to 0.15 per cent of the value of the issue for new public offers of equity.

Banking Sector Indicators

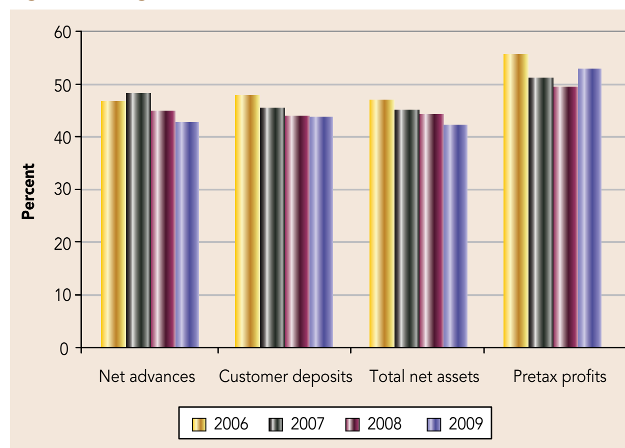
Market share

Although the banking sector continued to portray an oligopolistic market structure, there is progress towards a competitive market. During the 2006-2009 period, dominance by four of the largest banks on net advances, customers' deposits, and total net assets, though pre-tax profits dropped to an average of 47 per cent (Figure 7.1) from about 55 per cent in 2003-2005.[3] Nevertheless, the sector's total deposits and pre-tax profits expanded by 16 per cent and 12.9 per cent, respectively, in 2009.

Product diversification

There was enhanced adoption of ICT in delivery of banking services as a way of coping with increased competition. Taking advantage of mobile phone technology, new electronic banking products were introduced. Similarly, in their expansion strategies, banks increased the number of Automated Teller

Figure 7.1: Big banks market share (%)



Source: Central Bank of Kenya

Machines (ATMs) by 29.6 per cent from 1,325 ATMs in 2008 to 1,717 ATMs in 2009. Banks have also expanded into the card business as a result of both high demand and profits from the use of plastic money. The competition to increase market share in this business segment is now on. While the growth of credit cards usage remained stagnant, that of debit cards grew by 57 per cent between 2007 and 2008. The banks also continued to set up camp outside Kenya as a way of increasing additional revenue from the region.

Access to banking services

Although 22.6 per cent of the adult population had access to formal financial services in 2009 through banks[4] compared to 18.9 per cent in 2006, majority of Kenyans still lack access to formal financial services and products. However, mobile phone money transfer services continue to expand. By 2009, Safaricom and Zain (Airtel) were the only two major mobile money transfer service providers. Between 30 June 2008 and June 2009, the number of registered mobile phone money transfer customers increased by 146.7 per cent to stand at 7.4 million. Similarly, in the same period, the amount of money transferred via mobile phones increased by more than five times from Ksh 61.1 billion to Ksh 318.4 billion. Internet banking is also another remarkable service offered by banks.

The sector in general witnessed an increase in the branch network from 887 branches in December 2008 to 996 branches in December 2009, representing a growth of 12.3 per cent. Nairobi Province has extensive coverage of banking services with 39.7 per cent of all banks' branches. North Eastern Province continued to have the lowest number of branches. The skewed concentration of banks' branches has implications on access to formal financial services.

Cost of credit

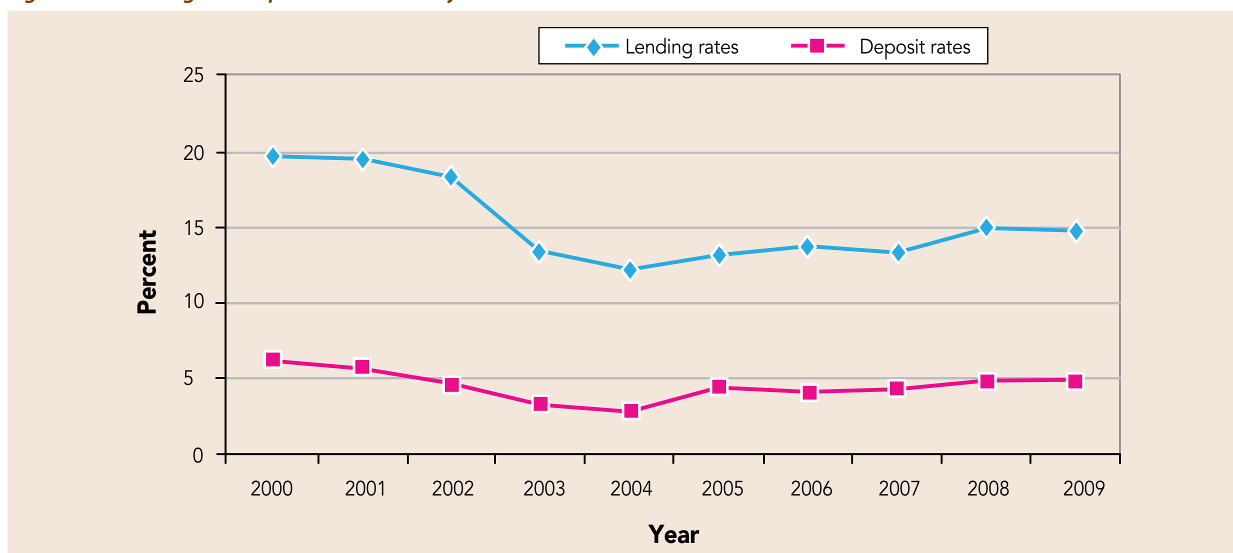
The lending rates, representing the cost of credit continued to be high. Deposit rates have, however, remained low, implying a high interest rate spread (Figure 7.2). Indeed, the interest income on loans and advances is the major source of income for banks, contributing 53 per cent of the total income. Efforts by the Monetary Policy Committee of the Central Bank of Kenya to lower the Central Bank Rate as an incentive to reduce the cost of credit have not been fruitful. The weak judicial system, especially in the enforcement of contracts, lack of competitive price offering by banks, and high intermediation costs are some of the factors contributing to high lending rates. This high cost of credit impedes investment growth.

The interest income on loans and advances is the major source of income for banks, contributing 53 per cent of the total income. Efforts by the Monetary Policy Committee of the Central Bank of Kenya to lower the Central Bank Rate as an incentive to reduce the cost of credit have not been fruitful.

Compared to middle income countries represented in Figure 7.3, the lending rate for Kenya is still relatively high. In countries such as Chile, China, Korea Republic, Singapore, Malaysia and Thailand, the lending rate is on average less than 8 per cent compared to Kenya's average of 13 per cent during the period 2005-2007. This is despite the decline in Kenya's lending rate in 2007.

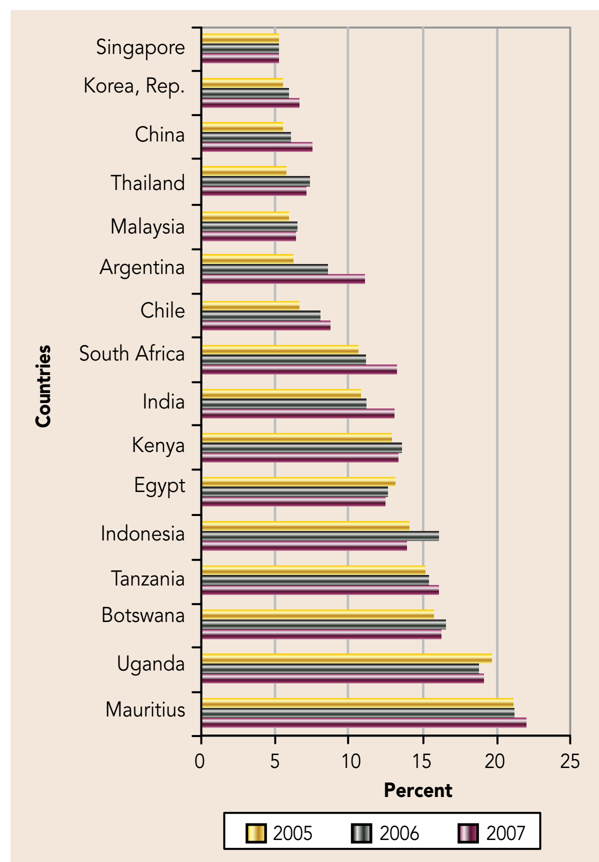
Similarly, during the period 2005-2007, Kenya's interest rate spread continued to compare unfavourably with other countries. While the spread for Kenya averaged 8.17 per cent, South Africa and

Figure 7.2: Lending and deposits rates in Kenya



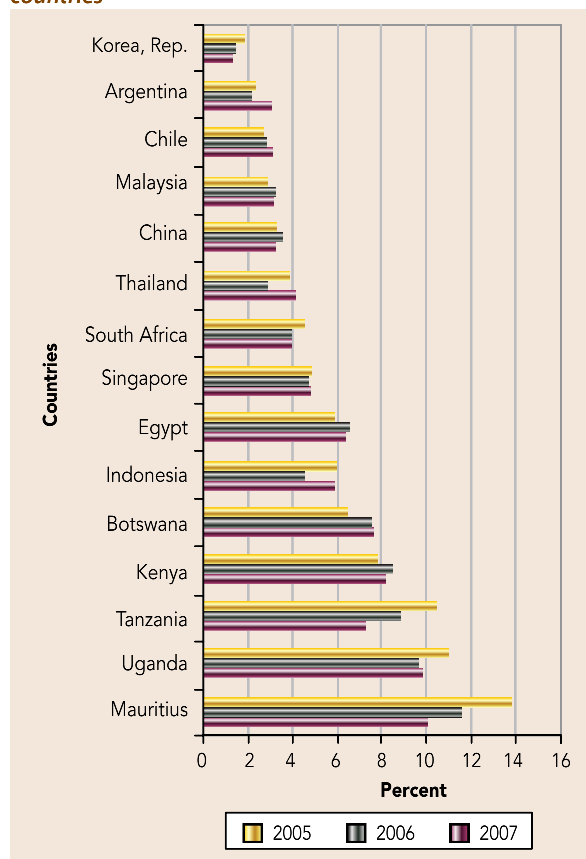
Source: Central Bank of Kenya

Figure 7.3: Lending rates for selected countries



Source: World Bank (2009)

Figure: 7.4: Interest rate spread across comparator countries



Source: World Bank (2009)

Egypt spreads were below 7 per cent during the same period. The interest rate spreads for countries that have already attained middle income status, such as Singapore, Malaysia, Korea Republic and China were below 5 per cent (Figure 7.4).

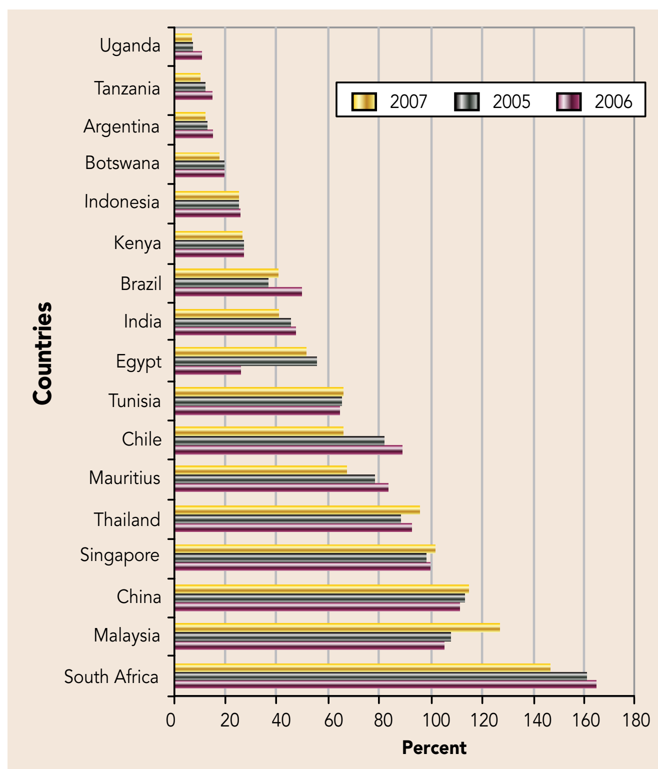
Credit to the private sector

Commercial banks' credit to the private sector increased, though at a decreasing rate i.e. from Ksh 558.3 billion at the end of June 2008 to Ksh 673.8 billion at the end of June 2009. This was an increase of 20.7 per cent compared to 29.6 per cent in the previous period. However, compared to middle income countries, Kenya's credit to the private sector remains low. This does not augur well for the achievement of Vision 2030 investment level targets. Kenya's share of credit is slightly above 20 per cent of GDP, while countries such as China, Malaysia, Singapore, and South Africa are at 100 per cent and above (Figure 7.5). This can be attributed to low cost of credit in these countries.

Non-performing loans

Despite the effects of the post-election violence, Non-Performing Loans (NPLs) declined by 1.8 per cent from Ksh 61.87 billion in December 2008 to Ksh 60.74 billion in December 2009. Consequently, the ratio of gross non-performing loans to gross loans reduced from 9.2 per cent in December 2008 to 8.0 per cent in December 2009. It is envisaged that Kenya will continue to achieve lower NPL levels following the anticipated economic recovery and the adoption of Credit Reference Bureaus expected to minimize the default rate.

Figure 7.5: Domestic credit to the private sector (% of GDP) for selected countries



Source: World Bank (2009)

Capital Market Indicators

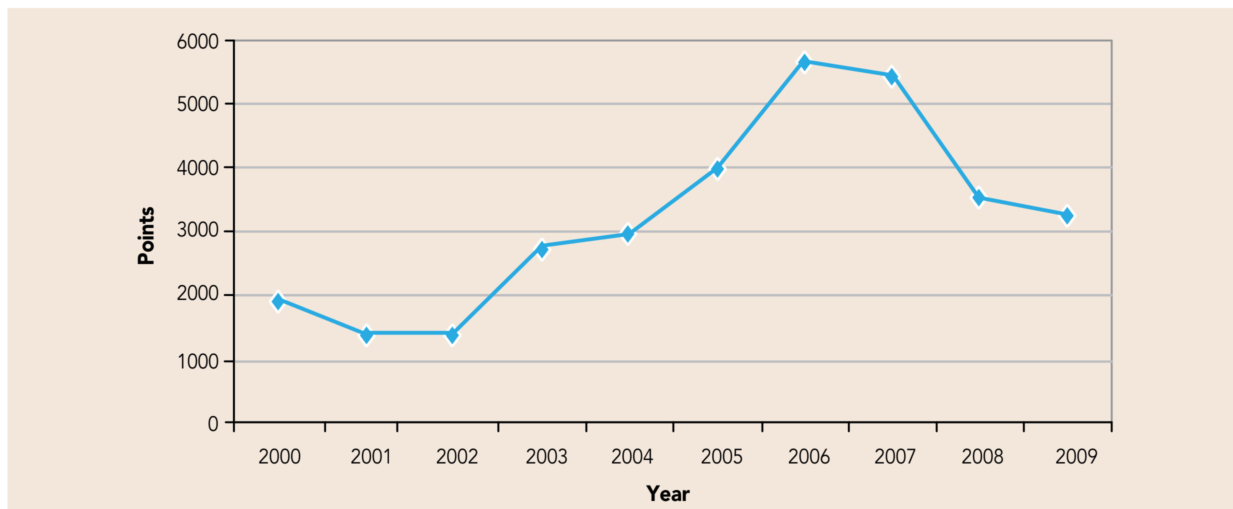
While the stock market in Kenya has witnessed increasing activities over the years, this scenario has reversed. All the stock market performance indicators depict a declining trend. Several factors attributable to this performance include withdrawal of foreign investors as a result of the global financial crisis, loss of investors' confidence particularly after the fall of stockbrokerage firms,[5] increase in inflation rate and unmet expectations from the Safaricom Initial Public Offer.

Despite the reforms put in place to ensure free, fair and efficient capital markets in Kenya, confidence among the investors, especially in the stock market is yet to be fully restored. The performance has continued to remain bearish with minimal improvements. This raises concerns about the market, especially as a source of capital for the private sector.

7.3.1 Stock indices

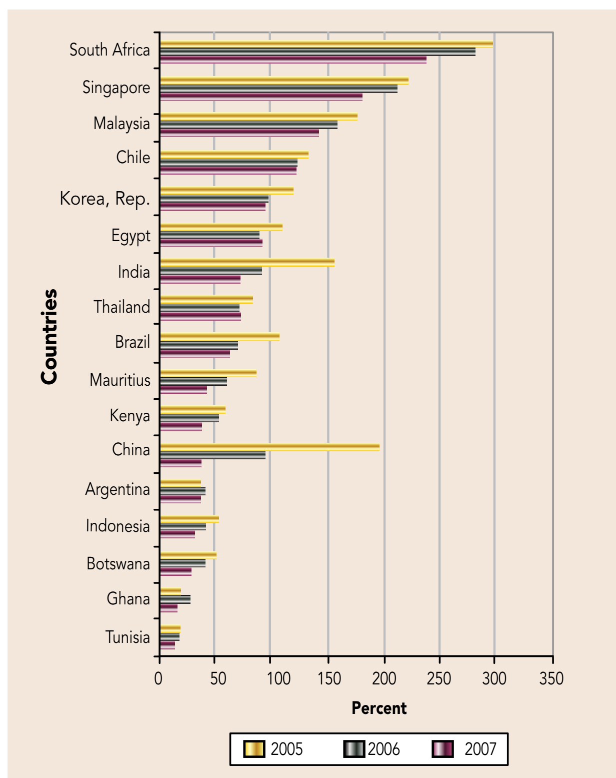
In 2009, the NSE index declined marginally by 7.8 per cent to close at 3247.44 points (Figure 7.6). Nevertheless, compared to the 35.3 per cent decline between 2007 and 2008, the trend indicates that the market is gaining momentum. The recently launched Nairobi All Share Index (NASI), tracking all the companies listed, also slightly declined by 2.4 per cent in the 2008-2009 period.

Figure 7.6: Nairobi Stock Exchange Index



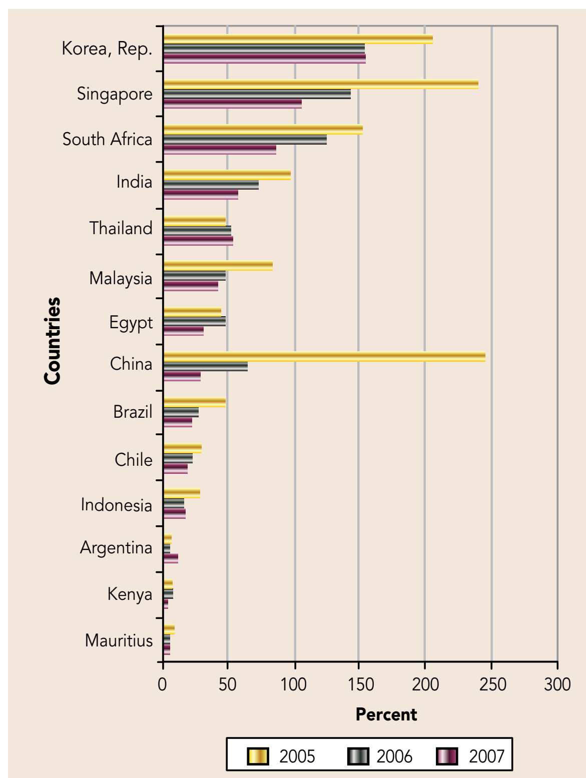
Source: Nairobi Stock Exchange

Figure 7.7: Stock market capitalization (% of GDP) of selected countries



Source: World Bank (2009)

Figure 7.8: Stock market liquidity (% of GDP) for selected countries



Source: World Bank (2009)

7.3.2 Stock market capitalization

The market capitalization, which captures the size of the market, also reduced by 2.3 per cent from Ksh 854 billion in December 2008 to Ksh 834.2 billion in December 2009. Although Kenya's market capitalization as a percentage of GDP in the 2005-2007 period is increasing, it still lags behind middle income countries which continued to report increased market capitalization (Figure 7.7).

7.3.3 Stock market liquidity

The market liquidity indicator shows a downward trend, though slightly (Figure 7.8). Kenya's market liquidity is still low compared to other countries in the region and globally. Middle income countries have achieved market liquidity of 50 per cent and above compared to Kenya's 5.4 per cent in 2007. This implies low business volume, which negates the growth of the stock market.

All the stock market performance indicators depict a declining trend. Several factors attributable to this performance include withdrawal of foreign investors as a result of the global financial crisis, loss of investors' confidence particularly after the fall of stockbrokerage firms, increase in inflation rate and unmet expectations from the Safaricom Initial Public Offer.

7.3.4 Bonds market

Compared to the equity market, the bonds market achieved a milestone. For the first time, infrastructure bonds were issued. The government issued two 12-year infrastructure bonds worth Ksh 37 billion,

each at Ksh 18.5 billion. In the corporate segment, KenGen issued a 10-year infrastructure bond worth Ksh 25 billion, while Safaricom raised Ksh 5 billion as first part of a Ksh12 billion bond. Other corporate issues include CFC Stanbic Bank's Ksh 2.5 billion bond, and Shelter Afrique's Ksh 1 billion bond. The primary corporate bond market is, however, still dominated by a few leading institutions, with the development of the secondary bonds market remaining depressed. This has led to low liquidity, which affects the deepening of the market.

Another milestone includes automation of bonds trading at the Nairobi Stock Exchange (NSE). This move is intended towards enhancing liquidity and trading efficiency in the debt market. As a way of widening the investor base and promoting savings among Kenyans, the Central Bank of Kenya reduced the minimum entry into treasury bills from Ksh 1 million to Ksh 100, 000. The government sustained the implementation of its policy of issuing longer dated paper, with a treasury bond of 20 years maturity being issued for the first time.

As at 2009, a total of 11 treasury bonds were issued, raising Ksh 79.8 billion. The Treasury was the biggest player in the bonds market, of which, private corporations account for only about 3 per cent. About 70 treasury bonds and 16 corporate ones are listed at the NSE.

Other Financial Institutions

The Savings and Credit Cooperative Organizations (SACCOs) continued to experience growth. As at 2008, the SACCOs had an estimated 6.19 million members with outstanding loan portfolio and shares and deposit base amounting to about Ksh 105 billion and Ksh 177 billion, respectively. Formation of the SACCO Regulatory Authority Board saw the beginning of the implementation of the SACCO Act 2008. This is expected to infuse professionalism into the management of SACCOs, boosting them as vehicles for savings mobilization.

Advancement towards offering comprehensive financial services in the microfinance sector was achieved. In the execution of the Microfinance Act 2008, Faulu Kenya was the first to be issued with a licence, allowing it to be a deposit-taking microfinance institution. Further, CBK has already approved 32 business names for applicants seeking to operate as deposit-taking microfinance institutions. However, the regulations to govern the conduct of the non-deposit taking microfinance business are yet to be put in place. To complement the efforts of Micro Finance Institutions (MFIs) in serving low-income households and small and micro-enterprises, there are a number of commercial banks that have diversified to the microfinance business. So far, Equity, Family, K-REP and Cooperative banks are undertaking the microfinance business.

The Kenya Post Office Savings Bank (KPOSB) continued to offer financial services and products, mainly savings mobilization and money transfer services. With total deposits of approximately Ksh 10.1 billion, KPOSB has about 1.2 million active deposit accounts/clients. It operates a nationwide network comprising 87 branches. Although the institution can now transact in foreign exchange business, it is still legally constrained from lending to its clients.

As at 2009, the insurance industry had 44 companies. While 20 companies undertook general insurance

CBK has already approved 32 business names for applicants seeking to operate as deposit-taking microfinance institutions. However, the regulations to govern the conduct of the non-deposit taking microfinance business are yet to be put in place.

business only, 9 wrote life insurance business only with 15 undertaking composite business (both life and general). The industry's profit increased from Ksh 3.9 billion in 2008 to Ksh 4.3 billion in 2009. Gross premium also grew by 17 per cent from Ksh 55.2 billion in 2008 to Ksh 64.5 billion in 2009, with general insurance accounting for Ksh 43.1 billion. Total assets for the industry increased to Ksh 165 billion from Ksh 146 billion in 2008. However, net incurred claims went up from Ksh 25 billion in 2008 to Ksh 30.5 billion in 2009.

Notable developments in the insurance sector include the introduction of micro-insurance products, which are important in addressing the insurance needs of the poor. Also, bancassurance has become a significant concept within the insurance sector, where banks are now angling to be a major distribution channel for insurers. All these efforts will enhance the penetration of insurance services in the economy, which marginally decreased to 2.63 per cent in 2008 from 2.65 per cent in 2007. However, in 2009, the penetration rate increased marginally to 2.84 per cent from 2.63 per cent in 2008. Life insurance recorded a penetration ratio of 0.94 per cent (0.87% in 2008) while that of non-life insurance was 1.90 per cent (1.76% in 2008). The low penetration rate is mainly attributed to lack of product innovation in the sector.

The pension scheme sector saw the registration of the Blue MSMEs Jua Kali Individual Retirement Benefits Scheme. Members of the scheme will make daily contributions of Ksh 20. The scheme is expected to boost saving for retirement among self-employed people.

The investment portfolio of the retirement benefit schemes increased marginally by 3.3 per cent to stand at Ksh 272.3 billion in 2008 compared to Ksh 263.6 billion in 2007. Investment in government securities and in quoted equity dominated the portfolio, each with a share of about 30 per cent. Nevertheless, investment in government securities is expected to increase further, following the amendment of the Retirement Benefits Act to provide for funded schemes for civil servants to invest only in government securities and infrastructure bonds issued by public institutions. The amendments, however, disregard the need to ensure that members' funds are protected against inflation through investment portfolios designed to secure real rates of return in excess of inflation.

Policy Options

For the financial sector to adequately support the mobilization of investment funds needed to realize Vision 2030 goals, the following policy recommendations are proposed:

Expand access to financial services

The proportion of adult Kenyans excluded from accessing financial services and products shrank from 38.4 per cent in 2006 to 32.7 per cent in 2009. However, majority of Kenyans lack access to financial services and products. Therefore, efforts to expand access to financial services and products to all adult Kenyans as envisaged in Kenya's Vision 2030 should be strengthened. To enhance access to affordable credit to more Kenyans, it is important to extend coverage by the Credit Reference Bureaus to other financial service providers such as the MFIs and SACCOs. This will enable their clients to reap the benefits of credit information sharing. Also, the amendments of the KPOSB Act to allow it to lend to its clients need to be effected.

Reduce cost of credit

Credit to the private sector is low due to the high cost associated with it. Certain measures need to be instituted to reduce the cost of credit. This includes strengthening the judicial system, especially in the enforcement of contracts. Judicial reforms undertaken so far towards this end have borne minimal results. The judicial system is still inefficient in resolving disputes. There is need, therefore, to re-examine the reform process in order to initiate result-oriented reforms.

In order to encourage transparency and competitive pricing, the Annual Percentage Rate (APR) should be adopted. APR is an all inclusive measure of the cost of credit, which incorporates the interest rate on credit facilities plus other charges, e.g. commitment fees. Adoption of APR will facilitate comparison of credit facilities by customers and, therefore, encourage the principle of competitive conduct by banks.

To lower intermediation costs, the collateralization process (in which a borrower gives a security to a lender) needs to be reformed. This is because the process of creation, perfection and enforcement of security interests has been evidenced as slow and costly. Consequently, the cost of borrowing tends to remain high. Reforms are necessary to make the collateralization process and realization of security fast, predictable and cost-effective. The reforms must also safeguard the lender and benefit borrowers.

Although Kenya's financial sector has a wide range of products, institutions and markets, there are glaring gaps in development finance. Development finance facilitates long-term investment and economic growth. Therefore, provision of development finance offers investors an alternative source of finance. This increases competition in the credit market, thus lowering the cost of credit. It is therefore critical that development finance institutions be reformed to provide the needed long-term finance. Efforts to develop a strategy for these institutions need to be rekindled.

To enhance competitive behaviour in the financial services, especially in the banking sector, the Competition Bill 2009 should be fast-tracked. Enacting the Bill into law will protect consumers from unfair and misleading market conduct.

(Endnotes)

1 Cheques and Electronic Funds Transfers (EFT) of Ksh one million and above and domestic foreign currency cheques and EFTs whose value is equal to or exceeds US Dollars 35,000, Sterling Pounds 15,000, and Euros 30,000, will be processed through the Real Time Gross Settlement System. Cheques of Ksh one million may, however, be drawn but will be on cleared collection basis.

2 This means that a commercial bank can contract an entity approved by the Central Bank of Kenya to provide services on its behalf.

3 This is the share of the four largest banks relative to the total market.

4 Includes Kenya Post Office Savings Bank (KPOSB).

5 In 2009, Discount Securities Ltd, a licensed stockbroker, was placed under statutory management following its collapse. Commercial banks including Cooperative Bank, NIC and ABC also entered into stock broking through takeover of brokerage firms.

8 Trade

Introduction

Trade is defined as an institutional arrangement that facilitates economic agents to exchange goods and services. By way of trade, goods and services are distributed from the production point to the consumption point through a variety of intermediaries (Kinyanjui and Kamau, 2007). At both domestic and international levels, trade contributes significantly in terms of linking productive sectors and, thereby, generating output and employment (Ministry of Trade, 2009). The trade sector is divided into two broad categories, namely: domestic and external trade. Domestic trade relates to the exchange of goods and services, whether formal or informal, within the borders of a country. External trade, on the other hand, relates to exchange of goods and services between a country and the rest of the world through exporting and importing. The trade sector in Kenya comprises distribution and wholesale, retail and informal trade, international trade, trade in services and electronic trade (Ministry of Trade, 2009).

The purpose of this chapter is to analyse the scope, pattern and trends of the trade sector in Kenya with particular emphasis on policy changes that have taken place between 2008 and 2009. The chapter aims at demonstrating the contribution of the trade sector in employment creation and poverty reduction.

Significance of the Trade Sector

The trade sector plays a crucial role towards attainment of national development objectives as envisaged in Vision 2030 and in realization of the Millennium Development Goals (MDGs) –Eradication of Extreme Poverty (MDG No. 1) and Developing Global Partnership for Development through Improved Market Access (MDG No. 7). Trade accounted for 60.4 per cent of GDP in 2008. The trade sector plays a pivotal role through its linkages with other sectors of the economy such as agriculture, manufacturing and the services industry, where it creates markets through which goods and services get to the consumer.

Kenya's trade strategy aims at ensuring that Kenyan business enterprises get the necessary support to be able to sell in the domestic market and penetrate into world markets in line with the export-led growth envisaged in Vision 2030. For this goal to be achieved, the policies pursued include:

(i) Stimulating and supporting Micro, Small and Medium Enterprises (MSMEs) to participate more in international trade.

(ii) Enhancing competitiveness in both the export and domestic markets.

(iii) Encouraging value addition and diversification.

(iv) Improving market access for Kenyan business enterprises to penetrate foreign markets.

(v) Enhance branding and marketing of Kenyan products in regional and international markets.

(vi) Improving the services sector so as to enhance productivity, employment and revenue generation for better quality life.

(vii) Increasing market efficiency of wholesale and retail trade through:

- Attracting at least three new chain retailers with more than 10 stores (supermarkets) into the Kenyan market.
- Enumerating informal sector operators and providing them with permanent and serviced facilities, training, and access to credit.
- Simplifying business registration and trade licensing in order to create a more enabling environment for trading activity.
- Establishing Producer Business Groups (PBGs), which will in turn feed large wholesale hubs principally in rural areas. These hubs will be 'Tier 1' retail markets that will provide primary producers with better value than at present where markets are heavily fragmented.

Performance Indicators

The performance of the trade sector is reviewed on the basis of growth, trade balance, share contribution in GDP, market access, regional integration, and employment creation.

Performance in domestic trade

Domestic trade in Kenya is substantially liberalized and market forces largely govern the sector with the government only taking intervention measures when there are market imperfections that reduce or threaten consumer welfare or discourage competition. The role of government in the domestic trade has been mainly creation of an enabling environment for trade to thrive. Domestic trade policies are geared towards integrating domestic trade with international trade given their interdependence. However, the sector currently lacks a strong and well coordinated institutional and legal framework. Further, it involves multiple government agencies, fees, levies and taxes. Consequently, the domestic trade and markets are unable to function efficiently, culminating into surplus production in one part of the country and serious shortages in other parts. For instance, there was maize and milk surplus in Eastern and Central Provinces, respectively, while shortages were experienced in North Eastern and other provinces.

Contribution of trade to employment

In Kenya, trade is responsible for the creation of many jobs in both formal and informal sectors. Between 2008 and 2009, employment in the trade sector grew by 3.5 per cent. As shown in Table 8.1, the wholesale and retail trade generated about 20,000 formal employment opportunities in the private sector alone between 2007 and 2009. The number is even higher when we include transport

The wholesale and retail trade generated about 20,000 formal employment opportunities in the private sector alone between 2007 and 2009. The number is even higher when we include transport and financial services.

Table 8.1: Number of people employed in the trade sector ('000)

Private Sector	2006	2007	2008	2009	2008-09 % change
Wholesale and retail trade, restaurants and hotels	179.6	189.8	196.4	209.2	6.5
Transport and communication	90.9	117.8	120.5	124.7	3.5
Finance, insurance, real estate and business services	75.5	79	81.9	84.3	2.9
Total private sector	1,207.7	1,281.7	1,305.5	1,345.8	3.1
Public Sector					
Wholesale and retail trade, restaurants and hotels	6.3	6	6	6.3	5.0
Transport and communication	40.2	36.1	36.9	38.4	4.1
Finance, insurance, real estate and business services	16.8	14.3	12.6	12.9	2.4
Total public sector	649.9	628.1	638.0	653.5	2.4
Total employment	1,857.6	1,909.8	1,943.5	1,999.3	2.9

Source: Economic Survey (2010)

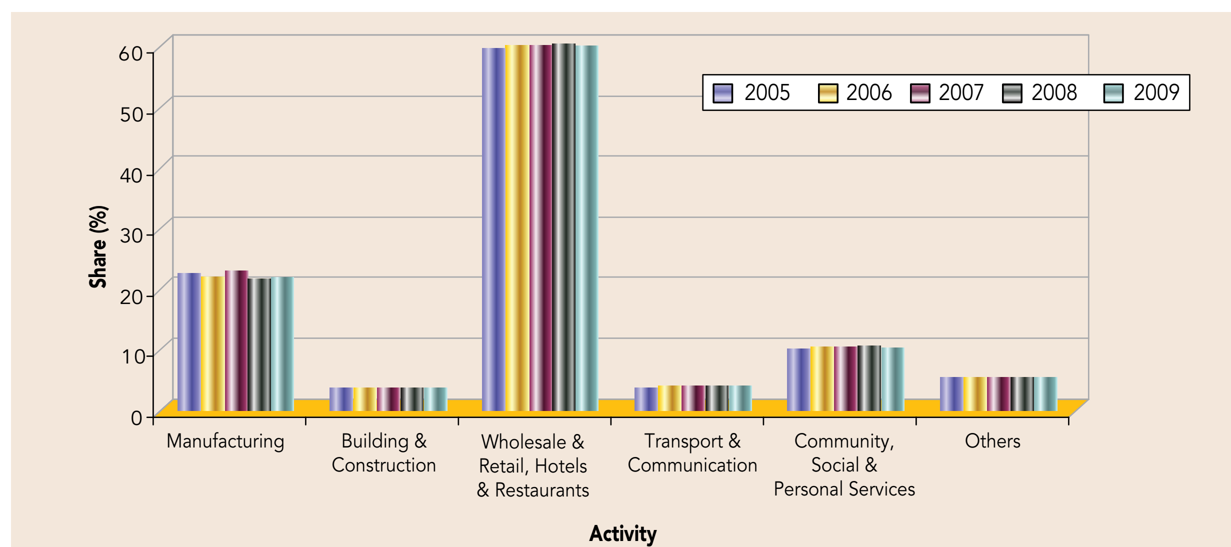
and financial services. Between 2006 and 2009, in the private sector alone, employment increased by 11.4 per cent compared to 0.6 per cent in the public sector.

The share contribution of trade in total employment increased from 22.0 per cent in 2006 to 23.8 per cent in 2009. Most of this growth was attributed to wholesale and retail-related activities, which grew at a higher rate than transport and financial services.

Employment in the informal sector

In the informal sector, wholesale and retail trade employment was 59.1 per cent in 2009, a slight change from 2008, where the share contribution was 59.4 per cent (Figure 8.1). Manufacturing is the second major contributor to the number of people engaged in the informal sector, while construction and transport and communication sectors are the least, accounting for about 3 per cent in the period 2005-2009.

Figure 8.1: Share of people engaged in the informal sector



Source: Economic Survey (2010)

While this may be attributed to lack of consistent and reliable data in the informal sector, it nonetheless shows the prominence of wholesale and retail trade. Between 2005 and 2009, wholesale and retail trade accounted for over 59 per cent of all employees in the informal sector. According to Vision 2030, most of the new jobs created between 2003 and 2007 were in the informal economy. There is, therefore, need for the government to pay more attention to the wholesale and retail trade, which generate a bulk of these opportunities.

Performance in External Trade

Growth in exports and imports

Kenya's international trade performance has not been favourable in the recent past. The 6.6 per cent real growth in trade during the 2006-2009 represented a decline from 11.2 per cent during 2005-2006 (World Bank, 2009/10). During 2006-09, the growth of imports was higher than that of exports in real terms at 2.2 and 2.0 per cent, respectively. The high growth in imports relative to exports resulted in the widening of overall trade balance. Between 2000 and 2004 and between 2006 and 2009, balance of trade deficit as a per cent of GDP worsened from -6.3 per cent to -9.81 per cent. This was mainly attributed to a decline in growth of exports from 6.4 to 2.0 between the two periods.

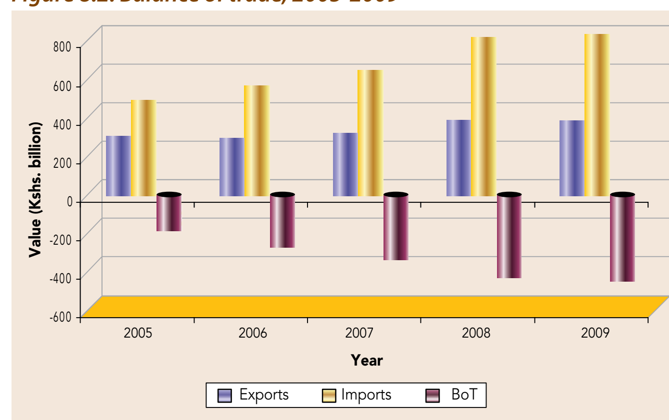
Similarly, the share of Kenya's trade in the world total trade is low, averaging 0.05 per cent in the period 2006-2009. Of this, imports account for a larger proportion compared to exports. Although the number of products exported increased marginally to 252 from 178 in the 2000-2004 period, the concentration is still high as the share of the top five exports remained high at 46.6. Trade integration indicators depict that trade as a percentage of GDP was 60.4 of which 25.3 is attributed to exports and 35.1 to imports.

During 2006-2009, trade as a share of GDP was 56 per cent which was low compared to the SSA. Services were estimated to account for more than a third (38.8%) of total exports in 2009. Tourism is one of the highest export earners in the services sector, accounting for 11.5 per cent in 2009 (of total exports). A variety of merchandise products are exported, including tea, cut flowers, vegetables, coffee and outer garments.

Trade balance

Trade balance has widened over time, increasing from a deficit of Ksh 425.7 billion in 2008 to a deficit of Ksh 443.1 billion in 2009, reflecting an increase of 4.1 per cent. The increase in imports relative to exports led to the deterioration in the export/import cover ratio from 44.8 per cent in 2008 to 43.8 per cent in 2009 (Figure 8.2). The poor performance in exports is attributed to the adverse impacts of the global financial crisis, which reduced demand in the EU and US markets. Over the same period, merchandise imports grew by 2.3 per cent from Ksh 770.7 billion to Ksh 788.1 billion, while exports grew by 0.3 per cent, i.e. from Ksh 322.7 billion to Ksh 323.6 billion. The growth of imports outweighed the growth of exports, and this trend widened the trade balance deficit, which grew by about 3.7 per cent.

Figure 8.2: Balance of trade, 2005-2009



Source: Economic Survey (2010)

Kenya's exports are mainly composed of food and beverages, industrial supplies (non-food), fuel and lubricants, machinery and other capital equipment, and consumer goods (Figure 8.3). Food and beverages, machinery and equipment and transport

Table 8.2: Performance indicators of trade in Kenya, 2006-2009

Indicator	Kenya	Sub-Saharan Africa	World
Real Growth in Trade			
Real growth in total exports (g+s, %)	2.0	0.7	-2.7
Real growth in total imports (g+s, %)	2.2	-0.00	-2.7
Real growth in total trade (g+s, %)	2.1	0.2	-2.8
Services trade share of total trade (g+s %)	26.6	25.2	25.2
Services exports share of total exports (g+s %)	41.7	24.0	29.2
Services imports share of total imports (g+s %)	15.7	27.8	23.4
Trade Integration			
Trade integration (% of GDP)	60.4	95.3	100.1
Export integration (g+s, % of GDP)	25.3	38.7	45.7
Import integration (g+s, % of GDP)	35.1	56.5	54.4
Trade Balance			
Current account balance (% of GDP)	-4.2	-9.3	-5.5
Trade balance (g+s, % of GDP)	-9.8	-17.9	-8.7
Share of World Trade			
Total trade share of world total trade (g+s, %)	0.1	0.0	0.6
Exports share of world exports (g+s, %)	0.0	0.0	0.6
Imports share of world imports (g+s, %)	0.1	0.0	0.6
Product and Market Diversification			
No. of products exported	252	186.4	217.8
No. of products imported	256	247.5	251.2
Share of top 5 export products of total goods exports (%)	46.60	74.0	57.6
Share of top 5 import products of total goods imports (%)	42.01	36.9	31.6
Trade and Tariff Restrictiveness Indices (TTRI)			
TTRI (MFN applied tariff) – All goods	8.2	11.4	7.2
OTRI (MFN applied tariff – NTMs) All goods	8.7	19.1	14.1
MFN Applied Tariff Escalation – All goods	0.5	3.5	1.7
Ease of Doing Business - Rank	95	137.9	92
Logistic Performance Index	2.6	2.4	2.8

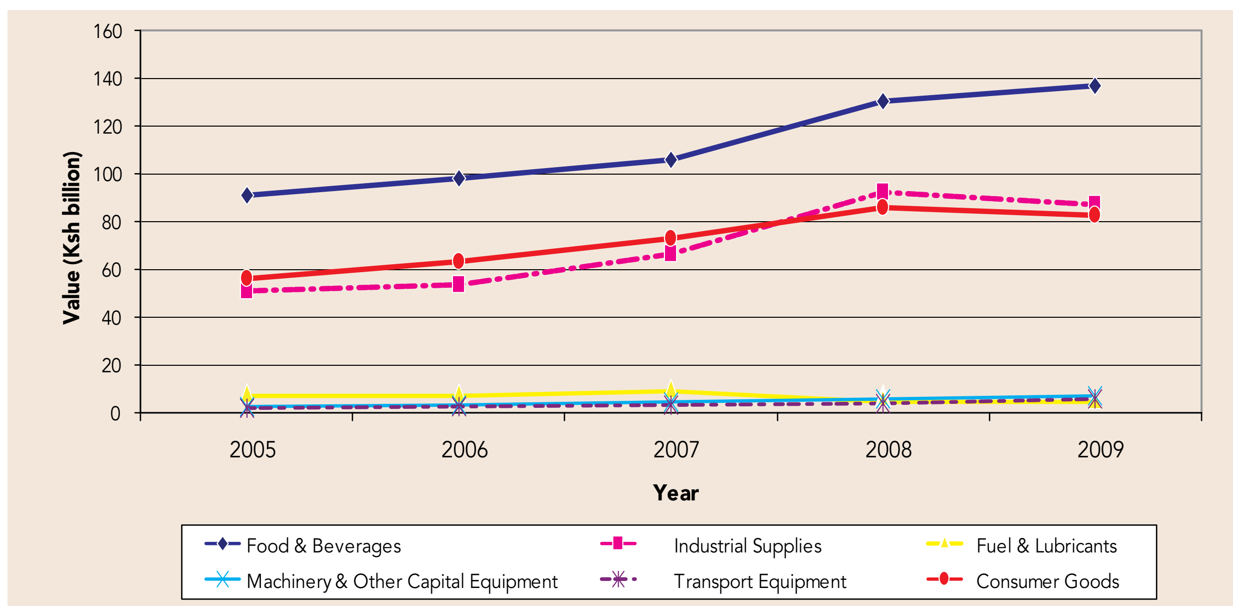
Source: World Bank, World Trade Indicators (2009/10)

equipment increased between 2008 and 2009, while industrial supplies, consumer goods and fuel and lubricants stagnated.

During 2009, tea was the leading export earner, contributing about 21.3 per cent of total export earnings, followed by horticulture 20.2 per cent, coffee 4.7 per cent, articles of apparel and clothing accessories 4.3 per cent, and tobacco 3.2 per cent. Horticulture, which for more than 4 years in a row was the leading export earning product, was overtaken by tea due to the adverse effects of the global economic recession, especially in Europe. The five leading export commodities accounted for 53.7 per cent of total exports in 2009, an indication of the continued dependence on a small export base. Of these, the first two export products accounted for over 40 per cent.

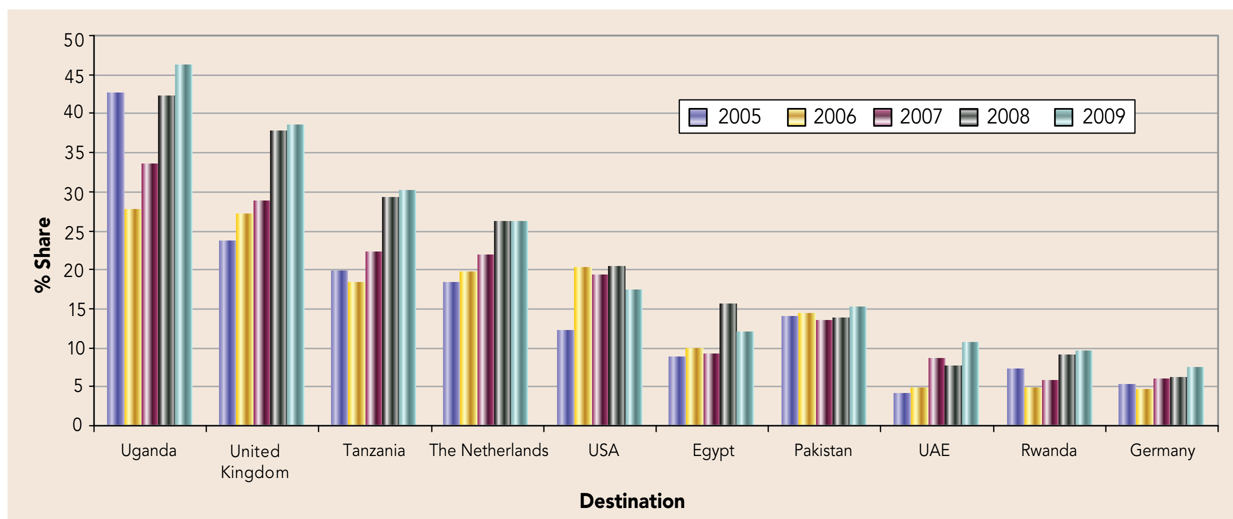
Kenya's main export markets include Uganda, UK, Tanzania, The Netherlands, USA, Egypt, and Pakistan, accounting for about 64 per cent of total exports as shown in Figure 8.4. These markets are in most cases attributed to trade preference.

Figure 8.3: Domestic exports by broad economic category, 2005-2009



Source: Economic Survey (2010)

Figure 8.4: Share of export market destinations, 2006-2008



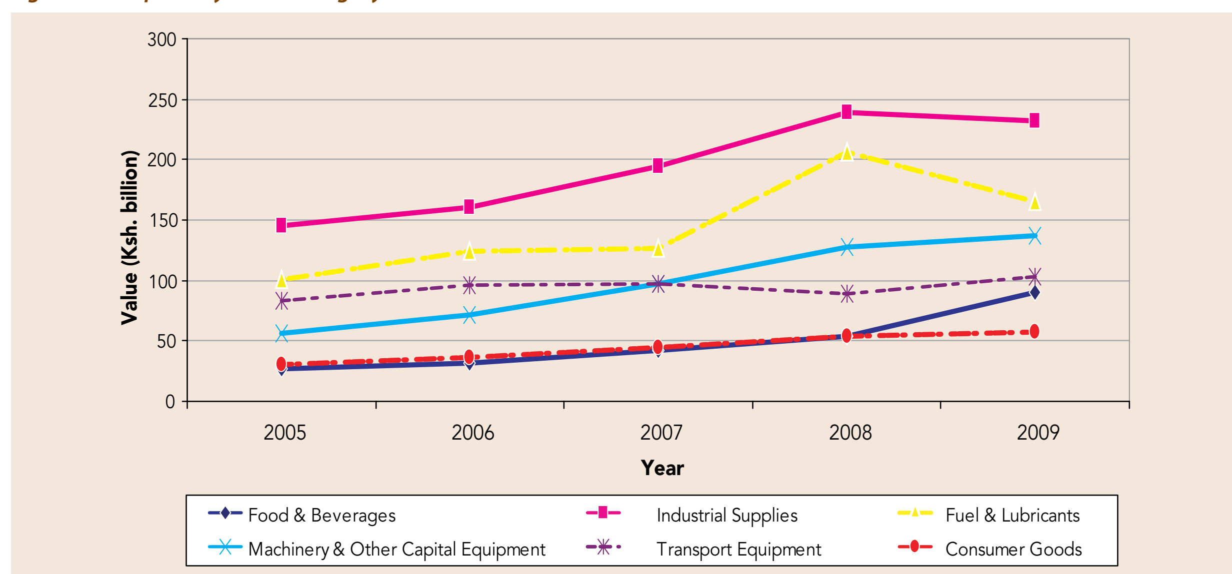
Source: Economic Survey (2010)

For example, Uganda, Tanzania and Rwanda are members of the EAC, which has since become a common market. On the other hand, the UK, The Netherlands and Germany are members of the EU where Kenya benefits from the Interim Economic Partnership Agreement. Egypt is a member of COMESA, which is a free trade area (FTA).

In terms of regional markets, the EAC was Kenya's leading destination for exports with about 26.2 per cent, followed by the European Union with 25.5 per cent, COMESA (in this case excluding EAC member countries) with 15.2 per cent and the Far East accounting for about 3.5 per cent in 2009.

Turning to imports to Kenya in 2009, the leading commodities included industrial machinery (15.3%), petroleum products (12.6%), crude oil (6.9%), road motor vehicles (6.4%), maize (4.3%) and iron and steel (4.3%). With exception to maize, the product

Figure 8.5: Imports by broad category 2006-2009



Source: Economic Survey (2010)

mix of leading import commodities did not change between 2007 and 2009. Imports in terms of broad economic categories between 2007 and 2009 are shown in Figure 8.5. The shares of exports were as follows: Industrial supplies (29.4%), fuel and lubricants (21%), machinery and other equipment (17.4%), transport equipment (13.1%), food and beverages (11.5%), and consumer goods (7.3%).

The Far East was the main import source of Kenya's products, accounting for about 37 per cent of total imports, followed by the Middle East with about 24 per cent and then Europe with 22 per cent. Since Kenya's imports from Europe are industrial supplies, machinery and other capital goods, it implies that much of the technology is from the West. Imports from the Middle East are mainly petroleum products, while from the Far East are road motor vehicles.

Trade in Services

The total trade in services has been growing at an increasing rate over the years since 2003. In addition, the services trade has been experiencing a net surplus of exports over imports, thereby playing a stabilizing role in the balance of payment as shown in Figure 8.6. However, the trade in services surplus was recently subdued following a marginal decline of total exports from US$ 2.7 billion to US$ 2.5 billion between 2007 and 2008. The decline was largely attributed to overall poor economic performance during the period due to internal and external factors already alluded to in this report.

During the year 2009, leading services sectors in Kenya's trade included transportation (42%), travel (33.7%), communications (4%), telecommunications (3.9%), and insurance services (0.3%).

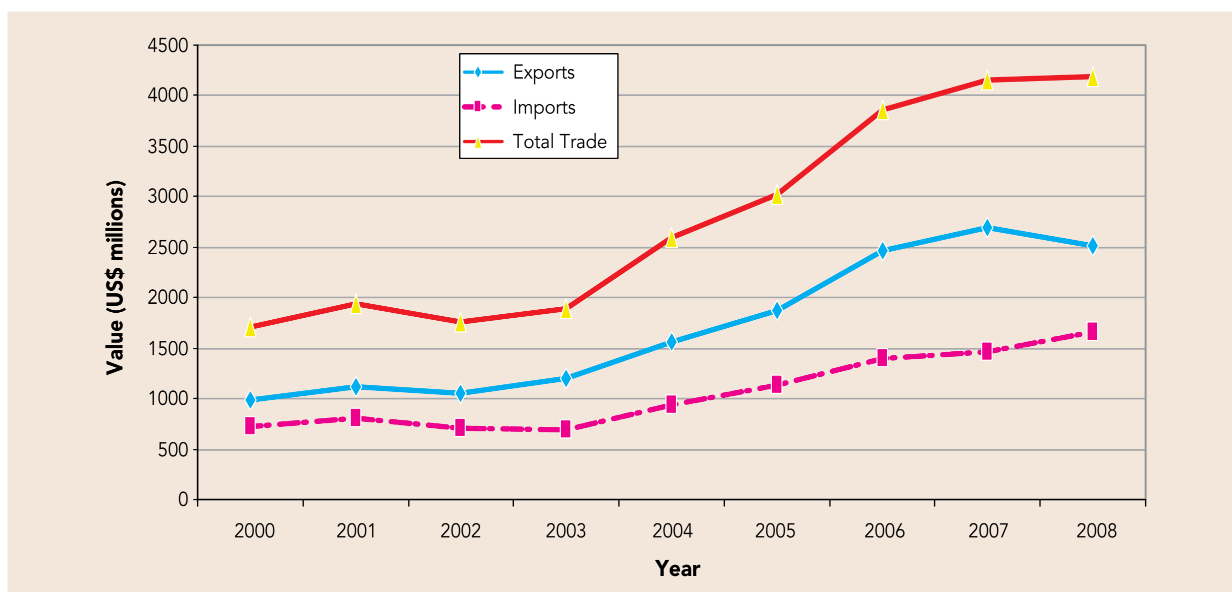
Comparative Analysis of Trade Performance

Kenya's trade performance is compared with other comparator countries, both in Africa and Asia in terms of real growth in total trade, real growth in exports, real growth in imports, trade integration (trade as a percentage of GDP), and total trade share of the world market in percentage.

Trade openness

Kenya's trade regime is more open than that of an average sub-Saharan Africa (SSA) country. According to the World Trade Indicators (2009/10),

Figure 8.6: Flow of services trade (US$ millions)



Source: United Nations Statistics Division (2010)

Table 8.3: Composition of Kenya's trade in services during 2009 (US$ millions)

Type of Service	Total Exports	Total Imports
Transportation	1,124.7	809.7
Travel	910.3	262.3
Communications	109.0	152.8
Telecommunications	107.9	152.1
Insurance	7.5	25.7
Financial	-	109.8
Total	2,698.9	1,459.5

Source: United Nations Statistics Division

Trade Tariff Restrictive Index (TTRI) ranks Kenya 95 out of 183 (Table 8.2). Kenya's progressive trade liberalization started in the mid-1980s, and since then tariffs have been gradually reduced. Kenya's MFN applied simple tariff average is 8.21 per cent, similar to the SSA regional (11.2%) and world (7.17%) averages, while the import weighted tariff average of 10.8 per cent is slightly lower than the comparator mean. The share of MFN duty free imports in total imports was 71.3 per cent, which is higher compared to the SSA regional and low income group averages.

Kenya's access to international markets is comparable to the regional average and only slightly better than for the average of low income countries. The latest market access TTRI preferences included, Kenya is ranked 103rd out of 183 countries. The weighted tariff averages that Kenya faced from the rest of the world (its exports) was 2.6 per cent in 2006 lower than the SSA regional (3.0) and low income (3.7) per cent averages. The share of MFN duty free exports in total exports was a modest 23 per cent, much lower than the regional and low income group comparators.

Kenya's competitiveness in doing business in terms of 'Applied Tariffs', 'Ease of Doing Business' and Logistics Process Index (LPI) compared within the average of other sub-Saharan countries has been deteriorating. For instance, Kenya's applied tariffs have remained below the average of other sub-Saharan countries, which declined from 9.58 per cent to 8.21 per cent between 2000 and 2008 compared to that of sub-Saharan countries whose average was 11.42 per cent in the period 2006-2008. However, applied tariffs for all goods, including preferences are, on average, at the same level with that of other sub-Saharan countries. In terms of 'Ease of Doing

Table 8.4: Market access indicators, 2006-2009

Indicator	Kenya	Sub-Saharan Africa	World
Total Trade Tariff Restrictive Index (TTRI)	8.21	11.42	7.17
MA – TTRI (Applied Tariff incl. prefs) – All goods	3.89	3.89	3.41
Ease of Doing Business – Rank (out of 183) -2010	95	137.9	92
Logistic Processing Index (LPI - Overall)	2.59	2.43	2.84

Source: World Bank (2009; 2010)

Business', out of 183 countries assessed, Kenya was ranked 78 in the period 2007, but deteriorated to position 81 in 2008, 84 in 2009 and 95 in 2010 (World Bank, 2009/10).

Comparison of external trade performance

Comparing with other African countries, Kenya performed better in terms of real growth in total trade, with a growth of 2.10 per cent, the second highest after Uganda (Table 8.5). Real growth in exports increased for Kenya (2.0), Ghana (3.2) and Uganda (5.2), while all other countries registered negative growth for the period 2006-2009. However, imports continued to show a positive trend, widening the balance of payments. Kenya's share contribution to world exports is quite insignificant, contributing only 0.05 per cent compared to countries such as Singapore, India, Korea Republic, and Malaysia contributing to about 2.11, 1.75, 2.67, and 1.07 per cent, respectively. South Africa and Egypt have the highest share of world trade among African countries, with 0.54 and 0.40 per cent, respectively.

