Pulling Apart

Facts and Figures on Inequality in Kenya

SID
Society for International Development

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Foreword

The social phenomenon ordinarily known as inequality evokes strong passions and sometimes stirs controversy, in Kenya and elsewhere in the world. In spite of this, the public debate in Kenya on the subject is almost non-existent. This publication is intended to help break this silence and lay the foundation for a healthy and vigorous national debate on issues of inequality. It is our hope that all the political players in Kenya: policy makers, politicians and other stakeholders will begin to confront the problem of inequality in a more direct, honest and a bold manner. For Civil Society organisations, research institutions and the general public, we do hope that *"inequality"* will become a topic for discussion, concern and continuous enquiry.

There cannot be any denial that the NARC administration inherited a most desperate political and economic situation. Today, Kenya is ranked among the 10 most unequal countries in the world and the most unequal in East Africa. For every shilling a poor Kenyan earns, a rich Kenyan earns 56 shillings! Yet inequality is much more than is conveyed through those unflattering figures: it, in fact, leads to discrimination and exclusion, thereby becoming not only a matter of social injustice, but also a matter of human rights and governance. Bad governance and concomitant of economic mismanagement which severely hit the poor more than they do the rich, are social maladies already recognised in the Kenya government's blueprint for reform: *the Economic Recovery Strategy for Wealth and Employment Creation,* 2003-2007, simply known as *the ERS*.

This publication should demonstrate that inequality and poverty are not just the result of lack of economic development: rather, economic growth is a necessary but not a sufficient condition for poverty eradiation. Without a conscious attention paid to issues of equity in public policy, rapid economic growth can easily marginalize certain sections of society and exacerbate poverty for others. What's more revealing is that growth requires consumption and poor people are bad consumers!

This publication is part of Society for International Development's contribution to a project titled, *Rich and Poor: National Discourses on Poverty, Inequality, and Growth,* in which SID works together with the Ministry of Planning and National Development and the Swedish Embassy in Nairobi. In Sweden, the issue of a fair and equitable distribution of resources has been a priority for almost a century. The Government of

Kenya therefore wholeheartedly welcomes this opportunity of sharing a well-tested experience, in the hope that it can inform Kenya's own quest for a more equal society. It is the hope of both governments that this very publication will not only give rise to a debate into the nature and causes of inequality in Kenya, but that more importantly, it will prod us into asking the more fundamental question: **what can we all do about it?**

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National Development
Government of the Republic of Kenya

Bo Göransson
Ambassador
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Acknowledgement

We would like to thank the author of this report, Dr Walter Odhiambo, Senior Research Fellow at the Institute of Development Studies (IDS) of the University of Nairobi, for his dedication and technical input in the process of writing, reviewing and editing of this publication.

Before publication, this report was the subject of a peer review meeting comprising eminent and experienced experts drawn from a wide variety of fields and academic disciplines. It is not possible to name all of them here. We sincerely thank the participants of the review meeting for their input and critique. Their comments went a long way in improving the final report.

This publication is a result of concerted efforts and contributions of many people, both financially and technically. We would like to thank the Swedish International Development Agency (Sida) for their financial support to the *Rich and Poor Project* of which this publication is a product. We would also like to acknowledge and appreciate our project co-partner, the Ministry of Planning and National Development, and specifically the Central Bureau of Statistics (CBS).

The photo images in this report were taken by Petrut Calinescu, a photographer who visited Kenya after winning an award from the Romania Association of Press Photographers. We would like to appreciate Petrut Calinescu for allowing us to use these photos for this report, and other project materials.

We would also like to thank very much staff at Sida who have worked with us and have tirelessly given us comments on various aspect of this publication, and also appreciate the hard work of SID staff M.J. Gitau, Irene Omari and Stella Kamuyu (SID intern), for their hard work that made the report you are about to read, what it is. Last but not least, we would like to recognise Stefano Prato and Arthur Muliro, Managing Director and Director of Programmes and Organisational Development, respectively, at the SID Rome, for their overall support and guidance in the course of organisational and programme set up of the SID Eastern Africa Office.

Preface

The purpose of this publication is to report on the various types of inequality in Kenya. Basing its contents exclusively on secondary sources, this publication captures the facts, and presents the portrait, of the unequal development of a nation. This publication is therefore useful more for its informational rather than explanatory value. Future publications by the Society for International Development (SID) will grapple with the questions of why we are unequal and what would be the needed responses.

Inequalities in Kenya are manifested in different forms. Differences in share of income and social services are observed across regions, genders and even specific segments of the population. For instance, this publication shows that the country's top 10% households control 42% of total income while the bottom 10% control less than 1% and that the difference in life expectancy between the Central and Nyanza provinces is a staggering 19 years. The report you are about to read further shows that the doctor-patient ratio is about 1:20,700 in Central but 1:120,000 in North Eastern. Last but not least, the publication also shows that about 93% of women in North Eastern province have no education at all, compared with only about 3% in Central province.

Inequality is also related to human rights and democratic governance in that certain forms of inequalities constitute human rights violations (e.g. discrimination). This partly results from weak accountability mechanisms and lack of knowledge among excluded and vulnerable groups on how to make their voices heard.

But while inequality is a visible and a significant phenomenon in Kenya, it has an uncannily low profile in political, policy and even scholarly discourse. For this reason, a number of questions come to mind: is our skewed development pattern an outcome that has been beyond our control or a product of policy choices we have made in the past? Is there any causal relationship between inequality and other trends in public affairs such as the ethnic-based politics, patterns of crime, and so on? While the answers to these, and many other, questions are not found in this publication, the questions themselves have, nonetheless, greatly informed its production. More importantly, this report attempts to provide a platform on which debate to answer these questions can be initiated.

Inequality evokes strong passion and easily stirs controversy. Perhaps this is why for a long time there has been a 'conspiracy of silence' on, or 'subterranean' treatment of, this subject. In our view, the fear of controversy does not provide a sufficient basis to ignore an issue so critical to our social relations, political stability and economic development. It is time for those in power, as well as wielders of influence, to confront this problem in a more direct, honest and bold manner. Policies and actions can no longer deal with inequality in a casual and selective manner. For this reason, it is our view that inequality should be considered among Kenya's major development questions, alongside other issues like growth, poverty reduction and good governance.

The publication is organised in four main chapters. **Chapter 1** presents different approaches to measuring inequality. **Chapter 2** presents the facts and figures on the rich-poor gap in Kenya while **chapter 3** focuses on regional dimensions of inequality. Regional inequality is examined at three levels: rural-urban; provincial and district. **Chapter 4** focuses on gender inequality. The booklet has heavily relied on official data some of which have limitations especially at the district level. By the time this is published, it is also possible that some situations may have changed a little on the ground and are yet to be captured in official documents. However, it is our belief that this information remains fairly indicative of the real situation. One of the biggest inequality issues, and which needs to be addressed urgently, is the absence of various survey data on North Eastern province. Further, because of limited scope and availability of data we have not been able to present the facts and figures on inequality in the private sector in all its dimensions: racial, ethnic, generational and gender.

We hope that the presentation of these *Facts and Figures on Inequality in Kenya* will invite useful, rational and progressive national debate on this issue. We also hope this publication goes along way in making the nation recognise inequality as a major development problem that merits immediate attention by everyone. Ultimately, this document shall have achieved its objective if it provokes national interest in debating the underlying causes and dynamics of inequality, and the responses needed to confront what is arguably Kenya's next big development question.

Duncan Okello
Regional Director
SID, Eastern Africa Office

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List of Abbreviations

AIDs	Acquired Immune Deficiency Syndrome
CBS	Central Bureau of Statistics
FAO	Food and Agriculture Organisation
FAO	Food and Agriculture Organisation
GDI	Gender Development Index
GEM	Gender Empowerment Measures
GER	Gross Enrolment Ratio
GRI	Gender Related Development Index
HDI	Human Development Index
HDR	Human Development Report
HIV	Human Immuno Virus
HPI	Human Poverty Index
IDS	Institute for Development Studies, University of Nairobi
KDHS	Kenya Demographic and Health Survey
MDGs	Millennium Development Goals
MICS	Multiple Indicator Cluster Survey
MP	Member of Parliament
PRSP	Poverty Reduction Strategy Paper
RAPP	Rich and Poor: National Discourses on Poverty, Inequality and Growth Project
SD	Standard Deviation
SID	Society for International Development
Sida	Swedish International Development Corporation Agency
UNDP	United Nations Development Programme
UNESCO	United Nations Educational, Scientific and Cultural Organisation
WMS	Welfare Monitoring Survey

Prologue

Some Ten Striking Features on Inequality in Kenya

1. Differences in income. The 10% richest households in Kenya control more than 42% of incomes, while the poorest 10% control 0.76% of income. This means that while the top rich Kenyan earns about 56 shillings, the bottom poor earns 1 shilling.

2. Differences in life expectancy. A person being born in Nyanza province can expect to live 16 years less than his fellow citizen in Central province. At the district, level life expectancy in Meru is double that in Mombasa, 68.6 and 33.1 years respectively.

3. Differences in unemployment between men and women. For the age group 20-24 years, there are about 274,000 unemployed women in urban areas compared to about 73,000 in the case of men of the same age group.

4. Differences in HIV/Aids prevalence. In Nyanza province 15% of the population is infected with the HIV/AIDs virus while the infection rate in North Eastern province is negligible, estimated at about 0%.

5. Differences in school enrolment. Going by the enrolment rates, practically every child in Central province attends primary school compared to about one out of three children in North Eastern province. For secondary school the difference is even bigger.

6. Differences in access to water. The proportion of households with piped water in their houses in urban areas is five times that in rural areas, about 19.2% and 3.8% respectively.

7. Differences in the health reach. In Central province, there are about 20,000 people for every doctor while in North Eastern province there is one doctor for every 120,000 people.

8. Differences in immunisation and mortality. The coverage of child immunization in Nyanza province is less than half that in Central, that is, 38% compared to 79% respectively. There are about twice as many infants dying before their first birthday in Nyanza province compared to Rift Valley, that is, 133 and 61 deaths per 1000 live births, respectively.

9. Difference in gender outcomes. About 93% of women in North Eastern province have no education at all, compared to 3% in Central province. Of the 2,140 elected councillors in 2002, only 97 were women. Of the 210 elected Members of Parliament in 2002 only 9 are women.

10. Difference in poverty levels. Poverty levels can vary within and without regions. For instance, although the proportion of people living below the poverty line in Nairobi is 44%, poverty levels range from 8% in Nairobi west, Kibera Division to 77% in Makongeni, Makadara Division.

Chapter 1
Introduction

Inequality is a complex development issue and a firm understanding of what it entails, and how it is measured, is critical for one to be able to appreciate and interpret the respective facts and figures on this concept. One must, therefore, internalise the conceptual and methodological issues involved in measuring and reporting inequality in order to make good use of quantitative information about this subject. This chapter briefly outlines what inequality is, why it matters in contemporary times and how it is measured.

What is inequality

Like many other development concepts inequality is difficult to define. However attempts have been made to define what the term simply entails. The *Penguin Dictionary of Economics* defines inequality as the degree to which distribution of economic welfare generated in an economy differs from that of equal shares among its inhabitants. It also entails the unevenness of certain attributes between two persons or groups of people. It is therefore typically thought of as the *difference* between individuals within a population, normally a country, or it can also be considered for smaller populations (such as a community or household) or larger populations (such as the world as a whole).

The definition of inequality focuses on differences between individuals both in terms of opportunities and outcomes. While discussions mainly focus on the more easily observed inequalities in outcomes such as wealth, employment and education, it is important to understand the factors and processes behind this. Some inequality in outcomes can be accounted for by the normal functioning of the market economy, which determines, for example, participation in the labour market. However, a substantial component of inequality in people's circumstances may reflect differences in opportunities, with people favoured or disfavoured according to where they live, parental circumstances, gender, among others. An understanding of such sources or causes of inequality is crucial in formulating appropriate policy responses.

Whenever people talk about inequality, the meaning that quickly comes to mind is income inequality. However, in many countries one also observes inequalities in terms of social exclusion and the inability of certain population groups to access key social

services and socio-political rights. These inequalities may arise on the basis of population groups, gender, geographical location and even race.

Though related, inequality and poverty are different. Inequality concerns variations in standards of living across a whole population. By contrast, poverty focuses only on those whose standards of living fall below a given threshold, commonly referred to as the poverty line. Even among the poor inequalities can exist where there are the very poor (those who are way below the poverty line) and the least poor (those who are just below the poverty line). The poverty threshold may be in absolute terms (absolute poverty) or relative terms (relative poverty). Of the two measures of poverty, relative poverty comes closest to inequality.

How is Inequality measured

Inequality is a relative term and concerns variations between individuals and groups of persons. It is typically viewed as the difference people have in the degrees of something, often considered in terms of consumption but equally applicable to other dimensions of living standards that show a continuous pattern of variation such as the level of education or the degree of malnutrition. As to which dimensions are measured this will in most cases depend on the availability and quality of data. In most countries, Kenya included, the availability of household surveys has made the assessment of inequality, possible. However, data limitations have made the assessment of some dimensions of inequality for example social inequality difficult. Analysis of generational inequality has also been difficult for the same reason.

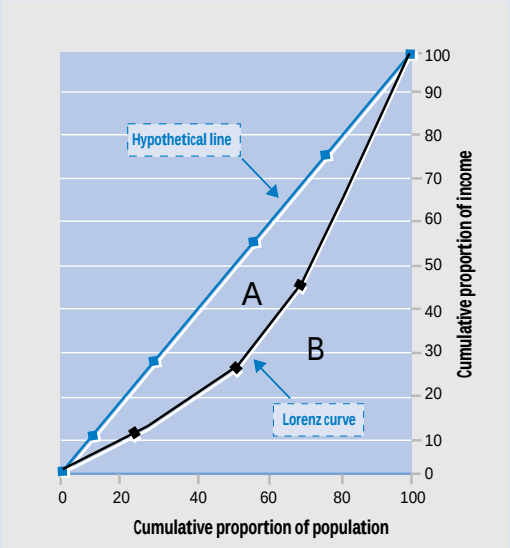
To assess inequality within a given distribution, one needs to consider the relative shares of those at different parts of the distribution. This entails dividing the population into quintile groups. In the case of income, for example, the population is divided into different quintile groups. The gini coefficient is the most widely used measure that utilises this approach. The gini index is based on the Lorenz curve (see Box 1). The gini index measures the area between the Lorenz Curve and a hypothetical line of absolute equality, expressed as a percentage of the maximum area under the hypothetical line. The gini coefficient ranges between zero and one, with the values closer to one indicating greater inequality. The gini coefficient is mainly used to assess inequality in income and consumption although it can also be used for other dimensions including assets, education, and even malnutrition.

The gini coefficient is the most widely used measure of inequality. It is based on the famous Lorenz curve.

Inequality can also be measured using quintile ratios. This is a measure of the ratio of the average income of the top quintile to that of the bottom quintile. For all measures of income, quintiles are formed by ranking household income after tax and dividing the entire income into five (or ten) equal parts. The top quintile consists of the 20% (or 10%) of the households with the highest after tax income, and the bottom quintile, the 20% (10%) of the households with the lowest incomes. The inequality ratio measures how much the families in the top income quintile have on average, for every shilling of those in the bottom quintile. The higher this ratio is, the greater the gap in income distribution among the families.

Box 1: **The Lorenz Curve**

The gini coefficient, which is the most widely used measure of inequality, is based on the Lorenz curve. The Lorenz curve compares the distribution of a specified variable (e.g income) with a uniform distribution that represents equality. To construct the Lorenz curve, the cumulative percentage of households (groups) is plotted in a graph against the cumulative percentage of the variable being investigated. Taking the example of income, the Lorenz curve plots the cumulative proportion of income earned by the poorest x% of the population for different values of x. The horizontal axis is the cumulative proportion of the population under study while the vertical axis is the proportion of total income. The Lorenz curve is drawn through a large number of points corresponding to different values of x.



The Lorenz curve inevitably has the shape shown in the figure. It joins the lower left and upper right corners of the diagram. It has a positive slope which increases as the cumulative proportion of the population increases. The diagonal hypothical line represents perfect equality. The gini coefficient is defined as A/(A+B), where A and B are the areas shown. If A=0 the gini coefficient becomes 0 which means perfect equality. Likewise if B=0 the gini coefficient becomes 1 which means perfect inequality.[1]

Why inequality matters

There is a growing body of both theory and empirical evidence on the role played by inequality in economic and social development. Inequality matters because of various reasons, namely:[2]

Inequality matters for poverty. If a country's development strategy is based on widespread growth strategy or on a progressive distribution of income, this will have a significant impact on how that country is able to reduce poverty levels among various groups in society (see box 2).

Inequality matters for growth. It is now being observed that a country's initial level of income distribution is an important determinant of future growth prospects. Countries with high levels of inequality—especially of assets—may achieve lower growth rates on average.

1 See annex for other measures of inequality and the weaknesses associated with the gini index/ coefficient as a measure of inequality.

2 For more on this section see: Andrew McKay, *Defining and Measuring Inequality,* Inequality Briefing Paper No. 1 (1 of 3). Overseas Development Institute, March 2002.

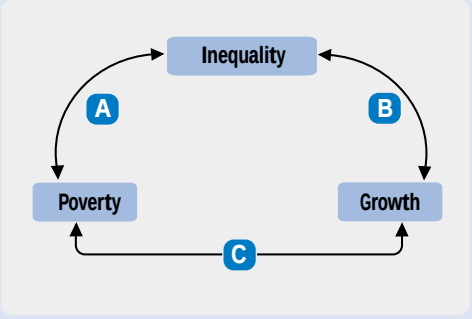
Inequality matters for social stability. Inequality is often a significant factor behind crime, social unrest or violent conflicts. Inequalities between clearly defined groups, for example ethnic tribes, may be a source of violent conflicts. All this may threaten a country's long-term social and political stability.

Inequality matters in its own right. Inequality matters purely on normative grounds and from a moral and ethical point of view. Ideally, people would want to live in a society where everyone is more or less equal and having comparable opportunities in life.

Box 2: Relationship between poverty, inequality and growth

The relationship between poverty, inequality and growth has received some attention in the recent past. The relationship is through a set of two-way links (see figure below). Inequality is directly linked to poverty (A) and also indirectly through growth (B, C). Changes in the income distribution can affect the level of poverty. This is because a change in income distribution in favour of the poor can leave them with more resources. In general, policies and growth patterns that improve distribution are potentially significant tools in the fight against poverty.

In addition to the direct effect on poverty, inequality also affects poverty indirectly through its impact on growth, links B and C. There are at least three theories on this:



(i) Large inequalities in income and wealth may trigger political demand for transfers and redistributive taxation. To the extent that transfers and taxation distorts incentives to work, save and invest, inequality may impede growth;

(ii) Excessive inequality may be socially divisive and inefficient. It may motivate the poor to engage in illegal activities and riots, or at least to divert resources from productive uses, both the resources of the poor and those of the state. Social conflict over the distribution of income, land or other assets can take place through labour unrest;

(iii) Inequality may affect national savings as the rich have a higher propensity to save than the poor. In this case inequality may be good for growth in that the greater the level of inequality, the higher is the saving rate and hence also investment and economic growth.

Although the link between inequality and poverty has remained controversial ever since the ground-breaking work by Simon Kuznets, there is growing evidence now that greater equity is associated with faster economic growth. It is now widely believed that lower inequality can create faster growth. This can then benefit the poor in two ways: by increasing overall growth and average incomes, and by letting the poor share more in that growth. This means that although growth is necessary for poverty reduction, it is less effective in high inequality countries. What matters for poverty reduction is not the rate of growth but the distribution corrected rate of growth.

There is growing evidence that greater equity is associated with faster economic growth. Lower inequality can create faster growth.

