2011

EQUITY WATCH

Assessing progress towards equity in health

Kenya

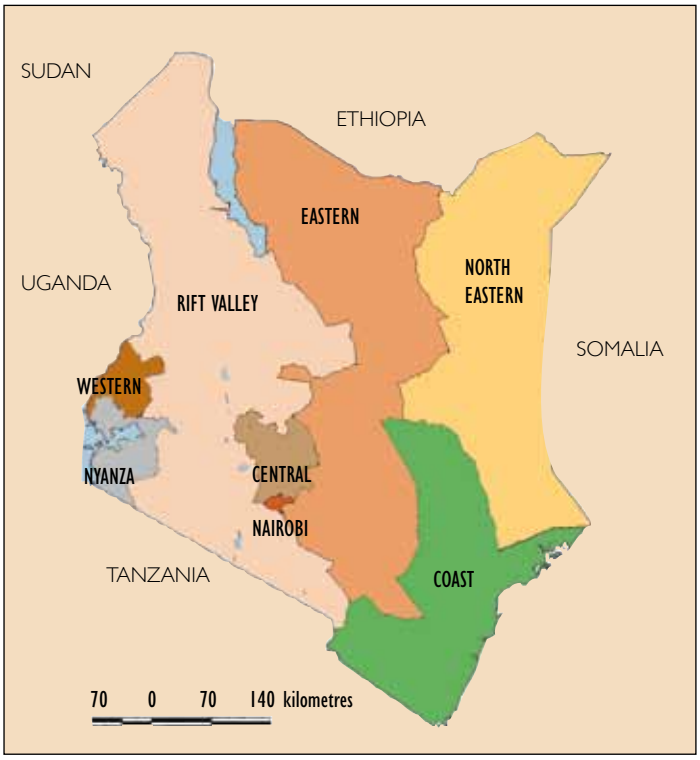
Kemri-Wellcome Trust Research Programme

Mustang Management Consultants

Ministry of Public Health and Sanitation

with Training and Research Support Centre in the Regional Network for Equity in Health in East and Southern Africa (EQUINET)

Map of Kenya by province



Source: KNBS and ICF Macro, 2010

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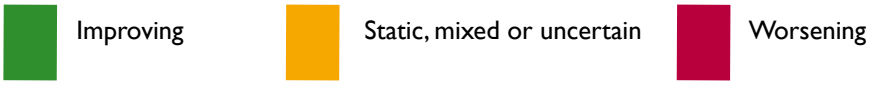
About the equity watch

An Equity Watch is a means of monitoring progress on health equity by gathering, organizing, analysing, reporting and reviewing evidence on equity in health. Equity Watch work is being implemented in countries in East and Southern Africa in line with national and regional policy commitments. In February 2010 the Regional Health Ministers Conference of the ECSA Health Community resolved that countries "Report on evidence on health equity and progress in addressing inequalities in health".

Using available secondary data, the Equity Watch is implemented by country personnel with support and input from EQUINET (TARSC) and review input from HNC. The aim is to assess the status and trends in a range of priority areas of health equity and to check progress on measures that promote health equity against commitments and goals.

This first scoping report uses a framework developed by EQUINET in cooperation with the East, Central and Southern African Health Community and in consultation with WHO and UNICEF. The report introduces the context and the evidence within four major areas: equity in health, household access to the resources for health, equitable health systems and global justice. It shows past levels (1980–2005), current levels (most current data publicly available) and comments on the level of progress towards health equity with a coloured bar indicating whether the situation is:



The relationship to the average in the east and southern African region is also shown:

EQUINET defines equity as:

> *'Equity in health implies addressing differences in health status that are unnecessary, avoidable and unfair. Equity motivated interventions seek to allocate resources preferentially to those with the worst health status. This means understanding and influencing the re-distribution of social and economic resources for equity – oriented interventions, and understanding and informing the power and ability people (and social groups) have to make choices over health inputs and to use these choices towards health.'*
>
> EQUINET steering committee, 1998

We explore in particular the distribution of health, ill health and particular determinants, including those relating to relating to employment, income, housing, water and sanitation, nutrition and food security, and those within the health system. The Equity Watch examines the fairness of resource generation and allocation, and the benefits derived from consuming the resources for health. We also explore the governance of the health system, given that the distribution and exercise of power affects the how resources are distributed and strategies designed and applied towards ensuring access to the resources for health.

Key areas

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- Formal recognition and social expression of equity and universal rights to health
- Achieving the Millennium Development Goal of reducing by half the number of people in poverty (and living on less than $1 per day)
- Eliminating differentials in maternal mortality, child mortality (neonatal, infant and under five) and under 5 year under-nutrition
- Eliminating income and urban/rural differentials in immunisation, antenatal care, attendance by skilled personnel at birth
- Achieving UN and WHO Goals of universal access to prevention of vertical transmission, condoms and antiretrovirals

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- Achieving the Millennium Development goal of halving the proportion of people with no sustainable access to safe drinking water by 2015
- Increasing ratio of wages to Gross Domestic Product
- Meeting standards of adequate provision of health workers and of vital and essential drugs at primary and district levels of health systems
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Introduction

EQUITY WATCH

Kenya is a low income East African country (see map, inside cover). The demographic indicators shown in Table 1 indicate that Kenya's population has been steadily rising with increasing population density, although the annual rate of population growth has fallen since 1979, largely attributed to the expansion of family planning programmes (Kenya National Bureau of Statistics, 2010). Improvements in life expectancy after 1970 were reversed in the 1990s largely due to AIDS but life expectancy has since improved, particularly as AIDS and infant mortality rates have fallen due to health sector interventions, discussed in this report (NCPD, 2000; Division of Malaria Control and MoPHS, 2009). While rural-urban migration was low prior to 1970, there has been a steady increase in the urban population thereafter (Table 1).

Table 1: Kenya demographic indicators, 1969-2009

Indicator	1969	1979	1989	1999	2009
Population (millions)	10.9	16.2	23.2	28.7	39.4
*Inter-censal growth rate	3.3	3.8	3.4	2.9	2.8
Density (population /km^2)	19.0	27.0	37.0	49.0	67.7
% urban	9.9	15.1	18.1	19.4	21.0
Life expectancy at birth	50	54	60	56.6	58.9

*Period between census is 10 years

Source: (CBS 1970; CBS 1981; CBS 1994; CBS 2001; KNBS 2010);

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In 2007, Kenya had a gross domestic product (GDP), using purchasing power parity (PPP) of US$57.9 billion or US$1542 per capita (UNDP, 2007). The country had a period of increasing economic growth, with GDP growth rising between 2000 and 2007 as the dividends of a change in government and favourable global markets were tapped to improve trade and international funding (see Table 2) (KNBS and ICF Macro, 2010). GDP growth declined dramatically in 2008, however, due to post-election violence, increases in food prices, fuel and fertilizers, and the effect of the global economic crisis (KNBS, 2008). Inflation also increased markedly in this period, only falling again in 2009 (see Table 2). Kenya's economic growth has also been associated with a reduction in poverty rates from 56 per cent in 1997 to 46 per cent in 2006. Urban poverty recorded the largest decline in that period from 51.5 per cent to 33.7 per cent (KNBS, 2010c). By 2007, Kenya had a human poverty index of 29.5 (UNDP, 2007). Economic growth and falling poverty after 2000 was not reflected in an improved human development index (HDI) before 2004, due particularly to the mortality changes mentioned earlier caused by AIDS (see Figure 1). Nevertheless, the human development index has steadily improved since then.

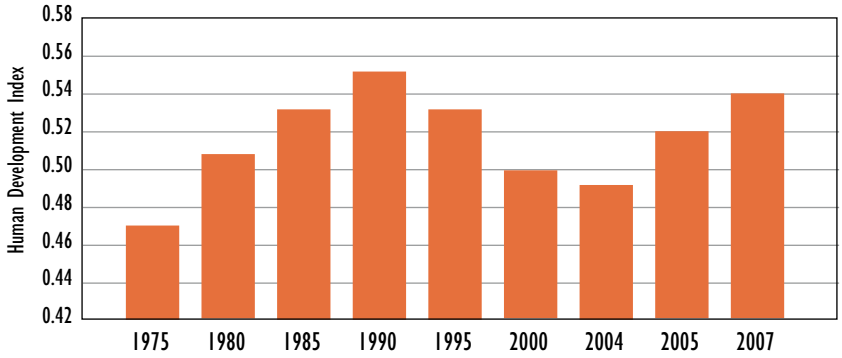
Table 2: Gross domestic product growth and inflation rates, 2000-2010

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
GDP growth rate %	0.6	4.5	0.6	2.9	5.1	5.9	6.3	7.1	1.7	2.6	5.8
Inflation rate %	–	5.8	2.0	9.8	11.3	10.0	6.0	4.3	16.2	9.2	4.7

Source MoH 2007; KNBS 2008; MoMS 2008; KNBS 2010; MoMS 2010

There is debate about how widely the benefits of economic growth have been distributed across the population. Kenya's 'Vision 2030', which sets its national vision, recognizes the need to close disparities between the rich and the poor and to ensure that all Kenyans benefit from development programmes. While the reduction in absolute poverty levels suggests that economic growth has benefited poorer groups after 2000, it would be important to assess how far the commitment in the national vision is being delivered on.

Figure 1: Trends in the human development index, 1975–2007



Source: UNDP 1980; 1985; 2000; 2004; 2007

This report assesses how far the opportunities of the current period of political improvements and economic growth are being tapped across provinces, in rural and urban areas and among different social groups, and whether they are translating into improvements for the population, particularly in relation to health.

Washing vegetables in rural Western Kenya: changes in women's lives and work give a sign of equity in the distribution of the benefits of growth

EQUITY WATCH

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Advancing equity in health

Progress markers

- Formal recognition and social expression of equity and universal rights to health
- Achieving the Millennium Development Goal of reducing by half the number of people in poverty (and living on less than $1 per day)
- Eliminating differentials in maternal mortality, child mortality (neonatal, infant and under five) and under five year under-nutrition
- Eliminating income and urban/rural differentials in immunisation, antenatal care and attendance by skilled personnel at birth
- Achieving UN and WHO goals of universal access to prevention of vertical transmission, condoms and antiretrovirals

EQUITY WATCH

Advancing equity in health

This section presents various markers of progress in health equity, in terms of the values that underpin it and the progress in addressing socio-economic and health inequalities.

Formal recognition and social expression of equity and universal rights to health

PAST LEVELS: 1980–2005

- Kenya's first constitution after independence (1963-2010) did not explicitly provide for the right to health or health care. Neither the Public Health Act chapter 242 (1921) nor any of the more than 24 laws addressing health formally recognized health equity or universal rights to health. In its first *National health sector strategic plan 1994–2000* (NHSSP I), however, Kenya stated its policy intention to ensure an equitable allocation of resources to reduce disparities in health and to review the existing legal framework (MoH, 1994).
- The country is signatory to many international declarations and conventions related to health (see Table 3), as well as the Millennium Development Goals, the Discrimination (Employment and Occupation) Convention; Equality of Treatment (Social Security) Convention, the Convention against Discrimination in Education, the International Convention on the Rights of Persons with Disabilities and the 2001 African Union Abuja Declaration on HIV/AIDS, Tuberculosis, and Other Related Infectious Diseases.

Table 3: Ratification of international treaties in Kenya

Treaty	Date signed/ratified
Universal Declaration on Human Rights	July 1990
Convention Against Torture and Other Cruel, Inhuman or Degrading Treatment or Punishment (1984)	1997a
International Covenant on Economic, Social and Cultural Rights (1966)	May 1972a
Convention on the Elimination of All Forms of Discrimination against Women (1979)	1984a
Convention on the Rights of the Child (1989)	1986
International Convention on the Elimination of all forms of race discrimination (1966)	1971a
African Charter on Human and Peoples' Rights (1990)	July 1996
Protocol to the African Charter on Human and Peoples' Rights on the Rights of Women in Africa (2003)	December 2003*

*means signatory only, 'a' means accession
Source: Kamupira and London, 2005; EQUINET SC, 2007

CURRENT LEVEL: 2006–2010

- Kenya made a major commitment to the right to health in its new Constitution passed in August 2010 (GoK, 2010). Given its comprehensive and progressive nature it is outlined in some detail in this report. The new constitution explicitly recognizes the right to health and health care, as follows:
  - Article 43 provides that every person has the right to the highest attainable standard of health which includes the right to health care services, including reproductive health care, and not to be denied emergency medical treatment. In the same section it provides for determinants of health, including the right to accessible and adequate housing, reasonable standards of sanitation and adequate, acceptable food. It also provides for the right to clean and safe water in adequate quantities, to social security and to education.
  - Article 46 gives consumers the right to protection of their health, safety and economic interests,.
  - Article 53 gives every child the right to basic nutrition, shelter and health care.
  - Article 21 provides that 'all state organs and all public officers have the duty to address the needs of vulnerable groups within society including women, older members of the society, persons with disabilities, children, youth, members of the minority or marginalised communities and members of particular ethnic, religion or cultural communities' (section 3). The constitution bars direct or indirect discrimination against any person on any ground including race, sex, pregnancy, marital status, health status, ethnic or social origin, colour, age, disability, religion, conscience, belief, culture, dress, language or birth.
  - Article 59 establishes the Kenya National Human Rights and Equality Commission whose main function is to promote gender equality and equity generally and to coordinate and facilitate gender mainstreaming in national development.
  - The 2010 constitution domesticates provisions of the international commitments noted earlier. It provides for the progressive realization of the rights contained in the Bill of Rights and binds all state organs and all persons. Article 20 provides that in applying a provision of the Bill of Rights, a court shall adopt the interpretation that most favours the enforcement of a right or freedom and promote the values that underlie an open and democratic society based on human dignity, equality, equity and freedom.
  - In applying the economic and social rights under Article 43, if the state claims that it does not have the resources to implement the right, it is the responsibility of the state to show that the resources are not available. In allocating the resources, the state shall give priority to ensuring the widest possible enjoyment of the right or freedom having regard to the prevailing circumstances, including the vulnerability of particular groups or individuals. Anyone can bring a suit to enforce his or her right when it is violated, directly or through other persons or civil society. There shall be no fee or a reasonable fee that does not impede access to legal proceeding, to avoid cost barriers.
- The devolved system of government set in the new constitution is likely to support the devolution of mechanisms, capacities and processes in health and other sectors, such as through the constituency development fund and the mechanisms for community participation from village level upwards.
- Widespread civic education in the constitution making process means that the rights in the constitution are relatively well known. Line ministries and civil society have also held seminars on the new constitution. A Committee for the Implementation of the New Constitution has a mandate to ensure the constitution is correctly interpreted and implemented, with some court cases held on interpretation of provisions.
- The second *National health sector strategic plan 2005–2010* (NHSSP II) followed an independent evaluation of the first plan. This pointed to the need to strengthen those health sector interventions and operations needed to meet the health and socio-economic development targets set in the plan (MoH, 2005b). It focused on reducing inequalities as a means to achieving this (MoH, 2005b), particularly by improving equitable access to health services and health financing (MoH, 2005). The plan also recognizes the role that the health sector plays in equity within the wider social and economic development (GoK, 2008).

Progress

The major constitutional reform and the policy statements in the *National health sector strategic plan 2005–2010* establish a strong legal and policy basis for the right to health and health care and for equity in health in Kenya. Other law reforms are now needed to fully implement the new constitution, including in the 1921 Public Health Act. There is need to further widen awareness on and implementation of the rights and policies related to health and health equity, including to establish mechanisms and processes to ensure that communities are aware of their rights in the constitution and know how to claim them.

Achieving the Millennium Development Goal of reducing by half the number of people in poverty (and living on less than $1 per day)

INDICATOR	PAST LEVELS (1980–2005) Level	Year	CURRENT LEVEL (most recent data) Level	Year*
% population living on less than US$1.25 a day	44.8	1992	n.a	
*Percentage population / households living under the poverty line	40.3 52.3	1994 1997	45.9	2005/6
– Range highest to lowest poverty by province % points difference	28.3 32.1 34.1	1992 1994 1997	52.6	2005/6
– rural poverty	47.9 46.8 52.9	1992 1994 1997	47.2	2005/6
– urban poverty	29.3 28.9 50.2	1992 1994 1997	40.5	2005/6
Human poverty index	28.2 35.5	1997 2004	29.5	2007
Different poverty measures % population below food poverty				
– rural	50.7	1997	47.2	2006
– urban	38.3	1997	40.5	2006
– national	48.3	1997	45.8	2006
– rural: urban ratio	1.32	1997	1.17	2006
% population in absolute poverty				
– rural	52.9	1997	49.1	2006
– urban	49.2	1997	33.7	2006
– national	52.3	1997	45.9	2006
– rural: urban ratio	1.08	1997	1.46	2006

* Poverty line: The World Bank consumption-based poverty line includes the expenditure necessary for minimum nutritional and other household items and to enable participation in the everyday life of society. Food poverty refers to food consumption levels that are insufficient to meet basic daily energy requirements of 2,250 kilocalories per adult equivalent per day. Absolute poverty refers to insufficient income to meet nutritional, clothing, fuel and other household necessities

Source: UNDP, 1980-2010; CBS, 2003c; EQUINET, 2007

PAST LEVELS: 1980–2005

- Between 1992 and 1997, the share of people living below the poverty line rose by 7.5 percentage points and between 1997 and 2004, the human poverty index rose by 7.3 percentage points. While poverty increased, there were wide geographical differences in poverty levels. The highest share of people living below the poverty line in 1992 was in Western province but by 1994 this had shifted to Eastern and North Eastern provinces and by 1997 to North Eastern and Nyanza provinces (see Table 4 on page 00). Nairobi and Central provinces had the lowest proportion of people living below the poverty line (CBS, 2003c).
- These provincial differences widened between 1992 and 1997. Differentials also existed between rural and urban areas which, in 1997, were wider for food poverty than absolute poverty (see summary table). Addressing poverty was thus one of the policy issues in the economic recovery programme (2003-2007) (MoPND, 2003).

Table 4: Percentage of people living below the poverty line by province, 1992–2006

Province	1992	1994	1997	2005/06
Central	35.8	31.9	31.4	30.4
Nairobi	26.5	25.9	50.2	21.3
Coast	43.5	55.6	62.1	69.7
Eastern	42.2	57.8	58.6	50.9
North Eastern	–	58.0	65.5	73.9
Nyanza	47.4	42.2	63.1	47.6
Rift Valley	51.5	42.9	50.1	49.0
Western	54.8	53.8	58.7	52.2
National	44.8	40.3	52.3	45.9

Source: CBS, 2003c; MoPND, 2003

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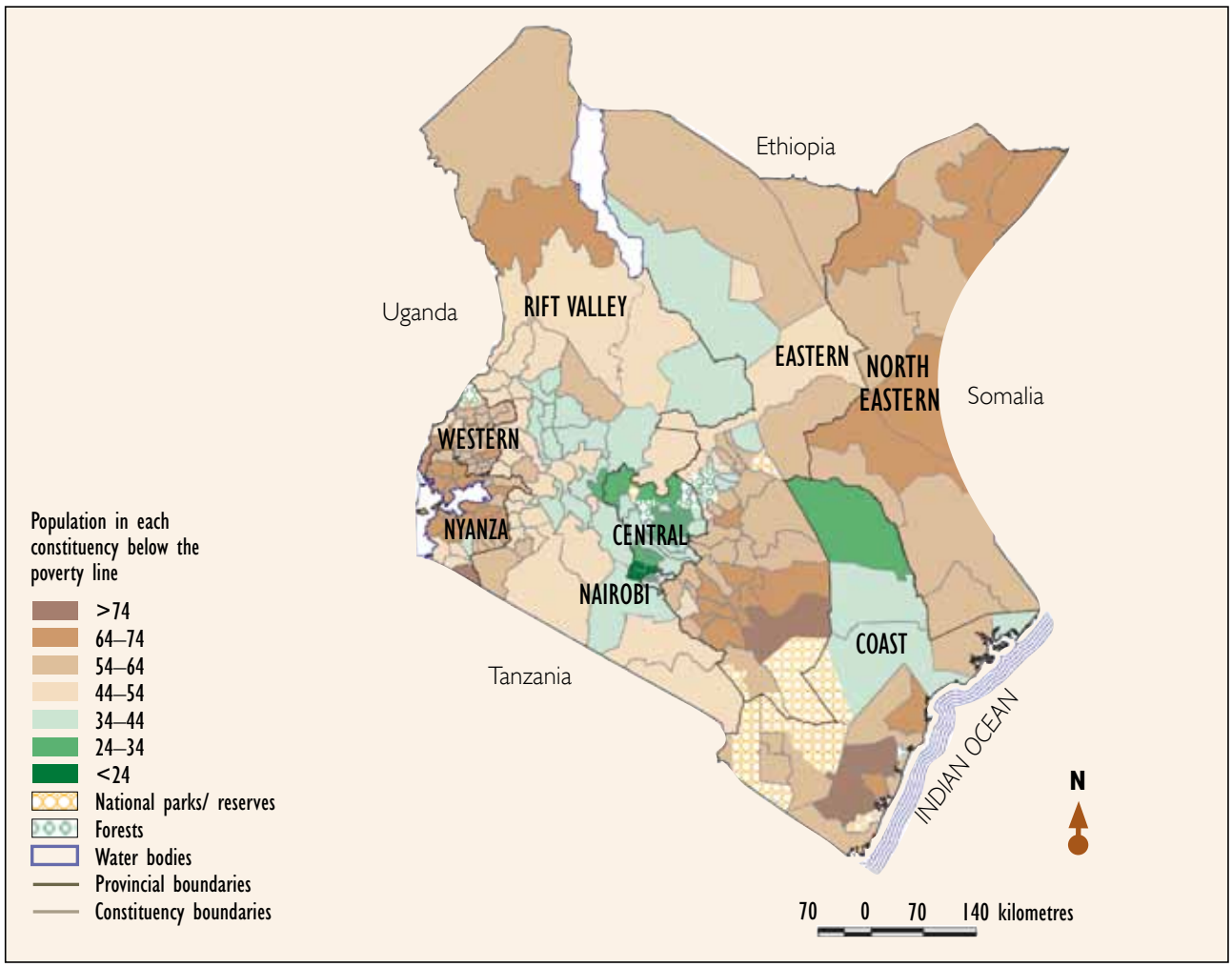
Figure 2: Map showing poverty by constituency, Kenya, 1999