Comparison of product diversification

Table 8.6 provides the share of top five exports, imports and the number of export and import products for selected countries. Contrary to the belief that the more advanced countries exports are well-diversified than for the less-developed countries, Kenya's top five exports account for about 46.6 per cent of total exports, while those of Singapore, Egypt and Malaysia contribute to about 57.6, 47.1 and 42.3 per cent, respectively. Korea's top five exports account for about 42.0 per cent close to that of Kenya. In Mauritius and Ghana, top five export products account for 62.1 and 75.2 per cent, respectively,

Table 8.5: Kenya's comparative trade performance, 2006-2009

Country	Real growth in total trade (g+s, %)	Real growth in exports (g+s, %)	Real growth in imports (g+s, %)	Trade integration (trade as a % of GDP)	Total trade share of world market (%)
Egypt	- 4.60	-5.50	-4.00	67.28	0.40
Brazil	-6.80	-4.10	-9.10	28.83	0.18
Tanzania	- 2.60	- 2.60	-2.70	57.60	0.03
Singapore	-7.30	-8.80	-5.70	376.90	2.11
Uganda	2.90	5.20	2.20	60.29	0.02
India	- 0.70	-3.00	1.00	48.81	1.75
Mauritius	-3.10	-2.90	-3.20	128.00	0.03
Malaysia	- 10.40	-12.80	-7.70	188.70	1.07
Kenya	**2.10**	**2.00**	**2.20**	**60.37**	**0.05**
South Africa	-8.10	- 6.50	-9.40	72.30	0.54
Ghana	0.30	3.20	-1.30	141.70	0.05
Korea, Rep	-9.80	-11.40	-7.80	91.02	2.67

Source: World Bank (2009; 2010)

an indication of high export concentration. The number of products being exported by these comparator countries is also closely related to those of Kenya. On average, these countries export 243 products.[2] Kenya's export products are 252 while those of Korea Republic, Malaysia and Singapore are 258, 255, and 258, resulting in a margin of 6, 3 and 6 products, respectively. In this category, Kenya exports more products than Mauritius, Ghana, Uganda and Tanzania. Kenya's exports are more in food processing, which are vulnerable to world price instability, unlike countries such as Malaysia and Singapore whose main exports are in manufactured products. Kenya needs to put great emphasis towards promoting the manufacturing sector.

It is, however, worth noting that despite the relatively better level of the export concentration index, Kenya's top exports are primary agricultural products and are highly vulnerable in the international markets.

On the import side, Kenya's top five imports account for 42 per cent of total imports, which is much lower than that of Singapore and India at 51 and 45 per cent, respectively. In comparison with other countries such as Egypt, Brazil and Korea Republic at 18, 28 and 34 per cent, respectively, Kenya has a high import concentration index. In the EAC region, Kenya compares well with Tanzania (45%) and Uganda (36%). Given that Kenya's imports are mainly industrial and petroleum products, this concentration puts it in a more precarious position compared to more developed countries such as India, Korea Republic and Singapore. The number of products imported is 256 in Kenya, Brazil (258), Singapore (259), and Korea Republic (260). The mean number of products imported by these selected countries is 256 products. In the region, Kenya, Tanzania and Uganda imported the same number of products between 2006 and 2009.

Economic Integration and Regional Trade Agreements

Kenya has been moving towards more liberal outward-oriented regimes in pursuit of increased market access to regional and global markets and greater integration into the world economy. This is evidenced by the trade policy reforms undertaken since independence, which range from price-

Table 8.6: Comparative analysis of Kenya's international trade performance

Country Year	Share of Top 5 Exports 2006-2009	Share of Top 5 Imports 2006-2009	No. of Products Exported 2006-2009	No. of Products Imported 2006-2009
Kenya	**46.60**	**42.01**	**252**	**256**
Tanzania	52.34	44.56	242	256
Uganda	53.38	35.53	243	256
Mauritius	62.08	31.42	232	248
South Africa	38.71	34.63	259	260
Ghana	75.19	29.13	228	260
Egypt	47.09	17.72	252	255
Brazil	27.68	27.71	258	258
Malaysia	42.27	39.19	255	264
Singapore	57.56	51.24	258	259
Korea, Rep.	41.72	34.92	258	260
India	34.61	45.10	258	263

Source: World Bank (2009; 2010)

oriented measures (i.e. tariffs, export taxes or subsidies, retention schemes, duty exemptions and import deposits) to quantity-based trade policy instruments such as import quotas, import bans, import licensing and export quotas or price measures related to export targets (Onjala, 2002). Kenya has also enhanced efforts in pursuing and strengthening economic integration with various trading partners and trading blocs through preferential trading arrangements.

At the multilateral level, Kenya is a founder member of the World Trade Organization (WTO) and signatory to the African Caribbean Pacific and European Union (ACP-EU) Cotonou Partnership Agreement. It is also a beneficiary of other preferential trade arrangements such as the US-African Growth and Opportunity Act (AGOA) and the Generalized System of Preferences (GSP). The GSP is a programme designed to promote economic growth in developing countries by providing duty-free entry of exports from beneficiary countries. The scheme, which was negotiated under the auspices of the UNCTAD, grants reduced or zero-rated tariff rates over MFN rates to beneficiary countries. The objectives are to increase the export earnings of preference-receiving countries, promote their industrialization and accelerate their rate of economic growth. Currently, there are 13 national GSP schemes notified to the UNCTAD Secretariat. Kenya is a beneficiary of the following 11 GSP schemes: Bulgaria, Canada, Estonia, European Union, Japan, New Zealand, Norway, Russia, Switzerland, Turkey, and the USA.

At the regional level, Kenya is a member of the East African Community (EAC), the Common Market for Eastern and Southern Africa (COMESA), the Intergovernmental Authority on Development (IGAD),[3] and the Cross Border Initiative (CBI). The broad mandate of IGAD includes conflict management and resolution, humanitarian affairs, infrastructure development and food security, and the environment. IGAD member states have committed to implement COMESA trade co-operation measures.

Kenya has also signed a number of bilateral trade agreements with several trading partners in pursuit of market access for her products. Some of the countries with which there are trade agreements include: Algeria, Argentina, Bangladesh, Belarus, Canada, China, Comoros, Congo D.R., Cyprus, Djibouti, Eritrea, India, Iraq, Lesotho, Liberia, Malaysia, Mauritius, Nigeria, Pakistan, Russia, Rwanda, Saudi Arabia, Somali, South Korea, Sudan, Swaziland, Tanzania, Thailand, Turkey, Ukraine, Zambia, and Zimbabwe. Some of the agreements are currently being reviewed in light of regional and multilateral trade commitments.

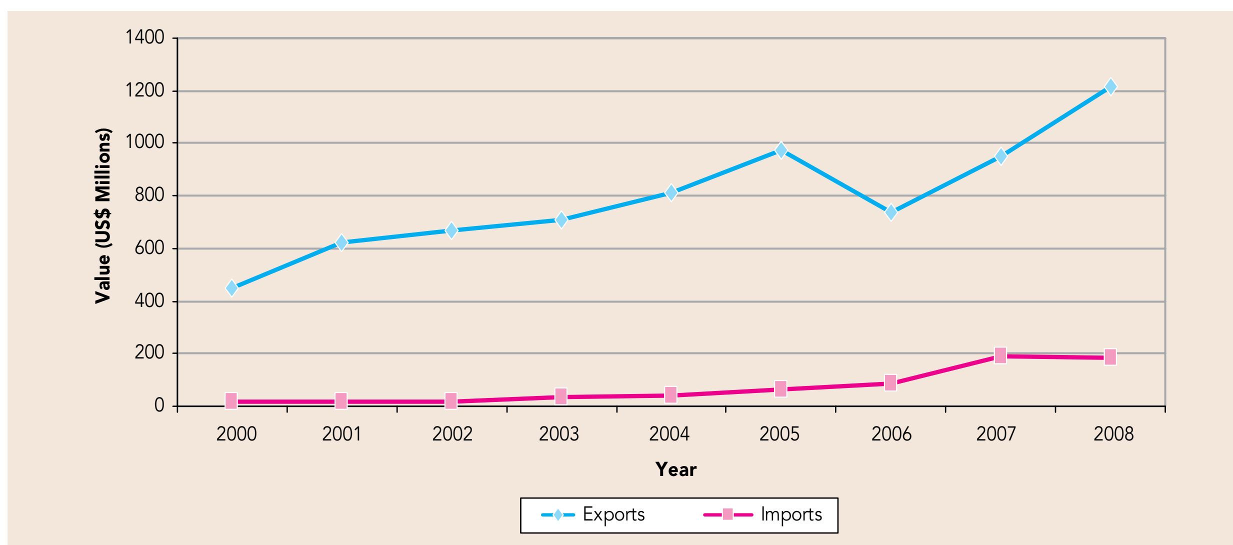
Status of the East African Community

The protocol establishing the East African Community–Custom Union (EAC-CU) was signed in December 2004 and the implementation of the CU commenced on 1 January 2005. The establishment of the CU is progressive in nature over a transitional period of five years. A fully-fledged CU was implemented in January 2010 when Uganda and Tanzania removed all tariffs on goods from Kenya. So far, there is growing evidence that implementation of the customs union has generated positive effects on trade in East Africa. For instance, Kenya's exports to the EAC increased from about US$ 650 million in 2002 to US$ 810 million in 2005 and US$ 1,213 million in 2008 (EAC, 2009).

As Figure 8.7 and Table 8.7 show, the growth rate of exports to the EAC was higher after the establishment of the customs union in 2005. Imports from EAC partners have been relatively low with modest increments during the period 2005-2008. Overall, Kenya had a favourable trade balance within the EAC, and this has been increasing gradually over the years.

Table 8.7 shows that Kenya's trade within the EAC has been increasing over the years. In 2008, Kenya's exports to the EAC partner states were 22 per cent of total exports while imports from these countries stood at a mere 1 per cent. In the EAC region, Uganda remained the largest destination

Figure 8.7: Kenya's trade with EAC partner states, 2000 -2008



Source: EAC Secretariat (2009)

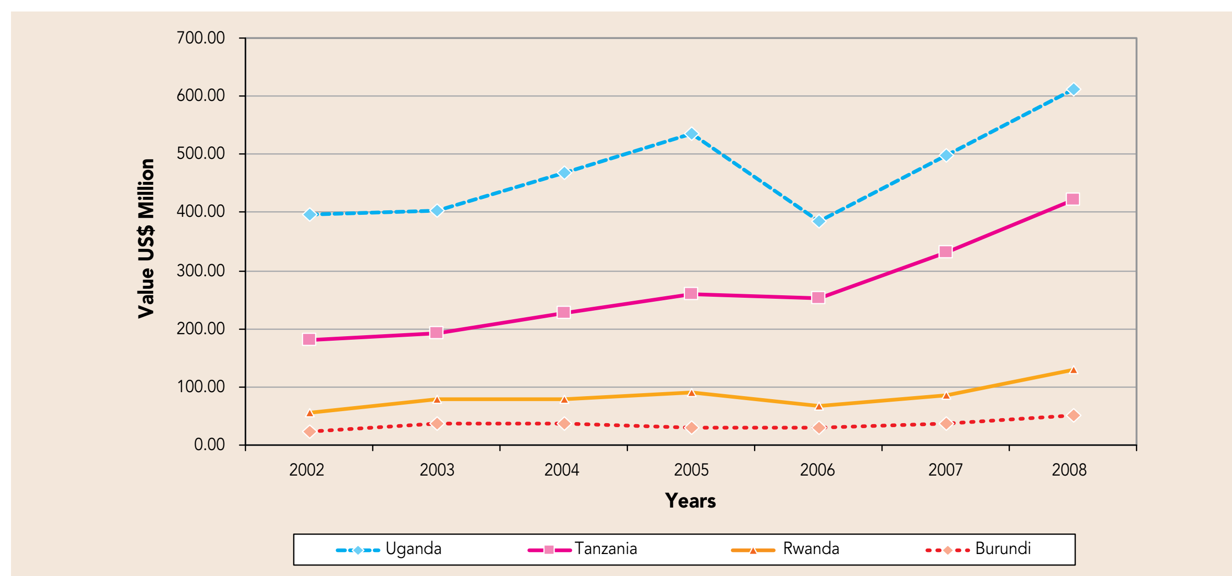
Table 8.7: Kenya's intra-EAC trade (US$ millions)

		Before the Customs Union				After the Customs Union		
		2002	2003	2004	2005	2006	2007	2008
Exports	Uganda	397.21	403.87	468.08	534.82	385.70	498.50	611.20
	Tanzania	180.07	192.11	226.35	258.62	253.60	331.50	422.40
	Rwanda	54.77	79.17	78.18	89.34	66.10	86.20	129.40
	Burundi	22.83	36.24	37.54	30.95	30.30	36.00	50.30
	Total, EAC	654.88	711.39	810.15	913.73	735.70	952.20	1213.30
	Total, ROW	2,143.97	2403.73	2702.77	3544.70	3617.15	3534.85	4933.45
Imports	Uganda	8.44	13.66	12.77	14.59	13.90	88.80	75.50
	Tanzania	10.19	18.01	25.39	29.00	62.60	99.20	105.00
	Rwanda	0.07	0.06	0.21	0.24	2.90	1.30	0.40
	Burundi	0.01	0.03	0.04	0.41	4.70	2.30	1.10
	Total, EAC	18.71	31.76	38.40	44.24	84.10	191.60	182.00
	Total, ROW	3,770.23	3,709.68	4,591.20	6,826.60	7,515.25	7,787.80	11,021.90
	BoT, EAC	636.17	679.63	771.75	869.49	651.60	760.60	1031.30
	BoT, ROW	-1626.26	-1305.95	-1888.43	-3281.90	-3898.10	-4252.95	-6088.45

Source: EAC Secretariat, 2009 (ROW-Rest of the World; EAC-East African Communitty)

of Kenyan export commodities, accounting for 60 per cent total exports to the EAC region, while Tanzania was the largest exporter to Kenya within the EAC region, accounting for 65 per cent total EAC imports. Major exports to Uganda included mineral fuels, mineral oils and related products (salt, sulphur, earths and stone and plastering materials), paper and paperboard, plastics and articles thereof, iron and steel, beverages, spirits and vinegar, and pharmaceutical products. On the other hand, exports to Tanzania composed largely of wood and articles of wood, wood charcoal, paper and

Figure 8.8: Kenya's exports to EAC, 2002-2008



Source: EAC Secretariat (2009)

paperboard, articles of paper pulp, cotton, copper and articles thereof, textile articles, worn clothing and worn textile articles.

Following successful negotiations, the East African Community partner states have finally established a Common Market. The Common Market is the second pillar of the EAC integration framework, which was scheduled as follows:

(i) Stage 1: Customs Union [2004]

(ii) Stage 2: Common Market [2009]

(iii) Stage 3: Monetary Union [2012]

(iv) Stage 4: Political Federation [2015]

The Customs Union entered into force on 1 January 2005, under which a common external tariff (CET) on all external goods coming into the region was established. In addition, internal tariffs for goods from Kenya to other EAC partner states were progressively reduced until 1 January 2010, when the customs union became fully operational. The EAC common market came into effect on 1 July 2010, and its overall objective is to build on the customs union and to widen and deepen cooperation among partner states in the economic and social fields for the benefit of the partner states. The common market seeks to ensure free movement of labour, services, goods and capital across borders.

Besides, negotiations for the monetary union have already begun. The prerequisites for a monetary union include a sufficient degree of convergence of the EAC economies to compensate for the inescapable loss of national discretion in monetary and exchange rate policy. It also requires sufficient economic and financial integration to enable partner states enjoy the benefits of lower transaction costs and exchange rate risks.

Common Market for Eastern and Southern Africa (COMESA)

COMESA was established in 1994, replacing the Preferential Trade Area for Eastern and Southern Africa States (PTA), which had been in existence since 1981. With a membership of 19 countries,[4] a combined population of about 430 million people and a GDP of US$ 472 billion in 2009, COMESA is the largest trading bloc in Africa. The COMESA Free Trade Area (FTA) launched in December 2000 has 14 members namely: Burundi, Comoros, Djibouti, Egypt, Kenya, Madagascar, Malawi, Mauritius, Libya, Rwanda, Seychelles, Sudan, Zambia and

Zimbabwe. The Non-FTA member states include DR Congo (Nil), Eritrea (80%), Uganda (80%), Ethiopia (10%) and Swaziland (under derogation).

The COMESA Customs Union was launched by the Heads of State and Government on 7th June 2009, and a transitional period of three years was provided for during which time the member states would align their national tariffs with the COMESA Common External Tariff (CET). The CET is based on categorization of goods into raw materials, capital goods, intermediate goods and finished goods. The CET structure is meant to promote value addition in the COMESA region.

Kenya is a founder member of COMESA and the FTA. Through a steadfast implementation of its integration programmes, COMESA has since become Kenya's leading export destination, accounting for 32.3 per cent total exports compared to 27.5 per cent to the EU, Far East and Australia (12.2%) and Middle East (4.6%) during 2008. Kenya's exports to COMESA countries grew by 30 per cent from Ksh 86,221 million in 2007 to Ksh 111,362 million in 2008 and accounted for 32.3 per cent of exports. Most Kenyan exports to COMESA comprise of manufactured as opposed to primary products, thus enhancing diversification of Kenya's manufacturing base. COMESA member states have agreed on a four-band tariff regime (Customs Union) namely: 0 per cent for raw materials, 0 per cent for capital goods, 10 per cent for intermediate products and 25 per cent for finished products.

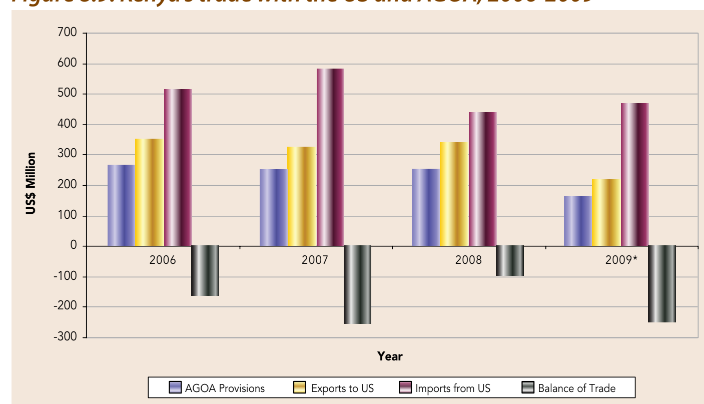
Besides, in order to create a conducive environment for free trade and investments, COMESA promotes, as a priority, programmes in trade liberalization, trade facilitation, liberalization of financial and monetary systems, investment promotion and private sector development and free movement of people. In this regard, progress has been achieved in a number of areas including air transport, development of transport corridors, energy, telecommunication and trade facilitation.

Under this agreement, Kenya invoked quota and tariff quota import safeguard provisions on *sugar* and *wheat flour,* respectively, from the other FTA member states. While the wheat flour safeguards expired in 2008, the safeguards on sugar are set to expire in 2012. The purpose has been to meet the existing production deficits, cushion farmers from competition and also allow for restructuring of the sub-sectors. Although the country is yet to attain self-sufficiency in production of these commodities, the measures provide an opportunity for the government to restructure the sub-sectors, enhance productivity and competitiveness and drive down consumer prices for these commodities in the long run.

African Growth and Opportunity Act (AGOA)

Kenya was one of the first African countries to qualify for AGOA signed into law on 18 May 2000 as Title 1 of "The US Trade and Development Act of 2000", whose objective was to facilitate export-led growth in sub-Saharan Africa. Under AGOA, Kenya enjoys duty- and quota-free access to the US market on a variety of products. However, from its inception, Kenya's trade with the US under AGOA has been spearheaded by textiles and clothing. AGOA rules allow Kenya and other low income countries to import fabric for clothing production and still qualify for duty-free import into the US market. As indicated in Figure 8.9, growth in trade between Kenya and the US has grown steadily between 2006

Figure 8.9: Kenya's trade with the US and AGOA, 2006-2009



Source: Tralac, www.agoa.com (2010)

and 2008, of which AGOA accounts for over 30 per cent and over 70 per cent, respectively, of Kenyan exports to the US. As expected, trade between Kenya and the US has remained favourable to the latter and the deficit has continued to rise.

The US market is a prime destination for textile and clothing products originating from the EPZs, which during the review period recorded a downward trend. This was attributed to the adverse effects of the global financial crisis in the US and also an unfavourable business environment characterized by high cost of production and stiff competition from Asian countries. The major challenge facing this market is that the derogation of the third-country fabric rule of origin will come to an end in September 2012, which may severely impede Kenya's capability to export into the US market.

African Caribbean Pacific-European Union (ACP-EU) Economic Partnership Agreement

The Cotonou Partnership Agreement, which was signed on 23 June 2000, aims at reduction and eventual elimination of poverty while contributing to sustainable development and to the gradual integration of ACP countries into the global economy. The overarching objectives of the EPA are to alleviate poverty, to promote regional integration and economic cooperation and to foster the gradual integration of EAC partner states into the world economy. The latter is to be achieved by improving the countries' trade capacity and creating an investment-conducive environment. So far, negotiations have been slowed down by failure of the two parties to agree on outstanding issues, key among them being treatment of the development component of EPAs. The EPA poses four broad multiple effects with development implications, namely: loss of revenue, implementation of new obligations, adjustment costs, and export effects.

Kenya, along with other EAC partner states, initialled the framework EPA on 27 November 2007. This was pursuant of the commitment under the road map agreed between the ACP and the EU on establishment of the Economic Partnership Agreement (EPA) by 31 December 2007. The framework agreement is to be replaced by a comprehensive EPA once negotiations of all pending issues, i.e. trade in goods, fisheries and development clauses are concluded.

There is much dispute over the adequacy of the "development component" of the EPA. Critics argue that although the EU donors have made commitments that appear to be adequate, there is no guarantee that they will be applied in an appropriate and timely way, and there is complete uncertainty over the funds for EPA support that will be committed by the European Commission and EU member states beyond 2013. Thus, while the EAC insists on the need to append a development matrix to the Framework Agreement on Economic Partnership Agreement (FEPA) and the full EPA prior to signature, the EU maintains that the EACs development needs are addressed under the European Development Fund (EDF).

In order to effectively support the EPA over its full 25-year implementation period, there is need to understand the EACs immediate priorities as well as the medium and long term challenges that require effective development support. Kenya's participation in the ongoing EPA negotiations stems from the importance of the European Union market to Kenyan exports, following the non-reciprocal trade arrangements. The EU accounts for about 30 per cent of Kenya's total exports (Government of Kenya, 2007). EPAs are envisaged to generate severe challenges to ACP; for instance, how to manage the expected losses of fiscal revenue, coping with increased competition under the principle of reciprocity and dealing with market access constraints for agricultural and non-agricultural products.

World Trade Organization (WTO)

Kenya was among the founding members of the World Trade Organization (WTO) when the

Marrakech Agreement was signed in Morocco on 15 April 1994. The notification process was completed by 31 December 1994, when accession to the WTO was completed and the country became a member of the WTO on 1 January 1995. As a member, Kenya is signatory to all WTO agreements, including the General Agreement on Tariffs and Trade (GATT), the Agreement on Agriculture (AOA), the General Agreement on Trade in Services (GATS), the Agreement on Textiles and Clothing (ATC) and the Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS).

On acceding to the Marrakech Agreement, Kenya established the Permanent Inter-Ministerial Committee (PIMC) in May 1995 to advise the government on all matters pertaining to the WTO. However, being an inter-ministerial committee, it excluded some key stakeholders, particularly those from the private sector and civil society. In recognition of the important role these actors could play in trade, in 1997 the government restructured the PIMC by including the private sector and civil society. Subsequently, the PIMC was re-branded as the National Committee on WTO (NCWTO). Thus, the NCWTO is the body through which the government consults with the private sector and civil society on WTO matters, and it is also the main trade-coordinating body (Odhiambo, *et al.*, 2005). There are currently around ten sub-committees dealing with diverse WTO issues within the NCWTO. These include: the Agriculture sub-committee, Services sub-committee, Market Access sub-committee, Trade and Environment sub-committee, Trade Facilitation sub-committee, Trade and Competition sub-committee, Trade and Investment sub-committee, Transparency and Government Procurement sub-committee, E-Commerce sub-Committee, and Trade-Related Intellectual Property Rights sub-committee.

Kenya's commitments to WTO principles are integral to its economic policies. In addition to its participation in the multilateral trading system, Kenya has also pursued preferential trade agreements as a means of increasing trade flow. Kenya has actively participated in the ongoing Doha Round of the WTO, which commenced in November 2001. The main objective of the Doha Round is to lower trade barriers around the world, which allows countries to increase trade globally. The Doha Round of the WTO, as of 2008, had hit a rough patch as talks had stalled over a divide on major issues, such as agriculture, industrial tariffs and non-tariff barriers, services, and trade remedies.

The Doha Round was declared a Development Round out of the concern that the multilateral trading system should benefit the developing countries that constitute over three quarters of WTO members. As a result, the Doha Declaration pledged to enable developing countries to 'secure a share in the growth of world trade commensurate with the needs of their economic development' by improving market access in the North and phasing out subsidies in developed countries.

Although the Doha Round is on-going, a recent study on Kenya based on the proposals contained in the July 2008 framework suggests that Kenya is likely to benefit in agricultural products and processed foods but loose in manufacturing and mining (Eduardo, et al., 2009).[5] The results indicate positive macro impacts, i.e. GDP to grow by 0.18 per cent, investment by 1.4 per cent and consumption by 2.3 per cent compared to a no-Doha scenario. In addition, the Doha-induced liberalisation has the effect of increasing trade i.e. by 4.0 per cent and 3.0 per cent for exports and imports, respectively. At sectoral levels, the study finds that Kenya will see gains in agricultural products and processed foods but losses in manufacturing as indicated in Table 8.8.

Table 8.8: Sectoral impacts of the Doha scenario

Sector	Demand	Exports	Imports	Production
Agriculture	-0.10	3.00	-2.10	0.70
Processed food	-0.70	13.40	23.90	2.70
Non-food industries	-0.80	-4.10	1.30	-2.10
Services	0.40	-4.10	4.00	0.20
Total	2.50	0.20	0.14	0.56

Source: Eduardo *et al.* (2009)

In addition, the Doha Round would produce an overall positive impact on human development by increasing the demand for low-skilled workers (Kenya's most abundant resource) in rural and urban areas, reducing the incidence of poverty and improving income distribution in rural areas (Table 8.9). However, on the downward side, income distribution would worsen in urban settings and the rural/urban divide will also deepen.

Table 8.9: Impact of the Doha scenario on labour

Type of Labour	Employment Change	Wage per Worker
Skilled	-0.01	-0.17
Semi-skilled	0.02	-0.02
Unskilled	0.01	-0.17
All	0.01	-0.10

Source: Eduardo *et al.* (2009)

Given these possible outcomes, there is need to ensure that the negotiations result in significant reduction of developed countries' subsidies to agriculture and enough room to shelter selected manufacturing sectors. But even most importantly, there is need to pay close attention to the process and strengthen domestic policies by ensuring that potential positive gains are actually accrued, while negative effects are neutralized or compensated for.

Key Challenges Facing the Trade Sector in Kenya

The trade sector faces a number of challenges that hindered realization of its potential in 2008. These have included under-developed domestic capacity. These are:

Lack of a coherent trade policy

The current interventions on trade development and competitiveness in Kenya are found in numerous policy documents, and the implementation and coordination is scattered to a number of institutions and ministries. The trade policy has been in draft form for the last five years. This hinders the successful implementation of policies. In addition, this is affecting the implementation of the flagship projects, which apparently fall under the jurisdiction of various government agencies. These range from difficulties in accessing required finances, land, formation and coordination of producer groups, etc.

Lack of data on domestic trade

Domestic trade has been hampered by lack of data on its performance, trend and scope. The Department of Internal Trade (DIT) has not developed a system to collect adequate data on domestic trade. This, coupled with weak regulatory frameworks and institutional capacities, make implementation of trade policies difficult. Most business enterprises are highly fragmented and operate informally, hindering their documentation. It is for this reason that factual information on domestic trade does not get into published documents. To make it worse, the Ministry of Trade does not have staff in some districts and provinces, which adversely affects information gathering.

Deteriorating business environment

An unfavourable business environment is a major hindrance to trade activities in Kenya. In 2010, Kenya was ranked 95th, a decline from the 84th position it held in 2009 among 183 countries. Although there have been some improvements in the infrastructural and institutional frameworks, more still needs to be done particularly on 'starting a business', tax regimes, enforcement of contracts and registration of property, where Kenya ranks poorly among the countries included in the analysis. In registering a new business, one has to go through 12 procedures as opposed to the 9.4 average in sub-Saharan Africa (SSA). The process takes about 34 days and it costs 36.5 per cent of income per capita. On trading across borders, one requires 9 documents taking 27 days against 7.8 documents and 33.6 days in the SSA averages, respectively. Moreover,

to export a container in Kenya, it costs US$ 2,055, which is higher than US$ 1,941 for the SSA average. Cumulatively, these factors result in the deterioration of Kenya in terms of ease of doing business. This is exacerbated by the high cost of energy and, to some extent, poor means of communication.

The introduction of the Single Business Permit and establishment of the Business Regulatory Reform Unit under the Ministry of Finance in efforts to streamline the regulatory framework has not yielded positive results either, but made it difficult for agencies such as the Ministry of Trade to collect and maintain business information data for purposes of planning, monitoring and evaluation.

Administrative and capacity constraints in simultaneous negotiations

Kenya is currently involved in simultaneous negotiations at the multilateral and regional levels– EAC, COMESA, EPAs and the WTO. As things stand, trade negotiators face the difficult challenge about the extent of trade liberalization to pursue and at which levels for conformity with domestic policies. Besides, the institutional, administrative, human and financial capacity of Kenya to manage parallel negotiations at bilateral, regional and multilateral levels is severely stretched and poses a big challenge. The Ministry of Trade is not represented in some missions abroad, which adversely affects enhancement of trade in foreign markets, and hence product and export diversification. While preferential liberalization in the context of the EAC and COMESA may be preferable, concerns naturally arise about the implications of pursuing reciprocal trade liberalization with, for instance, the European Union countries, given their levels of development and how this will be possible at different speeds with the multilateral liberalization. In general, different layers of regional and multilateral arrangements reduce transparency, raise transaction costs related to trade and create additional administrative costs.

Policy Recommendations

The trade policy is anchored on liberalization and globalization and driven by competitiveness. Trade plays an important role in industrialization and rapid economic growth, particularly because of its linkages with other sectors of the economy and integration into the global economy through export-led strategies. To exploit the existing and expanding opportunities in international trade arising from liberalization and globalization, countries have formed trade blocs in areas of common interest to enhance their competitive edge. Kenya has performed well in terms of forming trade blocks but by nature of tradable commodities, the benefits are still low. The domestic trade is hampered by fragmentation and lack of coordination.

In order for the trade sector to play the leading role in development as well as employment creation, the following recommendations could be considered:

There is need to finalize on a comprehensive trade policy that can provide holistic guidance on all trade matters. The policy should address issues of institutional and regulatory frameworks, and anchor the Ministry of Trade as the apex of trade activities. In addition, the trade policy needs to address issues of competition especially in the domestic trade The recent reforms appear not to have impacted significantly, which calls for their strengthening in the trade policy.

There is need for close coordination of bilateral, regional and multilateral trade negotiations, which Kenya is currently participating in. This will facilitate a smooth domestication of trade protocols negotiated at different levels. Related to this, there is need for close coordination of stakeholders involved in these trade negotiations. In addition, there is need to strengthen partnership with the private sector, especially negotiating trade protocols and all other trade-related issues.

(Endnotes)

1 Trade integration as a trade performance indicator is the sum of exports and imports in goods and services expressed as a percentage of GDP in current US dollars.

2 The number of products exported or imported is an indicator calculated at the 3-digit SITC Revision 2 level, and includes only those products whose value exceeds US$ 100,000 or 0.3 per cent of the country's total exports or imports, whichever one is smaller.

3 IGAD members include Djibouti, Ethiopia, Eritrea, Kenya, Somali, Sudan and Uganda.

4 COMESA member states include: Burundi, Comoros, Djibouti, DR Congo, Egypt, Ethiopia, Eritrea, Kenya, Libya, Madagascar, Malawi, Mauritius, Rwanda, Sudan, Seychelles, Swaziland, Uganda, Zambia, Zimbabwe

5 The Doha scenario was based on the three pillars of agricultural liberalisation – export subsidies, domestic support and market access and on the Non-Agricultural Market Access (NAMA).

9

Micro and Small Enterprises

Introduction

Public policy in Kenya places an overwhelming emphasis on Micro and Small Enterprises (MSEs) as a pillar for growth, wealth creation and poverty alleviation. Both the Kenya Vision 2030[1] and the First Medium Term Plan 2008-2012 underline the multiple roles of MSEs in stimulating economic growth, enhancing equitable income distribution, allowing more productive and efficient use of scarce resources, enhancing industrial transformation, and developing a vibrant private sector. These factors, among others, provide compelling reasons for the government to take an active interest in the continued growth and expansion of MSEs. Despite the vast potential of the sector, the actual contribution of the sector to national output, manufacturing value added, labour absorption, and poverty reduction are not properly documented. However, some previous estimates indicate that value addition, productivity and competitiveness remain very low. Similarly, a large proportion of the enterprises operate outside the scope of existing legislation, regulations and policies and, therefore, may not receive the public incentives, benefits and protection thereof.

The task of analysing the MSE sector in Kenya is faced with two main challenges. The first relates to definitional problems. The second relates to the paucity of recent data on MSEs at the national level. To date, the 1999 *National Baseline Survey on Micro and Small Enterprises*[2] is the most authoritative survey that has been undertaken in the country. Due to data limitations, and in an effort to analyse more recent data, this chapter will rely heavily on the data reported in Statistical Abstracts produced annually by the Kenya National Bureau of Statistics (KNBS).

The KNBS data provides some information on MSEs although the data is limited to enterprises that are operating in the modern sector and also reports on establishments rather than firms, which may be made up of more than one establishment. Establishments are defined to mean specific locations in which a clearly identified type of economic activity is being undertaken. Another limitation is that the KNBS data only reports on MSEs operating formally, yet MSEs can either be formal or informal.[3] In summary, the KNBS data includes all establishments with less than 50 employees, in urban areas, large-scale farms and modern formal enterprises located in rural areas and public enterprises engaged in activities of an enterprise nature. The data, therefore, excludes informal sector enterprises, very small non-agricultural rural establishments, a large number of small holdings outside 'Scheduled Areas' as well as non-agricultural rural establishments and private household's enterprises and is, therefore, not fully representative of the MSE sector but does provide a picture of the MSEs operating formally, such

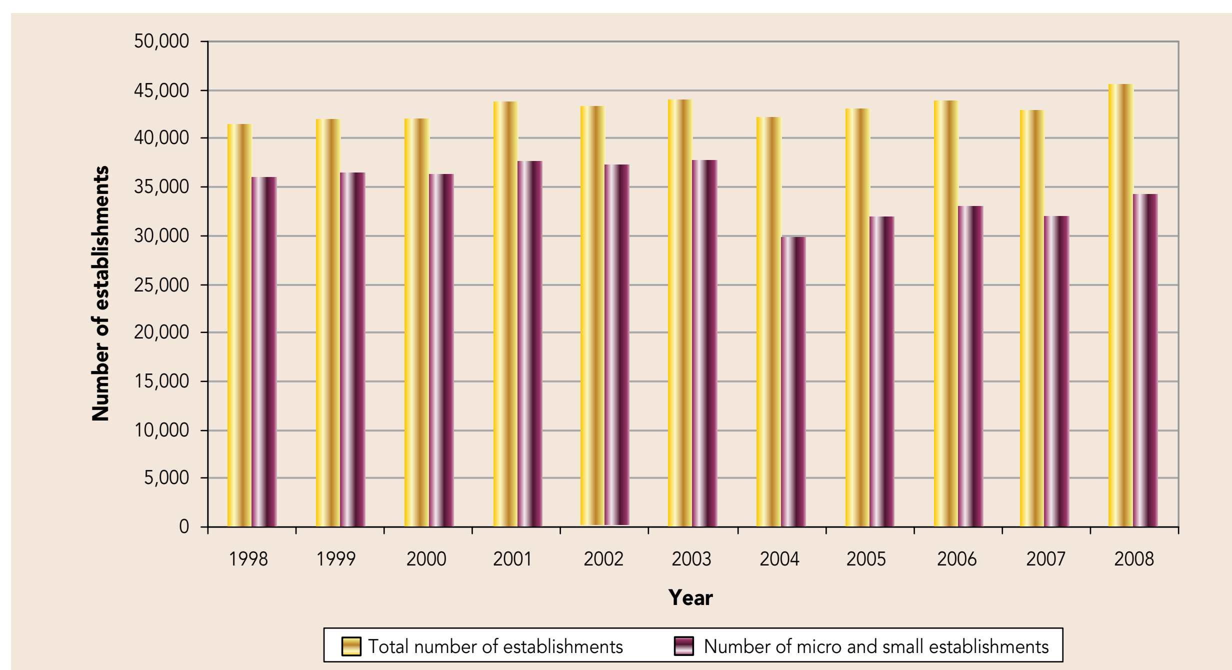
as limited liability companies and other forms of business organizations (also referred to as modern establishments) in Kenya.

Recent Performance

Number of establishments: Figure 9.1 shows that while the total number of establishments in 1999 and 2008 were almost the same,[4] the number of small establishments decreased but that of large establishments increased. In 2008, there were 34,225 MSEs operating in the formal sector, accounting for 75.3 per cent of all establishments in Kenya. This represents a 13.0 per cent reduction in the number of establishments existing in 1999, which were 36,386 MSEs. Based on the statistics provided in the Statistical Abstract, in 1999, 86.5 per cent of all establishments were MSEs. This indicates that there has been a decline in the absolute number of establishments in this category; however, the proportion of enterprises that were considered micro and small was more in 1999 compared to 2008, thus indicating a decrease in MSEs as a proportion of all establishments. Further to this, in 1999, there were only 5,656 large establishments. This number doubled to 11,180 in 2008.

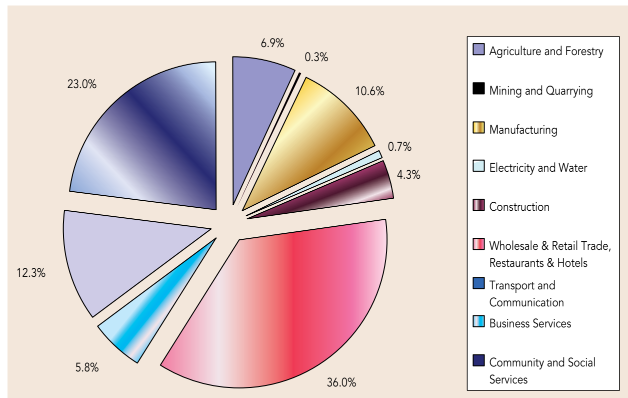
The decline in the number of MSEs could be explained by either enterprise closures (with very few new start-ups) or enterprise graduation from MSE into the medium or large scale category. However, the main reason is likely to be due to net enterprises closures. A review of employment figures of the MSEs sampled in the 1999 MSE Baseline Survey, aimed at comparing the employment figures at the start of the respective businesses and the employment figures at the time of the survey, revealed that about 80 per cent of the one-person MSEs stayed the same size, 19.3 per cent increased in size while 0.4 per cent decreased in size. For two-person MSEs, the proportions of stagnant, growing and contracting enterprises were 65.1 per cent, 15.1 per cent and 19.8 per cent, respectively. The results reported for the other categories did not differ significantly. Further to this, there is a low survival rate of MSEs in Kenya, which also face high closure rates. Figure 9.1 reveals that large and medium size establishments, on the other hand, have increased over time, especially between 2004 and 2007. This

Figure 9.1: Size distribution of establishments



Source: Government of Kenya (various), Statistical Abstract

Figure 9.2: Size distribution of MSEs by industry



Source: Government of Kenya (2009), Statistical Abstract

Figure 9.3: Employment in the micro and small establishments

Source: Government of Kenya (various), Statistical Abstract

could be attributed to the numerous reforms that were undertaken during the implementation of the Economic Recovery Strategy 2003-2007.

Figure 9.2 shows the size distribution of establishments by industry in 2008. Majority of MSEs operate in the service sector as indicated in Figure 9.2, which reveals that about 36 per cent of MSEs are involved in wholesale and retail trade, restaurants and hotels; 23 per cent are involved in community and social services, while only 11 per cent are engaged in the manufacturing sector.[5] The ratio of micro and small establishments to medium and large establishments is about 3:1.

Employment in the sector

Generally, formal employment has not been growing. This trend is duplicated by employment by MSEs that operate in the modern sector, which has been somehow stagnant over time. Figure 9.3 shows that the number of persons employed in the formal MSEs rose from 580,708 in 1999 to 602,258 in 2003, and then to 832,818 in 2008. Large establishments operating in the modern sector employed 1.15 million persons while MSEs operating in the same sector employed only 0.8 million. Employment by MSEs represents 42.4 per cent of total formal employment.

In some sectors, the relative share in employment for small establishments was higher than medium and large enterprises (Figure 9.4). These sectors happen to be the same sectors that are largely dominated by MSEs compared to medium and large enterprises. These sectors include: business services; construction; transport and communications; and trade, restaurants and hotels. Conversely, the following sectors had lower relative shares in employment for MSEs: community and social services; electricity and water; manufacturing; mining and quarrying; and agriculture and forestry.

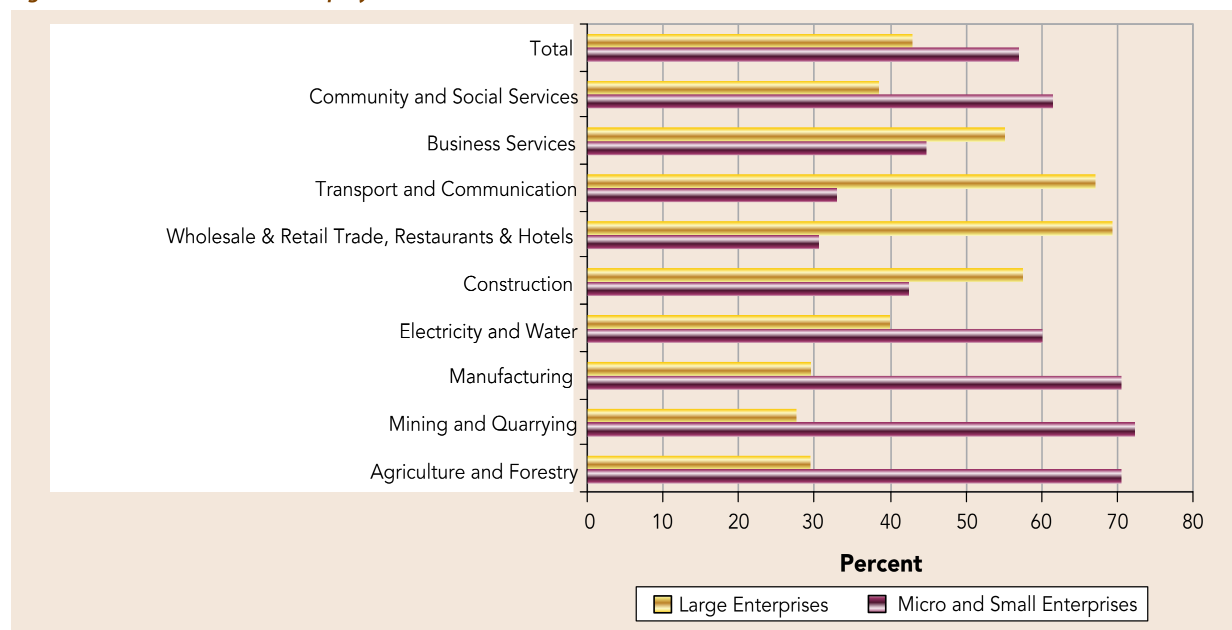
Sector contribution to national output

The most startling finding of MSEs in Kenya is the fact that despite the sector's contribution to employment being relatively high, its contribution to national output has been very low. In 1999, it was estimated that the sector employed about 2.9 million people, accounting for 42.5 per cent total employment recorded that year, yet contributed only 18.4 per cent to GDP. More recent data shows that the sector contributed only 12.2 per cent to the country's manufacturing value added (Figure 9.5). This indicates that productivity and value addition in the sector is very low. This confirms that productivity remains an issue that requires policy intervention.

Performance of the MSE Sector in Comparison with Other Countries

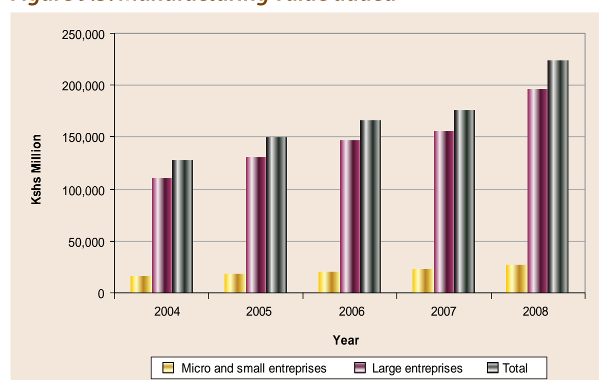
As much as there have been some reforms in the MSE sector as aforementioned, the impact of these reforms is yet to be fully felt. One likely reason is that

Figure 9.4: Relative shares in employment



Source: Government of Kenya (2009), Statistical Abstract

Figure 9.5: Manufacturing value added



Source: Government of Kenya (2009), Statistical Abstract

the impact of these reforms will be experienced in the medium term. Additionally, there are a number of challenges that still compound the sector. In fact, when comparisons of Kenya's MSE performance are made with other countries (Table 9.1) such as South Africa (where the MSE sector also employs about half of the country's working population), Kenya seems to be performing poorly. The contribution to GDP made by the MSE sector in South Africa is almost double that made by the sector in Kenya. Although definitions vary across countries, they all refer to MSEs as enterprises with less than 50 employees.

Some best practices can be drawn from reviewing some of the policies and programmes introduced in these and other countries with a thriving MSE sector. Countries such as India have introduced a number of MSE sector reforms, including some forms of tax exemptions for small businesses, assistance in marketing and accessing markets, and assistance in accessing technology. With regard to technology, MSEs are provided with machinery on hire purchase terms. In addition, they can access Incubation Centres set up at Technical Centres established by the National Small Industries Corporation (NSIC) and the Ministry of Micro, Small and Medium Enterprises, which also provides technological support to MSE players. The Ministry of Science and Technology also supports MSEs through various schemes and programmes (NCEUS, 2009).

Technology upgrading has also been an area of policy focus by other countries such as China and South Africa. China developed technological incubators where technological applications and business incubators are developed. China's High Technology Development Zone (HTDZ), for instance, links research to industry and provides enterprises with

certain incentives and subsidies. According to a Report on Chinese High-Tech Industries (2009), by the end of 2007, there were 54 national high technology parks in China with 48,000 enterprises. These parks are available for all businesses.

South Africa has 29 technology incubators, which operate under the Small Enterprise Development Agency (SEDA) where small enterprises can receive advice, counselling, mentorship and guidance. The Department of Science and Technology also plays a role by facilitating technology transfers between academic institutions and small enterprises.[7] Further to this, South Africa has techno-preneur programmes that promote access to technology and appropriate skills and training through support services and programmes which are provided by a number of different institutions (Moyi and Njiraini, 2005). The use of ICT is one way in which MSEs can improve access to more advanced technology. Small enterprises (6-19 employees) in New Zealand fully embrace ICT; this was revealed by a study conducted by the Ministry of Economic Development (2007), which indicated that 92 per cent of small enterprises use the Internet to support their business activities, with a majority of them using the Internet to receive orders for goods and services, thus improving market access.

As indicated earlier, MSEs in India receive assistance with respect to market access. The small enterprise sector in India contributes to 40 per cent of total exports (Table 9.1). The products exported include non-traditional commodities such as engineering goods, basic pharmaceuticals, chemical and allied products and others, while the traditional commodities include cashew nuts and spices.[8] Government institutes such as the Office

Table 9.1: Country comparisons

Country (Year)	Definition	% of total firms	% contribution to employment	% contribution to GDP
Kenya (2008)	Includes different forms of businesses with 0 to 50 employees in the private and public sector engaged in activities of an 'enterprise' nature	74%	42.8%	18.9% to GDP (1999) 12.2% manufacturing value added
India (2007)	The MSME Development Act (2006) categorizes MSMEs in manufacturing and service sector based on the investments (in rupees) in plant and machinery (manufacturing sector) or equipment (service sector)	90% (26.1 million enterprises)	59.7 million persons	45% of manufacturing output, 40% of total export
New Zealand (2007)	MSMEs are defined as enterprises with 19 or fewer employees	96.4% (98.9% of enterprises employ 49 or fewer employees)	29.6% (50% of total employment emanate from enterprises with 49 or fewer employees)	38.6% of total value added (enterprises with fewer then 50 employees accounted for half of the economy's total output)
South Africa (2007)	Enterprises employing less than 50 employees (Except in the mining, electricity, manufacturing, and construction sectors)	98%	59%	27-34% of GDP and 40% of value added in manufacturing

Source: Author's compilation[8]

of the Development Commissioner (MSME) and the MSME Development Institute, Agra, Small and Medium Business Development Chamber of India provide MSEs with necessary assistance, including developing their export markets, and training them in export marketing and export packaging. Market Development Assistance Scheme for MSME exporters (MSME-MDA) is an initiative introduced in India in 2001, aimed at providing MSEs with market assistance, which includes subsidies on air fare for Latin American countries.[9] Some of the market assistance that entrepreneurs in India receive includes:[10]

- Sub-contracting with the government; where some goods are exclusively purchased by the government through procurement preference policies that have also been provided in the Micro, Small and Medium Enterprises Development (MSMED) Act 2006;
- Reservation of some items by the government for exclusive purchase from the MSE sector (the government often reviews the list of reserve items);
- Reservation of the exclusive manufacture of certain specified goods to the sector (under the Government Stores Purchase Programme);
- In some cases, MSE products can get a price preference of up to 15 per cent over the offer of large scale sector and 5 per cent over the offer of Public Sector Undertaking.

Key Challenges, Recent Reforms and Policy Interventions

Lessons from other countries show that there are four main areas that provide the greatest potential in leveraging the growth and competitiveness of the MSE sector. The four areas are credit, technology, infrastructure, and the legal and regulatory environment. In addition to these four areas, we shall discuss the issue of data limitations, which is critical in Kenya in terms of planning for the sector. The discussion on challenges, recent initiatives and policy recommendations focuses on these five areas.

Micro-finance

Micro-finance is the provision of savings, credit, insurance and other financial products[11] that are small in size to poor clients. Micro-credit targets individuals who lack collateral, a steady job and a verifiable credit history. Micro-savings involve small cash deposits made to an account offered to the poor as an incentive to store funds for future use. Micro-insurance is a financial arrangement to protect the poor against specific risks in exchange for regular premium payments proportionate to the likelihood and cost of the risk involved. This is justified by the fact that the poor face more risks than the non-poor, but are more vulnerable to the same risks.

The penetration of formal credit in the MSE sector is still shallow. Estimates show that about 25 per cent of MSEs hold bank accounts, while only 6 per cent of these enterprises have ever applied for credit from a formal institution (CBS, ICEG and K-REP, 1999). One of the challenges facing MSEs in accessing credit is the inability to fulfil the collateral requirements imposed by banks. Similarly, most micro finance institutions (MFIs) have limited outreach in rural areas where the majority of MSEs are located. Banks have a wider resource base and wider outreach but lack expertise in micro-finance lending. Generally, lending by NGOs is geographically skewed towards urban areas and wealthier rural areas. Similarly, NGOs rely heavily on donor funding for their micro-credit resources, and face poor coordination and duplication of activities. They also suffer from inexperience in financial intermediation and limited financial resources.

Another weakness is the low diversity in microfinance products. Most micro-finance institutions[12] specialize in providing loans and savings only, with almost no micro-insurance products.[13] Due to the informality that characterises the sector, a number of MSE operators do not benefit from social protection schemes such as pension. It is estimated that only 15 per cent of the 10 million workers in the country are enrolled in retirement benefit schemes, while about 70 per cent of them without the scheme are in

the informal sector.[14] Similarly, most micro-finance institutions are biased towards short term finance, away from long term finance.

There are three recent micro-financial initiatives, namely: the Mbao Pension Scheme, the licensing of Credit Reference Bureau (Africa) Ltd, and the establishment of a Revolving Fund in the 2010/11 budget. The Mbao Pension Scheme is the only initiative in Kenya focusing on micro-insurance. It was launched in December 2009 by the Kenya National Jua Kali Cooperative Society Limited in collaboration with the Insurance Company of East Africa (ICEA) as the corporate trustee, Octagon Pensions Limited as the contracted administrators, Co-op Trust Investment Services as the fund managers, and the Kenya Commercial Bank as the custodian. The scheme targets people who are employed in micro and small enterprises in the country. The scheme requires savings of at least Ksh 20 a day. Given the expected volumes of small contributions, members have the option to contribute through money transfer services such as Safaricom's M-pesa and Zain's (Airtel) Zap services, and receive account updates through their handsets.

The Credit Reference Bureau (Africa) Ltd was licensed in March 2010 in accordance with the Banking (Credit Reference Bureau) Regulations 2008. The regulations provide for the licensing, operation and supervision of credit reference bureaus by the Central Bank of Kenya. The bureau will enable banks to share information about borrowers, especially during the credit granting process. The bureau will also keep a credit history record of the borrower and can even assign a score related to the credit history. With the licensing of the bureau, credit information sharing would enable those borrowers to build a track record that they can use to access credit. This would reduce opportunistic behaviour in the credit market.

In order to address youth unemployment and encourage the growth of MSEs, the Minister of Finance in the 2010/11 budget established a revolving fund of Ksh 3.8 billion through which the government will enter into a Credit Facility Agreement with select banks to support MSEs. The banks will match Ksh 5 for every Ksh 1 invested by the government, thus expanding the fund five times to Ksh 15 billion.

In order to improve access to micro-finance by operators in the MSE sector, policy should focus on addressing the problem of lack of collateral. A credit guarantee scheme should be developed to cater for the needs of borrowers who have no credit history. It would provide a mechanism where the borrower's loan is insured against default by a corporate body (say, a government agency or an MSE federation). The corporate body should ideally be managing a fund established for this purpose to cater for the MSE sector. Although the first-ever credit reference bureau (Credit Reference Bureau-Africa) was licensed in March 2010, more credit bureaus should be established to introduce competition in the market and improve efficiency.

In order to deepen the outreach of MFIs in rural areas, the following initiatives should be implemented. The Central Bank of Kenya should invoke moral suasion to convince the main banks to channel a larger share of their credit to the MSE sector, especially to the rural-based enterprises. To tackle the problem of poor coordination and duplication of activities, the NGOs Coordination Office should take stock of the primary activities of NGOs operating in an area, with the ultimate aim of streamlining such activities to ensure that duplication is reduced and synergies developed. NGOs undertaking a similar activity, say micro-finance, should not be concentrated in one locality. Rather, they should be spread out to cover especially economically, socially and geographically marginalized groups.

Policy should address the problem of paucity of other micro-finance products such as insurance, hire purchase, leasing, inventory financing, venture capital, investment schemes, factoring, and mortgage schemes. Representative associations such as the Micro and Small Enterprises Federation (MSEF) should develop platforms with their larger private sector counterparts

such as KEPSA to design programmes that enhance the linkages between MSEs and large enterprises. Such programmes could cover hire purchase, leasing, inventory financing, and mortgage. However, the government could support such programmes by providing fiscal incentives or providing recognition (giving prizes, awards, or honors) to the enterprises taking part in such programmes.

Technology

Whereas technology remains a key source of growth and competitiveness for business enterprises, MSEs in Kenya have weak production, investment and innovative capacities that limit their ability to generate, access and apply technology.[15] This low capacity is explained by several factors, including low incentives for research and development (R&D), high cost of importing equipment, shortages of machine parts and components, limited availability of process machinery, limited access to Information Communication Technology (ICT), low sophistication of production processes, weak university-industry linkages and inadequate supply of technical personnel. Many firms in Kenya use third or fourth generation technologies that are characterized by use of outdated capital stock, and use of re-cycled and reconditioned tools and equipment.

One of the recent interventions in the area of technology is the 4K initiative. The initiative was started in 2008, and is a partnership between the Kenya Industrial Research and Development Institute (KIRDI), the Kenya Bureau of Standards (KEBS), the Kenya Industrial Property Institute (KIPI), and the Kenya National Federation of Jua-Kali Associations (KNFJKA). It aims at assisting MSE operators through research and development, innovation and technology transfer, design and product development, patenting and branding, as well as quality standards. Despite the 4K initiative and other interventions, much more remains to be done in the area of technology. Further interventions are required as outlined below:

- The productive and investment capability of small enterprises can be enhanced by selectively lowering the costs of importing equipment, plant, machinery and tools by designing proper technology incentive schemes and programmes. Such programmes could take many forms including direct subsidies and tax credits (for technology licenses and for firms importing new plant, machinery, tools and equipment). Such subsidies have been very successful in Singapore. Case study evidence from Brazil and South Africa show that affirmative policy in public procurement results in higher payoffs for MSEs. Financial support for R&D is another approach that has resulted in higher technological capability among SMEs. In the United States, firms are eligible for tax credits for research and experimentation, and to innovation research grants. In Mauritius, the government runs product and process development grants for the development of new processes or products (Moyi and Njiraini, 2005; 2006).
- Technological transfer can be promoted by creating inter-firm linkages between technologically superior firms (e.g. transnational corporations) and technology laggards. This is an effective way of helping resource-constrained MSEs to access foreign technology. Such linkages could be promoted through incentive programmes (for instance through tax rebates) that encourage large firms to sub-contract to small enterprises. Transfers could also be strengthened through the public procurement system. This would require that a large firm is awarded a technology contract on the requirement that a specific percentage of the contract will be sub-contracted to small enterprises. Alternatively, the technology contract could require purchases of a certain value of the intermediate inputs from MSEs.
- Inter-firm linkages can also be promoted through the establishment of technology parks and business incubators. These institutions promote the link between the creators and suppliers of technology (universities and research institutes) with the consumers of

such innovations (businesses). Incubators also provide infrastructural support to small enterprises. There is need to invest in technology parks (for techno-firms and incubators for small businesses). Linkages could also be strengthened through exchange programmes and factory visits. This is critical in imparting best practices, capacity building and exposure to marketing and technology enhancement strategies.

- Public support towards research and development (R&D) should be enhanced by initiating programmes that recognize innovators (including professors) who develop processes or products for use by MSEs. Firms should be encouraged to invest more resources towards R&D through fiscal incentives such as tax rebates.
- Intellectual Property Right (IPR) should be enhanced to foster innovation in the private sector by allowing inventors to benefit from their inventions. Instruments of IPR, such as patents, copyrights, trademarks and trade secrets enhance competition and the working of technology markets. In Kenya, a number of MSEs are involved in practices where they copy new innovations without regard to IPR regulations and standards. MSEs should be assisted to appreciate and understand the role of IPR and how they can make use of the Kenya Industrial Property Institute (KIPI) to protect their intellectual property. In this regard, KIPI awareness programmes should be supported to focus their outreach activities towards MSEs.
- The supply of techno-preneurs should be increased through mentoring programmes. Techno-preneurs are the people that drive technology markets and come up with new ideas and innovations. Since such people are only a small proportion of the market, targeted programmes should be designed using incubation and mentoring approaches to support the development of techno-preneurs. This should be mainstreamed into the country's technology vision.