Chapter 2
The Rich-Poor Gap in Kenya

The gap between the rich and the poor is the most visible and widely talked about forms of inequality. This gap is characterised by a situation where one segment of the population has a disproportionately large share of income than other segments of that population. This often gives rise to differences in the lifestyles and standards of living in a society. This chapter presents some facts and figures that characterise the gap between the rich and the poor in Kenya.

2.1 Distribution of Income and Wealth

What is the current state of income inequality?

One approach of summarising the degree of inequality in Kenya is to consider how the share of the income received varies with specific population or wealth groups. This entails dividing the entire population into ten equal categories called *deciles,* and determining what accrues to each group.

Recent statistics for Kenya show that income is heavily skewed in favour of the rich and against the poor. The country's top 10% households control 42% of the total income while the bottom 10% control less than 1% (see Table 2.1 and Figure 2.1). This means that for every 76 cents earned by the bottom poor 10% the top rich 10% earn about Kshs 42. Or put it another way, for every one shilling earned by the poorest 10% households, the richest 10% earn more than Kshs 56.

Likewise, for 86 cents spent by the bottom 10% poor the top rich 10% rich spend about Kshs 44. This means that for every shilling spent by the poorest 10% in Kenya, the richest 10% spend about Kshs. 52. It is also significant that the 8th, 9th and 10th income groups account for about 70% of the income and expenditure.[3]

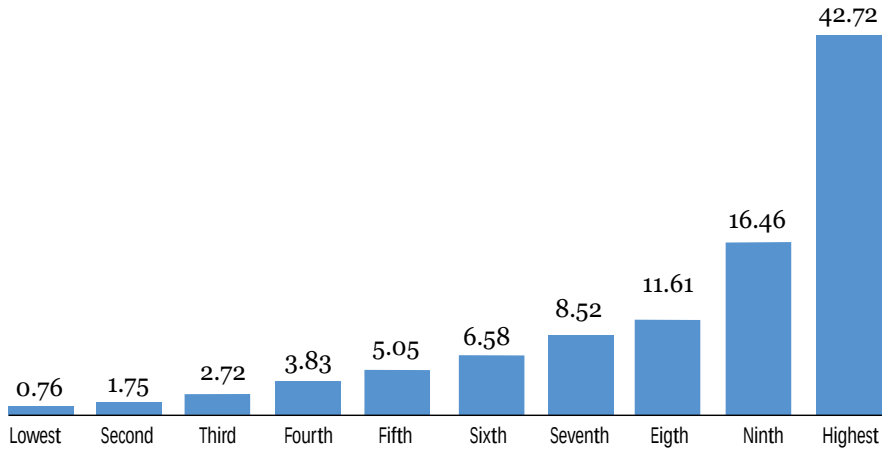
[3] It is important to assess the difference in well-being both in terms of incomes earned and consumption expenditure incurred as some households could be better off because their expenditure is over and above the incomes they earn particularly when they receive transfers (incomes received but not earrned) from relatives or friends. Also bear in mind that some households rely on subsistence production/ consumption.

Table 2.1: **Household expenditure and income distribution by deciles, 1999**

Deciles	Income			Expenditure		
	Value Kshs (Mn)	Share %	Cumulative %	Value Kshs (Mn)	Share %	Cumulative%
Lowest	387,996	0.76	0.76	579,622	0.86	0.86
Second	893,380	1.75	2.51	1,070,859	1.58	2.44
Third	1,385,264	2.72	5.23	2,320,817	3.43	5.86
Fourth	1,952,556	3.83	9.06	2,166,319	3.20	9.06
Fifth	2,574,966	5.05	14.11	3,082,143	4.55	13.61
Sixth	3,356,565	6.58	20.70	4,270,059	6.31	19.92
Seventh	4,343,231	8.52	29.22	6,075,953	8.97	28.89
Eighth	5,918,406	11.61	40.83	6,848,167	10.11	39.00
Ninth	8,389,841	16.46	57.28	11,071,978	16.35	55.35
Highest	21,775,814	42.72	100	30,235,252	44.65	100

Source: *Computed from the Integrated Labour Force Survey, 1998/99 data*

Figure 2.1: **Income inequality in Kenya**
Share of income by population group, 1999, %



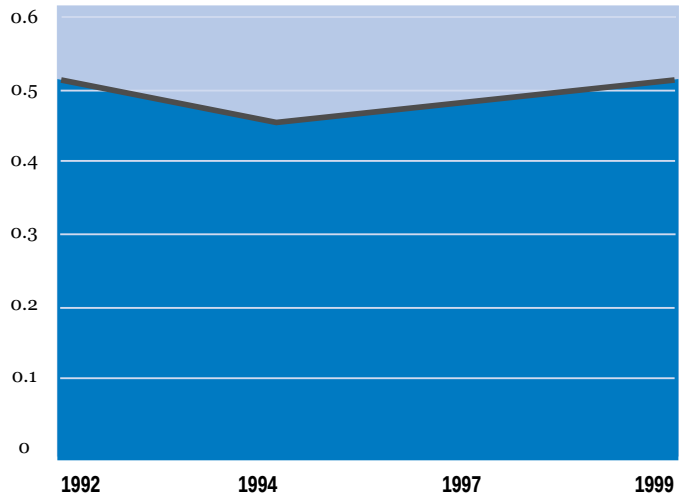
Source: *Computed from 1998/99 Intergrated Labour Force Survey data*

Available estimates of the gini coefficient for Kenya show that inequality has been increasing.

What has been happening to inequality in the recent past?

The gini coefficient is the most widely used measure of inequality. Available estimates of the gini coefficient for Kenya show that inequality has been increasing in the country particularly between 1994 and 1999. This was after a slight decrease between 1992 and 1994. Based on the available household surveys, the country's gini was estimated

Figure 2.2: **Inequality trends in the 1990s**



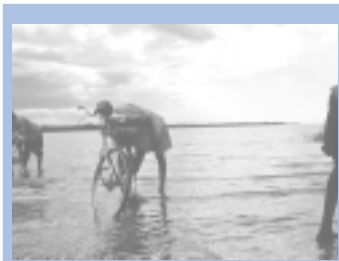
Source: *Estimates based on Welfare Monitoring Surveys (1992, 1994 qnd 1997) and the 1998/99 Intergrated Labour Force Survey Data*

at 0.57 in 1999, compared to 0.49 in 1997.[4] The gini coefficient was estimated as 0.45 in 1994. If calculated on a per capita income basis, Kenya exhibits higher inequalities as the gini coefficient calculated on per capita incomes stand at 0.625, as opposed to gini coefficient of 0.57 based on general household income.[5]

How does Kenya compare with other countries?

With a gini coefficient of 0.57 in 1999, Kenya ranks among the top ten most unequal countries in the world and the fifth in Africa. The gini coefficients of the top five most unequal and top five most equal countries in the world are shown in Table 2.2.[6] It is significant that the top three most unequal countries are from Africa; two of which have been involved in social and political conflicts.

The top five equal societies are developed countries from Europe. It is significant that while the richest 10% control about 42% of the total income in Kenya, the ratio for the same group in Belarus, Hungary and Sweden is only slightly over 20%. Conversely, while the lowest 10% control over 3.6% of the total income in the more equal countries, they account for less than 1% of income in Kenya.



4 The 1997 gini coefficient are estimates based on the Intergrated Labour Force Survey of 1998/99. The other figures are as reported by the World Bank and based on 1992, 1994 and 1997 surveys.

5 Both income and expenditure figures are presented as proxies of well being for comparisons. Expenditure figures are believed to be more accurate than income figures in surveying or estimating well-being. This is because respondents are more likely to reveal the correct expenditure figures than they would be in disclosing the incomes they receive. (See also footnote 2).

6 Although widely used to measure inequality gini indices/coefficients should be interpreted with caution especially when it comes to cross-country comparison mainly because of their computation and the size and date of the data used for their calculation. Nevertheless they give a general indication of the overall inequality situation among countries with similar conditions.

Table 2.2: **Income inequality in Kenya in a global context**

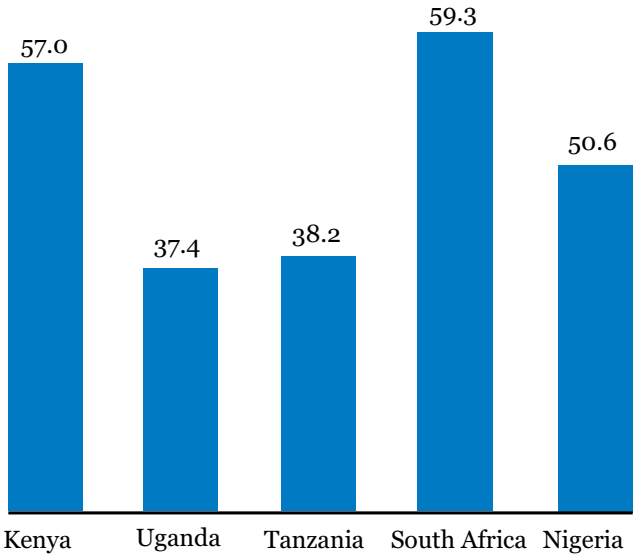
Country	Survey Year	Gini-Index	Poorest 10%	Poorest 20%	Richest 10%	Richest 20%
Most Unequal						
Sierra Leone	1989	62.9	0.5	1.1	43.6	63.4
Central African Republic	1993	61.3	0.7	2.0	47.7	65.0
Swaziland	1994	60.9	1.0	2.7	50.2	64.4
Brazil	1998	60.7	0.7	2.2	48.0	64.1
Nicaragua	1998	60.3	0.7	2.3	48.8	63.6
Most Equal						
Belarus	1998	21.7	5.1	11.4	20.0	33.3
Hungary	1998	24.4	4.1	10.0	20.5	34.4
Denmark	1992	24.7	3.6	9.6	20.5	34.5
Sweden	1992	25.0	3.7	9.6	20.1	34.5
Finland	1991	25.6	4.2	10.0	21.6	35.8
Kenya and its peers						
Kenya	**1997**	**44.5**	**2.4**	**5.6**	**36.1**	**51.2**
Kenya	**1999**	**57.0**	**0.8**	**2.5**	**42.7**	**57.3**
Uganda	1996	37.4	3.0	7.1	29.8	44.9
Tanzania	1993	38.2	2.8	6.8	30.1	45.5
South Africa	1993/4	59.3	1.1	2.0	45.9	64.8
Nigeria	1996/7	50.6	1.6	4.4	40.8	55.7

Source: *UNDP Human Development Report 2004, World Bank World Inequality Table and 1998/99 Integrated Labour Force Survey*

The level of inequality in Kenya is higher than in Uganda, Tanzania and Nigeria.

Kenya compares unfavourably with its peers on the African continent. As is shown in Figure 2.3, Kenya compares unfavourably with other countries on the continent. Going by the gini index the level of inequality in Kenya is higher than in Uganda and Tanzania and even Nigeria. It is, however, slightly lower than that of South Africa where the gini index is about 60%.

Figure 2.3: **Gini index for Kenya and her Peers,%**



Source: *UNDP Human Development Report, 2004*

3.2 Income earning opportunities

How do the rich compare with the poor in terms of income earning opportunities?

Employment is for many in Kenya a major source of income and an important dimension of inequality. Employment status can take any of the following forms: workers (people employed by others); self-employment; non-workers (people who do not work but do not consider themselves retired); disguised employment (the employed who are not working to their full potential); and the openly unemployed (those who are willing and able to work but cannot find any form of employment). Available information on the status of employment is presented in Table 2.3. The data shows that a smaller proportion of the poor are actually in employment compared to the rich.

Table 2.3: **Employment status by wealth group, %**

Wealth Group	Employed in the last 12 months		Not employed in the last 12 months	
	Male	Female	Male	Female
Poorest 20%	62.0	55.6	30.7	42.2
Second 20%	69.3	58.7	29.9	37.5
Middle 20%	68.7	60.0	27.0	37.3
Fourth 20%	76.5	56.4	20.0	40.0
Highest 20%	77.5	60.3	16.0	34.3

Source: *2003, Kenya Demographic and Health Survey*

The data from the 2003 Demographic and Health Survey show that over 77% of males in the richest 20% were in active employment compared to only 62% in the bottom 20%. Although the figures for women are lower, the same pattern is maintained.

In what specific activities are the wealthy in Kenya engaged?

For the employed, the nature of occupation matters because of differential rates of return. It matters whether one is working in the private or in the public sector, in the industrial or the agricultural sector, in the formal or informal sector or whether one is employed or self-employed. Table 2.4 summarises the main occupations of the different wealth groups in Kenya. Most of the poor people are employed in agriculture; 72% of women and 69% of men, such that the majority of the poor are women. The rich are typically engaged in sales, services and in professional and managerial activities. It is notable that there is a significantly higher percentage of women from the top wealth group in domestic service (about 21%) compared to women from the bottom wealth group (1.7%).

Table 2.4: **Main occupations by wealth groups in Kenya**

Wealth Group	Percent distribution of persons employed (main occupations)							
	Professional/Technical / Managerial		Sales and services		Unskilledmanual		Agriculture	
	Male	Female	Male	Female	Male	Female	Male	Female
Poorest	0.8	0.8	9.9	20.6	15.2	4.3	69.0	72.3
Second	5.5	2.1	10.5	19.6	19.7	6.7	60.9	68.9
Middle	5.2	3.5	12.0	20.7	18.7	7.4	55.9	64.7
Fourth	10.5	7.2	13.5	27.1	21.9	5.9	44.4	51.2
Highest	18.0	14.1	30.7	37.3	26.8	10.6	8.6	9.5

Source: *2003 Kenya Demographic and Health Survey*

The rich are typically engaged in sales, services and in professional and managerial activities.

3.3 Basic socio-economic outcomes

How do the rich compare with the poor in terms of basic socio-economic outcomes?

Education

Data on access to education by wealth group is shown on Table 2.5. It is evident that the wealthier groups in Kenya have generally better access to education than the poorer ones. The attendance ratio in primary schools for the top wealth group is 86% while that of the lowest wealth group is only 61%. Although attendance is much lower in secondary schools than in primary schools, the richer segments of the population still maintain their dominance over lower wealth groups. The net attendance gap in both primary and secondary schools between the top and bottom wealth groups is about 25%.

Table 2.5: **Access to education by wealth group in Kenya, 2003**

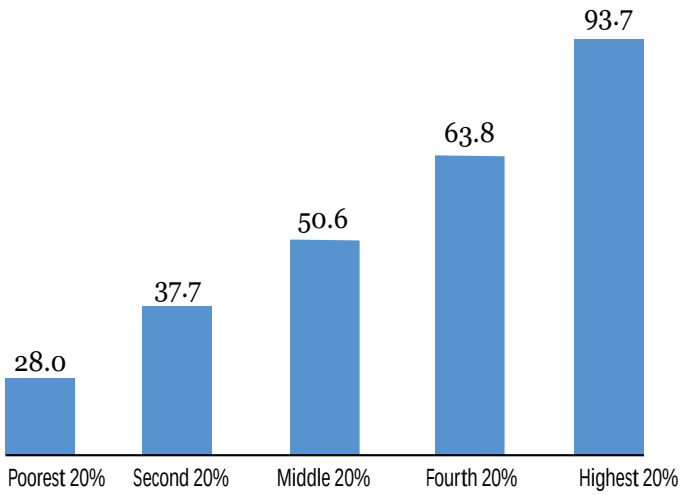
Wealth Group	Net attendance ratio	
	Primary	Secondary
Poorest 20%	61.3	4.0
Second 20%	79.9	7.3
Middle 20%	83.8	11.4
Fourth 20%	88.1	16.2
Highest 20%	86.0	28.2

Source: 2003 Kenya Demographic and Health Survey

Access to safe water

There are also remarkable differences between wealth groups in Kenya in terms of access to safe drinking water. Again the richer segment of the population in Kenya has comparatively better access to this basic commodity than the poor segments. Figure 2.4 shows that over 93% of the richest 20% have access to clean drinking water, compared to only 28% of the poorest 20%.

Figure 2.4: **Access to safe drinking water by wealth group, %**



Source: *Multiple Indicator Cluster Survey, 2000*

Health

Wealthier groups in Kenya have relatively better outcomes than the poor ones. A good indicator of access of health outcomes is usually the mortality rate. From Table 2.6, all the measures of early childhood mortality—neonatal mortality (probability of dying within the first month of life), infant mortality (probability of dying before the first birthday) and under-five mortality (probability of dying before the fifth birthday)—are all higher for the low income groups. The differences are highest among under-five mortality as for every 1000 live births the richest loose 91 infants, while the poorest loose 149.

Table 2.6: **Mortality by wealth group per 1000 live births, 2003**

Wealth Group	Percentage distribution of infant deaths		
	Neonatal Mortality	Infant Mortality	Under-five Mortality
Poorest 20%	38	96	149
Second 20%	33	75	109
Middle 20%	35	82	121
Fourth 20%	30	53	77
Highest 20%	26	62	91

Source: *2003 Kenya Demographic and Health Survey*

Chapter 3
Regional Inequality

Inequalities in well-being often take a regional dimension. In Kenya, these differences are observed between urban and rural areas, and between defined administrative regions. Differences in regional or geographic well-being more often, but not always, coincide with ethnic identities because ethnic groups often reside in given geographical regions. Information necessary for an assessment of this inequality is only available at the provincial and the districts levels; only recently has some information been generated at the constituency level.[7]

However, even at the provincial and district levels, the information has not always been comprehensive as certain areas have either been partially covered or completely left out in national surveys. A case in point is the absence of comprehensive socio-economic data for North Eastern province. This is in itself a glaring inequality as it constraints planning and service delivery for that region.

3.1 Inequalities at Provincial Level

Distribution of income and expenditure

How is income distributed within the provinces?

The distribution of incomes and expenditure is skewed in favour of the higher income groups (Table 3.1 and Figure 3.1). In Nairobi, for example, the top 10% of the households command 45% of the total income, while the bottom 10% commands 1.6%. Nairobi Rift Valley and Nyanza turn out to be the provinces with the most skewed income distribution in favour of the rich. North Eastern Province, with a gini coefficient of 0.439, is relatively more equal than the rest of the provinces.

The distribution of expenditure by province is shown in Table 3.2. It is evident that expenditure is more unequal in Nyanza and Western Provinces compared to the rest of the provinces. In Nyanza, for example, the top 10% of the households account for over 42% of the total expenditure while the bottom 10% account for less than 1%.

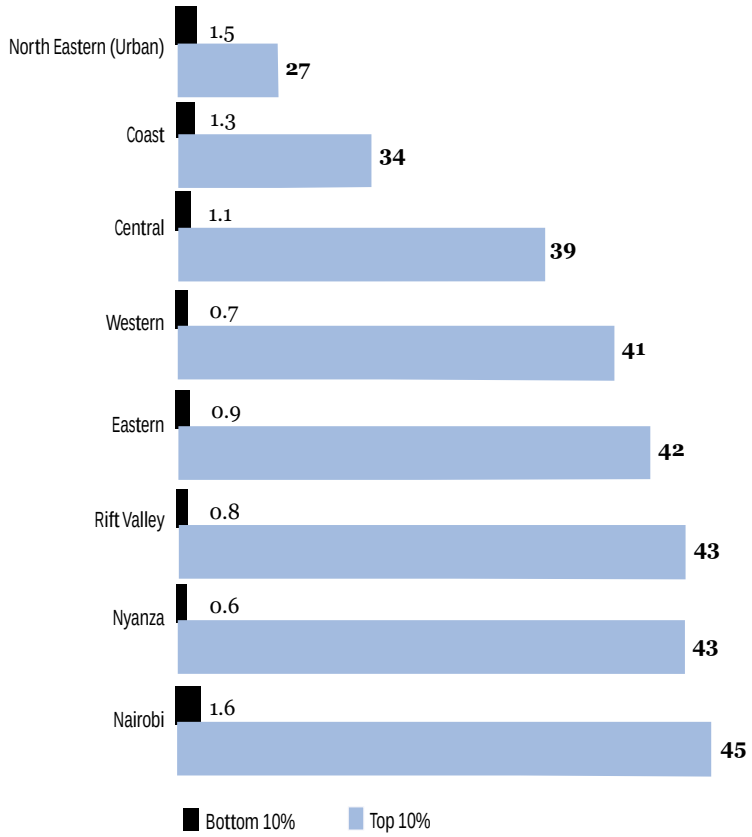
[7] See chapter 15 of the Economic Survey 2004 (Central Bureau of Statistics) that has summarised preliminary estimates of poverty and inequality in Kenya up to constituency level. *The Geographical Dimensions of Well-Being in Kenya, Volume II: Poverty and Inequality at the Constituency Level,* (Central Bureau os Statistics), is forthcoming.