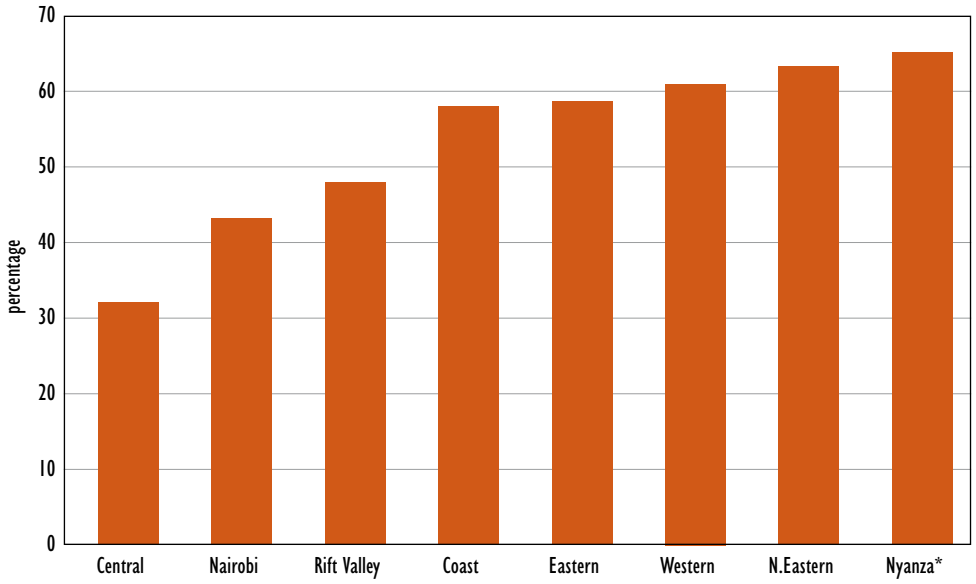


Source: CBS et al., 2000

CURRENT LEVEL: 2006–2010

- The association between improved economic conditions, GDP growth and falling poverty levels after 2004 was described in the introduction. As the summary table shows, the share of people below the poverty line fell to 45.9 per cent in 2005/6, although still at levels last evidenced in 1992. Food poverty also fell up to 2006. Despite this improvement, there have been widening differentials across provinces, with the range between highest and lowest province widening to 52.6 percentage points. Poverty levels rose to 73.9 per cent in North Eastern province and 69.7 per cent in the Coast province, at a time when poverty levels in Nairobi had fallen to 21.3 per cent. Provinces with higher levels of poverty seem to have become more vulnerable, while those with lower levels of poverty have become less so. The inequality across provinces has widened. The summary table also shows that the rural to urban ratio widened between 1997 and 2006 from 1.08 to 1.46, although the rural to urban ratio for food poverty narrowed as urban areas became more 'food poor'. Within rural areas the share of the lowest rural quintile in total rural consumption decreased from 6 per cent to 4.6 per cent over the same period (MoSPND, 2030, 2010).
- Although the gini coefficient fell from 0.574 in 1992 to 0.477 in 2007 (as shown in the summary table), incomes in Kenya are heavily skewed in favour of the rich. Inequality in the country is lower than the higher income countries in the region (Namibia, South Africa, Botswana) and higher than those with lower incomes such as Tanzania and Uganda (EQUINET SC, 2007). The bottom 20 per cent of the population in Kenya get 2.5 per cent of total wealth, while the top 20 per cent receive more than 50 per cent of total wealth (Ndirangu and Mathenge, 2010) (see Figure 3). In 1997 industry had highest levels of inequality. By 2007, crop farming had the lowest and salaried income the widest inequalities. It is not clear what has contributed to this change. The economic growth and investment policies documented earlier between 2003 and 2007 may have contributed, such as through job creation for young people, investment in small-scale agriculture and enterprises.

Figure 3: Percentage of residents living below the poverty line by province, 2006



*Estimate is 65–80%

Source: UNDP, 2006

Progress

While aggregate poverty levels have declined in recent years, following improvements in GDP, the decline has been unevenly distributed. Poverty increased in provinces with worse levels of poverty, while those with less poverty experienced further improvement, widening the inequalities across provinces. The rural to urban absolute poverty ratio has widened. In rural areas the poorest access a declining share of total wealth while in urban areas a rise in food poverty suggests a growing number of households are unable to secure their minimum food needs, possibly due to rising prices. The economic recovery programme appears to have ameliorated the general situation but more specific strategies are needed to close widening inequalities. These may include measures targeted at households to enhance food access in the poorest urban households through to more regional strategies to support farm or non-farm production in the poorest provinces.

Reducing the gini coefficient to at least 0.4

INDICATOR	PAST LEVELS (1980–2005) Level	Year	CURRENT LEVEL (most recent data) Level	Year*
Gini coefficient of income distribution	0.574	1992	0.477	2007
	0.420	1995		
	0.571	1999		
	0.490	2000		
	0.490	2004		

The closer to 0 the higher the degree of equality

Source: Ndirangu and Mathenge, 2010

PAST LEVELS: 1980–2005

- The gini coefficient is a measure of the inequality, commonly in wealth or income, with a value ranging from 0 (perfect equality) to 1 (perfect inequality). Inequality in Kenya is high and, while it fell between 1992 and 2000, Kenya was still ranked among the top ten low income economies for inequality in income in 2001. About 10 per cent of Kenyans control 35 per cent of national income (UNDP, 2000).
- Inequality differs across provinces, with 1999 data showing that the North Eastern province, also the poorest, had the lowest inequality and Nairobi, with the lowest poverty levels, had the highest (Table 5). There appears to be an inverse association between poverty and inequality, although this is not statistically significant.

Table 5: Provincial gini co-efficient, 1999

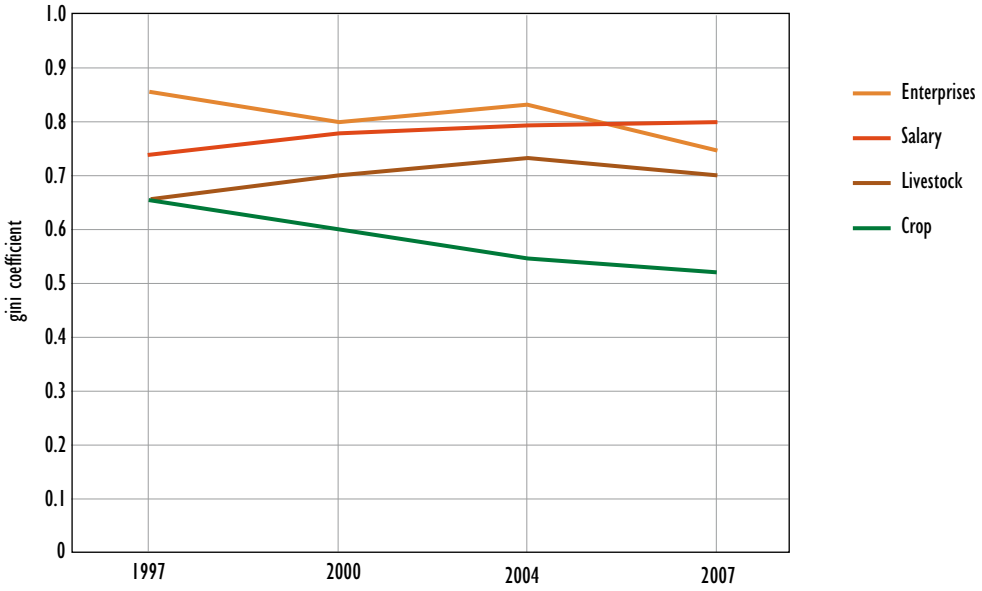
Province	Gini co-efficient
Nairobi	0.586
Western	0.586
Rift valley	0.575
Eastern	0.571
Nyanza	0.565
Central	0.516
Coast	0.511
North Eastern	0.439
Kenya national	0.571

Source: UNDP, 2000

CURRENT LEVEL: 2006–2010

- Although the gini coefficient fell from 0.574 in 1992 to 0.477 in 2007 (as shown in the summary table), incomes in Kenya are heavily skewed in favour of the rich. Inequality is lower than in the higher income countries in the region (Namibia, South Africa, Botswana) but higher than those with lower incomes such as Tanzania and Uganda (EQUINET SC, 2007). The bottom 20 per cent of the population in Kenya get 2.5 per cent of total wealth, while the top 20 per cent receive more than 50 per cent of total wealth (Ndirangu and Mathenge, 2010) (see Figure 4).
- In 1997 industry had the highest levels of inequality. By 2007, crop farming had the least inequalities and salaried income the widest. It is not clear what has contributed to this change. The economic growth and investment policies between 2003 and 2007 may have contributed through job creation for young people, investment in small scale agriculture and in enterprise.

Figure 4: Income component gini ratio, concentration indices: 1997-2007



Source: Ndirangu and Mathenge, 2010

Progress

The progress towards reduced inequalities in Kenya would need to be better understood to be sustained, particularly in terms of what policies and trends have contributed towards this. More focus still needs to be given to policies that enable the youth, women and groups, such as small scale farmers, to improve their socio-economic status, such as through investment in the small-scale agricultural and production sector, in relevant infrastructure, research, education, extension services provision and improvement of technology. The level of public investment in agriculture is further discussed in a later progress marker.

Eliminating differentials in maternal mortality, child mortality (neonatal, infant and under five) and under five under-nutrition

INDICATOR	PAST LEVELS (1980–2005) Level	Year	CURRENT LEVEL (most recent data) Level	Year*
Child mortality rate 1–5 yrs / 1000 (CMR)	41	2003	23	2009
Under five mortality rate (U5MR)/ 1000	115	2003	74	2009
Infant mortality rate (IMR)/ 1000	77	2003	52	2009
Neonatal mortality rate / 1000	33	2003–08	31	2009
Infant Mortality Rate (IMR)/per 1000				
– total	62 71 77	1993 1998 2003	52	2009
– rural	59 65 74	1993 1998 2003	58	2009
– urban	57 46 55	1993 1998 2003	63	2009
– ratio rural : urban	1.04 1.41 1.34	1993 1998 2003	0.82	2009
– ratio male:female	1.14 1.12 1.25	1993 1998 2003	1.23	2009
Under five mortality rate (U5MR)/ 1000				
– total	113 105 115	1989 1998 2003	74	2009
– rural	96 109 117	1993 1998 2003	86	2009
– urban	75 88 122	1993 1998 2003	74	2009
– ratio rural : urban	1.28 1.24 0.96	1993 1998 2003	1.16	2009
– ratio male : female	1.09 1.05 1.18	1993 1998 2003	1.17	2009
Under five mortality rate/ 1000 by wealth quintile				
– 1st	148	2003	98	2009
– 2nd	109	2003	102	2009
– 3rd	121	2003	92	2009
– 4th	77	2003	51	2009
– 5th (highest)	91	2003	68	2009
– ratio lowest : highest quintile	1.63	2003	1.44	2009

INDICATOR	PAST LEVELS (1980–2005) Level	Year	CURRENT LEVEL (most recent data) Level	Year*
Maternal mortality rate / 100 000	365 590 414	1994–98 1988–98 1993-2003	444	2003-10
Stunting in children < 5 years (height for age <2SD) - % total children	32.7 33.0 30.6	1993 1998 2003	34.7 29.6	2006 2009
– % rural children	34.7	1998	31.2	2009
– % urban children	24.7	1998	21.6	2009
– ratio rural : urban	1:1.4	1998	1:1.4	2009
Underweight in children < 5 years (weight for age <2SD)	22.3 22.1 19.1	1993 1998 2003	20.9 20.3	2006 2009
Wasting in children < 5 years (weight for height <2SD)	5.9 6 .1 4.8	1993 1998 2003	6.3 5.8	2006 2009
Stunting in children under five years (height for age<2SD) by wealth quintile				
– 1st	38.1	2003	44.4	2009
– 2nd	32.6	2003	39.2	2009
– 3rd	29.9	2003	34.4	2009
– 4th	27.3	2003	29.1	2009
– 5th (highest)	19.2	2003	24.5	2009

Sources: CBS, 1970, 1981, 1994, 2001, 2003a; CBS MoH et al., 2004; KNBS, 2010; KNBS and ICF Macro, 2010; NCPD et al., 1994; MoH, 2007; MoMS, 2008, 2010;

PAST LEVELS: 1980–2005

- As indicated in the summary table, infant mortality rose in the period (from 62 to 77 per 1000), with the greatest increase in rural areas between 1993 and 1998. This widened the rural to urban ratio from almost parity in 1993 to 1.41 in 1998 which narrowed marginally again to 1.34 by 2003. The male to female ratio remained relatively constant in the period, with a small increase up to 1.25 by 2003. Disparities in the infant mortality rate were widest by province, with ratios of 5.0 in 1993, narrowing to 2.4 in 2003. Nyanza, Western, Coast and North Eastern provinces had the highest rates over the period and Central and Nairobi the lowest.
- Under five mortality remained more constant with the greatest increase in urban areas between 1998 and 2003, reversing the rural to urban ratio from 1.28 to 0.96. The male to female ratio was also relatively constant, increasing marginally up to 1.18 by 2003. Disparities in under five mortality were again widest by province, with ratios of 4.6 in 1993 narrowing to 3.9 by 2003, although data from provinces may reflect sampling errors.
- Regional disparities in both infant and under five mortality to some extent reflect poverty distribution, suggesting the role of socio-economic determinants in the longer term, even while disease trends such as AIDS might influence medium term changes. The lowest wealth quintile had 1.63 times the under five mortality rate of the highest quintile suggesting that determinants like living environments and food security also play a role.
- As shown in the summary table, under-nutrition (stunting, wasting and general) in children under five declined between 1993 and 2003, although with relatively small declines in all forms of under-nutrition. Table 7 indicates that stunting was higher in Nyanza, Coast and Eastern provinces, the first two having higher child mortality. Stunting was low in Western province in 1987 but rose markedly by 1998, while stunting in Central and Nairobi was lower than in other provinces, rising up to 1993/94 and then falling again. Variations in provinces dependent on rural agriculture may reflect food shortages but the causes are unclear in Nairobi and Central province.

Table 6: Trends in under five and IMR by province 1989-2009

Province	1989	1993	1999	2000	2003	2009
Infant mortality rate per 1000 live births						
Nairobi	44	41	51	67	42	46
Central	31	27	36	44	60	37
Rift Valley	45	50	48	61	48	35
Eastern	47	53	57	56	39	43
Western	64	64	87	80	65	75
North eastern	na	na	na	91	57	na
Coast	68	70	65	78	71	107
Nyanza	128	135	117	133	95	94
Rate ratio highest to lowest	4.1	5.0	3.3	3.0	2.4	3.1
Under five mortality rate per 1000 live births						
Nairobi	80	82	93	77	95	64
Central	47	41	66	50	54	51
Rift Valley	51	61	89	72	77	59
Eastern	64	66	79	78	84	52
Western	133	110	159	140	144	80
North eastern	n.a	n.a	103	n.a	163	129
Coast	156	109	139	101	116	87
Nyanza	149	187	192	195	206	149
Rate ratio highest to lowest	3.3	4.6	2.9	3.9	3.8	2.9

Source CBS 1970; 1981; 1994; 2001, 2003a, NCDP CBS et al 1994; CBS, MoH et al. 2004; MoH 2007; MoMS 2008, 2010; KNBS 2010; KNBS and ICF Macro 2010

Table 7: Trends in stunting by province, 1987-2009

Year	1987	1993	1994	1998	2003	2006	2009
Nairobi	n.a	24.2	30.2	25.7	18.7	27.8	22.7
Central	25.0	30.7	28.7	27.5	27.0	30.0	25.7
Coast	49.5	41.3	38.3	39.1	34.9	36.0	34.0
Eastern	38.5	39.4	38.5	36.8	32.5	42.6	32.8
Nyanza	41.3	32.1	36.4	30.8	31.1	36.2	26.9
Rift Valley	26.9	28.5	31.8	33.1	31.6	32.1	30.9
Western	22.4	22.4	37.0	35.0	30.2	32.7	28.4
North Eastern	n.a	n.a	n.a	n.a	24.3	44.4	31.1
Rate ratio highest to lowest	2.21	1.84	1.34	1.52	1.87	1.53	1.50

Sources;: CBS, 1970, 1981, 1994, 2001, 2003; National Council for Population and Development, CBS et al., 1994; CBS, MoH et al., 2004; KNBS, 2010; KNBS and ICF Macro, 2010

PAST LEVELS: 1980–2005 continued

- Between 2003 and 2008 the neonatal mortality rate of 31 per 1000 live births implies that 40 per cent of infant deaths in Kenya occur in the first month of life so, for significant improvements in infant mortality rates, improvements are needed in maternal health (KNBS and ICF Macro, 2010). Comparing ten year periods 1988–98 and 1993-2003, maternal mortality fell but remained high at 414 by 2003 (CBS, MoH *et al*., 2004). Data on differentials in maternal mortality by province, rural or urban area and wealth quintiles were not available.

CURRENT LEVEL: 2006–2010

- Child, infant and under five mortality reduced markedly between 2003 and 2009. The differentials across groups also changed. Urban infant mortality worsened, reversing the 2003 rural to urban ratio, while urban under five mortality rates improved, reversing the 2003 rural to urban ratio. The reasons for this are unclear. The male to female ratios did not change in the 2000s but regional differentials widened, with infant mortality rates worsening substantially in Western and Coast provinces at the same time as under mortality rates improved. Infant mortality rates worsened in Nairobi and Eastern province but both infant and child mortality rates improved across all other areas. Wide differences between highest and lowest under five mortality rates by province persisted with 98 extra deaths per 1000 in Nyanza compared to Central province (see Figure 4). Socio-economic differentials in under five mortality fell between 2003 and 2009, mainly due to greater improvements among lower socio-economic groups (see Figure 3), although they remain wide at 1.44. Under five wasting and underweight rates improved marginally in the period although stunting increased up to 2006 and then fell by 2009, without major changes in the distribution across provinces (see Table 7). The reasons for these variations are not clear and need further investigation. Coast has the highest proportion of stunted children, possibly associated with poor agricultural investment and outputs (KNBS, ICF Macro, 2010).
- Economic growth, improved public health services coverage, such as immunization, information and community involvement, and a drop in HIV prevalence and mortality may explain the improvements in child mortality up to 2009 (KNBS, ICF Macro, 2010). Determinants such as child under-nutrition, however, continue to be a factor in child mortality and, as shown in Figure 5b, continue to be strongly associated with wealth.
- Kenya aims to reduce the maternal mortality ratio by 75 per cent between 1990 and 2015, with the second national health services strategic plan aiming to reduce maternal mortality to at least 115 by 2015 (MoH, 2006). However data suggests little progress towards this goal with maternal mortality rates increasing from 414 per 100 000 in the 1993–2003 period to 444 per 100 000 in 2003–10 period(KNBS and ICF Macro, 2010). Worsening neonatal mortality rates mean that the period around childbirth and the earliest infancy continues to be of major concern (see Figure 3). Evidence suggests wealth-related differentials in neonatal mortality (Figure 3) but more evidence is needed to understand who is at greatest risk and to better plan equity-oriented responses.

Figure 4: Distribution of under five mortality rates by province, 2008

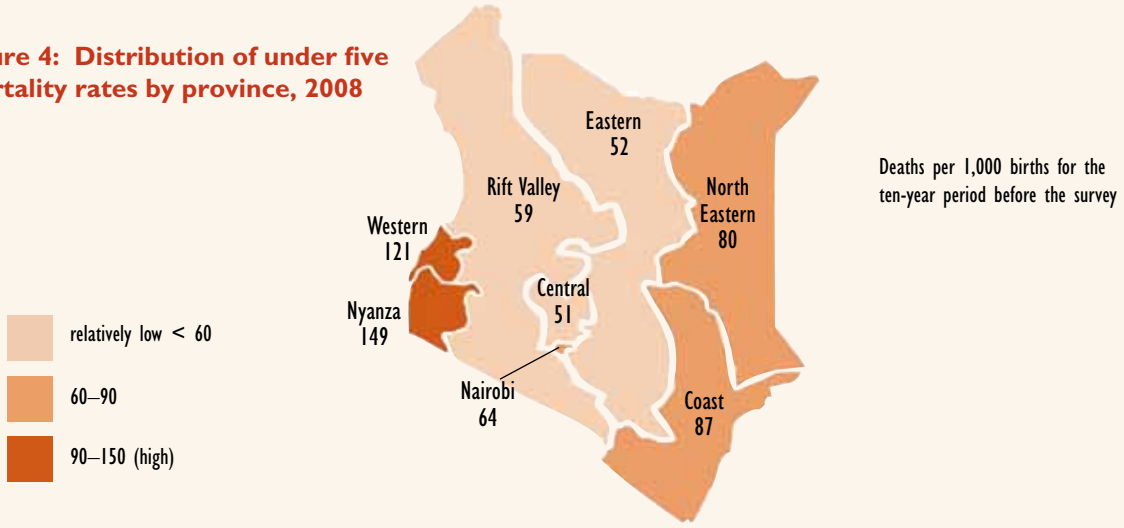
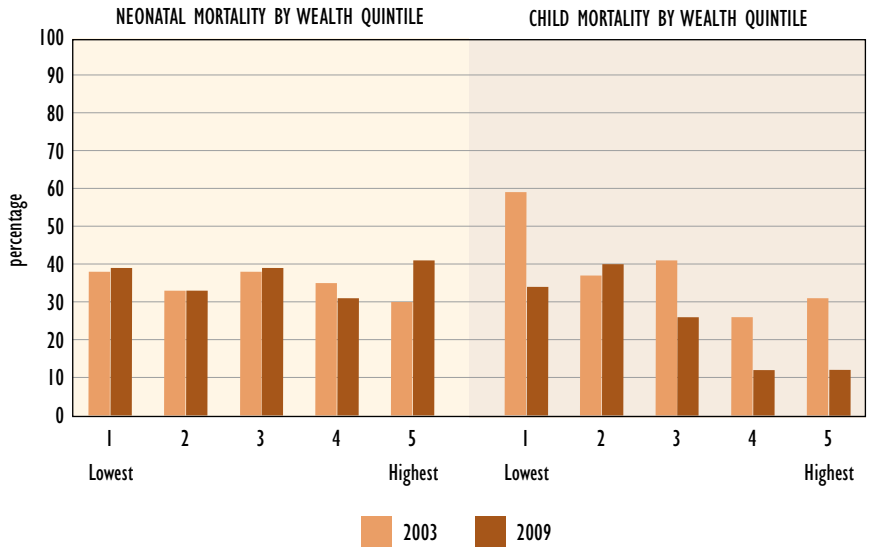
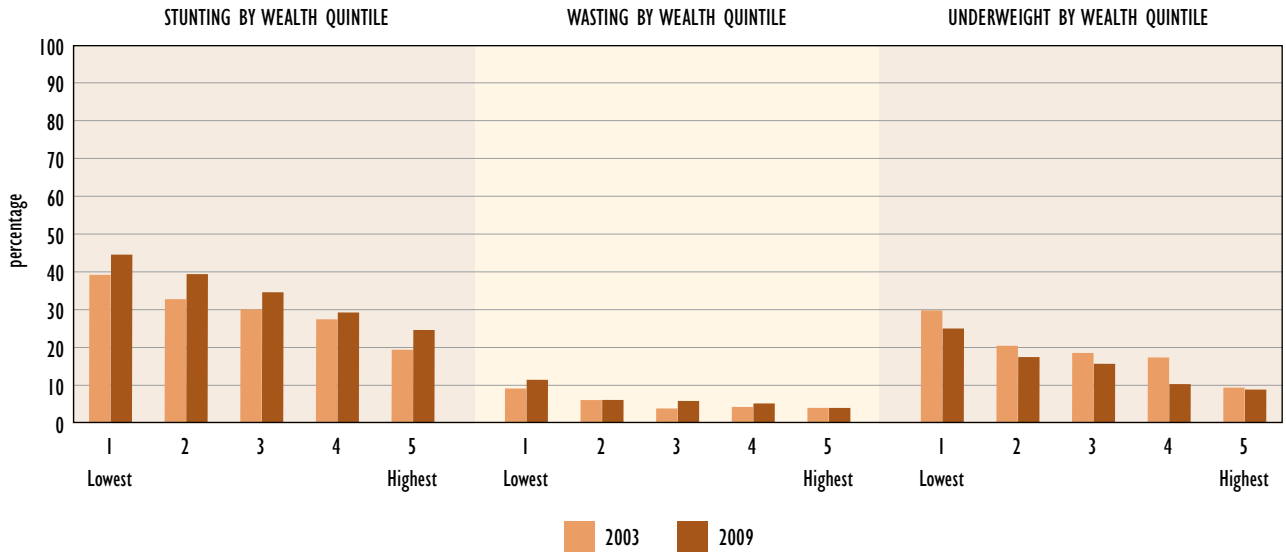