Infrastructure

The existing approaches to development, allocation and management of workspaces (and associated infrastructure) are riddled with several flaws ranging from bureaucracy and institutional failure, poor governance practices, to a weak policy environment. According to reports at the Ministry of Labour and Human Resource Development, about 22 parcels of land in various towns have been encroached by various interest groups. Similarly, the Ndung'u Report of 2004 documents some of the irregular land allocations. For instance, the report indicates that land approximating over 39 hectares belonging to the Kenya Industrial Estate (KIE), and which was reserved for industrial use and provision of worksites through the incubator model, has over the years been irregularly allocated to private developers. In addition, initiatives to develop MSE workspaces such as the *Jua Kali* sheds programme have remained overly bureaucratic and narrow-based in approach. They have failed to involve stakeholders in their development and management. As a consequence, some of the *Jua Kali* sheds are not properly planned, some are poorly located and lack utilities, while some are congested.

Since independence, the role of providing workspaces has been mainly vested with Local Authorities (LAs) as stipulated in the Local Government Act, Cap 265. The main problem with the local authority approach to workspace provision is that devolution has remained shallow, since most local authorities have not been able to effectively sustain their fiscal operations. They have lacked capacity to develop economic policies and plans for the MSE sector, which is the biggest contributor to their revenues and employment. The MSEs are rarely consulted during urban physical planning processes–placing their needs outside the formal planning systems. Thus, the traditional design of most towns and cities was not meant to accommodate MSEs. Problems related to weak capacities at the Local Authorities have resulted into inadequate provision of suitable land, unclear procedures for allocation

of land and worksites, inadequate development of markets, workshops and industrial sites, and poor maintenance of existing facilities. Similarly, most LAs have failed to come up with policies that encourage private sector participation in services management.

Improved worksites with necessary infrastructure, including electricity, water and sanitation, and market access is crucial for the development of the MSE sector. Vision 2030 aims at strengthening SMEs[16] in the manufacturing sector by improving their productivity and innovation. One of the flagship projects identified is the development of SME industrial parks. In addition, the supply and management of worksites and infrastructure can be improved by:

- *Adopting participatory approaches in the development, allocation and management of infrastructure*: Priority should go towards demand-driven and needs-based interventions. The MSE sector players need to be involved in formulation of policies and planning for the sector's infrastructural development. Their representation should be channelled through local representative committees and/or sectoral associations. The MSE sector needs to build strong, collective, representative and accountable associations to lobby for their interests. Effective and strong MSE associations would play a critical role in championing the rights of enterprises, and lobbying the government to prioritize issues of MSE workspace in the national policies and programmes. The MSE associations should also enhance the capacity to improve governance in the allocation of land for development of workspaces by forming vibrant advocacy and lobby groups that would "blow the whistle" and prevent cases of irregular acquisition of public land meant to benefit MSEs.

- *Undertaking legal, policy and regulatory reforms:* The laws and regulations governing the allocation of MSE workspace have tended to place too much power in the hands of the Local Authorities. The First Medium Term Plan 2008-2012 proposes both reform and capacity building at the Local Authorities. These reforms should address the issue of duplicated roles to ensure that there are no duplication of functions (especially between Local Authorities, Provincial Administration[17] and other stakeholders such as the Ministry of Lands) with regards to allocation of worksites and the capacity deficiency within the Local Authorities. There is need to mainstream MSE associations in decisions relating to formulation of by-laws, licensing of businesses and trade, policy development, planning, and land development. Similarly, all stakeholders (including MSEs) should be involved in the design of licensing regulations and determination of fees and charges in line with profitability/sales/location or any other reasonable criteria.

In summary, more reforms are needed to ensure that the Local Government Act Cap 265 supports the growth and development of the sector. Similarly, capacity building at the Local Authorities should ensure that the staff capacity of planning departments at the Local Authorities should be complemented by economic planners to ensure a synergy between physical plans and economic priorities. The government recently developed *Sessional Paper No. 3 of 2009 on National Land Policy* aimed at addressing the issue of land use and designation of informal activities. The proposed MSE Bill (2009) also aims at addressing the issue of worksites for MSE players. If these regulations are implemented well, with the necessary legal and regulatory reforms having taken place, the concerns with regard to allocation of worksites for MSEs will be addressed. Kenya Vision 2030 also proposed the establishment of SME industrial parks in key urban centres. Since the Local Authorities have been identified as having a critical role in developing these parks, this brings to the fore the need for proper mechanisms for coordination and implementation to ensure that these proposals are successful.

- *Encouraging private sector participation in the development and management of workspaces*: Given the predominance of public investments and the need for commercial orientation and sustainability, private sector participation in the development and management of workspaces should be encouraged. This would require initial government support or subsidies. Such subsidies could range from provision of free land, to tax rebates for private providers of workspaces; stamp duty exemptions; and investment allowances for establishment of incubators.
- Innovative approaches to workspace provision include periodic markets and live/work schemes. Periodic markets ensure making multiple uses of spaces like streets and open spaces by creating additional workspaces for MSEs. Certain streets would be closed for traffic to allow traders to carry out their businesses during specific times or days. To a small extent, this concept has been implemented in Nairobi and Mombasa. There is need to replicate it in other smaller towns and municipalities. However, even in Nairobi and Mombasa, the policy has not been properly institutionalized.

Laws and Regulations

The regulatory requirements for MSEs to start and run a formal business are relatively complex, time consuming and cumbersome, creating high compliance costs and imposing barriers to these enterprises. Lack of information is a major challenge to growth of MSEs, with a number of businesses not formalizing due to limited knowledge of the process and benefits of going formal. In addition, licensing and registration procedures are not harmonized. Moreover, some businesses are confronted with rent-seeking behaviour by public officials. This negatively impacts the businesses in terms of costs and time taken to register and obtain licenses, further discouraging MSEs from formalizing. Despite the licensing reforms that have been instituted in the last few years, most MSEs are subjected to more than one license in operating their businesses. A 2007 MSME survey by KIPPRA and Ernst and Young revealed that obtaining a license is still a lengthy process. For instance, the issue of a Single Business Permit (SBP) takes about 8.3 days, the transport license takes 36 days, while some specialized licenses take over 100 days.

The survey also revealed that only 28 per cent of MSEs surveyed had some form of business registration. Of this, only 8.3 per cent of the firms surveyed were formally registered as limited companies with the Registrar of Companies, 14.4 per cent were registered as sole proprietors, 3.9 were registered as partnerships while 0.7 per cent took other forms of registration such as cooperatives. The majority, 72.7 per cent, had no legal status. The low level of business registration is due to too many registration requirements, the long period it takes and the long distance to the registration office. There is also confusion among entrepreneurs regarding licensing and registration. Moreover, business registration is not enforced, and registering as a limited company is associated with statutory reporting and tax obligations.

Many licensing reforms have been introduced since the implementation of the report by the Working Committee on Regulatory Reforms for Business Activities in Kenya. Despite this, business licensing remains cumbersome and complicated. The Working Committee on Regulatory Reforms for Business Activities in Kenya was established in 2005 with the purpose of reviewing and improving the licensing system for businesses. The committee identified a total number of 1,325 licences, out of which 424 were eliminated, 607 were simplified, while 294 licences retained. The committee also recommended the creation of an electronic registry to host all legal licenses and the establishment of a Business Regulatory Reform Unit (BRRU), amongst other things. Based on these recommendations, the Minister of Finance announced the establishment of the Business Regulatory Reform Unit (BRRU) during the 2006/2007 Budget Speech. A Business Regulation Bill (2010) was drafted. The Regulation

Act will provide BRRU with statutory rights to keep track of all regulatory regimes, review the quality of new licenses, conduct regulatory impact assessments, and ensure that the new licenses, fees and charges do not create unnecessary burden on businesses.

During the 2010-2011 Budget Speech, the Minister of Finance indicated that the Business Regulation Bill was ready for submission to Parliament. In November 2007, BRRU launched an e-registry to improve access to licensing information, requirements and fees. The e-registry is now operational and a number of application forms for different licenses can be accessed and downloaded from the website. This is a step in the right direction and should be further developed in the medium term to facilitate the application and payment of licenses online. Best practices from countries that are constantly rated highly in the World Bank's *Ease of Doing Business* survey such as Singapore and Australia, utilize ICT to improve provision of licensing services. In Queensland (Australia), for instance, the *SmartLicence* system, which provides tailor-made licensing information and requirements effectively electronically, was introduced to simplify the process of obtaining licenses (ILO, 2003). In Singapore, the process of obtaining a license is done through an Online Business License Service (OBLS), which allows one to select, complete and submit one or multiple license applications to the relevant government agency.[18]

Turnover Tax (TOT) was introduced in 2006 following the amendment of the Income Tax Act (Cap 470). The applicable rate was not specified at the time but was provided in the 2007 Financial Act. TOT was, therefore, in operation from 1 January 2008. The applicable rate is 3 per cent of gross sales per year. It is a final tax targeting businesses whose turnover is more than Ksh 500,000 per annum but does not exceed Ksh 5 million. It was designed with MSEs in mind and was aimed at improving tax compliance amongst these businesses. In order to pay TOT, the business would only have to keep sales records. In addition, the tax is payable on a quarterly basis. TOT, however, is still faced with implementation challenges. This is an important reform as prior to introduction of TOT, there was no clear policy on taxing MSEs in Kenya other than Advance Tax, which is applicable to *Matatus* and other Public Service Vehicles.

Over the last four years, the Ministry of Labour has held several consultative workshops with key stakeholders (including KIPPRA) to solicit input into the Draft MSE Bill developed by the Department of Micro and Small Enterprise Development (DMSED). Once enacted, the MSE Bill will give the sector the necessary legislative support to facilitate its development. It will also provide the sector with the necessary institutional support, through the establishment of the National Council for Micro and Small Enterprises to, amongst other functions, coordinate, harmonize and facilitate the integration of MSE activities and programmes. The Bill also has provisions for development of infrastructure, capacity building programmes, assistance in market access, facilitating access to technology, improving access to finance through the establishment of MSEs development fund, and the effective regulation of MSE associations.

As indicated earlier, the government recently introduced an e-registry where information on relevant licenses and application forms for some licences can be obtained. However, there is scope to further improve the licensing system by ensuring that all licensing authorities have all relevant licensing information and application forms availed in the website, and by ensuring awareness on the e-registry is availed especially to MSE start-ups. In the medium term, the government should endeavour to make the process of obtaining licenses interactive so that an MSE can make an e-application and payments can also be done electronically, as is the case in countries such as Singapore and Australia. During the 2010/2011 Budget Speech, the Minister of Finance indicated that this is part of the second phase of the e-registry, which will be complete before the end of 2010/2011. This will be very beneficial to MSEs once implemented as it would improve efficiency,

reduce time taken when seeking licenses and reduce compliance costs. However, in the short term, the government should publicize this initiative more, especially to MSE operators who would benefit from not having to physically visit multiple different licensing agencies to obtain licensing information and application forms, given that a number of application forms are available for downloading under the e-registry. ICT, therefore, plays a very important role in the provision of electronic services. The government's Digital Village Initiative is vital to the success of such e-government services. It is also crucial for the government to ensure that the MSEs have necessary skills and capacity to take advantage of the e-registry.

The licensing system in Kenya involves multiple licensing authorities, which are located in different places. This creates an extra cost burden for MSE operators who have to physically go to the licensing authorities to obtain the respective licenses. If these licensing authorities were located in one single physical location, this would improve efficiency and reduce the time and costs it takes to obtain a license. Whereas the e-registry is a noble initiative, connectivity for rural-based MSEs is still a challenge. The government should introduce One Stop Shops (OSS) where entrepreneurs can access all licensing-related services and information, make the necessary payments, and obtain licenses.

The government should hasten the decentralization business registration as proposed in the 2002-2008 Development Plan. Currently, business registration is only undertaken in Nairobi (at the Registrar of Companies), which imposes large compliance costs to MSE operators. Additionally, the process of registering a limited company is complicated and costly. This is compounded by the need to use the services of a lawyer, further increasing the costs of undertaking business registration. The government should, therefore, introduce reforms in the process of registering a business with the aim of simplifying it and making it less time-consuming and more affordable.

Data and definitional challenges

Without a uniform definition, it becomes very difficult to measure, describe and analyze the MSE sector. It also contributes to poor policy implementation because the policies do not adequately define the target group. A number of policy documents use the terms such as small scale, micro and small enterprise, informal sector and *Jua Kali* enterprises interchangeably which has brought about confusion. There is need to develop a commonly understood and agreed upon set of definitions for the classification of all micro, small, medium and large enterprises, as well as for the informal sector. Such definitions should be precise and allow for easy identification of MSEs during survey and related work. It would be very beneficial when implementing laws and policies; for instance, it would be easier to identify MSEs that would benefit from the procurement provision for MSEs provided in the Public Procurement and Disposal Act (2005). The Draft MSE Bill (2009), when enacted, will provide a more detailed definition of MSEs in Kenya.

The last comprehensive survey of MSEs was undertaken in 1999. This data is now old and needs to be updated. There is need to design a programme of research into various aspects of the MSE sector to underpin and inform policies, programmes and actions aimed at developing the sector.

Conclusion

This chapter has attempted, though with data limitations, to describe the recent performance of the MSE sector in Kenya using the number of establishments, employment, and the sector's contribution to national output. It concludes that the sector is huge in terms of the number of establishments and the number of people employed. However, the sector's contribution to national output is very low. This indicates that one of the critical problems in the sector is low productivity and value

addition. Therefore, the chapter recommends wide-ranging policies and reforms in financing of MSEs, enhancing their access to technology, improving their infrastructure, and designing favourable laws and regulations.

(Endnotes)

1 Under the Vision 2030, for example, the government plans to develop MSE (industrial) parks to encourage industrial and manufacturing clusters.

2 Undertaken by the Central Bureau of Statistics (CBS), International Centre for Economic Growth (ICEG) and K-Rep Holdings Ltd.

3 Majority of MSEs in Kenya operate informally. The 1999 *MSE Baseline Survey* revealed that 88.6 per cent had no business registration while 60 per cent operated without any license. In 2007, in an MSME survey conducted by Ernst and Young and KIPPRA, the statistics changed slightly, 74.2 per cent had no business registration and 40 per cent operated with no license. Therefore, most of the statistics reported in this chapter give only a partial picture of the entire sector, since only a small fraction of MSEs operate formally.

4 In 1999 and 2007, there were 42,042 and 42,863 establishments, respectively, in total.

5 The contribution to GDP by the manufacturing sector in Kenya has generally been low and stagnant at 10 per cent for a number of years. The Kenya Vision 2030, however, targets strengthening MSEs in the manufacturing sector to become key industries in the future by improving their productivity and innovation.

6 Sources: Government of Kenya (2009), Statistical Abstract; CBS *et al*., (1999); Ministry of Micro, Small and Medium Enterprises, India, available from http://msme.gov.in/msme_aboutus.htm; Ministry of Economic Development; New Zealand (2007); SEDA (2007).

7 www.seda.org.za

8 Office of the Development Commissioner (MSME) Ministry of Micro, Small and Medium Enterprises, India.

9 http://www.msmediagra.gov.in/exportpromotion.htm

10 Information obtained from the Office of the Development Commissioner (MSME), the Ministry of Micro, Small and Medium Enterprises, India, available from www.smallindustryindia.com and the Manual on Policies and Procedures for Purchase of Goods (India) (2006).

11 Other micro-finance products include hire purchase, leasing, money transfer, inventory financing, venture capital, investment schemes, factoring, and mortgage schemes.

12 Formal micro-financial institutions include Commercial Banks, Non-Governmental Organizations (NGOs), Societies, Companies (either limited by shares or guarantee), non-bank financial institutions, Savings and Credit Cooperative Societies (SACCOs), Financial Services Associations (FSA), Wholesale Lending Institutions, the Joint Loans Board Scheme and Parastatals. Informal Micro-Financial Institutions include Rotating Savings and Credit Associations (ROSCAs), Accumulating Savings and Credit Associations (ASCAs), traders, shopkeepers, money lenders, pawn brokers, shylocks, family and friends.

13 It is argued that informal MFIs such as ROSCAs and ASCAs provide some form of social insurance, since they are founded on the principles of self-help and reciprocity.

14 This was announced by the Retirement Benefits Authority (RBA) Managing Director during the launch of the Mbao Pension Scheme in December 2009.

15 The Technological Readiness Index by the World Economic Forum; as a part of the Global Competitiveness Report (2009-2010), which measures the agility with which a country adopts existing technology ranked Kenya 96 out of the 133 countries surveyed with a score of 3.0 (between 1-7, where 7 is the highest).

16 This refers to Small and Medium Enterprises (as opposed to Micro and Small Enterprises).

17 The Constitution, however, proposed to restructure the Provincial Administration.

18 More information on this service can be obtained from https://licences.business.gov.sg/

10

Tourism

Introduction

In Kenya Vision 2030 and its first five-year Medium Term Plan (2008-2012), tourism is one of the six sectors earmarked to accelerate the growth of the Kenyan economy to the average annual rate of 10 per cent between 2012 and 2030. Within this period, Kenya targets to join the group of the top ten long-haul tourist destinations. By end of June 2010, the sector had the following targets, among many others: 1.97 million arrivals; Ksh 112.8 billion in revenue; bed capacity of 2 million; 2.3 million bed nights; Ksh 57,862 average expenditure per visitor; licensing of 250 cultural home stays; 720 people with tourism skills; and recruit and train 400 rangers in order to improve the security of tourists and wildlife. Various policy and institutional reforms had also been targeted, including the development of the Wildlife and Tourism Act, a heritage policy, and a conducive legal, regulatory and institutional framework.

By 2012, some of the goals for the tourism sector are to: increase tourism earnings from Ksh 52.7 billion (in 2008) to over Ksh 200 billion; raise the number of international visitors from 1.8 million (in 2007) to 3 million; raise average spending per visitor from Ksh 40,000 to at least Ksh 70,000; and increase hotel beds from 40,000 to about 65,000. Tourism is very important for the Kenyan economy but it is highly sensitive to economic, social and political instability.

This chapter assesses how the country has performed to date relative to the set targets and relative to performance in some comparator countries, and identifies the most binding constraints that must be addressed in order for tourism to meet high targets.

Performance Indicators

International tourist arrivals and visitors to parks and museums

Kenya's tourism sector performed poorly in 2008 due to the post-election violence, high crude oil prices and the global financial crisis. The volume of international arrivals decreased sharply by 33.8 per cent from about 1.8 million in 2007 to 1.2 million in 2008 (Table 10.1), unlike the situation in comparator countries, which experienced a slight growth in arrivals. Egypt had the highest growth in visitor arrivals of 15.9 per cent followed by Indonesia (13.2%), and Tanzania (8.4%). South Africa and Malaysia had modest growth of international arrivals of about 5 per cent. The sharp decline in both international arrivals to Kenya and visitors to its parks/reserves and museums was largely attributable to negative publicity (by both local and

international media) of the political situation in the country following the post-election violence in 2008.

Data for 2009, however, reveals that the sector is recovering from the 2008 crisis period. Tourism earnings and arrivals grew by 18.6 per cent and 23.9 per cent, respectively in 2009, attributed to political stability and successful tourism promotion in key source markets. Due to improved volume of local and international tourist arrivals, the number of visitors to game parks and reserves expanded by 45.9 per cent, while visitors to museums, snake parks and historical sites increased by 54.7 per cent (Table 10.1).

In the conferences sub-sector, the number of international and domestic conferences held increased by 3.7 per cent and 7.2 per cent, respectively in 2009 (compared to a decrease of 19.2% and 16.6%, respectively, in 2008), while the number of international and local delegates increased by 141.4 per cent and 67.9 per cent, respectively, compared to a decrease of 77.0 per cent and 63.5 per cent, respectively, the previous year. Among other opportunities for growth in the tourism sector, there is potential to generate revenue from conference tourism. Generally, the sector is still far from achieving the targets set for the 2010-2012 period.

Tourism earnings and per capita tourist expenditure

Tourism earnings increased to Ksh 62.5 billion in 2009 from Ksh 52.7 billion in 2008, representing a growth of 18.6 per cent. This remarkable increase in earnings was attributed to improvement in international arrivals mentioned earlier. Despite this performance, estimated tourist spending per capita declined by 4.3 per cent to Ksh 41,935 in 2009 from Ksh 43,807 in the previous year (Kenya National Bureau of Statistics, 2010). A possible explanation for this is that tourists opted for budget holidays (cutting down on spending) in response to the global financial crisis. In this scenario, therefore, increase in tourist arrivals contributed to increase in total revenue to compensate for reduced spending.

Although the earnings and arrivals for Kenya dropped in 2008, the per capita tourist expenditure actually rose from US$ 504 in 2007 to US$ 610 in 2008, a rate of increase that was the highest among comparator countries (Table 10.2).

However, the absolute level of per capita tourist expenditure in Kenya is still very low. For instance, it is almost one-third that of Tanzania and about half that of Mauritius (Table 10.2). Measures to substantially increase per capita tourist expenditure in Kenya should be at the top of priorities for the sector.

Table 10.1: Performance of tourism in 2008 and 2009

Performance Indicator	Performance in			
	2006	2007	2008	2009
International arrivals, No. (millions)	1.600	1.817	1.203	1.490
Visitors to game parks & reserves, No.	2,363,695	2,495,100	1,633,900	2,383,300
Visitors to museums, snake parks & historical sites, No.	559,764	598,400	493,200	763,100
Tourism earnings, Ksh billions	56.2	65.2	52.7	62.5
International conferences, No.	209	234	189	196
Domestic conferences, No.	2,120	2,528	2,107	2,258
International delegates, No.	45,063	52,318	12,024	29,025
Domestic delegates, No.	285,991	372,569	135,833	228,165

Source: Ministry of Tourism (2009); Kenya National Bureau of Statistics, Statistical Abstracts and Economic Surveys (various)

Table 10.2: Estimated per capita tourist expenditure for selected destination countries, 2006-2008

Country	Per Capita Spending (US$)			
	2006	2007	2008	% change
Malaysia	560	650	700	7.7
Tunisia	380	400	410	2.5
Mauritius	1300	1410	1560	10.6
Egypt	850	850	850	0.0
South Africa	970	970	800	-17.5
Tanzania	1440	1740	1800	3.4
Kenya	500	500	610	22.0
Thailand	970	1170	1200	2.5
Indonesia	900	980	1200	22.4

Source: World Tourism Organization-WTO (Various)

One measure in this direction may be marketing and promotion campaigns targeting source markets from which visitors to Kenya have demonstrated a tendency to spend more (and stay longer) compared to visitors from other countries. In 2009, for example, the average tourist from Australia and New Zealand spent in Kenya almost 90 per cent more than the overall average tourist (Table 10.3). This may be attributed to promotional campaign by Kenya Tourism Board targeting new markets in the Oceania region.

Average length of stay

One of the key determinants of per capita spending is the length of stay or number of nights spent in the

Table 10.3: Mean expenditure per visitor and average nights spent in Kenya, 2009

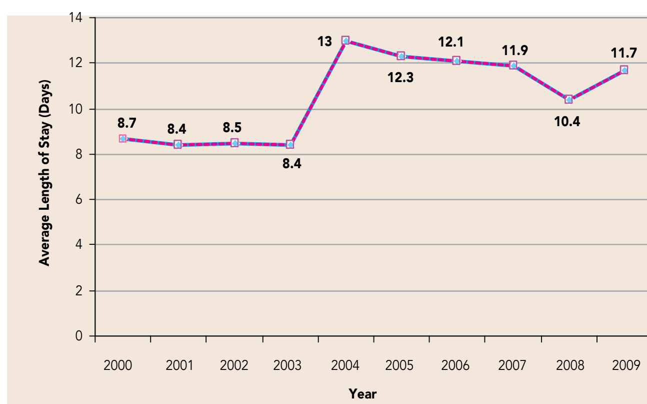
Country	Mean Expenditure per Visitor, Ksh.	Average Nights Spent in Kenya	Spending per Visitor Average per Day, Ksh
Australia and New Zealand	273,008	19	14,368.84
United Arab Emirates	268,141	22	12,188.23
USA	246,232	14	17,588.00
Other southern African countries	217,317	13	16,716.69
Other America	211,673	13	16,282.54
United Kingdom	208,260	13	16,020.00
Germany	190,113	18	10,561.83
Canada	187,416	14	13,386.86
China	186,605	28	6,664.46
Scandinavia	157,454	17	9,262.00
Italy	125,246	12	10,437.17
France	124,165	10	12,416.50
Other Europe	122,952	13	9,457.85
South Africa	116,815	8	14,601.88
Nigeria	114,491	10	11,449.10
India	82,922	22	3,769.18
North Africa	78,609	6	13,101.50
Japan	70,290	11	6,390.00
Other East and Central Africa	62,668	11	5,697.09
Middle East	59,729	4	14,932.25
Tanzania	32,582	10	3,258.20
Uganda	32,491	7	4,641.57
Average	144,054	13	11,081.08

Source: Government of Kenya (2009)

The absolute level of per capita tourist expenditure in Kenya is still very low. For instance, it is almost one-third that of Tanzania and about half that of Mauritius. Measures to substantially increase per capita tourist expenditure in Kenya should be at the top of priorities for the sector.

destination. This varies considerably among source markets, with a tourist from China having spent 28 nights on average in Kenya in 2009 compared to only 4 spent by a tourist from the Middle East. Overall, the average length of stay by visitors to Kenya improved considerably to 13 days in 2004 but declined to 10.4 days in 2008, then improved to 11.7 days in 2009 (Figure 10.1). As Kenya seeks to enhance the contribution of tourism to the economy, strategies to ensure sustained growth in average length of stay are urgent and critical.

Figure 10.1: Trends in average length of stay (days) for international visitors, 2000-2008



Source: Government of Kenya, Statistical Abstracts (various)

Bed nights and hotel occupancy rates

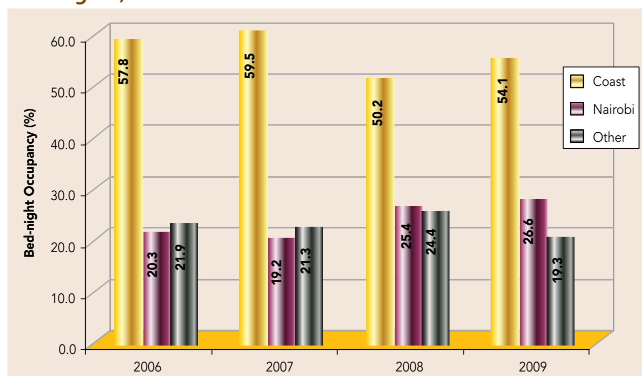
In 2009, bed night occupancy improved to 36.5 per cent, partly due to improved tourist arrivals and average length of stay, following the sharp decline to 26.0 per cent in 2008 from 47.2 per cent in 2007. Although hotel bed night occupancy at the Coast beaches dropped by 56.4 per cent during the period, there were improvements in all other regions of the country, with the exception of Maasailand and Northern Kenya (Kenya National Bureau of Statistics, 2010). Table 10.4 shows the average hotel occupancy rate for a few selected countries, including Kenya. The greatest reduction in hotel occupancy among the selected countries in 2008 was in Kenya at 42.9 per cent followed by China. Although Kenya's occupancy

Table 10.4: Hotel occupancy rates for selected countries, 2007-2009

Country	2007 (%)	2008 (%)	2009 (%)	% Change (2007 – 2008	% Change (2007 – 2009)	% Change (2008 – 2009)
Kenya	**47.1**	**26.9**	**36.5**	**-42.9**	**-22.5**	**35.7**
South Africa	60.1	59.9	52.5	-0.3	-12.6	-12.4
China	66.1	56.0	57.4	-15.3	-13.2	2.5
Korea Republic	84.0	81.0	69.5	-3.6	-17.3	-14.2
Thailand	47.6	44.4	50.0	-6.7	5.0	12.6
Singapore	87.0	81.0	75.8	-6.9	-12.9	-6.4
Indonesia	66.9	73.7	62.0	10.2	-7.3	-15.9
Malaysia	70.0	66.3	60.7	-5.3	-13.3	-8.4
India	75.1	73.0	62.0	-2.8	-17.4	-15.1
Mauritius	76.0	68.0	62.5	-10.5	-17.8	-8.1
Egypt	63.0	70.0	80.0	11.1	27.0	14.3

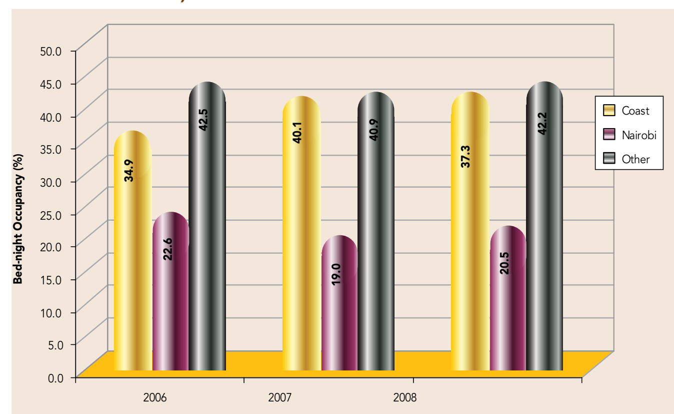
Source: Keny National Bureau of Statistics, and various country websites[1]

Figure 10.2: Distribution of hotel bed nights in Kenya by region, 2006-2009



Source: Kenya National Bureau of Statistics (various), Economic Survey

Figure 10.3: Distribution of bed nights occupied by domestic tourists, 2006-2008



Source: Kenya National Bureau of Statistics (various), Economic Survey

rate improved by 35.7 per cent in 2009 to 36.5 per cent–the highest among selected countries–it is yet to recover to the 2007 level, and it is still the lowest in the sampled countries.

The distribution of bed nights occupied by international tourists is still skewed, being still largely concentrated at the Coast. In 2009, the share for the Coast increased by 7.77 per cent over the previous year (to 54.1%) while that for Nairobi increased by 4.72 per cent (to 26.6%). Of concern is that the share of other regions declined in 2009 by 20.9% to 19.3 per cent (Figure 10.2). This suggests that the policy objective of regional dispersion of tourism is not being achieved. However, on a positive note, Kenya Vision 2030 proposes the development of 3 resort cities (Isiolo, Kilifi and Diani) in order to expand the accommodation capacity and also spread tourism benefits to less-visited areas. The Isiolo resort city proposed for construction around Isiolo area is meant to optimise the rich tourism potential presented by Mt. Kenya, Meru National Park, the Aberdares, and Samburu National Park, among others. A pre-feasibility study has already been completed for the Isiolo Resort City. Ongoing activities include conceptualizing the Isiolo Resort City Project idea by exploring suitable socio-economic activities befitting a resort city, project geographical area and land acquisition, infrastructural and service development requirements, funding, project institutional framework and action plan (Ministry of Tourism, 2009).

Distribution of bed nights occupied by domestic tourists is also still concentrated at the Coast, although this is slowly changing in favour of other parts of the country (Figure 10.3), i.e. Central, Maasailand, the Nyanza basin, Western and Northern regions. Coast's share declined to 37.3 per cent in 2008 while that of Nairobi and other regions increased to 20.5 per cent and 42.1 per cent, respectively.

Contribution to employment and poverty reduction

The tourism sector is a major source of employment, since it is labour-intensive. A marginal expansion in the sector generates more job opportunities than a similar expansion in other formal sectors of the economy. According to the National Tourism Master Plan (2005), it is estimated that out of ten new jobs generated in the modern sector, at least one job is created indirectly in the tourism sector. Due to its many linkages to other sectors (including agriculture, manufacturing, banking and finance, wildlife, entertainment and handicrafts), tourism has great potential to generate employment and wealth. However, even though Kenya has experienced remarkable growth in the tourism sector over the last five years, the effectiveness with which tourism contributes to poverty reduction, job creation and equity remains unknown.

Table 10.5: Number of wage-earners and aggregate earnings per sub-sector

	Number of Employees				Earnings by Industry (Ksh Millions)			
Tourism Activity / Sub-sector	**2000**	**2003**	**2007**	**2008**	**2000**	**2003**	**2007**	**2008**
Hunting, Trapping and Game Propagation	3,615	3,676	3,525	3,579	399.0	639.5	888.8	995.2
Forestry	17,491	16,771	14,807	14,856	2,435.0	2,822.2	3,192.5	3,178.5
Restaurants, Cafes, Other Eating and Drinking Places	10,906	11,508	13,536	13,903	1,702.3	2,899.0	5,789.0	4,913.3
Hotels, Rooming Houses, Camps, Other Lodging Places	38,994	37,511	43,909	43,414	11,398.9	18,401.0	38,023.0	16,349.4
Booking and Travel Agencies	1,176	1,119	2,446	2,551	377.5	520.0	1,754.0	2,218.4
Motion picture and other entertainment services	1,090	1,040	1,075	1,091	326.3	449.0	618.0	366.9
Libraries, Museums, Botanical and Zoological gardens	1,304	1,357	1,504	1,524	342.2	496.0	776.0	1,089.5
Pleasure Boat Hire	465	468	525	530	68.2	108.0	162.0	199.4
Other Amusement and Recreational Services	2,824	2,772	3,005	3,086	450.3	661.0	914.0	1,131.3
Photographic Studios including Commercial Photography	1,052	1,093	1,287	1,351	239.6	395.0	682.0	380.3
Hunting and Tourist Guide Services	1,305	1,410	1,752	1,750	262.3	423.0	695.0	843.7
Total	**80,222**	**78,725**	**87,371**	**87,635**	**18,001.6**	**27,813.7**	**53,494.3**	**31,665.9**

Source: Kenya National Bureau of Statistics (various), Economic Survey and Statistical Abstracts, 2001-2009

Generally, aggregate wage earnings in each sub-sector have been growing over the period 2000–2008 as shown in Table 10.5. The sub-sectors with the highest number of employees are Hotels, Rooming Houses, Camps and Other Lodging Places, and has also the highest wage bill. Overall, the number of employees in the eleven tourism sub-sectors given has remained more or less the same over the last three years.

Although the tourism sector has been constrained by lack of tourism satellite accounts, there has been some progress towards this. The Ministry of Tourism in conjunction with the Kenya National Bureau of Statistics has started work that will culminate in the development of satellite accounts.

Travel and Tourism Competitiveness Index (TTCI)

The World Economic Forum (WEF), in collaboration with the International Air Transport Association (IATA), the United Nations World Tourism Organization (UNWTO) and the World Travel and Tourism Council (WTTC) among other tourism-related bodies, has developed a Travel and Tourism Competitiveness Index (TTCI), which aims at measuring how different countries compare in terms of the attractiveness of factors and policies that are important for development of the travel and tourism (T&T) sector. The TTCI, launched in early 2007, is based on three broad categories of variables that facilitate or drive T&T competitiveness. These are:

1. Travel and Tourism Regulatory Framework–capturing those elements that are policy-related and generally under the purview of the government;
2. Travel and Tourism Business Environment and Infrastructure–capturing elements of the business environment and the infrastructure of each economy; and

3. Travel and Tourism Human, Natural and Cultural Elements–capturing the human and cultural elements of each country's resource endowments.

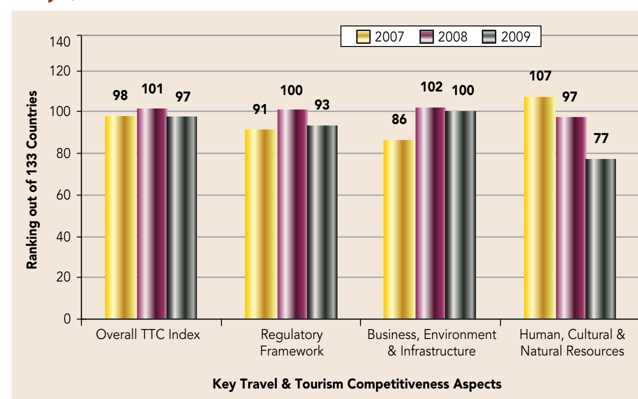
Each of these sub-indexes is composed of a number of pillars, which add up to 14 in total (World Economic Forum, 2009). This is a very useful index to gauge how competitive Kenya's Travel and Tourism Sector is relative to those of the comparator countries. Moreover, because of the large number of pillars, it is possible to identify the areas where Kenya's T&T sector is least competitive so that they can become the key focus of remedial interventions.

Overall competitiveness of Kenya's T&T sector

Given the importance of tourism in the Kenyan economy and the role the sector is expected to play in the pursuit of Kenya Vision 2030, the levels of its international and regional competitiveness are a major concern. It is ranked 18th in Africa, and 97th out of 133 countries.

The overall ranking for Kenya has hardly improved between 2007 and 2009, according to TTCI reports (Figure 10.4). Moreover, the ranking with respect to two of the three sub-indices (regulatory framework, business environment, and infrastructure) deteriorated over the period. On the positive side, the ranking with respect to human, cultural and natural resources improved dramatically from 107 to 77. Thus, the base for the T&T sector is

Figure 10.4 Travel and tourism competitiveness index for Kenya, 2007-2009



Source: World Economic Forum (2007; 2008; 2009)

Table 10.6: Kenya's T&T competitiveness relative to selected countries (rank out of 133 countries), 2009

Competitiveness of Kenya's Tourism	Kenya	S. Africa	Mauritius	Tanzania	Malaysia	Singapore	Egypt	Botswana	South Korea
Kenya's Most Competitive Aspects									
Prioritization of Travel and Tourism	12	60	1	33	23	2	9	43	52
Environmental Sustainability	16	44	53	32	54	42	103	62	55
Hotel Price Index	16	38	87	35	6	73	4	-	97
National Tourism Perception	25	22	130	3	21	94	109	34	91
Affinity for Travel and Tourism	50	43	3	33	21	10	20	49	114
Kenya's Least Competitive Aspects									
Safety and Security	121	128	40	98	59	10	67	49	71
Health and Hygiene	121	94	60	127	69	53	64	97	37
Ticket Taxes and Airport Charges	111	70	83	71	13	36	4	15	31
ICT Infrastructure	110	80	59	120	46	17	84	93	8
Extent and Effect of Taxation	110	25	8	71	20	5	34	19	31
Hotel Rooms Availability	109	91	35	106	45	34	74	72	93
Business Environment and Infrastructure[2]	100	63	49	118	35	5	58	79	44

Source: World Economic Forum (2009)

very competitive although the policy, regulatory, infrastructure and business environments have to be improved.

Most competitive aspects of Kenya's T&T sector

The aspects in which Kenya's T&T sector is most competitive are prioritization of the sector in the country, where it is ranked 12th overall, environmental sustainability, price of hotel rooms, national tourism perception, and affinity for travel and tourism (Table 10.6). Prioritization of tourism is demonstrated by high government priority on the sector and effective destination marketing and branding campaigns. However, the country's ranking on government expenditure on T&T and country presence at international fairs and exhibitions hardly improved over the last three surveys. There is a strong focus on environmental sustainability in the country, which is particularly important for Kenya given the sector's dependence on the natural environment.

Regarding its natural resources, Kenya has two World Heritage natural sites and a rich diversity of fauna. However, there is urgent need to improve the country's sports stadiums in order to promote 'sports tourism' and also develop innovative cultural products. The 2010 Soccer World Cup competition in South Africa, for example, was a way to uplift tourism in that country to new heights. With regard to national tourism perception (that is, openness to tourism and attitudes towards tourists), Kenya has scored average performance, implying there is still room for improvement. In particular, while Kenya's ranking with respect to recommendation to extend business trips improved considerably between 2007-2009, the country's ranking on attitude towards tourists remained more or less the same, while that on tourism openness worsened.

It is evident, therefore, that Kenya's travel and tourism sector is competitive on the fundamental areas, including prioritization of the sector by the government, support of and a positive attitude towards the sector by the domestic population, richness of the resource base, and hotel prices. Although Tanzania is less competitive than Kenya in various tourism aspects (including prioritization of travel and tourism; environmental sustainability; hotel price index; health and hygiene; ICT infrastructure; business environment and infrastructure), it is more competitive than Kenya in areas of national tourism perception (ranked 3 out of 133 countries); affinity for travel and tourism; safety and security; ticket taxes and airport charges; and extent and effects of taxation.

Comparing tourist arrivals and receipts for the two countries, it is interesting to note that although Kenya receives more tourists than Tanzania (1,800,000 and 692,000, respectively, in 2007), Tanzania received more tourism revenue (US$ 1,037 million and US$ 911 million, respectively). This is attributed to Tanzania's excellent national tourism perception and promotion of package tourism, which leads to higher per capita tourist spending in the country. Given that over 70 per cent of Kenya's international tourists come on non-package tours, there is need for Kenya to promote these aspects too (World Economic Forum, 2009). With regard to ICT infrastructure, several Kenyan hotels do not accept online booking using major credit cards due to legal barriers and insecurity. Tourists on package tours prefer to book everything (transport, accommodation, etc.) from home. Given that Kenya is now linked to the world via the fibre optic cable, there is potential to grow online booking services. Pertaining to security, there is need to strengthen the tourist police department and address the issue of Kenya's porous borders in the northern part of the country.

Underlying Challenges

The year 2008 was very difficult for the Travel & Tourism (T&T) sector. Globally, high oil prices, the financial crisis, concerns about terrorism, and uncertainty regarding influenza A (H1N1) virus were major challenges. Due to the impact of these factors, international tourist arrivals declined by 4.2 per cent in 2009 to 880 million, while international

tourism receipts reached US$ 852 billion in 2009, corresponding to a decrease in real terms of 5.7 per cent in 2008. Except for Africa, which recorded a positive growth of 3 per cent, all world regions recorded negatives in 2009: Europe (-6%), the Middle East (-5%), the Americas (-5%), Asia and the Pacific (-2%).[3] Locally, the post-election violence of early 2008 dealt a big blow to the sector that had been on an unprecedented growth momentum.

A closer analysis of the Travel and Tourism Competitiveness Index and its pillars and elements, disaggregated as much as possible, reveals the main challenges hindering competitiveness of Kenya's T&T sector (Table 10.7). The most important ones include safety and security, where Kenya is ranked 121st, health and hygiene, ticket taxes and airport charges, extent and effect of taxation, usage of ICT in the tourism industry (such as online booking), hotel room availability and business environment and infrastructure (e.g., processes required to establish a tourism-related enterprise). These are discussed in more details in the following sub-sections:

Regulatory framework

Since 2007 when TTCI was launched, Kenya's ranking on regulatory framework has hardly improved, largely because of serious challenges on the following aspects (Table 10.7):

1. Safety and security

Table 10.7: Ranking of Kenya's T&T sector on regulatory framework, 2007-2009

Regulatory Framework Aspects	Kenya's Ranking Out of 133 countries		
	2007	2008	2009
Overall Regulatory Framework	91	100	93
Policy Rules and Regulations	116	101	90
• Visa Requirements	113	80	87
• Openness of Bilateral Air Service Agreements	108	112	115
• Rules Governing Foreign Direct Investment	90	83	79
• Property Rights	83	87	81
• Foreign Ownership Restrictions	60	60	57
Environmental Sustainability[4]	60	19	16
Safety and Security	116	120	121
• Business Costs of Terrorism	117	124	128
• Business Costs of Crime and Violence	114	123	125
• Reliability of Police Services	90	96	88
Health and Hygiene	106	118	121
• Life Expectancy	107	115	117
• HIV Prevalence[5]	114	120	124
• Access to Improved Drinking Water	99	108	121
• Access to Improved Sanitation	86	106	106
• Hospital Beds	-	81	93
• Physician Density	107	113	115
Prioritization of Travel and Tourism	19	20	12
• Government Prioritization of T&T Industry	35	27	17
• Government Expenditure on T&T Industry	18	19	19
• Effectiveness of Marketing and Branding	26	16	9
• Attendance in T&T Fairs	23	45	25

Source: World Economic Forum (2007, 2008, and 2009)
Note: T&T = Travel and Tourism

2. Health and hygiene
3. Policy rules and regulations, especially inadequate openness of Bilateral Air Service Agreements and visa requirements.

The low ranking on safety and security is attributable to high business costs of terrorism, high business costs of crime and violence, and reliability of police services (Table 10.7). Kenya's ranking on health and hygiene is not only very poor but has also been deteriorating over the last three surveys. Worse still, this has been the pattern for all the elements under health and hygiene (life expectancy, HIV prevalence, access to improved drinking water, access to improved sanitation, hospital beds, and physician density). The country has to make adequate investment to improve its health and hygiene outcomes. Regarding safety, there is need to address the factors that lead to the country being perceived as insecure, including by fostering national cohesion, and then market Kenya as a safe destination.

Moreover, the policy environment is at present not very attractive to the development of the sector, with Bilateral Air Service Agreements that are not open, insufficiently protected property rights, a lengthy and expensive process of starting a business, and policy rules related to visa requirements for visitors.

The government has initiated various policy changes within the Medium Term Plan 2008-2012, including preparation of draft Tourism, Wildlife and Heritage policies that have been tabled before Parliament. The Tourism Bill 2010 provides for development, management, marketing and regulation of sustainable tourism and tourism-related activities and services, and for connected purposes. It proposes the establishment of the following institutions:

- Tourism regulatory, development and marketing bodies, namely: **Directorate of Tourism** for formulation of the national tourism strategy; **Kenya Tourism Regulatory Authority**; **Kenya Tourism Protection Service** (to formulate policies and ensure, in consultation with the national security agencies, the safety and security of visitors and hosts in respect of all tourist destinations in the country); and the **Kenya Tourism Board** to market Kenya as a tourist destination, which is already operational.
- **Kenya Tourism Research Institute** to undertake and coordinate tourism research and analysis.
- Financial bodies, namely **Kenya Tourism Fund** (to support the development of tourism products and services; finance marketing of Kenya as a tourist destination through the Tourism Board; to mobilize resources to support tourism-related activities); and **Kenya Tourism Finance Corporation** (to provide financial assistance for development, expansion and maintenance of tourism facilities and services; provide business advisory services to the tourism sector; and establish a reserve fund).
- **A Tribunal** to handle various disputes arising in the tourism industry.

However, the proposed Act is silent on the strategy to identify and develop World Heritage Sites, both natural and cultural, and to develop new tourist products. Research and development of new products, shopping and amusement facilities would directly and/or indirectly increase per capita tourist spending in the country.

In order to counter the downward trend experienced in 2008 in the sector, the government implemented the Tourism Recovery Initiative in the 2008/09 financial year, encompassing aggressive marketing of the country's tourism beyond the traditional markets. In addition, a specialized Tourist Police Unit was established within the police to provide security to tourists. Foreign missions abroad have been actively involved in countering negative publicity of Kenya as a tourist destination.

Government expenditure in the tourism sector

The Ministry of Tourism runs one major programme: tourism development and marketing. It has six sub-programmes, namely International Tourism

Table 10.8: Analysis of total expenditure, Ministry of Tourism, 2006/07-2008/09

Recurrent Budget	Approved Estimates (Ksh M) 2006/07	2007/08	2008/09	Actual Expenditure (Ksh M) 2006/07	2007/08	2008/09
Compensation to Employees	299.3	110.3	116.5	296.6	108.4	109.4
Use of Goods and Services	315.1	275.5	359.2	283.8	273.5	339.7
Grants, Transfers and Subsidies	1020.3	588.9	1000.5	1041.3	588.5	999.95
Acquisition of Non-Financials Assets	26.5	16.96	30.7	21.6	15.1	25.2
Total Recurrent Budget	**1661.2**	**991.7**	**1506.9**	**1643.3**	**984.5**	**1,474.3**
Development Budget						
Use of Goods and Services	-	-	10	-	-	9.9
Grants, Transfers and Subsidies	485.3	40	388	442.6	40	388
Acquisition of Non-Financials Assets	71.7	80	40.5	61.5	85.8	24.5
Total Development Budget	**557**	**120**	**438.5**	**504.1**	**125.8**	**422.5**
Total Expenditure	**2218.2**	**1111.7**	**1,945.4**	**2147.5**	**1110.4**	**1,896.8**
Recurrent as % of Total	74.9	89.2	77.5	76.5	88.7	77.7
Development as % of Total	25.1	10.8	22.5	23.5	11.3	22.3

Source: Ministry of Tourism (2009)

Promotion and Marketing; Domestic Tourism Promotion and Marketing; Conference Tourism Development; Cultural Tourism Development; Product Standardization and Classification; and Tourism Infrastructure Development.

Despite the importance of the Ministry of Tourism in foreign exchange generation, funding levels have been very low over the last three years, hampering effective implementation of some of the crucial programmes and flagship projects envisaged in the current Medium Term Expenditure Plan (MTEP). In 2007/08 and 2008/09 financial years, the ministry received Ksh 1.1 billion and Ksh 1.9 billion, respectively, against its requirements of over Ksh 6 billion annually (Table 10.8), thus a deficit of

Table 10.9: Analysis of total expenditure by tourism programmes, 2006/07-2008/09

Budget Items		Approved Estimates (Ksh Millions) 2006/07	2007/08	2008/09	Actual Expenditure (Ksh Millions) 2006/07	2007/08	2008/09
Tourism Promotion and Marketing	International	738.0	732.7	1,074.5	726.3	725.0	1,069.1
	Domestic	83.1	95.3	166.7	72.8	104.0	146.5
	Sub-total	**821.1**	**828.0**	**1,241.2**	**799.1**	**829.0**	**1,215.6**
Conference Tourism Development		(47.5)	-	287.1	(26.3)	-	286.9
Cultural Tourism Development		75.4	183.9	255.1	75.2	188.0	254.6
Product Standardization & Classification		49.6	74.2	102.0	45.3	69.4	92.0
Tourism Infrastructure Development Resort Cities Development (KTDC)		1.7	25.6	60.0	1.7	25.0	47.7
Wildlife Conservation & Management		1,317.9	-	-	1,252.5	-	-
Total Budget		2,218.2	1,111.7	1,945.4	2,147.5	1,110.4	1,896.8
Promotion and Marketing as a % of Total		**37.0**	**74.5**	**63.8**	**37.2**	**74.7**	**64.1**

Source: Ministry of Tourism (2009)

over Ksh 4 billion. The recurrent budget constitutes 78 per cent of the overall allocation while the development budget takes 22 per cent, which is far below the recommended budget index. Subsidies, grants and other transfers consume 71 per cent of the resources, leaving a balance of 29 per cent only to support other ministry's activities. The ministry's approved budget reduced by half in 2007/08 due to reorganization, whereby the funds allocated to Kenya Wildlife Service were moved to the Ministry of Forestry and Wildlife when KWS was moved to this ministry (Ministry of Tourism, 2008/2009). Although the Ministry is able to maintain its expenditure within the approved budget (Table 10.8), the budget deficit of Ksh billion is even more pronounced when inflation is taken into account, implying that the Ministry will require more funds to finance flagship projects in 2011/2012.

Disaggregated total expenditure by programmes (Table 10.9) shows that allocation to tourism promotion and marketing has been varying over the period (between 37.2% and 74.7%), with the highest being 74.7 per cent in 2007/08.

Given the huge role played by the public sector in the tourism sector, there is need for adequate funding to the sector. The establishment of the two financing bodies–Kenya Tourism Finance Corporation and Kenya Tourism Fund–will go a long way in supporting the establishment of vibrant tourism enterprises and structures. The Tourism and Wildlife Bills, once enacted, are expected to bring about the necessary legal reforms in wildlife management and allow KTDC to increase its borrowing capacity to Ksh 1 billion. In the meantime, there is need to increase the government's development budget to

Table 10.10: Ranking of Kenya's T&T sector on business environment and infrastructure aspects, 2007-2009

Business Environment and Infrastructure Aspects	Kenya's Ranking Out of 133		
	2007	2008	2009
Overall Business Environment & Infrastructure	86	102	100
Air Transport Infrastructure	71	73	77
• Departures per 1000 Population	81	96	96
• Airport Density[6]	63	102	106
• International Air Transport Network	59	58	59
• Number of Operating Airlines	53	52	54
• Available Seat Kilometres (International)[7]	51	52	53
• Quality of Air Transport Infrastructure	50	51	68
Ground Transport Infrastructure	84	107	98
• Quality of Road Infrastructure[8]	101	100	95
• Quality of Railroad Infrastructure[9]	78	74	68
• Quality of Port Infrastructure[10]	74	85	83
• Quality of Domestic Transport Network	73	116	82
Tourism Infrastructure	71	98	98
• ATMs Accepting Visa Cards	95	98	98
• Presence of Major Car Rental Companies	66	74	73
• Availability of Hotel Rooms[11]	-	106	109
ICT Infrastructure	93	108	110
Price Competitiveness	82	75	70
• Ticket Taxes and Airport Charges[12]	100	114	111
• Extent and Effect of Taxation[13]	106	113	110
• Hotel Price Index[14]	-	15	16
• Fuel Price Levels[15]	69	77	77

Source: World Economic Forum (2007, 2008, and 2009)
Note: T&T = Travel and Tourism

the tourism sector in order to realize implementation of the four key flagship projects planned for under the current MTP, namely: development of three resort cities (Isiolo, Diani and Kilifi); premium parks initiative (entry fees to Amboseli and Lake Nakuru National Parks raised to US$ 60 to facilitate control of numbers due to fragility of the environment, and high demand for the sites); Under-utilized Parks Initiative, which involves revitalization of 13 sites; and development of niche products (Ministry of Tourism, 2010).

Business environment and infrastructure

Kenya's ranking on business environment and infrastructure has worsened since 2007 when the TTCI was launched (Table 10.10), suggesting that the reforms that have been made in this area have been inadequate relative to what other countries have done. The most serious challenges are:

1. ICT infrastructure
2. Availability of hotel rooms

Table 10.11: Road density and fuel price, 2008

Destination	Road density (Km. of road per 100 sq. km. of land area)	Fuel price Super grade gasoline	(US$ / Litre) Diesel
Singapore	105	1.07	0.90
Korea, Republic	21	0.76	0.95
Malaysia	28	0.53	0.53
Mauritius	99	0.74	0.56
Thailand	35	0.87	0.64
Brazil	20	1.26	1.03
South Africa	30	0.87	0.95
China	36	0.99	1.01
India	100	1.09	0.70
Egypt	9	0.49	0.20
Indonesia	20	0.60	0.46
Botswana	4	0.88	1.02
Tanzania	8	1.11	1.30
Kenya	11	1.20	1.14

Source: World Bank (2009)

3. Airport density
4. Airport infrastructure as measured by departures per 1000 population.

Ground transportation, number of ATMs that accept visa cards and cost of fuel are other important challenges. Table 10.11 shows how poorly Kenya is doing in relative terms on road density and price competitiveness of fuel. Fuel costs in Kenya are approximately twice those in Egypt and Malaysia, seriously affecting the country's T&T competitiveness. Kenya needs to do much more to increase road density, which would have the added advantage of opening up new regions of the country to tourism.

Regarding the hospitality industry, only 18 per cent of Kenyan hotels are 4-5 star categories, which is significantly lower than the average 40 per cent in competing long-haul destinations. To increase competitiveness, there is need to expand product choice and improve on quality of facilities and services (Ministry of Tourism, 2010).

Human, cultural and natural resources

While Kenya's competitiveness on human, cultural and natural resources has improved considerably since 2007 (Table 10.12), the following aspects need to be addressed:

1. Inadequate number and poor quality of sports stadiums
2. Quality of natural environment
3. Number of World Heritage sites
4. Human resources
5. Tourism openness

The recent introduction of the Air Passenger Duty (APD) for departures from United Kingdom airports to long-haul destinations is also likely to be a major challenge, as it will increase taxes from between £90 (about Ksh 11,088) to £100 (about Ksh 12,320). This is serious given that the UK is one of the biggest source markets for Kenya. The APD

Table 10.12: Ranking of Kenya's T&T sector on human, cultural and natural resources aspects, 2007-2009

Human, Cultural and Natural Resources Aspects	Kenya's Ranking Out of 133 countries		
	2007	2008	2009
Overall Human, Cultural and Natural Resources	**107**	**77**	**77**
Human Resources	100	105	100
Affinity for Travel and Tourism	-	60	50
National Tourism Perception	75	26	25
• Tourism Openness[16]	77	70	82
• Recommendation to Extend Business Trips	57	53	26
• Attitude Towards Tourists	18	26	22
Natural and Cultural Resources	98	-	114
• Naturally Protected Areas	53	49	57
• Quality of Natural Environment	-	92	90
• Total Known Species	-	13	14
• Number of World Heritage Sites	60	83	82
• Sports Stadiums	-	111	113
• Number of International Fairs and Exhibitions	-	72	73

Source: World Economic Forum (2007, 2008, 2009)
Note: T&T = Travel and Tourism

is billed as an environmental tax. The increased duty was to be implemented in two stages, from November 2009 and November 2010.

Wildlife tourism in Kenya is currently concentrated in only 7 parks, which receive 80 per cent of the total number of visitors. There is, therefore, great potential in targeting the under-visited parks and reserves (Ministry of Tourism, 2010).

Policy Options

In order for Kenya to achieve the target of becoming among the top 10 long-haul tourist destinations, priority focus should be placed on the aspects where competitiveness is poor and worsening, such as health and hygiene, security and safety, high taxation rates and airport charges, among others.

Specific measures recommended include the following:

1. Immediately review the tax rates incident on T&T, especially on tickets, airport charges and other taxes that can be identified, in consultation with industry players. This measure could have a quick stimulus effect on the sector and thus the rest of the economy. Park rates should be based on ability to pay by visitors in order to encourage domestic tourism.

2. Increase government expenditure to the health sector and to police services to enhance security and safety. On these two areas, the government should set ambitious output and outcome targets to be achieved within three years, and the required resources committed in the budget.

3. Establish a Standing Task Force to identify and develop World Heritage sites, both natural and cultural, and to develop new tourist products every year. For instance, the country has enormous potential in sports tourism, conference tourism, ecotourism and medical/health tourism since the country has attractive and advanced medical care facilities, highly qualified medical professionals and affordable specialized medical care in the region. Development of new products and facilities would increase the expenditures in shopping, recreation, handicraft and amusement. Besides developing new tourist products, the task force would recommend incentives for the private sector to develop and market new products.

4. Target specific source markets for marketing and

promotion campaigns. Kenya should focus on tourists from specific regions who stay longer and spend more, e.g. Australia and New Zealand, UAE, as recorded in 2009/2010, since this is critical in raising annual tourism revenue. One way to do this is to negotiate Bilateral Air Agreements, special air fare rates, visa and other taxes/charges with the target countries. According to the Ministry of Tourism (2010), the government will enhance public-private-partnerships in tourism promotion and branding; ensure Kenya missions abroad are well-equipped to handle tourism issues; and to eliminate barriers in the issuance of visas to foreign nationals intending to visit the country without compromising national security. Kenya can learn from Malaysia, which is succeeding in targeting Muslims from the Middle East who stay twice as long as tourists from other parts of the world and spend nearly three-times more money.[17]

5. Promote establishment of SMEs in the tourism sub-sectors through dedicated funds and other incentives to create more employment. Over the last five years, the tourism sector's contribution to employment generation is estimated to have grown by about 3 per cent annually, while earnings per employee grew by 18 per cent.