Table 3.1: **Income distribution by province (1999)**

Province	Gini coefficient	Proportion of income accruing to			
	(income)	top 10%	bottom 10%	top 20%	bottom 20%
Nairobi	0.586	45.2	1.61	63.5	3.94
Central	0.516	39.47	1.07	55.51	3.35
Coast	0.511	33.77	1.34	50.16	4.33
Eastern	0.571	42.34	0.94	58.86	3.04
N.Eastern (Urban)	0.439	26.57	1.48	47.08	4.7
Nyanza	0.563	42.81	0.63	60.69	2.15
Rift Valley	0.575	42.58	0.79	59.76	2.46
Western	0.586	41.08	0.66	59.07	2.27
Kenya	**0.571**	**42.72**	**0.76**	**59.17**	**2.51**

Source: *Computed from the 1998/99 Intergrated Labour Force Survey data*

Figure 3.1: **Income distribution by province (1999)**



The distribution of incomes and expenditure is skewed in favour of the higher income groups.

Source: *Computed from the 1998/99 Intergrated Labour Force Survey data*

Table 3.2: **Expenditure distribution by province, 1999**

Province	Gini coefficient (expenditure)	% of expenditure incurred by			
		Top 10%	Bottom 10%	Top 20%	Bottom 20%
Nairobi	0.565	48.02	1.46	65.55	3.31
Central	0.514	39.10	0.78	56.98	3.19
Coast	0.450	40.80	1.10	56.02	3.82
Eastern	0.545	45.00	0.91	61.77	3.10
N.Eastern(urban)	0.406	28.50	0.47	50.12	3.06
Nyanza	0.574	42.70	0.84	59.51	2.34
Rift Valley	0.561	44.40	0.88	61.51	2.42
Western	0.558	43.30	0.91	62.26	2.30
Kenya	**0.558**	**44.6**	**0.9**	**61.0**	**2.4**

Source: *Computed from the 1998/99 Integrated Labour Force Survey data*

Income opportunities

How different are provinces in terms of income opportunities

Employment

Employment is a major source of income and therefore an important determinant of socio-economic well-being. Table 3.3 shows the numbers and proportions of persons involved in the formal (wage) and informal employment in the year 2002. It emerges

Table 3.3: **Employment type by province, 2002**

Province	Employment, 2002				Unemployment 1999
	Formal (wage)		Informal		
	Number	As % of total formal	Number	As % of total informal	% of age 15-64
Nairobi	425,600	25.0	1,228,700	24.2	23.9
Central	242,700	14.3	805,300	15.8	6.2
Coast	210,800	12.4	627,800	12.3	23.4
Eastern	141,900	8.3	467,900	9.2	6.8
N. Eastern	15,700	0.9	23,900	0.5	34.7
Nyanza	169,100	9.9	601,300	11.8	12.2
Rift Valley	381,700	22.5	962,900	18.9	12.1
Western	112,200	6.6	368,600	7.2	27.5
Kenya	**1,699,700**	**100.0**	**5,086,400**	**100**	**14.6**

Source: *Economic Survey 2004 and 1998/99 Integrated Labour Force Survey*

that informal and formal employment in Kenya tends to be concentrated in a few provinces. These are Nairobi, Rift Valley and Central which jointly account for about 60% of the total employment even though they account for a total of only 45% of Kenya's total population. The provinces with the least share of formal employment are North Eastern and Western. However, unlike formal employment, informal employment is more evenly distributed across the provinces but again Nairobi and Rift Valley lead, while North Eastern lags behind. In keeping with the trends in formal and informal employment, it turns out that unemployment is highest in North Eastern and Coast Provinces. Notably unemployment is also high in Nairobi due largely to migration. The unemployment rate for North Eastern Province (which is the highest) is almost six times that of Central Province (the lowest). At 27%, Western is the second province with most unemployed.

Access to land

In Kenya land is often recognised as an important resource and can be a source of inequality. The type of land held and the manner in which it is held is important. The distribution of land by region and type is summarised in Table 3.4. It is significant that the distribution of high potential land in the country is highly skewed.[8] While some regions like Nyanza and Western have most land classified as either high or medium potential, North Eastern Province has no medium or high potential land. All the land in the province is classified as low potential. In rural Kenya the average household land holding per hectare differs by region (see Table 3.5). In most of the households across the provinces, the average land holding is less than 4 hectares. Only in Coast, Eastern and Rift Valley Provinces is the proportion of households holding land of over 4 hectares more than 20%. The proportion of rural poor households without land also differs widely with the highest being in Central province (15.8%)

The proportion of rural poor households without land also differs widely with the highest being in Central Province and the lowest in Western.

Table 3.4: **Land types by region ('000 ha) 1998**

	High potential		Medium potential		Low potential		Other land	
Province	Area	%	Area	%	Area	%	Area	%
Nairobi	16	24	-	-	38	56	14	21
Central	909	69	15	1	41	3	353	27
Coast	373	5	796	10	5,663	68	1,472	18
Eastern	503	3	2,189	14	11,453	74	1,431	9
N.Eastern	-	-	-	-	12,690	100	-	-
Nyanza	1,218	97	34	3	-	-	-	-
Rift Valley	3,025	18	123	1	12,230	72	1,515	9
Western	741	90	-	-	-	-	82	10
Kenya	**6,785**	**12**	**3,157**	**6**	**42,115**	**74**	**4,867**	**9**

Source: *Statistical Abstract, 2003*

[8] It is important to bear in mind that the dichotomy between high and low potential lands is contestable. In Kenya this categorisation falsely presupposes that the former is always better land than the latter, yet there are viable and lucrative practices, agriculture and otherwise, that can be based on arid and semi-arid areas.

and the lowest in Western Province (6%). For the rural non-poor, Coast Province leads with the proportion of landless households at 41% compared to Eastern Province at 10.2%.Data for North Eastern Province is unavailable.

Table 3.5: **Land holding in rural areas by province**

Province	% proportion of households:					
	Landless		2.00-3.99 ha		4.0+ha	
	Poor	Non-poor	Poor	Non-poor	Poor	Non-poor
Central	15.8	17.5	24.7	21.1	8.8	10.4
Coast	13.3	41.1	33.2	24.7	29.2	16.7
Eastern	11.4	10.2	28.5	29.8	22.6	20.6
N.Eastern	-	-	-	-	-	-
Nyanza	9.9	12.6	35.9	35.7	17.8	19.1
Rift Valley	14.3	21.6	26.3	24.1	20.6	21.4
Western	6.0	11.8	26.2	26.6	19.2	19.1

Source: *Second Poverty Report in Kenya, Vol. II, 2000*

Home and land ownership

Housing is an important component of well-being in Kenya. The extent to which households own their homes and the land on which those structures are built can be a good indicator of the security one has in terms of being assured of some dwelling and

Table 3.6: **Main features of home ownership by region, %**

Province	Home ownership		Land on which home stands	
	Owns	Pays rent, lease	Owns	Pay rent, lease
Nairobi	10.4	84.7	8.3	49.5
Central	73.3	20.4	58.1	18.7
Coast	63.8	29.5	54.4	27.4
Eastern	85.3	9.9	78.6	9.9
N.Eastern	87.3	4.4	75.8	4.4
Nyanza	84.6	14.2	83.9	12.1
Rift Valley	66.4	24.7	60.0	19.4
Western	89.6	7.8	89.3	6.5
Kenya	**70.5**	**24.1**	**64.3**	**18.5**
Rural	87.6	6.7	80.5	5.3
Urban	19.3	76.2	15.6	58.4

Source: *2003, Kenya Demographic and Health Survey*

basic housing. Information on home ownership is presented in Table 3.6. Although home ownership does not show wide disparities, Coast Province shows the smallest proportion of people who own their houses and the land on which those houses are built, save for Nairobi. In Nairobi about 84% of residents pay rent as opposed to owning the houses in which they live.

Access to infrastructure

Access to infrastructure is a major determinant of overall well-being. This is because infrastructure helps to diversify production, expand trade and lower the cost of production. Infrastructure includes public utilities such as power, telecommunications, piped water supply, sanitation and sewerage. Table 3.7a and 3.7b and Figure 3.2 show the distribution of some of the key utilities across the Kenyan provinces. In terms of roads, there are wide disparities in the density (length of roads per square kilometres) across the provinces. Nairobi has the highest density of roads in the country at 3.2 compared to 0.1 in North Eastern Province and 0.4 in Rift Valley. Wide disparities are also evident in access to telephony in the country. Outside Nairobi, where data was unavailable, the province with the least telephone connection per population is North Eastern followed by Western and Eastern Provinces.

Table 3.7a: **Access to infrastructure**

Province	Roads		Telephone Connection	
	Total length of roads (Kms)	Road Density Length/Sq.Km	Total Telephone connection (public & private)	Population per telephone connection
Nairobi	2,234	3.2	-	-
Central	26,542	2.0	26,047	143
Coast	21,496	0.3	17,908	139
Eastern	38,441	0.2	16,441	382
N.Eastern	13,096	0.1	2,186	440
Nyanza	22,849	1.4	18,400	238
Rift Valley	61,484	0.4	35,972	194
Western	11,832	1.4	9,353	359
Kenya	**197,977**	**0.3**	-	-

Source: *District Development Plans (2002-2008) and 2003 Kenya Demographic and Health Survey*

Nairobi has the highest density of roads in the country at 3.2 compared to 0.1 in North Eastern Province and 0.4 in Rift Valley.

Table 3.7b below summarises information on access to piped water by province. Again, wide disparities in access to this basic commodity are evident with only 0.6% of households in both North Eastern and Nyanza Provinces having access to piped water compared to 11.8% in Central Province and 33.2% in Nairobi. On the overall, water access is low in Kenya with only 7.6% of households having access of piped water. It is estimated that only 53% of the households in Kenya walk for less than 15 minutes to fetch water.

Wide regional disparities are also manifested in terms of access to electricity. Nairobi leads with about 71% of its residents having electricity compared to Western Province's 1.6%. Electricity access also has a wide urban-rural gap despite the country having had a rural electrification programme for many years. Only 4.6% of residents in rural areas have electricity compared to about half of the residents in urban areas.

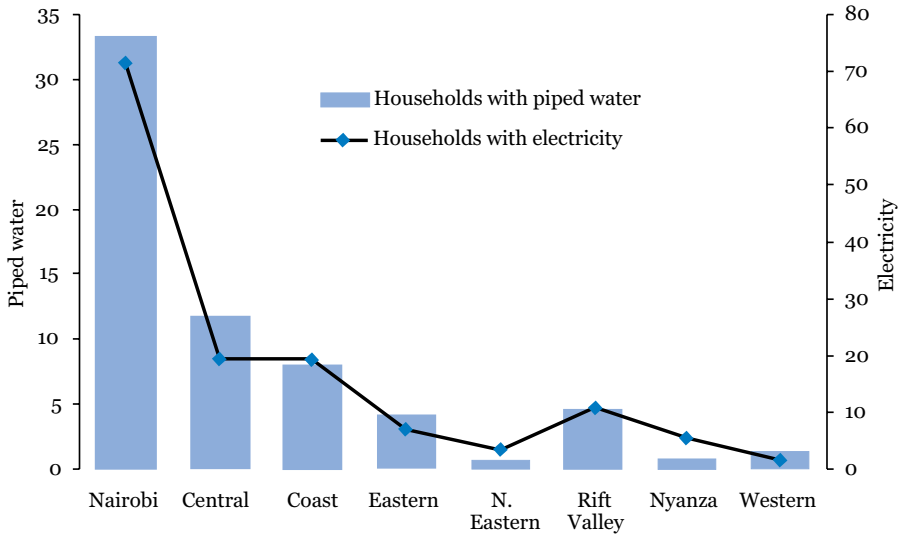
Table 3.7b: **Access to infrastructure: water and electricity**

Province	Access to water		Access to electricity, %	
	% of households with piped water in dwelling	% of people with water source in less than 15min	With	Without
Nairobi	33.2	95.9	71.4	28.5
Central	11.8	70.9	19.2	80.4
Coast	8.1	63.9	19.3	80.5
Eastern	4.1	38.7	6.9	93.1
N.Eastern	0.6	22.1	3.2	95.9
Nyanza	0.6	31.6	5.1	94.9
Rift Valley	4.5	50.5	10.5	89.5
Western	1.3	44.6	1.6	98.2
Kenya	**7.6**	**53.2**	**16.0**	**83.9**
Rural	3.6	43.1	4.6	95.2
Urban	19.2	83.8	50.2	49.8

Source: *2003, Kenya Demographic and Health Survey*

Figure 3.2 graphically illustrates access to water and electricity on a provincial basis. It is clear that access to these two commodities is correlated to some degree. More importantly, they are heavily skewed in favour of Nairobi. Water and electricity access is generally very low in all the other provinces of the country. The proportion of households with electricity in Nairobi is greater than all other seven provinces in Kenya combined.

Figure 3.2: **Disparities in water and electricity by region**



Source: *2003, Kenya Demographic and Health Survey*

Basic socio-economic outcomes

How do the provinces differ in terms of key socio-economic indicators?

Education

Key education statistics for the year 2002 are summarised in Table 3.8. The statistics show wide disparities in respect of access to education across the provinces. In Central Province the gross enrolment rates in primary school in 2000 was 106% compared to

Statistics show wide disparities in respect of access to education across the provinces.

Table 3.8: **Access to education 2002**

Province	Gross enrolment rate, %		Pupil-teacher ratio		Drop out rates
	Primary	Secondary	Primary	Secondary	%
Nairobi	52.0	11.8	33.7	11.4	11.3
Central	106.0	37.7	32.2	16.2	7.1
Coast	71.0	14.4	35.7	15.7	11.8
Eastern	96.9	23.3	30.4	16.0	8.8
N.Eastern(urban)	17.8	4.5	43.8	19.3	12.6
Nyanza	94.0	23.5	32.7	17.8	6.8
Rift Valley	88.3	18.3	33.1	16.9	8.2
Western	93.3	25.1	34.1	17.2	6.9
Kenya	**87.6**	**22.2**	**32.9**	**16.5**	**8.1**

Source: *Ministry of Education, Statistics Division*

only 17.8% in North Eastern Province. The corresponding figures for secondary school for the two regions are 37.7% and 4.5%, respectively.

There are also wide disparities in the pupil-teacher ratio at the provincial levels. Eastern and Central Provinces have the most favourable (lowest) teacher-pupil ratio while North Eastern Province has the highest. It is notable that the regions differ also in terms of school drop-out rates with the highest being in North Eastern Province.

Health

The information summarised in Table 3.9 shows wide regional disparities in key health access indicators. The table shows that whereas Central Province has a total 190 doctors and a doctor-patient ratio of 1:20,715, North Eastern Province has only 9 doctors with a ratio of 1: 120,823. In terms of health institutions, a similar pattern is maintained: Nairobi, followed by Rift Valley Province, has the least population per health facility while North Eastern province has the highest. In Northern Eastern Province, there are about 14,000 persons per health facility compared to about Nairobi's 5000. Such wide disparities are also evident in places of birth. In Nairobi and Central Provinces, most births take place in health facilities (both public and private). In all the other provinces births are mainly at home.

Table 3.9: **Access to health by province**

District	Access to qualified doctor		Place of delivery			Population per health facility
	Total No. of doctors	Doctor/Patient Patient	Public& private health facilities	Home	Others	
Nairobi	-	-	77.9	21.5	0.5	5,331
Central	190	1:20,715	66.9	31.9	1.1	7,742
Coast	39	1:51,155	31.2	67.4	0.8	5,883
Eastern	147	1:33,446	37.7	60.8	1.4	5,760
N.Eastern	9	1:120,823	7.7	91.9	0	13,551
Nyanza	165	1:28,569	36.2	62.2	0.9	8,819
Rift Valley	197	1:36,481	35.9	63	0.7	5,788
Western	83	1:39,554	28.4	70.6	0.6	10,834

Source: *Economic Survey 2004, District Development Plans (2002-2008), 2003 Kenya Demographic and Health Survey*

It is evident from Table 3.10 that Nyanza Province performs very poorly both in terms of childhood mortality and the proportion of people infected with the HIV/AIDs virus. Nyanza reports 206 deaths per 1000 live births before their fifth birthday. Nyanza also has the highest HIV/AIDs prevalence rates in the entire country.

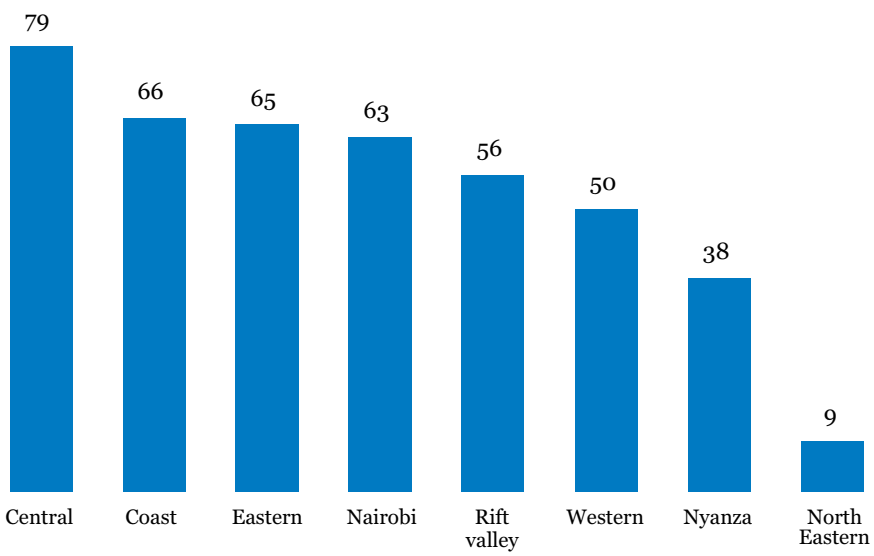
Table 3.10: **Disparities in selected health outcomes**

District	Early childhood mortality		HIV prevalence rates, %		
	Infant	Under-five	Men	Women	Total
Nairobi	67	95	7.8	11.9	9.9
Central	44	54	2.0	7.6	4.9
Coast	78	116	4.8	6.6	5.8
Eastern	56	84	1.5	6.1	4.0
N.Eastern	91	163	0.0	0.0	0.0
Nyanza	133	206	11.6	18.3	15.1
Rift Valley	61	77	3.6	6.9	5.3
Western	80	144	3.8	5.8	4.9

Source: *2003 Kenya Demographic and Health Survey*

An important factor that determines children's health is the extent to which they are vaccinated in their infancy and early childhood. Figure 3.3 shows the percentage of children who have the recommended vaccinations, by province. There is a striking difference in this important determinant of children's health. In Central Province 79% of all children have had their recommended vaccinations compared to only 9% in North Eastern Province.

Figure 3.3: **Coverage of child vaccination**



In Central Province 79% of all children have had their recommended vaccinations compared to only 9% in North Eastern Province.