Figure 5a: Trends in neonatal and child mortality by wealth quintiles, 2003-2009



Source: CBS, MoH et al., 2004; KNBS, ICF Macro, 2010

Figure 5b: Stunting, wasting and underweight children by wealth quintiles, 2003-2009



Source: CBS, MoH et al., 2004; KNBS, ICF Macro, 2010

Progress

National trends suggest that infant and under five year mortality has declined, although neonatal mortality has not. Economic growth and public health interventions may underlie these changes. These improvements were not evenly or equitably distributed, with improvements most marked in areas where IMR and under five mortality are lower and continuing inequalities by province, wealth and gender. A narrowing and in the case of IMR reversal of rural: urban differentials resulted from rural improvements and urban rises in infant mortality. The inverse happened with respect to the U5MR. The regional distribution (with widest differentials) of infant and under five mortality, differentials by wealth and the distribution of under nutrition suggest that in addition to making improvements in the factors affecting neonatal mortality, addressing equity also implies addressing the social determinants of health and access to health care in more marginalised areas and groups. Additional information on the distribution and determinants of child mortality and under nutrition needs to be collected to design programmes that focus on the key factors contributing to high IMR. The worsening trend in maternal mortality calls for more information on the cases and the distribution of maternal mortality by province and socio-economic status, to plan and focus interventions.

Eliminating income and urban/rural differentials in immunisation, antenatal care, attendance by skilled personnel at birth

INDICATOR	PAST LEVELS (1980–2005) Level	Year	CURRENT LEVEL (most recent data) Level	Year
Measles immunisation % coverage in < 1 yr	72.5	2003	85.0	2009
– rural	69.7	2003	83.4	2009
– urban	85.9	2003	90.4	2009
– lowest wealth quintile	54.8	2003	75.6	2009
– highest wealth quintile	68.1	2003	93.9	2009
– highest : lowest wealth quintile ratio	1.2	2003	1.2	2009
BCG immunisation % coverage	87.3	2003	95.6	2009
– rural	85.5	2003	95.4	2009
– urban	95.9	2003	96.2	2009
– lowest wealth quintile	70.0	2003	92.8	2009
– highest wealth quintile	96.2	2003	96.5	2009
– highest : lowest wealth quintile ratio	1.4	2003	1.0	2009
Full immunisation % coverage	57.0	2003	77.0	2009
– rural	56.4	2003	76.3	2009
– urban	58.7	2003	80.9	2009
– urban : rural ratio	1.04	2003	1.06	2009
– lowest wealth quintile	40.0	2003	65.9	2009
– highest wealth quintile	64.5	2003	85.1	2009
– highest : lowest wealth quintile ratio	1.6	2003	1.3	2009
% pregnant women with at least one antenatal visit				
– rural	2.5	2003	3.6	2009
– urban	4.7	2003	4.5	2009
– urban: rural ratio	1.88	2003	1.25	2009
% of women with >= 4 antenatal visits	52.3	2003	47.1	2009
% births attended by skilled personnel	42.0	2003	44.0	2009
– rural	34.5	2003	36.8	2009
– urban	72.0	2003	74.8	2009
– urban : rural ratio	2.09	2003	2.03	2009
– lowest wealth quintile	17.0	2003	20.3	2009
– second wealth quintile			31.3	2009
– third wealth quintile			41.9	2009
– fourth wealth quintile			52.9	2009
– highest (5th) wealth quintile	75.9	2003	81.4	2009
– highest : lowest wealth quintile ratio	4.5	2003	4.0	2009
*Contraceptive prevalence in married women	64.2	2003	72.9	2009
Contraceptive prevalence among all women	50.8	2003	57.7	2009
– rural	29.2	2003	37.2	2009
– urban	39.9	2003	46.6	2009
– lowest wealth quintile	11.8	2003	16.9	2009
– highest wealth quintile	44.5	2003	47.9	2009
– highest : lowest wealth quintile ratio	3.8	2003	2.8	2009

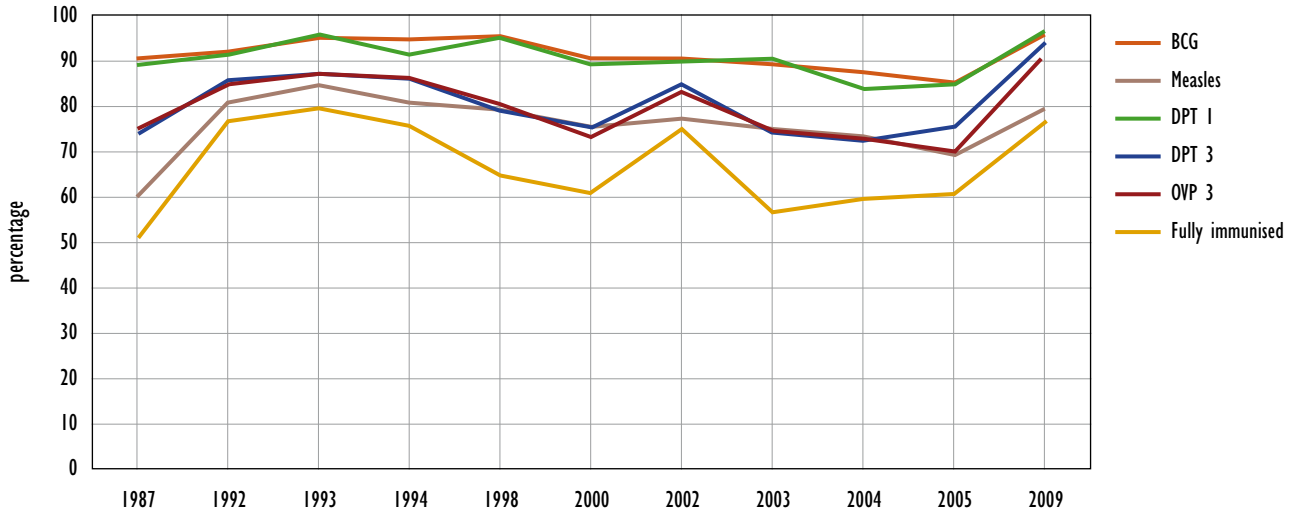
* Refers to ever use of contraceptive and not current use

Source: CBS, MoH et al., 2004; KNBS, ICF Macro, 2010

PAST LEVELS: 1980–2005

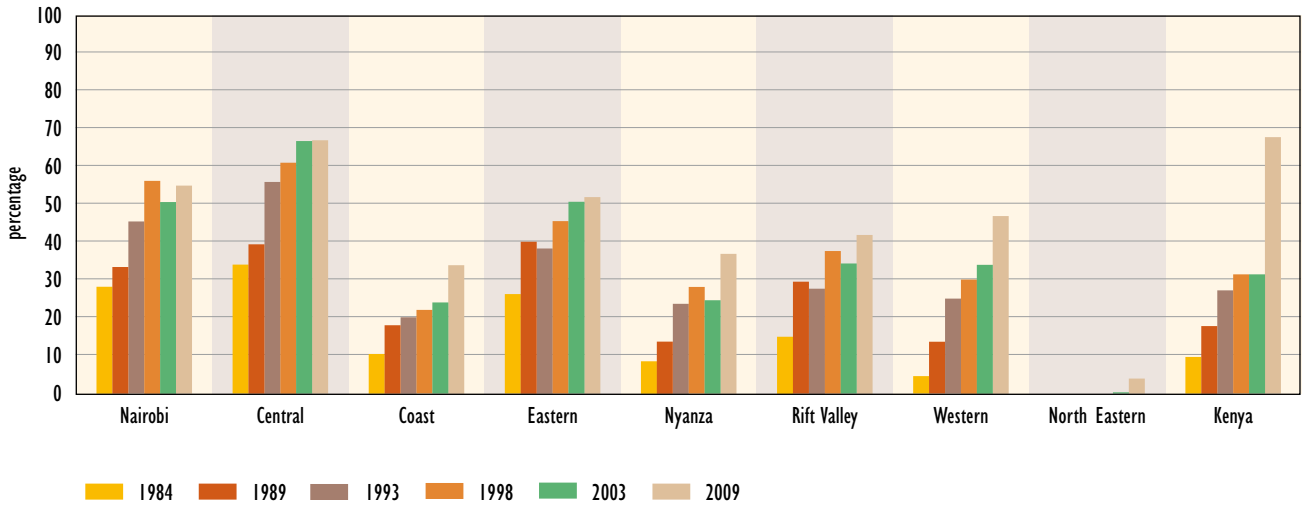
- The proportion of children fully immunised has been lower than estimates for each vaccine type, rising from 57 per cent in 1987 to 71 per cent in 1994 and falling to 59 per cent in 2003. BCG vaccination coverage was higher than for other vaccines, followed by DPT1 and then measles (NCPD, CBS *et al.*, 1994; CBS, MoH *et al.*, 2004). As shown in Figure 6, full immunisation coverage has generally fallen or remained static in this period, except for a brief spike in 2002, possibly due to local campaigns.
- Rural to urban differentials were low but there were provincial variations in full immunisation coverage. While differences between provinces should be interpreted with caution due to small samples, Nyanza and Western provinces recorded coverage rates of 38 per cent and 56 per cent in 2003, compared to 79 per cent in Central province. North Eastern province had the lowest proportion of children fully immunised at only 9 per cent (CBS, MoH *et al.*, 2004). North Eastern province is arid with pastoralists who migrate across provinces in search of pasture, undermining outreach and coverage of interventions.
- Wealth differentials were also evident (see summary table), with a rate ratio of 1.6 in 2003 for full immunisation between highest and lowest wealth quintiles (CBS, MoH *et al.*, 2004).
- Access to maternal health services was generally low, with only 52 per cent of pregnant women having four visits, 42 per cent having births attended by skilled personnel and 64 per cent contraceptive prevalence among married women in 2003 (CBS *et al.*, 2004).
- As for other health indicators, there were wide regional differentials and twofold urban to rural differentials in attendance by skilled personnel on delivery. As shown in Figure 7, while contraceptive prevalence improved from 8.1 per cent of women in Nyanza in 1987 to 23.6 per cent in 2003, North Eastern (at 0.2 per cent) and Nyanza had far lower contraceptive prevalence among women in 2003 than Nairobi (50.7 per cent) and Central (66.4 per cent) provinces (NCPD, CBS *et al.*, 1999; CBS, MoH *et al.*, 2004). Only 25 per cent of pregnant women in North Eastern province received antenatal care from a skilled health worker, compared to rates of 87 to 95 per cent in all other provinces (NCPD, CBS *et al.*, 1994; CBS, MoH *et al.*, 2004). Urban, more educated and wealthier women were significantly more likely to be assisted by a skilled health worker during delivery, with urban to rural ratios of 2.09 and highest to lowest wealth differentials of 4.5. wealth (see summary table). Differences in coverage of skilled assistance at delivery were also wide, ranging from 9 per cent in North Eastern province to 79 per cent in Nairobi in 2003 (CBS, MoH *et al.*, 2004).

Figure 6: Trends in percentage of children fully immunised, 1987–2009



Sources: NCPD et al., 1994, 1999; CBS, 2003; CBS, MoH et al., 2004; KNBS, ICF Macro, 2010

Figure 7: Contraceptive prevalence among married women aged 15-49 years, 1984–2009

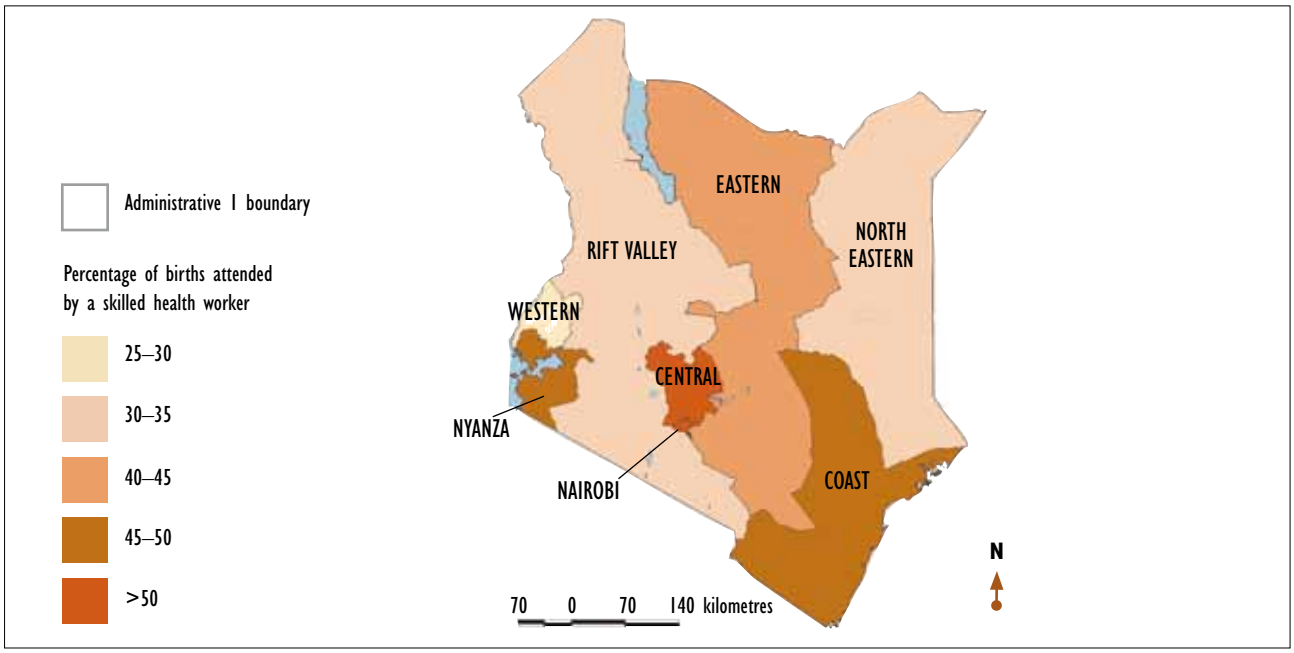


Sources: NCPD, CBS et al. ,1994; 1999; CBS, 2003; CBS, MoH et al. ,2004; KNBS, ICF Macro, 2010

CURRENT LEVEL: 2006–2010

- By 2009, immunisation coverage rates had improved overall and for all vaccines (Figure 6). While rural to urban differentials changed minimally and wealth differentials narrowed marginally, regional variations in coverage remained wide, with full immunisation among 12 to 23 year olds ranging from 86 per cent in Central province to 48 per cent in North Eastern province in 2009 (KNBS and ICF Macro, 2010). The barriers to coverage in North Eastern province raised earlier call for specific approaches to tackle the opportunity cost (travel, time off from income generating activities), information and awareness barriers for poorer populations.
- Contraceptive prevalence among women increased from 64 per cent in 2003 to 73 per cent in 2008-09 (KNBS and ICF Macro, 2010) and although wealth differentials in contraceptive prevalence narrowed, wealthiest groups still had 2.8 times the coverage of poorest. The bias in coverage towards urban areas and towards Nairobi and Central province persisted, although contraceptive prevalence increased significantly in Western and Coast Provinces (see Figure 7). It would be useful to understand what drive these more rapid improvements, for example, is it the integration of family planning with HIV related services?

Figure 8: Births attended by skilled health worker



Source: KNBS and ICF Macro, 2010

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CURRENT LEVEL: 2006–2010 continued

- Other indicators of maternal health showed little improvement, with the summary table showing a decline in the proportion of pregnant women who made four or more antenatal visits and a negligible increase in births under the supervision of a skilled birth attendant by 2009. Urban, rural, wealth and regional differences persist in use of skilled health workers at delivery. A fall in the ratio of highest to lowest wealth quintile in 2009 was due to a major decline in coverage from 76 per cent to 31 per cent among the wealthiest groups, rather than an improvement in the lowest income groups. In 2009, Western province had only 29 per cent of births attended by a skilled health worker and North Eastern had 32 per cent, compared to 88.9 per cent and 73.8 per cent in Nairobi and Central provinces respectively. Even within these areas there are socio-economic differentials, as people living in Nairobi's informal settlements have limited access to public facilities and are often use private providers who offer poor quality services due to lack of qualified personnel, equipment and supplies (APHRC, 2009). In an effort to ensure that more women are attended by skilled health providers during delivery, in July 2007 government abolished all fees for deliveries in public health centres and dispensaries. But in practice, facilities still charge for delivery services and women are required to purchase supplies.

Progress

While immunisation and contraceptive coverage rates have evidently improved, continued poor coverage of antenatal care and skilled health workers at delivery is a factor in the limited improvements in neonatal and maternal mortality. There is thus mixed performance on this progress marker. Urban to rural and wealth related inequalities in coverage of these interventions have persisted, as have wide regional inequalities. While improving overall coverage for women's health services is important, the evidence suggests the need for focused interventions among mobile pastoral groups in North Eastern province, poor women in Western province and among the poorest groups who face economic and information barriers to uptake of services. The barriers to use of antenatal and delivery services in Kenya include direct and indirect costs, geographical location, perceived poor quality of health services and rude staff in public facilities (van Eijk, Bles *et al.*, 2006; Ziraba, Madise *et al.*, 2009). Removing user fees for deliveries was thus an important but insufficient step to address the problem. Other interventions are needed, including educating community members on the importance of antenatal care, equipping hospitals with essential supplies, encouraging good interaction between women and health workers, and working with retired health professions to promote safe delivery at the local level.

Achieving UN and WHO Goals of universal access to prevention of vertical transmission, condoms and antiretrovirals

INDICATOR	PAST LEVELS (1980–2005) Level	Year	CURRENT LEVEL (most recent data) Level	Year
Adult HIV prevalence rate (%)	6.7	2003	7.1	2007
– urban	10.0	2003	8.4	2007
– rural	5.6	2003	6.7	2007
– urban: rural ratio	1.7	2003	1.3	2007
– female: male ratio	1.2	2003	1.6	2007
– highest to lowest wealth quintile ratio	2.7	2003	0.8	2007
% women who know where to get HIV test				
– urban: rural ratio	1.7	2003	1.1	2003
– highest to lowest wealth quintile ratio	3.2	2003	1.2	2008
% men who know where to get HIV test				
– urban: rural ratio	1.46	2003	1.08	2008
– highest to lowest wealth quintile ratio	2.34	2003	1.21	2008
% women ever tested for HIV	76.3	2003	86.0	2008
– urban	23.9	2003	71.0	2008
– rural	11.6	2003	54.2	2008
– urban: rural ratio	2.1	2003	1.3	2008
– lowest wealth quintile	5.8	2003	47.3	2008
– highest wealth quintile	24.4	2003	71.7	2008
– highest to lowest wealth quintile ratio	4.2	2003	1.5	2008
% ever tested for HIV (Men)	73.0	2003	79.0	2008
– urban	23.8	2003	56.3	2008
– rural	13.0	2003	37.2	2008
– urban: rural ratio	1.8	2003	1.5	2008
– lowest wealth quintile	10.5	2003	23.1	2008
– highest wealth quintile	25.0	2003	57.2	2008
– highest to lowest wealth quintile ratio	2.4	2003	2.5	2008
% of women tested during antenatal care	50.4 56.0	2003 2005	59.3 78.6	2006 2007
% of women not offered HIV test	43.2 36.8	2003 2005	25.9 17.9	2006 2007
% adults and children with advanced HIV infection receiving antiretroviral (ARV) therapy				
– adults	No data available		55.3 70.4	2008 2009
– children *			26.4 24.2	2008 2009*
% of women knowing about prevention of mother to child transmission (PMTCT)	33.0	2003	69.0	2008
– urban	35.7	2003	73.6	2008
– rural	25.6	2003	62.7	2008
– urban: rural ratio	1.39	2003	1.17	2008
– highest to lowest wealth quintile ratio	2.34	2003	1.68	2008
% HIV-positive pregnant women who received ARV drugs to reduce risk of mother to child transmission	No data available		73.6 72.3	2008 2009

*The denominator for the children went up in 2009 due to the new criteria that all HIV positive children under 18 months are in need of antiretroviral treatment.