Endnotes

1 **Kenya:** KNBS, 2010;

China: http://www.bizchina-update.com/content/view/1848/2;

India: http://www.business-standard.com/india/news/hotel-occupancy-may-hit-record-low/346596;

Mauritius: http://www.tropicscope.com/mauritius_information/mauritius_hotels.php; http://www.tourismroi.com/InteriorTemplate.aspx?id=32204 ; http://www.hospitalitynet.org/news/4042051.search?query=cache

Thailand: http://www.travelmole.com/stories/1143521.php?mpnlog=1 ; http://www.thaiwebsites.com/tourism.asp

Indonesia: http://business.globaltimes.cn/world/2009-07/449754.html ;

Egypt: http://af.reuters.com/article/investingNews/idAFJOE52K08520090321; http://www.arabianbusiness.com/550210-hotel-occupancy-rates-dip-in-egypt; http://internationalhorizons.wordpress.com/2009/12/04/egypt-tourism-industry-making-a-comeback-80-occupancy-rates/

Korea Republic: http://www.hotelresource.com/modules.php?op=modload&name=trends&file=detail&sid=43995;

All Countries: Smith Travel Research (STR Global, 2009 & 2010); http://www.strglobal.com

2 This indicator includes air transport infrastructure, ground transport infrastructure, and price competitiveness

3 UNWTO Tourism Highlights; http://www.unwto.org/facts/eng/pdf/highlights/UNWTO_Highlights10_en_HR.pdf

4 Stringency of environmental regulation, enforcement of environmental regulation.

5 HIV prevalence as a percentage of adults aged 15–49 years.

6 Number of airports per million population

7 Scheduled available seat kilometres per week originating in country (in millions).

8 The country's national ground transport network (buses, trains, taxis, etc.) offers efficient, accessible transportation to a wide range of travellers to key business centres and tourist attractions within the country. (1 = strongly disagree, 7 = totally agree).

9 Railroads in your country are (1 = underdeveloped, 7 = extensive and efficient by international standards).

10 Port facilities and inland waterways in your country are (1 = under-developed, 7 = extensive and efficient by international standards)*.

11 Measured as number of rooms per 100 population.

12 Index of relative cost of access (ticket taxes and airport charges) to international air transport services (0 = highest cost, 100 = lowest cost).

13 The level of taxes in your country (1 = significantly limits the incentives to work or invest, 7 = has little impact on the incentives to work or invest).

14 Average room rates calculated for first-class branded hotels for calendar year in US$.

15 Retail diesel fuel prices (US cents per litre).

16 Tourism expenditure and receipts as a percentage of GDP.

17 Source: Malaysia Tourism Report Q1 2010.

11 Infrastructure and Economic Services

Introduction

This chapter covers key issues in Kenya's infrastructure sector and related economic services. The introduction gives an overview of what infrastructure entails. The first section deals with the sector's significance. This is followed by highlights on expenditure review and policy setting. Financing issues are dealt with in the third section. The contribution of infrastructure to GDP, Kenya's performance on various infrastructure indicators by sub-sector in comparison to selected comparators, and issues of employment creation and inequality are all discussed in the fourth section. Key achievements, outstanding issues and policy challenges within the infrastructure sector are tackled in the fifth section. The last section articulates the main conclusions and recommendations that cut across the entire range of Kenya's infrastructure and economic services.

Sector Significance

Infrastructure refers to the basic structures, both physical and organizational, or the services and facilities that support the operations of a society or enterprise. The linkage between infrastructure, employment and wealth creation and equity is well documented. First, sound infrastructure lowers transaction costs by facilitating flow of information and goods, and interactions between markets. Second, infrastructure investment creates the potential for economic linkages. In particular, the ability to move goods makes investment viable. Third, provision of infrastructure concentrates economic activity spatially, thus supporting backward and forward linkages. Fourth, depending on the quality of infrastructure delivered, economies undergoing restructuring are able to respond to shocks, competitive pressures and value-added production. Fifth, access to infrastructure services could improve the capacities for producing goods and services in communities. Sixth, irrigation systems, transport routes and other infrastructure assets hold the potential for creating viable assets and markets. Seventh, infrastructure expansion creates jobs during construction and maintenance phases and finally, infrastructure expansion also boosts demand in the economy, thereby supporting forward linkages.

Infrastructure is key to economic growth and development of any nation. It facilitates economic activities and is critical to a country's competitiveness. The performance of infrastructure sectors has been good between the period 2006 to 2009, apart from electricity and water sectors, whose contribution to growth was between -0.5 per cent and -2.8 per cent. The source of growth from

the transport and communications sector increased from 18.8 per cent in 2006 to 29.5 per cent in 2009. This is a strong indication that the sector is one of the leading contributors to the country's wealth. Real estate and dwellings recorded a growth rate of 3.5 per cent, which increased to 6.2 per cent in the same period, while construction increased from 3 per cent to 17.5 per cent (Kenya National Bureau of Statistics, 2010).

The state and current investment in the infrastructure sub-sector determines future growth of the economy as well as economic sustainability. Energy, transport, water and sanitation, ICT, and construction and housing facilitate economic activities, while at the same time playing a key role in employment creation and reduction of inequality. A recent study in February 2009 on *Africa's infrastructure: A time for transformation, Kenya's infrastructure: A continental perspective,* by the World Bank (2009), argued that infrastructure contribution to growth in Kenya has been lower than in other African countries such as Mauritius, Uganda, Tanzania, and South Africa. The study considered telecommunications, electricity and roads.

However, the study noted that positive developments have been achieved in Kenya. When benchmarked against other countries, infrastructure in Kenya is of good quality and there is adequate connectivity, but of low density. The use of fuel levies, which are promptly collected, has been well-aligned with maintenance needs and key priorities. The port of Mombasa was noted as one of the largest in sub-Saharan Africa and has key advantages of being a natural transhipment port for East Africa.

As far as infrastructure is concerned, Vision 2030 envisages a country firmly interconnected through a network of roads, railways, ports, airports, waterways, and telecommunications infrastructure. Vision 2030 also requires reliable and sustainable energy. For example, the desired economic growth rate of 10 per cent requires a huge supply of energy and one which is clean for environmental sustainability. In addition, economic growth, reduction of income inequalities, and poverty alleviation depend on the quality and comprehensive coverage of infrastructure networks. Efficient transport infrastructure is needed to ensure mobility and connectivity; both factors are essential to national and regional market integration and connection to core economic activities and basic services.

According to the World Bank (2009), over the period 2003-2007, Kenya's economic growth averaged 5.3 per cent, compared with only 2.3 per cent in the previous decade. Notwithstanding this improvement, current growth levels still fall short of the sustained 7 per cent per annum needed to meet the Millennium Development Goals. About 0.38 per cent of East Africa's improved per capita growth performance during the 2000s is attributed to improved structural and stabilization policies. However, as much as 0.94 per cent of this per capita growth is related to improvements in the country's infrastructure platform over that period. This was primarily due to Kenya's ICT revolution, whereas the deficient quality of road infrastructure actually proved to be a slight drag on growth. Simulations suggest that if Kenya's infrastructure platform could be improved to the level of the African leader–Mauritius–per capita growth rates could increase by 3.3 per cent per annum. A substantial share of this impact would come from improvements in the power sector alone.

Expenditure Review and Policy Setting

Public expenditure on physical infrastructure has, in the past five years, increased tremendously. According to the Public Expenditure Review 2009 (Government of Kenya, 2009), both development and recurrent expenditures saw huge increases. In 2004 and 2005, recurrent and development expenditure increased from Ksh 13.6 billion and Ksh 11.7 billion, respectively, to over Ksh 40 billion and Ksh 90 billion in 2009 and 2010, respectively. This has mainly been driven by massive investment in road and energy sub-sectors (Table 11.1). There

is a shift in dedication of infrastructure spending from recurrent to development expenditure, and the policy seems to be working well. The condition of roads and other infrastructural facilities in the country has significantly improved.

With regard to physical infrastructure expenditures by sub-sector, the roads sub-sector has received the highest allocation. Its recurrent public expenditure increased from about Ksh 9.9 billion in 2004/05 to Ksh 16.5 billion in 2007/08, an increase of 66.3 per cent. In the same period, development expenditure increased from Ksh 4.8 billion to 24.6 billion, an increase of 409 per cent. This is an indication that more emphasis has been placed on road construction and long term infrastructure development than in the earlier years when recurrent expenditure on roads was prominent due to increased maintenance costs. Within the same period, donor-funded roads projects increased from Ksh 7 billion to Ksh 25 billion (increased by 261.7%). The Kenya Roads Act, 2007, assigned the overall responsibility for management of the entire road network to the Ministry of Roads through five agencies, namely: The Kenya National Highways Authority (KeNHA); the Kenya Rural Roads Authority (KeRRA); the Kenya Urban Roads Authority (KURA); the Kenya Wildlife Service (KWS), and the Kenya Roads Board (KRB). The first four agencies are responsible for planning and implementation of road works programmes, while the KRB is responsible for the management of the Road Maintenance Levy Fund (RMLF).

The government has a Road Sector Investment Programme (RSIP) whose main purpose is "to provide good roads for a globally competitive and prosperous Kenya". Its specific objective is to provide an investment programme for the entire road network for the next 15 years in order to optimize the utilisation of the available financial and other resources. In the transport sub-sector, recurrent expenditures declined from Ksh 2.98 billion in 2004/5 to Ksh 1.97 billion in 2007/08 (reduced by 34%), while development expenditure increased from a low of Ksh 535 million to Ksh 3.2 billion (increased by 506%). This was mainly driven by concessioning of the railway, which led to reduction of allocation from government.

The energy sub-sector has not seen much improvement with regard to recurrent expenditure but much progress has been made in development expenditure. As can be seen from Table 11.1, recurrent expenditure increased from only Ksh 225 million in 2004/05 to Ksh 290 million in 2007/08. However, development expenditure increased from Ksh 5.9 billion to Ksh 17.7 billion (199%). Within the same period, donor-funded projects for the energy sector increased from Ksh 4.56 billion to Ksh 6.77 billion (48.3%). The implication is that Kenya is going to see increased investment in infrastructure and, therefore, improvement in delivery of services in the economy.

Financing of Infrastructure

For low-income countries such as Kenya, infrastructure investments have alluring benefits but also daunting costs. Where transportation, communication and power generation are inadequate, their provision can do much to boost productivity and growth. However, where income and productivity are depressed by inadequate infrastructure, the financial resources needed to underwrite infrastructure investments are difficult to mobilize. With the lack of infrastructure limiting finance and the lack of finance limiting infrastructure, countries can find themselves in a low-level equilibrium trap from which it is difficult to break away. Kenya is currently heavily investing in infrastructure projects due to the enormous benefits that accrue from such projects.

In Kenya, much of the funding for infrastructure is from government sources and development partners but in recent times private sector participation has increased, especially in the ICT sector. The government has also come up with new initiatives of financing infrastructure investment and development by introducing long term instruments in the debt market through the Central Bank of Kenya, where citizens can participate

Table 11.1: Analysis of expenditure on physical infrastructure sectors (Ksh millions)

Year	2004/05	2005/06	2006/07	2007/08	2008/09*	2009/10*	% Change
Analysis of Actual Recurrent Expenditure							
Sub-sectors							
Roads	9,965	8,017	9,046	16,567	21,159	21,435	115.10
Transport	2,984	3,177	3,367	1,968	3,214	3,363	12.70
Public Works	-	-	-	709	3,443.59	3383.96	-
Housing		862	1,067	1,294	1,716	1,857	-
Energy	225	248	297	290	366	372	65.33
Local Government	486	722	743	973	10,547	11,308	2,226.75
Nairobi Metropolitan	-	-	-	37	268	339	
Sub-total	13,660	13,026	14,520	21,838	38,261	40,049	193.18
Analysis of Development expenditure							
Sub-sectors							
Roads	4,824	16,057	19,402	24,596	42,353	46,437	862.62
Transport	535	683	4,177	3,244	4,231	2,481	363.74
Public Works	-	-	-	1454	2597	2267	-
Housing	0	195	615	1284	2,330	2,066	-
Energy	5,913	7,733	8,208	17,704	30,386	31,260	428.67
Local Government	496	955	1,664	2,796	3,517	3,462	597.98
Nairobi Metropolitan	-	-	-	-	2,050	1,690	
Sub-total	11,768	25,623	34,066	51,078	88,328	90,449	668.60
Analysis of donor- funded programmes -physical infrastructure							
Sub-sectors	2004/05	2005/06	2006/07	2007/08	2008/09*	2009/2010*	
Roads	7,060	8,785	12,807	25,543	25,558	26,000	268.27
Transport	178	-	7,090	4,789	2,739	1,943	991.57
Public Works	-	0	-	115	80	-	-
Housing	-	212	-	68	179	176	-
Energy	4,569	4,257	3,509	6,775	7,816	8,042	76.02
Local Government	880	372	724	101	1,263	1,500	70.45
Nairobi Metropolitan	-	-	-	-	50	-	-
Sub-total	12,302	13,626	24,130	37,391	37,685	37,661	206.14
Grand Total	37,730	52,275	72,716	110,307	164,274	168,159	346

Source: Ministry of Finance (2009); * provisional estimates

in development of infrastructure in the country while at the same time creating their own wealth. So far, the government has floated three successful infrastructure bonds, in which the first two subscriptions have already been allocated to finance various infrastructure projects across the country. The Central Bank and the Ministry of Finance are constantly providing information on how much has been raised and how it is being used. The first bond raised Ksh 18.5 billion whereby Ksh 6.4 billion, Ksh 7.9 billion and Ksh 4.1 billion was spent on roads, energy and water and irrigation sectors, respectively. The second bond raised Kshs 14.5 billion and the most recent one, which was floated in August 2010 to finance the budget deficit as indicated in the 2010/2011 budget raised Ksh 31.6 billion. Issuance of the Sovereign Bond of Ksh 33.7 billion was not done due to the global financial crisis, among other factors. In addition to the bonds issued by the government of Kenya, two other public bonds were issued by KenGen (Ksh 15 billion) to raise funds to expand the generation capacity, and Safaricom (Ksh 5 billion) to improve on the company's mobile infrastructure.

Infrastructure Sectors and Contribution to GDP

Infrastructure contribution to GDP has witnessed mixed performance. Transport and communications has been the most impressive. Its contribution to GDP has averaged about 10 per cent from 2006 to 2009. Electricity performance declined to 1.5 per cent in 2008 from 1.7 per cent in 2006 but increased to 2.4 per cent in 2009. The decline in the electricity sub-sector was mainly due to decline in demand for power as a result of decline in the GDP and other economic activities mainly driven by the post-election violence and the global financial crisis. Drought also accounted for decline in supply of power generation from hydro-sources and, thereby, affected performance adversely. The construction sub-sector's performance improved from 2.3 per cent in 2006 to 4.4 per cent in 2009. On the other hand, real estate-dwellings, rented and owner-occupied, as well as real estate-renting and business services performance, were moderately stable at 1.8 per cent and 1.7 per cent, respectively, between 2006-2008 but increased to 2.6 per cent in 2009. The post and telecommunications sub-sector recorded a high contribution of 3 per cent in 2007 but declined slightly to 2.8 per cent in 2009 (Table 11.2).

Table 11.2: Infrastructure contribution to GDP (%)

Infrastructure	2006	2007	2008	2009
National GDP growth	6.3	7.1	1.7	2.6
Electricity and water	1.7	1.6	1.5	2.4
Electricity	1.2	1.2	1.1	1.7
Water supply	0.5	0.4	0.4	0.7
Construction	2.3	2.2	2.1	4.4
Transport and communications	10.6	10.6	10.4	9.8
Transport and storage	7.9	7.6	7.6	7
Post and telecommunications	2.7	3	2.8	2.8
Real estate-dwellings, rented and owner occupied	2.1	2	1.8	2.6
Real estate-renting and business services	2.1	1.9	1.7	2.6
Total infrastructure	**18.8**	**18.3**	**17.5**	**21.8**

Source: KNBS, Economic Surveys, Statistical Abstracts (various)

With regard to value addition, transport and communications performed better compared to electricity and water, and building and construction. Value addition in transport and communications was mainly driven by the communications sub-sector and particularly in mobile telephony, where many new products such as M-Pesa, Zap, mobile banking such as M-kesho and mobile internet were introduced.

Energy sub-sector

The energy infrastructure includes transmission and distribution lines for electricity, geothermal and thermal plants, hydropower dam infrastructure, pipelines, and wells for petroleum products. Energy is a factor of the well-being of the people and is a key factor in enterprise operations in commercial and industrial sectors. It is a prime mover of the country's competitive edge and economic development in the long term. In order to attain continuous and sustainable economic development, it is essential that energy supplies be adequate and secure, at reasonable prices, and that due consideration be given to the environment so as to enhance the country's competitiveness. There are three main sources of energy used in Kenya. These are wood fuel, petroleum and electricity, accounting for 70 per cent, 21 per cent, and 9 per cent, respectively, of total energy consumption in the country. Renewable energy is also becoming important although it remains insignificant in the country's overall energy mix. The demand for petroleum products marginally increased from 3,176.2 thousand metric tonnes to 3,190 thousand metric tonnes in 2009. On the other hand, power generation has increased from 5,894.9 GWh in 2006 to 6,548 GWh in 2009 (Table 11.3). The total energy consumption, on the other hand, has marginally increased from 3,508.8 Tonnes of Oil Equivalent (TOE) in 2006 to 3,617.1 TOE in 2008 (Table 11.4).

With regard to production, trade and consumption of energy expressed in terms of primary source of energy, in thousand tonnes of oil equivalent, the

Table 11. 3: The status of the energy sector in Kenya

	Petroleum demand '000Tonnes	Electricity Generated GWh	Total Energy Consumption (TOE)
2004	2,490.7	5,194.5	2,853.7
2005	2,944.1	5,547.0	3,155.2
2006	3,176.2	5,894.9	3,508.8
2007	3,285.7	6,324.6	3,627.1
2008	3,298.0	6,460.4	3,617.1
2009	3,190.0	6,548.0	4,002.3

Source: Kenya National Bureau of Statistics (2010), Economic Survey,

energy consumed increased from 2,853.7 TOE in 2004 to 3,617.1 TOE in 2008. Of this consumption, the local energy production declined from 12 per cent in 2004 to 10.2 per cent in 2008 of the total energy consumed. This indicates that Kenya relied heavily on imported energy and a lot needs to be done to secure energy supply in the country. At the same time, per capita consumption in terms of kilogrammes of oil equivalent increased from 83.4 in 2004 to 101.6 in 2009.

Energy Sub-sector Performance: Kenya versus Comparator Countries

The performance of Kenya's energy sector lags behind that of middle-income country averages and is at par with the low-income and sub-Saharan Africa (SSA) averages. In the electricity sub-sector, for example, electric power consumption per capita increased from 109.8kWh in 2000 to 145kWh in 2006. However, this was below the middle-income economies at 1,109.5kWh and 1,549kWh, respectively, in the same period. On average, Kenya also performed poorly compared to sub-Saharan and low-income countries whose per capita consumption increased from 490.7kWh to 533.9kWh and 255.3kWh to 316.3kWh within the same period, respectively. Malaysia, whose per capita consumption increased from 2,742kWh in 2000 to 3,387.6kWh, was doing far much better than Kenya and yet the two countries were at the same level of development during independence. Ghana is also doing much better than Kenya in power consumption, although its per capita consumption

Table 11.4: Production, trade and consumption of energy expressed in terms of primary sources of energy, 2004-2008, TOE

	2004	2005	2006	2007	2008	2009
Coal and coke consumption	108	89.3	119.7	109.5	11.3	94.6
Imports of crude oil	2,043.8	1,774	1,643.2	1,598.7	1,773.3	1,627.9
Net exports of petroleum	1,375.4	902.7	1,264.7	1,836	1,50.5	2,565.6
Stock change and balancing	1,044.7	39.2	130.3	-312.9	-150.7	-582.7
Total Consumption of Liquid Fuels	**2,374.5**	**2,715.9**	**3,038.2**	**3,121.8**	**3,133.1**	**3,610.8**
Hydro and geothermal energy						
Local production and hydropower	272.5	261.5	260.1	308.8	281.3	182.4
Local production of geothermal	84.8	86.1	89.9	85	89.3	111.2
Imports of hydro	13.9	2.4	0.9	1.9	2.1	3.3
Total consumption hydro and geothermal	371.2	350	350.9	395.8	372.7	296.9
Total local energy production	343.4	345	350	393.8	370.6	293.6
Total Net Imports	**790.3**	**963**	**499.1**	**-125.8**	**376.2**	**-839.8**
Total Energy Consumption	**2,853.7**	**3,155.2**	**3,508.8**	**3,627.1**	**3,617.1**	**4,002.3**
Local production as percentage of total	12	10.9	10	10.9	10.2	7.9
Per Capita Consumption in Terms of Kilograms of Oil Equivalent	**83.4**	**89.9**	**97.2**	**97.5**	**97.2**	**101.6**

Source: Kenya National Bureau of Statistics
Note: Modern sector only; fuel wood and charcoal are excluded.

Table 11.5: Electric power consumption (kWh per capita) in selected countries

Country	2000	2001	2002	2003	2004	2005	2006
South Africa	4,416.6	4,375.0	4,556.2	4,759.7	4,886.2	4,857.5	4,809.9
Malaysia	2,742.9	2,911.1	2,935.0	3,026.4	3,128.2	3,174.4	3,387.6
Middle-income	1,109.6	1,135.2	1,181.5	1,266.0	1,356.4	1,438.5	1,549.1
Egypt, Arab Rep.	958.3	1,009.1	1,058.1	1,125.2	1,166.0	1,235.3	1,303.7
Sub-Saharan Africa	490.7	492.5	508.9	522.9	540.8	542.5	534.0
Indonesia	400.4	422.1	428.4	440.1	486.8	509.3	529.7
Ghana	331.1	338.0	315.6	234.0	235.5	260.8	311.9
Vietnam	295.0	335.1	386.1	440.7	502.2	572.7	597.7
Low-income	255.3	264.2	271.3	283.0	294.5	307.1	316.3
Kenya	**109.9**	**119.7**	**125.2**	**130.6**	**135.1**	**138.4**	**145.3**
Tanzania	58.0	60.1	62.5	55.0	63.4	65.0	57.8

Source: World Bank (2009)

declined from 331kWh in 2000 to 311.9kWh in 2007. In the East African region, Tanzania and Uganda have performed poorly compared to Kenya, with per capita consumption of 57.8kWh in Tanzania. South Africa and Egypt, who are Kenya's main competitors in the region, have higher per capita consumption than Kenya due to the low costs of power and increased accessibility, with per capita consumption of 4,809.9 kWh and 1,303.7kWh, respectively (Table 11.5).

Transmission and Distribution Losses

In terms of electric power transmission and distribution losses, Kenya experienced a relatively poor performance. The transmission and distribution losses declined marginally from 21.1 per cent to 17.0 per cent in 2006. This is below comparator countries such as Malaysia, which has realized reduction in distribution losses from 7.8 per cent to 0.6 per cent of the total power generated. Countries such as Egypt and Indonesia have transmission losses of 10.9 and 11.2 per cent, respectively. The sub-Saharan Africa, low-income and middle-income countries had losses of 11.0, 12.6 and 11.9 per cent, respectively, implying that Kenya is performing worse than her comparator countries (Table 11.6). The transmission and distribution losses in Kenya had reduced to about 16 per cent by 2009.

Table 11.6: Transmission and distribution losses

Country	2000	2001	2002	2003	2004	2005	2006
Tanzania	22.4	25.9	24.0	27.2	20.8	20.9	20.9
Kenya	**21.1**	**20.5**	**19.6**	**18.2**	**17.4**	**17.8**	**17.0**
Ghana	17.0	16.0	18.8	22.6	20.0	18.4	15.6
Low-income	14.6	15.0	14.9	14.2	13.6	13.2	12.6
Vietnam	13.8	13.9	14.0	12.9	10.5	11.0	11.0
Egypt, Arab Rep.	13.8	13.1	12.6	11.2	12.2	11.6	10.9
Middle-income	13.7	13.7	13.5	13.0	12.5	12.3	11.9
Sub-Saharan Africa	11.1	11.1	10.1	9.8	9.7	9.0	11.0
Indonesia	10.9	13.2	16.1	16.3	11.9	11.8	11.2
South Africa	8.2	7.8	6.4	6.1	6.1	6.1	8.7
Malaysia	7.8	3.1	4.1	4.6	3.9	1.4	0.6

Source: World Bank (2009)

Alternative Energy

Many countries today are diversifying their traditional energy sources to include alternative energy, which consists mainly of renewable sources such as wind, solar and biogas. Kenya's contribution of alternative energy to total energy use is 6 per cent. This is mainly driven by proactive policies to promote renewable energy. However, the country has not fully exploited her potential for alternative energy. Geothermal energy has a capacity of between 4,000MW and 7,000MW. Singapore relies only on thermal power generation. South Africa, which has a contribution of 2.3 per cent, mainly relies on hydropower, thermal generation and coal to produce electricity (Table 11.7).

Table 11.7: Alternative energy as a percentage of total energy use

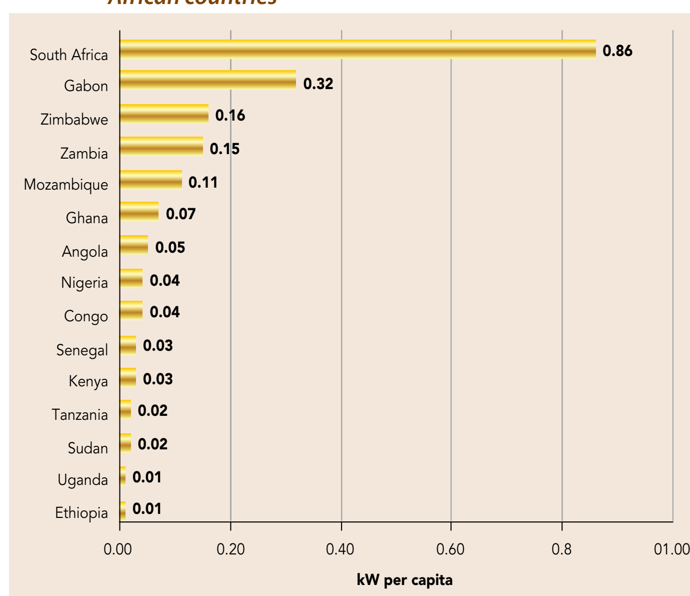
Country	2000	2001	2002	2003	2004	2005	2006	2007
Egypt,	2.63	2.84	2.18	2.11	2.03	1.86	1.83	2.09
Ghana	7.35	7.06	5.24	4.00	5.46	5.55	5.20	3.38
Indonesia	3.34	3.92	3.86	3.78	3.83	3.77	3.63	3.68
Kenya	**3.21**	**4.14**	**3.99**	**6.12**	**6.76**	**6.48**	**6.34**	**6.43**
Malaysia	1.28	1.06	0.86	0.86	0.92	0.68	0.83	0.77
Singapore	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
South Africa	3.16	2.74	3.21	2.88	2.79	2.43	2.23	2.27
Tanzania	1.37	1.58	1.57	1.41	1.26	0.89	0.69	1.18

Source: World Bank (2009)

Electricity availability per capita

Like most African countries, Kenya has a low-installed electricity capacity. This situation is worsened by the rapid population growth, which translates into even lower electricity availability per capita (measured in kilowatts available per capita). At 0.03 kW per capita by the year 2008, Kenya still has acute shortage of energy supply to its population. This is far behind Ghana (0.07 kW/capita), Gabon (0.32 kW/capita), and South Africa (0.86 kW/capita) for the same period (see Figure 11.1).

Figure 11.1: Electricity availability per capita for selected African countries



Source: Based on Moyo (2008)

Electricity tariffs

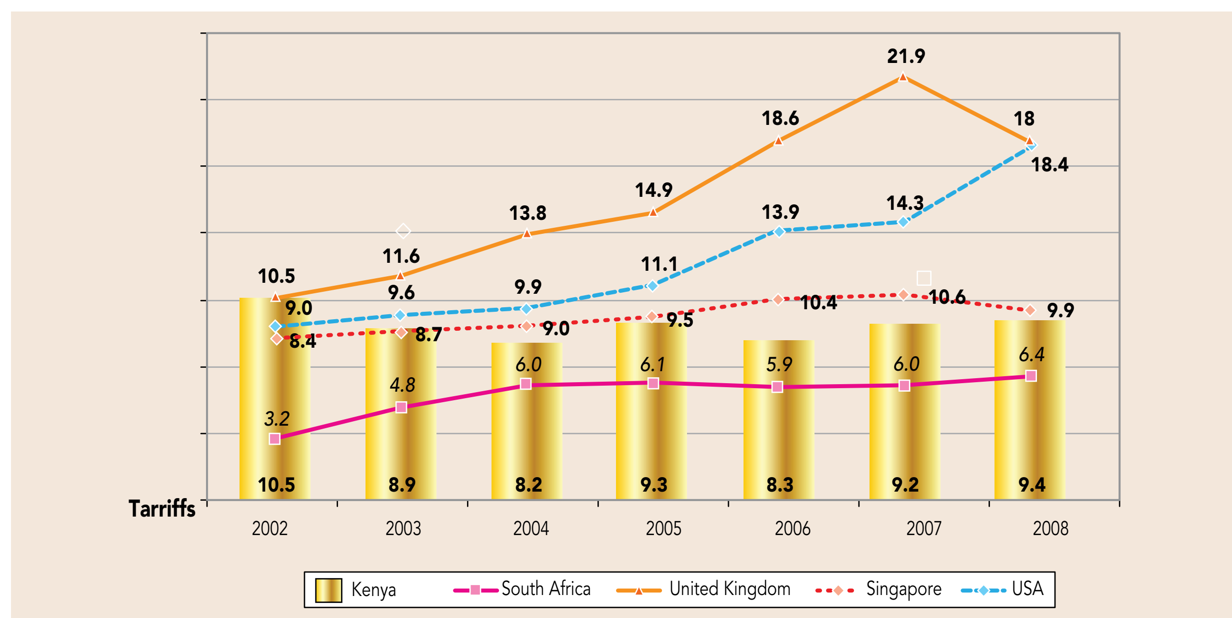
Electricity tariffs in Kenya at US cents 9.4 per kWh in 2008 are higher than those of South Africa and Egypt, which are her major competitors in trade in goods and services in East and South Africa. India, which has one of the highest populations in the world and is currently experiencing a growth rate of about 10 per cent, has very low and competitive tariffs (5.38 US cents per kWh) and this is good for households and industries. The UK and Singapore have some of the highest tariffs in the world at 21.9 and 18.4 US cents per kWh, respectively, compared to the USA and Korea Republic (Figure 11.2). Though VAT on electricity was reduced to 12 per cent in 2008 (Government of Kenya, 2008), power tariffs have not come down mainly due to the generation mix whereby thermal power (which is expensive) has been on the increase.

Although power tariffs in South Africa are lower, there is a general increasing trend. It is apparent that for the foreseeable future, electricity tariffs will continue to rise around the world. Since ESKOM applied for tariff increase to nominal prices in 2009, South Africa's electricity tariffs are likely to rise. If a similar trend takes shape in Kenya, then the country's national strategy aimed at providing reliable and affordable electricity faces a major challenge.

Energy intensity

There is a linear relationship between GDP and energy use. Countries that have high GDP growth rates are most likely to demand more energy to power their economy. Compared to the countries she emulates, Kenya's GDP per unit of energy use at constant 2005 PPP dollars per kilogramme of oil equivalent (Table 11.8) is low. Singapore and Egypt have one of the highest percentages of 8.15 per cent and 5.67 per cent, respectively. Kenya is only doing better than Tanzania, which recorded 2.53 per

Figure 11.2: Comparative electricity tariffs



Source: KIPPRA (2010)

Table 11.8: GDP per unit of energy use, constant 2005 PPP dollars per kilogramme of oil equivalent

Country	2000	2001	2002	2003	2004	2005	2006	2007
Egypt	6.20	6.24	5.76	5.60	5.71	5.48	5.58	5.67
Ghana	2.65	2.64	2.69	2.80	2.97	3.00	2.99	3.09
Indonesia	3.71	3.67	3.76	3.87	3.90	4.02	4.12	4.15
Kenya	**2.67**	**2.78**	**2.78**	**2.75**	**2.69**	**2.77**	**2.81**	**2.98**
Malaysia	4.81	4.60	4.76	4.64	5.24	4.62	4.78	4.67
Singapore	7.81	7.32	7.15	8.01	7.66	6.74	7.46	8.15
South Africa	2.99	3.13	3.37	3.09	2.95	3.15	3.25	3.29
Tanzania	2.18	2.19	2.23	2.27	2.32	2.36	2.43	2.53

Source: World Bank (2009)

cent. This shows that Kenya's energy consumption is low and for higher GDP growth rates to be realized, more effort is needed to increase its energy production capacity.

Energy Sub-sector Achievements, Outstanding Issues and Policy Challenges

As explained in the earlier sections, the high growth rate projected in Kenya Vision 2030 requires sustainable supply of energy that is affordable and clean. Building and construction activities, for instance, are bound to increase in line with Vision 2030, and accompanying this will be an upsurge in energy consumption, being among the most energy-intensive sectors. Clean energy is needed to help mitigate environmental degradation in line with the Copenhagen resolutions on reversing and containing climate change. The following are some of the key achievements in the sub-sector:

- Establishment of the Geothermal Development Company (GDC), which will promote research and development geared towards exploiting the rich geothermal power potential concentrated in the Rift Valley.
- Establishment of Kenya Electricity Transmission Company (KETRACO) to improve electricity transmission. Transmission and distribution losses are likely to reduce.
- Green energy initiatives, with heavy investment in wind energy. Kenya Power and Lighting Company (KPLC) has already signed a Power Purchase Agreement (PPA) with Lake Turkana Power Company to supply 300 MW to the grid.
- There have been increased solar energy

penetration and tax incentives in the budget to support the sub-sector.

- Massive efforts in hydrocarbon exploration.
- Ground-breaking for the energy centre of excellence at Mitunguu.
- There are new economic instruments to be introduced by the ERC to streamline tariffs and other objectives in the energy sub-sector. These have already been discussed and shared with stakeholders.

Key Policy Recommendations for the Energy Sub-sector

- There is need to prioritize investments in expanding generation capacity and strengthening transmission links so as to meet the expected increase in demand for power, as envisaged in Vision 2030.
- There is need to put in place deliberate measures to increase clean energy generation initiatives such as those being undertaken by the Lake Turkana Power Company, not only to provide clean energy and mitigate against climate change, but also to help bring power tariffs down.

Transport Sub-sector

Transportation infrastructure includes transit-related structures with associated facilities for safety, signage and markings, lighting, communication, landscaping, navigation and maintenance. Generally, transportation infrastructure comprises roads and highways, pedestrian walkways, bicycle paths, mass transit systems, railway networks, airports, seaports, and canals. The transport sub-sector in Kenya consists of the following modes of transport: road transport, railway transport, maritime and inland waterways transport, pipeline transport, air transport, and Non-motorized and Intermediate Means of Transport (NMIMT).

The role of transport in economic development has mainly been discussed in relation to its contribution to the development of domestic trade. However, globalization has changed this notion. The ability of a country, and particularly the more isolated communities within a country, to participate in trade depends on other economic activities and the quality of transport and communication infrastructure that allows them access to the world trading system. It has been argued that if liberalization of trade can open new markets for developing countries, then efficient transport systems and transport routes will be needed to connect domestic producers with these markets. Affordable transport costs, timely delivery, and the quality of services provided are indispensable elements in calculating and assessing the competitiveness of products for global markets. A range of infrastructure and institutional barriers still inhibit competitiveness of Kenya's products in the global market. Provision of truly cost-effective transportation linkages, therefore, remains a policy priority in an era of rapid globalization as well as regional integration in East Africa and within COMESA.

Transport Sector Performance: Kenya versus Comparator Countries

Road transport infrastructure

Road infrastructure forms important networks that facilitate distribution of resources and services inland and effective coordination and execution of logistics. Strict regulation, improved design and structure, and expansion of the road network are the crucial interventions needed to ensure efficient traffic flow and adequate spatial coverage. Traffic jams on our roads is an outstanding problem in Nairobi, which is fast spreading to the neighbouring centres in the metropolitan region and other key urban centres in the country. This trend is accompanied by high economic, social and environmental costs as the urban centres become more populated with people and motor vehicles. The last national census of 2009 revealed an alarming growth rate of Kenya's urban population, an average of about 8.4 per cent per annum between 1999 and 2009 as opposed to

the earlier projections of 6 per cent annual growth. The road transport infrastructure, being the chief means of transport is faced with the big challenge of accommodating the expected surge in transport demand, especially in urban centres. Well-targeted re-engineering and innovation in road design, road construction and travel demand management–supported by accurate traffic data–offers the only realistic opportunity to solve the country's rising transport problems. Road crash cases attributable to human error are also rampant in Kenya, and this is one major justification for strict regulation and traffic law enforcement.

Although the performance of the roads sub-sector might not have been rated as good, fuel levy in Kenya has been well aligned with maintenance and priority needs and is promptly collected. The considerable increase in roads development expenditure, as presented earlier, is a welcome development in improving Kenya's road infrastructure. The existing Road Sector Investment Programme (RSIP) caters for all roadworks, from new construction to rehabilitation and maintenance. Kenya's road sub-sector receives funding from several sources, namely: the Exchequer or national budget, comprising government revenues; the Road Maintenance Levy Fund (RMLF); transit tolls; Local Authority Transfer Fund (LATF); Agricultural Cess; and development partners. Total funding of the roads sub-sector from 2007/08 to 2009/10 has increased impressively from Ksh 58 billion to Ksh 70 billion. The backlog and current maintenance needs are, however, estimated at a whooping Ksh 40 billion per annum, and there is still a funding gap estimated at Ksh 20 billion per annum.

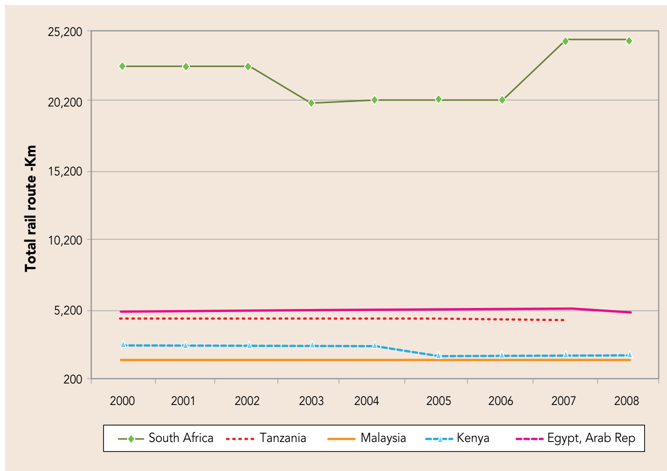
The total road network length in the country by 2010 measures about 161,000 kilometres, of which only about 63,000km or 39 per cent is classified. This translates into a low road network density of about 27km per 100 square kilometres of land area. Only 11,197km or 7 per cent is paved while the other 149,689km is earth or gravel; this is dismal performance relative to the countries Kenya emulates; for instance, Botswana (33% paved) and China (71% paved). According to the Road Inventory and Condition Survey 2009, 10 per cent, 34 per cent and 56 per cent of the roads are in good, fair and poor condition, respectively. This calls for substantial road network improvement to boost the contribution of the roads sub-sector to Kenya's growing economy.

Kenyan roads have had a much lower contribution to goods transport than the other means of transport, estimated in 2001 to be around 22 million tonne-kilometres. South Africa's estimate was 434 million tonne-kilometres for the same period (World Bank, 2009). The road sector fuel consumption was estimated in 2006 at about 6 per cent of total fuel consumption, which was at par with low-income countries' average. Kenya's per capita fuel consumption in the road sector was estimated in 2006 at 34 litres, also at par with the mean rate for low-income countries. This was lower than Ghana's 59 litres per capita, South Africa's 354 litres per capita, and Singapore's 608 litres per capita. This was, however, higher than Tanzania's 27 litres per capita. Middle-income countries consume about 150 litres per capita and high-income countries about 1,300 litres per capita (World Bank, 2009).

Railway transport infrastructure

Railway route length, passengers carried, and goods freight are among the lead indicators of performance in the railway transport sub-sector. Kenya's rail track is a narrow gauge, but the standard gauge of 1,435mm is more appropriate. Railways take up less space than roads, thereby helping to concentrate traffic and minimize environmental impact. As can be seen in Figure 11.3, Kenya's performance on railway route length has not improved, and has remained below South Africa's, Egypt's and Tanzania's over the years. This poor performance is also reflected in railway passenger transit, where Egypt leads in the region with over 40 million passenger-kilometres in a year (Table 11.9). South Africa's performance in terms of railway goods freight is exemplary in Africa and

Figure 11.3: Performance on railway route length 2000-2008



Source: World Bank (2009; 2010)

Table 11.10: Comparison of railway goods freight, 2000-2008 (millions of tonne-km)

Year	South Africa	Tanzania	Malaysia	Kenya	Egypt
2000	106,605	1,990	907	**1,492**	3,980
2001	105,393	1,380	1,531	**1,603**	4,299
2002	103,717	1,487	---	**1,538**	4,254
2003	106,538	1,468	1,224	---	4,188
2004	108,503	1,351	1,224	**1,399**	4,188
2005	108,513	1,196	1,178	**1,399**	3,917
2006	108,513	728	1,572	**1,399**	3,917
2007	108,513	---	1,355	**1,399**	3,917
2008	106,014	---	1,350	**1,399**	4,188

Source: World Bank (2010)

is a motivating example to Kenya and other African countries on this indicator (Table 11.10). Although Kenya's railway system has been concessioned, it has not seen any improvement in performance. The governments of Kenya and Uganda have had problems with the original concessionaire but the shareholding of the Rift Valley Railways is changing, with acquisition of the majority shares by Citadel of Egypt.

Air transport

According to IATA (2009)[1], air transport is a major contributor to global economic prosperity. Aviation provides the only rapid worldwide transportation network, which makes it essential for global business and tourism. It plays a vital role in facilitating economic growth, particularly in developing countries. In addition, aviation transports over 2.2 billion passengers annually. Air transport facilitates world trade, helping countries participate in the global economy by increasing access to international markets and allowing globalization of production. The total value of goods transported by air represents 35 per cent of all international trade. Air transport is indispensable for tourism, which is a major engine of economic growth, particularly in developing economies. Over 40 per cent of international tourists now travel by air. It improves productivity, by encouraging investment and innovation, improving business operations and efficiency, and allowing companies to attract high quality employees. Another important feature of the air transport industry is that it generates a total of 32 million jobs globally, through direct, indirect, induced and catalytic impacts. Aviation's global economic impact (direct, indirect, induced and catalytic) is estimated at US$ 3,560 billion, equivalent to 7.5 per cent of the world Gross Domestic Product (GDP). Some 2,000 airlines around the world operate a total fleet of 23,000 aircraft. They serve some 3,750 airports through a route network of several million kilometres managed by around 160 air navigation service providers.

Table 11.9: Comparison of railway passenger transit, 2000-2008 (millions of passenger-km)

Year	South Africa	Tanzania	Malaysia	Kenya	Egypt
2000	13,260	946	1,312	**350**	34,960
2001	13,023	471	1,181	**166**	38,160
2002	---	445	1,123	**288**	39,083
2003	996	444	1,931	---	46,185
2004	1,001	471	1,931	**226**	40,837
2005	10,842	628	1,181	**226**	40,837
2006	991	325	2,075	**226**	40,837
2007	14,856	475	2,193	---	40,837
2008	13,865	---	2,268	**250**	40,830

Source: World Bank (2010)

Airfreight (million tonne-km)

Kenya has been performing better than her neighbours (Uganda and Tanzania) on this indicator of airfreight over the years. The country recorded a steady rise in airfreight from 77 million tonne-kilometres in the year 2000 to 301 million tonne-kilometres in the year 2006, before dipping to 295 million tonne-kilometres in the year 2008. The figures for Tanzania remained mostly between one and three million tonne-kilometres; Uganda recorded mostly between 20 and 30 million tonne-kilometres for the same period. This means Kenya is still a leader in East Africa in terms of airfreight, but it still lags behind South Africa, whose performance on this indicator has increased steadily from about 700 million to over one billion tonne-kilometres from the year 2000 to 2006. Like Kenya, South Africa, Tanzania and Egypt experienced a decline in airfreight in the year 2007, and so was true for sub-Saharan Africa and the low-income country category. Though Egypt used to record much higher airfreight than Kenya between the year 2000 and 2005, Kenya started catching up with it in the year 2006 and even recorded higher air freight than Egypt by over 90 million tonne-kilometres in the years 2007 and 2008. With billions of tonne-kilometres recorded yearly, Korea Republic and Malaysia remain far ahead and are the examples Kenya needs to emulate (Table 11.11 and Figure 11.4).

Air passengers carried

Kenya's number of air passengers over the years 2000 to 2008 has generally been on the increase, hitting a high of 2.88 million in 2008. This was higher than the numbers realized by Mauritius and Tanzania, though lower than Egypt and South Africa. Malaysia, Korea Republic and Indonesia have been recording much higher numbers over the same period (tens of millions). Sub-Saharan Africa and low-income countries have been recording a lower number of air passengers between 2000 and 2008, ranging between 14 and 28 million. Middle-income countries have retained higher scores of between 30 and 60 million over the same period (and rising steadily since 2003).

Registered carrier departures worldwide

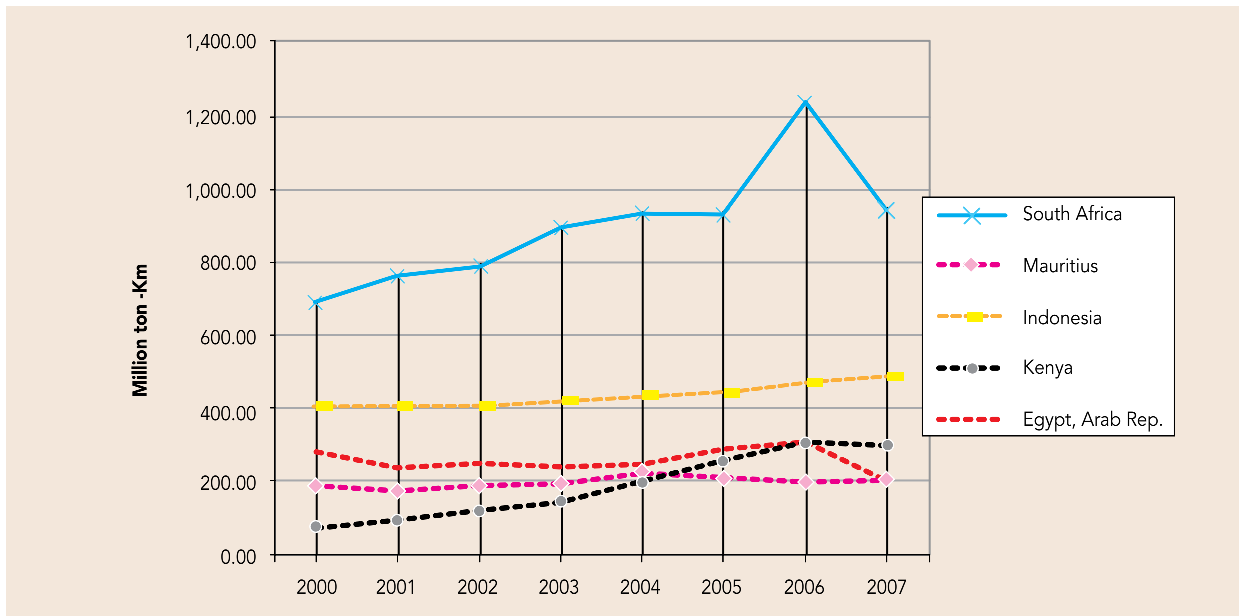
Registered carrier departures worldwide refer to domestic takeoffs and takeoffs abroad of air carriers registered in the country. Kenya has recorded a

Table 11.11: Airfreight (million tonne-km)

Country/Category	2001	2002	2003	2004	2005	2006	2007	2008
South Africa	755.52	783.84	891.47	928.99	923.38	1,233.00	939.20	760.89
Vietnam	135.36	151.91	164.46	216.53	230.19	216.01	258.49	295.76
Ghana	32.97	18.90	16.63	6.65	..	..	..	..
Tanzania	3.25	2.32	1.79	2.25	1.85	1.69	1.45	1.45
Uganda	21.07	21.28	23.41	26.68	28.55	33.98	..	..
Malaysia	1,774.75	1,923.66	2,178.51	2,599.17	2,577.58	2,597.40	2,661.53	2,444.46
Mauritius	174.23	185.57	186.81	219.62	211.72	194.84	202.81	191.19
Indonesia	408.37	405.50	424.36	434.10	439.77	469.22	484.52	394.58
Korea, Rep.	6,827.18	7,896.53	6,935.94	8,072.78	7,432.57	7,751.66	9,039.72	8,726.81
Kenya	**92.73**	**118.38**	**141.54**	**193.46**	**253.16**	**301.22**	**298.08**	**295.18**
Egypt, Arab Rep.	239.04	249.21	238.89	241.87	286.95	309.43	206.83	195.48
Sub-Saharan Africa	1,698.98	1,499.87	1,642.87	1,822.41	1,842.22	2,248.58	1,895.22	..
Low-income	954.59	748.22	802.73	957.06	1,041.57	1,097.97	971.62	..
Middle-income	17,194.93	18,116.78	19,433.38	22,599.40	23,359.19	24,403.89	27,113.64	..

Source: World Bank (2009; 2010)

Figure 11.4: Inter-country comparison of airfreight, 2000-2007



Source: World Bank (2009)

general increase in registered carrier departures from 2000 to 2007. Kenya's scores on this indicator have exceeded the ones of Ghana, Tanzania, Uganda and Mauritius. She has been recording about thirty thousand over the period, which exceeded Uganda's (about 300), Tanzania's (about 6000) and Mauritius (about 12000) for the same period. South Africa, Malaysia, Korea Republic, Indonesia and Egypt have been recording more departures than Kenya. Indonesia recorded a sharp increase from 2003 (155,609) to a high of 357,789 in 2007. Sub-Saharan Africa has been recording higher than low-income countries by a difference of about 100 thousand over the years 2000 to 2007, but still much lower than middle-income countries by between 4 and 6 million over the period. Table 11.12 shows some of the comparative country figures of air passengers and registered carrier departures worldwide from 2000 to 2008.

Maritime transport

Kenya's coastal region is the premier location of maritime transport, forming an important gateway to international trade. The number of ships docking in Mombasa since 2006 has been dropping drastically, indicating a clear need for policy change. A decline of about 200 in the number of ships docking in Mombasa from the year 2006 to 2008 has been recorded (Kenya National Bureau of Statistics, 2009). It is worth noting that if the country has a serious resolve on an export-led growth strategy, then infrastructure investments should be more particular about ports and railways. However, this is not the case observed in the country currently.

Kenya's status with respect to the Logistics Performance Index[2] (LPI) is illustrated in Table 11.13. Kenya's ranking on this index is still far below that of South Africa, Malaysia and Singapore. Kenya records higher comparative costs of importing containers (Figure 11.5).

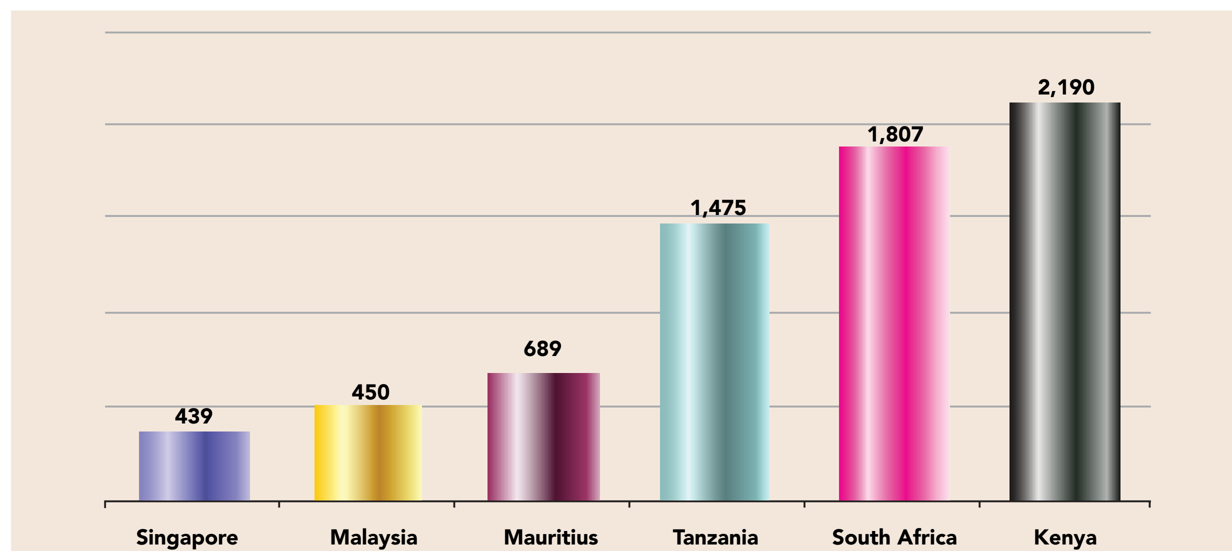
With an overall LPI score of 2.52, Kenya is ranked 76th out of 162 countries, but comes out 8th amongst the top-ten low-income countries. This data suggests that good logistics performers benefit more from globalization. Logistically, friendly countries are more likely to have better global value chain integration and attract export-oriented FDI. In Kenya's case, it is ranked as a partial reformer with key challenges in respect of reforms. While

Table 11.12: Inter-country comparison of air passengers and registered carrier departures worldwide, 2000-2008

Air passengers by country							
Year	South Africa	Ghana	Tanzania	Uganda	Mauritius	Kenya	Egypt
2000	8,000,757	314,335	193,069	39,379	949,085	**1,554,949**	4,521,702
2001	7,948,374	301,135	174,559	40,560	1,002,282	**1,418,183**	4,389,163
2002	8,052,660	255,630	134,470	40,560	1,029,466	**1,599,843**	4,526,688
2003	9,159,815	241,111	149,540	39,749	1,042,773	**1,678,160**	4,180,814
2004	9,878,598	96,444	243,087	45,711	1,088,696	**2,005,473**	4,621,310
2005	11,844,657	..	257,223	49,368	1,145,737	**2,424,382**	4,888,146
2006	12,932,671	..	189,844	55,292	1,056,496	**2,685,148**	4,988,262
2007	12,870,324	..	250,849	..	1,277,957	**2,857,464**	5,829,044
2008	13,135,437	..	202,704	..	1,256,746	**2,880,546**	6,688,999
Registered carrier departures worldwide by country							
Year	South Africa	Ghana	Tanzania	Uganda	Mauritius	Kenya	Egypt
2000	110,392	4,873	5,973	263	12,162	**29,080**	47,418
2001	122,561	5,892	4,360	266	12,269	**24,741**	41,373
2002	116,985	4,382	4,401	263	12,720	**25,873**	41,858
2003	130,938	3,333	6,082	263	12,969	**27,057**	42,152
2004	133,222	1,333	6,441	302	14,791	**26,218**	42,189
2005	148,146	..	6,062	317	14,743	**28,399**	44,730
2006	146,648	..	5,068	330	13,692	**29,039**	47,444
2007	152,550	..	5,457	..	12,090	**32,329**	51,440
2008	156,567	..	5,460	..	11,742	**32,045**	57,510

Source: World Bank (2010)

Figure 11.5: Cost of importing a twenty foot container (US$ excluding tariffs and trade taxes), 2009



Source: World Bank (2010)

Table 11.13: Logistics Performance Index (LPI)

Country	Definition	Singapore	South Africa	Malaysia	Kenya	Mauritius	Tanzania
Logistics Performance Index	Logistics Performance Index (LPI) is the simple average of the country scores on the seven key dimensions	4.19	3.53	3.48	2.52	2.13	2.08
LPI Rank		1	24	27	76	132	137
Customs	Efficiency and effectiveness of the clearance process by Customs and other border control agencies	3.9	3.22	3.36	2.33	2	2.07
Infrastructure	Quality of transport and IT infrastructure for logistics	4.27	3.42	3.33	2.15	2.29	2
International shipments	Ease and affordability of arranging shipments	4.04	3.56	3.36	2.79	2.2	2.08
Logistics competence	Competence in the local logistics industry (e.g., transport operators, customs brokers)	4.21	3.54	3.4	2.31	1.75	1.92
Tracking & tracing	Ability to track and trace shipments	4.25	3.71	3.51	2.62	2.25	2.17
Domestic logistics costs	Ability to track and trace shipments	2.7	2.61	3.13	2.75	2.67	3.33
Timeliness	Timeliness of shipments in reaching destination	4.53	3.78	3.95	2.92	2.33	2.27

Source: International Bank for Reconstruction and Development/World Bank (2007) and World Economic Forum (2008)

it has implemented some of the core reforms, it is experiencing challenges across sectors, facing resistance to change, and experiencing governance problems. This state of affairs imposes costs on consumers emanating from high costs and poor service delivery.

Transport Sub-Sector Achievements, Outstanding Issues and Policy Challenges

The transport sector has been vibrant in its endeavour to improve logistics and related services in the country. The sector has made significant strides despite challenges related to inadequate financing. Particular salient achievements and key issues in various sub-sectors are outlined below.

Roads sub-sector

The roads sub-sector in Kenya has realized some of the best performances since 2003, particularly in the last two years.

- First, within this period, most of the pending work in the Northern corridor rehabilitation and construction are nearly complete and this has reduced the cost of doing business due to improved services and reduced transportation costs (Transportation cost has been a major hindrance to doing business in Kenya).
- Second, Kenya has realized improved collection and proper utilization of the road maintenance levy fund. The country has been rated among the best in the region by the World Bank (2009) in terms of utilization of the fund for priority needs.

- Third, there has been substantial improvement in road construction and rehabilitation, conspicuously widespread all over the country.
- Fourth, governance, regulations and investments in the roads sub-sector have been enhanced with the creation of key authorities with specific mandates to improve service delivery in the sub-sector. These new institutions are: the Kenya National Highways Authority (KeNHA)–which is in charge of all major highways in the country, the Kenya Urban Roads Authority (KURA)–which is in charge of all urban roads, and the Kenya Rural Roads Authority (KeRRA)–in charge of all rural roads, which are also funded using the Constituency Development Fund (CDF).
- Fifth, the implementation of the axle load policy is a key development in the sub-sector.

Transport sub-sector

The transport sub-sector has witnessed mixed performance in the last three years. Some of the outstanding achievements in the sector include:

- New amendments to the Transport Policy (2009) on road safety.
- Road safety initiatives to reduce road carnage.
- Upgrading of Jomo Kenyatta International Airport and Kisumu Airport.
- Upgrading of the port of Mombasa, set to be privatized.
- Tenders to construct a new railway line from Mombasa to Kampala have been agreed upon by both Kenya and Uganda. This follows poor performance of the Rift Valley Railways, the concessionaire who runs operations of rail services.