Source: *2003, Kenya Demographic and Health Survey*

Regional differences in socio-economic opportunities and outcomes in Kenya may in effect mean stark differences in the well-being of specific ethnic groups living in specific regions of the country. Table 3.11 shows that HIV prevalence in Kenya differs widely by ethnic group. It is, for example, highest among Luo men and women and lowest among Somali women and Kisii men.

Table 3.11: **HIV prevalence rate by gender and ethnic group, %**

Ethnic	Women	Men	Total
Embu	(2.8)	(3.7)	3.3
Kalenjin	4.9	2.0	3.4
Kamba	8.6	1.6	5.4
Kikuyu	6.6	2.8	4.9
Kisii	7.4	0.5	4.0
Luhya	7.9	5.1	6.6
Luo	25.8	17.5	21.8
Masaai	2.8	2.2	2.5
Meru	6.1	1.2	3.7
Miji Kenda/Swahili	3.8	3.0	3.5
Somali	0.9	1.8	1.3
Taita Taveta	11.7	7.1	9.7
Turkana	6.5	5.1	5.7
Kuria	-	(5.2)	2.7
Other	6.7	5.6	6.1

Source: *2003 Kenya Demographic and Health Survey. Figures in brackets are based on 25-49 unweighted cases*

How do the provinces differ in the socio-economic outcomes?

The overall well-being indicators for Kenya's eight provinces are shown in Table 3.12. Wide disparities in the socio-economic indicators are again evident. In 2000, it was estimated that some 73.1% of the total population in North Eastern Province was living below the poverty line. This is to be compared to 35.3% in Central Province. The table also shows regional disparities in three other indicators, namely the Human Poverty Index (used to measures human deprivation), the Human Development Index (used to measure human progress) and the Gender-related Development Index (used to measure human progress adjusted for gender). The indices are explained in the annex notes. Finally, it is notable that there are wide regional disparities in the life expectancy among regions. Thus, while an average person in Central Province expects to live for an estimated 64 years, the life expectancy in Nyanza is only 47.7 years.

Table 3.12: **Socio-economic outcomes by region, %**

District	Poverty	Human Development (2001)			
	Income poverty 2000	Human poverty index (HPI), 2003	Human development Index (HDI)	Gender-related development index	Life expectacy in years, 1999
Nairobi	-	29.7	0.758	0.626	61.6
Central	35.3	31.6	0.467	0.597	63.7
Coast	69.9	37.3	0.413	0.464	52.2
Eastern	65.9	43.1	0.525	0.512	62.8
N.Eastern	73.1	41.9	0.413	0.454	51.8
Nyanza	70.9	42.8	0.44	0.429	47.7
Rift Valley	56.4	35.6	0.51	0.526	59.5
Western	66.1	38.5	0.449	0.446	53.5
Kenya	**52.6**	**34.1**	**0.55**	**0.521**	**54.7**

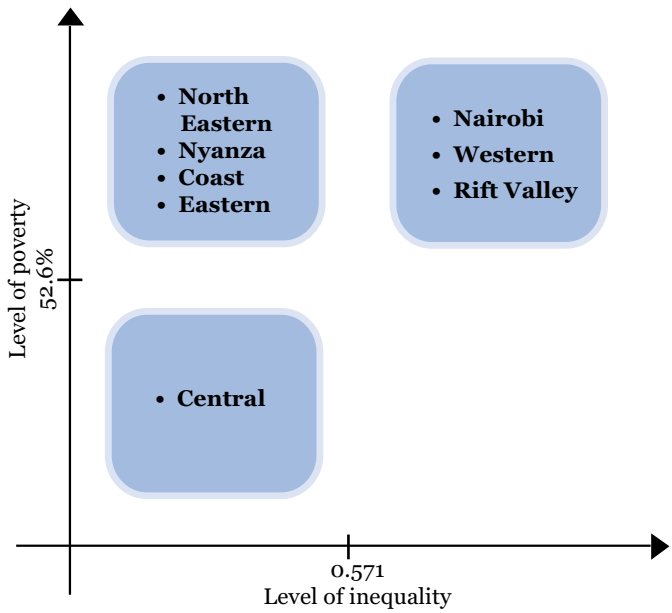
Source: *UNDP, Human Development Reports and CBS poverty reports*

Does the level of inequality matter for poverty?

In an attempt to answer this question, we group in Figure 3.4, Kenya's eight provinces in terms of the level of poverty and inequality based on national averages. It is significant that three out of Kenya's eight provinces may be casually classified as high inequality high poverty provinces.

Three out of Kenya's eight provinces may be casually classified as high inequality high poverty provinces.

Figure 3.4: **Kenya's provinces by level of poverty and inequality**



Source: *Based on table 3.1 and 3.12*

These are Nairobi, Western and Rift Valley. One province falls within the low income low inequality quadrant, that is, Central Province. Except for this province, one is tempted to conclude that inequality has some causual association with poverty in Kenya.

Access to justice

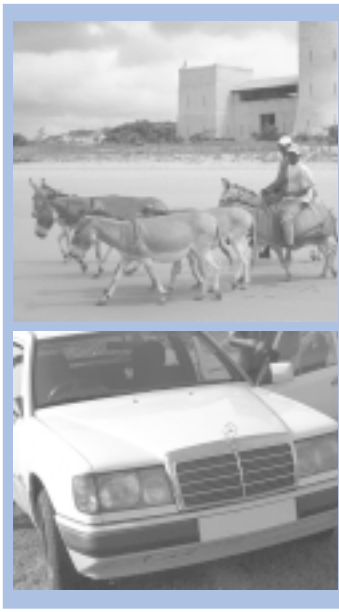
How do the provinces compare in terms of access to justice?

Over time, the administration and delivery of justice in Kenya has been structured around the formal court system. A court of law has evolved to become a key institution in the judicial system. Although access to justice depends on other factors (such as one's socio-economic background, legal literacy levels and wealth status) presence of courts is still and important determinant in the citizens' ability to enter and access the justice system.[9] Available statistics for Kenya show that the presence of courts differs from one region to the other. Table 3.13 shows the number of courts (various ranks) or court stations and the average number of people per court.[10] Central Province has the highest number of counts and the smallest court per capita ratio of 186,208 people for a single court of law. The worse off region is North Eastern Province where there are only 2 courts with 481,072 people per court.

Table 3.13: **Court distribution by province, 2004**

Province	Number of courts	Number of people per court
Nairobi	6	357,209
Central	20	186,208
Coast	11	226,115
Eastern	19	243,778
N.Eastern	2	481,072
Nyanza	18	244,011
Rift Valley	18	388,169
Western	11	305,343
Kenya	**105**	**273,206**

Source: *PRO Judiciary and the Institute of Economic Affairs*



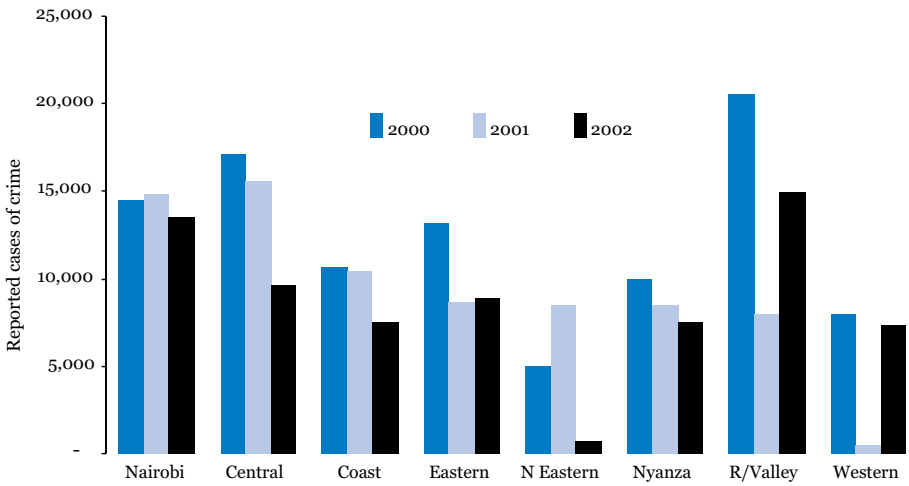
Generally, assessing the distribution of crime across regions in the context of inequality is interesting as one of the adverse outcomes of the gap between the rich and the poor is how these disparities influence social behaviour and stability. Specifically, the level of crime in an area can determine to a great extent whether people feel secure to lead normal and productive lives. Figure 3.5 shows the total number of reported crime by province from 2000 to 2002. Crime was high in Nairobi,

9 For a more recent report on access to justice, see Legal Resources Foundation, *Balancing the Scales: A Report on Seeking Access to Justice in Kenya*. (Nairobi, 2004).

10 This excludes the number of High Courts that sits in 14 selected stations/towns countrywide. The Court of Appeal also sits in other areas outside Nairobi where appeal cases have been filed.

Central and Rift Valley Provinces with an average of over 14,000 cases reported annually. There were sharp swings in crime in Rift Valley and Western Provinces.

Figure 3.5: **Number of reported crime by province**



Source: *Statistical Abstract, 2003*

Political representation

Does the level (and nature) of political representation matter?

It is now widely accepted that political representation is key to socio-economic development. This is largely because political representation is closely linked to public administration and the allocation of resources. The level of political representation is bound to differ from one region to the other depending on the number of the administrative units on the ground. Table 3.14 summarises the number of constituencies per province and the number of persons per Member of Parliament.

More people are represented in Nairobi by the same MP than in Coast or North Eastern Provinces.

To the extent that an MP articulates the views of his/her constituents in parliament, and that accessing an MP and contact with the electorate is important for political participation, then there are evidently wide disparities in representation in Kenya. More people are represented in Nairobi by the same MP than in Coast or North Eastern provinces. The average size of the constituencies in area terms also differs widely across the provinces as shown in Table 3.14. The disparities are more striking at the constituency level. For instance, Embakasi constituency in Nairobi, which covers a total area of 208 square kilometres and has a population of 434,884 is represented in parliament by one MP just like Lamu East which has a population of 16,794, spread over an area of 1,663 square kilometres (see also Fig 3.5).

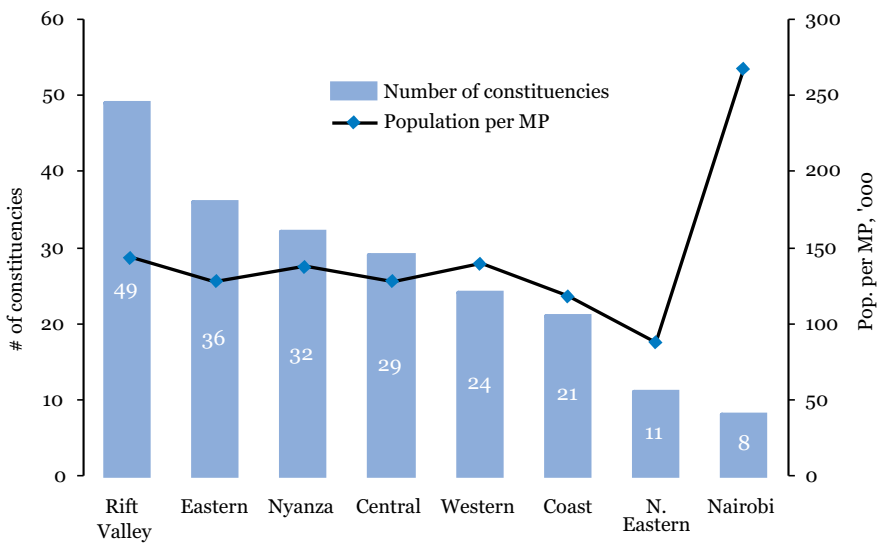
Table 3.14: **Number of constituencies and poverty levels by province**

Province	Number of Constituencies	Population per Constituency/MP	Average size of constituencies (in Sq Kms)	Poverty Levels, %	
				Rural	Urban
Nairobi	8	267,907	87	-	44
Central	29	128,419	456	31	46
Coast	21	118,441	3,944	61	48
Eastern	36	128,661	4,263	58	49
N.Eastern	11	87,468	11,648	-	-
Nyanza	32	137,256	392	64	62
Rift Valley	49	142,593	3,725	48	53
Western	24	139,949	344	60	68
Kenya	**210**	**136,603**	**2,770**	**53.7**	**52.9**

Source: *Population and Housing Census 1999, Geographical Dimensions of Well-Being, Vol.I*

It can be seen from Figure 3.5 that provinces like Nairobi and North Eastern have very few constituencies but a significantly higher ratio of population per MP, more so because it is the smallest province in Kenya. It has more people concentrated in one place than is the case with other provinces.

Figure 3.6: **Representation burden in Kenya, 2002**



Source: *Based on table 3.17*

The Rural -Urban Divide

Income distribution

Is income inequality higher in urban areas than in rural areas?

The data in Table 3.15 shows that the gini coefficient is marginally higher in the urban areas than in the rural areas. Generally speaking, this implies that there is more inequality in urban areas than in rural areas in both incomes received and consumption expenditure. It is also significant that, at lower decile levels, incomes are more unequal in the urban areas than in the rural areas. At higher levels of income, inequality tends to be higher in rural areas.

Table 3.15: **Income distribution in rural and urban areas, 1999**

Income distribution	Rural	Urban
Gini coefficient, household income	0.540	0.549
Gini coefficient, household expenditure	0.496	0.541
Distribution of household income by deciles, %		
-Lowest	0.84	1.39
- Second	1.89	2.84
- Third	2.84	3.64
- Fourth	4.12	4.65
- Fifth	5.16	5.6
- Sixth	6.94	7.22
- Seventh	8.73	8.72
- Eighth	11.72	11.11
- Ninth	16.70	15.81
- Highest	41.06	39.04

Source: *Computed from the 1998/99 Intergrated Labour Force Survey data*

The mean monthly wage from paid employment and the overall unemployment rate in urban areas, is more than twice that in rural areas.

Income opportunities

Table 3.16 summarises parameters on labour market participation in both rural and urban areas. Participation rates are much higher in urban areas than in the rural areas. Unemployment rates are, however, much higher in the urban areas than in rural areas. The mean monthly wage from paid employment, and the overall unemployment rate in urban areas, is more than twice that of rural areas. The unemployment gap between rural and urban areas is highest (over 30%) at both the entry and exit of the labour force, that is, ages 15-24 years and 55-64 years. It is also significant that the rate of unemployment is higher among the youth particularly those between the ages of 15 and 29 years. This is true for both the rural and urban areas.

Table 3.16: **Employment and income levels in rural and urban areas**

Socio-economic characteristics	Unit of measurement	Rural	Urban
No. of employed persons (age 15-64)	No.	7,457,133	3,068,477
Informal sector employment	No.	2,378,461	1,231,045
Participation rate	%	73.6	86.4
Mean monthly earnings from paid employment	Kshs.	4,662	10,257
Working children as a % of 15-17 population	Percent	19.7	9.0
Unemployment rate (total)	"	9.4	25.1
Unemployment rates:			
15-19	"	15.9	47.0
20-24	"	15.1	47.3
25-29	"	8.6	25.1
30-34	"	8.2	14.3
35-39	"	6.5	12.0
40-44	"	8.3	11.2
45-49	"	5.6	14.7
50-54	"	5.5	18.9
55-59	"	8.1	40.6
60-64	"	8.0	45.2

Source: *1998/99 Labour Force Survey Report*

Basic socio-economic outcomes

Tables 3.17 and 3.18 provide various indicators of well-being in rural and urban areas in Kenya. Living standards in rural areas generally lag behind the urban areas. In education, the proportion of the population above 15 years of age who are literate is higher in the urban areas. Likewise, the percentage of school going children already in primary school is higher in urban areas.

Table 3.17: **Social indicators in rural and urban areas education, %**

Socio-Economic characteristic	Rural	Urban
Gross enrolment (primary)		
Male	114.2	103.2
Female	107.2	99.9
Drop out rate	7.7	10.5
Net enrolment (primary)		
Male	78.0	82.4
Female	78.1	82.5
Population (>15 years) that is literate		
Male	86.2	93.7
Female	75.2	88.5

Source: *2003 Demographic and Health Survey, and Multiple Indicator Cluster Survey Report, 2000*

In health, indicators in Table 3.18 point to better access in the urban areas than in the rural areas. Access to safe drinking water and sanitation is higher in urban areas. It is therefore not surprising that the level of poverty is higher in the rural than in the urban areas in Kenya.

Table 3.18: **Social indicators in rural and urban areas - health and water**

Socio-Economic characteristic		Rural	Urban
Health	Neonatal mortaliity, 2003	34.0	26.0
	Under-five mortality, 2003	117.0	93.0
HIV/AIDS prevalence, %		10.0	5.6
Water and Sanitation, %			
Proportion of population with access to drinking water		43.5	89.7
Proportion of population using safe sanitary means (2000)		76.6	94.8
Poverty, %	Absolute poverty (1997)	52.9	52.3
	Food poverty (1997)	50.6	38.3

Source: *Demographic and Health Survey and Multiple Indicator Cluster Survey 2000*

Inequalities at the district level

Income and expenditure distribution

Is income evenly distributed amongst Kenyan districts?

Income is an important dimension of inequality. Table 3.19 presents the income and expenditure distribution of the top five and bottom five districts in Kenya. The rest of the districts for which data was available are shown in Annex Table 2. The classification is based on the proportion of income that accrues to the richest 10%. Again it emerges that there are wide disparities in the distribution of income in Kenya. While in Kiambu District, the rich 10% command over 35% of the total income, in Kwale District they control only 1.3% of the income. This shows that income is heavily skewed in favour of the rich in Kiambu. Likewise, the rich 10% in Kwale account for only 1.3% of the total expenditures compared to their counterparts in Kiambu who account for over 37.7%. A word of caution is nevertheless important here. Statistics for the computation of income distribution at the district level are in most cases inadequate and may therefore not yield accurate inequality indicators. The result need, therefore, to be interpreted with caution.

It emerges that there are wide disparities in the distribution of income even at the district level.

Table 3.19: **Household income and expenditure distribution ranges**

Top 5: Household expenditure (Proportion attributed to the rich 10%		Top 5: Household income (Proportion attributed to the rich 10%	
Kwale	1.3	Kwale	1.3
Kajiado	2.2	Kajiado	2.1
Kilifi	3.0	Machakos	2.9
Machakos	3.4	Kilifi	3.1
Kericho	3.7	Kericho	4.6
Bottom 5: Household expenditure (Proportion attributed to the rich 10%		**Bottom 5: Household income (Proportion attributed to the rich 10%**	
Kiambu	37.7	Kiambu	35.4
Busia	27.1	West Pokot	28.3
Migori	20.6	Laikipia	21.9
West Pokot	19.7	Migori	21.5
Laikipia	17.5	Elgeyo Marakwet	18.4

Source: *Computed from the 1998/99 Integarated Labour Force Survey*

Income opportunities

Are income-earning opportunities evenly distributed among the Kenyan districts?

Employment

Employment opportunities are critical in determining the overall well-being of individuals and regions. Employment, both in the formal and informal sector, is an important source of income and therefore an important dimension of inequality. Information on five districts with the highest and lowest employment and unemployment by region and gender are summarised in annex Table 3. The top five and bottom in terms of the two parameters are shown in Table 3.20. The proportion of the population working for pay in Nairobi and Mombasa are as high as 50% while in other districts like Wajir, Turkana, Garissa and West Pokot the proportion working for pay is less than 10%. Unemployment rates are also significantly higher in areas like Garissa, Mombasa and Moyale compared to such places as Nyandarua and Mount Elgon where it is less than 5%.