Source: NASCP, MoH, 2009; KNBS, ICF Macro, 2010; NACC, 2010

PAST LEVELS: 1980–2005

- Adult (15-49 years) HIV prevalence in Kenya was at 6.7 per cent in 2003 down from 10 per cent in 1997/98 (CBS, 2003). As shown in the summary table, in 2003 HIV prevalence was 1.79 times higher in urban than rural areas, 1.2 times higher in women than men and 2.72 times higher in wealthiest than in poorest quintiles of the population (CBS, MoH *et al.*, 2004).
- Before 2005 prevention services were a key intervention and condom distribution rose from 78.4 million in 1998 to 94.8 million in 1999 (NASCOP, 2011). Antiretroviral (ARV) treatment was low with only 60,392 HIV positive adults on treatment in 2005, against 934,000 HIV positive adults (see Table 7).
- In 2003, both women and men had little knowledge of where to go for an HIV test, with only 40.7 per cent of rural women and 55.8 per cent of rural men informed, compared to more than 70 per cent of men and women being informed in urban areas and more knowledge among wealthier groups (CBS, MoH *et al.*, 2004).
- Fewer than a quarter of men and women had tested for HIV. Testing was twice as likely in urban areas and twice (for men) and four times (for women) more likely in wealthiest than in poorest groups. So although HIV prevalence was higher in wealthier urban groups, so too was health service knowledge and uptake.
- Perhaps the most evident inequity was thus along gender lines where, despite higher HIV prevalence, women had worse uptake of these services than men. There are various entry points for women for HIV services. As shown in the summary table, over half of women were tested during antenatal care and this number is steadily rising. So while awareness of prevention of mother to child transmission services was still low, especially among poorer and rural women, the integration of HIV testing into antenatal clinics has enhanced access. HIV testing has been offered as part of the standard package of care for all pregnant women attending maternal and child health services since 2004, in line with Kenya's national prevention of mother to child transmission guidelines (MoH, 2009). Following group pre-test counselling, women attending antenatal clinics are offered an HIV test with results and individual post-test counselling the same day.
- Prevention of mother to child transmission services were introduced in Kenya on a pilot basis in 2000 and by December 2006, 64 per cent of facilities were providing free services integrated into maternal and child health services to 60–70 per cent of all pregnant women (NACC, 2010).

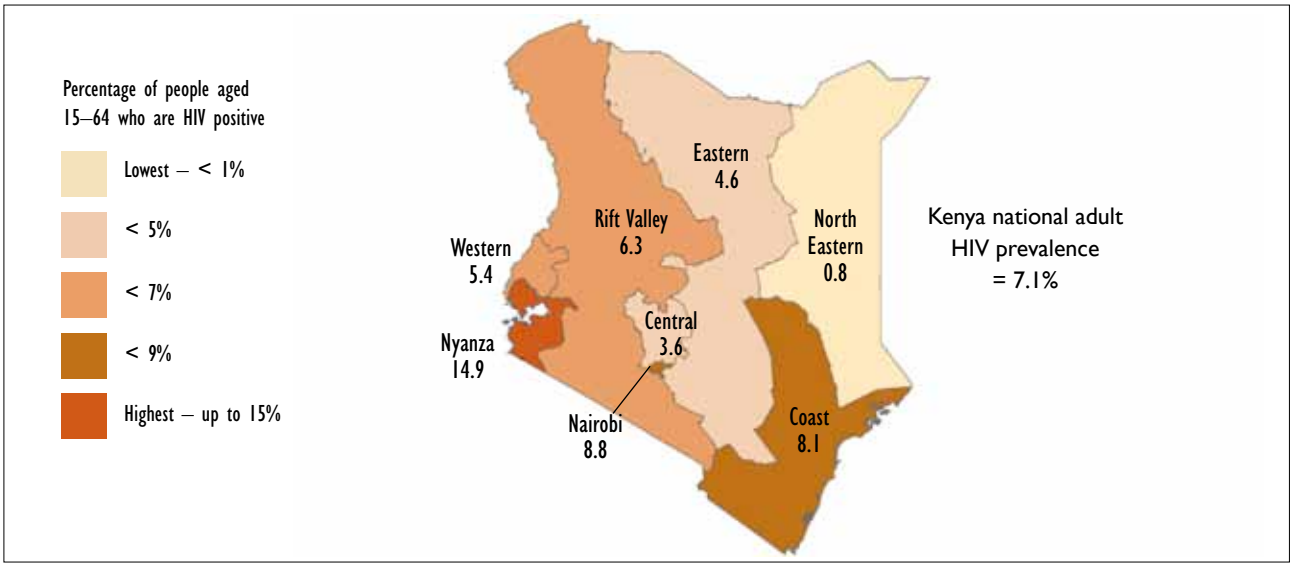
CURRENT LEVEL: 2006–2010

- By 2007, 7.1 per cent of adults aged 15–64 years were HIV positive (KNBS and ICF Macro 2010), higher in the 30–34 year old age group, higher in urban areas (as in the prior period) and with a growing increase in the ratio of women to men. In contrast to the earlier period, wealth-related risk had inverted and by 2007 those in the wealthiest group were less likely to have HIV than those in the poorest groups. Similarly women with secondary education or more had significantly lower HIV prevalence than those with lower education levels (KNBS and ICF Macro, 2010).
- Regional disparities in HIV prevalence, shown in Figure 9, indicate highest levels in Coast and Nyanza provinces, as core endemic areas due to a tourist economy in the former and socio-cultural practices in the latter, while religious and cultural factors are associated with low levels in North Eastern province. Ratios of 10.1 between provinces indicate that for HIV prevalence, widest inequalities exist by province but growing inequalities exist by gender. There are also other social differentials in the risk of infection, such as a higher risk among widowed respondents (44.4 per cent) (KNBS and ICF Macro, 2010).
- Greater recognition has also been given to child HIV, with a cumulative estimate of 184,052 children infected by 2009 (NASCOP, 2011), contributing to infant and young child mortality and complicating child malnutrition.
- While previously the wealthier, urban groups were most affected and had highest coverage of HIV services, in this period, poorer, less educated women increasingly from rural areas had greater need for services. Services have consequently expanded rapidly. The cumulative number of people tested through voluntary counselling and testing (VCT) and prevention of mother to child transmission services increased from 1.7 million in 2005 to over 4.6 million in 2007 (MOT Analysis, 2009).

Table 7: Cumulative number on antiretroviral treatment by province, 2005–2007

Number of adults Province	on treatment 2005	2006	2007	% change 2005-2007	HIV+ (*)
Nairobi	14,331	24,737	38,948	172	197,000
Central	5,547	13,543	21,962	296	96,000
Coast	3,686	8,748	14,419	291	93,000
Eastern	3,156	8,379	11,931	278	72,000
North Eastern	134	169	322	140	9,000
Nyanza	11,352	26,943	41,292	264	183,000
Rift valley	15,825	27,671	33,594	112	171,000
Western	6,361	9,836	18,990	199	112,000
Total	60,392	120,026	181,458	200	934,000

Figure 9: Adult HIV prevalence 15–64 years by region, 2007



Source: NASCP and MoH, 2009

CURRENT LEVEL: 2006–2010 continued

- Health facilities offering prevention of mother to child transmission services increased from about 2000 in 2007 to 3000 in 2008 and to 3,397 by 2009 (NACC, 2010). Kenya's *National AIDS strategic plan* (KNASP) target of introducing these services in 80 per cent of health facilities offering antenatal care was met in 2007 (NASCP and MoH, 2009).
- The coverage of HIV testing and knowledge about voluntary testing and counselling and prevention of mother to child transmission services more than doubled between 2003 and 2007, particularly in rural areas (see summary table).
- The number of HIV positive people on antiretrovirals trebled between 2005 and 2007 (see Table 7), with highest rates of increase in Nyanza, Coast, Centre and Eastern provinces. Nyanza and Coast had higher HIV prevalence rates in 2007.
- Despite this rapid expansion of services and the significant growth in service coverage in rural areas, an inequity between need and supply persists. Wealthier, urban groups continue to have higher testing coverage, the entry point for other services and to be better informed about them (see summary table). A reported 60 per cent of voluntary testing sites are in urban and peri-urban areas where only 20–30 per cent of the population live (NASCOP, 2011).
- There are some indications of measures enhancing equity. The proportion of pregnant women tested for HIV during antenatal visits increased dramatically from 59.3 per cent in 2006 to 78.6 per cent in 2007, as HIV services were increasingly integrated into antenatal clinics. The proportion of women offered a test but not tested fell to only 3.5 per cent in 2007, with fewer test kit stockouts and fewer cases of absences or unavailability of testing staff or refusals ('opt out') (KAIS, 2007). As a result, by 2009, 72.7 per cent of HIV positive pregnant women were offered and accepted an HIV test and received their results during antenatal care and the share of children receiving antiretrovirals rose from 47 per cent in 2008 to 49 per cent in 2009 (KNBS, ICF Macro, 2010).

Progress

Despite the reduction in overall adult HIV prevalence, some groups in Kenya continue to be at high risk, as evidenced by the wide or growing inequalities by province and by gender. Particular social groups are at high risk and children born with HIV remain vulnerable. While knowledge, prevention and treatment services have expanded since 2005, these services are highly dependent on external funding. The average annual cost of first-line antiretroviral treatment per person, when computed at a cohort level, is still close to US$200 (not inclusive of laboratory costs at initiation or related to clinical monitoring), which makes it difficult to finance locally, even for middle-class patients. While the national programme provides treatment free of charge through tax and external funding, there was still an overall funding gap of about US$959 million in the period 2010 to 2013 in HIV treatment and care, US$547 million of which was for antiretrovirals (MoH, 2010). This raises a challenge to meet currently outstanding demands for treatment (about 430,000 adults, (NASCPOP, 2011) and the costs of prevention and treatment services, and to boost domestic financing for these services. The National Hospital Insurance Fund does not currently cover outpatient services, including antiretrovirals or outpatient treatment of opportunistic infection, passing these costs on to government and donors. This raises questions about the balance between the fund's role in sustaining lifetime antiretroviral treatment and the role of other sources of funding, and the mechanisms to achieve this (MoH, 2010).

A further challenge arises in the inequity between need and supply of services, as wealthier, urban groups continue to have higher coverage and uptake of services. Evidence suggests that where AIDS services are integrated into those services widely used by populations with high need (including rural, low income, women and children) there are greater possibilities for equity. An example of this is the integration of testing for HIV and referral for prevention of mother to child transmission during antenatal visits.

EQUITY WATCH

Household access to the national resources for health

Progress markers

- Achieving the Millennium Development Goal of halving the proportion of people with no sustainable access to safe drinking water by 2015
- Achieving the Millennium Development Goal of halving the proportion of people with no sustainable access to safe drinking water by 2015
- Increasing ratio of wages to gross domestic product
- Meeting standards of adequate provision of health workers and of vital and essential drugs at primary and district levels of health systems
- Abolishing user fees from health systems backed by measures to resource services
- Overcoming the barriers that disadvantaged communities face in access and use of essential health services

EQUITY WATCH

Household access to the national resources for health

The health inequalities and their determinants described in the previous section are addressed by households accessing resources for health through redistributive health systems and through wider national and global policies. This section explores progress in selected parameters of how far households are accessing the educational, environmental, income, health care and social protection resources they need to improve their health, and to close differentials in the social determinants of health. The parameters indicate the wider spectrum of such resources.

Achieving and closing gender differentials in attainment of universal primary and secondary education

INDICATOR	PAST LEVELS (1980–2005) Level	Year	CURRENT LEVEL (most recent data) Level	Yea
% net enrolment in primary school				
Female	48.7	1990	48.9	2006
	49.4	1995	48.8	2007
	49.6	2000	49.1	2008
	48.6	2005	48.9	2009
Gross enrolment rates				
– female	99.6	1990	105.5	2006
	86.3	1995	104.4	2007
	91.7	2000	107.7	2008
	92.0	2001		
	104.4	2005		
– male	104.0	1990		
	87.4	1995	109.3	2006
	88.1	2000	110.7	2007
	109.9	2005	112.2	2008
– male : female ratio	1.04	1990	1.04	2006
	1.04	2000	1.04	2008
	1.05	2005		
Primary to secondary school transition rates (%)				
– female	39.4	1990	56.2	2005
	43.9	1995		
	44.9	2000		
– male	42.9	1990	58.8	2005
	45.4	1995		
	47.3	2000		
– male : female ratio	1.09	1990	1.05	2005
	1.05	2000		
% adult literacy (overall)			87.0	2009

Source: KNBS, 1990-2009; MoE, 2009

PAST LEVELS: 1980–2005

- Net enrolment in primary school remained relatively constant in the period but gross enrolment increased markedly from 2004 due to the government introducing free primary education in 2003 (see summary table). Under the policy of free primary education, fees were removed in all public primary schools and textbooks and stationery were supported. With decentralisation, primary schools opened bank accounts and received funding directly from the Ministry of Finance to avoid losses at district level.
- Enrolment rates for boys and girls were close to parity at both primary and secondary school.

CURRENT LEVEL: 2006–2010

- After 2005 gross enrolment rates remained at above 100 per cent in primary school, with parity between girls and boys. Net enrolment rates are lower due to children dropping out of school. The data is not available to assess gender disparities.
- The free primary education policies in 2003 translated into increased transition rates to secondary schools for both genders in 2005. Although it has been increasing over the years, the median number of years of schooling completed in 2009 was still higher for males (6 years) than females (5.2 years) (KNBS, ICF Macro, 2010).
- In 2008, the government removed tuition fees at secondary schools, although those attending boarding schools still pay significant sums for boarding facilities. However, transition rates to secondary school still remain relatively low at 56–59 per cent due to limited space in existing schools.
- The Constitution of Kenya Act (2010) states in Article 53(1)(b) that every child has the right to free and compulsory basic education and in Article 27(3) it provides for the right to equality and protection against bias in access to education on the grounds of culture, religion and gender.

Progress

Access to primary education and transition to secondary education has improved dramatically in Kenya, following the introduction of free primary and secondary education in 2002 and 2008 respectively. This has been consolidated by the inclusion of the right to free and compulsory basic education for all in the 2010 Constitution. There are still some gender disparities in completed years of schooling. For transition rates to secondary school to improve investments need to be made to make facilitates more available.

Achieving the Millennium Development Goal of halving the proportion of people with no sustainable access to safe drinking water by 2015

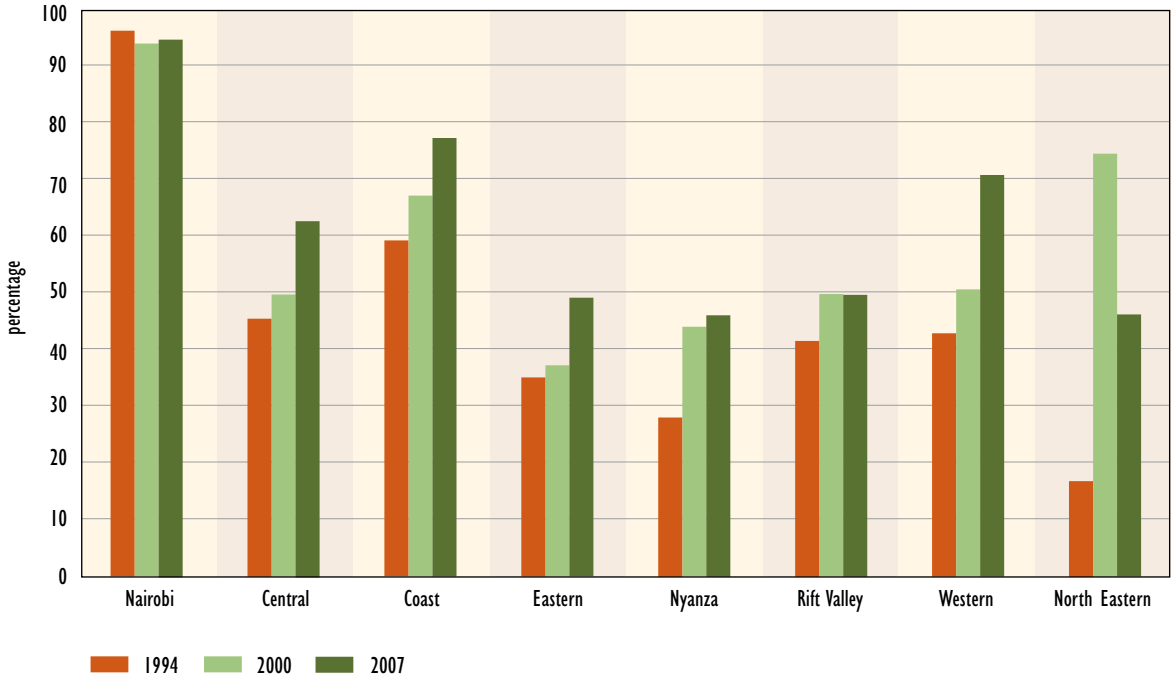
INDICATOR	PAST LEVELS (1980–2005) Level	Year	CURRENT LEVEL (most recent data) Level	Year
% of households with safe water	44.9	1994	57.0	2006
	55.0	1998	60.4	2007
	54.8	2000		
	58.6	2003		
– rural	32.5	1994	48.2	2006
	42.1	1998	50.5	2007
	43.5	2000		
	51.2	2003		
– urban	93.3	1994	83.6	2006
	91.3	1998	90.9	2007
	89.7	2000		
	80.2	2003		
– urban : rural ratio	2.9	1994	1.7	2006
	2.2	1998	1.8	2007
	2.1	2000		
	1.6	2003		
% of households living <15 minutes away from water source	53.1	1998		
	53.2	2003		
– urban : rural ratio	1.9	1998		
	1.9	2003		
% of households living < 30 minutes away from water source			68.3	2007
– urban : rural ratio			1.34	2007
% of households with safe sanitation	82.6	1993	85.2	2006
	85.2	1998	87.7	2007
	81.1	2000		
	83.8	2003		
– rural	75.9	1994	81.2	2006
	81.4	1998	83.9	2007
	76.6	2000		
	79.6	2003		
– urban	97.6	1994	97.4	2006
	97.4	1998	99.2	2007
	94.8	2000		
	96.3	2003		
– urban : rural ratio	1.3	1994	1.2	2006
	1.2	1998	1.2	2007
	1.2	2000		
	1.2	2003		

Source: NCDP, CBS et al., 1999,; CBS, MoH et al., 2003a; CBS, MNPD, UNICEF, 2003; KNBS, 1994

PAST LEVELS: 1980–2005

- Access to safe water reduces the risk of waterborne diseases. It saves women and children's time, leaving them time for other activities and for education. The government has set policy aims to improve access to water and sanitation services. The Water Act, 2002, redefined government functions and increased commercial roles in water supply, increasing cost barriers (GoK, 2010).
- As the summary table shows, urban access rates to safe water were over double those of rural areas during the period, although the gap closed in 2003. This was due to better rural coverage but also to a drop in urban coverage, partly attributed to the increasing population living in urban informal settlements.
- There were wide regional differentials in access to safe water, as shown in Figure 10, with four times more access in Nairobi compared to North Eastern province.
- While changes were generally limited between 1994 and 2000, North Eastern province experienced particularly rapid improvements for unclear reasons (KNBS, ICF Macro, 2010).
- Over 80 per cent of Kenyan households have access to safe sanitation, with high levels in both urban and rural areas. Access is above sub-Saharan Africa averages and nearly at par with levels in middle income countries (EQUINET SC, 2007). Access rates in urban areas fell slightly in the period, due to the growth of large urban informal settlements with poor property rights (GoK, 2010). North Eastern province had lower access in 1994 due to less developed infrastructures and the pastoralist nature of communities (KNBS, ICF Macro, 2010).

Figure 10: Percentage of households with safe drinking water by province, 1994–2007



Source: MoH, 2010b

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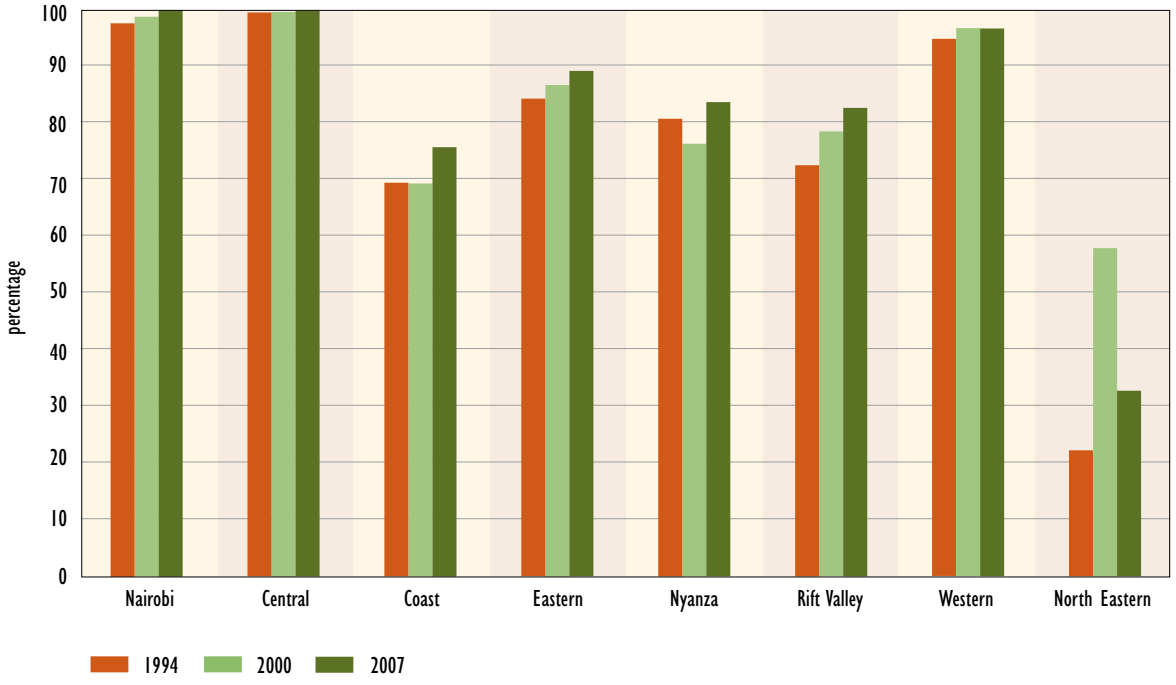
CURRENT LEVEL: 2006–2010

- Both rural and urban access to safe water had improved by 2007, although differentials widened due to faster improvements in urban areas (see summary table). Geographical differences in access to safe drinking water continued (see Figure 10) but Western, Coast and Central provinces improved rapidly by 2007.
- In one year (2007/08 – 2008/09) around 2.47 million people (53 per cent of them in rural areas) gained access to clean drinking water – about 7 per cent of the population. Improvements were mainly through rehabilitating and expanding water supplies, drilling boreholes and constructing or de-silting water pans and dams. Water supply infrastructures for 26 medium size towns were rehabilitated and expanded, and 482 boreholes were drilled and equipped, mainly in remote areas. Rehabilitation and expansion works are ongoing in other urban areas like Nairobi, Mombasa, Nakuru and Kisumu. As many as 272 small dams and water pans were constructed or rehabilitated and 108 new rural water and sanitation projects were constructed (GoK, 2010).
- Recently limited improvements in sanitation meant little change in urban, rural and regional safe sanitation distribution. While 244 rural sanitation projects were rehabilitated, giving approximately 800,000 people access to improved sanitation (GoK, 2010), surveys expose a problem in large urban areas. In Nairobi 60 per cent of people live in overcrowded slums with shallow, poorly-constructed pit latrines, of which 65 per cent are unusable (GoK, 2010). Almost 70 per cent of these households share facilities with 70–150 people per facility. Communal sanitation blocks and bio-latrines, two technologies increasingly adopted in slums like Kibera, are not considered improved sanitation facilities (GoK, 2010).