Policy Recommendations for the Transport Sub-sector

- The government should complete ongoing policy and institutional reforms, including strengthening the institutional capacity of the three roads authorities (KeNHA, KURA and KeRRA) with particular emphasis on planning and management systems and provision of budgetary allocations for operations. The road agencies must uphold performance-based maintenance contracts to be an incentive to contractors who perform well and help achieve cost-effectiveness.
- In view of Kenya's rapid urbanization rate that has even exceeded earlier predictions, passenger transit is a growing problem, which now calls for mass transit solutions, integrated land use and transport planning, and effective modal split and traffic control systems supported by technology.
- There is need to enhance regional security so that the JKIA can start handling direct flights to and from critical trade partners such as the United States.
- Improving the Mombasa-Nairobi-Kampala rail network by investing in the proposed new standard gauge rail (1435 mm) and ensuring multi-modal transport between the port and the rail corridor.
- In the ports sub-sector, there is need to fast-track efforts to make Mombasa a landlord port so as to improve maritime transport and hence, international trade in the country and region.

Technology Infrastructure

The development challenges facing the world today are complex and multifaceted. This reality calls for greater collaboration between researchers and policy makers in the common pursuit of sustainable development. National economies are becoming increasingly dependent on knowledge systems as opposed to the static comparative advantage based on natural resources. Strong capacity and linkages in science and technology are critical to generating and applying knowledge for economic growth (African Technology Policy Studies-ATPS, 2008). Technology infrastructure is the anchor of systems that make up a knowledge-based economy. This

type of infrastructure is a central pillar in leveraging innovation processes and diffusion of technologies. Splendid technology infrastructure is the platform for a strong national innovation system. Universities, research institutes, and industrial clusters that are connected with efficient communications network are core components of technology infrastructure. This sub-section sheds light on Kenya's performance with respect to research, technology and innovation. Particular emphasis is placed on communications infrastructure, being a critical component of technology infrastructure.

Importance of research, technology and innovation

In today's competitive world business environment, innovation is not an option for any country that aims to achieve and sustain high standards of social, economic and environmental well-being. Technological transformation needs, as a prerequisite, a system of governance and related practices that promote Science, Technology and Innovation (STI). Technological innovation is the force behind continuous improvement on existing technologies and production of new ones that are better equipped to achieve new development targets.

Technology involves the practical application of science (and art) to commerce and industry. It is knowledge-based and application-specific. Innovation involves the development and commercialization of new technologies. Through innovation, new ideas are introduced into the marketplace in the form of new products or services, or improvements in organization or processes. Innovation can, therefore, take the form of product innovation, process innovation, marketing innovation, or organizational innovation. Competitive companies have to continually innovate to improve products and production processes. Innovation has accelerated globalization by contributing to enhanced market forces.

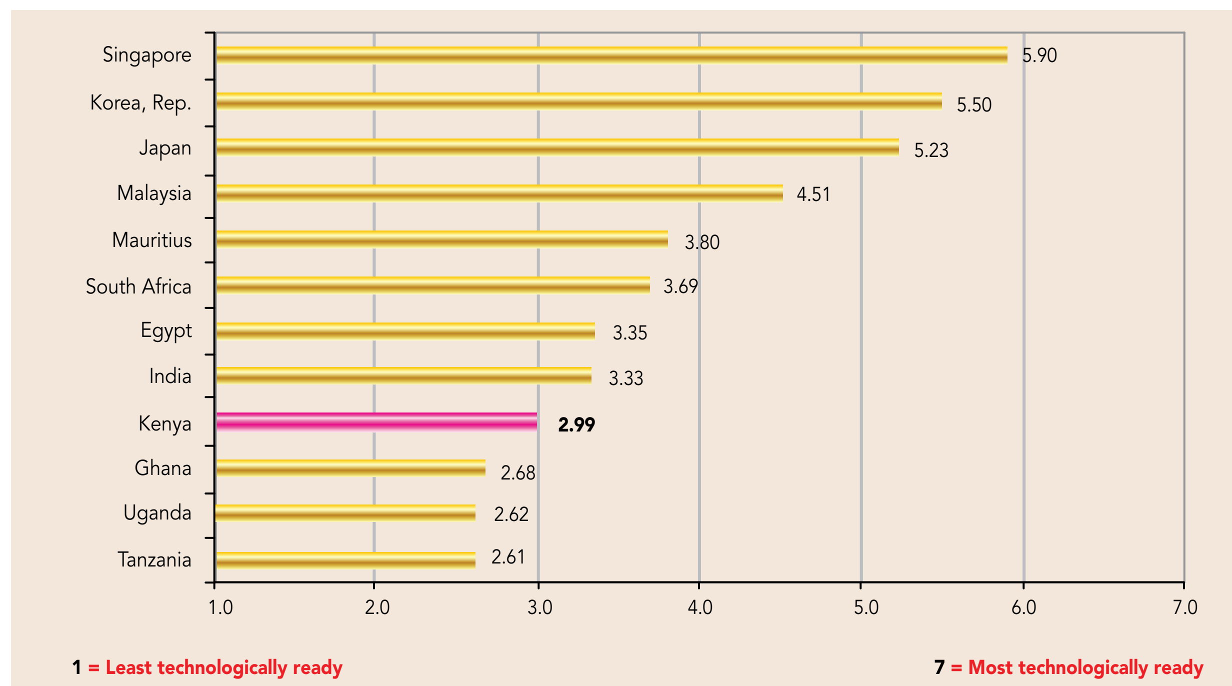
Technology infrastructure: Kenya versus comparator countries

Technological readiness is one of the pillars of global competitiveness. It measures the agility with which an economy adopts existing technologies to enhance the productivity of its industries. Industries need to have access to new technologies and apply them to boost national economies, whether they are developed within or outside national borders. Foreign Direct Investments (FDI) play a key role in sourcing foreign technology, and technological governance of the same is crucial. The year 2009 scores on technological readiness index for selected countries are shown in Figure 11.6. Singapore ranked top in technological readiness.

Institutions of technological governance need to facilitate and ensure domestication of new technologies and treat the relevant foreign direct investments as a strategic variable in propelling economic growth. Popularising science and technology in education systems can be ensured by demonstrating its daily application in real life and developing home-grown STI.

Activities such as science congresses help identify young talent and innovation. Incentives need to be given to young innovators, especially in areas that can score double gains such as technologies that can convert invasive species into industrial products. A good example that has been demonstrated in Kenya at the Jomo Kenyatta University of Agriculture and Technology is making shoe polish from weeds, which can lead to employment creation on the one hand, while indirectly boosting agricultural productivity on the other. Patenting such ideas and commercialising the products must be given keen attention to gain optimally from local talents. This is a crucial step towards utilising and developing indigenous capacity and greater application of traditional knowledge. STI should be integrated at all levels of education and training. Education systems should encourage socialisation of STI, experiential education,[3] discovery, participatory approaches, and formation of international centres of excellence.

Figure 11.6: Technological readiness index for selected countries



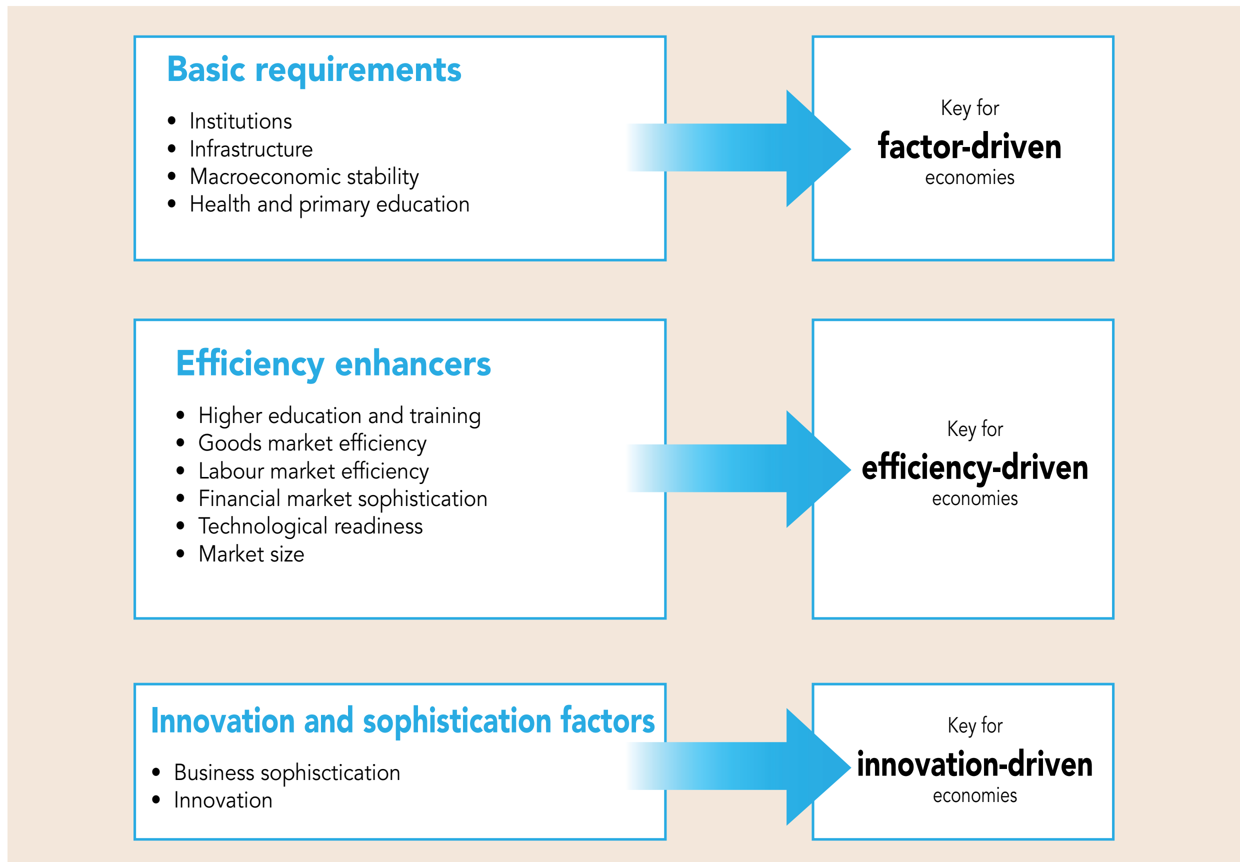
Source: World Economic Forum (2009)

Innovation ranking measures a country's ability to innovate and expand the frontiers of knowledge. As opposed to the other pillars of global competitiveness that finally run into diminishing returns, innovation is the one pillar that promises to raise living standards as economies run out of natural resources. Innovation is one of the 12 pillars of competitiveness, according to the World Economic Forum (2009). Figure 11.7 summarizes these 12 pillars of competitiveness into three levels of development: factor-driven, efficiently-driven and innovation-driven. In 2009, Tunisia ranked 30th for innovation factors (and first in Africa); South Africa 36th (second in Africa) and Kenya 50th (third in Africa) in a list of 33 African countries, and 134 countries overall. According to the report, these countries have high-quality scientific research institutions, invest strongly in research and development, and are characterized by a significant level of collaboration between business and universities in research. Algeria, Mauritius, Namibia, South Africa and Tunisia are in the efficiency-driven phase, while Botswana, Libya and Morocco are in transition from factor-driven to efficiency-driven economies. Kenya, despite her high score in innovation factors, is still in the first stage (factor-driven economy) because she still needs to address major weaknesses in the basic requirements such as institutions and infrastructure (Figure 11.7).

Communications Infrastructure

Communications infrastructure includes landline and mobile phone networks, cable networks for internet, major telecommunication networks, and communication satellites. Information and Communication Technology (ICT) is the engine of transformation for modern communication systems. It has been argued that the ICTs hold the key to economic growth, poverty reduction and sustainable development in developing countries. The contrast between the complexity and expense of some of these technologies and the urgent, basic needs of the poor, have led to questions as to what exactly is the link between ICTs and development, and whether these should be a priority for development agencies, and for developing countries themselves. Others have hailed these technologies as holding out great

Figure 11.7: The 12 pillars of global competitiveness



Source: World Economic Forum (2009)

hope for developing countries, and have warned of a growing "digital divide" between the rich and poor that must be narrowed by concerted international action.

Over the last decade, Kenya has come up with an ambitious development agenda aimed at reducing poverty through enhanced and sustained wealth creation. This agenda has often been formulated in the context of high poverty prevalence rates and constrained economic growth rates. Currently, poverty rates in the country stand at 46 per cent with most people living under US$ 1 per day. In the Economic Recovery Strategy 2003-2007, the ICT sector was expected to be a significant part of the growth strategy with a targeted average growth rate of 5 per cent. Under Vision 2030, Kenya aspires to become a "firmly interconnected" country and a technologically-advanced society with modern information and communication systems driving innovation, growth and social progress. The country also aims to become Africa's top off-shoring destination, with Business Process Outsourcing (BPO) as a key growth engine and a preferred employment source for youth and young professionals. As part of the strategy to achieve this, the country is now focusing on establishing relevant capacity in the sector, partly through attracting global IT suppliers as well as BPO players.

In the last six years, ICT access in Kenya has greatly improved. As can be seen from Table 11.14, connections to fixed lines, Code Division Multiple Access (CDMA) and other wireless services increased from 280,000 to 696,000, an increase of about 148.6 per cent. This was mainly driven by increased penetration of wireless telecommunications. The public call boxes–both coin-operated phones and prepaid services–declined by

Table 11.14: ICT access in Kenya

	Unit	2004	2005	2006	2007	2008	2009	% Change
Fixed lines, CDMA and other wireless services								
Capacity	000	508	517	533	505	612	731	43.90
Connections	000	280	287	291	339	527	696	148.57
Public call boxes (telephone booths)								
Coin phones	000	10	8	7	5	6	5	-50.00
Card/prepaid phones	000	2	1	1	1	1	0.5	-75.00
Mobile telephony								
Mobile telephone capacity	000	3,935	6,800	10,600	18,200	25,965	29,000	636.98
Connections	000	2,546	4,479	6,485	9,305	12,934	17,362	581.93
Licensed internet service providers	000	78	72	51	50	56	52	-33.33
Tele-density (%)	-	1	1	1	1	1.4	1.8	80.00
Tele-Accessibility (%)	-	9	15	20	35	36.4	46.8	420.00

Source: Communications Commission of Kenya-CCK (2009); Kenya National Bureau of Statistics-KNBS (2010)

50 and 75 per cent, respectively. In the same period, mobile telephony capacity and connections increased by 636.9 per cent and 581.9 per cent, respectively, while internet service providers declined by about 33.3 per cent from 78 ISPs to 52. The tele-accessibility over the same time increased by 300 per cent, mainly driven by increased subscription in mobile telephony. The sector now has four key firms with Safaricom, the leading mobile telephone service provider, controlling over 77 per cent of the total market.

Table 11.15: Internet users per 100 persons

Country	2000	2001	2002	2003	2004	2005	2006	2007	2008
Egypt	0.64	0.84	2.72	4.04	5.15	11.7	12.55	14.76	16.65
Ghana	0.15	0.2	0.83	1.19	1.72	1.83	2.72	3.85	4.27
Indonesia	0.93	2.02	2.13	2.39	2.6	3.6	4.76	5.79	7.92
Kenya	**0.32**	**0.62**	**1.21**	**2.94**	**3.02**	**3.1**	**7.53**	**7.95**	**8.67**
Malaysia	21.38	26.7	32.34	34.97	42.25	48.63	51.64	55.7	55.8
Mauritius	7.33	8.83	10.33	12.27	13.78	15.28	18.52	20.39	22.22
Rwanda	0.06	0.24	0.29	0.36	0.43	0.56	-	2.12	3.09
Singapore	32.27	41.08	49.44	54.35	63.58	61.85	59.32	67.67	69.64
South Africa	5.45	6.45	6.85	7.17	8.63	7.68	7.81	8.29	8.6
Tanzania	0.12	0.17	0.22	0.68	0.88	0.99	0.97	0.97	1.22
Uganda	0.16	0.24	0.38	0.46	0.72	1.74	2.53	3.67	7.9

Source: World Bank (2010)

Comparison between Kenya and other countries shows that the ICT sector has seen tremendous improvement. With regard to internet usage (Table 11.15), access has improved from 0.32 in the year 2000 to 8.67 per 100 people in 2008. Other Eastern African neighbours (Uganda and Tanzania) in 2008 had access of 7.89 and 1.22, respectively. Her major competitors, South Africa and Egypt, have access levels of 8.6 and 16.65, respectively, while countries such as Malaysia and South Korea have high access levels of 55.80 and 69.64, respectively. With the arrival of the optical fibre cable and increased mobile internet, access costs are likely to come down and, therefore, more adoption of internet in business and households.

In the telecommunications sub-sector, access to mobile and fixed-line telephone subscribers in Kenya increased from 0.42 million in the year 2000 to 16.55 million in 2008. This was a higher number than for Tanzania and Uganda, which by 2008 had access levels of 13.13 million and 8.72 million, respectively, while Egypt had a higher level of 53.21 million and South Africa had 49.43 million. With respect to the percentage of country populations subscribed to mobile and fixed-line telephones, Mauritius, South Africa,

Table 11.16: Mobile and fixed-line telephone subscribers (per 100 persons)

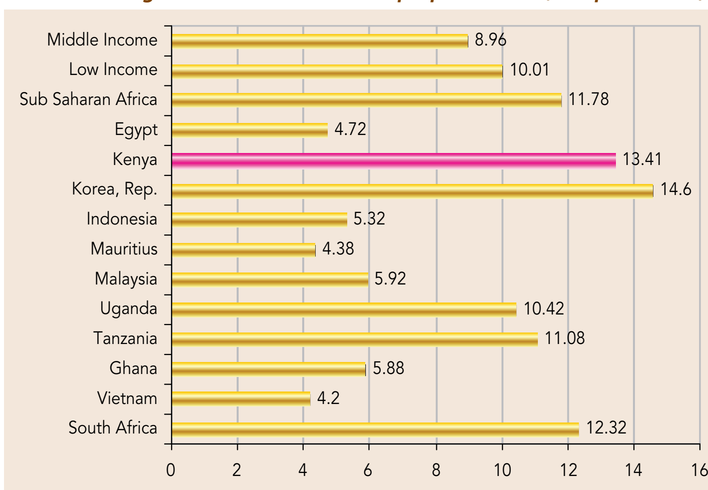
Country	2000	2001	2002	2003	2004	2005	2006	2007	2008
Singapore	116.5	119.4	125.5	132.8	140.3	146.0	150.9	169.7	170.1
Malaysia	41.9	50.9	56.6	63.5	75.6	93.2	91.2	104.3	116.4
Mauritius	38.8	48.3	55.8	66.3	73.1	81.6	90.2	102.3	110.2
South Africa	30.2	35.1	41.0	47.3	55.4	82.5	93.5	97.9	..
Egypt	9.8	13.3	16.8	19.6	22.6	31.1	36.9	51.8	65.4
Indonesia	5.0	6.6	9.2	12.4	18.7	27.4	35.3	50.0	74.9
India	3.5	4.4	5.2	7.1	9.1	12.8	18.6	24.3	33.8
Ghana	1.8	2.4	3.2	5.2	9.4	14.6	24.8	34.9	50.2
Kenya	**1.3**	**2.8**	**4.6**	**5.7**	**8.2**	**13.8**	**20.9**	**30.9**	**42.8**
Tanzania	0.8	1.3	2.1	5.7	5.5	9.1	14.8	20.6	30.9
Uganda	0.8	1.3	1.7	3.1	4.5	4.9	7.1	14.2	27.6
Rwanda	0.7	1.0	1.3	1.8	1.8	2.7	..	7.0	13.8

Source: World Bank, 2010

Egypt and Ghana perform better than Kenya. In East Africa, Kenya leads Tanzania, Uganda and Rwanda in percentage subscription (Table 11.16).

With regard to mobile cellular prepaid tariffs (US$ per month), as can be seen from Figure 11.8, Kenya in 2008 had one of the highest tariffs in the world. In 2008, her tariffs compared to that of South Africa (US$ 12.3), Egypt (US$ 4.7), Ghana (US$ 5.88), Tanzania (US$ 11.1) and Uganda (10.42) was US$ 13.41 per month. Middle-income countries have the lowest tariffs of US$ 8.96. Korea Republic has one of the highest tariffs in the world at US$ 14.6, while Egypt and Ghana have some of the lowest tariffs in Africa and high levels of access as aforementioned.

Figure 11.8: Mobile cellular prepaid tariffs (US$ per month)

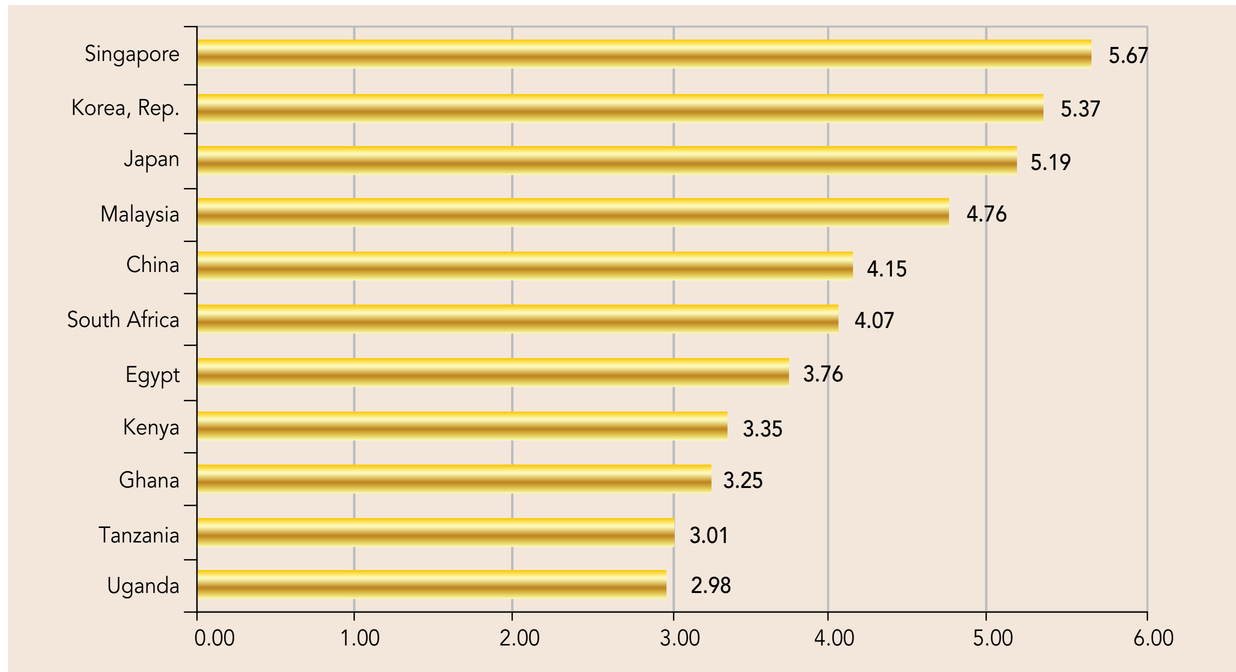


Source: World Bank (2009)

The impact of ICT on competitiveness is usually measured based on the World Economic Forum's *Networked Readiness Index (NRI)*. This is a measure of a country's propensity to exploit ICT opportunities by offering an enabling environment, readiness of key community stakeholders to use ICT, and the actual usage of ICT among stakeholders. As can be seen from Figure 11.9, Kenya's recent showing on NRI ranking is still far below countries such as South Africa, Brazil, Egypt, the Asian Tigers and developed economies. However, the country still has great potential to enhance her competitiveness through ICT.

The telecommunications sub-sector has seen improved performance over time. Telecommunication revenue as a percentage of GDP is shown in Table 11.17. When compared to other countries such as Egypt, Ghana, Indonesia, Korea Republic, Malaysia, and even Rwanda, Kenya is doing better at 6.32 per cent, but below South Africa (at 7.43%).

Figure 11.9: The networked readiness index rankings, 2008-2009



Source: World Economic Forum (2009)

Table 11.17: Telecommunications revenue per cent of GDP

Country	2000	2001	2002	2003	2004	2005	2006	2007	2008
Egypt	2.78	2.89	2.94	3.39	3.38	3.61	3.79	3.84	3.71
Ghana	1.79	2.4	2.08	-	-	-	-	-	-
Honduras	1.42	1.35	1.72	1.96	2.16	-	-	-	-
Kenya	**2.41**	**3.72**	**4.64**	**4.37**	**4.34**	**4.74**	**4.05**	**6.05**	**6.32**
Korea, Rep.	3.89	4.07	4.01	4.52	4.62	4.67	4.7	4.65	4.72
Malaysia	4.14	4.81	4.75	4.51	4.59	-	-	-	-
Mauritius	3.16	3.18	3.42	3.21	3.05	4.42	3.51	3.38	3.63
Rwanda	1.01	2.56	2.81	2.72	-	-	2.96	3.11	3.13
Singapore	3.36	3.68	3.79	3.61	3.32	3.58	2.93	2.79	-
South Africa	5.14	5.23	5.25	5.35	5.17	6.38	7.43	-	-
Tanzania	1.91	2.31	2.27	-	-	-	-	-	-
Uganda	1.51	3.54	-	2.92	2.94	3.19	-	-	-

Source: World Bank (2010)

With regard to exports of goods and services, Kenya's performance has been poor compared to Korea, Malaysia, and Singapore. Uganda is performing better than both Kenya and South Africa (Table 11.18). As can be seen, countries that have been proactive in the ICT sector are reaping high benefits. Singapore and Malaysia have performed far much better compared to other countries.

Kenya lags behind her competitors in ICT expenditure as a percentage of GDP (World Bank, 2009). Countries such as Singapore, Korea Republic, Malaysia and South Africa have kept their ICT expenditure as a percentage of GDP higher compared to Kenya (Table 11.19).

Table 11.18: Exports of ICT goods per cent of total exports

Country	2000	2001	2002	2003	2004	2005	2006	2007	2008
Egypt	-	-	-	-	-	-	-	-	1.81
Ghana	-	-	-	0.03	0.06	0.03	0.01	0.02	0.05
Indonesia	12.63	11.55	11.69	10.29	10.16	9.23	6.89	5.26	4.63
Kenya	**0.09**	**0.18**	**0.78**	**0.32**	**0.16**	**0.3**	**0.45**	**0.97**	**1.26**
Korea, Rep.	35.72	31.11	33.87	34.33	33.92	30.65	27.21	26.21	-
Malaysia	56.58	54.54	54.19	50.75	47.43	45.66	45.07	41.54	26.18
Mauritius	0.77	0.81	1.23	2.81	2.92	14.73	14.44	4.7	4.02
Rwanda	-	-	0	2.48	0.79	1.28	0.69	0.84	0.54
Singapore	56.13	53.12	52.62	48.72	48.79	46.41	45.64	36.19	35.92
South Africa	1.98	2.1	2.14	1.94	1.89	1.7	1.82	1.78	1.61
Tanzania	0.38	0.09	0.03	0.04	0.15	0.42	0.33	0.37	-
Uganda	1.12	0.56	0.62	0.52	1.86	2.07	6.11	6.91	4.86

Source: World Bank (2010)

The government has prioritized ICT investments aimed at strengthening ties between institutions. This includes digitization within the Ministry of Education, which has started with high hopes that it will help expand and accelerate dissemination of educational programmes countrywide, ease teacher shortages, and enhance opportunities for harmonization of education programmes. In relation to this, the Kenya Education Network Trust (KENET) was seeking to procure a network operation centre and related software to connect over 70 educational institutions in the country.

To date, the ICT Board has awarded five high-value contracts aimed at digitizing various arms of government under KTCIP (Kenya Transparency and Communications Infrastructure Project). Among them are the pre-digitization support contract for the Judiciary, which was handed to the Jomo Kenyatta University of Agriculture and Technology Enterprises (JKUATES) to cost Ksh 5.5 million, as well as a tender for the supply of bandwidth to the e-government network awarded to Telkom Kenya to cost Ksh 90 million. The three other projects are in the Ministry of Information and Communication; a job entailing the installation and commissioning of a local area network at the Ministry of Information and Communication's Kenya News Agency handed to Forecast Electronic Systems to cost Ksh 12 million; supply of hardware to the same department to MIBM at Ksh 19 million and a Ksh 53 million (US$ 716,000) contract to the same department to the Kenya Data Networks (KDN). Upcoming projects include the supply, installation and commissioning of software and hardware, document scanning and digitization services at the High Court registries, and the supply and installation of equipment, data capture and digitizing of files at the Company Registry–which form part of the ongoing reforms within the legal system.

Table 11.19: ICT expenditure per cent of GDP

Country	2003	2004	2005	2006	2007	2008
Egypt	3.96	4.69	5.32	5.36	5.23	5.7
Indonesia	3.14	3.34	3.34	3.2	3.25	3.29
Kenya	**5.43**	**5.46**	**5.84**	**5.15**	**5.55**	**5.75**
Korea, Rep.	8.97	9.48	9.21	9.41	9.2	9.07
Malaysia	12.83	13.42	12.05	12.23	11.05	9.7
Singapore	10.1	9.7	9.56	8.72	7.53	7.08
South Africa	7.99	8	9.49	9.8	9.45	10.1

Source: World Bank (2010)

The government plans to boost connectivity and bridge the ICT gap as a way of meeting the universal access fund obligation in the country. In this regard, five digital villages/*pasha* centres were to be set up

Table 11.20: Internet bandwidth bits per person

Country	2000	2001	2002	2003	2004	2005	2006	2007	2008
Egypt	0.44	4.68	8.85	12.45	11.54	32.27	119.25	186.25	332.12
Ghana	-	0.20	0.59	1.38	-	7.67	14.74	21.73	86.29
Indonesia	1.22	1.65	2.72	4.96	6.96	6.87	15.64	35.09	119.94
Kenya	**0.33**	**0.81**	**0.79**	**0.76**	**0.97**	**3.17**	**17.97**	**8.93**	**21.37**
Malaysia	23.20	30.84	54.45	93.39	126.84	124.56	625.72	1547.66	2373.59
Mauritius	5.06	8.33	28.09	51.52	57.57	123.06	153.23	226.46	364.11
Rwanda	-	0.02	1.20	1.15	5.10	6.01	7.60	16.50	27.47
Singapore	558.36	637.75	1412.40	3782.44	5928.91	-	15004.09	22783.42	-
South Africa	7.91	10.60	12.48	13.66	19.02	18.80	52.44	70.64	-
Tanzania	0.06	0.12	0.44	0.43	0.42	2.56	2.49	2.42	-
Uganda	0.07	0.20	0.30	0.37	2.18	2.11	4.49	11.24	11.66

Source: World Bank (2010)

in each constituency by the end of year 2010. The government has already trained 1,000 youths who are supposed to be loaned up to Ksh 1 million to set up the centres. According to the government's requirements, operators have to extend data services in rural areas and build centres for the delivery of e-government services. The investment, valued at US$ 200,000 for the Nairobi-based control centre and around US$ 10,000 per site, comprises installation of transmission dishes, tower constructions and connectivity.

Internet bandwidth bits per person are shown in Table 11.20, where Egypt, Indonesia, Malaysia and Mauritius have over 100 bits per person, doing better than Kenya which has 21.37 bits per person. In the region, 800km of the East African Submarine Cable System (known as EASSy) have been deployed to nine countries along the East African coast, offering more advanced internet and better connectivity to Europe, the Americas, the Middle East, and Asia. Kenya has witnessed the landing of both, EASSy, TEAMS and SEACOM fibre optic networks. Their aim is to connect the major urban areas of Kenya, Mozambique, Madagascar, South Africa, and Tanzania. These will create a competitive environment where bandwidth prices will fall, so that service providers can pass this benefit to customers.

While it remains to be seen whether EASSy and other fibre optical networks will provide faster and cheaper Internet, the fact that the projects have successfully been implemented is an accomplishment in itself. It is encouraging that foreign investors and especially African-based companies are committed to improving the economic development of East Africa. There are regional efforts in place to combat cybercrime through: the East African Community (consisting of Kenya, Tanzania, and Uganda) and the South African Development Community (consisting of Malawi, Mozambique, South Africa, Zambia, and Zimbabwe), which have both enacted plans to standardize cyber crime laws throughout their regions.

In terms of voice traffic in minutes per person (Table 11.21), Egypt, Malaysia, Mauritius, Rwanda, Singapore and South Africa are doing better than Kenya.

Compared to other African countries, South Africa is doing better in regard to the number of computers per 100 persons. Kenya needs to emulate countries such as Malaysia, Mauritius and, most importantly, Singapore (Table 11.22).

Table 11.21: Voice traffic, minutes per person

Country	2000	2001	2002	2003	2004	2005	2006	2007	2008
Egypt	11.51	14.55	17.90	18.46	22.26	28.41	20.23	14.68	26.91
Ghana	10.94	10.50	9.69	14.76	-	20.66	-	0.98	5.99
Indonesia	3.60	3.28	3.41	4.00	5.29	-	-	-	-
Kenya	**2.58**	**2.40**	**1.89**	**4.36**	**5.06**	**5.59**	**4.24**	**3.37**	**-**
Malaysia	62.52	69.62	87.92	-	-	-	-	-	-
Mauritius	72.16	76.51	83.10	91.56	130.81	110.84	107.65	129.78	99.72
Rwanda	-	-	-	-	-	1.25	-	10.94	-
Singapore	644.26	726.37	-	-	-	1063.34	1236.88	1530.97	-
South Africa	25.22	24.77	27.64	-	-	-	-	-	-
Tanzania	1.10	1.13	1.43	-	-	-	0.51	0.46	-
Uganda	-	-	2.76	3.13	-	-	-	7.02	-

Source: World Bank (2010)

Table 11.22: Number of computers per 100 persons

Country	2000	2001	2002	2003	2004	2005	2006	2007	2008
Egypt	11.51	14.55	17.90	18.46	22.26	28.41	20.23	14.68	26.91
Ghana	10.94	10.50	9.69	14.76	-	20.66	-	0.98	5.99
Indonesia	3.60	3.28	3.41	4.00	5.29	-	-	-	-
Kenya	2.58	2.40	1.89	4.36	5.06	5.59	4.24	3.37	-
Malaysia	62.52	69.62	87.92	-	-	-	-	-	-
Mauritius	72.16	76.51	83.10	91.56	130.81	110.84	107.65	129.78	99.72
Rwanda	-	-	-	-	-	1.25	-	10.94	-
Singapore	644.26	726.37	-	-	-	1063.34	1236.88	1530.97	-
South Africa	25.22	24.77	27.64	-	-	-	-	-	-
Tanzania	1.10	1.13	1.43	-	-	-	0.51	0.46	-
Uganda	-	-	2.76	3.13	-	-	-	7.02	-

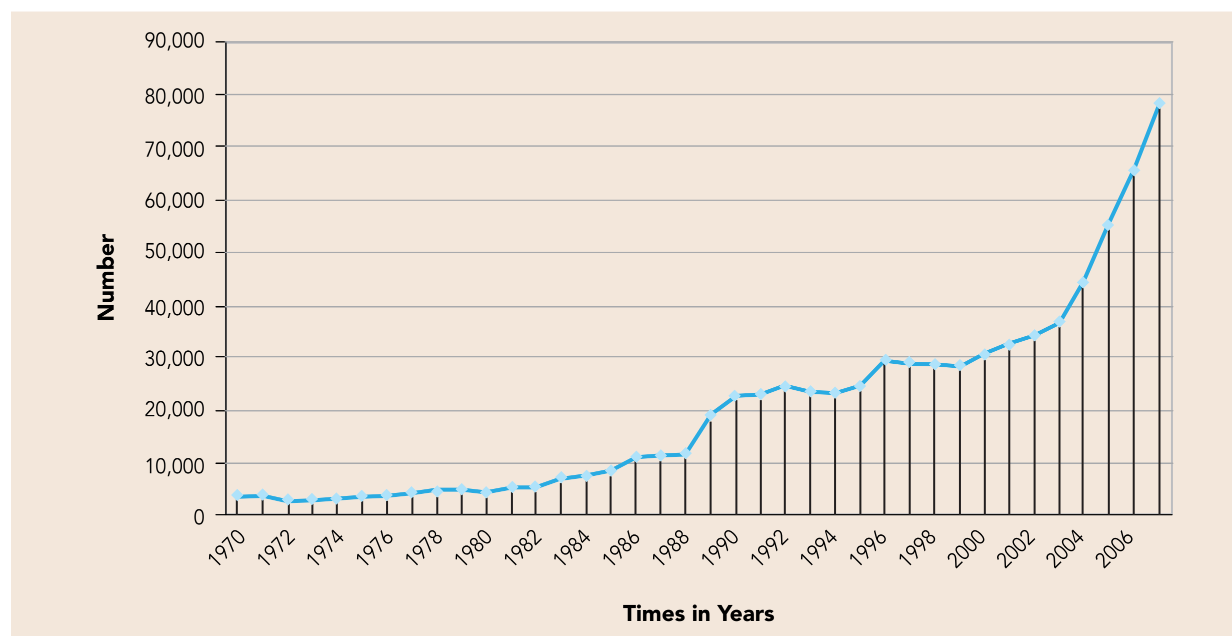
Source: World Bank (2010)

Labour participation in the ICT sector

Labour participation in the ICT sector has been growing rapidly. This has been enhanced by the liberalization of the sector, which has led to increased investment by the private sector. Mobile telephony and internet sub-sectors have the most investments. Kenya is likely to see more labour participation with the arrival of the optical fibre cable that will lead to reduction in tariffs and ICT costs in the sector. According to Figure 11.10, labour participation in the formal ICT sector has increased from about 5,000 in 1970 to about 80,000 in 2006 and it is likely to improve further in the coming years with the new developments in the sector.

ICT is creating jobs through direct employment in the ICT industries and indirectly through ICT-enabled and ancillary enterprises. Currently in Kenya, there is no proper audit of the existing ICT human resource capacity. However, the Computer Society of Kenya estimates that there are a total of 5,500 ICT professionals in the country, with 300-500 graduates in computer science, electronics/electrical engineering and library scientists per year. For this reason, there is need for a strategy for massive capacity building for a critical mass of skilled ICT human resource to drive the ICT industry.

Figure 11.10: Formal employment in Kenya's ICT sector



Source: Kenya National Bureau of Statistic, Statistical Abstracts (various)

ICT Sector Achievements, Outstanding Issues and Policy Challenges

As Kenya races towards being the leading ICT hub in East and Central Africa, it can build on the following achievements so far realized:

- Safaricom is still the most respected company in East Africa and has performed well, with 77 per cent of the total mobile phone subscriptions in Kenya.
- Success in mobile money transfers (M-pesa, M-Kesho, and Zap). These have improved access to credit among the unbanked population and in marginalized areas.
- The CCK was named the best regulator in the communications sector in Africa in 2009.
- The arrival of the Seacom cable. This is expected to bring down tariffs, which are today the highest in the region.
- Radio broadcasting has already gone digital with trials already launched in various regions in the country. This will improve the quality of mass communication.

Policy Recommendations for Research, Technology, Innovation and ICTs

- Kenya's fair score on innovation index calls for policy measures that encourage retaining and optimal utilization of existing scientific research capacity, and patenting of innovations. In this light also, physical infrastructure development needs should be enhanced, since they offer a viable environment for technological learning and adaptation of suitable foreign technologies.
- There is need to ensure maximum utilization of the optical fibre cable (Seacom). This is expected to bring down tariffs which, as mentioned earlier, are today among the highest in the region.

Water and Waste Management Infrastructure

Water management infrastructure is essential to improving access to safe and clean water. This includes water supply and drainage systems, water treatment and metering systems, sewage collection and disposal facilities, irrigation systems, and

major flood control systems. Waste management infrastructure is critical to health and attainment of a safe and life-enhancing environment. Rapid population growth and urbanization have aggravated the challenges of waste management. The rapid accumulation of waste in Kenya, especially in urban centres, has already made the case for safe disposal of hazardous waste and sustainable pathways for utilizing and managing solid and electronic waste an emergency.

Access to water and sanitation: Kenya versus comparator countries

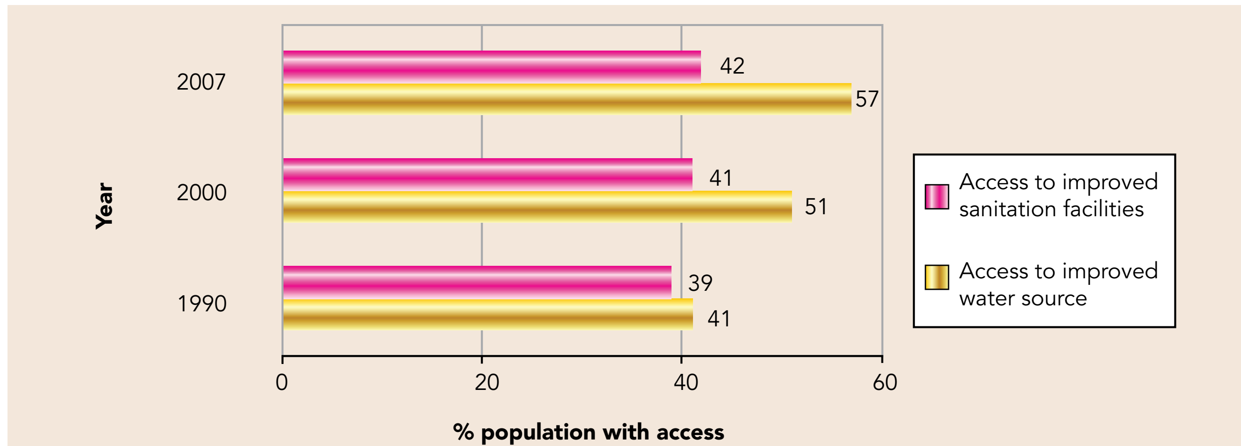
Access to water and sanitation is a critical requirement for healthy living. Global indicators of access to water and sanitation services show poor performance trends, especially in sanitation. More than 1.1 billion people do not have access to safe drinking water as per the standards set by the World Health Organization (WHO) for Drinking Water Quality. The term "improved access" refers to water sources that are superior to traditional, unprotected ones. Sources that qualify as "improved" include a household pipe connection, borehole, protected dug well, protected spring, or rainwater collection. Connection to a public sewer or septic system or use of ventilated pit latrines and some simple pit latrines qualify as improved sanitation.[4] As shown in Figure 11.11, access to water and sanitation in Kenya, like in most developing countries, is still below the standards set by the WHO.

The data presented below shows the huge rural-urban disparity in access to water and sanitation in Kenya.

Access to improved water sources

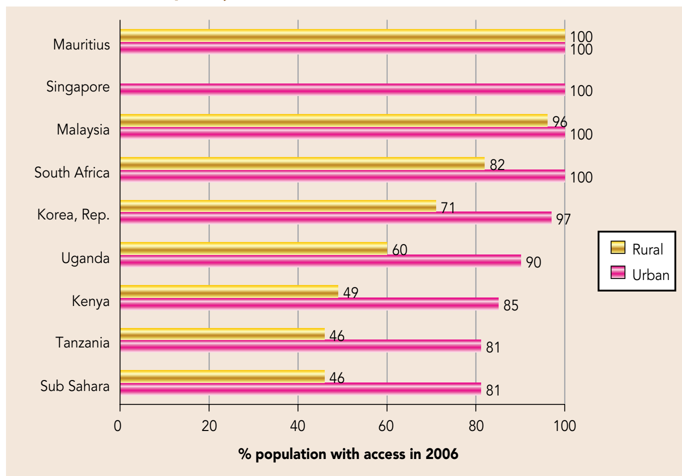
In 2007, annual freshwater withdrawal in Kenya was 13 per cent of internal renewable water resources, and per capita availability was 552 cubic metres (FAO, 2007; World Bank, 2009). There is a wide rural-urban disparity in access to improved water sources, rural areas being more disadvantaged. Access to improved water sources in 2006 was 85 per cent in urban areas and 49 per cent in rural areas (Figure 11.12). This was below South Africa's 100 per cent and 82 per cent, and Uganda's 90 per cent and 60 per cent in both cases, respectively. This is an indication that Kenya needs to do more towards achieving sustainable water supply. Comparative studies also show that Kenya's water sector suffers hidden costs estimated at 0.3 per cent of its GDP; 60 per cent of this is due to mispricing, 30 per cent due to unaccounted losses such as illegal connections and leakages, and 10 per cent due to inefficient bill collection. The 0.3 percentage share of Kenya's GDP is at par with Rwanda's, Uganda's and Ethiopia's, but Tanzania has a much better score, with only 0.1 per cent of its GDP claimed by hidden costs in the water sector (Banerjee *et al.*, 2008).

Figure 11.11: Access to improved sanitation and water sources in Kenya, 1990-2007



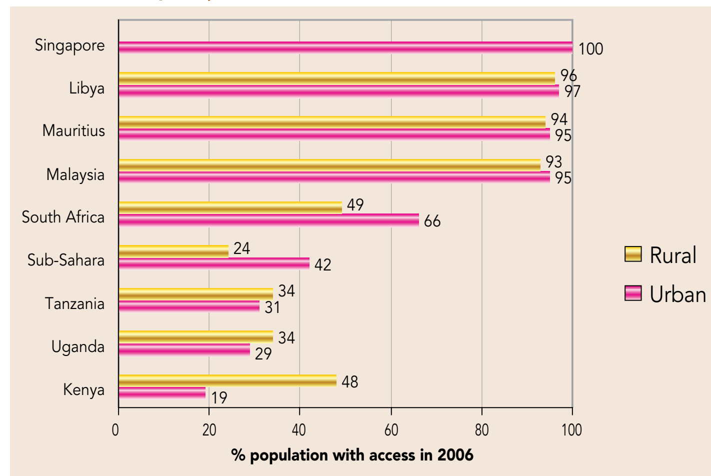
Source: World Development Indicators (2009)

Figure 11.12: Access to improved water sources: Urban-rural disparity in 2006



Source: World Bank (2009), World Development Indicators

Figure 11.13: Access to improved sanitation facilities: urban-rural disparity in 2006



Source: World Bank (2009), World Development Indicators

Kenya needs to put in place strategic policies to improve access to water. The number of water purification points in Kenya has remained constant at 186 from 2004-2008/09. However, the number of new boreholes drilled increased from a low of 63 in 2004/05 to 231 in 2005/06 but in 2008/09 this dipped to 141 (Kenya National Bureau of Statistics, 2009). This could be attributed to the post-election violence, which affected security in many of these areas as well as the global financial crisis that may have affected donor inflows dedicated to water and sanitation. However, more resources were allocated in the year 2009/10, and this is likely to improve performance in the sub-sector.

Access to improved sanitation facilities

With respect to access to improved sanitation facilities, Kenya performs worse than her comparators, more so in urban areas. In 2006, only 19 per cent of Kenya's urban population had access to improved sanitation facilities, far below South Africa's (66%), Singapore's (100%), and the sub-Saharan Africa's average (42%) (World Bank, 2009). On the other hand, 48 per cent of the rural population had access to improved sanitation facilities in 2006, lower than Libya's 96 per cent, Malaysia's 93 per cent, and South Africa's 49 per cent; but higher than the sub-Saharan average of 24 per cent, and 34 per cent for Uganda and Tanzania (Figure 11.13).

Water and Sanitation Achievements, Outstanding Issues and Policy Challenges

Significant steps have been taken towards boosting access to improved water sources. This has been demonstrated by the increase in national access to improved water sources from 41 per cent in 1990 to 57 per cent in 2007. However, there are still many outstanding setbacks in this sector. Rural Kenya is still far behind urban areas in access to improved water sources (by about 40%). There has been poor performance in access to improved sanitation, with hardly any measurable improvement recorded between 1990 and 2007, and urban areas have been more adversely affected. The increasing demand imposed by population growth and urbanization on the country's limited water resources calls for measures to increase efficient water use and water conservation, protect and recharge groundwater, and to enhance sustainable (rain) water harvesting efforts and technologies. Technology and innovation has a great role to play in sustainable waste management, an area where Kenya performs much worse that her neighbours.

Policy Recommendations for the Water and Sanitation Sub-sector

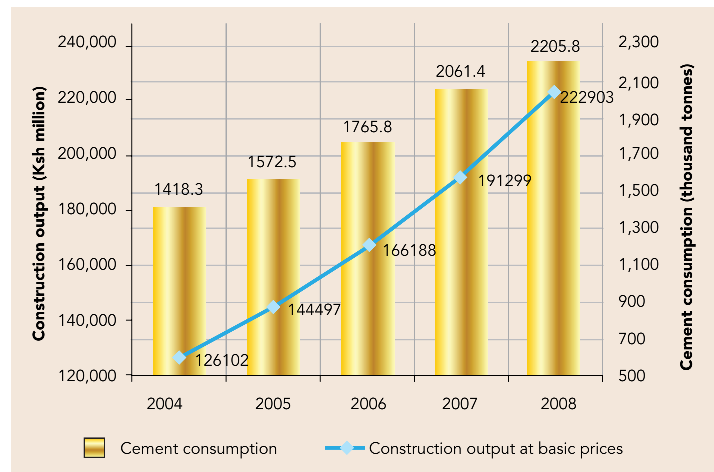
The following recommendations can be made for the water and sanitation sub-sector:

- Investment in water management infrastructure must be improved with key targets focused on enhancing access to improved sources and sustainable rainwater and groundwater harvesting. Policies and financial mechanisms to incentivise efficiency in domestic, municipal, industrial and agricultural use must strictly be enforced since the country faces water scarcity against the high pressure of rapid population growth.
- Access to improved sanitation in Kenya is wanting, with a wide rural-urban disparity. Bridging the wide gap demands major interventions. Appropriate technology holds the promise of achieving sanitation targets faster. Industrial clusters that facilitate waste reuse and recycling and use of resource-efficient facilities such as composting toilets are key examples worth pursuing.
- The pronounced low access to sanitation in urban areas is related to the high incidence of informal settlements, the reason for which suitable land policies and improved planning of settlements are called for. This will further ensure improved access to water in the housing sector.

Building and Construction Sub-sector

Kenya aspires to be a decently housed nation in a sustainable environment. This qualifies the provision of adequate utilities within the housing sector as a key priority. The building and construction sub-sector, together with related activities, is one of the major sources of economic development. It generates employment and offers job opportunities to millions of unskilled, semi-skilled and skilled work force. It supplements the foreign exchange earnings derived from trade in construction material and engineering services. According to Kenya's Economic Survey 2009, most key economic indicators of building and construction improved between 2007 and 2008. Construction output at basic prices, and cement consumption have been rising over the years (Figure 11.14). Cement consumption, a key indicator of construction activities, increased by 7 per cent from 2.061 million tonnes recorded in 2007 to 2.206 million tonnes in 2008. Disbursements by the Kenya Roads Board to the various roads agencies increased by 23 per cent from Ksh 15.4 billion in 2007/08 to Ksh 19.0 billion in 2008/09. The index of government expenditure on roads increased from 219.4 in 2007 to 256.4 in 2008 (Kenya National Bureau of Statistics, 2009).

Figure 11.14: Construction output and cement consumption



Source: Kenya National Bureau of Statistics (2009), Economic Survey

It is worth noting that this sector is of major environmental significance. Research has established that building and construction is responsible for about 30-40 per cent of environmental degradation related to deposited waste, energy use in society, and material flows (UNEP SBCI, 2007). Using recycled building materials can help save 12-40 per cent of the total energy used during material production (UNEP SBCI, 2007).

How buildings are designed, planned, and serviced with basic services such as electricity, water and sanitation, and maintained to ensure safety, aesthetic appeal, environmental friendliness, and

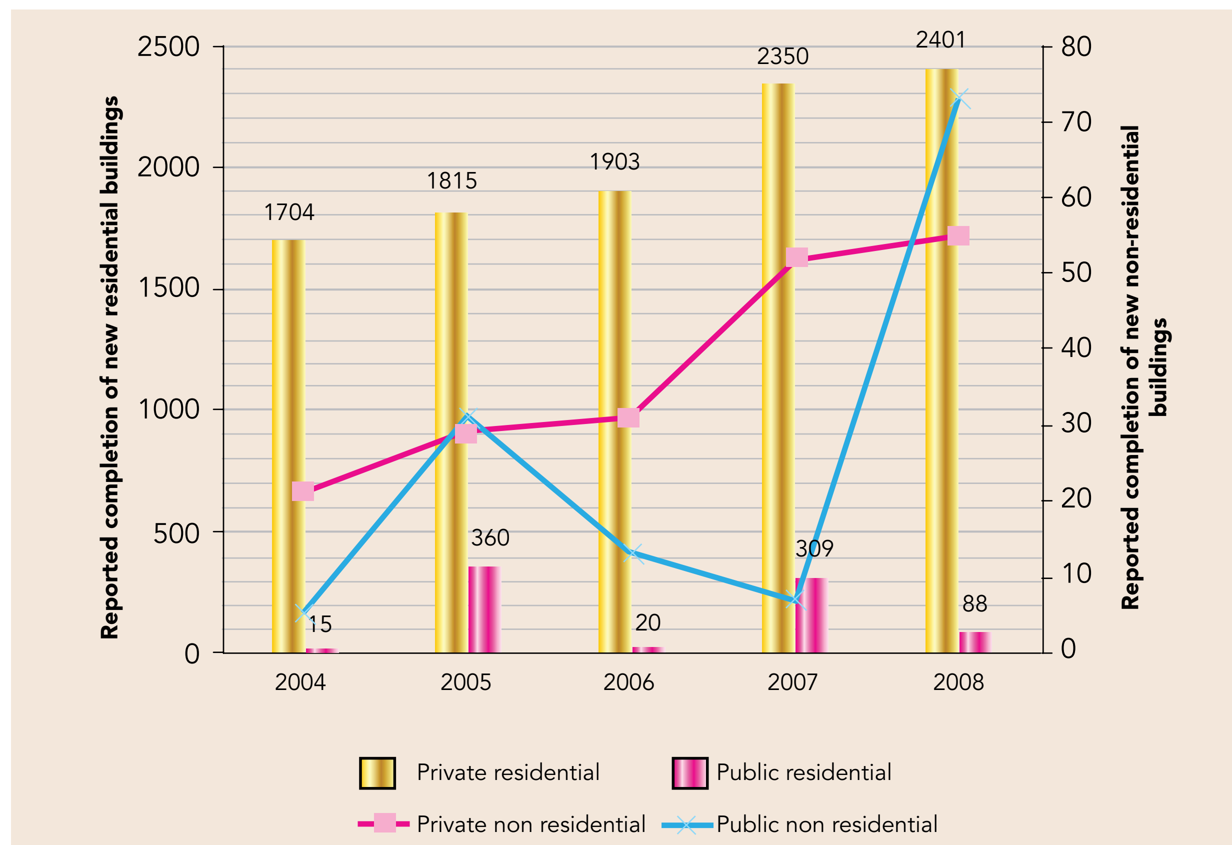
durability is central to infrastructure sustainability. Professionalism in this sector is a major concern; in Nairobi alone, over 90 per cent of buildings are not designed or supervised by professionals and the city currently lacks a master plan. Only a third of Kenyan towns are planned and only four municipalities have planning departments at present (Government of Kenya, 2008).

In Kenya, the private sector has been playing a dominant role in providing residential buildings, as shown in Figure 11.15 for some key urban centres: Nairobi, Mombasa, Kisumu, Nakuru and Malindi. Supply of both residential and non-residential buildings from the public sector has been unsteady over the years. Therefore, to effectively address the existing enormous shortfall in housing units (estimated at about 170,000 annually and accompanying issues of affordability), combined efforts from both the private and public sector are essential.

Policy Recommendations for the Building and Construction Sub-sector

- There is need to review the cost of construction inputs, which directly affects the cost of housing. A revised building code needs to expedite the inclusion of other building materials that are cheaper, better adapted to local climate, and environmentally friendly.
- There is need to develop new master plans for all counties to help direct and control land use development. Enforcement of development control must be emphasized, as well as recruitment of qualified planning and engineering professionals.

Figure 11.15: Reported completion of new buildings, 2004-2008



Source: Kenya National Bureau of Statistics (various), Statistical Abstracts, and Economic Surveys

Physical Framework for Sustainable Infrastructure Development and Management

Developing quality infrastructure for a nation is a costly and painstaking process. Infrastructure assets must, therefore, be managed in a sustainable manner to realize returns on investment and reap long term benefits of such major ventures. At the core of the infrastructure issues already discussed is the Earth itself. This fact makes sound Earth-monitoring networks a key component of any country's sustainable infrastructure development and management framework.

Geophysical exploration networks

Geophysical exploration deals with research pertaining to the study of physical aspects of the Earth and its atmosphere. It is essential to modern environmental monitoring. Advancement in modern Earth sciences has extended geophysical research to phenomena of the outer parts of the Earth's atmosphere and the physical properties of other planets and accompanying satellites.[5] Geophysical exploration networks are made up of facilities for earthquake measurements (seismometers), meteorological monitoring systems, remote sensing satellites and associated global positioning and geo-information systems (GPS and GIS), as well as tidal and fluviometric[6] measurement structures.

Opportunities availed by geophysical exploration

Geophysical exploration helps to disclose the early signals useful in natural resource management, sound infrastructure planning, and emergency preparedness. The growing degree of interdependence and strong linkages among national economies in the world today accentuates the need for sound geophysical exploration. For instance, the closure of the European airspace in April 2010 due to a volcanic eruption in Iceland led to cancellation of some 4,000 flights. The consequences of this explosion were felt globally, and Kenya's tourism and horticultural sectors were considerably affected. Geophysical exploration networks, therefore, make up a key component of essential infrastructure in the present age.

Most African countries (Kenya included) have rich natural endowments. Sound geophysical exploration infrastructure is crucial for a country to undertake comprehensive natural resource assessment and manage such resources in a sustainable manner. National resource development and management for a resource-rich country such as Kenya can be enhanced through the following applications of geophysical exploration:

- Energy resource exploration, for example, for petroleum and geothermal sources.
- Mineral and groundwater exploration.
- Safe location of engineering structures, informed by considerations of sub-surface risk factors such as fault lines.
- Environmental monitoring and forensic studies.

It is evident that Kenya needs to focus more attention on developing geophysical exploration infrastructure network to enhance her global competitiveness. Achieving this feat invokes the government's dedication to the following key interventions:

- Developing appropriate methodologies for geophysical exploration through capacity building as well as collaborative research and development.
- Investing in adequate instrumentation for geophysical exploration.
- Enhancing data mapping, data processing and data interpretation techniques and technologies for geospatial and geophysical analyses.

The following examples exhibit the wide spectrum of development opportunities that can be exploited through geophysical exploration towards realizing Kenya's development blueprint.

Energy resource exploration

At 0.03 kW per capita of electric power availability by the year 2009, Kenya lagged behind Ghana (0.07 kW/capita), Gabon (0.30 kW/capita), and South Africa (0.86 kW/capita) for the same period. Best practices such as in Canada, at 3.72 kW/capita, avail one hundred times or more of electricity. Geothermal mapping in the Rift Valley is a great opportunity for Kenya to increase power supply. The recent establishment of the Geothermal Development Company (GDC) by the Ministry of Energy is already a demonstration of the high premium the country has placed on geothermal resource assessment. Exploration for coal and similar energy sources will get a big boost from superior geophysical exploration infrastructure.