Table 3.20: **Employment and unemployment rates-ranges**

Top 5: Employment with pay (%)		Top 5: Unemployement rate (%)	
Nairobi	67.1	Garissa	28.4
Mombasa	57.4	Mombasa	22.8
Thika	40.3	Moyale	18.2
Buret	32.6	Turkana	16.2
Nakuru	32.0	Kisumu	15.4
Bottom 5: Employment with pay (%)		**Bottom 5: Unemployement rate (%)**	
Wajir	6.1	Nyandarua	2.9
Turkana	6.4	Mount Elgon	3.3
Garissa	7.5	Kuria	3.7
West Pokot	7.2	Kirinyaga	3.8
Mandera	8.4	Murang'a	4.2

Source: *Population and Housing Census, 1999*

Access to arable land

With over 80% of the population in Kenya dependent on agriculture, access to arable land is an important dimension of inequality. This is because land is the primary asset required for agricultural production. Thus differential access to land both in quality and size is likely to create a differentiated set of outcomes in income earning opportunities. Table 3.21 shows the districts with the highest and lowest proportions of arable land in the country. The rest of the districts are shown in annex Table 4. The

With over 80% of the population in Kenya dependent on agriculture, access to arable land is an important dimension of inequality.

Table 3.21: **Access to land by district-ranges**

Top 5:Arable land as % of total land		Top 5:Urban area as % of total	
Nyando	96.0	Machakos	26.67
Kuria	95.0	Busia	19.74
Nyamira	91.0	Siaya	18.59
Kiambu	90.0	Lamu	17.5
Uasin Gishu	90.0	Buret	15.89
Bottom 5:Arable land as % of total land		**Bottom 5:Urban area as % of total**	
Isiolo	0.3	Kitui	0.05
Garissa	1.0	Wajir	0.06
Kwale	1.0	Kajiado	0.07
Moyale	2.0	Nandi	0.15
Mandera	5.0	Isiolo	0.17

Source: *District Development Plans, 2002-2007*

difference between the two groups is significant. For instance, in Nyando District, arable land as a proportion of the total land is about 96% while it is only 0.3% in Isiolo. There are also remarkable differences in the proportion of areas designated as urban across the districts.

Access to infrastructure

As already indicated earlier, infrastructure is an important determinant of the socio-economic well-being. As is evident in Table 3.22 below, there are wide disparities in access to infrastructure in terms of road densities and telephone connections. The highest road density is in Rachuonyo District with a density ratio of 1.92 compared to only 0.02 in Taita Taveta. Such wide disparities are also evident in telephone connections the highest being in Kisumu with 9,233 telephone connections compared to only 26 in Ijara District.

Table 3.22: **Access to Infrastructure**

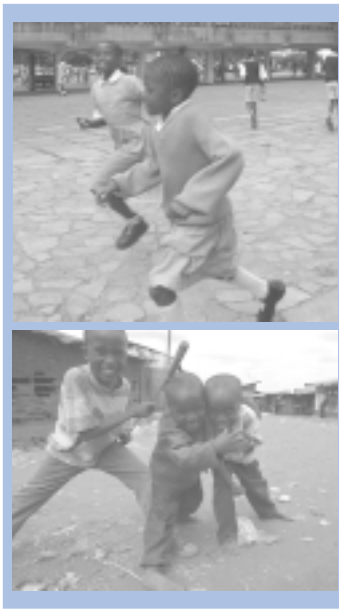
Top 5: Road density (road length per square kilometres)		Top 5: Private and public telephone connections	
Rachuonyo	1.92	Kisumu	9,233
Kuria	1.52	Kiambu	8,438
Vihiga	1.42	Kilifi	6,637
Thika	1.12	Uasin Gishu	6,591
Tharaka	1.00	Thika	5,120
Bottom 5: Road density (road length per square kilometres)		**Bottom 5: Private and public telephone connections**	
Tana River	0.02	Ijara	26
Turkana	0.04	Tharaka	46
Ijara	0.04	Turkana	76
Garissa	0.05	Gucha	88
Taita Taveta	0.06	Marakwet	98

Source: *District Development Plans (2002-2007)*

Basic socio-economic outcomes

How do the districts differ in terms of access to education?

Access to education is important for individuals and regions in as much as it is directly related to incomes and health status. Kenyan districts differ widely in access to education. The total number of schools, the number of teachers and the teacher-pupil ratios for all the Kenyan districts are summarised in annex Table 4. The top and bottom five districts in terms of the outlined parameters are shown in Table 3.23. The district with the most favourable teacher-pupil ratio turns out to be Baringo where there are about 21 students for every teacher. Nithi District follows with 24 pupils per teacher. The district with the most unfavourable teacher-pupil ratio is Kisumu where for every teacher there are about 83 students. With regard to enrolments, it is notable that Keiyo Districts has an enrolment of about 140.3% followed by Mt. Elgon, HomaBay, Migori



and Marakwet Districts. The enrolments rates are all above 100% implying that there are persons in primary schools who are beyond the primary school going ages. At the bottom of the rank in terms of enrolment are districts such as Garrisa, Wajir, Mandera, Tana River and Marsabit, all in the arid and semi-arid areas.

Table 3.23: **Access to education-ranges**

Top 5: Pupil-teacher ratio (2003)		Top 5: Gross enrolment rate (primary) 2003	
Baringo	21.1	Keiyo	140.3
Nithi	24.0	Mt. Elgon	135.2
Koibatek	23.9	Homa Bay	133.4
Meru Central	25.4	Migori	130.1
Isiolo	25.9	Marakwet	129.8
Bottom 5: Pupil-teacher ratio		**Bottom 5: Gross enrolment rate (primary), 2003**	
Kisumu	83.3	Garissa	8.8
Malindi	54.0	Wajir	14.0
Moyale	49.6	Mandera	24.4
Butere/Mumias	49.0	Tana River	51.9
Trans Nzoia	49.0	Marsabit	55.0

Source: *Ministry of Education records*

How do the Kenyan districts perform in terms of access to health and sanitation?

The data provided in Table 3.24 provides some insights into the disparities in health and sanitation among Kenya's districts. The information shows the top and bottom five districts with respect to HIV prevalence rates and access to clean water and sanitation. Information for the remaining districts is summarised in annex Table 5. The highest HIV prevalence rates are in Nyanza and Eastern Provinces. Nyando and Kisumu Districts record a prevalence rate of about 27.1% followed by Nithi, Tharaka and Meru Districts with 26.2%. HIV prevalence is lowest in the remote districts of Mandera Wajir, Isiolo and Marsabit where it remains at less than 4%.

The highest HIV prevalence rates are in Nyanza and Eastern Provinces.

In terms of access to clean drinking water, again wide disparities are evident. When it comes to water access Wajir, West Pokot and Marsabit Districts rank highly. From practical experiences these three districts take these positions more because of the nature of the data used (mainly from urban) than because of superior water supply. Among districts with poor water access are Nairobi*, Garrissa and Mombasa. Others are Uasin Gishu and Kiambu Districts.

Table 3.24: **HIV prevalence and access to water-ranges**

Top 5: HIV prevalence rates (%)		Top 5: Access to clean drinking water (%)	
Nyando	27.1	Wajir	96.0
Kisumu	27.1	West Pokot	91.2
Nithi/Tharaka/Meru north	26.2	Marsabit	83.9
Kuria/Migori/Rachuonyo	26.2	Murang'a	75.8
Siaya/Suba/Bondo	24.9		
Mbeere	25.9	Tana River	73.6

Bottom 5: HIV prevalence rates (%)		Bottom 5: Access to clean drinking water (%)	
Mandera	2.7	Nairobi	6.1
Wajir	2.9	Garissa*	6.2
Isiolo	3.4	Mombasa	16.2
Marsabit	3.6	Uasin Gishu	26.3
Keiyo/Marakwet	3.7	Kiambu	29.2

Source: *District Development Plans (2002-2008)*

How do the districts compare in terms of the socio-economic outcomes?

The outcomes of employment levels, access to education, health and sanitation in Kenyan districts are summarised in annex Table 6. Table 3.25 shows the outstanding top and bottom five districts with respect to the socio-economic indicators. The districts

Table 3.25: **Socio-economic outcomes-ranges**

Top 5: Absolute poverty (1997) (%)		Top 5: Life expectancy (1999)	
Makueni	73.5	Meru	68.6
West Pokot	68.5	Nyandarua	65.1
Kilifi	66.3	Murang'a	64.3
Busia	66.0	Nandi	64.2
Taita Taveta	65.8	Nyeri	63.4
Bottom 5: Absolute poverty (1997) (%)		**Bottom 5: Life expectancy (1999)**	
Kiambu	25.1	Mombasa	33.1
Kajiado	27.9	Turkana	42.3
Nyandarua	33.3	West Pokot	44.0
Laikipia	33.9	Siaya	45.0
Kirinyaga	35.7	Migori	45..7

Source: *Welfare Monitoring Survey, 1997 and 1999 Population and Housing Census Reports*

with the highest poverty levels turn out to be Makueni, West Pokot, Kilifi, Busia and Taita Taveta. These are districts with over 60% of the population living below the national poverty line. In contrast, poverty is least in Kiambu, Kajiado, Nyandarua, Laikipia and Kirinyaga.

There are also significant differences in the life expectancy. Meru, Nyandarua, Muranga, Nandi and Nyeri Districts have some of the highest life expectancies in the country. Districts with low life expectancy include Mombasa, Turkana, West Pokot, Siaya and Migori. It is again worth noting that the life expectancy in Meru District, for instance, is more than double that of Mombasa, signifying the wide disparities in socio-economic well-being in the country.

It is again worth noting that the life expectancy in Meru District, for instance, is more than double that of Mombasa.

Chapter 4
Gender Inequalities

Over the last two decades, there has been increasing recognition of the significant role women play in the socio-economic and political development of a society. However, the full participation of women in development continues to be hampered by a number of obstacles. These challenges essentially put women at a disadvantaged position (relative to men) in so far as realising their full potential and freedoms is concerned. This chapter presents some key information on the various aspects of inequality from a gender perspective.

Income distribution

Is there a difference in income distribution between male and female-headed households?

To answer this question, data from the Integrated Labour force Survey 1999 was grouped according to the gender of the household head and the distribution of income

Table 4.1: **Income distribution by gender, 1999**

Income distribution-male and female headed households (1999)	Male	Female
Household Income distribution by head (deciles), %		
Lowest	15	8
Second	17	7
Third	16	10
Fourth	9	7
Fifth	10	10
Sixth	11	12
Seventh	6	9
Eighth	6	12
Ninth	5	12
Highest	4	12

Source: *Computed from the 1998/99 Integrated Labour Force data*

assessed for each group. The resulting income decile for each group is shown in Table 4.1. It is evident, for example, that while the lowest deciles for the male-headed household accounted for 15% of the total income that of the female-headed accounted for only 8%. The corresponding figures for the highest deciles are 4% for the male-headed household and 12% for the female-headed households. It is also significant that among the male-headed households, income tends to be concentrated in the lower deciles than is the case with female-headed households.

Income opportunities

How do men and women compare in terms of income earning opportunities?

Employment

Employment is important for socio-economic well-being. It is widely acknowledged in Kenya that there are wide disparities in employment by men and women. Table 4.2 summarises some of the important dimensions of this gender dimension of inequality. The data shows that men not only have higher incomes, but are also better placed in the labour market in terms of the kind of jobs they do.

The participation of men in the labour force is also higher than that of women. Women mostly occupy low-grade positions, especially in the public sector and are concentrated in the non-professional positions. It is significant, for example, that women only constituted 13% of the total professionals in public service in 2002.

Gender participation in the labour market may sometimes assume a distinct regional pattern. In the entire country, unemployment of women is higher that that of men. The unemployment situation in Kenya is skewed and takes both gender and generational dimensions. The 1998/99 Labour Force Survey reported that 1.8 million people form the active labour force. A majority of these are young men and women,

The participation of men in the labour force is also higher than that of women.

Table 4.2: **Gender disparities in employment opportunities**

Employment	Units	Female	Male
Mean monthly earnings from paid employment (1999)	Kshs	5,752	8,440
Labour force participation rates (1999)	Percent	72.6	74.7
Informal sector employment	"	45.0	55.0
Formal sector employment	"	28.0	71.9
Unemployment rates (15-64 years)	"	19.3	9.8
Wage employment by grades (public-2002)	Percent		
Bottom 5: A	"	70	30
B	"	65	35
C	"	67	33
E	"	77	33
F	"	89	23
Top 5: Q	"	19	81
R	"	15	85
S	"	10	90
T	"	6	94
U	"	30	70
Occupation of employed person (15-64)	Percent		
Legislators, senior officials and managers	"	12.6	87.4
Professionals	"	13.3	86.7
Technical and associate professionals	"	37.1	62.9
Clerks	"	39.7	60.3
Service workers, shop/market sales workers	"	50.3	49.7
Skilled agricultural and fishery workers	"	58.0	42.0
Craft & related activities	"	20.4	79.6
Plant and machinery operators & assemblers	"	4.0	96.0
Elementary occupation	"	52.0	48.0
Others	"	59.1	40.9

Source: *1998/99 Integrated Labour Force Survey data, the 1999 Population and Housing Census, and Records of Directorate of Personal Management*

especially from urban areas.

By disaggregating unemployment by age group, gender and the rural urban divide, table 4.3 presents the striking bias of unemployment of young women in urban areas compared to their male counterparts. For instance, there were 72,824 unemployed men of age 20-24 years in urban areas compared to a staggering 274,395 for women in the same age and region.

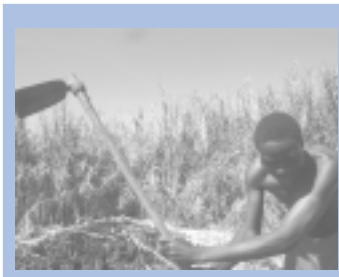


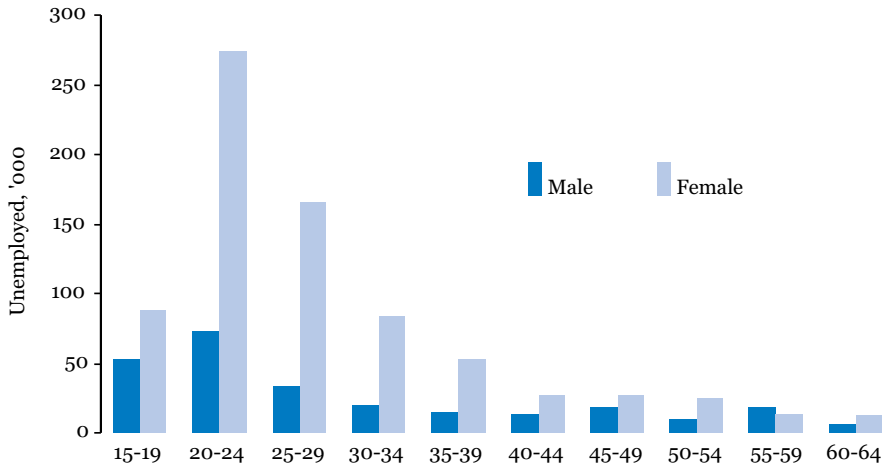
Table 4.3: **Number of unemployed by gender age groups, 1999**

	Urban		Rural		
Age group	Male	Female	Male	Female	Total
15-19	52,729	87,643	60,854	68,991	270,217
20-24	72,824	274,395	98,702	87,157	533,078
25-29	32,820	165,447	36,672	56,740	291,679
30-34	20,177	83,603	21,667	60,480	185,927
35-39	15,055	53,382	27,114	44,596	140,147
40-44	13,554	27,585	37,524	34,501	113,164
45-49	18,197	26,593	11,685	32,121	88,596
50-54	9,889	24,960	14,110	17,881	66,840
55-59	18,658	13,217	15,833	16,527	64,235
60-64	6,160	11,793	8,242	20,544	46,739
Total	**260,063**	**768,618**	**332,403**	**439,538**	**1,800,622**

Source: *1998/99 Labour Force Survey Report*

There is an alarming difference in the unemployment level of women (15-39 years) in urban areas. As can be seen from figure 4.1 the number of the unemployed women, aged 20-24 years, is over three times that of young men of the same age group.

Figure 4.1: **The Female unemployment bias in urban areas, 1999**



Source: *1998/99 Labour Force Survey Report*

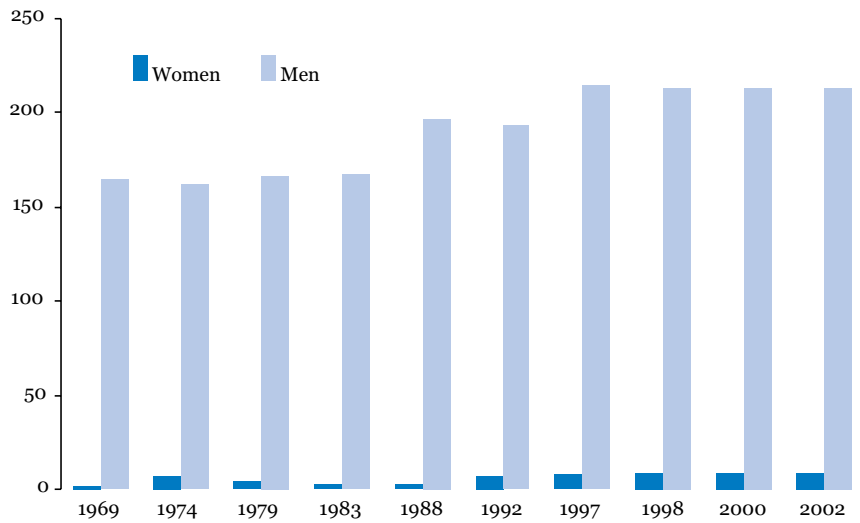
The number of the unemployed women, aged 20-24 years, is over three times that of young men of the same age group.

Political participation

How does the participation of women in politics and public service compare to that of men in Kenya?

Women participation in decision-making at the household and national level has increasingly been found to be an important ingredient in socio-economic development. Although women participation is increasing, it remains far below that of men as is evident in Figure 4.2 and Table 4.5. The figure below quite evidently shows that women membership in Parliament is still considerably lower compared to that of men.

Figure 4.2: **Parliamentarians by gender, 1969-2002**



Source: *Analytical Report on Gender Dimensions, Population Census, 1999*

Table 4.5 also demonstrates that women's presence in other elective positions such as local authority offices is still low, compared to that of men. In all local authority posts, men's representation is remarkably higher than that of their female counterparts thus reinforcing the low position that women occupy in representative, decision-making and redistributive offices in the country.

Table 4.4: **Local authorities composition by gender, 1992 and 1998**

	Men		Women	
Authority	1992	1998	1992	1998
County	1,005	2,254	24	201
Municipal	339	544	15	52
City council	51	62	4	7
Town council	391	532	7	40
Total	**1786**	**3,392**	**50**	**300**

Source: *Analytical Report on Gender Dimensions, Population Census, 1999*

Since women's presence in Parliament and local authorities is an outcome of a preceding process it would be important to establish how many women offered themselves for election. Table 4.6 presents information on women who stood for election in 2002 for both parliament and civic authorities.[11] It can be seen that the proportion of women who stood for election and actually got elected was still low. Of the 44 women who stood for election to Parliament in 2002 only 9 (about 20%) were voted in. (The same ratio however applies for male candidates in civic and parliamentary election by region, 2002). Of the 2,043 elected councillors in the last election only 97 (about 5%) are women.

Table 4.5: **Women's candidature and election by region and post, 2002**

	Parliament				Civic			
	Candidates		Elected		Candidates		Elected	
Province	Male	Female	Male	Female	Male	Female	Male	Female
Nairobi	54	8	7	1	305	18	54	1
Central	165	7	27	2	902	42	211	8
Coast	110	4	20	1	672	44	173	11
Eastern	191	10	34	2	1,136	78	307	20
North Eastern	54	0	11	0	270	2	112	1
Nyanza	150	3	32	0	1,068	71	353	19
Rift Valley	169	9	47	2	1,657	68	645	21
Western	98	3	23	1	615	59	188	16
Total	**991**	**44**	**201**	**9**	**6,625**	**382**	**2,043**	**97**

Source: *Gender Monitoring Report, AWC Features Service, 2003, as sourced from ECK data*

In the 2002 election the proportion of women who stood for election and actually got elected was still low.