Figure 11: Percent households with toilet facility by province, 1999–2007



Source: MoH, 2010b

Progress

Access to safe drinking water has progressed slowly despite significant investments in safe water and irrigation infrastructure and significant improvements in some provinces, like North Eastern and Western. Access to safe sanitation has been at relatively high levels since 1993, with limited change in the period. Kenya has a stated policy aspiration for most Kenyans to have access to an improved water source and to sanitation by 2030 (GoK, 2010). The 2012 targets for access to safe, reliable water are 90 per cent for urban areas and 70 per cent for rural areas while targets for access to safe sanitation are 70 per cent in urban areas and 65 per cent in rural areas. The evidence suggests that urban water targets and urban and rural sanitation targets have been met. However, efforts to improve access to safe water in rural areas need to be accompanied by measures to involve communities, ensure maintenance and promote practices to treat or purify water. In urban areas the major concern is the increasing population density, particularly in informal settlements, leading to cost barriers to access and unacceptably high people to facility ratios.

Increasing the ratio of wages to gross domestic product (GDP)

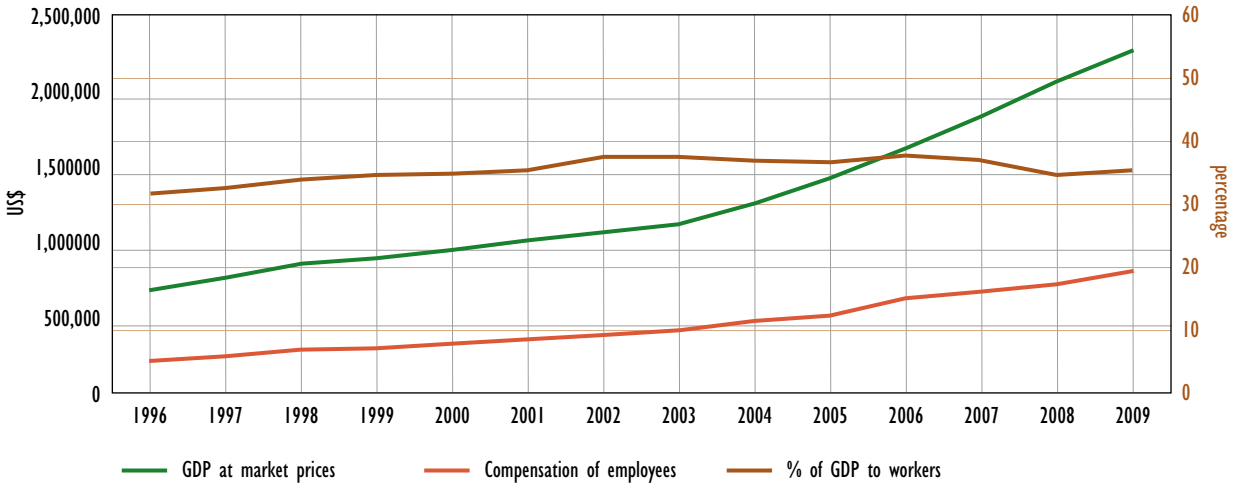
INDICATOR	PAST LEVELS (1980–2005) Level	Year	CURRENT LEVEL (most recent data) Level	Year
Percentage of gross domestic product that goes to workers	31.4	1996	36.9	2005
	32.6	1997	37.7	2006
	33.7	1998	37.0	2007
	34.4	1999	34.5	2008
	34.8	2000	35.3	2009
	35.3	2001		
	37.4	2002		
	37.2	2003		
	37.2	2004		

Source: KNBS ,1996-2009; CBS, 2004

PAST LEVELS: 1980–2005

- The data in the summary table indicates a gradual increase in the share of wages to GDP from 31.4 per cent in 1996 to 37.4 per cent in 2002, after which the level plateaued. There was a strong positive correlation between GDP and the share to wages in 1996 to 2005 (correlation coefficient = 0.874) indicating that improvements in the economy translated to improved wage incomes (see Figure 12).

Figure 12: Share of gross domestic product paid to workers, 1996–2009



Source: KNBS, 1996-2009; CBS, 2004

CURRENT LEVEL: 2006–2010

- The share of wages in GDP declined somewhat after 2007, with the gap between GDP and the share to wages growing (see Figure 12).

Progress

The growing gap between economic performance and the share of wages in GDP post 2006 may not imply a fall in incomes, as overall GDP improves, but it does indicate a difference in the returns to workers of growth, consistent with the finding of growing salary inequality noted earlier. While this may indicate an improved share of GDP to investment, it may also suggest that workers will be more vulnerable to downturns in economic performance.

Meeting standards of adequate provision of health workers and of vital and essential drugs at primary and district levels of health systems

INDICATOR	PAST LEVELS (1980–2005) Level	Year	CURRENT LEVEL (most recent data) Level	Year
Total medical personnel per 100,000 people	not available	2002	197	2007
	192	2003	203	2008
	198	2004		
Total doctors per 100,000 people	14.1	2002	17.0	2007
	15.0	2003	17.0	2008
	16.0	2004		
Total dentists per 100,000 people	n.a	2002	n.a	2007
	3.0	2003	3.0	2008
	3.0	2004		
Nursing personnel per 100,000 people (registered and enrolled nurses)	108	2002	153	2007
	133	2003	153	2008
	130	2004		
Total clinical officers per 100,000 people	n.a	2002	11.9	2007
	16.0	2003	12.0	2008
	16.0	2004		
Total pharmacists per 100,000 people	n.a	2002	n.a	2007
	6.0	2003	7.0	2008
	6.0	2004		
Total pharmaceutical technologists per 100,000 people	n.a	2002	n.a	2007
	4.0	2003	5.0	2008
	4.0	2004		

Source: MoH, 2005; KNBS, 2009

PAST LEVELS: 1980–2005

- Kenya has had a human resource supply problems over the last two decades. In 2005, set in a context of an ageing workforce with high levels attrition and an eight year freeze on recruitment, only 33 per cent of the nurses needed to implement Kenya's Essential Package for Health were available in the Ministry of Health (MoH, 2006). Health worker emigration rates (numbers out-migrating as a share of total) were estimated as 51 per cent for doctors and 8.3 per cent for nurses in 2005 (Clemens *et al.*, 2006).
- In 2006, about half of all health workers and 80 per cent of doctors were in based in urban areas, most of these working in the private sector (MoH, 2005). In 2002 the ratios of 14 doctors and 108 nurses per 100,000 people were lower than the average for the African region of 21.7 doctors and 117 nurses, and much lower than the WHO recommendation of 228 nurses per 100,000 population (EQUINET SC, 2007).
- The summary table indicates an improvement in the density of health workers, particularly doctors and nurses, between 2002 and 2004, while the density of other categories of health workers shown did not change. Paradoxically, despite the absolute shortfalls, there was an increased rate of unemployment for nurses trained in both government and private institutions in the period (MoH, 2005). In the 1990s, all nurses trained at government facilities were employed on a permanent basis by the Ministry of Health, but this changed towards the end of that decade leaving some nurses employed on a contract basis and others unemployed (MoH, 2006).

PAST LEVELS: 1980–2005 continued

- A 2003 baseline survey on access and use of quality medicines found that 97 per cent of public health facilities had more than 75 per cent availability of essential medicines but that households faced cost barriers, with considerable variation in costs of medicines in public facilities. The survey found a tendency to over-prescribe antibiotics and less than half of the respondents understood how to take their medicines (HAI, WHO, 2004).

CURRENT LEVEL: 2006–2010

- Accurate information about the number, location and skills of health workers in Kenya is limited (Luoma *et al.*, 2010) and relies on mapping studies and payroll databases that may not be accurate due to 'ghost workers' being included on lists (MoH, 2005a; Muchiri and James, 2006). In 2005, it was reported that enrolled nurses (trained to certificate level) outnumbered registered nurses (trained to diploma level) and that clinical officers in district and provincial general hospitals were at parity with doctors in these facilities. Provincial general hospitals, with an average of 38 doctors, 40 clinical officers, 262 nurses, 11 laboratory specialists and 22 pharmacy specialists had twice the personnel of district hospitals (15 doctors, 19 clinical officers, 141 nurses, 4 laboratory and 13 pharmacy specialists), while health centres had on average one clinical officer, seven nurses (mainly enrolled nurses) and a pharmacy specialist. One in five health centres had a laboratory specialist (Chankova *et al.*, 2009).
- The summary table shows some improvement in the number of health workers in 2007 and 2008, largely due to government initiatives with support from external partners, such as the Clinton Foundation economic stimulus programme. There is an unequal distribution of health workers across provinces, although for all provinces numbers are well below the WHO recommended levels cited above. The lowest density of health workers is found in North Eastern province, a province already noted earlier to have lower outcomes on a range of health service coverage indicators. The highest density of doctors is in Nairobi but the city also has second lowest number of nurses per 100,000 population (Table 8).
- A follow-up survey of medicine availability in 2007 found that 59 per cent of public facilities had medicines on a list of 37 essential medicines, 75 per cent in urban areas and 51 per cent in rural areas. Access in the private sector was higher at 91 per cent and similar to public facilities in the mission sector at 63 per cent. Medicine availability was lower and cost barriers higher for chronic disease treatments (HAI, WHO, 2007). The survey did not report on prescribing and use.

Table 8: Provincial distribution of health personnel per 100,000 people, 2007

	Central	Coast	Eastern Eastern	North	Nyanza	Rift Valley	Western	Nairobi
Doctors	4	4	3	1	2	3	2	6
Clinical officers	7	7	6	6	6	8	5	5
Nurses	73	50	56	28	40	49	45	34

Source: MoH, 2005a

Progress

Kenya faces shortages and slow improvement in availability of key categories of health workers, despite the presence of unemployed graduate nurses due to hiring constraints. This is exacerbated by a maldistribution of some categories of health workers, with greater density of health workers in urban and private sector services. For provinces like North Eastern with high health need and poor outcomes, the very low density of health workers is likely to be a barrier to effective care. Drug availability surveys suggest that cost barriers and problems in rational prescribing and use of essential medicines may be a further barrier for poor communities.

Abolishing user fees from health systems backed by measures to resource services

INDICATOR	PAST LEVELS (1980–2005) Level	Year	CURRENT LEVEL (most recent data) Level	Year
Out of pocket spending as a percent of total health expenditure*	35.9 44.8	1997 2000	29.1	2005

*Data obtained from household surveys
Source: MoH, 2004; GoK and Health Systems, 2020 Project, 2009

PAST LEVELS: 1980–2005

- User fees for health systems have been shown to contribute to inequities in access to health care services and to household poverty. User fees were first introduced in Kenya in 1989 but they were suspended in 1990 due to problems with the hurried implementation, massive declines in health services use, the lack of quality improvements and poor revenue collection (Mwabu, 1986, 1995; Mwabu, Mwanzia *et al.*, 1995; Collins, Quick *et al.*, 1996). They were reintroduced in 1991 in phases starting with tertiary and provincial hospitals, then at health centres and dispensaries. These fees were charged for individual services like drugs, injections and laboratory services, not for consultations.
- Exemptions were provided for children under five and for specific services and conditions such as immunisation and tuberculosis management. There were fee waivers for poor people although the criteria for these were not clear and may have relied on providers' personal judgement. Exemptions were reportedly cumbersome for both health workers and patients to implement (Collins *et al.*, 1996) while fees and other out of pocket payments reduced health care services use, particularly among the poorest people, widening disparities in health care uptake (Mwabu, 1986; Mbugua *et al.*, 1995; MoH, 2004; MoMS,and Ministry of Public Health, 2009).
- Socio-economic and geographic inequities in services uptake were wider for in-patient than for outpatient care due to the higher and more unaffordable costs of the latter (Chuma *et al.*, 2006; 2007).
- In July 2004, user fees at primary health care facilities (lowest level of care) were abolished and replaced with a flat registration fee of 10 Kenya shillings 10 and 20 for dispensaries and health centres respectively – this was commonly known as the 10/20 policy. This was associated with the fall noted in the summary table in out of pocket spending (MoH, 2004). Children under five, poor people, people with specific health conditions like malaria and tuberculosis, HIV/AIDS and other sexually transmitted infections and maternal health and delivery services were exempted from the registration fees. An initial evaluation of the 10/20 policy reported high adherence to the policy and an initial increase in use of 70 per cent, levelling out to about 30 per cent higher than prior to fee reduction. With the reduction of user fees, the revenue collected fell, there were drug shortages and 'overworked' staff due to the increased services use. While the policy was popular among patients, it was not supported by health workers (MoH, 2005) and a later evaluation showed that adherence to the 10/20 policy fell, with charges being raised for registration, injections, drugs, deliveries and laboratory services (Chuma *et al.*, 2009).
- To address this, in 2005 a pilot project was introduced in Coast province, supported by DANIDA, to compensate health centres and dispensaries for lost user fees. Under the project health facilities received money through their bank accounts from the treasury without passing through the Ministry of Health (Opwora *et al.*, 2010). While these measures were applied in the public sector, in the private sector out of pocket spending accounted for 80 per cent of expenditure on health in 2005, with per capita out of pocket spending of US$ 11.7 in 2003, higher in urban than in rural areas, and with highest levels in Nairobi (US$ 18.8 in 2003 and the lowest in Western province (US$ 3.3 in 2003) (MoMS and Ministry of Public Health 2009).

CURRENT LEVEL: 2006–2010

- The fee reduction policy at dispensaries and health centres (the 10/20 policy) continues to operate. Waiving and exempting policies to protect the poor and the vulnerable are still in place. While waivers reportedly function poorly, exemptions function well in most settings (Mwabu *et al.*, 1995; Gilson 1997; Gilson and McIntyre, 2005). Nevertheless, as shown from survey evidence in Table 9, fee charges ranged from the correct levels to up to 22 times the correct levels for dispensaries and up to 12 times the correct levels for health centres. As shown in Figure 13, while expenditure on fees for outpatient visits fell marginally between 2003 and 2007, fees for hospitalisation rose markedly in the period.
- In 2006, government hospitals were allowed to charge women a delivery fee of US$ 6.5 for normal deliveries. Mean out of pocket costs accounted for 17 per cent of households' monthly income on medical expenses for a normal delivery and double this for a complicated delivery. This level of out of pocket payment did not differ significantly by socio-economic status (Perkins *et al.*, 2009). Out of pocket payments impoverish about one million Kenyan households annually (MoMS and MoPH, 2009) and about 7.7 per cent of low income households incur catastrophic health expenditures (Carrin *et al.*, 2007).
- In July 2007, government abolished delivery fees (KSh 300-500) at dispensary and health centre level. While fee charges declined significantly, women still had to purchase essential supplies like gloves and cotton wool (Perkins *et al.*, 2009). To address the lost revenue from fees and discourage these additional charges, in December 2007, the health sector services fund was gazetted as an extension of the pilot project (discussed previously), compensating facilities for revenue loss following user fees reduction through direct transfers from the treasury (MoMS and Ministry of Public Health 2009).

Table 9: Fees charges in Kenya shillings at sampled dispensaries and health centres, 2007*

	Dispensaries		Health centres	
Fee charges	Kwale (n=98)**	Makueni (n=73)	Kwale (n=14)	Makueni (n=32)
Mean	25	14	52	36
Median	20	10	40	20
Range	10-–220	10–100	20–230	20–100

* 2007 is 3 years after fees were reduced to 10 and 20 shillings for health centres and dispensaries respectively. Exchange rate in the period was 1 US dollar= Ksh 78
**n = the number of facilities (dispensaries or health centres) surveyed
Source: Chuma et al., 2009

CURRENT LEVEL: 2006–2010 continued

- Out of pocket spending in the private for profit sector has continued to account for high levels of private expenditure on health but it dropped to US$7.4 per capita in 2007, including in areas of highest expenditure in Nairobi (US$15.9 in 2007) and Western province (US$3.0 in 2007!(MoMS and MoPH, 2009). It is not clear what caused this decline. People may have shifted their treatment seeking patterns towards the public health sector.

Figure 13a: Out-of-pocket expenditure 2003 and 2007: on outpatient visits

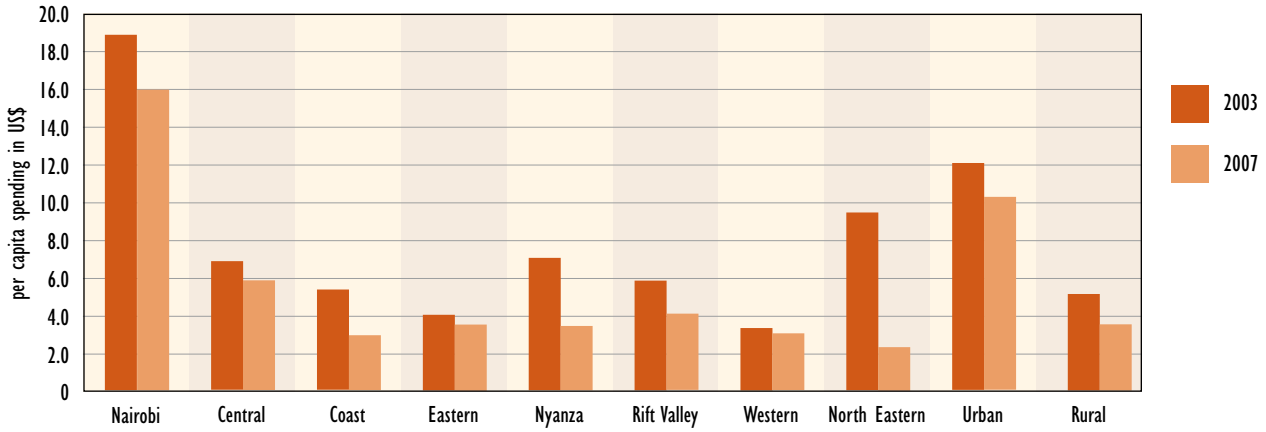
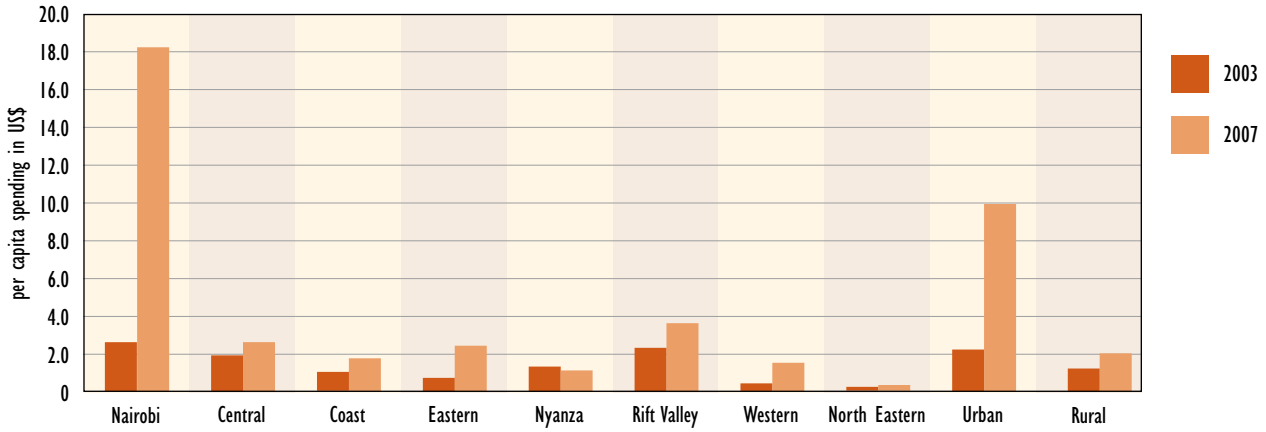


Figure 13b: Out-of-pocket expenditure 2003 and 2007: on hospitalisation



Sources: MoH, 2004; MoMS and MoPH, 2009

Progress

Over the past decade, Kenyan government policy has been consistently committed to abolishing fees at the primary care level. The 10/20 policy was a first step towards this initiative and the health sector services fund is the policy measure to replace registration fees and informal charges at dispensaries and health centres. The positive equity impact of these policies is evident from the changes in patterns of use and reduced financial costs, particularly in low income communities. The challenge has, however, been in how effectively these policies are implemented on the ground. While cited assessments of the 10/20 policy show that it has reduced fee charges, it has not removed them and, given the limited resources available to the facilities, people may find medicines unavailable and still have to purchase them. The health sector services fund provides additional funds to enable facilities to adhere to the 10/20 policy, potentially reducing out of pocket spending and increasing services use. Results of a 2010 baseline study on the health sector services fund will provide evidence of how far this programme is achieving this goal. Out of pocket spending remains an issue at the hospital level and in the private for profit sector, and policy discussions on prepayment mechanisms and social health insurance, discussed later, will be important in providing financial risk protection from these charges for all Kenyans.

Overcoming the barriers that disadvantaged communities face in access and utilisation of essential health services

PAST LEVELS: 1980–2005

- Communities have faced cost and geographical (distance) barriers in accessing health services. Cost barriers arose in the discussion on medicines and user fees and they increase the inequalities in access to health care. As discussed earlier, waiver and exemption mechanisms were applied for fee barriers but were poorly applied and not effective, leading to the change in fee policy.
- A further approach to reducing cost barriers was identified as improving the coverage of social health insurance. In May 2002, an inter-sectoral task force was established to prepare the strategy and legislation for a National Social Health Insurance Fund (NSHIF) (MoH, 2003; Mboya *et al.*, 2004), and the National Social Health Insurance Fund Bill was passed on 9 December 2004. However, the President returned it to parliament for further debate and it has not since advanced.