Water resources management

Identification and development of underground water supplies are important factors in ensuring adequacy, both in terms of quality and quantity of water, for a water-scarce nation. Assessments related to hydrology, regional geology, and geochemistry are of critical importance here. Geophysical measurements of electrical conductivity, for instance, enable the detection of both fresh and saline water sources, and this is crucial in water resource assessment and quality assurance. With increasing urbanization, there is a high likelihood of over-exploitation of groundwater in rapidly growing centres such as Ongata Rongai. The adverse effects of this, particularly gradual sinking of land in cities, need to be monitored through geophysical studies.

Public safety

Public safety must not be compromised when locating engineering structures. There is need to map and discover points of weaknesses such as fault lines, in case of earthquakes. The building and construction sub-sector is an obvious beneficiary of such information, which can lead to strategic design and location. This information is critical for preventive maintenance, and can be a useful addition to actuarial indicators considered when insuring buildings against risks. Geological mapping in Nairobi, for example, has revealed that the southern part of the metropolitan region has many fault lines, unlike the stable eastern region. Damage to physical infrastructure located in geologically weak (and hence high-risk) zones can result in great socio-economic losses, which a country may take a long time to recover from.

Environmental monitoring

Geophysical exploration networks effectively meet the need for inexpensive and rapid techniques of environmental monitoring. Remote sensing techniques such as airborne geophysical exploration offer vast exploration opportunities. A sound geophysical network is essential to monitoring the country's vast inland and coastal resources, including natural resource accounting for proper management, policy and technical decisions. Regular environmental impact assessments must accompany exploration and exploitation of the country's resources to ensure that the natural resource base is sustained.

Other Achievements, Outstanding Issues and Policy Challenges

Financing issues

There are recent initiatives and suggestions for reforming the provision and financing of infrastructure in developing countries such as Kenya. They include encouraging private investment as a way of avoiding the inefficiencies of public administration, and tapping into local savings to avoid excessive reliance on external borrowing. Several outstanding issues remain with regard to infrastructure financing:

- Introduction of the infrastructure bond by the Ministry of Finance through the Central Bank of Kenya. The initiative has so far raised about Ksh 32.9 billion. The first infrastructure bond,

which raised Ksh 18.5 billion, has been utilized to finance roads, water and irrigation, and energy.

- Public-private partnerships, particularly in the ICT sector, where the government in partnership with the private sector was able to bring on board the optical fibre cable (Seacom).
- The infrastructure stimulus package such as the Ksh 28 billion allocated to upgrade Thika Road is one of the key achievements in financing of infrastructure in the country.
- Other financing initiatives such as the KenGen and Safaricom bonds have also been successful.

Policy Challenges

- High cost of power still remains a big challenge in the energy sub-sector due to hydrological fluctuations, which have led to an upsurge in thermal generation of electricity.
- Financial constraints due to the burden of many projects that need to be constructed and rehabilitated.
- Corruption is still a growing problem but progress has been made, e.g. through registering all contractors in the country.
- Procurement procedures are a challenge, both from the side of government and development partners. At times, this has delayed projects and led to low absorption of funds from the Treasury. To solve this problem, there have been capacity building efforts in procurement by the PPOA in conjunction with government and related agencies to streamline procurement processes.
- High cost of materials has hampered infrastructure development in the key areas of road construction, housing, energy, and environmental infrastructure.
- Replacement of obsolete infrastructure technologies is challenging since it calls for change of attitude besides high capital investment.
- Regulation of infrastructure and economic services and particularly in the implementation of the axle load policy to limit overloading of truck and reduce damages to roads.

Conclusion

This section has illuminated the vital role that infrastructure and economic services play in ensuring sustainable national development. This important role was discussed under key infrastructure typologies, namely: energy infrastructure, transportation infrastructure, technology infrastructure, water and waste management infrastructure (including building and construction), and geophysical exploration networks. Increasingly interdependent, these infrastructure sectors are a means to ensuring safety, security and efficient delivery of goods and services. All these factors promote economic prosperity and boost the quality of life.

Given the current trends and the aspirations of Kenya Vision 2030, demand for sustainable infrastructure and related economic services will increase drastically in the next two decades. This change will mainly be influenced by challenges arising from global economic growth, technological sophistication, climate change, urbanization, and growing congestion. Many parts of infrastructure systems in both rich and poor nations are ageing rapidly, public finances are becoming increasingly tight, and infrastructure financing is becoming much more complex. Kenya is no exception to this predicament.

This section concludes that the infrastructure sector is grossly under-funded. Therefore, the government should, under the circumstances, consider increasing the current sector ceiling to Ksh 250 billion in order to implement the flagship projects as stipulated in the physical infrastructure medium term expenditure framework. However, it has been shown that new initiatives in infrastructure financing are bearing fruit and particularly in infrastructure bonds and public-

private partnerships. Procurement procedures related to infrastructure investment and delivery need to be streamlined to increase absorption of funds both from the public sector side as well as development partners.

Infrastructure investments in the country have always followed demand, and not anticipated demand as seen in the East Asian Model, where infrastructure investments follow stimulating demand. Most infrastructure projects highlighted in the master plans in the early 1960s, such as Dogo Kundu (which is to act as a bypass and also host a Free Trade Zone) have not yet been implemented, and need to be developed.

Cross-Cutting Recommendations

Earth monitoring systems

- Resource exploration and infrastructure sustainability owe a lot to sound earth monitoring and measurement systems. This has a bearing on safety, security and the wider economy. To boost sustainable infrastructure development, the country needs to invest in adequate capacity building and geophysical exploration networks for improved spatial data capture and early warning systems.

Financing

- There is need to establish an infrastructure unit at the Ministry of Finance to coordinate all infrastructure investments in the country in order to achieve efficient service delivery.
- There is need to enhance and sustain the infrastructure stimulus package such as the Ksh 28 billion allocated to upgrade Thika Road. This should be extended to other infrastructure projects as well.
- There is need to enhance and sustain domestic borrowing through infrastructure bonds and other long term infrastructure financing by the Ministry of Finance to increase the amount of funds available to projects. The government should continue with efforts to attract huge borrowing through initiatives such as the listing in the Euro bond market.
- There is need to promote public-private partnerships, particularly in the infrastructure sectors, towards financing various projects such as wind power generation and transportation infrastructure development.

Endnotes

1 International Air Transport Association

2 The Logistics Performance Index (LPI) and its underlying indicators constitute a unique dataset to measure country performance across several dimensions of logistics and to benchmark that logistics performance against 150 countries. It provides the empirical basis to understand and compare differences in trade logistics as well as to inform policy with respect to difficult bottlenecks and tradeoffs. Source: IBRD, 2007

3 Defined by the Association for Experiential Education as “a philosophy and methodology in which educators purposefully engage with learners in direct experience and focused reflection in order to increase knowledge, develop skills and clarify values.”

4 Montgomery, M.E (2007), *Water and sanitation in developing countries: including health in the equation millions suffer from preventable illnesses and die every year.* Yale University

5 Moons, or the small celestial bodies revolving around larger ones

6 Includes stream gauges for taking stream flow measurements

12 Environment and Natural Resources

Introduction

This chapter presents an overview of the status of environmental quality in the country and provides a snapshot of changes in environmental quality over time. Such information is useful for two reasons: first, it provides comparative information about the country's bundle of environmental attributes *vis a vis* other countries; second, it assists policy makers to formulate better environmental policies so as to increase the quality of life for the citizenry.

For comparison, we have chosen countries whose experiences may help increase our understanding of the links between economic development and the environment. For instance, over the last two decades, economic growth per capita in Malaysia averaged 5 per cent a year. In Singapore, the percentage of the population living below the poverty line is estimated to have declined by between 50 to 70 per cent. At the same time, environmental losses in some of these countries surpassed in many respects those of other regions (Hammer and Shetty, 1995). Emphasis should be on how to maintain continuity of economic and social developments while conserving the environment without jeopardizing the future use of natural resources.

The Economic and Environmental Situation

Kenya derives over 40 per cent of her Gross Domestic Product (GDP) from the environment and natural resource-based sectors such as agriculture, energy, forestry, tourism, and water. These sectors provide about 37 per cent of wage employment in the country (Government of Kenya, 2010). Most Kenyan people are dependent directly or indirectly on natural resources for their livelihoods. Over 70 per cent of the population resides in the rural areas and directly or indirectly derive their livelihoods from agriculture and other related primary sectors. In spite of the importance of the environment and natural resources sector, the budgetary allocation to these sectors is disproportionately low. In the 2009/10 financial year, the allocation for the environment, water and sanitation sectors was less than 4 per cent of the total budget (Government of Kenya, 2009a). The environmental sector also faces a serious challenge in terms of data availability. Data for most of these indicators is sourced from international organizations, and there is apparent lack of consistency between different sources. Several critical environmental indicators–especially those linking environment and

poverty–are not mainstreamed in the national data gathering protocols.

The country is currently experiencing high levels of natural resource degradation manifested through high rates of soil erosion, declining soil fertility, pollution of water bodies, ineffective disposal of solid waste, deforestation, sporadic violent conflicts over resources, among other things. Environmental degradation is a threat to such key sectors as agriculture, energy, health, tourism, fisheries, and forestry and has the potential to jeopardize the realization of the development targets set out in Vision 2030. According to Vision 2030, the government aims at transforming the country into a middle income country where citizens enjoy a high quality of life in a clean and secure environment. In order to achieve the targeted rates of GDP growth of 10 per cent annually, the environment and key natural resources will have to be sustainably managed. The need to manage the environment and natural resources sustainably has become of even greater concern due to the emerging threat of climate change as a result of global warming. Climate change is projected to have serious impacts on weather patterns in the future, thereby worsening the precarious situation of the already vulnerable poor people, especially in rural areas.

In recognition of the national importance of the environment and natural resources, the government has continued with efforts to ensure their sustainable management. The ongoing effort to reclaim, rehabilitate and restore the five main water towers in the country is part of that effort. In particular, in 2009, the government set up a comprehensive process of repossessing and rehabilitating the Mau Forest complex. The government has (April 2010) developed a climate change response strategy for the country through a consultative process. However, the final adoption of the national environmental policy is yet to be done. The government (through NEMA) has also continued to enforce environmental regulations especially using the environmental impact assessment (EIA) process.

The country has the obligation to ensure it manages the environment in a sustainable manner as spelt in the Millennium Development Goal number seven (MDG No. 7). Furthermore, the country is obligated to fulfil its commitment to the various Multi-lateral Environmental Agreements (MEAs) to which it is a signatory.

Indicators of Environmental Quality

Some critical indicators of environmental quality are highlighted below:

Land resources

Kenya's total land area is about 587,000 km^2 of which about 11,000 km^2 is surface water. A huge proportion of Kenya's land area is mainly Arid and Semi-Arid Lands (ASALs), accounting for over 80 per cent of the total area and used for pastoralism. About 17 to 20 per cent of the land has medium to high potential for agriculture. Forests, woodlands, national reserves, and game parks cover about 10 per cent of the land.

The total average area under cultivation at a national level continues to increase, as crops are introduced in degazetted forest lands and some humid rangelands are converted to farmland. Crops are grown on a significant proportion of marginal land with low or variable rainfall, and it is likely that more such lands are being converted to crops, even though there is high risk of crop failure. In the agriculturally productive highlands, productivity is declining due to growing populations, and land sub-division due to traditional property inheritance practices; urbanization; declining soil fertility and associated low use of inputs such as fertilizers, among others.

Land use has been changing in the ASALs as traditional land rights are increasingly ignored and growing human and livestock populations degrade pasture and water resources. In addition, ASALs are subject to recurring drought, which exacerbates land degradation and threatens the lives and livelihoods of over 3.5 million pastoralists. In order to address

the underlying problems in the land sector, the government is undertaking land reforms. The first and important step in this effort led to the adoption of the *Sessional Paper No. 3 of 2009 on National Land Policy* by Parliament in December 2009. The policy sets guidelines for a broad range of issues that need to be addressed within the land sector. Initial stages of implementation of the policy have begun; for example, the ongoing process of computerization of land information systems and development of a National Spatial Plan at the Ministry of Lands.

Water resources

Fresh water resources are of major environmental and economic importance. Availability of water in sufficient quantity and quality is vital for human well-being. Wetlands cover a paltry 2-3 per cent of the country's land surface, but play a critical role in the ecosystem. The distribution of fresh water resources varies widely within the country. In arid regions, fresh water resources may at times be limited to the extent that demand for water can be met only by going beyond sustainable use in terms of quantity. Fresh water abstractions, particularly for public water supplies, irrigation, livestock, wildlife, tourism, industrial processes and other uses exert a major pressure on water resources, with significant implications for the quantity and quality of water resources. Improving management and protection of water resources to ensure equitable allocation of water for the various uses in the country–including

Figure 12.1: Major water bodies and drainage areas reflecting the spatial distribution of water availability in Kenya

Source: World Resources Institute (2007)

domestic and public use, industry, agriculture, energy, livestock, wildlife, tourism and other uses– is a high priority for any country. Main concerns relate to the inefficient use of water and to its environmental and socio-economic consequences: low river flows, water shortages, salinization of fresh water bodies in coastal areas, human health problems, loss of wetlands, desertification, and reduced food production.

In terms of per capita availability, Kenya is a water scarce country. The total annual renewable water resources for Kenya are estimated at 30.7 billion cubic metres per year (MoWD and JICA, 1992). The average per capita freshwater availability has continued to decline with increasing population. In 2004, it stood at about 625 cubic meters per person but this declined to about 534 cubic meters in 2009 (World Bank, 2010). The availability of water is characterized by high variability both in space and time. The per capita availability compares poorly with the United Nation's recommended minimum of 1000m^3 per capita. This is gradually dwindling due to increasing population pressure, deforestation and the recurrent droughts mainly as a result of global warming.

Some parts of the country are perennially affected by floods while others face periodic droughts. A substantial portion of the country's water resources is shared among the Nile basin countries. About 54 per cent of Kenya's water resources are shared with other countries. Adequate water is available only in 20 per cent of the country's land mass, while in the rest and biggest portion of the country (including the arid and semi-arid lands), water has to be mined from the ground or harvested in dams, and pans prior to its use in any sector of development. Due to scarcity of water in the arid and semi-arid regions of the country and its uneven and poor distribution in the high and medium potential areas, it needs to be conserved, protected and apportioned for its various uses in an integrated and sustainable manner.

Lack of adequate, good-quality water is, therefore, a significant obstacle to development. Unsafe water, for example, is a major contributor to waterborne diseases such as cholera and diarrhoea. Reduced access to water increases collection time; a burden that falls disproportionately on women and children taking time away from other productive tasks, such as going to school. To address the problem of water shortage, the government has set out to increase water harvesting and storage capacity through construction of twenty four (24) medium-sized multipurpose dams for the period ending 2013. The dams are expected to increase water storage capacity by 21 million m^3. The work on five dams began in September 2009. Besides, the Ministry of Water and Irrigation has developed the National Water Harvesting and Storage Management Policy (May 2010)

Municipal waste and sanitation

The amount of municipal waste generated in a country is related to the rate of urbanization, the types and patterns of consumption, household revenues, and lifestyles. While municipal waste is only one part of total waste generated, its management and treatment often absorbs more than one third of the public sector's financial efforts to abate and control pollution.

The main environmental concerns relate to the potential impact from inappropriate waste

To address the problem of water shortage, the government has set out to increase water harvesting and storage capacity through construction of twenty four (24) medium-sized multipurpose dams for the period ending 2013. The dams are expected to increase water storage capacity by 21 million m^3. The work on five dams began in September 2009.

management on human health and the environment (soil and water contamination, air quality, land use and landscape). Kilogrammes of municipal waste per capita – or "waste generation intensities" – are broad indicators of potential environmental pressure. They should be complemented with information on waste management practices and costs, and consumption levels and patterns.

Access to adequate water in quality and quantity is associated with improved sanitation. In the absence of adequate quality water, sanitation deteriorates and may lead to deaths through waterborne diseases. In the year 2006, only 42 per cent of Kenya's population had access to improved sanitation, 48 per cent for rural areas and 19 per cent for urban areas (UN MDG Indicator database, accessed July 2010).

While this may be fairer compared to the sub-Saharan Africa's 31 per cent, it is not impressive as compared to Japan (100%), Botswana (47%), China (65%), Egypt (66%), Malaysia (94%), Mauritius (94%), Singapore (100%), and South Africa (59%) for the same period.

Undoubtedly, more effort is required towards increasing access to improved sanitation especially for urban population in the country as poor sanitation would impact adversely on the health indicators. There is need to build more public toilets in market areas to maintain high levels of hygiene. The slum upgrading programme already initiated by the government is a milestone in the right direction in this respect.

Forest resources

Forests are essential ecosystems, providing wood fuel, timber, food, medicine and other forest products, wildlife habitat, tourist attractions, water catchments, carbon storage, and many other goods and services as well as cultural and spiritual values. About 10 per cent of the population lives within 5 km of Kenya's indigenous closed-canopy forests and derive direct benefits from them, and in some areas, as much as 70 per cent of the income for households adjacent to forests comes from forest activities (Kenya Forests Working Group-KFWG, 2008).

Kenya's closed-canopy gazetted forests cover only about 2 per cent of Kenya's land area, much lower than the world's recommended 10 per cent. The country's total forest area includes woodlands, bushlands, and wooded grasslands, which contain most of the country's woody biomass. The total forest area has been on the decline, although the deforestation rate of indigenous forest since 2005 decreased by 5.1 per cent. This has stabilized the forest cover at about 6.2 per cent of the total land cover (World Bank, 2009a). According to the World Bank (2010), the total forest in Kenya declined slightly from 353,400 hectares in 2004 to 349,800 hectares in 2008.

It is important for the country to effectively protect her forests, especially the indigenous ones because they house the endemic and the endangered flora and fauna. Currently, 103 plant species are endangered, a number that is substantially high compared to Mauritius (88), Botswana (0), Uganda (38), South Africa (74), Singapore (54), Egypt (2), Korea Republic (0) and Japan (12)(IUCN, 2009). Compared to Tanzania, Malaysia and China, which have 240, 686 and 446 endangered plant species, respectively, Kenya is fairly better. Another reason that makes it pertinent to conserve forests is that loss of forest cover aggravates soil erosion, siltation of dams, flooding, and decline of groundwater resources and loss of biodiversity.

Since 2007, the government has rolled out reforms within the forest sub-sector to ensure more public participation in the management of forests. The process began with the enactment of the Forest Act of 2005, and subsequent development of *Sessional Paper No. 1 of 2007 on Food Policy*. The subsequent reform processes are still being rolled out in accordance with the new legislation. In the recent past, the government started an intensive campaign to rehabilitate and protect indigenous forests that form the five (5) major water towers. By September

2009, a total of 70,250 ha of forest were under rehabilitation.

Wildlife resources

Kenya is rich in biodiversity, ranking second in Africa. The country has an estimated 6,506 higher plant species, 359 mammals, 1, 079 birds, 61 reptiles, 63 amphibians, 34 fish species and 21,575 insect species. While some of the species are found within the protected areas, others occupy surrounding private and communal land. Indeed, 70 per cent of wild animals live outside protected areas, often causing human-wildlife conflicts. The protected areas constitute 12.7 per cent of the country's total land area. This is impressive compared to other countries such as South Africa (3.3%), Egypt (0.3%), Botswana (7.8%), Tanzania (4.3%), Uganda (3.2%), Mauritius (3.4%), Korea Republic (4%), Malaysia (2.8%), Singapore (4.8%), Japan (1.7%) and China (4.7%). However, it is imperative that the country strives to reduce human-wildlife conflicts, especially along the wildlife migration corridors, which have been immensely reduced by expansion of human activities. Possibilities of reclaiming these corridors are being explored; during the first quarter of 2009/10, four migratory corridors were reclaimed including Taita Taveta (Tsavo East/West), Nyahururu/Rumuruti, Narok and Lamu. Easement has been suggested as one of the options and is being experimented, although funding remains a challenge.

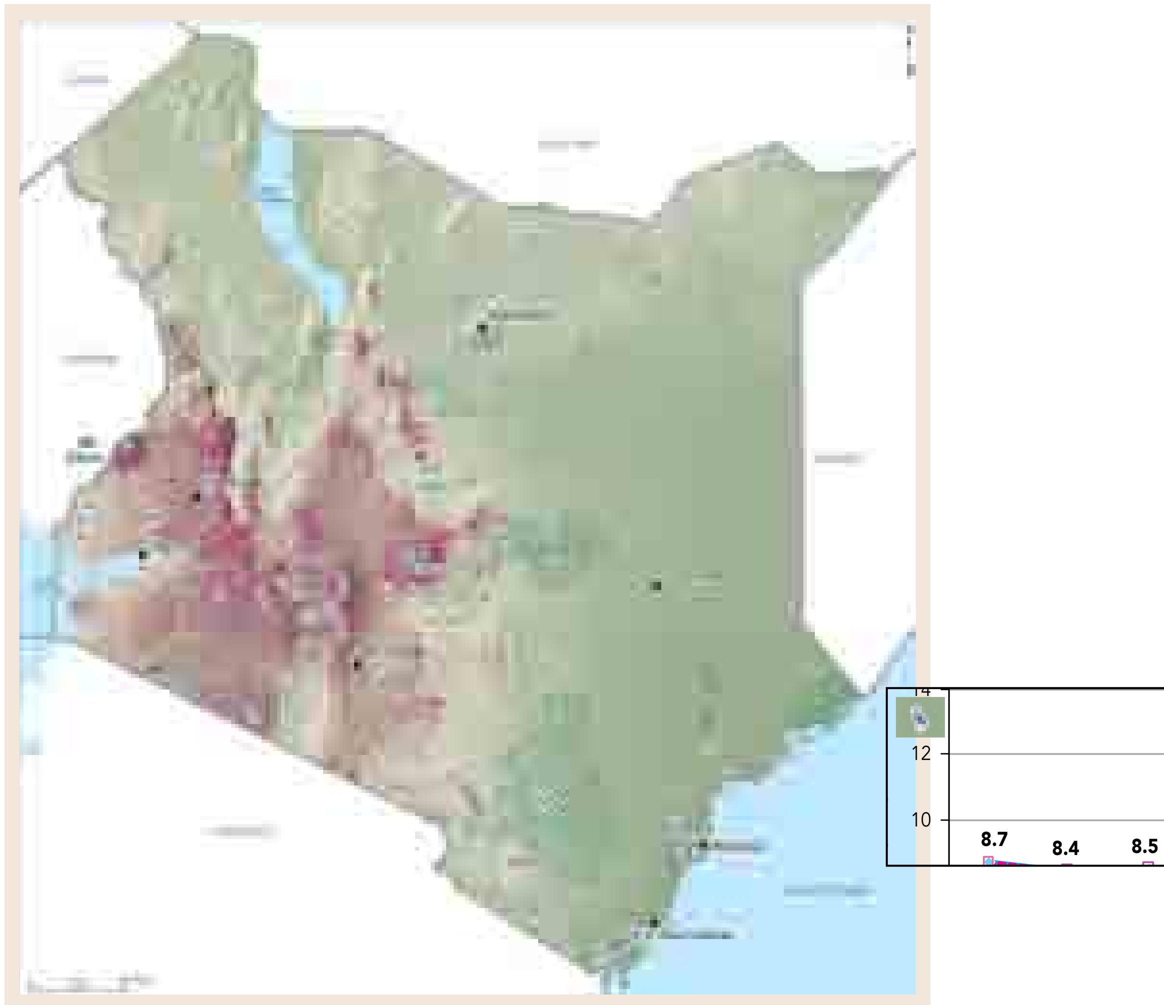
Wildlife remains important for tourism, a sector that earns the country about 11 per cent of GDP. Kenya's wildlife resources are managed in accordance with *Sessional Paper No. 5 of 1975* and Wildlife Conservation and Management Act, Cap 376 of 1977 (revised in 1985). Closed-canopy forests are the main habitats of wildlife and biodiversity. Although they occupy less than 2 per cent of the country's total land area, they house 50 per cent of the country's tree species, 40 per cent of larger mammals, 30 per cent of birds and 35 per cent of butterflies (UNEP, 2009). The indigenous forests are a home to both endemic and endangered species. Among the endangered species are 33 species of mammals, 28 breeding bird species, 5 species of reptiles, 4 of amphibians, 29 of fish, 16 molluscs species, 11 species of other invertebrates, and 103 plant species. Notable endangered species include the African Elephant, Black Rhino, Grevy's Zebra, Sokoke Scops Owl, Gigasiphon, Mangabey, Cheetah, Green Sea Turtle, Tana River Red Colobus, Hawksbill Turtle and the African Lion.

The number of threatened mammals in Kenya in 2008 was (27), which was substantially higher than in South Africa (23), Egypt (17), Botswana (6), Uganda (21), Mauritius (6), Korea Republic (9), Singapore (12) and Japan (27). The countries that perform worse than Kenya in this respect include China (74), Malaysia (70) and Tanzania (34).[1] In terms of threatened birds, Kenya ranks better at 27 compare to South Africa (35), Tanzania (40), Korea Republic (30), Malaysia (42), Japan (40), and China (85) but worse than Egypt (10), Botswana (7), Uganda (18), Mauritius (11), and Singapore (14).[2] For the threatened reptiles, Kenya performs as bad as Tanzania, better than South Africa, Egypt, Mauritius, Malaysia, Japan and, China but worse than Botswana, Uganda, Korea Republic and, Singapore. Threatened amphibians are fewer in Kenya than in South Africa, Tanzania, Uganda, Malaysia, Japan, and China.

Causes of threats to biodiversity

Habitat loss and land fragmentation are the greatest threat to biodiversity the world over. Specifically, in Kenya, this has been driven by rapid population growth, poverty and desire for economic growth. Forest areas, grasslands and bushlands, to some extent, are highly degraded. Discontinuities in forest cover may isolate some species and lead to their extinction. At the same time, degraded land and water make habitats not conducive for habitation by species.

Figure 12.2: Protected bird areas



Source: World Resources Institute (2007)

Invasive alien species also impact negatively on biodiversity, agriculture and human development in general. In Kenya, at least 34 alien species have been identified. Some of the notable ones include grain borer, water hyacinth and *prosopis spp*. Although the country has initiated elaborate measures to mitigate their impact, only a few of these species are under control.

Biodiversity hotspots

These are areas internationally recognized as richest in plants and animals, and are also most threatened. There are eight such spots in Africa, two of which partly occur in Kenya. Mount Kenya and Mount Elgon form part of the Afromontane hotspot while the coastal strip and the 120 km extension along River Tana form part of the Coastal Forests of Eastern Africa hotspot. The coastal Forests of Eastern Africa harbour 1,750 endemic flora and 28 endemic plant genera. For instance, the Kiunga Marine National Reserve in this hotspot is the world's largest breeding colony of roseate terns.

Besides the biodiversity hotspots, the country has internationally-recognized Important Birds Areas (IBAs). These include Arabuko Sokoke Forest Reserve, Lake Nakuru National Park, Yala Swamp, Busia grasslands, Mukurwe-ini valleys and Mau-Narok/Molo grasslands. The main threat to IBAs are overgrazing and illegal grazing, illegal logging, and vegetation destruction. The most severely affected

sites are the Yala Swamp, Busia grasslands, Mukurwe-ini valleys and Mau-Narok/Molo grasslands.

To curb the threats to biodiversity, as has been alluded to earlier, the government has set aside protected areas. In 2007, Kenya had 348 designated protected areas, covering about 75,238 square kilometers (UNEP, 2009). Of the protected areas, 14 are internationally recognized. To further conserve wildlife and increase earnings from tourism, the government has embarked on a programme of park branding. During the year 2009, Hells Gate National Park was branded and the process is ongoing for several other parks.

Fisheries

The fisheries sub-sector is important for generation of income in the Kenyan economy and for providing a means of livelihood to a large number of people. Fresh water fishing still dominates the industry, contributing 94.5 per cent of the total catch, of which 91.4 per cent comes from Lake Victoria. Perhaps poor technology and shortage of facilities could be blamed for the under-development of marine fisheries in the country. However, it must be noted that quantity and value (for both marine and fresh water fish caught) have been on the rise. For instance, between 2007 and 2008, the total fish landed increased by 5.5 per cent, with fresh waters contributing 5 per cent of this rise.

Safety concerns by the fish export markets (e.g. EU), the open access nature of fisheries, over-fishing, shortage of capital and facilities, weak enforcement of regulations and/or lack of appropriate regulations, poor governance and corruption are some of the challenges facing the sub-sector. For sustainability of the sub-sector, these challenges should be addressed alongside other pertinent issues such as water pollution, siltation and invasive weeds. It may also be useful to invest more in marine fisheries, which are under-exploited. In addition, there is need to continue to promote inland fish ponds, which the Ministry of Livestock and Fisheries Development has embarked on.

Of the fish species in the country, 71 are endangered. This is higher than Botswana (2), Uganda (54), Mauritius (11), South Africa (65), Singapore (22), Egypt (24), Korea Republic (14), China (70), Malaysia (49), and Japan (40). Only Tanzania has a higher number of endangered fish species (138) in the region than Kenya.[3] It is, thus, important to intervene and save the country's endangered fish species.

Mineral resources

Kenya's mining industry is dominated by production of non-metallic minerals encompassing industrial minerals such as soda ash, flourspar, kaolin and some gemstones. Mining accounts for less than 1 per cent of Kenya's annual GDP. Gold is produced primarily by artisanal workers in the west and south western parts of the country, on several small greenstone belts, some part of the Lake Victoria greenstone belt. Limestone is mined for use in the manufacture of cement. The country is now exploring the Mui and Mutito basins in Mwingi District for coal. Oil exploration is also ongoing in the north eastern region.

Soda ash and fluorspar are the key industrial minerals. Their production increased by 30.1 per cent and 52.9 per cent, respectively, in 2008 (Government of Kenya, 2009b). Salt production more than doubled in the same year. The export prices of soda ash and fluorspar have been on an upward trend due to increasing demand, and this has encouraged their exploitation.

Mining, as much as it earns foreign currency, can be degrading to the environment depending on the methods of extraction used. It may also displace local communities and even interfere with neighbouring ecosystems. Currently, the industry is regulated through the Mining Act Cap 306, which does not specify how derelict land should be handled, and how land owners should be compensated for/ relocated when displaced from their ancestral lands.

The challenges facing the sub-sector include inadequate/outdated legal frameworks, weak governance systems, inadequate resources especially among the local players, and world price volatility. Exploration for various minerals has continued in earnest; recent findings indicate that there are huge deposits of coal in Mwingi.

Air quality

Air pollution adversely affects the environment and human health. Particulates are associated with respiratory and eye diseases such as asthma, lung cancer, and conjunctivitis, especially in the young and elderly who are more vulnerable. Air pollution is also a major contributor to effects such as acid rain, which has been responsible for much damage to soil, fish resources, and vegetation, often very far from the emission sources (UNEP, 2009).

Per capita carbon dioxide emission (in our context defined as carbon dioxide emissions divided by mid-year population) in metric tonnes was steady in 2006 at 0.3 metric tonnes. This is better compared to South Africa (8.7), Egypt (2.4), Botswana (2.5), Mauritius (2.7), Korea Republic (9.4), Malaysia (9.3), Singapore (13.2), Japan (9.6), and China (4.3). In East Africa, however, it is the highest compared to Tanzania and Uganda, which emit 0.1 metric tonnes per capita each.

Although per capita emission of carbon dioxide in Kenya is low relative to other countries, the percentage increase in these emissions between 1990 and 2005 was about 91 per cent (World Bank, 2009b). It may be important to deal with this high rate of growth in per capita emissions. However, compared to other countries, Kenya is doing better on this front. For instance, Botswana, China, Egypt, Malaysia, Mauritius and Uganda registered a carbon dioxide emission growth of 110 per cent, 131 per cent, 130 per cent, 334 per cent, 133 per cent and 184 per cent, respectively, in the same period.

UNDP estimates the country's mean annual temperature to have risen by 1°C since 1960, representing an average rise of 0.21°C per decade. It is further projected that the country's temperature will increase by between 1 and 2.8°C by 2060s and by about 4°C by the year 2100.

Climate Change

Carbon dioxide (CO_2) makes up the largest share of "greenhouse gases". The addition of man-made greenhouse gases to the atmosphere disturbs the earth's radiative balance. This is leading to an increase in the earth's surface temperature and to related effects on climate, sea level rise and agriculture. UNDP estimates the country's mean annual temperature to have risen by 1°C since 1960, representing an average rise of 0.21°C per decade. It is further projected that the country's temperature will increase by between 1 and 2.8°C by 2060s and by about 4°C by year 2100. There are already observable impacts of climate change in the country, such as the reducing mountain glacier on Mt Kenya, increased variability in weather patterns, frequent flooding and a general rise in average temperature. These observable impacts of climate change have resulted in frequent droughts and associated crop failure and livestock deaths, loss of human life and property, and destruction of sources of livelihoods.

The predicted rise in temperatures, increased droughts and rainfall variability will greatly affect the country, particularly because the country relies on rain-fed agriculture, which supports more than 80 per cent of the population. Climate change-related

health factors are likely to worsen health indicators. For instance, distribution of some infectious diseases and disease vectors will be altered. Diarrhoea will increase and malaria will extend to new areas. Other likely effects of climate change on the country are worsening poverty, food insecurity, environmental degradation and loss of natural resources. These may jeopardize the realization of Vision 2030 goals and other development objectives unless appropriate adaptation measures are put in place promptly. However, lack of information, credit constraints, and poverty remain the key obstacles to developing and implementing adaptation strategies.

Recent Policy Processes in Environment and Natural Resource Management in Kenya

Land sub-sector

The adoption of *Sessional Paper No. 3 of 2009* is considered an important milestone in addressing critical problems affecting the land sector in Kenya. The policy is expected to provide an overall framework and define important measures required to address critical issues such as inequitable distribution of land, land restitution or resettlement, and land tenure systems. The policy further repudiates the long-standing priority of land administration in Kenya. It further addresses issues of land use planning, environmental degradation, conflicts, un-planned proliferation of informal settlements, outdated legal and institutional frameworks, and information management. The policy is a very comprehensive and instructive document that will, no doubt, help address the many clusters of land issues.

Water sub-sector

According to the Kenya National Water Development Report (2006), poor governance of water resources, including poor financing and tariff policies, large unaccounted-for losses, inefficient technologies, lack of demand management, ineffective management of water sheds, inadequate pollution control, deteriorating hydro-meteorological services, and neglected demands for stream flow requirements impose a major additional constraint on an already stressed resources base, threatening its long term sustainability.

The irrigation sector is one of the major consumers of water, accounting for over 70 per cent of water being used. In realization of this, the government has since developed the Irrigation and Drainage Policy, which seeks to promote, *inter alia*, ground water development, construction of water storage structures, inter-basin and intra-basin water transfers to avail water for irrigation and flood control, efficient water demand management systems and renegotiation of existing water use agreements with regard to transboundary waters, such as the Nile Treaty.

Fisheries sub-sector

The government launched the National Oceans and Fisheries Policy in mid 2009. A first of its kind, the policy seeks to give guidance and direction on sustainable development and utilization of the fisheries resources for the benefit of the present and future generations. The policy acknowledges that the fisheries sector has a multiplicity of stakeholders, hence, the need to coordinate and harmonize the sector mandates, activities, and implementation plans for sustainable development. The environmental concerns which need to be addressed include: pollution of water bodies, receding water levels, over-fishing, invasive and alien species, and weak implementation and enforcement of legislations.

Wildlife sub-sector

The coexistence between people and wildlife is increasingly being manifested by rising conflicts, property damage and, in extreme cases, loss of life as demographic patterns shift and communities in

wildlife areas undergo radical lifestyle changes. It is estimated that over 70 per cent of Kenya's wildlife is found outside protected areas, making conservation on communal and private land a vital sustainability effort. Currently, the problem of human-wildlife conflicts is worsened by inadequate compensation for damages and loss of human life. It is expected that once the reviewed and re-drafted Wildlife Bill 2009 is enacted, it will address the thorny issue of rapid change of tenure in wildlife rangelands, among others.

Climate change mitigation and adaptation measures

Growing concerns have been raised about climate change as a result of increased greenhouse gas emissions into the atmosphere. Climate change is currently considered one of the most serious problems to sustainable development globally, regionally and locally. The Kenyan government has realized the implications that are likely to be brought about by effects of climate change to its citizenry. The frequent recurrence of extreme weather conditions such as droughts and floods have heightened concerns. These weather extremes have led to loss of human life, damage to property, loss of livestock, and crop failure. In light of the above, the government is currently spearheading efforts to put in place a comprehensive climate change policy. It has recognized the need to enhance coordination of climate change activities in the country by mainstreaming climate change in government policies. The Ministry of Environment and Mineral Resources has since developed the National Climate Change Response Strategy (NCCRS), which will put in place robust measures needed to address most (if not all) of the challenges posed by the current climate change variability. One critical element in tackling the effects of climate change is accurate weather prediction. Therefore, there is an added premium on climate and weather data. The country has also been an active participant in international climate change negotiations. In addition, the country is making efforts to take advantage of the emerging carbon markets such as the CDM projects and also Reduced Emissions from Deforestation and Degradation (REDD).

For example, Kenya Forest Service has completed Reducing Emissions from Deforestation Forest Degradation (REDD) readiness preparation proposal for Kenya, which outlines the process by which the Government of Kenya will develop its national strategy for participating in an evolving international mechanism for reducing emission from deforestation and forest degradation, conserving and enhancing stocks, and sustainably managing forests REDD. This has been submitted to the Forest Carbon Partnership Facility (FCPF).

Under an Emission Reduction Purchase Agreement (ERPA) with the World Bank, Kenya, through KenGen, is exploring the utilization of Clean Development Mechanism (CDM) through renewable energy resources (water/hydropower, biomass, solar, geothermal). These projects aim to improve energy efficiency through increased use of renewable energy, switch from fossil fuels, and decrease in emission of Green House Gases (GHG).

Pollution control

The Ministry of Environment and Mineral Resources has enacted the Environmental Management and Coordination (Noise and Excessive Vibration Pollutions) Control Regulations 2009. These regulations are intended to prevent, control and abate air pollution and ensure clean and healthy ambient air. It provides for the establishment of emission standards for various sources, including mobile sources (motor vehicles) and stationery sources (industries) as outlined in the Environmental Management and Coordination Act (EMCA) 1999. Capacity building is needed for the citizenry, on emission limits for various areas and facilities.

Conclusions

The environment and natural resources sector play a very critical role in the economic welfare of the

country. In spite of this recognition, the sector has not received as much attention as it should in terms of development priority and the accompanying budgetary allocation. There are several projects within the sector that remain unimplemented due to lack of funds. For example, KFS has not been able to successfully implement forest rehabilitation projects due to lack of funds. There is need to substantially increase budgetary allocation to the environment sector. New and innovative ways to raise funds for the environment (by taxing 'environmentally unfriendly activities') should be explored. The legal framework of environmental fiscal management is already provided for in EMCA.

An integrated approach and mainstreaming of environment and natural resources issues in all government ministries would be very important in ensuring that all environmental issues are adequately addressed. The process of mainstreaming should also be accompanied by harmonization to avoid duplication of efforts. The process of harmonization of conflicting and overlapping legislations would also be important in addressing the underlying problems within the sector. Already, key steps have been undertaken to address the underlying problems in the sector. The adoption of *Sessional Paper No. 3 of 2009 on National Land Policy* by Parliament is an important step. Parliament should hasten the process of coming up with over-arching legislation for the land sector to harmonize conflicting provisions within the existing land laws.

Policy Recommendations

- Environmental data collection should be incorporated in regular government data collection procedures. In addition, more money should be allocated to environmental data gathering to ensure that there is up-to-date information for decision-making.
- The government should fast-track and fully implement environmental and natural resource accounting in national accounts. This would provide an objective way for allocating funds in the sector.
- Environmental issues run across sectors. In order to address all environmental concerns, the government should fully mainstream environmental issues in all government operations. All government ministries and departments should identify environmental aspects within their jurisdiction and ensure that they are considered and prioritized in the budgeting process.
- To effectively tackle the threat posed by climate change, there is urgent need to come up with a comprehensive Climate Change Policy. The policy should emphasize the need to increase funding for the Meteorology Department to enable it provide accurate and timely weather data to facilitate timely and effective response to threats posed by climate change.

Endnotes

1 IUCN Red List of Threatened Species by Scientific Classification, World by Country, 2008.

2 Ibid op cit

3 Ibid op cit

PART III

Medium Term Prospects

Part III analyzes Kenya's medium term prospects under alternative policy scenario. In 2009, the economy was on the path to recovery, registering a growth of 2.6 per cent. As the economy continues on the recovery path, the medium term prospects will largely depend on both domestic and external factors. The domestic factors include the effective implementation of the Medium Term Plan (MTP) of Vision 2030, the economic stimulus package, political reforms under Agenda Four, the new constitution, and also the weather conditions. Effective implementation of political governance reforms is expected to restore investor confidence and enhance national cohesion. External factors include the global financial and economic crisis, international oil and food prices, and conflicts in neighbouring countries.

13

Medium Term Prospects

Macroeconomic Prospects

Kenya was hit by multiple shocks in 2008, thereby registering a growth of 1.6 per cent down from 7.0 per cent in 2007. In 2009, the economy was on the path to recovery registering a growth of 2.6 per cent. As the economy continues on the recovery path, the medium term prospects will largely depend on both domestic and external factors. The domestic factors include the effective implementation of the MTP of Vision 2030, the economic stimulus package, political reforms under Agenda Four, the new Constitution, and also the weather conditions. Effective political governance reforms is expected to restore investor confidence and enhance national cohesion. External factors include the pace of recovery from the global financial and economic crisis, international oil and food prices, and conflicts in neighbouring countries.

Recent Developments

The economy has shown signs of recovery following the dismal performance in 2008. The recorded growth for 2009 in real terms was 2.6 per cent, which is a slight recovery compared to the 1.6 per cent growth for 2008. The fourth quarter in 2009 had a growth of 3.3 per cent, which was high compared to a growth of -0.1 per cent registered during the same period in 2008. The first, second and third quarters of 2009 recorded economic growth rates of 5.6, 0.9 and 0.5 per cent, respectively.

The poor performance in the third quarter of 2009 is attributed to weak performance of key sectors such as agriculture and forestry, mining and quarrying, manufacturing, electricity and water, and real estate, renting, and business services, which declined by 3.4, 7.0, 0.5, 4.1, and 6.6 per cent, respectively. Drought adversely affected production in agriculture and forestry, and electricity and water sectors. High energy costs (together with reduced domestic and external demand) adversely affected production in the manufacturing sector. The building and construction sector supported by government-enhanced investment in infrastructure played an important role in supporting recovery.

The overall twelve-month inflation continued to decline in 2009, falling from 13.3 per cent in January to 5.3 per cent in December 2009. The decline is attributed to the falling prices of food, medical goods and services, recreation, education and personal goods and services. The average inflation for 2009 stood at 9.3 per cent, down from about 16 per cent in 2008.

The balance of payments position improved from a deficit of Ksh 33,161 million in 2008 to a surplus of Ksh 75,180 million in 2009. The increase is attributed

to a large increase in net capital flows coupled with improvement in the current account balance from a deficit of of Ksh 137,147 million in 2008 to a deficit of Ksh 124,446 million. The capital and financial account recorded a surplus of Ksh 215,864 million in 2009, mainly as a result of increased inflows in form of short and long term capital flows.

Medium Term Prospects

The Vision 2030 MTP targets real GDP growth to rise steadily to 10 per cent by 2012/2013 as a result of various interventions, including implementation of flagship projects under the economic and social pillars. Sustaining these higher growth rates would provide a strong basis for achieving the MDGs as well as laying the groundwork for achieving an equitable society.

The economy is expected to continue on a recovery path in the medium term so as to achieve the Vision 2030 goals. In the medium term, it is projected to grow at 5.2 per cent and 6.6 per cent in 2010 and 2011, respectively. This recovery is pegged on a favourable international environment, effective implementation of the medium term policy agenda, and favourable weather conditions. In the forecasts, it is assumed that international oil prices will remain stable in the medium term. As a result, more investment is needed to maintain the current capacity. Economic growth is expected to return to the pre-crisis level after 2012. Positive growth is expected to be from improved investments, exports, stable and low interest rates and low inflation levels. Other assumptions are that the economic stimulus package and the Medium Term Plan will be effectively implemented. Table 13.1 summarizes the key macroeconomic variables and medium term forecasts.

The government adopted a new method of measuring inflation using the geometric mean, which resulted in inflation registering low levels. The average overall inflation for 2009 was estimated to have come down from 16 per cent in 2008 to 9.3 per cent. The expected stability in international oil prices and prudent fiscal and monetary policies are expected to yield inflation levels of about 5 per cent in the medium term. Improved food production and favourable weather conditions are crucial for future overall price stability, since food commodities account for a big share in the consumer basket. However, it is assumed that in the medium term, the inflation rate will ease so as to converge to the policy scenario.

Table13.1: Economic projections for 2008-2013

Variable	2008	2009	2010	2011	2012	2013
GDP growth	1.6	2.6	5.2	6.6	7.6	8.9
Inflation overall	16.0	9.3	5.0	5.0	5.0	5.0
Treasury bill interest rates	7.8	7.5	4.9	4.8	4.8	4.8
Private consumption growth	-0.7	4.0	4.0	6.0	6.0	8.0
Private investment growth	9.0	-2.0	3.0	8.0	8.0	14.0
Government consumption growth	2.0	5.0	12.0	8.0	8.0	8.0
Government investment growth	18.0	26.1	17.0	19.0	18.0	15.0
Exports of goods & services growth	7.0	-7.0	8.0	8.0	11.0	11.0
Imports of goods & services growth	7.0	-0.2	7.0	8.0	10.0	11.0
Current account balance as % of GDP	-6.6	-5.0	-3.0	-1.0	0.1	0.4
Financial deficit as a % of GDP	-4.0	-5.0	-6.0	-6.0	-6.8	-7.0
Public expenditure as a % of GDP	30.0	29.9	30.1	30.0	30.0	29.6

Source: KIPPRA-Treasury Macro Model (KTMM)

The assumptions underlying the fiscal framework are consistent with the Budget Policy Statement and adjustments to reflect actual budget implementation. Public expenditure as a per cent of GDP is estimated at about 30.1 per cent in 2010, which is a marginal increase from 29.9 per cent in 2009. Growth in government consumption and investment for 2010 are expected to average about 12 per cent and 17 per cent, respectively. Investment is expected to be high due to increased construction activities, especially on infrastructure and as implementation of the planned development programmes (as contained in the Medium Term Expenditure Framework) gain momentum. In the years 2012 and 2013, both consumption and investments are expected to stabilize but at high levels so as to achieve the high economic growth rates expected.

On international trade, there is likely to be increased trade and investment following the implementation of the East African Community (EAC) Common Market Protocol. The common market regime strives to make the free movement of labour, capital, services and the right of establishment a reality in the EAC region within the next five years. As tariff and non-tariff barriers are removed, the factors of production will become more efficiently allocated; this will further increase productivity. Furthermore, the current promotion activities in the tourism sector aiming at selling Kenya as a preferred tourist destination are expected to revive tourism. Between 2008 and 2009, international arrivals grew by 23.9 per cent, making a recovery from the effects of the post-election violence in 2008. The tourism sector is expected to stabilize in the future and continue to grow at an average of 12 per cent. This growth is expected to be supported by vigorous marketing of Kenya as the best tourists' destination and both political and economic stability at home. This is expected to boost exports in the medium term projections and play a role in the economic growth outcome. Imports are expected to expand with the economic growth. The projected positive growth for sub-Saharan Africa, given at 2.2 per cent for 2009 and 5.0 per cent for 2010, is expected to provide an impetus to private investments for the recovery process.

Due to the strong economic growth expected in the medium term, imports expansion is projected to remain strong in 2010, 2011, 2012 and 2013 at 7 per cent, 8 per cent, 10 per cent, and 11 per cent, respectively. The import volume growth will be occasioned by the need to complement domestic production, purchase of intermediate and capital goods and purchase of oil and oil-related products.

For the economy to continue on a growth trajectory, it will be crucial for the government to maintain macroeconomic stability, deepen structural reforms and strengthen institutions in order to help deliver high and stable levels of economic growth and employment. The following key sectors have been identified to provide the major aspects of the required boost to the economy as well as an avenue for the private sector to participate:

Tourism–to improve tourist revenue yield through premium safari parks, resort cities and strategic niche products.

Agriculture–deepen reforms in agriculture and increase resources to implement sector strategies.

Manufacturing–establish special economic clusters and small and medium size industrial parks.

Wholesale and retail trade–creation of an organized market outlet for small scale operators.

Business Process Outsourcing (BPO)–establish BPO parks to attract leading BPO players.

Financial services–reform the banking sector to facilitate consolidation, improve coverage in the pension sub-sector and deepen capital markets by accessing international capital, among others.

The medium term prospects are subject to various challenges and uncertainties that relate to weather conditions, implementation of agreed reforms and recovery of the international economy. An alternative scenario is presented in Table 13.2 showing projected GDP growth of 3.8 in 2010 and a moderate rate of expansion in 2011 and 2012. The forecasts are based on the assumptions that: the high inflation rate continues in 2010 due to

supply constraints; weakening of the Kenya shilling against the US dollar, pushing commodity prices even higher; and protracted slowdown in the global economy. Political uncertainties are also likely to deter potential investors from taking advantage of the investment opportunities that exist in the country. Slow uptake of the Public Private Partnership (PPP) initiative in the implementation of MTP strategies may lead to a slower rate of economic expansion than envisaged in Vision 2030. Also, the weak implementation of the budget can adversely affect growth in the medium term. Table 13.2 shows economic projections reflecting downside risks.

Growth in partner countries was adversely affected by the global financial crisis in 2009, which is depicted by the negative growth estimates for most countries. However, a recovery, albeit slow, is expected as from 2010 and to continue in the immediate medium term period. This has an important bearing for Kenya's exports and medium term prospects.

Kenya GDP Growth and Critical Aspects

The GDP growth has largely been supported by increase in domestic demand, especially private consumption and investment and some increase in external demand for Kenyan products. Therefore, there is need to refocus efforts towards the supply constraints in the different sectors of the economy and to adopt policies that exploit and enhance domestic inter-linkages in the economy and further boost productivity growth in sectors such as agriculture, manufacturing, tourism and trade. The key challenges to growth in exports include: lack of diversification, low value exports, and supply-side constraints related to the investment climate. To achieve sustainable growth in a stable macroeconomic environment, there is need for balanced growth in aggregate demand, and the potential of the economy to produce goods and services.

However, the growth prospects are subject to risks and uncertainties related to the depth and length of the global financial crisis, political stability, the weather and effective implementation of reforms. GDP growth for 2009 was estimated at 2.6 per cent while it is projected to accelerate to 3.8-5.2 per cent in 2010 and about 4.8-7.6 per cent in 2012. The following are the critical aspects in putting back the economy to the path of sustained growth and restoration of investor confidence:

Table 13.2: Economic projections for 2008-2013 (Alternative scenario)

	2008	2009	2010	2011	2012	2013
GDP growth	1.7	2.6	3.8	4.2	4.8	6.3
Inflation overall	16.0	9.3	9.0	10.0	10.0	11.0
Treasury bill interest rates	7.8	7.5	6.3	6.7	7.2	7.8
Private consumption	-0.7	4.0	2.0	3.0	4.0	5.0
Private investment	9.0	-2.0	2.0	5.0	8.0	15.0
Government consumption	2.0	5.0	12.0	9.0	8.0	8.0
Government investment	18.0	26.1	21.0	19.0	17.0	20.0
Exports of goods & services	7.0	-7.0	6.0	8.0	8.0	9.0
Imports of goods & services	7.0	-0.2	7.0	9.0	10.0	13.0
Current account balance	-6.6	-5.0	-3.0	-2.0	-0.9	-1.1
Financial deficit	-4.0	-5.0	-6.0	-7.0	-7.9	-8.8
Public expenditure	30.0	29.9	30.3	31.0	30.7	30.6

Source: Estimates from the KIPPRA-Treasury Macro Model (KTMM)

- Effective implementation of the Grand Coalition policy agenda. This is critical in ensuring political stability necessary for growth and restoration of investor confidence and enhancing national cohesion. This includes: implementation of the constitution, electoral reforms, land reforms, fight against corruption, and public expenditure management reforms aimed at enhancing efficiency and effectiveness in budget implementation and the financial and business sectors. Effective implementation of the Medium Term Plan is thus a key priority.
- A stable macroeconomic environment underpinned by a prudent fiscal and monetary policy is critical, since economic recovery is still weak. It is important that the government continues to implement countercyclical monetary and fiscal policy but being vigilant of any signs of macroeconomic instability. An exit strategy will need to be developed once growth in household consumption picks up.
- There is need for continuous improvement of the investment climate. In this regard, the planned infrastructure investment and improvements need to remain on track. However, security still remains a major challenge.
- Global economic factors: According to the Global Economic Prospects 2010 by the World Bank, unwinding of the stimulus packages could be followed by a slowdown in the global economy. Delays, on the other hand, could lead to high inflation and high interest rates as countries tighten macro policies. The potential consequence of the global financial crisis is increased risk aversion and tight regulation. It is advisable then that the country deepens domestic financial reforms and regional integration to mitigate the potential impact.

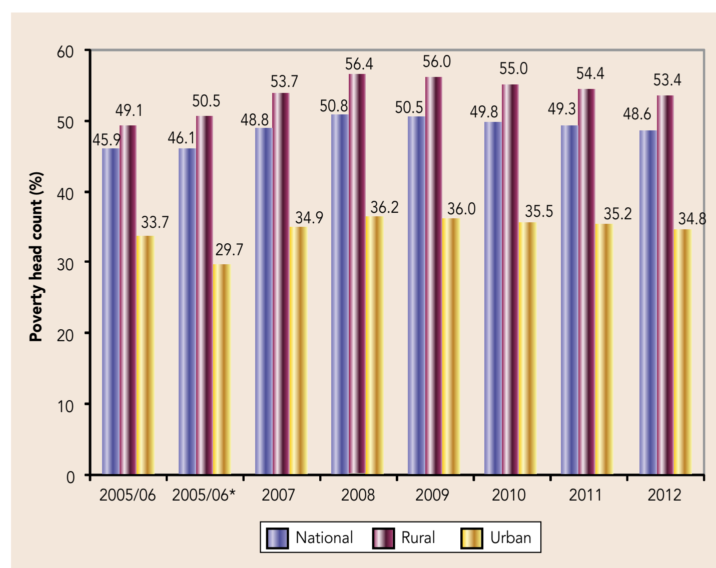
Poverty Projections

Estimated poverty indices derived from the KIHBS (2005/06) were used to project poverty levels for the period 2007-2012. The method developed by Mwabu *et al.* (2002) is used for the analysis. Figures 13.1, 13.2 and 13.3 show estimated headcount poverty (P0), poverty depth (P1) and severity of poverty (P2).

The first set of bars for 2005/06 represents the actual computed poverty indices as reported in Kenya (2007). The second set of bars denoted as 2005/06* represents the projected indices using the method by Mwabu *et al.* (2002) using WMS (1994) as the base. The method closely estimates the actual poverty indices as observed in the KIHBS 2005/06. The rest of the projections 2007-2011 are based on 2005/06 poverty levels.

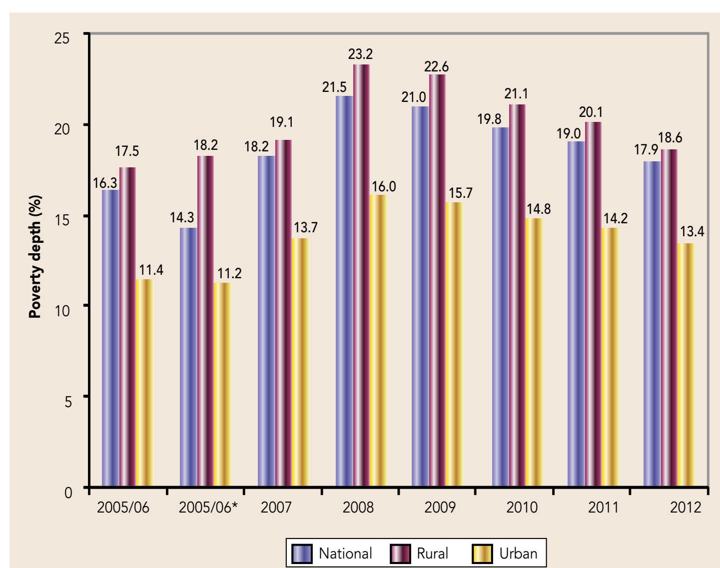
As economic growth worsened in 2008, the proportion of poor people in the population increased significantly (48.8%) compared to 45.9 per cent in 2005/06. The depth and severity of poverty was also at its worst in 2008. The increase in poverty in 2007 (despite an impressive growth rate of 7.1 per cent) could be due to the growth not being pro-poor. The headcount projections into 2013 show a very slight improvement that cuts across both rural and urban regions. This is also reflected at the national level. Similarly, the average deprivation of a poor person from the poverty line indicate impressive

Figure 13.1: Projected head count poverty, 2005/06-2012



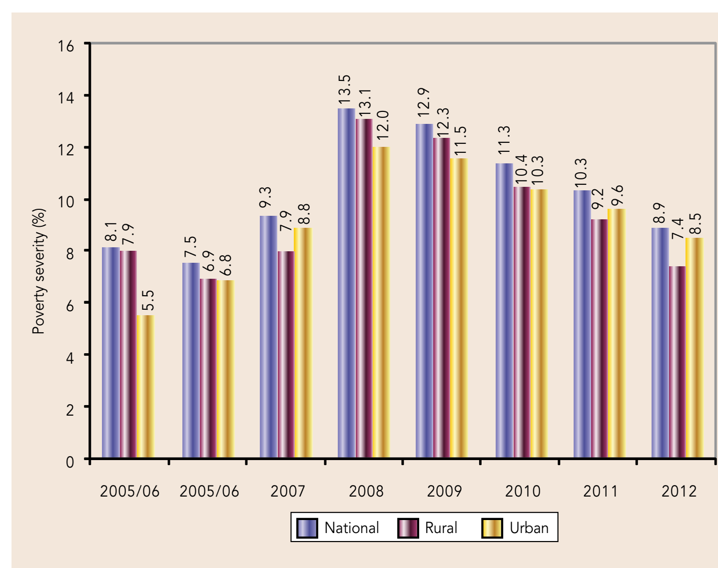
Source: Projections based on KIHBS 2005/06 (N=48.2, R=52.9, U=34.5)

Figure 13.2: Projected poverty depth, 2005/06-2012



Source: Projections based on KIHBS 2005/06 (N=17.2, R=17.8, U=13.0)

Figure 13.3: Projected severity of poverty, 2005/06-2012



Source: Projections based on KIHBS 2005/06 (N=8.0, R=6.3, U=7.8)

decline. This means that the average income of the poor seems to be increasing, thus reducing the gap between their incomes and the poverty line.

The severity index, which shows the degree of inequality indicates impressive gains into 2013, with the rural poor being the highest beneficiaries. Unlike the previous poverty indices, poverty severity is sensitive to income changes of the poor.