As mentioned above, holders of public offices in Kenya may, on given situations, offer services based on one's socio-economic characteristics. The status of women in Kenya, and the degree to which they enjoy their freedoms and rights, depends a great deal on

Table 4.6: **Administrative and diplomatic ranks by gender**

	Men			Women		
District	1998	2000	Mar-02	1998	2000	Mar-02
Provincial Commissioners	8	7	7	0	1	1
Permanent Secretaries	26	15	14	4	3	4
District Commissioner	68	67	65	1	3	5
Deputy Secretary	69	71	72	13	14	14
District Officers	644	647	644	68	82	85
Ambassadors/H.Commissioners	31	28	28	2	5	6

Source: *Analytical Report on Gender Dimensions, Population Census, 1999*

[12] For more on the gender perspective on the 2002 election see *African Woman and Child Feature Service*, Gender Monitoring Report of 2002 General Election in Kenya. Nairobi (May 2003).

how well they are represented in senior positions of influence. Table 4.7 shows the composition, by gender, of senior positions in government and in the diplomatic service. It is evident that women have been poorly represented as Permanent Secretaries, District Commissioners and District Officers. Until 2000, there was no woman provincial commissioner and the ratio of women to men district commissioners was 1:13 as of March 2002.

Composition of the bench and bar

An important dimension of gender inequalities is the number of women in Kenya's judicial service and the number of women lawyers being admitted to the bar. This information is presented in Table 4.7 below. It shows, for instance, that Kenya has never had a woman Chief Justice and only recently got a woman Judge in the Appeal Court in 2002, against 10 of them who are men. As of March 2002, there were twice as many men lawyers as there were women ones.

Table 4.7: **Composition of judicial service and legal sector by gender**

	Men			Women		
District	1996	1998	2002	1996	1998	2002
Chief Justice	1	1	1	-	-	-
Judge Court judge	10	9	10	-	-	1
Commissioner of Assize	26	24	29	4	5	6
Chief magstrate	-	6	5	-	4	3
Senior principal magistrate	5	6	6	4	4	4
Senor resident magistrate	5	7	8	3	3	4
Magistrate	27	25	27	13	14	16
District magistrate	72	58	61	24	28	31
Chief Kadhis	14	17	17	-	-	-
Total	**237**	**225**	**236**	**87**	**99**	**107**
Lawyers*	3249	3255	3193	1295	1409	1531

Source: *Analytical Report on Gender Dimensions, Population Census, 1999*
** Figures for the periods 1998, 2000 and March 2002*

Socio-economic outcomes

How wide are disparities in gender development in Kenya?

Education

On education, evidence shows that women are more disadvantaged both in terms of access and outcomes. The enrolment rates for women (both net and gross) are lower than those of men. Illiteracy among females is almost twice (21%) that of males (14%). This inequality also takes a regional dimension. Thus, while 91.8 % of the female in the Nairobi are literate, only 6.4% are literate in North Eastern Province. For men, the

corresponding figures for Nairobi and North Eastern Provinces are 94.2% and 29.5%, respectively. The proportion reported as having no education is higher in women than in men. Regions show wide disparities across genders; a staggering 93% of women in North Eastern Province reported as having no education at all.

Table 4.8: **Literacy by gender and region, %**

	Literacy		No education at all	
Province	Female	Male	Female	Male
Nairobi	91.8	94.2	5.6	4.9
Central	91.1	94.4	2.6	1.5
Coast	65.6	88.2	29.6	10.0
Eastern	81.6	91.7	8.4	3.5
N. Eastern	6.4	29.5	93.4	71.1
Nyanza	79.8	89.4	7.1	1.8
Rift Valley	73.2	83.9	17.4	10.2
Western	77.4	84.4	9.0	3.4
Kenya	**78.5**	**88.1**	**21.6**	**13.8**

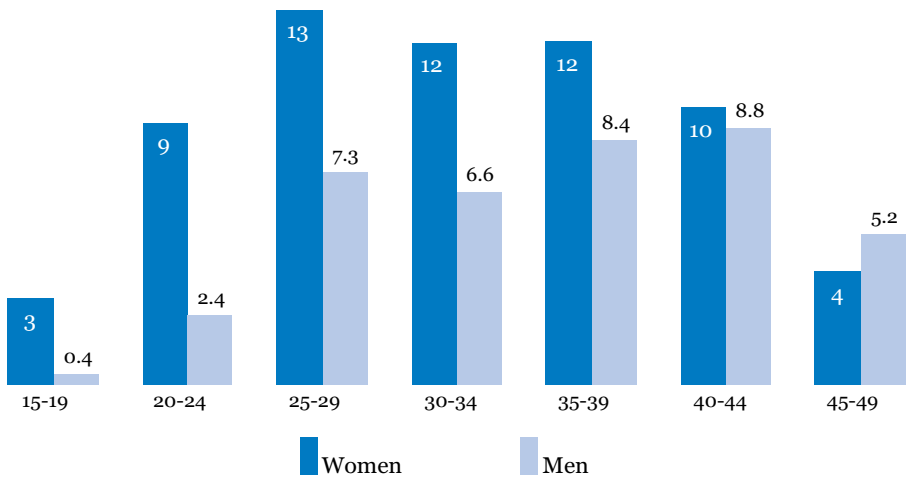
Source: 2003 Kenya Demographic and Health Survey

HIV/Aids

Like in many other development or socio-economic outcomes, women can be disadvantaged if they are not fully empowered or informed. The prevalence of HIV/Aids is one of such outcomes that has been higher among women, especially middle aged women, as opposed to men. Figure 4.3 shows the percentage of women and men who are infected with HIV. The high percentage of women with HIV compared to men in nearly all age groups suggests that women are still at a higher risk of contracting the virus.

A staggering 93% of women in North Eastern province reported as having no education at all.

Figure 4.3: **HIV prevalence by age group and sex, 2003**



Source: *Kenya Demographic and Health Survey*

The foregoing reviews point to the disadvantage of women in a wide range of social, political and economic spheres. Their limited participation in key decisions-making bodies in the country may limit their access to education, employment and other services in the country. The Gender Related Index, developed by UNDP to measure the degree of gender inequality, was in 2003 estimated at 0.521. A GDI value of 0.521 places Kenya in the middle human development category. A GDI value of closer to one signifies achievement of equality for women and men. In terms of regions, the GDI estimates show wide disparities with Nairobi showing the highest gender inequalities. The least gender development is presented in Table 4.9. The table shows the life expectancy of both men women for the country and the provinces. Ironically, despite the disadvantaged position of women in the country, they have comparatively higher life expectancy than men.

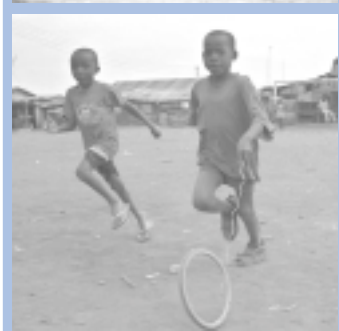
Table 4.9: **Gender development by provinces 2003**

Province	Gender-Related Development Index (2003)	Life Expectancy, 1999	
		Female	Male
Nairobi	0.626	54.1	55.3
Central	0.597	63.0	64.4
Coast	0.464	50.8	52.7
Eastern	0.512	61.8	62.8
N.Eastern	0.454	53.0	51.8
Nyanza	0.429	43.7	47.7
Rift Valley	0.526	57.5	59.5
Western	0.466	51.3	53.5
Kenya	**0.521**	**54.1**	**55.3**

Source: *Kenya Human Development Report, 2003; Housing and Population Census Analytical Reports, 1999*

Gender violence

An increasingly important indicator of the level of gender development in the country is the presence or absence of gender violence. There has been increasing concern in the country on violence particularly against women, which in many ways is a violation of human rights. Table 4.10 shows that 25% of the women in Kenya experienced some form of violence twelve months preceding the 2003 KDHS, and about 49% since they were 15 years of age . The data also show that the violence differs substantially among regions. Violence is highest in Western, Nyanza. This in a way confirms the low GDI values for those areas.



Violence against women greatly depends on the attitudes of both men and women towards this action. Gender violence is sometimes strongly embedded in, or rationalised, by culture. As can be seen from table 4.10 two out of every three women think that wife beating or hitting is justified on the basis of at least one of the following reasons: wife burns food, argues with her husband, goes out without telling the husband, neglects their children or refuses to have sexual relations with husband.

Table 4.10: **Gender violence and perceptions by region, %**

Province	Women who have experienced violence		Womens' own attitude toward women's violence*
	Since age 15	12 months preceding survey	
Nairobi	50.7	19.0	42.6
Central	44.0	16.6	61.0
Coast	30.2	13.8	69.6
Eastern	36.5	20.0	65.6
N.Eastern	50.8	22.5	77.1
Nyanza	59.6	35.9	79.2
Rift Valley	46.4	28.1	73.2
Western	72.8	35.9	74.4
Kenya	**48.9**	**25.1**	**67.8**

Source: *Kenya Demographic and Health Survey, 2003*
** If wife beating can be justified when wife at least burns food, argues with husband, goes out without telling husband, neglects children or refuses to have sex with husband*

North Eastern, Nyanza, Rift Valley and Western Provinces have the leading attitudes with about 75% of women there agreeing that wife beating can be justified; nationally that rate is over 67%. On the overall, two-thirds of both men and women agree that one of these factors can provide justification for wife beating. Such attitudes need to be changed if women in Kenya are to enjoy their full potential, rights and freedoms.

On the overall, two-thirds of both men and women agree that some selected factors can provide justification for wife beating.

Annex

Annex 1:

Other measures of inequality

Though widely used, the gini coefficient has a number of weaknesses and is therefore not a perfect measure of inequality. Perhaps its greatest weakness is that it is not decomposable or additive across groups. That is, the total Gini of the society is not equal to the sum of the Ginis for the sub-groups. A more fundamental weakness of the Gini and other measures of inequality (e.g. the Theil Index) is that they are unable to handle other dimensions of inequality such as differences among countries, regions and even intra-household differences. In other words most of the measures of inequality are incapable of handling the extensive view of inequality.

A problem with the more extensive view of inequality is to find adequate ways of measuring it given the subjectivity of the concepts used. This explains why the measurement of inequality is, in most cases, about the measurement of income inequality and rarely investigates other aspects of inequality. Particularly affected are the social and political dimensions of inequality. Examples include social exclusion, vulnerability or powerlessness. There are at the same time serious methodological and data constraints on measuring inequality between men and women. Only recently, in 1995, the United Nations Development Programme (UNDP) developed a gender-related developed index (GDI) and the Gender Empowerments Measures (GEM) as measures of gender in development. GDI is adopted from the Human Development Index (HDI).

Box A1: **Non-income measures of inequality**

Human Development Indicators

The Gender-related Development Index (GDI) is derived from the Human Development Index (HDI) introduced in the UNDP 1990 Human Development Report. The HDI is derived from a simple average of three components: longevity, educational attainment or level of knowledge and decent living standards. Longevity is measured by life expectancy at birth, while knowledge is measured by adult literacy rates and combined enrolment rates. Decent living standards are measured by per capita income. The GDI uses the three variables of the HDI to measure gender disparities. Simply, GDI provides summary information on gender inequality.

Subjective measures of inequality

A number of normative approaches of measuring inequality and poverty have emerged in recent years. One such approach is the famous Sen's capability approach, named after the Nobel laureate Amartya Sen. The capability approach advocates that we focus on people's capabilities when making normative evaluations, such as those involved in poverty measurement, cost benefit analysis, efficiency evaluation, social justice issues, development ethics and inequality analysis. But what are these capabilities? Capabilities are people's potential functioning. Functioning are being and doings. Examples are being well fed, taking part in the community, being sheltered, relating to other people, working on the labour market, caring for others and being healthy. According to Sen, all capabilities together correspond to the overall freedom to leave the life that a person has reason to value.

Annex 2:

Definition of terms

Labour participation rate: This is one of the most frequently used measures of the population in the labour force. It is computed as the proportion of the economically active population (employed and unemployed between ages 15 and 64 but active) to the working age population.

Unemployment rate: The unemployment rate is usually computed as the proportion of unemployed persons (persons or working age not working but looking for a job) to the total labour force. They relevant ages here are between 15 and 64.

Employment rate: The employment rate is computed as the proportion of employed persons to the total labour force. The employed refer to people who report to either hold a job or undertaken an activity for pay, profit or family gain. It includes employment both in the formal and informal sector.

Child Mortality: Child mortality is a strong indicator of a country's level of socio-economic welfare and standard of living. There are several indicators of child mortality. The three most important are: Neonatal mortality, Infant Mortality and Under-five mortality.

(i) Neonatal mortality: Is the probability of dying within the first month of life
(ii) Infant mortality: Is the probability of dying before the first birthday
(iii) Under-five mortality: Is the probability of dying before the fifth birthday

Mortality rates are usually calculated on the basis of the Brass method which is an indirect technique that uses the mean number of children ever born and the proportion of these children who have died, both tabulated by five year age group of women aged 15-49 years. The techniques converts these data into probabilities of dying by taking into account both the mortality risks to which the children are exposed and their length of exposure to the risk of dying.

Anthropometric measures: These are standard indicators of physical growth that describe the nutritional status of children. There are three important such measures:

(i) Height-for-age
(ii) Weight–for-height
(iii) Weight-for -age

Each of the three nutritional indicators is usually expressed in standard deviations (Z-Scores) from the mean of the reference population. Deviations of the indicators below 2 standard deviation (SD) indicate that the children are moderately and severely affected, while deviations below 3 SD indicate that the children are severely affected.

Literacy rate: UNESCO defines a literate person as one who can read and write, with understanding, a short simple sentence on one's everyday life. The literacy rates reported in this volume are based on surveys in which respondents are asked whether

they are able to read and write. Those who claim to be able are then subjected to a literacy test and the proportion of those who can and cannot is tallied.

Gross and Net Enrolment Rate: Gross enrolment is a measure of participation in the schooling system. It is the proportion of the total pupils in a particular level of education irrespective of age, to the total population of the corresponding school age. The gross primary school enrolment ratio is the number of pupils in primary school divided by total population of the primary school going age (6-13 years). The GER is commonly used to compare educational performance and outcomes across districts, provinces, urban and rural areas, and between sexes. It can be more than 100% which is usually reflective of the presence of repeaters and late starters. The net enrolment rate is the ratio of pupils within the ages 16-13 in primary school to the school age population for primary school.

Gini coefficient: The gini index measures the extent to which the distribution of income (or in some cases consumption) deviates from a perfectly equal distribution. A Lorenz curve plots the cumulative percentages of the total income received against the cumulative number of receipts, starting with the poorest individual or household. The gini index measures the area between the Lorenz Curve and a hypothetical line of absolute equality, expressed as a percentage of the maximum area under the line. The higher the gini-coefficient the greater is the degree between the high and the lower income households. A zero indicates that each household has an equal share of income. At the other extreme, 100 shows perfect inequality in the income distribution.

Inequality: Inequality concerns variations in living standards across a whole population. The textbook definition for inequality is 'the fundamental disparity that permits one individual certain material choices, while denying another individual those same choices'. It thus encompasses differences in opportunity and outcomes. Inequality is different from poverty because, while poverty focuses only those below a certain defined threshold level, inequality focuses on variations across a whole population.

Poverty: Poverty refers to a situation in which individuals cannot raise the income required to meet a given level of basic needs, usually over a period of one month. A poverty measure is an index that shows the magnitude of poverty in a society. It is usually based on a pre-determined poverty line expressed usually in monetary terms. The food poverty line for Kenya is the cost of consuming 2250 calories per day per adult, a figure based on the FAO recommendations. This was Kshs 927 per adult per month in rural areas and Kshs 1254 in urban areas. The absolute poverty line, which indicates a household inability to meet its entire basic requirement (food and non-food), was Kshs 1239 per month per adult in rural areas and Kshs 2648 in the urban areas.

HIV prevalence rates: the percentage of people in a give age group who are infected with a particular disease, say HIV/AIDS or malaria.

Human Development Index (HDI): This is an index which has been popularised by UNDP since 1990. It measures the average achievement in basic human development in one single index. The index is a composite index encompassing life expectancy, education attainment and standards of living as measured by per capita income. The

HDI value for a country shows how far that country has gone in attaining an average life expectancy of 85 years, access to education for all and a decent standard of life.

Gender-related Development Index (GDI): The Gender-related Development Index measures achievement in basic human development adjusted for gender inequality. GDI uses the same parameters as the HDI, namely life expectancy, education attainment and standards of living. A GDI value close to one signifies achievements of equality for men and women.

Human Poverty Index (HDI): The human poverty, also popularised by UNDP since 1990, measures the extent of human deprivation. Rather than measure poverty by income, the HPI uses indicators of the basic dimensions of deprivation: illiteracy, malnutrition among children, early death, poor health care and poor access to safe drinking water. A HPI value of say 35 implies that 35% of the population suffers from human poverty.

Life expectancy: This refers to the total number of years one is expected to live given the socio-economic and political environment one lives in.

Deciles: Refers to a segment of a given population when it is divided into 10 equal parts.

Annex Table 1: **Demographic profiles of districts**

District	Population			% Shares		Pop
	Males	Female	Total	Males	Female	Density
Nairobi	1,153,828	989,426	2,143,254	53.8	46.2	3,079
Kiambu	369,101	374,909	744,010	49.6	50.4	562
Kirinyaga	226,665	230,440	457,105	49.6	50.4	309
Murang'a	164,670	183,634	348,304	47.3	52.7	375
Nyandarua	235,052	244,850	479,902	49.0	51.0	145
Nyeri	322,521	338,635	661,156	48.8	51.2	197
Thika	323,479	322,234	645,713	50.1	49.9	329
Maragua	187,128	200,841	387,969	48.2	51.8	447
Kilifi	258,505	285,798	544,303	47.5	52.5	114
Kwale	240,764	255,369	496,133	48.5	51.5	60
Lamu	37,553	35,133	72,686	51.7	48.3	12
Mombasa	363,552	301,466	665,018	54.7	45.3	2,898
Taita Taveta	123,329	123,342	246,671	50.0	50.0	14
Tana River	90,613	90,288	180,901	50.1	49.9	5
Malindi	139,340	142,212	281,552	49.5	50.5	36
Embu	136,499	141,697	278,196	49.1	50.9	381
Isiolo	51,214	49,647	100,861	50.8	49.2	4
Kitui	243,045	272,377	515,422	47.2	52.8	25
Makueni	372,639	398,906	771,545	48.3	51.7	97
Machakos	442,891	463,753	906,644	48.8	51.2	144
Marsabit	60,940	60,538	121,478	50.2	49.8	2
Mbeere	81,885	89,068	170,953	47.9	52.1	82
Meru Central	248,027	250,853	498,880	49.7	50.3	167
Moyale	26,559	26,920	53,479	49.7	50.3	6
Mwingi	141,778	162,050	303,828	46.7	53.3	30
Meru North	293,385	310,665	604,050	48.6	51.4	153
Tharaka	48,195	52,796	100,992	47.7	52.3	64
Nithi	100,226	105,225	205,451	48.8	51.2	188
Garissa**	206,117	186,393	392,510	52.5	47.5	9
Mandera**	131,062	119,310	250,372	52.3	47.7	9
Wajir**	171,318	147,943	319,261	53.7	46.3	6
Gucha	221,249	239,690	460,939	48.0	52.0	689
Homa Bay	136,728	151,812	288,540	47.4	52.6	249
Kisii C	234,448	257,338	491,786	47.7	52.3	758
Kisumu	248,735	255,624	504,359	49.3	50.7	549
Kuria	73,989	77,898	151,887	48.7	51.3	261

Annex Table 1: **Demographic profiles of districts** contd...