CURRENT LEVEL: 2006–2010

- With the halt in establishing a social health insurance scheme, expanded insurance cover has primarily been through increasing cover from the 40-year old National Hospital Insurance Fund. This has changed from compulsory cover for all salaried employees and their dependents to improved cover of voluntary adherents from the informal sector. This is further discussed in the progress markers on improving tax financing and harmonising health financing into one scheme.
- Within the national financing strategy, focus has been on how best to support marginalised areas and the most vulnerable people, such as children and women. This has led to pilot programmes to support access in poor communities, for example by using vouchers for safe motherhood or providing free antiretrovirals for low-income communities (MoH, 2008).
- Particular strategies have been instituted to overcome barriers to access within specific areas of health service delivery, such as AIDS and maternal and child health. For example, by strengthening service provision and health worker competencies and supporting community outreach personnel like community midwives, HIV counsellors, home-based care personnel and support networks for people living with HIV. Additional measures were taken to improve competencies in providing services to adolescents and women with disabilities (MoH, 2008).
- To address geographical distance barriers, government policy provided for a community strategy for preventive and promotive health (MoH, 2006). Vast experience of using community health workers was accumulated in the 1980s but the approach had sustainability problems as it depended on external funding. In 2006, the community health strategy revived the approach and engaged a large number of well-trained public health technicians. Government also enrolled community nurses, many of whom were unemployed, to fulfill the extension role of level one services. The policy also provided for links with households through community-owned resource persons (MoH, 2006).

Progress

There is a policy focus on addressing the financial and geographical barriers to the access that low income people have, and progress will depend on the implementation and evaluation of these policy measures. There may also be social barriers to uptake, such as in health worker communication, or attitudes within communities, that need to be addressed.

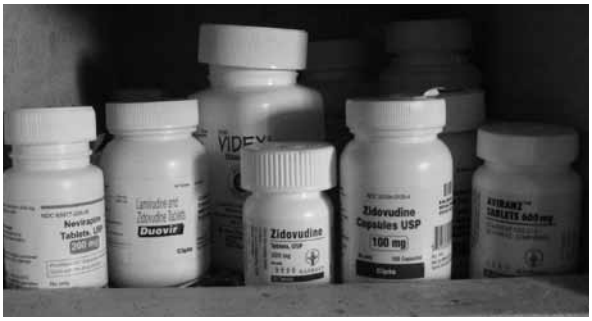
EQUITY WATCH

Resourcing redistributive health systems

Progress markers

- Achieving the Abuja commitment of 15 per cent government spending on health
- Achieving US$60 per capita public sector health expenditure
- Increasing progressive tax funding to health and reducing out of pocket financing in health
- Harmonising the various health financing schemes into one framework for universal coverage
- Establishing and ensuring a clear set of comprehensive health care entitlements for the population
- Allocating at least 50 per cent of government spending on health to district health systems and 25 per cent on primary health care
- Community outreach and health promotion in Western Kenya
- Implementing a mix of non–financial incentives for health workers

EQUITY WATCH



Resourcing redistributive health systems

For health systems to promote health equity they need to work with other sectors to improve household access to the resources for health (for example, safe water and education) discussed in an earlier section. Health systems also need to 'get their own house in order', to promote the features that enhance health equity. This section presents selected parameters of progress in this direction, for example: in the benefits, entitlements and framework for achieving universal coverage; in mobilizing adequate resources through fair, progressive funding; in allocating resources fairly on the basis of health need; and in investing in the central role of health workers, people and social action in health systems.

Achieving the Abuja commitment of 15 per cent of government spending on health

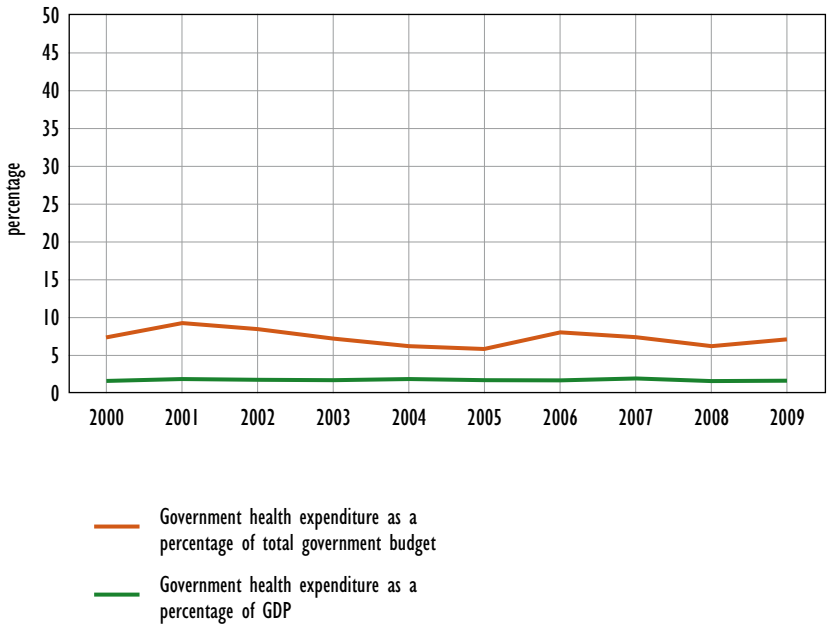
INDICATOR	PAST LEVELS (1980–2005) Level	Year	CURRENT LEVEL (most recent data) Level	Year
% of government spending on health excluding external funding	7.2	2000	7.9	2006
	9.1	2001	6.4	2007
	8.3	2002	6.0	2008
	7.0	2003	6.9	2009
	6.1	2004		
	5.7	2005		
Government health spending as % of GDP	1.4	2000	1.5	2006
	1.7	2001	1.7	2007
	1.5	2002	1.4	2008
	1.5	2003	1.4	2009
	1.6	2004		
	1.5	2005		

Sources: MoH, 2004, 2005, 2008;, 2009; MoMS and MoPH, 2009, 2010; 2010a

PAST LEVELS: 1980–2005

- African heads of state met in Abuja in 2001 and agreed to allocate a minimum of 15 per cent of their budgets to health care, in order to meet the needs of their citizens. They also called upon high income countries to fulfil their commitment of allocating 0.7 per cent of their gross national product as official development assistance for developing countries (African Union Heads of State, 2001).

Figure 14: Government health expenditure as a share of total government spending and GDP, 2000–2009



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CURRENT LEVEL: 2006–2010

- As shown in the summary table and Figure 14, government health expenditure as a share of total government spending has fluctuated since 2005, rising to a maximum of 7.9 per cent in 2006 and falling to 6 per cent in 2008. The decline in 2008 may have been associated with the effects of the political violence in the country (Chuma, 2010) .
- One of the key concerns regarding increasing allocation of funds to the health sector is its absorptive capacity. The public expenditure survey reports of 2005, 2008 and 2009 indicate that a large proportion of the money allocated to the health sector is not spent, and that the remaining funds have to be returned to the treasury by end of the financial year (MoH, 2005; 2009; MoMS and MoPHS, 2010). For example, in previous years only 40 per cent of the health sector's development budget was spent (MoH, 2009).
- Various factors outside the health sector are also responsible for lack of spending in the sector, including delays in transferring funds to the ministry and then from the ministry to the districts. Cumbersome procurement process that have to conform to the Provisions Procurement Act make it difficult for facilities to implement development plans on time (MoH, 2008; MoMS and MoPHS, 2010). So to improve funding to the health sector, the barriers to spending also need to be addressed.

Progress

Kenya has not met the Abuja commitment and has made slow and sometimes faltering progress towards it. Among the eastern and southern African countries, Kenya spends the least share of government expenditure on health and is the only country that has been making negative progress towards this target (Govender et al., 2008). The low domestic share has been attributed to economic constraints, the contribution of external funds to the sector and to low absorptive capacities. The significant policy commitments to improved coverage and better access to health care and other inputs, including the constitutional commitments and policy measures described in this report, demand significant public sector leadership. This may be less likely to be achieved through dramatic increases in resources unless the system is strengthened to enhance absorption and effective use of resources. Progress towards Abuja may need to be met through a progressive and incremental annual increase, together with measures to overcome the barriers to effective use of resources at the different levels of the system. The health sector services fund, previously discussed, is an important step towards addressing challenges in financial flows. Other interventions to improve on might include the procurement process, information systems and the disbursement of funds to the local level.

Achieving US$60 per capita public sector health expenditure

INDICATOR	PAST LEVELS (1980–2005) Level	Year	CURRENT LEVEL (most recent data) Level	Year
Public sector per capita spending on health (US$)*	9.5	1980	11.4	2006
	4.5	1991	10.6	2007
	3.5	1996	11.0	2008
	6.3	2001		
	6.1	2002		
	6.4	2003		
	7.4	2004		
	9.1	2005		
Total health spending per capita (including external funding) (US$) **	12	1983	not available	
	21	1994		
	23	2001		
	27	2005		

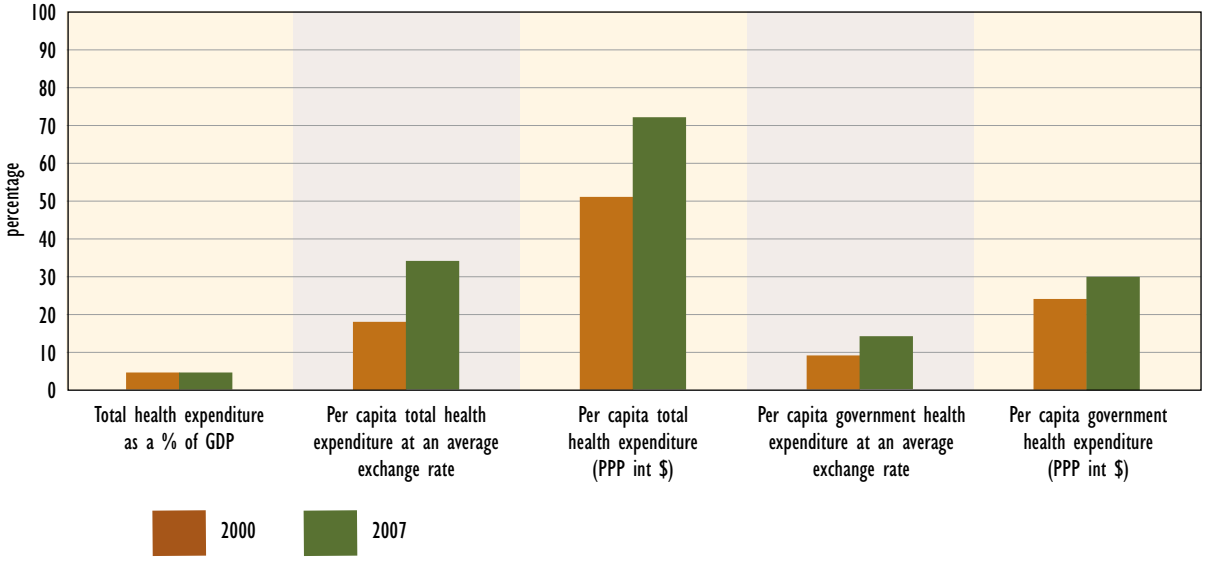
* Not stated whether real or nominal ** Information on total health expenditure per capita was only available for financial years when the national health accounts were conducted – 2001/02 and 2005/06

Sources: MoH, 2005, 2009; MoMS and MoPHS, 2010

PAST LEVELS: 1980–2005

- In addition to increasing the share of public spending devoted to health, total health spending should reach at least US$60 per capita to achieve the health services coverage needed to improve population health. In 2002, the WHO costed a package of priority health interventions for Sub-Saharan Africa at US$34 per capita, excluding the wider systems costs, and $60 per capita including these costs (EQUINET SC, 2007).
- After falling between 1980 and 1996, the summary table shows that government health expenditure per capita increased to US$9.1 in 2005, while the total health expenditure per capita also rose to US$27. This still remained below the recommended levels. Government health expenditure as a percentage of total government spending rose in 2001 (9.1 per cent) and 2002 (8.3 per cent) but fell to 5.7 per cent in 2005 (see Figure 14). Government health expenditure as a percentage of GDP remained constant over the years at levels of 2 per cent or below of GDP.

Figure 15: Per capita health expenditures, 2000 and 2007



Source: WHO, 2010

CURRENT LEVEL: 2006–2010

- Government health expenditure per capita fluctuated after 2005 and declined to US$10.6 in 2007 (shown in the summary table), reflecting the falling budget allocation that year described earlier. Both public and total per capita spending on health increased, however, between 2000 and 2007, although for the last three years this increase has been below the rate of population growth (Figure 15).
- Households remain the main sources of health funding in Kenya, contributing 36 per cent of health spending compared to the 31 per cent from external funders. Out of pocket spending accounts for 29.1 per cent of total health spending, with negative implications for household poverty and equity, as discussed earlier.

Progress

Although both government health expenditure per capita and total health expenditure per capita are increasing, with increases in the resources allocated to the health sector in absolute terms, both total and government per capita levels are below the level of US$34 per capita for basic interventions or US$60 per capita for health system costs. This raises challenges for the Kenyan government and economy to gradually increase the level of funding to the health sector to avoid over reliance on external funding. In the competition for resources and acknowledging the contribution that other sectors make to health, there is need to explore ways of enhancing resource mobilisation, rather than reducing allocations to other sectors that potentially impact on health. One possible source of better financing is to improve on tax efficiency and compliance, and introduce additional taxes earmarked for health that target high income groups (such as taxes on airline travel). This is further discussed in the next section.

Building work underway on new maternity wing for Mbita sub-district Hospital, Nyanza province, Kenya

Increasing progressive tax funding to health and reducing out of pocket financing in health

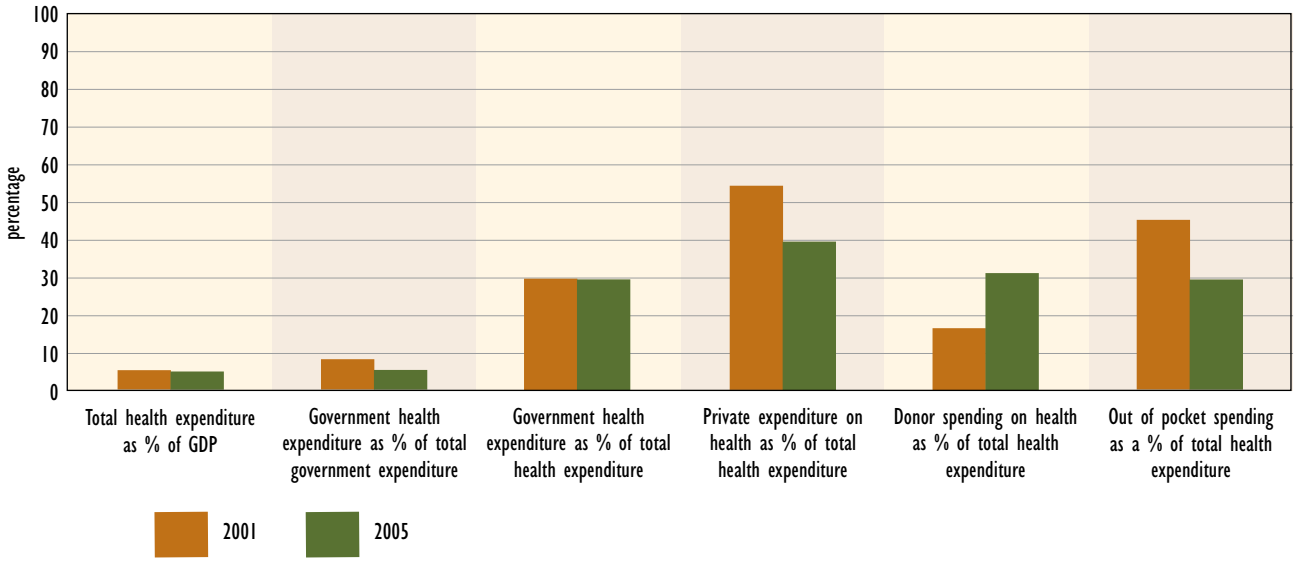
INDICATOR	PAST LEVELS (1980–2005) Level	Year	CURRENT LEVEL (most recent data) Level	Year
Percentage of total health expenditure as:				
– out of pocket spending	35.9	1997	not available	
	44.8	2000		
	29.1	2005		
– government (tax revenue) spending	29.6	2000	35.0	2008
	29.3	2005		

Source: MoH, 2004a; GoK and Health Systems 2020 Project, 2009

PAST LEVELS: 1980–2005

- Equitable health financing requires that contributions to health care are on the basis of ability to pay. Wealthier people need to contribute a larger proportion of their income than poorer people, with cross-subsidies between wealthy and poor people. Countries enhance equity by moving away from out-of-pocket payments and finance health systems through prepayments, including tax funding and health insurance (WHO, 2005).
- As shown in the summary table, between 2000 and 2005 government expenditure on health was relatively constant as a share of total health expenditure, while the out of pocket spending share fell. This was mainly because the share of external funding increased from 16.4 per cent in 2001 to 31 per cent in 2005 (by US$180 million). Figure 16 shows the shares from different funding sources. As a share of total health expenditure, private expenditure fell from 54 per cent in 2001 to 39.3 per cent in 2005 and total household spending fell from 51.1 per cent in 2000 to 35.9 per cent in 2005 (MoH, 2004a; GoK and Health Systems 2020 Project, 2009).
- Kenya has various sources of funding to complement tax funding. The National Hospital Insurance Fund is mandatory for those working in the formal sector and voluntary for others. Contributions range from Ksh360 to Ksh3,840 (US$4.6-49.20) per annum based on income level but as the rates have remained static over 40 years while incomes have increased, their progressivity has been eroded. Those working outside the formal sector contribute a flat rate of Ksh1,920 per annum. The fund provides a defined benefit package covering all diseases and maternity. Government facilities, including the teaching and referral hospitals, provide comprehensive cover to fund members without any co-payments, while faith-based facilities and private for profit facilities provide benefits but with a co-payment.

Figure 16: Shares of total health expenditure, 2001, 2005



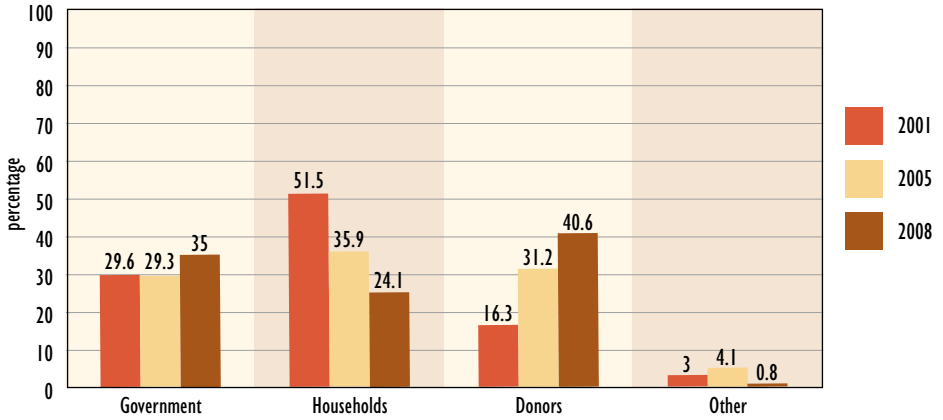
PAST LEVELS: 1980–2005 continued

- Government introduced various other tax-based funding schemes for health. In 1999, the Local Authorities Transfer Fund provided for services in large urban local authorities and supplemented funds for less financially viable authorities. It has had limited success in improving services or financing due to weak administrative capacities (MoSPND and Vision 2030, 2010). The Constituency Development Fund, introduced in 2004, allocates 2.5 per cent of government's annual budget to promote constituency development, with allocations to constituencies based on their population and poverty levels. About 25 per cent of these funds support health-related development spending, such as building dispensaries, but not recurrent inputs, such as staff or medicines.
- While these funds add to those captured in the expenditure data provided in this report, there are criticisms of the extent of community involvement in their allocation and use (MoSPND and Vision 2030, 2010).

CURRENT LEVEL: 2006–2010

- As shown, government health expenditure increased to 35 per cent of total health expenditure in 2008 and external funding to 40 per cent, while household contributions fell (Figure 17). A large share of these external funds are for HIV and AIDS related interventions, with most from PEPFAR and the Global Fund for AIDS Tuberculosis and Malaria (hereafter the Global Fund) (GoK and Health Systems 2020 Project, 2009).
- The National Hospital Insurance Fund proposed an increase and revision to contributions in September 2010 to structure contributions progressively. However, the Central Organisation of Trade Unions (COTU) went to court to block this process, citing lack of consultation during the design period (Jilo, 2010). While the first court judgement ruled in favour of the fund, COTU filed an appeal in the High Court and judgment is pending.
- In January 2007, the Ministry of Health initiated a health financing strategy to achieve universal coverage, based on values of equity, solidarity and transparency. The proposed policy options include: a social health insurance system with significant tax funding; decentralisation; tax deductions for employers who co-pay for their contributing employees; channelling donor funds centrally; community based health insurance; demand side financing; and strengthening private health insurance (MoMS and MoPH, 2009). However, it remains unclear how the policies will be implemented in a manner that promotes universal coverage. Current recommendations potentially promote a fragmented and inequitable health system in terms of both delivery and financing.

Figure 17: Sources of health care funds, 2001, 2005, 2008



Source: MoH, 2004a; GoK and Health Systems 2020 Project, 2009

Progress

The government share of health expenditure increased in 2008, as did external funding, while the household, out of pocket spending share fell after 2007. The main shift has been between out of pocket spending and external funding, with much of the latter focused on AIDS spending within the health sector. There is need and scope to increase government funding to ensure a sustainable equitable domestic source of financing. The new financing strategy, outlining the path to universal coverage in Kenya, introduces national health insurance. Elements of the strategy have met initial resistance, for example to adjustments in contribution rates and the move towards universal health insurance. Consultations, political commitment and careful implementation are required to move towards progressive health care financing. In the meantime the health sector needs an increasing share of tax revenue to improve service quality and boost people's confidence in the sector. Better tax collection has not translated into a larger share of the government budget for health.