The decline in projected poverty into 2013 is attributed to decline with improvement in growth and redistribution given the pro-poor social policies under implementation.

Forecasting the Manufacturing Sector

Various methods can be used to forecast manufacturing output several periods ahead. The time series process of manufacturing output contains useful information, which can be used to make reasonable medium term forecasts. Thus, to forecast aggregate manufacturing output in the medium term, historical manufacturing sector output is modelled using series regressions primarily using dynamic multivariate models. This approach also includes some emphasis on the underlying structural economic relationships of the factors that influence manufacturing output. For example, we assume that manufacturing firms combine capital and labour to produce output in an aggregate setting. The firms also make use of positive spill over effects from physical infrastructure (such as recent road construction) provided by government, among other 'business climate' factors that may affect manufacturing firms' investment decisions and production. It can be expected that at the aggregate level, some important factors that influence manufacturing output such as technological progress, climatic shocks and other externalities (which may not be identifiable) still show up in the data and are referred to as the residual or total factor productivity. Nevertheless, the predictions about the future evolution of output are primarily obtained through the use of statistical methods.

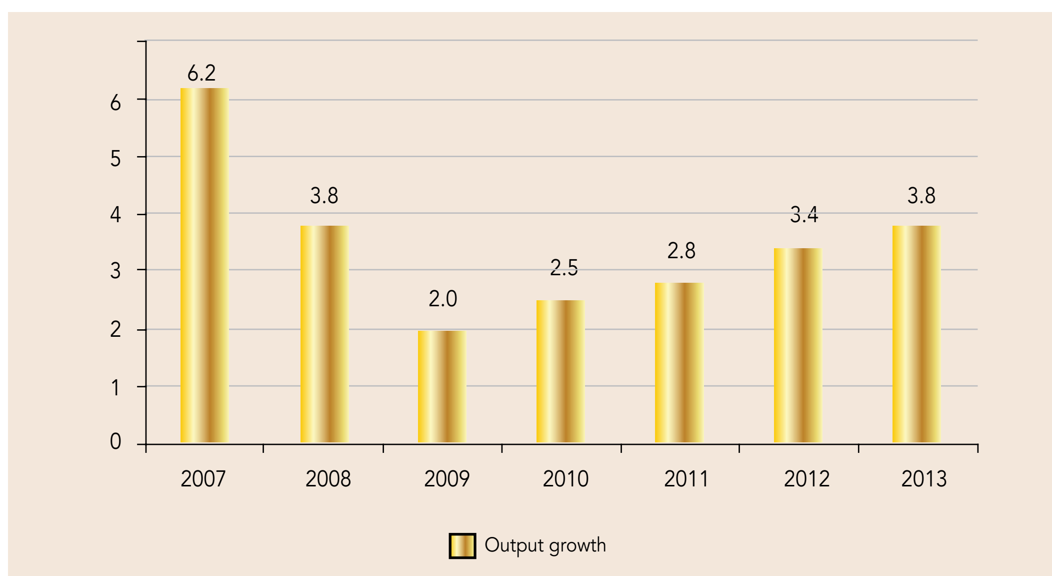
The key assumption is that we do not expect a major shift in the structure of the economy, nor on the way manufacturing production systems are organized. This means that the results may be a bit conservative, but this is quite consistent with the prevailing domestic and international economic environment. For instance, the effects of the global financial crisis can be expected to affect manufacturing at least in

the medium term, for example, through muted demand for manufactured exports. Investments into the sector may also remain low. The recent 2003-2007 turnaround (which saw the sector grow by 4.7 per cent in 2005, and 6.9 per cent in 2007) may also not be guaranteed going by the 2008's multiple shocks. For example, the sector output declined from 6.5 per cent in 2007 to 3.8 per cent in 2008. Beverages, clothing, leather and footwear, and paper products sub-sectors grew by 5.6, 15.5, 1.8 and 29.5 per cent, respectively, in 2008. But food manufacturing, printing and publishing and basic industrial chemicals, declined by 7.1, 33.2, and 26.1, respectively. This deceleration in growth was due to demand contractions in the early part of 2008, inflationary pressures that also affected consumer demand, and increases in energy costs, especially the unprecedented rise in crude fuel prices and electricity tariffs. The full impact of weak demand and tight credit conditions globally and domestically may still affect the recovery in 2010, with future growth likely to follow the trends and swings in the global economy.

On the positive side, the growth rates in the EAC trading bloc are projected to decelerate less dramatically and may partly cushion Kenya's manufactured exports to the region. Some direct government interventions (through fiscal stimuli) are expected to restore growth in manufacturing. Government spending in infrastructure; targeted fiscal incentives (for example, reduction of excise duty on water and on soft drinks; removal of the Sugar Development Levy on refined industrial sugar; exemption of import duty on all industrial spare parts; and remission of import duty on raw materials for various products) may reduce the cost of doing business while indirectly boosting demand for manufactured products. The government has also proposed a 150 per cent investment allowance on investment in other towns and also proposed incentives that will also improve the efficiency of technology savvy manufacturing firms. Other positive developments are the enactment of the Anti-Counterfeit Bill, which seeks to deter manufacturers, importers and distributors of counterfeit products.

The forecast exercises deliver important information about the trends and dynamics of the manufacturing output series. Using a small manufacturing model (which incorporates structural dependencies between output and factor inputs), the analysis shows that manufacturing output trends upwards over time with a discernible path. Assuming the persistence of

Figure 13.4: Manufacturing output growth forecasts



Source:

this trend, and that of the lack of structural change in the composition of manufacturing output in the total GDP in the medium term, we find that manufacturing output would grow by at least 3.3 per cent in the medium term, with the value added in real terms rising to at least Ksh 144 billion in 2010, 148 billion in 2011, and further beyond Ksh 153 billion in 2012 (Figure 13.4).

Tourism Sector Prospects

Despite the difficulties the tourism sector faced in 2008, the sector has recovered to the extent that the country is close to receiving the pre-2008 visitor levels. In this section, we discuss the medium term prospects for the tourism sector in terms of Tourist Arrivals, Tourism Earnings, Value Added in Hotels and Restaurants, and Major Source Markets.

Tourist arrivals

Given the performance over the last two years, we envisage that the country will receive the pre-crisis level of arrivals in 2010 and predict that the average annual growth rate in arrivals experienced over the period 2005-2007 (11%) will be replicated in the medium term. For the baseline scenario, therefore, we assume that the pre-crisis growth rate in arrivals will be attained in the 2009/2010 financial year and sustained in 2010, 2011, 2012 and 2013 (Table 13.3). In the optimistic scenario, we assume that Kenya will regain the pre-2008 visitor arrivals in 2010 and sustain the average annual growth in arrivals for the period between 2010 and 2013.

Tourism earnings

During the pre-crisis period of 2005-2007, tourism earnings grew at about 15.7 per cent on average per year. Similar to the case for arrivals, we use the pre-crisis average growth rate to establish the baseline earnings for the medium term. In the optimistic scenario, we assume that the pre-crisis tourism earnings will be attained in the 2010 financial year, and thereafter we use the pre-crisis period growth rate (15.7%) to estimate the earnings for 2011-2013 (Table 13.4).

The WTTC report forecasts that Kenya's tourism and travel GDP will grow at about 3.8 per cent annually for the period 2009-2018 (WEC, 2009). This is much lower than our baseline forecasted growth rate of 15.7 per cent. In addition, the given figures for projected arrivals and earnings for year 2012 are also much lower than the Ministry of Tourism's target of 3 million arrivals and Ksh 200 billion in earnings, whose achievement will depend on implementation of various flagship projects, improvement of standards of the current tourism facilities, and tourism promotion and marketing to

Table 13.3: Projected tourist arrivals under various scenarios

	Pre-crisis Period					Post-Crisis Period			
	2005	2006	2007	2008	2009	2010	2011	2012	2013
Baseline	1,479,000	1,600,541	1,816,957	1,203,200	1,490,000	1,653,900	1,835,829	2,037,770	2,261,924
Optimistic	1,479,000	1,600,541	1,816,957	1,203,200	1,490,000	1,816,957	2,016,822	2,238,672	2,484,925

Source: KIPPRA estimates based on Economic Survey (2010)

Table 13.4: Projected total tourist earnings (Ksh billions) under various scenarios

	Pre-crisis Period					Post-Crisis Period			
	2005	2006	2007	2008	2009	2010	2011	2012	2013
Baseline	48.90	56.20	65.40	52.7	62.5	72.3	83.7	96.8	112.0
Optimistic	48.90	56.20	65.40	52.7	62.5	65.4	75.7	87.5	101.2

Source: KIPPRA estimates based on Economic Survey (2010)

Table 13.5: Projected value added of hotels and restaurants (Ksh millions), 2010-2013

	2007	2008	2009	2010	2011	2012	2013
Baseline-constant prices	20,814	13,298	18,993	21,803	25,030	28,738	32,991
Optimistic scenario-constant prices	20,814	13,298	18,993	20,814	23,894	27,430	31,489
Optimistic scenario-current prices	29,612	23,745	39,421	48,211	58,963	72,111	88,191

Source: KIPPRA estimates based on Economic Survey (2010)

key source markets aimed at increasing length of stay and average tourist spending from the current Ksh 40,000 to Ksh 70,000 (Ministry of Tourism, 2009).

Value added in hotels and restaurants

Table 13.5 shows the projected value added for hotels and restaurants at 2001 constant prices and current prices. In the baseline scenario, the value added for the period 2010 to 2013 is projected using the average annual growth rate in value added for the period 2003 to 2007 of 14.8 per cent.

In the optimistic scenario, value added for hotels and restaurants (at constant and current prices) was expected to reach the pre-crisis levels in 2009 and, thereafter, to grow at the annual rate of 14.85 per cent for constant prices and 22.3 per cent for current prices, which is the average for the 2003-2007 period.

Major source markets

The prospects for inbound tourists are derived using departures by country of residence. In the baseline scenario, it was assumed that the pre-2008 departure levels would be reached in 2009. Growth at the average growth rates experienced over the period 2005-2007 is thereafter used to forecast for the 2010-2013 period (Table 13.6).

The highest prospects for growth over the forecast period is likely to come from Canada, Tanzania, Australia and New Zealand, USA, and India source markets. However, in terms of highest numbers of departures, UK, Germany and Italy will lead other source markets.

Table 13.6: Projected departures by country of residence (baseline status), '000

	Pre-crisis Period			2005 – 2007 mean	Post-Crisis Period					
	2005	2006	2007	growth rate (%)	2008	2009	2010	2011	2012	2013
UK	248.2	272.0	313.6	12.44	216.7	245.9	276.5	310.9	349.6	393.0
Germany	237.6	248.9	263.2	5.26	137.3	149.7	157.6	165.9	174.6	183.8
Italy	123.1	129.9	146.6	9.19	80.2	112.1	122.4	133.7	145.9	159.3
France	71.3	76.2	84.7	9.01	43.1	51.3	55.9	60.9	66.5	72.5
Switzerland	58.0	60.3	60.5	2.15	37.7	43.1	44.0	44.9	45.9	46.9
USA	78.7	91.9	116.8	21.93	89.4	127.2	155.1	189.1	230.6	281.1
Canada	15.3	22.1	27.4	34.21	18.9	28.1	37.7	50.6	67.9	91.1
India	26.2	35.7	37.1	20.09	35.3	38.2	45.9	55.1	66.2	79.5
Japan	22.2	21.5	22.0	2.74	14.2	18.8	19.3	19.8	20.4	21.0
Tanzania	16.8	25.8	27.6	30.28	23.2	46.1	60.1	78.2	101.9	132.8
Uganda	15.3	19.8	20.9	17.49	22.8	42.7	50.2	58.9	69.3	81.6
Australia & New Zealand	18.7	24.0	28.7	23.96	19.2	22.8	28.3	35.0	43.4	53.8

Source: KIPPRA estimates based on Economic Survey (2010)

Prospects for the Infrastructure Sector

Infrastructure contribution to making Kenya a globally competitive economy

Infrastructure forms one of the 12 pillars of competitiveness, and is classified as a basic requirement for developing the economies of countries in their early stages of economic development–characterized by heavy reliance on natural resources and abundance of unskilled labour (World Economic Forum, 2009). Investing in adequate infrastructure is necessary for Kenya to advance from a *factor-driven*[1] economy and join the league of *efficiency-driven*[2] economies, and eventually achieve an *innovation-driven*[3] economy status.

The development of high quality infrastructure is critical for socio-economic transformation in the medium term. The strategies and measures to be pursued in the medium term include: supporting development initiatives around flagship projects, strengthening institutional framework, enhancing efficiency and quality as well as increasing the pace of projects so that they are completed as envisaged. Other measures include encouraging private sector participation in the provision of infrastructure services through the Public Private Partnership (PPP) framework (Government of Kenya, 2010). The sector aims at improving both the quality and quantity of the existing physical infrastructure facilities in order to contribute to the attainment and maintenance of a sustained economic growth of over 10 per cent per annum by 2012 and beyond (Government of Kenya, 2010).

KIPPRA estimates that in the high growth scenario, GDP growth rate will increase from 1.7 per cent in 2008 to 7.5 per cent in 2012. Vision 2030, like its predecessor the ERS, calls for a considerable shift in the manner in which the country deploys her resources to acquire the necessary capacity and access to infrastructure services in their wealth creation through the identified flagship projects. According to the physical infrastructure sector MTEF 2010-2012, the projects that have already been earmarked include: Construction of Nairobi fresh produce wholesale hub; Dredging and deepening the port of Mombasa; Development of the Nairobi metropolitan region bus rapid transit system; Development of light rail for Nairobi and its suburbs; Development of a new transport corridor to Southern Sudan and Ethiopia; National road safety computerized information management systems programme; Rehabilitation and maintenance of airstrips and airport expansion and modernization; Development of Nairobi city integrated closed circuit television system; Construction industry development policy; Public facilities improvement programme; Rural electrification programme; Geothermal appraisal at Olkaria IV; Coal exploration in Mui-Kitui, among other areas, Wind power generation; Least cost power master plan; Capacity enhancement of the oil pipeline; Kenya-Uganda oil pipeline, and promotion of LPG consumption, among others.

The implementation of the above infrastructure projects will lead to economic transformation and accrue benefits to the country and citizens. As a result, GDP is expected to grow at a faster rate as well as the sub-sectors within the infrastructure sector.

Based on analysis of historical trends in value addition and shares of infrastructure in national GDP in Kenya and several comparator countries, the following infrastructure growth estimates are estimated up to the year 2013: a high growth scenario and an alternate or low growth scenario.

High growth scenario

Under the high growth scenario, infrastructure and economic services were projected to register a growth rate of 6.2 per cent, 6.5 per cent and 6.8 per cent in 2009, 2010 and 2011, respectively. This will increase to 7.4 per cent in 2012, and 7.8 per cent in 2013. Under the scenario, it is assumed that the economic stimulus package and implementation of flagship projects under physical infrastructure take effect immediately. Growth in electricity is projected to increase from the 6.2 per cent in 2008 to 7.6

Table: 13.7: High growth scenario: Projected percentage growth in infrastructure and economic services

Infrastructure sub-sector	2007	2008	2009	2010	2011	2012	2013
National GDP	**7.0**	**1.6**	**2.6**	**5.2**	**6.6**	**7.6**	**8.9**
Electricity	11.8	6.2	6.4	6.6	7.0	7.6	8.4
Water supply	2.1	2.5	2.6	2.7	2.8	3.0	3.2
Water transport; harbours	14.4	8.7	8.9	9.3	9.9	10.6	11.2
Land transport, transport and via pipeline	7.1	4.5	4.6	4.8	5.1	5.5	6.0
Air transport	9.3	5.8	5.9	6.2	6.6	7.1	7.3
Auxiliary transport activities	15.7	9.4	9.6	10.1	10.7	11.5	12.5
Posts and telecommunications	30.3	7.9	8.5	8.9	9.4	10.1	11.0
Construction	9.1	5.7	5.8	6.1	6.5	6.9	7.5
Real estate, renting and dwelling business	7.8	5.0	5.1	5.4	5.7	6.1	6.4
Real estate-dwellings, rented and owner occupied	4.0	4.0	4.1	4.3	4.5	4.9	5.5
Real estate-renting and business services	10.1	6.3	6.5	6.7	7.1	7.7	8.6
Total infrastructure	**17.6**	**6.0**	**6.2**	**6.5**	**6.8**	**7.4**	**7.8**

Source: KIPPRA estimates

per cent in 2012, and 8.4 per cent in 2013. Water transport and harbours, air transport, auxiliary transport activities, post and telecommunications sector and construction will contribute the highest growth (Table 13.7).

Low growth scenario

The second scenario presents infrastructure growth projections in a case where the economic stimulus package is not implemented in full and investments in the flagship projects are delayed and the constitutional review process (plus its accompanying implementation) is delayed and, therefore, negatively impacting on ability of parliament to pass infrastructure-related bills and budgetary operations. It also assumes that political temperatures may affect flow in the transport sector in the Northern corridor, railways, air as well as water transport and harbours. In addition, it is assumed electricity power generation, development of geothermal power and renewable energy projects

Table 13.8: Low growth scenario: Projected percentage growth in infrastructure and economic services

Infrastructure sub-sector	2007	2008	2009	2010	2011	2012	2013
National GDP	**7.0**	**1.6**	**2.6**	**3.8**	**4.2**	**4.8**	**6.3**
Electricity	**11.8**	**6.2**	**6.3**	**6.6**	**6.9**	**7.3**	**7.6**
Water supply	2.1	2.5	2.6	2.7	2.8	2.9	3.1
Water transport; harbours	14.4	8.7	8.9	9.2	9.7	10.2	10.6
Land transport, transport and via pipeline	7.1	4.5	4.6	4.8	5.0	5.3	5.5
Air transport	9.3	5.8	5.9	6.2	6.4	6.8	7.3
Auxiliary transport activities	15.7	9.4	9.6	10.0	10.4	11.0	11.3
Posts and telecommunications	30.3	7.9	8.5	8.8	9.2	9.7	10.0
Construction	9.1	5.7	5.8	6.0	6.3	6.7	7.0
Real estate, renting and dwelling business	7.8	5.0	5.1	5.3	5.6	5.9	6.3
Real estate-dwellings, rented and owner occupied	4.0	4.0	4.1	4.2	4.4	4.7	4.9
Real estate-renting and business services	10.1	6.3	6.5	6.7	7.0	7.4	7.6
Total infrastructure	**17.6**	**6.0**	**6.2**	**6.4**	**6.7**	**7.1**	**7.6**

Source: KIPPRA estimates

are not implemented as scheduled. It is also assumed that there would be limited investment in the ICT and constructions sub-sectors.

Given this scenario, we are not likely to see major declines in the infrastructure sub-sector, mainly because the government has already committed finances to the various programmes under implementation. For example, in the roads sub-sector, Thika Road, the Northern Corridor and other major road networks financing has already been committed. In this scenario, the situation is not likely to get worse than it is currently. The growth in the infrastructure sub-sectors will increase from the 6.0 per cent in 2008 to 6.2 per cent, 7.1 per cent, and 7.6 per cent in 2009, 2012, and 2013, respectively (Table 13.8).

Social Sector Medium Term Prospects

Education

Kenya has implemented various policy reforms since 2003 that have enabled the expansion in the education sector. In 2003, for instance, the government initiated the Free Primary Education (FPE) programme, followed with the Free Day Secondary Education programme in 2008. According to *Sessional Paper No. 1 of 2005*, the government aims at integrating Early Childhood Development Education (ECDE) and Training into basic education from 2010. At the same time, the government is committed to expanding tertiary education by revitalizing Technical Industrial Vocational Entrepreneurship and Training (TIVET) and expanding university education.

Policy targets related to these reforms include increasing primary net enrolment and completion rates to 100 per cent by 2015; reducing regional disparities in access to primary education; increasing primary to secondary transition rate to 75 per cent by 2012; increasing secondary to university transition rate to over 10 per cent by 2015; improving internal efficiency across all education levels by reducing education wastage that is mainly associated with dropout and repetition; improving adult literacy (especially for women); equitable access to basic and continuing education; improving quality of physical facilities in learning institutions; and ensuring quality delivery of science and technology

Table 13.9: ECDE, primary and secondary enrolment projections, 2008-2013 (millions)

Population	2008 (Actual)	2009	2010	2011	2012	2013
ECDE (4-5 Years)	2.45	2.56	2.68	2.75	2.82	2.88
Primary (6-13 Years)	7.57	7.93	8.30	8.78	9.26	9.74
Secondary (14-17 Years)	3.15	3.14	3.14	3.24	3.33	3.43
ECDE						
Public	1.26	1.31	1.37	1.42	1.47	1.52
Private	0.46	0.60	0.63	0.65	0.67	0.70
Total	**1.72**	**1.91**	**2.00**	**2.07**	**2.14**	**2.22**
Primary Education						
Public	7.64	8.00	8.48	8.85	9.21	9.61
Private	0.92	0.83	0.86	0.88	0.90	0.92
Total	**8.56**	**8.83**	**9.34**	**9.73**	**10.11**	**10.53**
Secondary Education						
Public	1.21	1.35	1.58	1.82	2.01	2.11
Private	0.17	0.16	0.16	0.17	0.17	0.17
Total	**1.38**	**1.51**	**1.75**	**1.99**	**2.18**	**2.28**

Source: KIPPRA Estimates based on the Education Simulation and Financial Projection Model (2009)

and other higher education programmes. These have implications on the sector's enrolment.

As shown in Table 13.9, ECDE, primary and secondary school age population were estimated at 2.5 million, 7.6 million and 3.1 million in 2008, respectively. By 2013, the respective school age population are projected at 2.9 million, 9.7 million and 3.4 million children.

Further, it is expected that the sector will experience a rise in enrolment rates in all levels. As the data in Table 13.9 shows, enrolment at the ECDE level is expected to increase from the 1.72 million pupils (27% in private schools) in 2008 to 2.2 million students (32% in private schools) in 2013. Primary enrolment is expected to increase from the 8.6 million students (11% in private schools) in 2008 to 10.5 million pupils (8.6% in private schools) in 2013. Secondary school enrolment is estimated to increase from 1.38 million students (12% in private schools) to 2.3 million students (8% in private schools) during the same period. Overall ECDE GER is projected to increase from 60 per cent in 2008 to 77 per cent in 2012. Primary GER was 110 per cent in 2009 and is projected at 109 per cent by 2013. Secondary education GER is expected to rise from 45 per cent in 2009 to 66 per cent by 2013, assuming the eligible students appropriately enrol for secondary school education.

Whereas primary education enrolment would stabilize in the medium term, total secondary enrolment is expected to rise sharply over the period 2008-2013. The sharp increase in secondary enrolment can be attributed to growth in numbers of pupils successfully completing the last grade of primary education level (Standard 8) following free primary education, free day secondary education, internal efficiency gains (both in primary and secondary), and the policy target of an increased transition rate of 75 per cent by 2012. The envisaged expansion calls for substantial investment in the sector, both in terms of human resources and physical infrastructure.

As aforementioned, measures already in place towards expanding access to secondary education include introduction of free day and subsidized secondary education in 2008, expansion of existing schools to at least three streams, and encouraging various stakeholders (private sector, communities and development partners) to support post-primary education expansion. This is mainly through the Kenya Education Sector Support Programme (KESSP), public private sector partnerships in education; and mobilization of more resources from decentralized funds such as the Constituency Development Fund (CDF) towards expanding physical infrastructure in learning institutions. However, given the expected expansion and limited fiscal space in public financing of the sector, it would be important to explore feasible measures for financing the sector that are within the macro-financial framework and budget constraints.

Medium Term Prospects in Agriculture

In 2010, agricultural growth was robust due to the good rainfall received in most parts of the country. The weather plays a critical role in the country's predominantly rain-fed agriculture. The sector recovered from a severe drought in 2008/2009 (coupled with the effects of the global financial crisis), high fuel and food prices to a year characterized by bountiful harvests of different commodities. For instance, there were reports of surpluses of milk in Central and Rift Valley provinces, and maize in Eastern Province and Tana River basin. The significant increase in agricultural surpluses has led to incessant complaints by farmers and investors of inadequate processing and storage capacity. In some parts of the country, there were considerable post-harvest losses and wastage, even leading to maize spoilage in Eastern and Coast provinces. If there are no dramatic shifts in the weather patterns and production practices, then the prospects for agricultural growth appear promising in the medium term. Improved food production

would stabilize food prices, reduce the import bill and also contribute to low inflation.

Agriculture is a labour-intensive sector. Vibrant sectoral growth will increase the demand for labour in production, transportation, processing, and marketing sectors, and thus create much-needed employment. With the increased opportunity created as a result of a vibrant sector, the population will be well-fed and the general livelihoods will improve due to increased income especially in the rural areas. Broad-based investments such as irrigation, rural feeder roads, and research and extension services would increase the production of food and industrial crops, which have a positive impact on reducing poverty. Benefits of irrigation are relatively higher in the arid and semi-arid areas where poverty is more widespread and rainfall is less reliable, while investments in water harvesting and storage have higher benefits in the high potential areas where rainfall is frequent and more reliable.

Because of performance contracting in the public sector and considerable political support, some policy initiatives have been implemented at a faster pace than in the past when projects were endlessly deferred until 'when funds became available'. However, the pace of implementation has been slower than expected in some sub-sectors for a variety of reasons, including: lack of financial resources, inadequate project preparation and competition with other projects within and across ministries. Such delayed projects include legal reforms in the agricultural sector, fertilizer cost reduction initiatives, irrigation projects and setting up of disease free zones in arid and semi-arid areas.

Continued investments in agriculture will require a complex mix of factors, including incentives such as targeted input subsidies, availability of inputs (e.g., seed, fertiliser, agro-chemicals, credit etc.) at affordable prices, adaptive innovations from research institutions, information through various channels such as extension services and producer/business associations, supportive infrastructure (water/irrigation, storage, transport, telecommunications, etc.), functional and efficient institutions and a predictable macroeconomic environment. In the next two years, Kenya will be engaged in a devolved electoral process. During that period, many promises may be made to the farming populations that may affect the way farmers and investors make their decisions, and this may significantly affect production levels in the subsequent periods. Nevertheless, assuming favourable weather and barring any negative political outcomes, the prospects for the agricultural sector appear promising.

Environment Prospects

The environment sector has gained prominence both within and outside government in the recent past. The emphasis on conservation of indigenous forests and increasing the extent of farm forests is likely to increase the forest cover towards the desired level of 10 per cent of the total land cover. However, the continuing high dependence on biomass energy by a large section of the population and the prevailing high price of alternative energy sources could still jeopardize forest rehabilitation efforts. The implementation of the ongoing policy reforms are also expected to result in more efficiency and better management in the sector. The increased participation of stakeholders in conservation activities as envisaged in the Water Act 2002 and the Forests Act 2005 is expected to result in positive conservation outcomes.

The environment sector will face such issues as poor sanitation in urban areas, low water harvesting and storage capacity, poor waste management among others. Due to the relatively low budgetary allocation to the sector, these issues are likely to remain pressing in the medium term.

(Endnotes)

1 According to the Global Competitiveness Index (GCI), in the first stage, the economy is *factor-driven* and countries compete based on their factor endowments: primarily unskilled labour and natural resources. Companies compete on the basis of price and sell basic products or commodities, with their low productivity reflected in low wages. Maintaining competitiveness at this stage of development hinges primarily on well-functioning public and private institutions (pillar 1), well-developed infrastructure (pillar 2), a stable macroeconomic framework (pillar 3), and a healthy and literate workforce (pillar 4) (World Economic Forum, 2009).

2 As wages rise with advancing development, countries move into the *efficiency-driven* stage of development, when they must begin to develop more efficient production processes and increase product quality. At this point, competitiveness is increasingly driven by higher education and training (pillar 5), efficient goods markets (pillar 6), well-functioning labour markets (pillar 7), sophisticated financial markets (pillar 8), a large domestic and/or foreign market (pillar 10), and the ability to harness the benefits of existing technologies (pillar 9) (World Economic Forum, 2009).

3 Finally, as countries move into the *innovation-driven* stage, they are able to sustain higher wages and the associated standard of living only if their businesses are able to compete with new and unique products. At this stage, companies must compete through innovation (pillar 12), producing new and different goods using the most sophisticated production processes (pillar 11). The concept of stages of development is integrated into the Index by attributing higher relative weights to those pillars that are relatively more relevant for a country given its particular stage of development. That is, although all 12 pillars matter to a certain extent for all countries, the relative importance of each one depends on a country's particular stage of development (World Economic Forum, 2009).

PART IV

Poverty, Unemployment and Inequality in Kenya

Part IV of this report discusses the problems of poverty, unemployment and inequality. The chapter analyzes the contribution of the various sectors of the economy to employment creation and poverty reduction. Based on the analysis, various policy options are discussed.

14 Enhancing Sectoral Contribution Towards Reducing Poverty, Unemployment and Inequality

Introduction

Despite four decades of anti-poverty programmes and government spending, poverty is still widespread in Kenya. Estimates based on the Kenya Integrated Household Budget Survey (KIHBS) for 2005/2006 show that close to 50 per cent of the population was still below the poverty line–49 per cent and 34 per cent in rural and urban areas respectively (Kenya National Bureau of Statistics-KNBS, 2008). The proportion of the poor is expected to have risen due to the internal shocks following the post-election violence in 2008. This was exacerbated by the 2008/09 drought and the global food, fuel and financial crisis. World Bank (2009) estimated that poverty could have risen by 9.0 per cent following the effects of the political crisis alone.

Unemployment in Kenya is also high. Estimates based on the KIHBS (2005/06) reveal that average unemployment was about 12.7 per cent, with urban and rural areas having unemployment rates of 19.9 per cent and 9.8 per cent, respectively (Government of Kenya, 2008). High unemployment levels have an implication on income distribution as returns to growth accrue to only those who supply the factors of production. This chapter recognizes that unemployment and poverty are two sides of the same coin. The poor have little capital or land, and depend primarily on labour for their income. Thus, the critical factor in reducing income poverty is increased employment. As labour markets tighten, rising real wages provide further increase in incomes of the poor. Poverty declines rapidly when employment growth is sufficiently rapid so as to raise real wages. This gives a double benefit to the poor.

Inequality in Kenya manifests itself in different forms. These include unequal distribution of wealth and income, unequal access to economic and social goods and services, poorly remunerated jobs for the majority of the population and, exclusion of some social groups from participation in social and political processes and other life choices. It can be noted that for any given level of economic development or mean income, higher inequality implies higher poverty, since a smaller share of resources is obtained by those at the bottom of the distribution of income or consumption. Higher initial inequality may also result in lower subsequent growth and, therefore, less poverty reduction.

According to the KNBS (2008), the lowest 10 per cent of Kenyan households in rural areas control only 1.63 per cent of total expenditure, while the top 10 per cent control approximately 36 per cent. Expenditure shares for basic needs tend to be higher in poor regions compared to shares in better-off regions. Moreover, poor regions tend to have larger proportions of their populations in the lower expenditure deciles.

Government Efforts to Reduce Unemployment, Poverty and Inequality

There have been many initiatives aimed at alleviating poverty and unemployment in Kenya since independence. One of the initiatives that has been prominently used by the Kenyan government is the promotion of high economic growth. The first two development plans after independence placed emphasis on rapid economic growth to alleviate poverty and reduce unemployment. However, in the earlier years of independence, the two problems of poverty and unemployment persisted and income inequality widened despite the economy achieving high rates of economic growth. The persistence of these problems led to greater focus on equity and employment generation in the National Development Plan of 1974-78. The *Sessional Paper No.1 of 1986* also put considerable attention to poverty and unemployment. It recommended remedial measures, which included rapid economic growth to be led by the private sector, with support from a more efficient public sector.

The strategy of rapid economic growth has been maintained in subsequent development plans with minor variations. For instance, Government of Kenya (1994) states that it is only through sustainable economic growth that national wealth can be created to support measures to alleviate poverty, protect vulnerable groups and raise standards of living. The National Development Plan 1997-2001 deviated from previous ones by shifting emphasis to private sector investment in industrial production with an aim of transforming Kenya from a largely agricultural sector to a newly industrialized country by the year 2020. It was argued that industrialization has the potential to create more jobs rapidly and help reduce poverty (Government of Kenya, 1999). The National Development Plan 2002-2008, with the theme of "effective management for sustainable economic growth and poverty reduction", articulated pro-poor growth strategies aimed at economic growth and poverty reduction. The Economic Recovery Strategy for Wealth and Employment Creation (ERSWEC) 2003-2007 also placed emphasis on achieving high growth rate and creation of employment as the primary means of alleviating poverty. In the ERSWEC, the government committed itself to generate 500,000 jobs every year. However, the persistence and spread of poverty, inequality and unemployment indicate that the strategies adopted so far have not been very effective. These vices are also now recognized as a major threat to security.[1] It is for this reason that Kenya Vision 2030 aims (in its social pillar) at achieving a just society that enjoys equitable social development. The political pillar also aims at addressing some of the inequalities by focusing on a political system that is issue-based, people-centred, results-oriented and accountable. However, Vision 2030 also places emphasis on rapid economic growth as a strategy of achieving, among other things, poverty reduction and employment creation.

Inter-linkages between Growth, Poverty and Inequality in Kenya

For a country that has pursued poverty reduction and employment creation strategies for a long time and has developed a long term vision (the Kenya Vision 2030), in which economic growth will play a significant role, there is need to investigate the relationship between growth and poverty reduction and employment generation. Several studies have been done on this relationship, but what is the contribution of various sectors of the economy to

employment generation, poverty and inequality reduction? This forms the focus for this chapter.

Inter-sectoral Linkages

Inter-sectoral linkages are important when formulating development strategies (Lewis, 1954; and Fei and Ranis, 1964). These can be distinguished into backward and forward linkages (Hirschman, 1958). The *forward linkages* measure the relative importance of a sector as a supplier to other sectors in the economy whereas the *backward linkages* measure its relative importance as a demander. Thus, backward linkages are like "pulls" and forward linkages are like "pushes". Some important questions for policy include: (i) how policies should be formulated to achieve accelerated and sustained growth, and (ii) If it matters whether forward or backward linkages are promoted.

On the first one, a policy of a big-push, with coordinated investment in many different sectors of the economy, and balanced growth is sometimes advocated. One problem is that this strategy requires a lot of resources, and a second and more important problem is the informational requirements of such an exercise. The alternative is to rely on the market to correct the coordination failure. Selectively promote a few sectors in the economy which would, through the linkages with the rest of the economy, stimulate other sectors as well. This is the unbalanced growth. How do we choose such key sectors? The determining factors are: (i) The number of linkages a certain sector possesses and the characteristics of the economy; and (ii) the strength of the linkage.

On the question of whether it matters whether forward or backward linkages are promoted, it does matter. By raising demand for a product, a backward linkage effectively raises the price of the output of the sector that benefits from the linkage. A forward linkage reduces the price on one of the inputs of production of the sector that benefits from the linkage, thus easing its supply. The overall effect is difficult to estimate as it depends on the many factors in the production process. Forward linkages have international implications especially competitiveness of a sector.

Relative Importance of Growth and Redistribution on Poverty Reduction

Poverty reduction depends on: (i) the magnitude of economic growth (the larger the growth, the greater the reduction of poverty); (ii) changes in inequality accompanying the growth process–an increase in inequality reduces the impact of growth on poverty reduction. This implies that a prudent poverty reduction strategy would have to focus on both the level of growth and on the pattern of that growth; that is, on who benefits from that growth. What has been the relative importance of the growth and redistribution elements in poverty reduction in Kenya? This question is answered through an analysis of the Welfare Monitoring Surveys I (1994) and II (1997) and the KIHBS (2005/06). This information is helpful when trying to strike the right balance between pro-poor and pro-growth interventions.

To quantify the relative contribution of economic growth and redistribution to changes in poverty over time, a decomposition of the total change in poverty level is done.[2] The decomposition goes beyond answering the basic question of whether poverty declined or increased. It tells how changes in welfare distribution have impacted on gains of economic growth in reducing poverty.

While poverty declined during the review period, Table 14.1 shows that changes in the distribution of income worked against the poor, substantially impacting on poverty reduction. For instance, during the period 1994-1997, the large and positive redistribution effect (21.7) dominated the negative growth effect of negative 12.9, resulting in an increase in poverty by 8.8 per cent (from 43.2% in 1994 to 52.0% in 1997). Although the growth

Table 14.1: Decomposition of change in poverty (headcount) into growth and redistribution components in Kenya, 1994-2005/06

	Period 1: (1994-1997)	Period 2: (1995-2005/06)	Total change in poverty (%)	Growth Effect	Redistribution Effect
National					
1994-1997	43.2	52.0	8.8	-12.9	21.7
1997-2005/06	52.0	45.9	-6.0	-19.6	13.6
Rural					
1994-1997	46.0	52.6	6.6	-12.1	18.7
1997-2005/06	52.6	49.1	-3.4	-15.0	11.5
Urban					
1994-1997	28.9	48.9	20.0	-12.8	32.9
1997-2005/06	48.9	33.7	-15.2	-19.5	4.3

Source: KIPPRA estimates based on KIHBS 2005/06

effect (-19.6) during 1997-2005 period was larger in magnitude than the redistribution effect (13.6), and therefore poverty declined, overall, the large positive redistribution effects in both periods meant that the potential for growth in reducing poverty could not be fully realized.

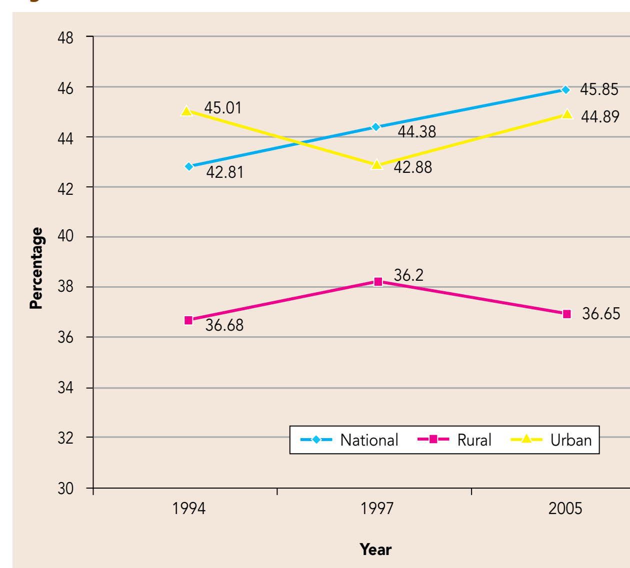
Similar effects are observed in both urban and rural areas. The most striking result is that redistribution in urban areas between the two-time periods improved from 32.9 per cent in period 1 to 4.3 per cent in period 2. Nevertheless, the urban Gini coefficient increased from 42.7 in 1997 to 44.2 in 2005 (Figure 14.1), pointing to varying growth rates across the welfare distribution.

Degree of Pro-poorness of Growth in Kenya

To further explore the extent to which the poor benefited from economic growth during the study period, we compute an index of pro-poor growth called the Poverty Equivalent Growth Rate (PEGR).[3] The PEGR is the growth rate that would result in the same level of poverty reduction as the observed growth rate if the growth process had not been accompanied by the change in inequality (i.e. if everyone in the society received the same proportional benefits of growth). The PEGR takes into account both the magnitude of economic growth and the benefits of growth that the poor receive.

Growth is pro-poor if PEGR is greater than the observed growth rate, and pro-rich if less than the observed rate. The situation is characterized by a trickle down process, when the poor receive proportionately less benefits of growth than the non-poor. In situations where inequality increases so much that the beneficial impact of economic growth is more than offset by adverse impact of rising inequality, PEGR is negative. This was the

Figure 14.1: Trends in Gini coefficient, 1994-2005



Source: KIPPRA estimates based on KIHBS 2005/06

case for the period 1994-1997 (Table 14.2). The table shows PEGR for head count poverty, poverty gap and severity of poverty for the periods 1994-1997 and 1997-2005/06.

Kenya's economy experienced negative growth in the period 1994-1997. Real per capita consumption declined at an annual rate of 2.63 per cent. This observed growth rate was higher than the PEGR of negative 3.86 per cent, implying that the poor were proportionately more adversely affected by the recession. This is also shown by the large negative PEGR for poverty gap (-10%). However, the poor during the period became more equal. This is shown by the large national PEGR (36.9%) for poverty severity, which is greater than actual growth rate during 1994-1997. But this is not the case for the urban poor. The recession was highly un-equalizing among the poor in urban areas as the PEGR is negative 20.2.

During the period 1997-2005 when Kenya experienced a positive growth rate of 1 per cent per annum, a PEGR of 0.3 per cent indicates that the non-poor benefited proportionately more than the poor. About 0.7 per cent of growth rate was lost in terms of poverty reduction because the country did not follow a pro-poor growth path. Given that the computed PEGRs are generally less than realized growth rates, it can be concluded that the Kenyan growth process during the ten-year period generated proportionately more benefits to the non-poor than the poor; that is, the growth process was a trickle-down one. Consequently, inequality rose across the country. These results lend credence to fast-tracking of the social protection interventions under the Medium Term Plan (MTP) 2008-2012 for Vision 2030, and in the growth sectors identified therein: manufacturing, agriculture, trade, tourism, transport and communications; information and communication technologies (ICT), and financial services. The ensuing analysis not only attempts to quantify the potential of these sectors to achieve the desired growth, but also the triple challenges of reduction of poverty, unemployment and inequality in Kenya.

The success of economic growth in alleviating poverty and creating new jobs depends on a number of factors. These include: the sectoral composition of growth, the translation of growth into increases in personal income, and progressive changes in the distribution of personal income.

The different sectors of the economy may contribute to job creation and poverty reduction through

Table 14.2: Poverty equivalent growth rate, 1994-2005/06

Year	Average growth rate in consumption	Total Poverty elasticity	Poverty equivalent growth rate
Head count poverty			
National			
1994-1997	-2.63	2.58	-3.86
1997-2005	1.00	-1.44	0.31
Rural			
1994-1997	-1.03	4.67	-1.89
1997-2005	0.23	-3.69	0.05
Urban			
1994-1997	-8.18	2.77	-5.21
1997-2005	2.99	-1.28	2.33
Poverty gap ratio			
National			
1994-1997	-	1.36	-10.24
1997-2005	-	-1.46	0.2
Rural			
1994-1997	-	2.17	-5.58
1997-2005	-	-3.8	0.04
Urban			
1994-1997	-	2.12	-10.86
1997-2005	-	-1.06	1.41
Severity of poverty			
National			
1994-1997	-	-0.42	36.87
1997-2005	-	-0.73	0.08
Rural			
1994-1997	-	-2.32	5.89
1997-2005	-	-0.63	0.06
Urban			
1994-1997	-	1.26	-20.21
1997-2005	-	-0.73	0.8

Source: KIPPRA estimates based on KIHBS 2005/06

various channels. First, is through sector-specific output growth, which may lead to overall improved growth of the economy. However, there may be differences in output growth of the various sectors. If the growing sectors absorb a large share of the labour force, then one would expect increased job creation and significant reduction in poverty.

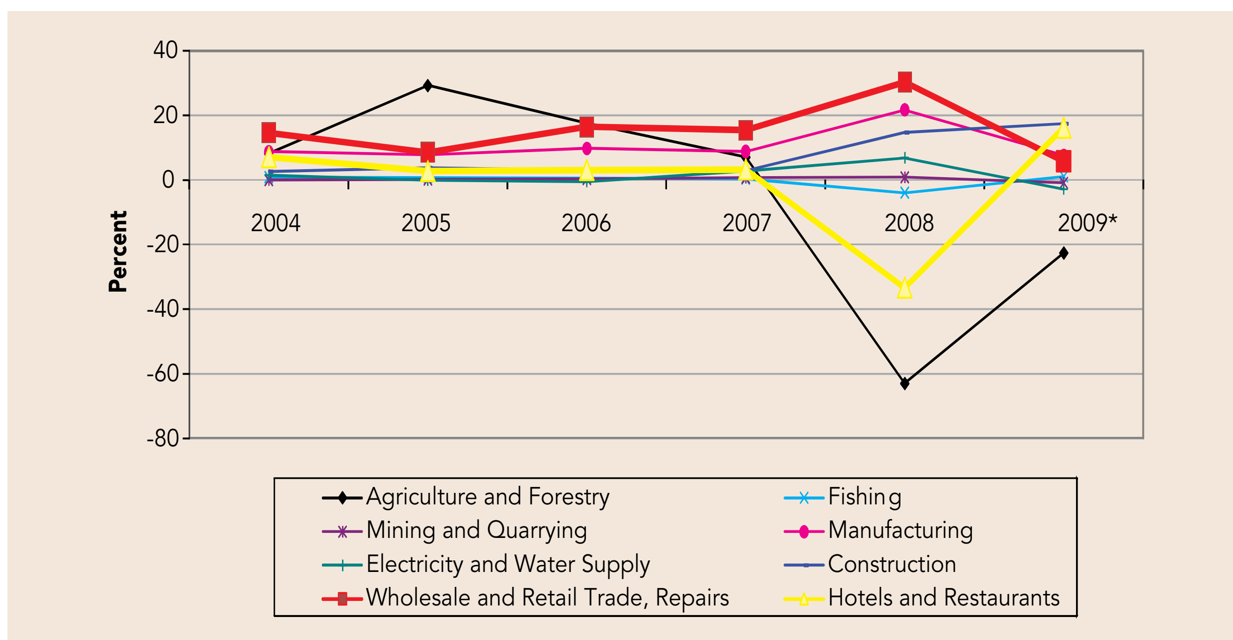
Second, the growing sectors would also have a large impact on job creation and poverty reduction if they have strong linkages (forward and backward) with other sectors of the economy. The effectiveness with which the growing sectors can contribute to poverty reduction further depends on how growth translates into higher earnings for the poor, and thus improved income distribution. If forward linkages lead to a general decline in the prices of goods and services (e.g. through increased supply of goods especially those largely demanded by the poor), then such growth is likely to have substantial impact on poverty. It is also possible that prices remain the same but outputs rise. This situation may arise due to improved productivity. The effect would be beneficial to both producers and consumers.

Third, is through choices of techniques of production. For a labour-abundant country such as Kenya, use of labour-intensive techniques of production would contribute greatly to employment generation and poverty reduction. The amount of labour used per unit of output may be indicative of the capacity of a sector to reduce poverty.

Contribution of Selected Sectors to Economic Growth

As already noted, growth of different sectors may have different impacts on unemployment, poverty and inequality. This is because different sectors impact on prices, techniques of production and earnings. It is also worth noting that different sectors are affected differently by both internal and external factors. For instance, in 2008, all major sectors of the economy recorded reduced growth (with agriculture and hotel industries shrinking by 5.1 and 36.1, respectively), compared to growth rates of 2.0 and 16.3 per cent, respectively, in 2007 (Government of Kenya, 2009).[4] This was attributed to drought, global financial crisis, high fuel and food prices,

Figure 14.2: Sources of growth, 2004-2009 (%)



Source: Government of Kenya (2010), Economic Survey

and the post-election violence in 2008. Figure 14.2 shows the main drivers of growth for the past few years. The contraction of agriculture and tourism (hotels and restaurants) sectors largely contributed to the negative growth in 2008. This points to the need for policies and strategies that increase the resilience of these sub-sectors to shocks.[5] Detailed sectoral growth rates over time are shown in Table A14.1 (Annex) for selected sectors.

Agriculture

Agriculture has, for a long time, remained a significant sector in terms of its contribution to economic growth in Kenya. Its growth pattern has varied over time–from an average annual growth rate of 4.6 per cent over the period 1964-1973, to negative 1.2 per cent over the period 1996-2000 before recovering in the period 2001-2005 to 2.5 per cent. However, the growth rate has not only been low but also very volatile (Annex Table A14.1). Despite its disappointing growth rate and pattern, agriculture has been, until recently, the leading contributor to overall economic growth.

Manufacturing

The growth of the manufacturing sector has been instrumental for economic development despite the fact that it is usually far from being the largest in most economies in terms of its share of total output or employment (Söderbom, 2001). In Kenya, the manufacturing sector is the second in terms of the size of its sectoral contribution to GDP (10.6%), after agriculture and forestry (23.4%) (Government of Kenya, 2009). The growth of output as reflected in output growth rate per annum averaged 4.98 per cent over the 2004-2008 period (Table 14.3). The decrease in 2008 could be attributed to the poor performance of agriculture, which is closely linked to manufacturing.

Table 14.3: Selected performance indicators of the manufacturing sector (%)

Year	Output growth	Employment growth
2004	6.68	0.92
2005	7.21	2.24
2006	5.49	2.46
2007	7.34	2.89
2008	-16.85	1.06
2009	12.82	-

Source: Republic of Kenya (2010)

As shown in Table 14.4, the contribution of the manufacturing sector to GDP has stagnated at around 11 per cent over the past five years. This is not a good reflection for a country that aspires to become a middle-income country by 2030. Also implied in the data is the fact that agricultural-based sectors such as food, beverages, and tobacco sub-sectors have a higher contribution to GDP than all other manufacturing sub-sectors (Table A14.2). Note that as the country moves towards the take-off stage in its development path, the role of manufacturing should increase as that of agriculture declines. This notwithstanding, Kenya being largely an agricultural-based country, the potential in manufacturing is dependent on how fast value addition in agriculture takes place.

The contribution of the manufacturing sector to GDP is also low compared to countries Kenya aspires to catch up with. For instance, Table 14.4 shows that the contribution of the sector to GDP has been over 30 per cent in China and more than 20 per cent in Malaysia and Singapore. The case is the same even for the annual growth.

Tourism

The tourism sector has continued to play a significant role in economic growth. It accounts for about 20 per cent of foreign exchange earnings and 11 per cent of GDP to the national economy. Tourism recorded a maximum annual growth of about 15 per cent in the period 2000-2006 (Table A14.1). In 2006, tourism revenue grew by 14.9 per cent and overtook horticulture to become the leading foreign exchange earner in Kenya with earnings of Ksh 56.2

Table 14.4: Manufacturing contribution to GDP in selected countries

Manufacturing value added (% of GDP)					
Country	2004	2005	2006	2007	2008
Brazil	19.2	18.1	17.4	17.4	16
China	32.4	32.8	33.6	34.1	34.4
Egypt, Arab Rep.	18	17.3	16.6	15.7	16.9
Botswana	4.1	3.7	3.7	3.3	3.2
Kenya	**11.3**	**11.8**	**11.6**	**11**	**9.1**
Mauritius	21.1	20.2	19.1	19.9	19.4
Malaysia	30.4	29.6	29.6	28	..
Singapore	27.5	26.9	26.9	24.9	20.8
South Africa	19	18.5	18.4	18.1	18.5
Uganda	7.6	7.6	7.7	7.7	7.6
Tanzania	7	6.8	6.9	..	..
Korea, Rep.	27.7	27.5	27.1	27.3	28.1
Manufacturing value added (annual % growth)					
Brazil	8.5	1.3	1.1	4.7	3.2
China	9	9.5	13.1	16.7	10.5
Egypt	2.2	m	5.8	7.6	8
Botswana	4.2	6.5	0	3.2	7.2
Kenya	**4.5**	**4.7**	**6.3**	**6.2**	**4**
Mauritius	0.1	-2	-0.8	3.1	3.2
Malaysia	9.6	5.2	7.1	3.1	..
Singapore	13.9	9.5	11.9	5.9	-4.1
South Africa	4.7	4.6	5.2	3.8	5.5
Uganda	6.3	9.5	7.3	4.3	8.1
Tanzania	8.6	9	7.1	..	..
Korea, Rep.	10	6.2	8.1	7.2	3.1

Source: World Development Indicators (various)

billion. Save for the year 2008 when it recorded a slump of negative 19.4 per cent, this upward trend has been maintained in the subsequent years (16.4% in 2007 and 18.6% in 2009).

Generally, the contribution of the tourism sector to economic growth is represented by performance in the hotels and restaurants sub-sector. The statistics from this sector show that its contribution to GDP has been increasing, although at a very low rate of about 1.5 per cent (Economic Survey, 2009). When economic growth is decomposed, the contribution of this sub-sector to the annual growth was 3.3 per cent in 2007. This fell very dramatically in 2008 to negative 36.2 per cent mainly because of the effects of the post-election violence in the country and the global financial crisis; but rebounded to a positive 16.2 per cent in 2009, showing resilience to quickly recover from shocks. Overall, the tourism sector is recovering to the pre-2008 level, having recorded 18.6, 23.9, 68.8 and 45.9 per cent growth in revenue, international arrivals, bed-night occupancy, and visitors to game parks and reserves, respectively, in 2009 (Government of Kenya, 2010).

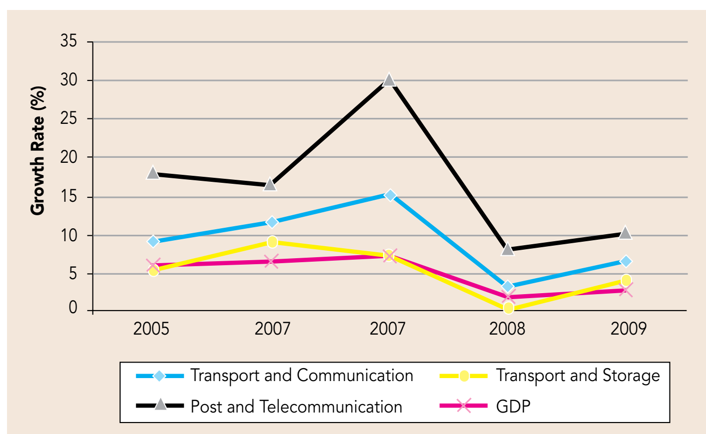
Wholesale and Retail Trade

The wholesale and retail sector is one of the flagship projects of Vision 2030. Its contribution to GDP has been modest, rising from 9.7 per cent in 2007 to 10% in 2009 (Government of Kenya, 2010). However, as a source of growth, its contribution can be substantial. The share of wholesale and retail trade was highest in 2008 at 30.3 per cent when other key sectors' growth plummeted (Figure 14.2). In general, the sector's share as a source of growth has been rising over the years. This has brought to the fore the importance and potential of the sector in terms of its contribution to economic growth and employment. The choice of the sector as a flagship project for Vision 2030 is well informed and the challenge is to actualize the proposed interventions in the MTP (2008-2012) so as to enhance its contribution to economic growth.

Information and Communication Technology (ICT)

ICT has become one of the recent drivers of economic growth in the world. Figure 14.3 shows the growth rates for ICT sub-sectors in Kenya. The ICT sub-sectors experienced increased growth rates from 2005 to 2007 but witnessed declined performance in 2008, mainly due to the post-election violence and the global financial crisis. However, the sector registered improved performance in 2009 (Figure 14.3). The sub-sectors' growth is above the GDP growth.

Figure 14.3: Growth rate of ICT sectors



Source: Government of Kenya, Economic Survey (2010)

The contribution of ICT to GDP has also been steady as shown in Table 14.5. Being an enabler sector, it has growth impacts on all other sectors of the economy. Therefore, the 10 per cent steady contribution to GDP by the transport and communications sub-sector and the increasing role of post and telecommunications should be enhanced. Thus, the expansion of communication infrastructure, including roads and data cables is expected to further enhance the sector's contribution to economic growth.

Building and construction

The performance of the building and construction sector can be used as an indicator of both current economic growth and future prospects. The main activities in this sector have included private and public construction of buildings and construction of roads by the government.

Although the contribution of the sector to GDP has stagnated at about 3.8 per cent, its contribution to economic growth has been rising in the recent past. This is mainly due to increased infrastructural investments by the government. The main indicator of the performance of this sector is cement consumption, which grew by 7 per cent between 2007 and 2008 and by 21 per cent in 2009 (Government of Kenya, 2010).

Table 14.5: ICT sub-sectors contributions to GDP (%)

Sub-sectors	2005	2006	2007	2008	2009
Transport and communication	10.3	10.6	10.6	10.4	9.8
Transport and storage	7.7	7.9	7.6	7.4	7.0
Post and telecommunication	2.6	2.7	3.0	2.8	2.8
GDP	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**

Source: Government of Kenya (2010)

Sectoral Contribution to Employment Creation

The achievement of Kenya's Vision 2030 goals is largely dependent on creation of equitable growth that benefits all citizens. The Government of Kenya is, therefore, very much concerned with how economic growth is transmitted into changes in employment, factor earnings and consequently household income. This section seeks to answer the question of how an increase in a sector's output affects employment for different socio-economic groups in the country. The multiplier decomposition for a socio-economic system represented by Social Accounting Matrix (SAM) is used to study these linkages. Employment multipliers are derived from the latest available Kenyan SAM 2003 to identify sectors with potential for high capacity to absorb labour.

Influence of production activities on employment

Figure 14.4 shows the effects of an exogenous stimulus to each sector on labour income. For instance, a 100 per cent increase in maize production generates about 15.8 per cent increase in labour income. This implies that an injection of Ksh 1 billion in maize production generates an additional Ksh 158 million of labour income. At an average wage rate of Ksh 6,000, this translates to about 26,000 new jobs per year. The bulk (64%) of this increase in income accrues to men, and the same holds for incomes generated in most of the sectors in the economy. A stimulus in most sectors yields proportionately more male labour employment than females.

Figure 14.4: Effects of an exogenous stimulus to a sector on demand for male and female labour

Goat and Sheep
Poultry
Other livestock
Beef
Vegetables
Hotels & Restuarant
Other Crops
Rice
Roots and Tubers
Tea
Fruits
Cotton
Administration
Cut Flowers
Dairy
Maize
Pulses and Oil Seeds
Coffee
Sugarcane
Other Cereals
Financial Services
Trade
Other Services
Wood and Paper
Mining
Barley
Wheat
Forestry
Transport
Water and Energy
Communications
Other Manufactures
Textile & Footwear
Metals and Machines
Beverages and Tobacco
Construction
Food Processing
Fish
Petroleum & Chemicals

0 5 10 15 20 25 30

Effect on labour demand (%)

Total Labour | Male | Female

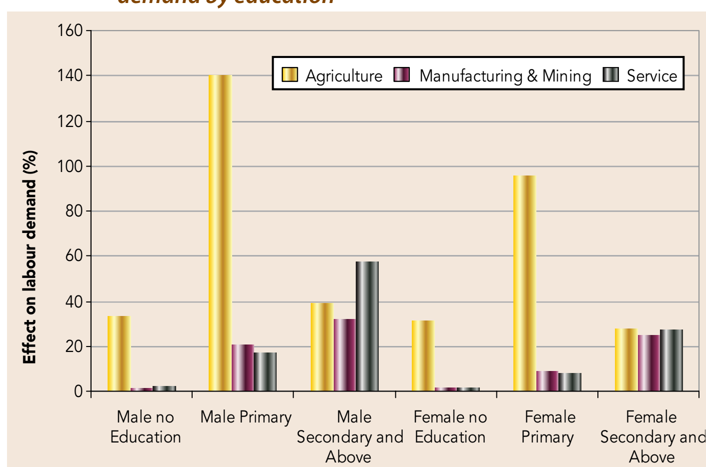
Source: KIPPRA estimates

Table 14.6: Sectoral employment effects by education

	Crop	Livestock	Mining	Manufacturing	Services	Total effect
Total employment effect	16.2	18.8	12.0	6.50	11.59	13.03
Male	10.1	8.5	8.6	4.11	7.90	7.88
Female	6.1	10.3	3.4	2.39	3.69	5.15
Male no education	1.8	1.0	0.3	0.12	0.26	0.98
Male primary	6.7	6.3	0.0	1.48	1.91	3.72
Male secondary and above	1.5	1.2	8.3	2.62	5.79	3.57
Female no education	1.3	2.1	2.2	0.17	0.11	1.13
Female primary	3.8	6.4	0.7	0.59	0.85	2.39
Female secondary and above	1.1	1.9	0.5	1.75	2.74	2.23

Source: KIPPRA estimates

Figure 14.5: Effects of an exogenous stimulus to agriculture, industry and service sectors on male and female labour demand by education



Source: KIPPRA estimates

In general, investment injections in the livestock sub-sectors have highest effects on labour income. The livestock sub-sectors also lead in terms of effects of employment on demand for female labour (Table 14.6). From Figure 14.4, another agricultural sub-sector that could induce proportionately more female labour income than men is vegetable production.