District	Population			% Shares		Pop
	Males	Female	Total	Males	Female	Density
Migori	247,131	267,766	514,897	48.0	52.0	257
Nyamira	239,851	258,251	498,102	48.2	51.8	556
Rachuonyo	145,793	161,333	307,126	47.5	52.5	325
Siaya	220,997	259,187	480,184	46.0	54.0	316
Suba	75,167	80,499	155,666	48.3	51.7	147
Bondo	113,583	125,197	238,780	47.6	52.4	203
Nyando	146,635	153,295	299,930	48.9	51.1	270
Baringo	130,054	134,924	264,978	49.1	50.9	31
Bomet	185,999	196,795	382,794	48.6	51.4	203
Keiyo	71,147	72,718	143,865	49.5	50.5	100
Kericho	206,353	199,701	406,054	50.8	49.2	222
Kajiado	237,821	230,672	468,493	50.8	49.2	19
Koibatek	69,236	68,927	138,163	50.1	49.9	60
Lakipia	161,698	322,187	322,187	50.2	49.8	35
Marakwet	69,068	71,561	140,629	49.1	50.9	89
Nakuru	598,703	588,336	1,187,039	50.4	49.6	164
Nandi	290,003	288,748	578,751	50.1	49.9	200
Narok	184,231	181,519	365,750	50.4	49.6	24
Samburu	69,378	74,169	143,547	48.3	51.7	7
Trans Mara	83,773	86,818	170,591	49.1	50.9	60
Trans Nzoia	286,836	288,826	575,662	49.8	50.2	231
Turkana	224,548	226,312	450,860	49.8	50.2	7
Uasin Gishu	315,932	306,773	622,705	50.7	49.3	189
West Pokot	151,506	156,580	308,086	49.2	50.8	34
Buret	162,703	154,179	316,882	51.3	48.7	332
Bungoma	425,957	450,534	876,491	48.6	51.4	424
Busia	174,368	196,240	370,608	47.0	53.0	330
Mt. Elgon	66,783	68,250	135,033	49.5	50.5	143
Kakamega	290,343	313,079	603,422	48.1	51.9	433
Lugari	105,273	110,647	215,920	48.8	51.2	322
Teso	87,926	93,565	181.491	48.4	51.6	325
Vihiga	232,720	266,163	498,883	46.6	53.4	886
Butere/Mumias	227,043	249,885	476,928	47.6	52.4	508

** *Data sample too limited to yield reliable estimates. In some cases data applies for urban regions only*

Annex Table 2: **Income distribution by districts***

District	Household Income		Household Expenditure	
	Highest 10%	Bottom 10%	Highest 10%	Bottom 10%
Kiambu	37.7	5.0	35.4	3.7
Kirinyaga	5.6	4.8	5.2	4.3
Murang'a	10.4	5.2	10.2	9.8
Nyandarua	7.9	4.9	7.6	4.9
Nyeri	4.0	11.7	4.3	7.6
Thika	-	-	-	-
Maragua	-	-	-	-
Kilifi	3.1	10.8	3.0	8.9
Kwale	1.3	2.0	1.3	3.1
Lamu	5.1	3.0	5.1	2.9
Mombasa	0.9	17.7	0.9	17.9
Taita Taveta	11.0	3.7	12.2	4.9
Tana River	8.4	24.9	5.2	39.6
Malindi	-	-	-	-
Embu	13.5	8.8	10.2	9.0
Isiolo	12.1	9.3	12.1	9.0
Kitui	17.2	5.0	18.0	3.8
Makueni	4.5	5.2	5.6	6.0
Machakos	2.9	15.9	3.4	17.0
Meru	6.3	8.3	5.4	8.7
Tharaka - Nithi	-	20.0	0.0	20.0
Garissa**	-	17.9	0.0	22.6
Mandera**	-	14.3	0.0	28.6
Wajir**	12.5	37.5	0.0	50.0
Kisii	12.7	9.3	14.1	10.5
Kisumu	8.2	8.3	7.5	9.1
Siaya	16.2	0.8	17.1	0.6
Homa Bay	14.3	4.5	17.2	4.7
Migori	20.6	3.3	21.5	5.2
Nyamira	14.4	5.3	15.0	3.7
Kajiado	2.1	19.1	2.2	11.1
Kericho	4.6	8.6	3.7	7.5
Laikipia	17.5	4.8	21.9	3.2

Annex Table 2: **Income distribution by districts** contd...

District	Household Income		Household Expenditure	
	Highest 10%	Bottom 10%	Highest 10%	Bottom 10%
Nakuru	7.9	6.8	6.0	7.6
Narok	12.2	12.4	12.8	15.0
Trans Nzoia	15.4	6.1	14.1	6.8
Uasin Gichu	9.6	13.8	11.3	10.5
Marakwet	5.6	6.6	7.8	3.6
West Pokot	19.7	1.3	39.6	2.0
Bungoma	10.0	8.2	11.1	6.1
Busia	27.4	3.5	18.2	2.8
Kakamega	13.9	6.6	11.2	5.0

Note: *Income and expenditure data t district levels is seldom accurate because the small sizes occasioned by non-response. The figures are therefore only indicative.*

* *Data only available for 44 disricts*

** *Data sample too limited to yield reliable estimates. In some cases data applies for urban regions only*

Annex Table 3: **Employment rates, 1999**

District	Employment		Unemployment Rates			Employment		
	With Pay	Without pay	Male	Female	Total	Male	Female	Total
Nairobi	67.1	24.5	14.5	25.0	10.1	85.5	75.0	81.5
Kiambu	40.7	44.1	12.4	13.5	12.9	87.6	86.5	87.1
Kirinyaga	25.6	76.3	3.3	4.3	3.8	96.7	95.7	96.2
Muranga	17.8	68.0	5.9	5.6	4.2	94.1	94.4	95.8
Nyandarua	15.4	70.7	4.5	4.0	2.9	95.5	96.0	97.1
Nyeri	25.0	66.3	3.0	2.9	5.3	97.0	97.1	94.7
Thika	40.3	49.1	4.8	5.9	9.6	95.2	94.1	90.4
Maragua	17.7	64.3	8.7	10.5	5.7	91.3	89.5	94.3
Kilifi	18.9	59.2	11.7	13.3	12.6	88.3	86.7	87.4
Kwale	16.7	65.2	11.2	14. 5	12.9	88.8	85.5	87.1
Lamu	22.0	55.4	5.8	29.6	15.6	94.2	70.4	84.4
Mombasa	57.4	27.5	17.3	32.7	22.8	82.7	67.3	86.7
Taita Taveta	26.1	56.4	7.5	11.6	9.4	92.5	88.4	77.2
Tana River	12.4	72.7	6.3	20.9	12.6	93.7	79.1	90.6
Malindi	23.9	54.3	9.1	17.8	13.3	90.9	82.2	87.4
Embu	27.0	66.1	4.4	7.0	5.7	95. 6	93.0	94.3
Isiolo	18.2	61.5	8.6	19.2	13.0	91.4	80.8	87.0
Kitui	17.0	60.9	4.5	4.8	4.7	95.5	95.2	95.3
Makueni	20.9	46.5	8.8	14.2	11.6	91.2	85.8	86.1
Machakos	25.7	42.8	10.5	17.3	13.9	89.5	82.7	88.4
Marsabit	9.7	80.9	4.8	20.6	10.3	95.2	79.4	89.7
Mbeere	-	-	6.3	7.7	7.0	93.7	92.3	93.0
Meru Central	-	-	4.4	6.6	5.5	95.6	93.4	94.5
Moyale	-	-	9.1	33.6	18.2	90.9	66.4	81.8
Mwingi	-	-	4.7	6.0	5.5	95.3	94.0	94.5
Tharaka	-	-	5.4	7.4	6.5	94.6	92.6	93.5
Nithi	22.0	70.5	4.8	5.9	5.3	95.2	94.1	94.7
Garissa**	7.5	37.8	16.6	53.6	28.4	83.4	46.4	71.6
Mandera**	8.4	80.4	6.8	26.5	13.1	93.2	73.5	86.9
Wajir**	6.1	114.4	8.8	28.6	15.7	91.2	71.4	84.3
Gucha	9.8	60.6	-	-	-	-	-	-
Homa Bay	9.6	67.0	7.7	6.5	7.1	92.3	93.5	92.9
Kisii C.	13.4	58.9	7.7	6.5	7.1	92.3	93.5	92.9
Kisumu	27.7	44.2	12.9	18.0	15.4	87.1	82.0	84.6

Annex Table 3: **Employment rates, 1999** contd...

District	Employment		Unemployment Rates			Employment		
	With Pay	Without pay	Male	Female	Total	Male	Female	Total
Kuria	9.6	66.1	2.9	4.3	3.7	97.1	95.7	96.3
Migori	13.6	59.1	7.0	9.5	8.3	93.0	90.5	91.7
Nyamira	14.3	58.7	6.8	5.0	-	-	-	-
Rachuonyo	11.6	59.4	8.9	8.2	8.5	91.1	91.8	91.5
Siaya	11.4	69.5	5.3	5.6	5.5	94.7	94.4	94.5
Suba	15.5	55.0	7.7	11.5	9.7	92.3	88.5	90.3
Bondo	14.4	55.6	9.5	12.5	11.1	90.5	87.5	88.9
Nyando	19.0	51.4	10.2	11.8	11.0	89.8	88.2	89.0
Baringo	15.2	56.1	5.5	10.7	8.1	94.5	89.3	91.9
Bomet	11.4	63.2	5.1	4.7	4.9	94.9	89.3	95.1
Keiyo	18.7	60.8	4.3	10.5	7.2	95.7	89.5	94.1
Kericho	27.2	54.2	4.9	10.5	6.2	95.1	92.2	93.8
Kajiado	28.5	54.8	9.0	16.4	12.2	91.0	83.6	87.8
Koibatek	22.5	50.8	6.2	12.4	9.2	93.8	87.6	90.8
Laikipia	25.2	58.6	7.0	9.4	8.1	93.0	90.6	91.9
Marakwet	11.2	66.4	3.9	4.8	4.4	96.1	95.2	95.6
Nakuru	32.0	50.2	8.4	11.8	10.0	91.6	88.2	90.0
Nandi	22.6	49.0	5.1	13.3	8.8	94.9	86.7	91.2
Narok	12.7	64.3	4.7	12.6	8.2	95.3	87.4	91.8
Samburu	9.4	63.9	9.7	21.2	14.7	90.3	78.8	85.3
Trans Mara	9.5	67.4	5.6	8.1	6.9	94.4	91.9	93.1
Trans Nzoia	24.6	46.5	7.6	12.8	10.0	92.4	87.2	90.0
Turkana	6.4	84.2	7.5	26.7	16.2	92.5	73.3	83.8
Uasin Gichu	30.0	39.3	10.4	20.0	14.5	89.6	80.0	85.5
West Pokot	7.2	76.2	6.1	10.8	8.4	93.9	89.2	91.6
Buret	32.6	50.3	5.5	6.4	5.9	94.5	93.6	94.5
Bungoma	14.0	56.8	4.8	6.3	5.6	95.2	93.7	94.4
Busia	11.2	65.9	5.9	6.1	6.0	94.1	93.9	94.0
Mt. Elgon	8.8	65.8	2.6	4.0	3.3	97.4	96.0	96.7
Kakamega	16.8	59.7	7.2	8.1	7.7	92.8	91.9	92.3
Lugari	15.7	57.8	6.9	9.7	8.3	93.1	90.3	91.7
Teso	12.8	67.1	3.7	5.8	4.8	96.3	94.2	95.2
Vihiga	14.7	55.4	10.7	11.5	11.1	89.3	88.5	88.9
Butere/Mumias	15.7	63.9	6.1	6.7	6.4	93.9	93.3	93.6
Total			**14.5**	**25.0**	**10.1**	**91.6**	**88.1**	**89.9**

** *Data sample too limited to yield reliable estimates. In some cases data applies for urban regions only*

Annex Table 4: **Access to education by district**

Districts	Number of Schools	Number of Teachers	Pupil-Teacher Ratio	Gross enrolment rate Secondary (2002)			Gross Enrolment Rate Primary (2003)		
				Male	Female	Total	Male	Female	Total
Nairobi	191	4,030	48.1	7	3	5	86.5	50.6	62.0
Kiambu	243	3,536	38.8	48	48	48	96.1	95.9	96.0
Kirinyaga	184	2,934	32.7	28	38	33	106.6	108.0	107.3
Muranga	208	2,881	32.6	449	53	46	115.4	116.0	115.7
Nyandarua	311	3,577	36.8	30	31	30	112.3	114.7	113.5
Nyeri	380	4,596	31.9	40	40	40	106.6	108.0	107.3
Thika	245	3,146	42.6	37	34	36	93.0	90.9	91.9
Maragua	184	2,865	39.1	41	43	42	119.6	122.7	121.1
Kilifi	231	2,533	49.2	14`	12	13	91.6	75.7	83.7
Kwale	274	2,481	43.3	12	10	11	97.3	79.7	88.6
Lamu	66	518	31.4	13	12	13	101.8	97.9	99.9
Mombasa	86	1,422	43.7	8	6	7	64.0	61.6	62.8
Taita Taveta	178	1,781	35.2	28	27	27	109.4	108.4	108.9
Tana River	116	809	29.5	10	8	9	58.7	44.6	51.9
Malindi	101	1,185	54.0	9	4	6	83.3	68.3	78.4
Embu	140	2,155	28.7	39	45	42	109.2	109.1	109.2
Isiolo	64	622	25.9	10	5	7	71.6	65.3	68.5
Kitui	603	4,476	36.4	84	82	83	124.3	123.9	124.1
Makueni	843	6,851	36.4	31	31	31	124.7	121.1	122.9
Machakos	796	7,209	37.8	32	29	31	126.0	124.6	125.3
Marsabit	50	444	36.1	5	6	5	61.0	48.9	55.0
Mbeere	211	1,734	29.5	29	25	27	110.3	116.0	113.1
Meru Central	324	4,040	25.4	23	24	24	102.7	104.1	103.4
Moyale	24	247	49.6	5	6	5	93.8	63.8	79.2
Mwingi	352	2,733	38.0	40	37	38	122.2	124.0	123.1
Meru N	326	3,381	47.2	10	9	10	107.3	110.6	109.0
Tharaka	145	1,029	30.7	25	6	16	132.2	136.0	134.1
Nithi	230	2,087	24.0	-	-	-	-	-	-
Garissa**	49	342	61.3	5	1	3	10.9	6.3	8.8
Mandera**	64	439	56.4	16	9	13	31.8	15.8	24.4
Wajir**	69	441	42.5	4	3	4	16.8	10.5	14.0
Gucha	352	3,261	38.5	45	34	39	106.6	108.2	107.3
Homa Bay	313	2,247	41.6	19	17	18	137.7	129.0	133.4
Kisii C.	303	3,303	39.4	27	28	28	102.2	102.0	102.1
Kisumu	182	1,436	83.3	15	10	12	47.3	44.6	45.9
Kuria	133	969	48.3	20	14	17	127.7	121.5	124.6

Annex Table 4: **Access to education by district** contd...

Districts	Number of Schools	Number of Teachers	Pupil-Teacher Ratio	Gross enrolment rate Secondary (2002)			Gross Enrolment Rate Primary (2003)		
				Male	Female	Total	Male	Female	Total
Migori	404	3,370	46.8	18	11	14	125.1	125.1	130.1
Nyamira	389	4,062	32.4	34	31	33	106.1	104.7	105.4
Rachuonyo	326	2,495	46.6	16	7	12	150.1	121.3	122.8
Siaya	379	3322	44.9	21	17	19	124.3	121.3	122.8
Suba	169	1144	39.4	18	6	12	123.8	116.7	120.3
Bondo	243	1,849	38.9	24	15	19	125.4	125.0	125.2
Nyando	284	2,259	42.0	30	19	24	127.2	124.5	125.9
Baringo	357	3,499	21.1	19	17	18	102.9	99.9	101.4
Bomet	293	2,589	43.7	26	18	22	107.0	106.6	106.8
Keiyo	159	1629	30.4	32	14	23	138.9	141.8	140.3
Kericho	306	3,487	38.7	22	18	20	116.9	110.4	113.7
Kajiado	208	1,762	37.9	3	2	3	74.1	63.9	69.1
Koibatek	155	1,803	23.9	29	28	28	126.1	129.7	127.9
Laikipia	233	2,326	31.6	26	23	25	95.3	92.4	93.9
Marakwet	160	1,452	32.9	3	3	3	129.0	130.6	129.8
Nakuru	515	6,197	46.1	17	12	15	80.5	85.8	83.1
Nandi	546	5,049	33.7	22	20	21	117.4	116.3	116.8
Narok	289	1965	40.8	13	9	11	86.1	75.3	80.8
Samburu	105	682	35.3	14	4	9	77.0	57.7	67.5
Trans Mara	128	1,000	43.1	12	7	9	90.8	87.2	89.0
Trans Nzoia	259	3,474	49.0	19	17	18	107.1	107.2	107.2
Turkana	155	949	38.6	6	4	5	38.5	28.4	33.5
Uasin Gichu	331	3,390	43.4	20	19	19	74.5	74.6	74.6
West Pokot	246	1,707	42.6	9	5	7	112.9	82.9	97.8
Buret	210	2,364	39.6	28	34	31	117.4	115.1	116.2
Bungoma	472	6,049	48.4	29	25	27	129.7	82.9	97.8
Busia	230	2,338	46.6	18	15	16	115.2	112.9	114.0
Mt. Elgon	103	1,017	47.5	9	7	8	136.0	134.3	135.2
Kakamega	347	4,051	44.8	28	27	27	119.0	121.0	120.0
Lugari	114	1,627	43.4	21	27	24	123.7	127.5	125.6
Teso	116	1,134	46.8	20	18	19	120.3	111.6	115.9
Vihiga	340	3,939	40.4	34	41	37	122.2	122.6	122.4
Butere/Mumias	255	2,744	49.0	22	18	20	89.0	88.1	88.6

** *Data sample too limited to yield reliable estimates. In some cases data applies for urban regions only*

Annex Table 5: **Access to health and safe sanitaton by district**

District	Underweight children under 5 years (%)	HIV Prevalence rates (%) (2000)	People without access to proper health	People without access to clean drinking water
Nairobi	12.4	15.9	45.0	6.1
Kiambu	13.1	16.7	34.1	29.2
Kirinyaga	8.4	10.0	31.4	65.5
Murang'a	21.1	10.1	40.6	75.8
Nyandarua	19.7	10.0	47.9	54.6
Nyeri	12.3	10.7	62.5	36.8
Thika	-	16.7	-	-
Maragua	-	10.1	-	-
Kilifi	28.9	10.4	64.8	35.1
Kwale	26.2	9.4	45.1	33.9
Lamu	21.1	7.3	93.8	37.6
Mombasa	10.4	15.6	49.0	16.2
Taita Taveta	15.7	6.6	77.4	44.2
Tana River	31.7	2.8	76.6	73.6
Malindi	-	10.4	-	-
Embu	23.6	25.9	45.0	53.2
Isiolo	19.1	3.4	85.0	55
Kitui	45.5	5.6	86.5	86.2
Makueni	-	12.4	-	-
Machakos	24	12.4	80.9	62.1
Marsabit	34.9	3.6	75.1	83.9
Mbeere	-	25.9	-	-
Meru Central	33.6	26.2	51.6	42
Moyale	-	5.6	-	-
Mwingi	-	5.6	-	-
Meru North	-	26.2	-	-
Tharaka	-	26.2	-	-
Nithi	-	26.2	-	-
Garissa**	19.3	2.9	89.0	6.2
Mandera**	16.2	2.7	89.0	36
Wajir**	7.7	2.9	89.0	96
Gucha	-	11.3	-	-
Homa Bay	-	24.9	-	-
Kisii C	-	11.3	-	-
Kisumu	20.9	27.1	65.3	54.6

Annex Table 5: **Access to health and safe sanitaton by district** contd...