Harmonising the various health financing schemes into one framework for universal coverage

PAST LEVELS: 1980–2005

- There were a number of challenges to harmonising health financing. Some, such as low shares of government financing and high levels or formal and informal out of pocket financing, have been discussed. There was resistance from some stakeholders to insurance options. For example, while a National Health Insurance Bill was passed in parliament in 2004, the president declined to sign it for technical and political reasons.
- External funds increased as a share of financing and, while they have provided valuable support to the health system, they were primarily allocated directly to projects, with more limited funding through government budget support (GoK and Health Systems 2020 Project, 2009). Failure to harmonise external funds mean that while some areas have financial surpluses, other areas of essential medicines, medical supplies and immunisation have had large deficits (MoSPND and Vision 2030, 2010).
- Discussions to establish a sector-wide approach made slow progress (personal communication, MoMS and MoPHS officials).

CURRENT LEVEL: 2006–2010

- As shown in the prior section, external funding continued to increase after 2006, as did government funds, although to a lesser extent. The major shift in the period has, however, been strategic. A health financing strategy to guide the country towards universal coverage has been developed. The strategy states that: 'What is required is a set of mutually-reinforcing policy approaches that lead to the universal coverage of the population with a basic package of health services, where barriers to access are minimised' (MoMS and MoPHS 2010: ix). The strategy proposes to have all government tax funds and national health insurance contributions channelled to a National Health Services Trust, through a National Health Social Security Revenue Agency. This effort to pool funds together, once implemented, will be an important step towards harmonisation.
- However, the strategy also proposes measures that could weaken pooled funding, for example, by encouraging private and community health insurance. The strategy argues that premiums for private health insurance will fall as the National Health Insurance Fund will provide stiff competition. However it also acknowledges that it could exacerbate fragmentation (MoMS and MoPHS,2010: 5).

Progress

The framework for universal coverage is provided through the rights to health and health care services in the Kenyan constitution, and its recognition of the importance of equity in the distribution of resources. The commitment towards universal coverage is clearly spelt out in the health financing strategy. However, there are elements of the design such as private health insurance and community health insurance that may keep the health system fragmented and promote inequity. Should government adopt these approaches, regulation and risk equalization across different pools will be required if equity is to be achieved. While there are also policy measures that propose to channel contributions from tax and national health insurance into one central fund, there is a need to manage stakeholder concerns around public funding mechanisms. This also affects how far external funds are harmonised and coordinated through sector wide, pooled funding.

Establishing and ensuring a clear set of comprehensive health care entitlements for the population

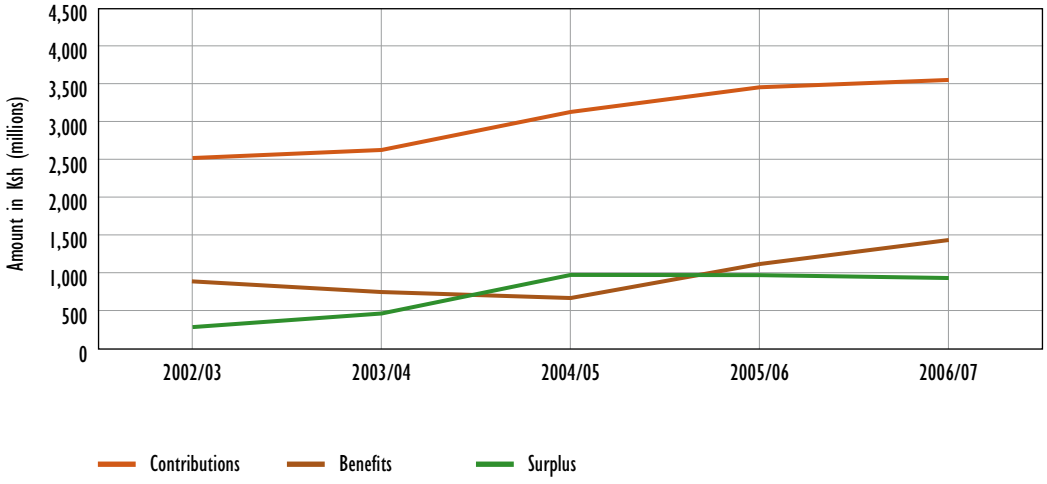
PAST LEVELS: 1980–2005

- All Kenyans are entitled to health care services in all public facilities provided they can pay the user charges, where charges exist. Kenyans are also entitled to free services in all government facilities, as set out in the health sector policy for 1994-2010 (MoH, 1994). The challenge to policy implementation lies in the limited availability of services in government facilities and poor perceptions of quality of care (GoK, 2010).
- Benefits packages in insurance schemes are limited. The National Health Insurance Fund limits payments to accredited facilities to a flat daily rate based on the services provided at a facility and hospital costs of up to Ksh2000 per day. Hospitals are accredited using a criteria that takes into account the range of services provided (NHIF, 2005). Hospitals with larger bed capacities offering a wider range of services thus receive higher reimbursement rates than smaller hospitals.

CURRENT LEVEL: 2006–2010

- The second *National health sector strategic plan* (NHSSP II: 2005-2010) highlights the need to have an essential package for health, referred to in the document as the Kenya Essential Package of Health (KEPH) (MoH, 2005). This package integrates health programmes into a single package aimed at improving health at different phases of the life course. National Health Insurance Fund members are entitled to benefits that include inpatient cover annually up to Ksh 396,000 and 280 inpatient days for the contributor, spouse and children. The benefit package for the Fund differs by type of facility but in all cases covers all diseases and maternity and all government facilities, including teaching and referral hospitals, without any co-payments. Individuals seeking care from faith-based facilities and some small private for profit facilities also enjoy comprehensive benefits but a co-payment of Ksh 15,000 may be charged in cases of surgery, at the discretion of the facility. Benefits at private facilities include a flat daily payment rate that differs depending on the size and kind of services available at the hospital and ranges from Ksh 400 to Ksh 1,800 (NHIF, 2010). The National Health Insurance Fund recorded a surplus of Ksh990 million in 2005/06 (US$ 12.6 million) and Ksh 934 million (US $ 12.7 million) in 2006/07 (MoH, 2009).
- As shown in Figure 18, benefits and contributions to the National Health Insurance Fund steadily increased between 2002 and 2006/7, with a plateauing surplus after 2004, suggesting greater application of surplus resources to benefits, to maintain this correspondence.

Figure 18: Trends in National Health Insurance Fund contributions, benefits and surplus, 2002/3-2006/7



Source: MoMS and MoPHS, 2009b

- In 2011, the National Health Insurance Fund was considering expanding its benefit package to include outpatient care, with a new and broader package proposed, including services from primary health care services and minor surgeries. The proposed benefits package has been made public, with the general services, laboratory tests and investigations and drugs and dispensing services specified for various level services: Level 1– dispensaries and health centres; Level 2 – private medical doctors' clinics, district hospitals, medium-sized faith based and private institutions; Level 3: tertiary and referral level of care, including large faith-based and private hospitals, provincial hospitals, teaching and referral hospitals (NHIF, 2010). Details of the full package extend to several pages and are not included in this report, although Table 10 gives an example of the Level 1 benefits.
- At the same time, the National Health Insurance Fund plans to increase contributions significantly to make the broad benefit package affordable (NHIF, 2010). Should the review be implemented, members will access a wide range of benefits. The challenge remains on how to ensure affordability of health insurance cover, given the limited formal employment and the low numbers (about 400,000 people) covered on a voluntary basis.

Table 10: Outpatient National Health Insurance Fund benefit package for Level I: dispensaries and health centres

General	Laboratory tests and investigations	Drugs administration and dispensing
• Consultation, mostly by clinical officers • Primary health care services including maternal child health/ family planning, PMTCT, STI, TB, HIV/AIDS, IMCI immunisation, • Minor surgeries and surgical dressing • Community oral health services • Dispensing of drugs; Plain x-rays • Short term inpatient observations • Circumcision • Minor incision and drainage of cyst/ abscess • POP application and removal • Suture of cut small, medium, & arresting haemorrhage • Emergency tracheotomy; Tongue-tie release • Catheterisation; Manual vacuum aspiration • Implants insertion and removal • Minor removal of FB nose, ear • Ear syringing, enema • Removal of stitches • Examinations –manual or electronic • Therapy– manual or electronic • Chest physiotherapy • Psychiatry care	• Haemoglobin test • Differential white cell count • Peripheral blood film • Syphilis screening • Gram stain • Sickle cell test • Ziel Nielsen stain • Potassium hydroxide preparations • Wet preparations • Urinalysis • Stool for ova and cyst • Blood slide for malaria parasite • Stool for culture, sensitivity • Pregnancy test • Cervical smears cytology • Blood glucose • HIV test • Compatibility test • Titrated widal tests • Blood transfusion, collection, screening & storage	• General and local anaesthetics • Non-opioids • Anti allergies and drug use in Anaphylaxis • Antidotes, poisoning remedies • Antiepileptic/anticonvulsants • Anti-Infective drugs-antihelminthics • Antibacterial-oral liquids, oral tabs, capsules, injectables • Antifungus; Antiprotozoals • Antimigraine • Dermatological • Hormonal contraceptives and ENT preparations; Opthalmologicals • Immunological vaccines • Oxytocics and antioxytocics • Anti acids • Respiratory drugs • Psychotherapeutic drugs • Solutions for water, electrolyte and acid base disturbance • Vitamins and minerals • Pharmaceutical medicated dressings, gauzes and so on.

Progress

Kenya has a policy commitment to universal coverage of comprehensive health care benefits, and has defined an essential package for health. The National Health Insurance Fund has improved benefits in line with contributions in the 2000s, with a widening package of benefits and a proposal for further expansion. Implementation has been delayed by a legal challenge from COTU, citing the lack of consultation during the design period (Jilo, 2010). The first court judgement ruled in favour of the Fund but COTU appealed and judgement is pending. The need to widen cover and keep contributions affordable calls for a balance between progressive increases in contribution rates and funding from existing surpluses. The National Health Insurance Fund also needs to widen coverage to those outside formal sector employment.

Allocating at least 50 per cent of government spending on health to district health systems (including level 1 hospitals) and 25 per cent on primary health care

INDICATOR	PAST LEVELS (1980–2005) Level	Year	CURRENT LEVEL (most recent data) Level	Year
Proportion of actual government expenditure* for different levels of care				
– Teaching hospital	18.5	2005	18.1	2006
			17.0	2007
			15.0	2008
			10.1	2009
– Provincial hospitals	29.0	2005	15.0	2006
			10.3	2007
			10.4	2008
			9.0	2009
– District hospitals	21.6	2005	37.1	2006
			44.7	2007
			41.6	2008
			42.0	2009
– Health centres and dispensaries	13.6	2005	16.7	2006
			13.5	2007
			5.0	2008
			19.4	2009
– Preventive and promotive services	6.5	2005	5.8	2006
			4.1	2007
			13.5	2008
			n.a.	2009

* Expenditure and allocations are different. The government might have allocated larger amounts to lower levels of care but the same may not have been spent due to various reasons including timing, lack of absorptive capacity, among others. The figures do not add to 100 per cent due to the costs that are not categorised by facilities, including general administration and planning, health training and research, which consume about 11 per cent of the budget.

Source: MoH 2005; 2008; 2009; MoMS and MoPHS 2010; 2010a

PAST LEVELS: 1980–2005

- Data prior to 2005 was not available on this progress marker but 2005 data shown in the summary table indicates that primary health care (community and primary care levels – dispensaries, health centres, preventive and promote care) consumed 20.1 per cent of government spending and a further 21.6 per cent was spent at district level or a total of 41.7 per cent. So this was close to but not at the 50 per cent required in the progress marker.
- Expenditure on preventive and promotive care at 6.5 per cent is below the allocation proposed in policy (MoMS and MoPHS, 2010). The low spending at primary care level was attributed to the focus for some time on curative care. It was also attributed to the bureaucracy of channelling funds from the treasury to the districts and then to the primary care levels which led to delays, under-spending and resources allocated to primary level facilities being spent at the district level. Another reason was the limited absorptive capacity, especially for development-related expenditure (MoMS and MoPHS, 2010). Health facilities are reported to receive a large proportion of their funds late in the year, making it difficult for them to spend their budget within the financial year (MoMS and MoPHS, 2010).

CURRENT LEVEL: 2006–2010

- The Kenyan Vision 2030 for the health sector adopts a preventive approach to health, proposing to allocate more resources to preventive and promotive activities and to lower levels of the health system (GoK, 2008). This has positive implications for equity as lower levels of care are more commonly used by low income groups than higher levels (GoK, 2008). The summary table shows that expenditures for preventive and promotive services fell in 2007 and then rose significantly to 13.5 per cent in 2008. Spending at primary care facilities fell markedly in 2008 before rising sharply to 19.4 per cent in 2009. Spending on district hospitals rose in 2008 and then fell to close to 2005 levels. The total spending on districts and primary care levels was however still above 50 per cent.
- The large increase in expenditure at primary care level was in part due to an economic stimulus package that included Ksh5 billion to construct model health centres and recruit 20 nurses in each constituency (personal communication, officials at the MoPHS). Establishing two ministries of health in 2008 (the Ministry of Medical Services, for curative care, and the Ministry of Public Health and Sanitation, for prevention and primary level health care services) has focused on the needs of these different levels and stimulated greater budget support. While this may raise some issues of ensuring non overlapping mandates and costs, overall spending on health, presented earlier, seems to have only increased marginally despite the creation of two ministries and even decreased in some years.

Progress

The Kenyan government has made clear its commitment to a greater focus on prevention, promotion and primary care services in its Vision 2030 for the health sector. It has increased the percentage of government resources allocated to these levels, including through the economic stimulus package. In 2009, the combined spending on preventive and promotive services, primary care and district level facilities was above the 50 per cent set in the progress marker. The investment in 20 nurses per constituency will assist in supporting absorptive capacity. Further measures may be needed to ensure that facilities and outreach programmes have essential medicines, supplies and infrastructure, and to monitor the impact on health of these measures, to motivate and sustain the expenditure pattern.

Community outreach and health promotion in Western Kenya

PAST LEVELS: 1980–2005

- The shortages and poor distribution of health workers reviewed earlier posed a challenge to the expansion of services, with limited numbers of qualified health workers to oversee those less skilled. A number of policies and strategies have had an impact on this situation. The *Economic recovery strategy for wealth and employment creation 2003-07* recognised that the human capital of poor people can be improved by increasing their access to basic health care and nutrition and promoted equity, access, affordability and quality in the provision of basic health services (MoPD, 2003). The decentralisation of the health sector developed structures at different levels of the health system to enhance the management of resources, including personnel, based on local planning and prioritisation of health services (MoH, 2006). The health sector reforms recognised that improving human resource management and development was essential in making the health sector more effective, particularly through strengthening planning, training and development, and performance management (MoH, 2006).
- Various policies were put in place to secure the personnel for these policies. With no dedicated human resources information system and limited information from the health information system, a human resource mapping and verification study was conducted in 2004 to provide data on staffing levels and patterns and the skill mix at provincial, district and facility levels (MoH, 2005). Human resource norms were set for different levels of the health system taking into account workloads and service delivery standards (MoH, 2006). A ministerial committee composed of representatives of the main ministry of health departments was responsible for decision making on the recruitment and deployment of specific cadres. The ministry developed a consistent job classification system for all civil servants, including health care workers but put in place a recruitment freeze which started in 1998 and only allowed for recruitment to fill vacated posts. Recruitment was only on time-limited contracts where funds were available from other sources, such as the Global Fund, GAVI, UNICEF and the Clinton Foundation (Luoma *et al.*, 2010).
- Improving retention was recognised as relating to deployment measures, pay and conditions (Luoma *et al.*, 2010). Government salary reviews were set to attract health workers back into the public health system and efforts were made to improve retention by taking into account preferred choice of postings, by issuing three-year contracts, offering options to transfer to a government post at the end of the contract and using gratuity payments (in lieu of pension contributions) upon completion (MoH, 2006).

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CURRENT LEVEL: 2006–2010

- In 2006 the *World health report* identified Kenya as one of 57 'crisis countries' facing an absolute shortage of health workers (WHO, 2006). The *National health sector strategic plan 2005–2010* aimed to ensure adequate, equitably distributed and appropriately skilled and motivated health workers (MoH, 2006a). The strategic plan was informed by the findings of the 2004 human resources mapping and verification study, financial planning documents such as the Kenya *Health sector-wide approach* and various data provided by the human resources division of the ministry.
- The ministry developed initiatives to improve health worker performance, effective supervision systems and the quality of basic and pre-service training (MoH, 2006a). This was supported by external funds and personnel seconded to support policy and strategy development and information systems within the emergency hiring plan (Gross *et al*., 2010).
- In 2009 the Ministry of Health, with funding from the Global Fund, PEPFAR and the Clinton Foundation, recruited 1,428 health workers on three year contracts. Those appointed through Clinton Foundation funding will be absorbed into the government on completion of the contract (MoH, 2006). Other initiatives include direct salary support from PEPFAR to health workers and support to the ministry to rapidly hire, train and deploy health workers to facilities where there are persistent staffing shortages. The mid-term review of this initiative in February 2008 reported that 849 workers had been deployed to 200 government and faith-based facilities in 66 of the neediest districts in Kenya, with salaries paid using PEPFAR funds (Gross *et al*., 2010).
- Further work had been undertaken with the Ministry of Health Planning Unit and the Ministry of Planning and National Development to ensure that all posts supported by the emergency hiring plan are factored into the government's mid-term budget forecasts in order to absorb these staff into the government payroll. The 2008/09 budget allowed for absorbing up to 600 health workers, which included the first wave of 113 PEPFAR-funded recruits from May 2006 (entering the government payroll in May 2009) (Gross *et al*., 2010).
- A new government performance appraisal system is in place, recognising that strengthening staff performance is critical to productivity in the public sector. A workplace climate improvement programme is in place to motivate staff productivity, although covering a limited number of workers (Gross *et al*., 2010). A review of financial and non-financial incentives for health workers in 2008 found that facilities offered a number of financial incentives to their staff, such as paid leave and overtime pay, access to house or car loans at lower negotiated market rates (for highly skilled public sector workers) and numerous allowances, such as transport, entertainment, hardship, responsibility, special duty and uniform allowances (Ndetei *et al*., 2008). Some staff worked in bonding agreements whereby the institution paid for their studies but they had to work for a specific numbers of years in return. Non-financial incentives for health workers included housing (or a housing allowance), post-graduate training and continuing medical education, life insurance, personal loan facilities, shorter working hours, membership to the National Social Security Fund, medical cover (including their nuclear family) and the introduction of HIV and AIDS treatment in some workplaces (Ndetei *et al*., 2008).
- Terms and conditions of service in private and teaching facilities were reviewed regularly and health workers were informed about any changes of services through improved human resource management. Private medical institutions, national hospitals and training institutions had implemented non-financial incentives by improving working conditions through renovations, upgrading the facilities (re-equipping the medical facilities with new technology) and making medical supplies accessible to communities (Ndetei *et al*., 2008).

Progress

Government has put schemes in place to attract, deploy and retain health workers, with external funder support. They include measures to absorb personnel paid for by external resources when these programmes are completed. This has created a mechanism to expand and deploy the health workforce. While incentives have been introduced, evidence gathered suggested that incentives often depend on the facility for their effective implementation, with better organised facilities, often in higher-income areas, being more successful in providing incentives. Yet, ironically, it is at the lower levels of the health system (in rural and poorer areas) where incentives are more urgently needed to counteract the strong push factors that force workers out of these areas and where incentives are either not present or are inadequate (Ndetei *et al*., 2008).

Formal recognition of and support for mechanisms for direct public participation in all levels of health systems

PAST LEVELS: 1980–2005

- One of the six 'strategic imperatives' of Kenya's *Health policy framework*, published in the mid-1990s, was creating an enabling environment for more private sector and community involvement in health sector provision and finance (MoH, 1994). In various strategic plans, the Ministry of Health committed to decentralising and increasing district and facility level authority in decision making, resource allocation and management. This was partly to promote community participation in managing health funds and implementing the essential clinical and public health package at the lower levels (MoH, 2005b). District health management boards, established in 1992 by Legal notice No.162 of the Public Health Act (Cap. 242), became responsible for overseeing all health sector activities and use of funds and included community and other group representatives (MoH, 2002). In 2002 the ministry provided operating guidelines for these boards and committees (MoH, 2002). The provincial health management team, an intermediary between the central ministry and districts, ensured policy was implemented and, with district health management teams, supported the boards in their provinces. An evaluation in the 2004 Kenya service provision assessment survey found, however, that these structures existed and met but gaps in guidelines or in their application weakened their role (NCAPD , OCR Macro, 2005).
- In 1998, the Ministry of Health issued a circular to establish rural health centre and dispensary management committees to enhance community participation in planning and implementing the care and promotion outreach from these health facilities (AKHS Kenya Community Health Department, 2000). Medical officers at provincial and district levels initiated the process within their catchment areas to elect ten-members for a facility management committee, who would hold office for three years. Committees oversee the operation and management of their health facility and are a channel for the communities' voice regarding health services. They were also mandated to raise funds from the community or other sources to operate and maintain the facility. However, resource shortages impeded this programme and the rural health facilities performance (MoH, 2007).

CURRENT LEVEL: 2006–2010

- Revitalising a community health strategy was central to enhancing access to health care after 2005 (MoH, 2006a). Successive health sector reforms through the primary health care approach advocated for people's active involvement (MoH, 2006e). Community-based health care principles involved decentralising and formalising people's power through mechanisms and designated roles in determining health system priorities for plans and actions. Communities were also involved in mobilising, allocating and controlling resources. This approach was implemented through local government reforms, with power shifted to the councils. Stakeholders were included on the committees and boards of facilities and in local government structures to enhance transparency and accountability and literacy for communities to demand their rights and seek accountability from the health system (MoH, 2006e).
- The approach was primarily implemented at primary and district levels and was intended to have the resources to support the process. Ministry of Health developed comprehensive guidelines (MoH ,2007) covering: resource management, planning health facility activities, operating financial management systems, procuring goods and services and documenting accounts. The facility management committees would input to plans that determined the financial resources released to the facilities (MoH, 2007).

Progress

Kenya has a clear policy commitment to community participation through primary health care and decentralised decision making within the health system but it is unclear how far this has been implemented. There is little documented evidence on the system wide impact of these health sector reforms, beyond some focused project evaluations (Mwabu, 1995). The budget implications of the community health strategy remain unclear as a no full costing has been done and the resource flows from and to communities through the efforts of the facility committees are not nationally documented. Further work is needed to build on the *2004 Kenya service provision assessment* to ascertain whether the district health management committees and boards meet governance and management norms and standards (Ndavi *et al*., 2009), how far the community health strategy has been implemented and its outcomes. Civil society in Kenya apparently has a key role in monitoring the implementation, performance and outcomes of the current community involvement policies in health and making their findings known.