Table 14.6 also shows employment effect by education. A stimulation in most of the sectors leads to a proportionately higher increase in demand for male workers with primary level education. Very little additional labour demand is generated for people with little or no education (Figure 14.5).

A similar pattern is observed when labour is categorized by skill, rural and urban location, and regions. The regions are defined by agro-ecological zones as lowlands, midlands, highlands and metropolitan (Thurlow *et al.*, 2007). The bulk of the generated employment goes to rural middle-skilled workers in the midland agro-ecological zones (Table 14.7). Figures A14.1-A14.4 in the annex show the distribution of the stimulated labour demand for each sector in the four agro-ecological zones.

In general, it is the rural middle-skilled workers in the midland zone who seem to benefit most from a stimulus targeted at the whole economy. This may partly explain the large effect of agriculture in Figure 14.5 on males and females with primary school level of education. Very few sectors generate substantial labour demand for unskilled workers. This would be those with low education (Figures 14.5). According to the KIHBS (2005/06), poverty is concentrated in households with unskilled labour. The most vulnerable are those in lowlands in the rural areas. In the midlands, the sectors that can be stimulated to increase employment of the unskilled include financial services, communication, construction, textiles and footwear, and to some extent transport and rice production (Figure A14.2). In the highlands,

Table 14.7: Employment effects by skill, rural and urban location and by agro-ecological zone (%)

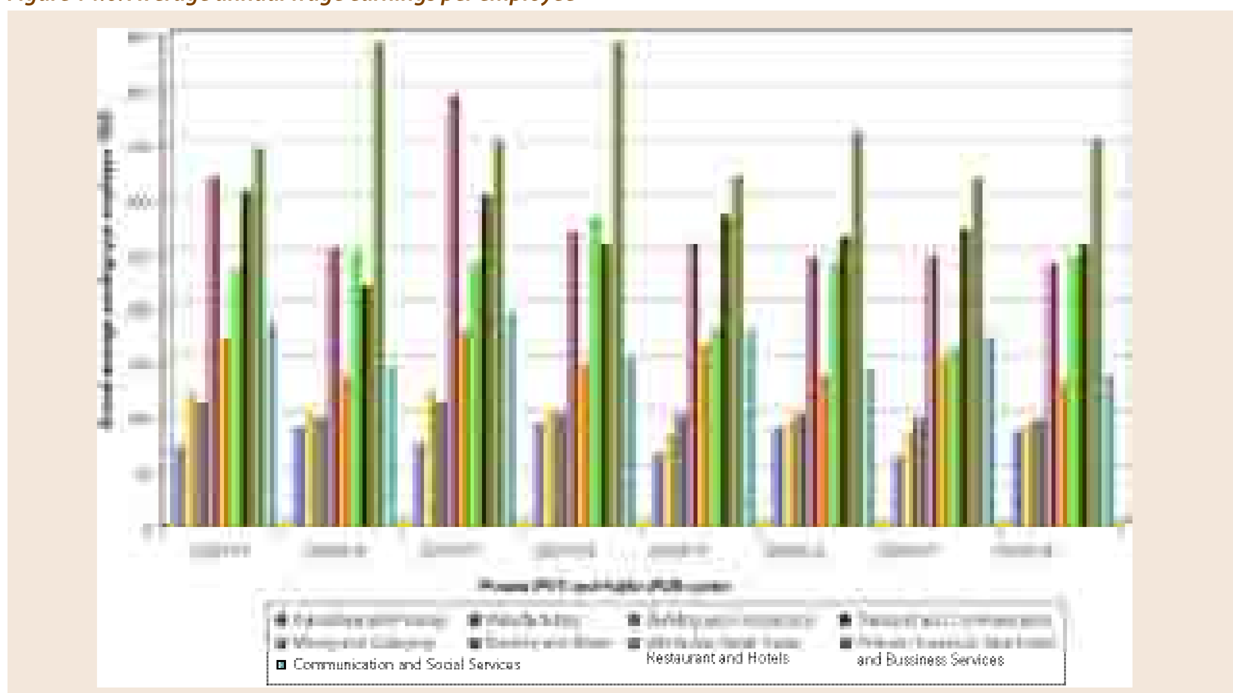
	Lowlands	Midlands	Highlands	Metropolitan
Rural high skill	2.4	2.4	3.2	..
Rural medium skill	1.8	6.6	5.4	..
Rural low skill	0.1	0.5	0.4	..
Urban informal high skill	0.6	0.2	0.2	0.6
Urban informal medium skill	0.3	0.2	0.2	0.8
Urban informal medium unskilled	0.1	0.0	0.0	0.0
Urban formal high skill	0.1	0.2	0.1	0.9
Urban formal medium skill	0.5	0.6	0.4	3.6
Urban formal unskilled	0.8	0.2	0.2	2.0

Source: KIPPRA estimates

it is a stimulus in public services that would increase employment for unskilled workers the most (Figure A14.3). In the metropolitan, a stimulus in hotels and restaurants and trade activities generates a substantial share of labour demand for unskilled informal labour (Figure A14.4).

In conclusion, the above analysis shows a relatively skewed distribution of additional employment arising from an increase in output in most of the sectors. Since few sectors generate additional employment for people with low skills/education, addressing unemployment for such categories, and therefore poverty, may require additional measures other than policies that stimulate production of goods and services. In the short term, social protection policies that promote re-distribution would complement growth promotion policies. In the medium and long term, enhancement of skills development programmes is necessary for tackling unemployment. Also, noting that sectors

Figure 14.6: Average annual wage earnings per employee



Source: KIPPRA estimates

with highest labour effects are agricultural-based, there is need for increased investments in irrigation to reduce the vulnerability of these sub-sectors to rainfall shortfalls and variability.

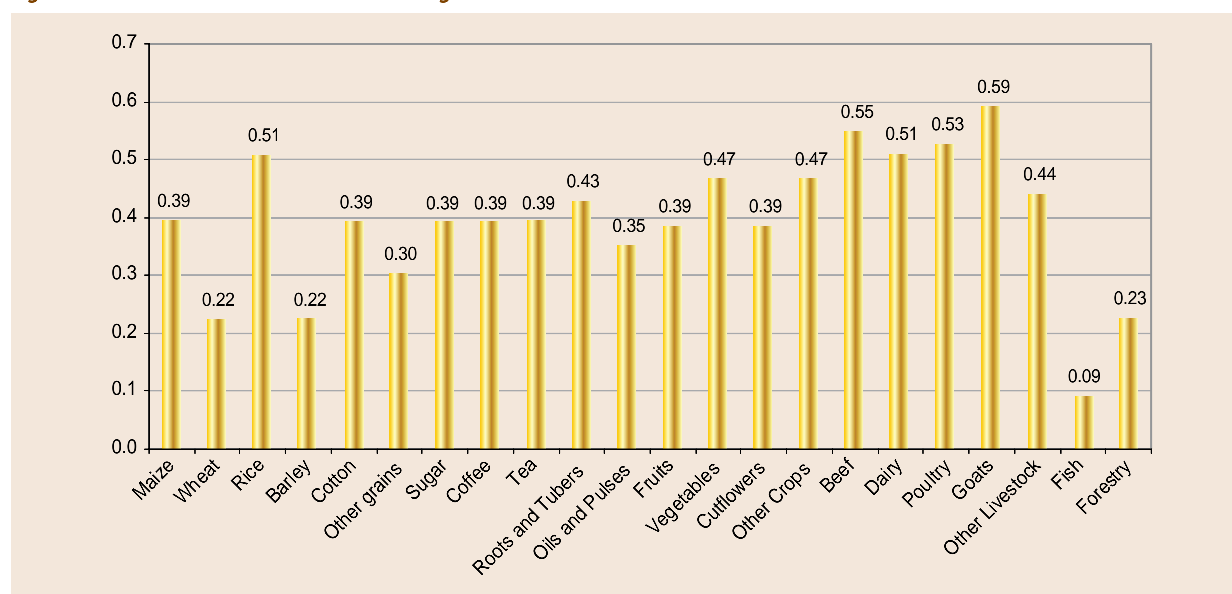
Sectoral Contribution to Income Generation

Wages in the different sectors of the economy differ significantly, as shown in Figure 14.6. Wage earnings give a picture of the contribution of different sectors to income distribution. Thus, sectors with high employment numbers and/or high wage earnings influence the distribution of income in the society. Figure 14.6 shows that the leading sectors in employment have the lowest average earnings. This includes agriculture and manufacturing, which employ about 600,000 people annually. On the other hand, the sectors that absorb the least labour have the highest average wage earnings. This implies that a few people control the largest share of wage earnings. Finance, insurance and business sectors, together with electricity and water sectors, have the highest share of wage earnings and yet they provide only about 120,000 employment opportunities annually.

Detailed contribution of various sectors to factor income (labour, capital and land) is provided in columns 3 and 4 of Table A14.6 in the appendix. Labour income accounts, on average, for 43 per cent of value added in all sectors while capital accounts for 54 per cent. This yields a labour intensity of about 0.78, ranging from 0.9 in agriculture to 0.4 in manufacturing. A lower unit labour to capital ratio is an indication that compensation to capital dominates domestic incomes in Kenya. Since the poor lack capital, the structure of the economy favours the better off. Although a low labour intensity is necessary for raising productivity, this needs to be balanced by the need to enhance labour income. For livestock sub-sectors such as beef and goat, dairy and poultry, the share in value added of both labour and capital is almost equal.

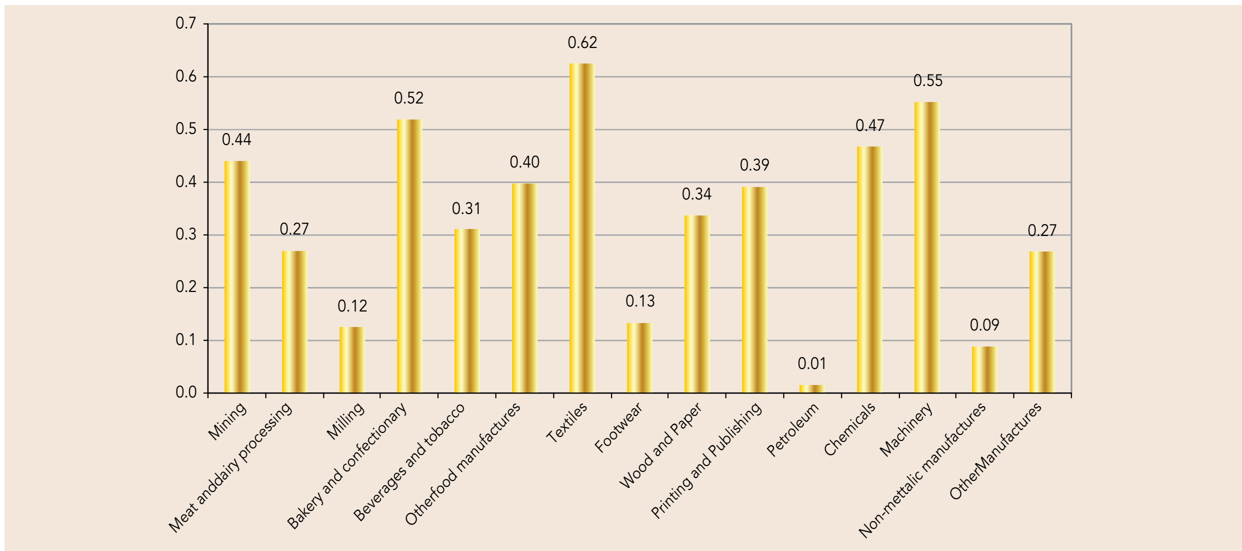
The livestock sub-sectors have the highest proportion of value added as labour income (Figure 14.7). However, these sub-sectors have in the past received relatively lower policy attention compared to crop production. Also, multipliers for fisheries are rather low, which may reflect the sectors' high capital intensity. As such, targeted interventions in these sectors may not boost employment unless coupled with interventions to boost capital acquisition by the poor.

Figure 14.7: Labour share of value added: Agriculture sector



Source: KIPPRA estimates

Figure 14.8: Labour share of value added: Industry

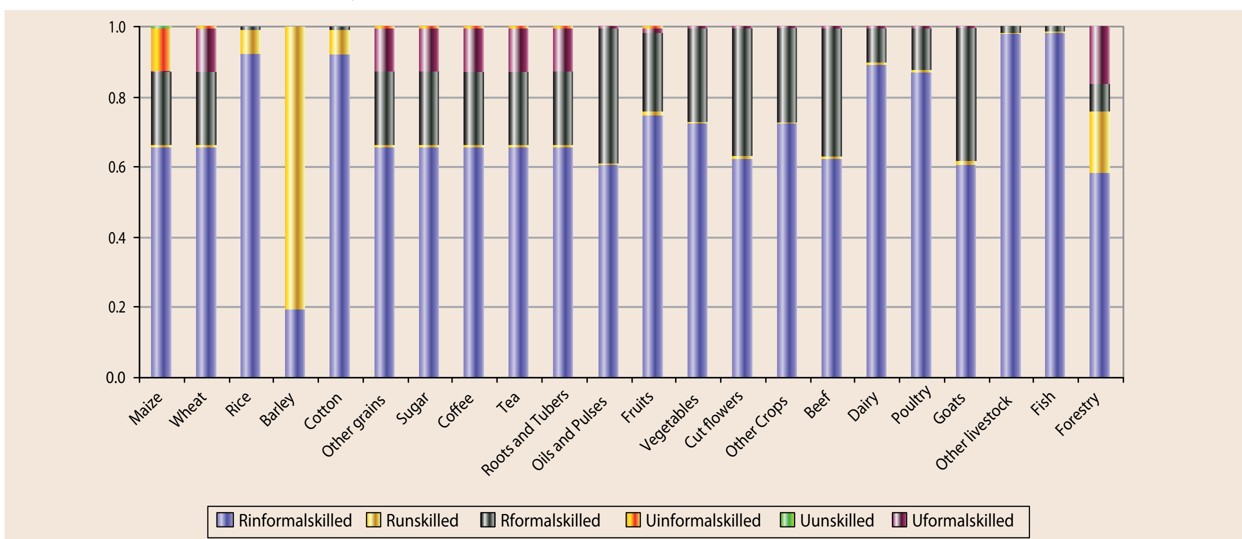


Source: KIPPRA estimates

Agriculture labour earnings are compared to those of the industry in Figure 14.8. Agricultural-based industries such as textile, bakery and confectionary have relatively high share of value added as labour income. In fact, the textile industry has the highest share of value added as labour income within the economy. This justifies the promotion of textile industry for job creation.

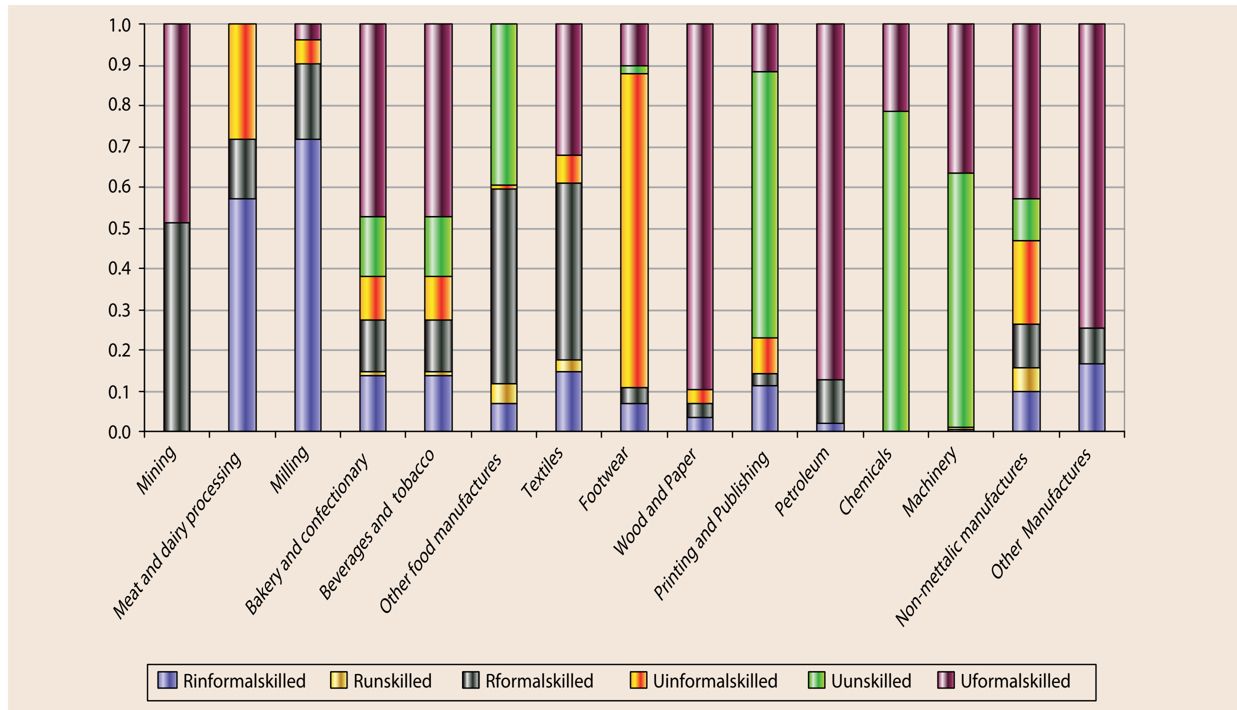
Relative income distribution by sector shows a very low share of value added accrues to rural unskilled labour (5.7%) in all sectors. Figures 14.9, 14.10 and 14.11 show labour income distribution for agriculture, industry and services, respectively. The low share of value added for the rural unskilled labour contrasts to that of unskilled labour in the urban areas. The latter category generates a quarter (24.9%) of labour income in the economy, second only to rural skilled labour in the informal sector (26.5%). This may suggest that lack of skills is what may constrain labour earnings in rural areas and may be the push factor for rural-urban migration. The

Figure 14.9: Share of value added by labour categories: Agriculture sub-sectors



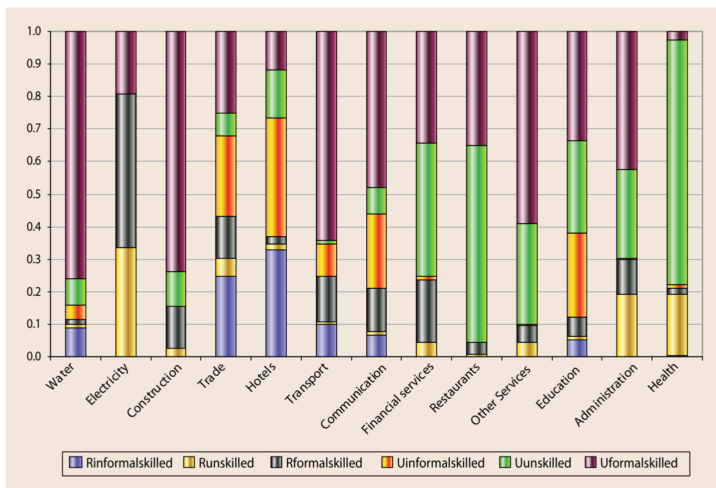
Source: KIPPRA estimates

Figure 14.10: Share of value added by labour categories: Industry



Source: KIPPRA estimates

Figure 14.11: Share of value added by labour categories: Services and social sectors



Source: KIPPRA estimates

economic potential of rural areas can, therefore, be enhanced by investing more in skills development. As Figure 14.9 shows, about 70 per cent of the agricultural labour income accrues to rural informal skilled labour.

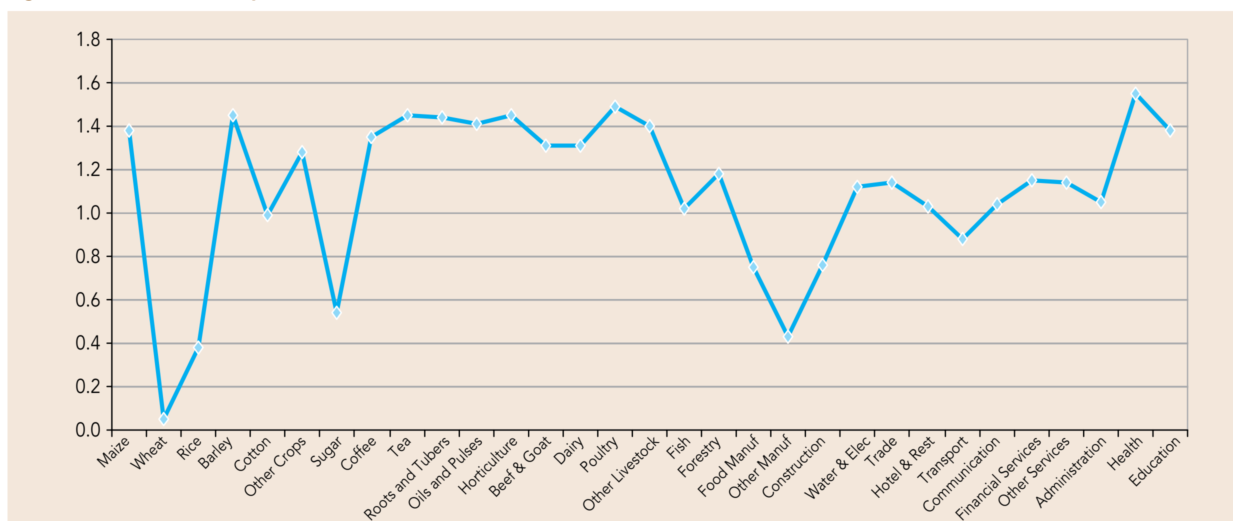
Influence on household income

The impact on households from a change in output in a sector is dependent on asset ownership. Figure 14.12 shows the linkages between changes in levels of production and household income. The pattern follows that of labour income, signalling the importance of labour asset for a majority of households. Thus, interventions in those sectors with the highest impact on labour income would also have a large impact on total household income. Agriculture sub-sectors, education and health are potential candidates for this.

However, the distribution of income is quite skewed (Figure 14.13). On average, about 44 per cent of an increase in household income due to increase in output in all sectors accrues to the top urban quintile of consumption.

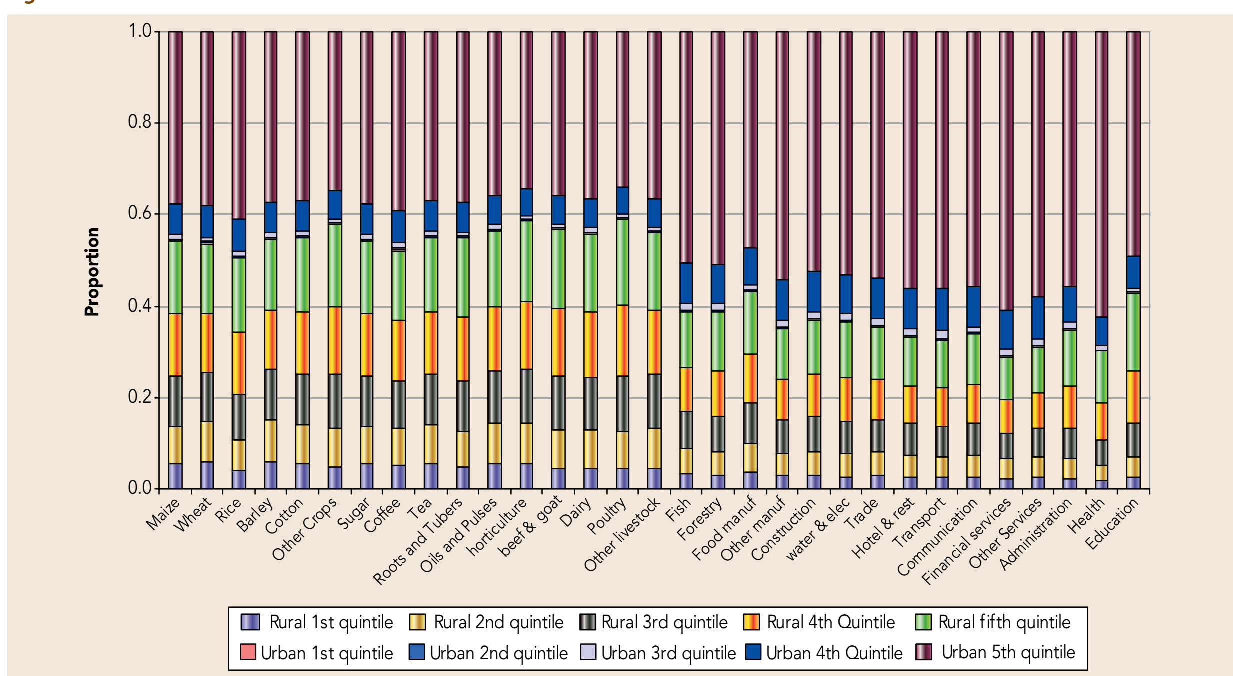
Agriculture sub-sectors yield better income distribution with the fifth urban quintile receiving, on average, 38 per cent of total income. Given this skewed distribution of an increase in additional income arising from increase in output, addressing

Figure 14.12: Sectoral impact on household income



Source: KIPPRA estimates

Figure 14.13: Sectoral distribution of the induced increase in household income



Source: KIPPRA estimates

poverty in both rural and urban areas may require additional measures other than policies which stimulate production of goods and services. This again calls for social protection policies that promote re-distribution to complement growth promotion policies.

Conclusions and Recommendations

Unemployment and poverty are major problems in Kenya. Worse still, the progress made especially in poverty reduction during the implementation of the Economic Recovery Strategy (2003-2007) may have been reversed by both internal and external shocks. Of importance to Kenya is that it has the human capital and potential to harness

technological advancement and, to a certain extent, the forces of trade. From the analysis so far, growth in agricultural sub-sectors has the highest effect on employment. The sector has the highest proportion of its value added as labour income. This is not surprising because as has been observed, since the agricultural sector in low-income countries is so large, accelerated agricultural growth (that is higher than the population growth rate) adds immense purchasing power. This is because farmers spend a substantial proportion of incremental income on locally-produced non-farm goods and services.

However, agricultural growth in Kenya has been very slow (even negative) since 2007. This is because of its heavy dependence on rain-fed agriculture. The critical elements for the sector to achieve its potential are irrigation; effectiveness in technological generation and adoption; public investment in rural roads to improve agricultural markets and, therefore, raise efficiency and linkages with non-farm sectors; education; and a shift to higher value crops.

The analysis also reveals that a stimulation of most sectors within the economy yields a relatively skewed distribution of income among Kenyan households. Kenya has numerous strategies and initiatives to address slow growth, poverty and income inequality. A key question regards where to focus development policy, i.e. whether a country should place more focus on economic growth, or poverty and/or inequality reduction. From the above analysis, Kenya needs to focus on economic growth as well as poverty and inequality reduction. For re-distribution policies to be efficient and growth-enhancing, redistribution should emphasize on creating wealth/capital for those lacking rather than direct income transfers. This efficiency can be achieved by correcting imperfections in the credit markets and freeing distortionary income redistribution mechanisms. The points to consider in designing and implementing anti-poverty initiatives include the following:

Economic growth and redistribution policies: It is clear from the literature that countries that managed to reduce poverty substantially had high rates of economic growth. One way of accelerating and sustaining high rates of economic growth would be to reduce the costs of doing business, and keep political and macroeconomic risk low. This would also contribute to Kenya's competitiveness. Therefore, it is essential for Kenya to promote growth. However, while economic growth is necessary for poverty reduction, it is not by itself sufficient; its pattern also matters. Moreover, poverty alleviation efforts are more successful when accompanied by not only growth policies but also by distributional policies that reduce inequality. To this end, it is noteworthy that the Vision 2030 MTP flagship programmes and projects are also mainly targeted towards the poor. The plan identifies social programmes, welfare programmes, and targeted poverty programmes and projects as some of its priority intervention areas.

Removal of factor price distortions in markets: Policies should be formulated and implemented to improve functioning of input markets (e.g. markets for farm inputs, labour and capital) and product markets. In particular, reforms should remove constraints (such as high transport costs) that prevent the poor from taking advantage of markets to improve their welfare. Improvement in the functioning of markets for farm inputs can contribute to higher farm incomes to poor farmers and employment opportunities for those without land. This will enable the poor participate fully in rural markets for agricultural products and for labour. Improving incomes in rural areas will narrow the urban-rural income gap and help stem rural-urban migration, which gives rise to increased urban unemployment and poverty.

Promotion of better linkages between markets: Since the poor participate in multiple markets, better linkages between markets can improve their participation. For example, better linkages between farm and off-farm activities and rural and urban markets would permit beneficial spill-over effects from one market to another. Assuming the economy grows as envisaged in Vision 2030, the benefits of growth must reach the poor if growth is to contribute in reducing poverty. In this context,

isolated markets would be a hindrance to poverty reduction. Better infrastructure and dissemination of market information can facilitate linkages.

The integrated employment and wealth creation programme for MSEs should be implemented vigorously. This should include providing training on setting up of cottage industries for such areas as confectionaries, handicrafts and arts. It has been established that cottage industries have given economic independence to women in the developing as well as developed countries. For instance, in Nepal, the cottage industry provides 76 per cent of all the employment in the industry sector. Some of the areas that cottage industries thrive are in confectionaries, handicrafts and arts.

Creation of institutions that encourage and support robust manufacturing industries: There were several policy initiatives targeting the manufacturing sector between 2003 and 2007. These included formulation of the National Exports Strategy (NES) for enhancing competitiveness, formulation of the Private Sector Development Strategy (PSDS), development of the Master Plan Study for Kenyan Industrial Development (MAPSKID) and the *Sessional Paper No. 2 of 2005 on Development of MSEs*. However, the sector is still encumbered with stifling challenges. One area that poses a serious challenge is poor infrastructure, evidenced partly by a dilapidated transport network, and unstable and relatively high production costs, including costly energy supply. Other challenges include weak regulatory and institutional frameworks and an influx of counterfeit goods. Apart from stemming these challenges, there will be urgent need to institute further regulatory and institutional reforms.

Training for the youths: A large number of youth in Kenya has no training. Therefore, training systems should be made to work better for the youth. This can be addressed by providing information about training opportunities, vouchers and subsidies for training, and improving access to credit to finance training. Experience from other countries such as South Korea shows that appropriate policies in vocational education and training can stem unemployment by enhancing employability. Thus, revamping TIVET institutions and polytechnics would go a long way in providing the required skills to the youth.

Focus on the labour intensive sectors: The analysis shows that some sectors are labour-intensive, hence can be relied on to absorb more labour. However, such sectors' labour income is low. Kenya should invest more on the labour-intensive sectors such as agriculture. This would not only encourage employment creation but also improve productivity to enhance incomes.

Endnotes

1 This was highlighted in 2008 during negotiations for a coalition government in Kenya where the government identified poverty and inequality reduction as part of the agenda items that the coalition government agreed to address.

2 Datt and Ravallion, 1992; Kakwani and Subbarao, 1990; Kolenikov and Shorrocks, 2003.

3 Kakwani, Khandker & Son, 2003

4 Economic Survey, 2009

5 The slowdown in economic growth in Kenya in 2008 was not very unique to Kenya. Several countries in sub-Saharan Africa and the world as a whole experienced shrinking economic growth as is shown in Table A14.5.

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Appendix

Table A14.1: Growth of selected activities and sectors, percentages update

Sector	Period	Average	Minimum	Maximum
Agriculture	1964-1973	4.6	1.3	8.4
	1974-1979	3.9	-1.3	12.3
	1980-1985	3.5	2.2	4.8
	1986-1990	3.8	-3.4	4.9
	1991-1995	3.3	-1.1	4.8
	1996-2000	-1.2	-2.4	1.5
	2001-2006	2.5	-3.1	6.9
	2007-2009	-1.4	-4.1	2.4
Manufacturing	1964-1973	9.1	7.9	10.8
	1974-1979	10.0	-0.2	18.5
	1980-1985	4.8	4.3	5.9
	1986-1990	5.4	5.2	6.0
	1991-1995	2.8	1.2	3.9
	1996-2000	-0.5	-1.5	1.9
	2001-2006	3.3	0.8	6.9
	2007-2009	3.93	2.0	6.3
Building & Construction	1964-1973	5.8	-8.7	20.7
	1974-1979	1.2	-8.2	7.5
	1980-1985	3.6	-0.1	5.4
	1986-1990	4.7	2.2	5.4
	1991-1995	2.6	-6.7	3.8
	1996-2000	1.2	-1.5	3.5
	2001-2006	3.4	-0.5	7.6
	2007-2009	9.9	7.3	14.1

Tourism	1964-1973	-	-	-
	1974-1979	8.8	-7.6	10.7
	1980-1985	6.6	2.8	8.1
	1986-1990	4.6	2.2	9.8
	1991-1995	2.2	0.1	8.6
	1996-2000	3.4	1.0	8.0
	2001-2006	6.8	1.3	14.9
	2007-2010	7.7	- 36.1	42.8
Transport & Communication	1964-1973	7.3	1.2	10.6
	1974-1979	6.3	-5.7	10.4
	1980-1985	3.4	0.4	6.5
	1986-1990	3.5	3.0	4.4
	1991-1995	3.2	0.8	4.2
	1996-2000	2.0	1.2	4.0
	2001-2006	5.7	1.5	10.9
	2007 - 2009	8.2	3.1	15.1

Source: Government of Kenya (various), Economic Survey

Table A14.2: Contributions of the manufacturing sub-sector to GDP

GDP PRODUCT BY MANUFACTURING ACTIVITY	2004	2004	2006	2007	2008
Total food manufacturing	22.19	20.60	20.19	20.73	17.66
Tobacco and beverages	7.76	8.37	9.05	9.28	8.58
Textiles and clothing	3.36	3.14	3.26	3.13	2.79
Leather and footwear	1.87	1.76	1.75	1.85	1.71
Wood and furniture	2.04	1.69	1.50	1.40	1.61
Paper and printing	7.06	7.28	6.52	6.56	6.54
Industrial chemicals, paint & soap	1.72	1.43	1.42	1.42	1.28
Petroleum refineries : oils, vaseline	11.63	15.87	15.41	15.43	18.47
Rubber products	1.22	1.32	1.30	1.24	1.00
Plastic Products	1.98	1.98	1.98	1.77	1.39
Clay and glass products	1.73	1.61	1.46	1.33	1.46
Metal products	17.24	17.01	18.02	18.03	19.45
Transport equipment	2.29	1.50	1.77	1.62	1.67
Miscellaneous manufacturing	0.53	0.45	0.52	0.51	0.66
Micro and small enterprises	12.54	11.94	12.04	11.76	12.17
Export Processing Zones	4.83	4.05	3.80	3.96	3.56
Manufacturing-Total	100.00	100.00	100.00	100.00	100.00

Source: Author's Computation from Government of Kenya (2009), Statistical Abstract

Table A14.3: Labour force and unemployment rate among selected countries

Year	1999	2000	2001	2002	2003	2004	2005	2006
Argentina								
Total labour force	15,817,761	16,230,913	16,733,394	17,300,263	17,657,180	17,935,785	18,360,638	18,764,668
Unemployment	14.40	14.70	19.20	n/a	16.00	12.60	10.60	10.20
Brazil								
Total labour force	82,149,297	83,603,817	84,992,751	87,340,751	89,795,365	90,112,347	91,688,697	93,082,509
Unemployment	9.60	n/a	9.30	9.10	9.70	8.90	n/a	n/a
Chile								
Total labour force	6,115,227	6,077,994	6,184,807	6,258,631	6,414,747	6,440,791	6,512,218	6,581,001
Unemployment	8.90	8.30	7.90	7.80	7.40	7.80	6.90	n/a
Costa Rica								
Total labour force	1,578,743	1,592,829	1,718,168	1,762,648	1,806,163	1,890,374	1,956,228	2,020,993
Unemployment	5.90	5.10	6.10	6.40	6.70	6.40	6.60	n/a
Cuba								
Total labour force	5,169,584	5,208,188	5,214,547	5,225,454	5,233,370	5,294,627	5,329,576	5,347,367
Unemployment	6.30	5.40	4.10	3.30	2.30	1.90	n/a	n/a
Egypt								
Total labour force (TLF)	19,376,407	19,780,035	20,059,761	20,697,133	21,390,077	21,943,164	22,533,124	23,110,745
Unemployment	8.10	9.00	9.40	10.20	10.40	10.70	n/a	n/a
Ghana								
Total labour force	8,587,120	8,805,930	9,052,876	9,279,044	9,506,839	9,761,275	10,015,968	10,284,624
Unemployment	10.10	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Kenya								
Total labour force	13,527,523	13,959,388	14,381,220	14,826,312	15,271,550	15,768,735	16,216,126	16,650,475
Unemployment	9.80	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Korea, Rep.								
Total labour force	22,226,175	22,624,036	22,956,407	23,396,067	23,402,743	24,111,626	24,360,931	24,540,053
Unemployment	6.30	4.40	4.00	3.30	3.60	3.70	3.70	..
Kyrgyz Republic								
Total labour force	2,043,649.6	2,077,538.8	2,108,447.5	2,140,393.9	2,192,812.8	2,238,504.9	2,288,073.0	2,331,179.1
Unemployment	n/a	n/a	n/a	12.50	9.90	8.50	n/a	n/a
Malaysia								
Total labour force	9,433,564	9,879,122	10,176,903	10,431,776	10,662,263	10,994,222	11,299,249	11,594,023
Unemployment	3.40	3.00	3.50	3.50	3.60	3.50	n/a	n/a

South Africa								
Total labour force	18,252,247	18,694,851	19,064,741	19,226,075	19,457,017	19,645,999	19,831,707	19,996,481
Unemployment	25.40	26.70	29.50	30.50	31.20	26.20	26.70	n/a
Singapore								
Total labour force	2,015,895	2,063,656	2,101,964	2,117,647	2,085,007	2,122,098	2,176,087	2,247,973
Unemployment	4.60	n/a	3.40	5.20	5.40	5.30	4.20	n/a
Thailand								
Total labour force	33,430,918	34,080,691	34,564,862	34,880,365	35,168,586	35,726,041	36,072,172	36,450,231
Unemployment	3.00	2.40	2.60	1.80	1.50	1.50	1.30	n/a
Tanzania								
Total labour force	16,378,753	16,743,504	17,122,504	17,513,268	17,894,420	18,407,558	18,847,067	19,317,017
Unemployment	n/a	n/a	5.10	n/a	n/a	n/a	n/a	n/a
Uganda								
Total labour force	10,232,625	10,492,420	10,803,858	11,128,067	11,475,411	11,827,733	12,209,884	12,608,589
Unemployment	n/a	n/a	n/a	n/a	3.20	n/a	n/a	n/a

Source: World Bank (2008)

NB: Unemployment is a percentage of the total labour force

Table A14.4: Unemployment rate, world and regions

Both sexes	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008*	Period average
World	6.1	6.2	6.1	6.1	6.1	6.3	6.3	6.2	6.0	5.7	6.0	6.1
Developed Economies and EU	7.1	6.9	6.7	6.7	7.4	7.3	7.2	6.9	6.3	5.7	6.4	6.8
Central and South Eastern Europe (non-EU) and CIS	12.1	12.4	10.5	10.2	9.9	9.9	9.7	9.2	9.1	8.5	8.8	10.0
East Asia	4.3	4.3	4.1	4.1	4.0	3.8	3.8	3.8	3.6	3.5	3.8	3.9
South-East Asia and the Pacific	4.8	5.1	5.0	5.8	6.1	6.2	6.4	6.1	6.2	5.5	5.7	5.7
South Asia	3.7	4.0	4.5	3.8	3.3	4.5	5.3	5.4	5.3	5.3	5.4	4.6
Latin America and Caribbean	8.2	8.5	8.3	8.3	8.6	8.5	8.2	7.9	7.4	7.2	7.3	8.0
Middle East	10.8	10.3	9.8	11.4	11.4	11.8	9.2	9.8	9.8	9.4	9.4	10.3
North Africa	13.1	13.6	14.2	13.7	13.6	13.2	11.9	11.6	10.5	10.4	10.3	12.4
SSA	7.7	8.1	8.2	8.3	8.4	8.5	8.2	8.1	8.1	7.9	7.9	8.1

Source: ILO's Global Employment Trends (2009)

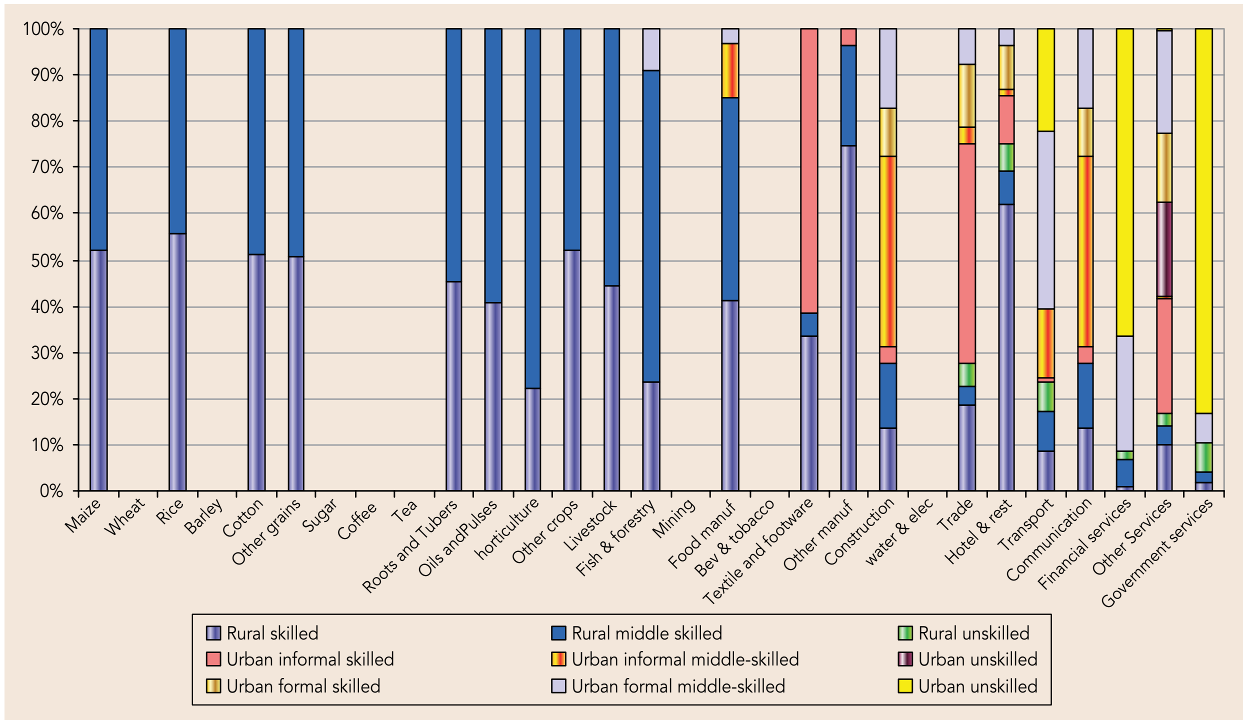
Table A14.5: Growth rates for other countries, 2005-2010

Country	2005	2006	2007	2008	2009	2010*
China	11.3	12.7	14.2	9.6	9.1	10.5
Egypt	4.5	6.8	7.1	7.2	4.7	5.3
Germany	0.8	3.4	2.7	1.0	-4.7	3.3
India	9.2	9.7	9.9	6.4	5.7	9.7
Indonesia	5.7	5.5	6.3	6.0	4.5	6.0
Islamic Rep. of Iran	4.7	5.8	7.8	1.0	1.1	1.6
Japan	1.9	2.0	2.4	-1.2	-5.2	2.8
Korea	4.0	5.2	5.1	2.3	0.2	6.1
Pakistan	7.7	6.1	5.6	1.6	3.4	4.8
Rwanda	9.4	9.2	5.5	11.2	4.1	5.4
Saudi Arabia	5.6	3.2	2.0	4.2	0.6	3.4
Singapore	7.4	8.6	8.5	1.8	-1.3	15.0
South Africa	5.3	5.6	5.5	3.7	-1.8	3.0
Tanzania	7.4	6.7	7.1	7.4	6.0	6.5
Uganda	6.3	10.8	8.4	8.7	7.2	5.8
United Kingdom	2.2	2.8	2.7	-0.1	-4.9	1.7
United States	3.1	2.7	1.9	0.0	-2.6	2.6

** Provisional figures*

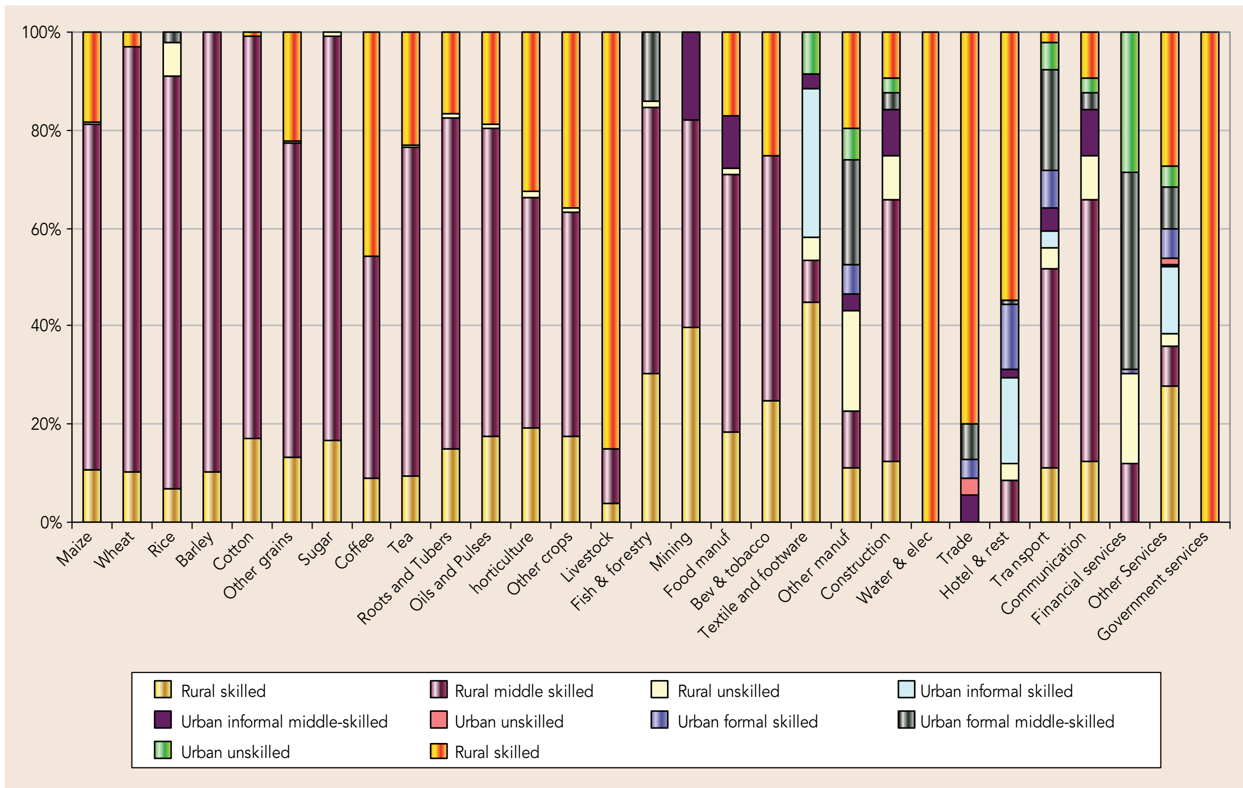
Source: World Economic Outlook (2010)

Figure A14.1: Effects of an exogenous stimulus to a sector on employment by labour category: Lowlands



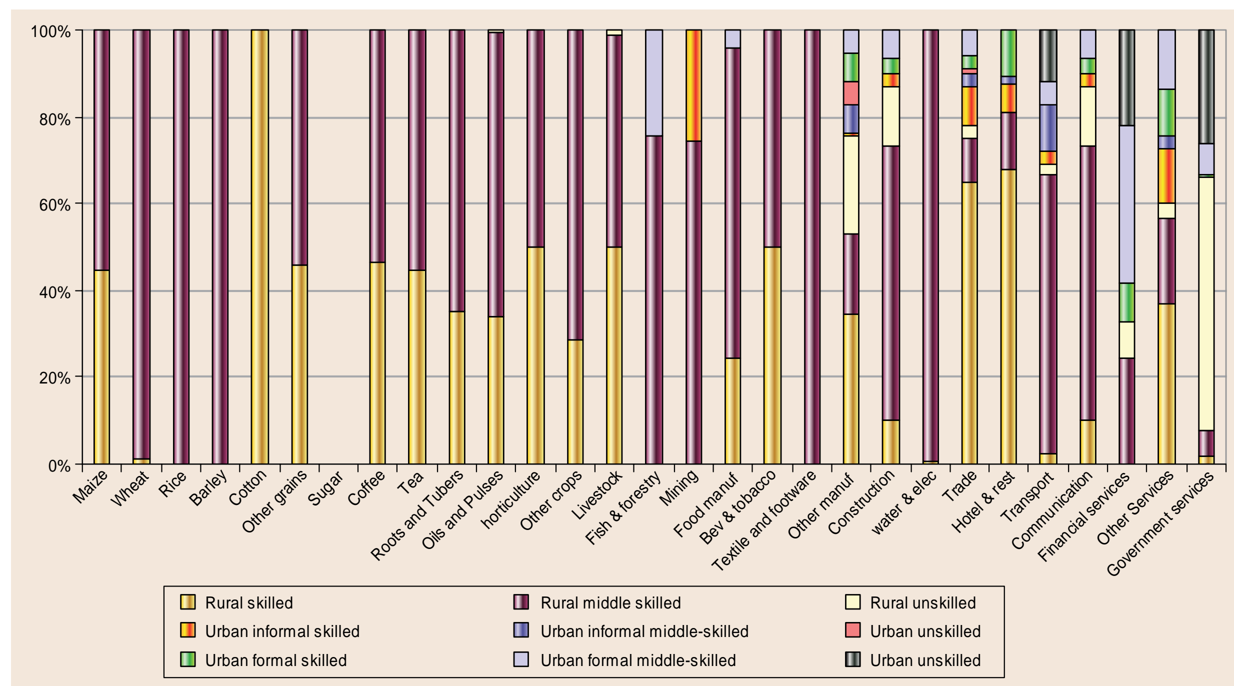
Source: KIPPRA calculations based on 2003 Social Accounting Matrix

Figure A14.2: Effects of an exogenous stimulus to a sector on employment by labour category: Midlands



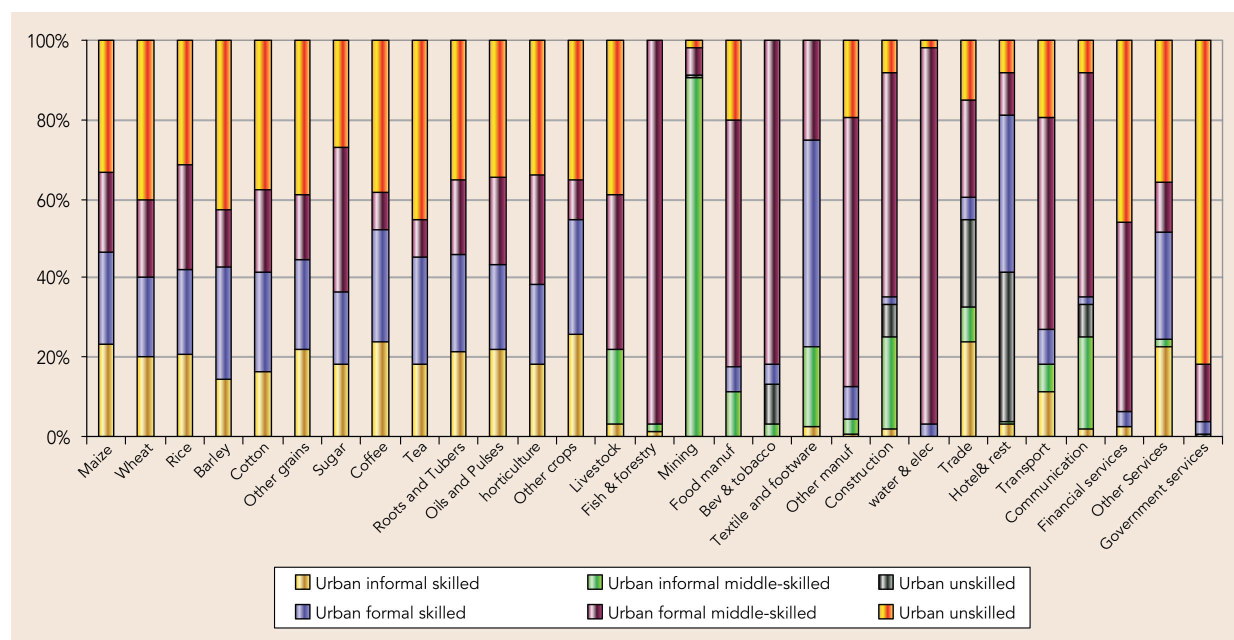
Source: KIPPRA calculations based on 2003 Social Accounting Matrix

Figure A14.3: Effects of an exogenous stimulus to a sector on employment by labour category: Highlands



Source: KIPPRA calculations based on 2003 Social Accounting Matrix

Figure A14.4: Effects of an exogenous stimulus to a sector on employment by labour category: Metropolitan



Source: KIPPRA calculations based on 2003 Social Accounting Matrix

Table A 14.6: Summary of structure of production, value added in Kenya: Kenya SAM 2003

	Production share	Value added	Labour share	Capital share	Labour/ Capital Ratio (L/K)	Rural			Urban		
						informal skilled	unskilled	formal skilled	informal skilled	unskilled	formal skilled
Maize	2.5	3.5	39.3	44.3	0.9	65.7	0.4	21.1	12.3	0.0	0.4
Wheat	0.0	0.0	22.4	58.2	0.4	65.7	0.4	21.1	12.3	0.0	0.4
Rice	0.1	0.2	50.9	39.6	1.3	92.0	-	7.3	-	-	0.7
Barley	0.0	0.1	22.4	58.2	0.4	19.2	-	80.7	0.1	-	-
Cotton	0.0	0.0	39.3	44.3	0.9	92.0	-	7.3	-	-	0.7
Other Crops	0.7	1.0	38.5	49.8	0.8	72.2	0.5	26.9	0.5	0.0	0.0
Sugar	0.1	0.2	39.3	44.3	0.9	65.7	0.4	21.1	12.3	0.0	0.4
Coffee	0.5	0.7	39.3	44.3	0.9	65.7	0.4	21.1	12.3	0.0	0.4
Tea	2.5	3.9	39.4	44.2	0.9	65.7	0.4	21.1	12.3	0.0	0.4
Roots and Tubers	1.0	1.4	42.9	50.0	0.9	65.7	0.4	21.1	12.3	0.0	0.4
Oils and Pulses	1.5	2.3	35.1	47.1	0.7	60.3	0.7	38.5	0.4	0.0	0.1
horticulture	3.9	6.2	41.3	44.6	0.9	68.3	1.0	29.9	0.6	0.1	0.2
Beef & goat	1.7	2.0	56.9	43.1	1.3	61.1	1.2	37.2	0.3	0.0	0.1
Dairy	1.7	1.8	50.9	49.1	1.0	89.1	0.7	9.9	0.3	-	-
Poultry	1.0	1.5	52.8	47.2	1.1	35.2	51.9	0.1	4.8	7.3	0.4
Other livestock	0.2	0.4	44.0	56.0	0.8	98.0	0.4	1.5	0.0	-	0.1
Fish	0.3	0.4	9.2	90.8	0.1	98.4	0.4	-	1.2	-	-
Forestry	0.4	0.7	22.7	77.3	0.3	58.4	-	17.6	7.8	-	16.2
All agriculture	18.1	26.4	42.1	47.2	0.9	70.0	0.7	24.1	4.9	0.0	0.3
Food manuf	8.4	3.9	28.3	71.7	0.4	32.7	1.8	25.4	9.2	16.6	14.4
Other manuf	13.3	9.4	28.7	71.3	0.4	6.5	1.5	10.8	19.5	17.2	44.4
Manufacturing	21.7	13.3	28.6	71.4	0.4	16.9	1.6	16.6	15.4	17.0	32.5
Construction	8.9	5.3	29.2	70.8	0.4	-	2.4	13.1	-	10.7	73.8
water & electricity	2.0	2.7	25.3	74.7	0.3	7.0	8.0	11.5	3.3	6.6	63.5
Trade	8.6	7.2	52.5	47.5	1.1	24.9	5.3	13.0	24.7	7.2	25.0

Contd....

Contd....

	Production share	Value added	Labour share	Capital share	Labour/ Capital Ratio (L/K)	Rural			Urban		
						informal skilled	unskilled	formal skilled	informal skilled	unskilled	formal skilled
Hotel & rest	4.9	6.0	29.5	70.5	0.4	19.9	1.6	2.7	22.3	32.7	20.8
Transport	10.0	7.3	44.2	55.8	0.8	10.0	0.7	13.9	10.0	1.1	64.3
Communication	2.6	2.9	24.0	76.0	0.3	29.9	5.0	62.9	104.0	37.5	221.9
Financial services	5.2	6.6	37.4	62.6	0.6	-	4.5	19.0	1.2	41.0	34.2
Other Services	5.7	7.3	33.6	66.4	0.5	0.1	4.5	5.2	0.2	31.2	58.9
Services	47.8	45.2	35.8	64.2	0.6	13.4	0.6	20.2	2.6	0.0	0.8
Administration	4.7	4.6	61.0	39.0	1.6	5.3	0.9	6.0	26.0	28.4	33.5
Health	5.5	7.6	96.1	3.9	24.4	0.2	19.1	10.6	0.2	27.4	42.4
Education	2.2	3.0	56.0	44.0	1.3	0.4	18.6	1.9	1.2	75.3	2.6
Social services	12.4	15.1	77.6	22.4	3.5	1.3	15.3	4.6	5.8	55.5	17.5
Total			42.8	54.3		26.5	5.7	12.4	10.4	24.9	20.1

Source: ILO's Global Employment Trends (2009)

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