District	Underweight children under 5 years (%)	HIV Prevalence rates (%) (2000)	People without access to proper health	People without access to clean drinking water
Kuria	-	24.9	-	-
Migori	-	24.9	-	-
Rachuonyo	-	24.9	-	-
Siaya	22.3	24.9	64.0	36.9
Suba	-	24.9	-	-
Bondo	-	24.9	-	-
Nyando	-	27.1	-	-
Baringo	34.2	7.4	55.0	68.7
Bomet	-	11.9	-	-
Keiyo	-	3.7	-	-
Kericho	13.9	11.9	45.1	64.6
Kajiado	279	4.0	68.8	32.9
Koibatek	-	7.4	-	-
Laikipia	20.8	6.6	84.0	52.7
Marakwet	-	3.7	-	-
Nakuru	21.7	22.9	52.0	45.9
Nandi	26.1	6.9	60.8	40.1
Narok	28.2	3.9	71.0	52.5
Samburu	46.2	4.7	75.0	32.5
Trans Mara	-	3.9	-	-
Trans Nzoia	21	12.3	54.1	41.4
Turkana	34.2	3.7	75.0	59
Uasin Gishu	18.3	12.9	72.7	26.3
West Pokot	49.7	3.9	86.4	91.2
Buret	-	11.9	-	-
Bungoma	21.1	8.9	55.9	51.9
Busia	15.7	20.4	61.1	45.6
Mt. Elgon	-	11.9	-	-
Kakamega	29.6	10.0	71.9	38.2
Lugari	-	10.0	-	-
Teso	-	11.9	-	-
Vihiga	-	13.3	-	-
Butere/Mumias	-	10.0	-	-

** *Data sample too limited to yield reliable estimates. In some cases data applies for urban regions only*

Annex table 6: **Socio-economic outcomes**

District	Life expectancy 1999	Absolute poverty 1997	Human Poverty Index (HPI)	Human Development Index (HDI)
Nairobi	61.6	50.24	29.7	0.758
Kiambu	63.2	25.08	24.4	0.607
Kirinyaga	63.5	35.70	29.8	0.582
Murang'a	64.3	38.62	34.8	0.599
Nyandarua	65.1	33.34	32.7	0.593
Nyeri	63.4	31.05	30.5	0.625
Thika	-	-	-	-
Maragua	-	-	-	-
Kilifi	51	66.30	47.6	0.393
Kwale	49.5	60.55	46.4	0.329
Lamu	54.8	39.35	40.4	0.496
Mombasa	33.14	38.32	35.7	-
Taita Taveta	52.7	65.82	36.8	0.501
Tana River	47.6	34.22*	52.0	0.382
Malindi	-	-	-	-
Embu	55.76	64.5	33.2	0.606
Isiolo	51.6	-	41.7	0.522
Kitui	67.7	64.91	52.1	0.522
Makueni	67.2	73.51	-	-
Machakos	68.1	62.96	43.3	0.565
Marsabit	55.2	-	-	0.195
Mbeere	-	51.36	-	-
Meru	68.6	40.96	35.4	0.580
Moyale	-	-	-	-
Mwingi	-	-	-	-
Meru North	-	-	-	-
Tharaka	55.58	62.3	-	-
Nithi	55.58	62.3	-	-
Garissa**	52.7	54.43	40.5	0.441
Mandera**	52.7	76.81	42.5	0.427
Wajir**	50.6	64.40	51.3	0.346
Gucha	-	-	-	-
Homa Bay	46.5	77.49	-	0.375
Kisii C	57.22	52.1	35.6	0.490
Kisumu	-	-	48.2	0.490
Kuria	-	-	-	-

Annex table 6: **Socio-economic outcomes** cont.

District	Life expectancy 1999	Absolute poverty 1997	Human Poverty Index (HPI)	Human Development Index (HDI)
Migori	45.7	57.63	-	-
Nyamira	-	-	-	0.402
Rachuonyo	-	-	-	-
Siaya	45	58.02	44.4	0.390
Suba	-	-	-	-
Bondo	-	-	-	-
Nyando	-	-	-	-
Baringo	55.8	36.95	38.7	0.508
Bomet	57	61.80	-	0.547
Keiyo	-	-	-	-
Kericho	60.6	52.42	33.9	0.550
Kajiado	60.2	27.87	42.9	0.468
Koibatek	-	-	-	-
Laikipia	60.7	33.88	41.3	0.536
Marakwet	-	47.82	-	0.480
Nakuru	57.4	45.08	33.7	0.586
Nandi	64.15	56.7	34.0	0.510
Narok	57	52.17	47.0	0.453
Samburu	54.7	-	59.6	-
Trans Mara	-	56.59	-	-
Trans Nzoia	54.83	61.4	33.2	0.452
Turkana	42.3	-	48.9	0.198
Uasin Gichu	59.3	42.22	35.0	0.576
West Pokot	44	68.46	59.4	0.241
Buret	-	-	-	-
Bungoma	55.3	55.21	44.3	0.455
Busia	46.3	65.99	46.7	0.345
Mt. Elgon	-	-	-	-
Kakamega	56.2	56.99	39.0	0.509
Lugari	-	-	-	-
Teso	-	-	-	-
Vihiga	-	-	-	-
Butere/Mumias	-	-	-	-

** *Data sample too limited to yield reliable estimates. In some cases data applies for urban regions only*

Annex Table 7: **Employment by gender**

District / Province	Percentage		GAP (F-M)	F/M x100
	Female	Male		
Nairobi	31.7	68.3	-41.6	41.2
Kiambu	34.4	65.6	-32.7	52.3
Kirinyaga	36.1	63.9	-27.8	56.5
Murang'a	32.8	63.9	-34.5	48.7
Nyandarua	30.3	69.7	-39.4	43.4
Nyeri	33.5	66.5	-33.0	50.4
Thika	33.6	66.4	-32.7	50.7
Maragua	34.5	68.5	-37.1	45.9
Central	**33.7**	**66.3**	**-32.7**	**50.7**
Kilifi	23.5	76.5	-52.9	30.8
Kwale	20.2	79.8	-59.6	16.1
Lamu	13.8	86.2	-72.3	16.1
Mombasa	24.6	75.4	-50.8	32.6
Taita Taveta	26.3	73.7	-47.5	35.6
Tana River	19.0	81.0	-62.0	23.5
Malindi	21.0	79.0	-58.1	26.5
Coast	**23.3**	**76.7**	**-53.4**	**30.4**
Embu	35.2	64.8	-29.6	54.4
Isiolo	25.7	74.3	-48.5	34.7
Kitui	29.2	70.8	-41.7	41.1
Makueni	28.4	71.6	-43.2	39.6
Machakos	29.1	70.9	-41.7	41.1
Marsabit	24.1	75.9	-51.8	31.8
Mbeere	32.5	67.5	-35.1	48.1
Meru Central	32.8	67.2	-34.4	48.8
Moyale	21.0	79.0	-57.9	26.6
Mwingi	32.7	67.3	-34.6	48.6
Meru N.	27.5	72.5	-44.9	38.0
Tharaka	32.8	67.2	-34.4	48.8
Nithi	33.2	66.8	-33.6	49.7
Eastern	**30.2**	**69.8**	**-39.5**	**43.3**
Garissa**	16.7	83.3	-66.6	20.1
Mandera**	17.1	82.9	-65.7	20.7
Wajir**	20.3	79.7	-59.3	25.5
N/Eastern	**17.8**	**82.2**	**-64.3**	**21.7**
Gucha	30.3	69.7	-39.5	43.4
Homa Bay	28.2	71.8	-43.5	39.3
Kisii C.	28.2	71.8	-43.6	39.3
Kisumu	27.8	72.2	-44.5	38.4

Annex Table 7: **Employment by gender** contd...

District / Province	Percentage		GAP (F-M)	F/M x100
	Female	Male		
Kuria	26.9	73.1	-46.2	36.8
Migori	26.3	73.7	-47.4	35.7
Rachuonyo	28.4	71.9	-43.1	39.1
Siaya	28.1	71.9	-43.8	39.1
Suba	23.7	76.3	-52.5	31.1
Bondo	25.5	74.5	-48.9	34.3
Nyando	24.5	75.5	-51.0	32.4
Nyanza	**27.4**	**72.6**	**-45.1**	**37.8**
Baringo	29.9	70.1	-40.1	42.8
Bomet	25.4	74.6	-49.3	34.0
Keiyo	26.1	73.9	-47.9	35.5
Kericho	27.2	72.8	-45.7	37.3
Kajiado	28.0	72.0	-44.0	38.9
Koibatek	28.7	71.3	-42.6	40.3
Laikipia	27.7	72.3	-44.6	38.3
Marakwet	25.6	74.4	-48.7	34.5
Nakuru	29.9	70.1	-40.2	42.7
Nandi	26.4	73.6	-47.1	35.9
Narok	21.0	79.0	58.0	26.6
Samburu	26.6	73.4	-46.9	36.2
Trans Mara	24.6	75.4	-50.8	32.6
Trans Nzoia	29.4	70.6	-41.1	41.7
Turkana	29.2	70.8	-41.6	41.2
Uasin Gichu	26.8	73.2	-46.3	36.7
West Pokot	24.0	76.0	-52.0	31.6
Buret	27.8	72.2	-44.3	38.4
Rift Valley	**27.9**	**72.1**	**-44.3**	**38.6**
Bungoma	52.0	75.0	-49.9	33.4
Busia	25.0	75.0	50.0	33.3
Mt. Elgon	26.5	73.5	-46.9	36.1
Kakamega	28.8	71.2	-42.4	40.4
Lugari	25.7	74.3	-48.6	34.5
Teso	27.8	72.2	-44.4	38.5
Vihiga	32.5	67.5	-34.9	48.3
Butere/Mumias	23.6	76.4	-52.8	30.9
Western	**27.0**	**73.0**	**-46.1**	**36.9**

** *Data sample too limited to yield reliable estimates. In some cases data applies for urban regions only*

Annex Table 8: **Access to infrastructure**

District/Province	% of Household with electricity	% of Households with electricity connections	Total Telephone Connections	% of Households with access to piped water	Road Length	
					Total Areas Sq Kms	Road Density
Kiambu	0	N/A	8,438	49.1	1,332	0.88
Kirinyaga	4.0	4,540	3,852	31.0	1,478	0.62
Murang`a	0	N/A	1,372	9.1	930	0.85
Nyandarua	9.6	10,000	621	5.0	3,304	0.30
Nyeri	6.5	11,053	5,120	73.1	3,266	0.91
Thika	16.9	28,995	6,163	43.9	1,960	1.12
Maragua	3.5	3,203	481	16.3	1,065	0.59
Central	**-**	**-**	**-**	**26,047**	**40.8**	**-**
Kilifi	5.9	5,360	6,637	7.8	4,779	0.21
Kwale	13.0	12,000	3,608	24.9	8,260	0.81
Lamu	12.3	1,842	2,386	10.0	6,167	0.10
Mombasa	-	-	-	-	-	-
Taita Taveta	3.5	1,326	2,024	63.8	17,128	0.06
Tana River	0.5	180	453	4.7	38,782	0.02
Malindi	12.5	6,537	2,800	51.5	7,605	0.09
Coast	**-**	**-**	**17,908**	**23.9**	**-**	**-**
Embu	8.3	5,595	1,915	60,0	729	0.80
Isiolo	3.9	981	750	0	25,605	0.07
Kitui	-	2,000	798	6.1	20,402	0.09
Makueni	0.7	950	1,035	10.3	7,965.80	0.20
Machakos	-	-	3,410	6.2	6,281.40	0.28
Marsabit	1.7	513	344	21.0	66,000	0.06
Mbeere	2.2	802	356	23.1	2,092.50	0.34
Meru Central	1.2	5,566	4,941	15.8	2,982	0.30
Moyale	8.1	836	594	1.0	9,390.30	0.06
Mwingi	0.5	300	353	11.3	10,030.30	0.16
Meru N.	0.4	540	1,048	46.0	3,942.30	0.17
Tharaka	0	1	46	7.1	1,569.50	1.00
Nithi	1.9	900	851	26.1	1,092.90	0.38
Eastern	**-**	**-**	**16,441**	**18.2**	**-**	**-**
Garissa**	0	-	1,032	12.1	33,620	0.05
Mandera**	1.6	718	564	10.7	26,474	0.08
Wajir**	0	-	564	0.1	56,501	0.15
N/Eastern	**-**	**-**	**2,186**	**7.2**	**-**	**-**
Gucha	2.5	2,240	88	6.1	660.8	0.98
Homa Bay	2.8	1,882	488	3.0	1,160.40	0.44
Kisii C	13.5	13,500	4,051	19.4	648.9	0.74
Kisumu	11.6	14,335	9,232	30.2	919	0.50

Annex Table 8: **Access to infrastructure** contd...

District/Province	% of Household with electricity	% of Households with electricity connections	Total Telephone Connections	% of Households with access to piped water	Road Length	
					Total Areas Sq. Kms	Road Density
Kuria	0	-	108	0.9	581	1.52
Migori	N/A	7,000	748	3.8	2,030	0.63
Rachuonyo	2.0	1,363	750	0.6	945.2	1.92
Siaya	0.9	1,062	953	5.0	1,520	0.52
Suba	0	0	147	6.4	1,056	0.37
Bondo	1.2	705	377	23.6	1,972	0.28
Nyando	2.6	1,801	561	17.0	1,168.40	0.93
Nyanza	**-**	**-**	**18,460**	**11.0**	**8,655**	**-**
Baringo	30.0	17,042	1,125	33.5	8,655	0.15
Bomet	0.5	417	673	2.9	1,439	0.37
Keiyo	3.6	1,182	428	10.7	1,439	0.41
Kericho	N/A	-	2,386	30.7	2,110.60	0.39
Kajiado	8.2	7,937	0	27.3	21,902	0.13
Koibatek	3.0	850	1,925	28.0	2,306.40	0.35
Laikipia	4.3	3,350	3,360	28.4	9,693	0.11
Marakwet	0	0	98	8.4	1,588	0.43
Nakuru	7.7	25,346	13929	42.3	7,242	0.28
Nandi	2.0	2,256	1,993	3.1	2,873	0.59
Narok	10.5	8,000	776	8.9	15,087.80	0.29
Samburu	1.4	490	0	13.3	21,126.50	0.07
Trans Mara	0.6	200	150	16.4	2,932	0.16
Trans Nzoia	4.0	4,600	2,147	15.9	2,487	0.45
Turkana	0	76	18.9	77,000	-	-
Uasin Gichu	4.5	6,082	6,591	30.4	3,327	0.37
West Pokot	0.3	214	315	11.3	9,064	0.11
Buret	0.9	598	1,308	35.6	1,100	0.48
Rift Valley	**-**	**-**	**35,972**	**24.5**	**-**	**-**
Bungoma	2.0	4,000	2,529	32.7	2,068.50	0.56
Busia	3.3	2,700	651	23.0	1,261.30	0.46
Mt. Elgon	0.2	55	99	15.7	936.75	0.74
Kakamega	15.0	18,885	2,995	9.9	1,394.80	0.55
Lugari	0.1	35	40	8.1	670.20	0.66
Teso	-	-	213	5.3	558.5	0.58
Vihiga	2.3	2,400	970	11.4	563	1.42
Butere / Mumias	9.2	1,050	522	18.6	939.30	0.59
Western	**-**	**-**	**9,353**	**19.1**	**-**	**-**

** *Data sample too limited to yield reliable estimates. In some cases data applies for urban regions only*

Annex Table 9: **Access to medical personel**

District/province	Number of Doctors	Doctor / Patient ratios
Nairobi	32	1: 25,000
Kiambu	6	1:76,690
Murang`a	12	1:30,000
Nyandarua	53	1:10,000
Nyeri	23	1:29,000
Thika	32	1:121,940
Maragua	32	1:12,966
Central	**190**	**-**
Kilifi	6	1:100,000
Kwale	6	1:82,690
Lamu	2	1:36,343
Mombasa	-	-
Taita Taveta	6	1:41,000
Tana River	2	1:95,500
Malindi	16	1:19,502
Coast	**39**	**-**
Embu	28	1:10,474
Isiolo	5	1:22,000
Kitui	34	1:16,047
Makueni	7	1:119,879
Machakos	15	1:62,325
Marsabit	2	1:63,825
Mbeere	3	1:57,000
Meru Central	16	1:33,259
Moyale	6	1:10,000
Mwingi	7	1:50,071
Meru N.	10	1:65,620
Tharaka	1	1:100,992
Nithi	14	1:15,125
Eastern	**148**	**-**
Garissa	6	1:61,432
Mandera	1	1:308,878
Wajir	1	1:356,340
N /Eastern	**9**	**-**
Gucha	2	1:250,666
Homa Bay	8	1:38,707
Kisii C.	15	1:5,379
Kisumu	100	1:56,913
Kuria	3	1:5,280

Annex Table 9: **Access to medical personel** contd...

District/province	Number of Doctors	Doctor / Patient ratios
Migori	11	1:65,000
Rachuonyo	2	1:150,000
Siaya	5	1:96,000
Suba	2	1:85,036
Bondo	2	1:120,000
Nyando	7	1:50,000
Nyanza	**164**	**-**
Baringo	5	1:57,381
Bomet	4	1:102,048
Keiyo	1	1:156,471
Kericho	-	1:15,000
Kajiado	7	1:66,412
Koibatek	4	1:34,716
Laikipia	7	1:50,000
Marakwet	3	1:50,024
Nakuru	42	1:31,251
Nandi	8	1:80,000
Narok	4	1:100,953
Samburu	2	1:76,000
Trans Mara	1	1:177,000
Trans Nzoia	25	1:26,000
Turkana	7	1:75,000
Uasin Gichu	68	1:10,034
West Pokot	4	1:84,528
Buret	7	1:52,434
Rift Valley	**200**	**-**
Bungoma	7	1:142,446
Busia	-	1:41200
Mt. Elgon	1	1:144,679
Kakamega	45	1:14,246
Lugari	-	-
Teso	4	1:45,372
Vihiga	11	1:50,000
Butere /Mumias	15	1:35,000
Western	**83**	**-**

** *Data sample too limited to yield reliable estimates. In some cases data applies for urban regions only*

Data types and sources

The data used in this report is from different sources and of varying quality. It is, therefore important to explain the sources, the quality and the underlying concepts. This is important to facilitate understanding and interpretation of the data. The data used is from three main sources: the 1999 population and housing census; household surveys; and administrative records.

The 1999 population and Housing Census:

This is mainly demographic data and covers population sizes, its distribution and the socio-economic characteristics of the population. The data was collected by the Central Bureau of Statistics (CBS). This data is comprehensive and covers all the districts, locations and divisions in the country. Information was also obtained from the various census analytical reports that take a particular aspect of the population (e.g. housing, gender) and analyse separately.

Household surveys by the Central Bureau of Statistics

Most of the data used in the report are from socio-economic surveys conducted by the CBS. The main ones are:

- The Welfare Monitoring Surveys of 1992, 1994 and 1997
- The Kenya Demographic and Health Survey of 1998 and 2003
- The Integrated Labour Force Survey of 1998/99
- The Multiple Indicators Cluster Survey (MICs) of 2000

The data from CBS are based on samples and therefore suffer from limitation associated with use of samples and sampling techniques. The data is also in most cases not comprehensive as they do not cover all the current districts. In certain areas particularly in North Eastern province, the data only covers urban areas leaving out the rural. A second problem with the data is the aggregation level. The survey results are reasonable at the national and the provincial levels. The precision of the aggregation however declines as the results are disaggregated at the district level.

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