EQUITY WATCH

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A more just return from the global economy

Progress markers

- Reducing debt as a burden on health
- Promoting healthy nutrition through local foods through supporting women farmers
- Ensuring health goals in trade agreements, with no new health service commitments to GATS and inclusion of TRIPS flexibilities in national laws
- Bilateral and multilateral agreements to fund health worker training and retention
- Health officials included in trade negotiations

EQUITY WATCH

A more just return from the global economy

Household access to the resources for health and the promotion of equitable health systems are both increasingly influenced by policies, institutions and resources at the global level. The final section examines selected parameters of the policy space and support for health equity at global level. These include the debt burden on health, the use of flexibilities in world trade agreements, the support from international institutions for health worker incentives, protecting women smallholders' food production in trade policies and including health officials and health protection in trade negotiations and agreements.

Reducing debt as a burden on health

PAST LEVELS: 1980–2005

- Kenya's public debt increased between 1996 and 2005, particularly its domestic debt, which rose by 162 per cent in the period (Table 11). External debt rose by 26 per cent in the same period. The composition of public debt thus changed significantly, with the share of domestic debt rising and the share of external debt falling. Despite the rise in the stock of debt, the share of overall debt to GDP declined, as GDP grew faster than debt.
- This shift in the composition of debt was mainly attributed to debt rescheduling and domestic borrowing to close the shortfall (MoF, 2007). Under the Paris Club, Kenya has rescheduled arrears and debt flows in 2000 and 2004 amounting to US $650 million, effectively receiving 50 per cent relief in present value terms. China, Finland and the Netherlands opted to cancel debts amounting to US$30 million instead of rescheduling the debt under the Paris Club in the same period (MoF, 2007).
- Further, in 2004, when the National Rainbow Coalition (NARC) government came to power on the platform of zero tolerance of corruption, the government suspended payment of external commercial debts pending the outcome of a special audit and investigations by the Comptroller and Auditor General and the Kenya Anti-Corruption Commission. This reduced external debt service to commercial creditors at that time.

Table 11: Public debt stock, in Kenya shillings (millions), 1996–2005

	June 1996	June 1998	June 2000	June 2002	June 2003	June 2004	June 2005
EXTERNAL	345 939	323 339	395 564	377 748	407 053	443 157	434 453
Bilateral	127 753	108 256	138 553	129 973	142 593	162 914	157 669
Multilateral	187 812	179 276	230 662	222 452	233 829	260 658	255 784
Commercial banks	28 996	34 915	24 867	24 031	3 597	2 912	1 776
Export Credit	1 378	892	1 481	1 292	27 034	16 674	19 224
As a % of GDP	50.3	39.9	50.9	36.8	39.2	36.6	32.2
As a % of total debt	74.2	65.3	65.7	61.5	58.4	59.1	57.9
DOMESTIC	120 355	171 730	206 127	235 991	289 377	306 235	315 573
As a % of GDP	17.5	21.2	26.5	23.0	27.9	25.3	23.4
As a % of total debt	25.8	34.7	34.3	38.5	41.6	40.9	42.1
GRAND TOTAL	466 294	495 070	601 691	613 739	696 430	749 392	750 025
As a % of GDP	67.8	61.1	77.4	59.8	67.1	62.0	55.6

Source :MoF, 2007

CURRENT LEVEL: 2006–2010

- Table 12 shows the trends after 2005, with a rise in total debt, a fall in external debt and a rise in domestic debt between 2006 and 2010 continuing the trends started in the prior period of an increasing share of public debt being made up of domestic debt. Again in this period, the share of overall debt to GDP declined, mainly due to faster growth in GDP compared to the debt.
- External debt was expected to rise after 2006 due to the resumption of payment of debts not covered under the Paris Club rescheduling agreement following the end of the consolidation period at the end of December 2006 (MoF, Treasury 2007). External debt servicing will rise in the medium term if the suspended external commercial debts currently under forensic audit are settled.
- In the meantime the increase in domestic debt is also increasing interest payments on this debt, rising from Ksh37,309 million in 2006/07 to Ksh44,600 million in 2009/10.

Table 12: Projected public debt stock in Kenya shillings (millions)

	2006/07	2007/08	2008/09	2009/10
External debt	422,484	413,684	405,006	396,370
Domestic debt	387,500	419,400	451,100	484,700
Total debt	809,984	833,084	856,106	881,070
Debt as % of GDP	46	42	39	36

Source :MoF, 2007

Progress

The fall in external debt and in the share of overall debt to GDP are positive signs. Hence, despite the rising debt stock overall, recent debt sustainability analysis indicates that Kenya's debt is sustainable in the long term and that the country does not qualify for debt relief under the Highly Indebted Poor Countries (HIPC) and Multilateral Debt Relief Initiatives (MDRI). There is concern however at the increase in domestic debt, and at the possible increase in external debt should the suspended external commercial debts currently under forensic audit need to be settled. It is also not clear that the benefits of a reducing share of debt to GDP is being felt in the health sector, given the low share of and low increases in health spending within government spending in the period. The government is negotiating with the government of Italy for deeper debt relief through a 'debt for development' swap, entailing the cancellation of US$43 million debt if the funds are channelled towards poverty alleviation programmes, which may include health. The release of resources from debt provide a potential source of revenue to address the national health financing demands to lever the important policy shifts envisaged in the constitution and the 2030 vision, discussed earlier.

Allocating at least 10 per cent of budget resources to agriculture, particularly for investments in smallholder and women producers

PAST LEVELS: 1980–2005

- In the first decade of independence (1965-1975) Kenya spent on average over 10 per cent of its total government budget on agriculture (including livestock, fisheries and cooperatives) (Akroyd and Smith, 2007). Since then there has been a dramatic decline in expenditure to an average 7.5 per cent over the period 1980 to 1989 and just 3 per cent between 1990 and 2000 (Table 13). This was mainly attributed to policy measures in the structural adjustment programme and the declining role of government in agriculture.
- In 2004, the government introduced a strategy for revitalisation of agriculture, shifting the role of government to limited provision of goods and services and substituting regulation by the state with voluntary regulation in the private sector.

Table 13: Expenditure by the three agricultural ministries (Kshs millions)

	2000/1	2001/2	2002/3	2003/4	2004/5	2005/6	2006/7	2007/8	2008/9
Recurrent	5,438	5,485	5,869	6,404	6,236	8,304	10,497	11,096	11,997
Development	1,652	1,052	1,202	2,858	2,721	4,555	6,522	9,712	11,655
Total	7,090	6,537	7,071	9,262	8,957	12,859	17,019	20,808	23,652
Agriculture % of total govt expenditure		4.2%	3.8%	3.8%	3.6%	2.9%	3.7%	4.4%	5.2%
% of GDP	0.8%	0.7%	0.7%	0.6%	0.8%	1.0%	1.1%	1.1%	

CURRENT LEVEL: 2006–2010

- Government has recognised that budget allocation to the agricultural sector is insufficient (see the *Agricultural sector development strategy 2009–2020)* (MoAg, 2008). Table 13 indicates that agriculture as a share of GDP rose from 2.9 per cent in 2005/6 to 5.2 per cent in 2008/9, although this is still below the 10 per cent target in the progress marker.
- The credit programmes in Kenya reach only a small number of farmers. The Ministry of Agriculture's strategic plan for 2008–2012 recognises that inadequate credit to finance inputs and capital investments is the main cause of low productivity in agriculture and notes the barriers most farmers face in accessing credit. Government itself allocated only Kshs110 million (US$1.4 million) to enhancing credit in 2008/09 or 0.8 per cent of the ministry's budget (MoAg, 2008). The Agricultural Finance Corporation, set up by government at independence to provide long-term credit, after being plagued by allegations of mismanagement, was re-capitalised after 2006. However, it has continued to have low levels of loan disbursement. It only lends to farmers with a minimum of five acres of land who have raised 20 per cent of the project cost, limiting the group covered (see Agricultural Finance Corporation at www.agrifinance.org).
- A 2009 study of the factors affecting government and external spending in agriculture in Kenya, Uganda and Malawi identified the following challenges: inadequate allocations, particularly for smallholder women farmers; inadequate extension, research and rural financial services to support smallholders; poor use of national resources by external funders; and weak financial management (Actionaid, 2010).
- It remains difficult to track these areas of spending as government spending on agriculture is not disaggregated by producer level and there is no gender analysis of agricultural spending. In Kenya the only mention of women in the agriculture budget is a mainstreaming gender budget line for 2008 to 2012, which allocated only one million Kenya shillings (US$13,000) amounting to just 0.007 per cent of spending.

Progress

Despite stated policy recognition of the funding and investment barriers to agriculture, especially for smallholder farmers, and a stated commitment to improving budget allocations and investment for these groups, there has been relatively slow progress towards improved government spending on agriculture. The sector strategy barely mentions women farmers who are the majority of smallholder farmers. While the ministry's *Agricultural sector development strategy* proposed to mainstream gender, this does not yet appear to have happened. As women are rarely landowners, they are not recognised as farmers even when they do much of the work. Statistics are not gender disaggregated, increasing the invisibility of women. Furthermore, agricultural research and development appears to have ignored the needs of marginal farmers, especially women, or their knowledge of traditional farming methods and indigenous plant varieties. A focus on commercial crops on high input farms has meant that limited funding has been given to food crops grown by women, such as vegetables, millet and sorghum, despite their importance in providing for nutritional needs.

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Ensuring health goals in trade agreements, with no new health service commitments to GATS and inclusion of TRIPS flexibilities in national laws

PAST LEVELS: 1980–2005

- As a member of World Trade Organisation, Kenya made commitments to comply with the TRIPS agreement. Intellectual property rights are protected in the Industrial Property Act, 2001, the Industrial Property Regulations 2002, the Copyright Act 2001 and the Copyright Regulations 2004. Kenya has included the TRIPS flexibilities in its legislation. The Industrial Property Act 2001, section 80 provides for compulsory licensing and parallel importation allowing for the importation of legitimately produced and marketed generic medicines (Lewis-Lettington and Munyi, 2004). No compulsory license was granted in the period, however, and no applications proceeded beyond preliminary enquiries, due to complexities and uncertainties of application procedures. An application was submitted in 2003 for the local production of antiretrovirals by a generic manufacturer, Cosmos Pharmaceuticals Ltd, but the application was for a government use order rather than a compulsory licence (Lewis-Lettington and Munyi, 2004).
- The inherent conflicts around the desire to use the flexibilities for public health and the desire to protect commercial interests are found in the treatment of parallel importation. In 2002, after the Industrial Property Act 2001 was amended to provide for parallel importation, the Statute Law (Miscellaneous Amendments) Act, 2002, was passed 'late at night when most MPs were absent, and key activists on access to medicines issues out of the country' (Lewis-Lettington and Munyi, 2004: 19). This amendment blocked the planned parallel importation of generic drugs by non-governmental organisations. The amendment was contrary to the parliamentary rule that no amendments should be permitted to any Act prior to six months after its entry into force and the Minister for Trade and Industry, KIPI and the Attorney General's Chambers all stated that they had not been its source. Once the amendment came to the attention of members of parliament, the Minister for Trade and Industry, the Vice President (as Chairman of the Parliamentary Business Committee) and the Parliamentary Health Committee vowed to reverse it and to instruct the relevant authorities not to enforce it pending reversal. In an unprecedented move, the amendment was reversed in August 2002. Since then parallel importation of generic drugs under the 2001 Act has occurred many times, particularly for antiretrovirals and other drugs for the treatment of opportunistic infections in the non-government and public sector.

CURRENT LEVEL: 2006–2010

- While patenting laws have provided for TRIPS flexibilities, in 2008, Kenya passed the Anti-Counterfeit Act 2008, which came into operation on 7 July 2009. While there are legitimate concerns about falsified, substandard medicines entering Kenya's market without adequate legal protection, the 2008 Act uses a wide definition of 'counterfeits' which could be extended to include generic drugs. It includes provisions that would then nullify the TRIPS flexibilities by making importing such drugs illegal unless agreed to by the patent holder. There are ongoing stakeholder consultations with a view to amending the offending provisions of the Anti-Counterfeit Act, while maintaining its regulation of sub-standard and falsified drugs.

Progress

Use of the flexibilities in the TRIPS agreement and the domestic provisions for compulsory licensing and parallel importation has made antiretrovirals available and affordable. A significant share of AIDS, malaria, TB and other health programmes are, however, externally funded and acquire their drug supplies externally, particularly if local producers are not prequalified. Local factories do not receive external funding to supply public hospitals and supply a small market of faith-based institutions and the organisation, Missions for Essential Drugs and Supplies. Prequalification of Kenyan producers and local production of affordable drugs remains a major challenge for sustainable domestic access. Kenya has been active at global level in the negotiations on increasing access to drugs for neglected diseases and on technology transfer. Resolving these questions and the barriers posed by new laws such as the Anti-Counterfeit Act are thus important concerns for stakeholder awareness and consultation, not only for national outcomes but for wider regional outcomes too. Kenya has plans to develop a regional pharmaceutical procurement pool to bring down the cost of pharmaceutical products in the East Africa region, which requires that Uganda and Tanzania also have TRIPS compliant legal regimes.

Bilateral and multilateral agreements on health worker training and retention

PAST LEVELS: 1980–2005

- The adequacy and distribution of health personnel has been discussed in a prior progress marker. In 2005 Kenya's emigration rate of 12.3 per cent of doctors leaving out of the total number trained was higher than the 11.4 for sub-Saharan Africa, with 51 per cent of Kenyan physicians working abroad, compared to 28 per cent for sub-Saharan Africa (Clemens *et al.*, 2006). The emigration rate of 8.3 per cent for Kenyan nurses in 2005 put Kenya fourth in nurse out-migration out of 16 eastern and southern African countries. Internal migration and out-migration have been attributed to individual preferences on working and living conditions, inadequate incentives (including allowances) and weak deployment procedures (Mwaniki and Dulo, 2008). The *National health sector strategy plan II* acknowledges these issues and the disparities between regions in resources and quality of services which are also drivers for health worker migration (MoH, 2005). Strategies to address this included deployment and retention incentives and training (Table 14).

Table 14: Medical Personnel Registered in Kenya, 2003

Type of Personnel	Number	Number. per 100,000 population	Number iin training 2003/2004*	% in training 2003/4
Enrolled nurses	30,212	100.2	3,940	13
Registered nurses	9,869	33.1	1,281	13
Public health technicians	5,627	19.4	489	9
Doctors	4,813	15.3	862	18
Clinical officers	4,804	15.7	891	19
Pharmacists	1,881	5.8	234	12
Pharmaceutical technologists	1,405	4.3	169	12
Public health officers	1,216	3.6	215	18
Dentists	772	2.7	178	23
TOTAL	60,599	192.1	8,259	14

* = Provisional registration

Source: MOH 2005

CURRENT LEVEL: 2006–2010

- Kenya and Namibia have had a memorandum of technical cooperation since 2002, renewed in 2009, including co-operation on health worker recruitment, deployment, attachment of experts, training attachments and student matters, although funding of training is not included (GoNamibia, GoKenya, 2002, 2009). There is no evidence of other bilateral agreements.

Progress

The 2010 WHO *Code of practice on international recruitment of health personnel* advocates for developed countries to provide technical and financial assistance. It includes the call to mitigate the negative effects and maximise the positive benefits of migration on the health systems of the workers' source countries (WHO, 2010b). While Kenya has a bilateral agreement with Namibia on health workers, there is scope for agreements to be negotiated with other recipient countries to support both the training and deployment of health workers to underserved areas in the country, particularly given the relatively high level of out-migration of skilled health workers.

Health officials included in trade negotiations

PAST LEVELS: 1980–2005

- Health officials in Kenya have in the past had relatively little involvement in trade negotiations. Preparations for key international meetings have been inadequate with the follow up of key resolutions uncoordinated and no proper framework to link resolutions passed at the international meetings to national policy formulation and implementation (MoPHS, 2011). Concerns regarding these weaknesses led to the establishment of the Department of International Health Relations within the Ministry of Public Health Services, in 2005. This had a mandate to coordinate all activities related to international health, including regional collaborations, and to adequately equip and prepare ministry officials to handle all matters related to global health diplomacy.

CURRENT LEVEL: 2006–2010

- With the formation of the Department of International Health Relations, health officials are now actively involved in trade negotiations, through the Inter-ministerial Committee on Global Diplomacy and International Health. The country has built capacity in global health diplomacy with 27 officers trained in 2008 and 2009 and an Intellectual Property Health Advisory Group established drawing membership from government, the Kenya Industrial Property Institute, the Pharmacy and Poisons Board, HAI Africa and the WHO (MoPHS, 2011). Preparations are made for international meetings, especially for the World Health Assembly, in a pre-assembly stakeholders' workshop held to develop the country position on priority agenda items, assign leadership by African groups and organise post-assembly debriefing workshops for stakeholders. This development has played an important role in disseminating international resolutions and following up with the relevant departments and stakeholders to implement resolutions and link them with local policy formulation processes (MoPHS, 2011).

Progress

The establishment of Department of International Health Relations has strengthened Kenya's position in international health forums, despite constraints in the size and resources of the department. The Kenya government, with other partners (ECSA Health Secretariat, University of Nairobi, Government of South Africa, EQUINET) was a founder of the ECSA Health Community Strategic Initiative on Global Health Diplomacy and has led regional training in the area. There are plans to develop further foreign health policy, in conjunction with Global Health Institute of University of Nairobi, the Foreign Affairs Service Institute and the WHO.

PROGRESS MARKERS	STATUS AND TRENDS	PRIORITY AREAS FOR ACTION
EQUITY IN HEALTH		
Formal recognition of equity and health rights	The new constitution and the policy statements in the second NHSSP 2005-2010 establish a strong legal and policy basis for the right to health and health care and for health equity.	Other areas of law reform now need to take place to operationalise the new constitution and measures to widen awareness on and capacities to claim rights.
Halving the number of people living in poverty	Poverty levels declined following improvements in GDP, with an uneven distribution of this improvement, widening provincial and rural to urban gaps and a rise in urban food poverty.	Specific strategies needed to address gaps, from measures aimed at the poorest urban households through to regional strategies to production in poorest provinces.
Reducing the gini coefficient of inequality	High inequality in most provinces, but with a trend towards declining inequality	Measures needed to improve incomes for youth, women and other vulnerable groups
Eliminate differentials in child, infant and maternal mortality and undernutrition	IMR and UMR declining, but MMR and neonatal mortality increasing. Continuing inequalities by province, wealth and gender. Reversal of rural: urban IMR differentials due to reduced rural and increased urban IMR.	Identity causes of poor outcomes in maternal and child mortality and under-nutrition and target interventions to determinants, including in Nyanza, Western and North Eastern provinces where outcomes are worse.
Eliminate differentials in access to immunisation, antenatal care and skilled deliveries	Improved immunisation and contraceptive coverage, still poor ANC and skilled health worker at delivery coverage and urban: rural and wealth related inequalities in coverage.	Address low immunisation coverage in North Eastern province and low coverage for women's health services overall, particularly for the poorest groups who face economic and information barriers to uptake of services.
Universal access to PMTCT, ART and condoms	Increased HIV testing and ARV coverage. Integrating with ANC improved PMTCT coverage. Still a treatment coverage deficit and inequalities by province, gender and wealth.	Improve testing and treatment coverage through integrated services but target specific groups for uptake. Strengthen domestic funding of AIDS programmes.
HOUSEHOLD ACCESS TO RESOURCES FOR HEALTH		
Close gender differential in education	Constitution provides for the right to education. Primary school enrolment improved for girls and boys. Secondary school enrolment low due to capacity and cost.	Continue to invest in free primary. Enforce free secondary education and fees regulation for boarding schools
Halve the proportion of people without safe water and sanitation	Slow progress in access to safe drinking water, moreso in North Eastern and Western provinces. Access to safe sanitation relatively high since 1993 but high ratios of people to facility in urban areas and informal settlements, and cost barriers to commercialised water access.	Expand safe water country wide, especially in remote rural areas, North Eastern, Nyanza, and rift valley provinces. Add measures to involve communities and maintenance and practices to treat or purify water.
Increase ratio of wages to GDP	Growing gap between economic performance and the GDP share to wages post 2006. Growing salary inequality noted earlier.	Workers more vulnerable to economic fluctuations and less able to buffer social demands with wages.
Adequate health workers and drugs at primary level	Shortages but slow improvement in availability health workers, more urban and private sector services. Cost barriers to access and problems in rational prescribing and use of medicines a barrier to coverage for poor communities.	Address absolute shortfalls health workers in North Eastern province and remote rural areas. Ensure free health care and insurance policies address medicine needs and promote rational drug prescribing and use.
Abolish user fees	Policy commitment but implementation limited by resources and out of pocket spending high at hospital level and in the private for profit sector.	HSSF funding supports free care policies. Prepayment mechanisms and social health insurance important for free care policies.
Overcoming barriers to use of services	Policy focus on addressing the financial and geographical barriers to access in low income people.	Progress depends on stronger attention to assessing social barriers implementation and evaluation of policies.

PROGRESS MARKERS	STATUS AND TRENDS	PRIORITY AREAS FOR ACTION
REDISTRIBUTIVE HEALTH SYSTEMS		
Achieving 15 per cent government spending on health	The negative progress towards Abuja target, signs of improvements but levels remain extremely low	Uganda Increase government spending on health, while strengthening absorptive capacity
Achieving US$60 per capita health funding	Government and total health expenditure have increased but are still low.	Increase domestic funding (wealth and earmarked taxes) to health to avoid overreliance on external funding.
Improve tax funding and reduce out of pocket funding for health	Small improvement in share of government and external funding and reduced out of pocket spending. Improved tax revenue has not translated into an improved health budget. Financing strategy for universal coverage including national health insurance.	Consultations, political commitment and careful implementation required to move towards progressive tax financing. Improve health share of tax revenue to raise confidence in the quality of services.
Harmonise financing into a framework for universal access	Framework for universal coverage in the constitution, and health financing strategy. Elements of the design (private health insurance and community health insurance) that may fragment and promote inequity.	Should private, community insurance be adopted, regulation and risk equalization required for equity, and manage external funds in sector wide, pooled funding
Establish and ensure clear health care entitlements	Policy commitment and defined an essential package for health but implementation challenges to widening NHIF cover.	Balance increased contribution rates with funds from existing surpluses in NHIF and reach those outside formal employment.
Allocate at least 50 per cent of public finances to districts, 25 per cent to primary health care	Policy commitment to prevention, promotion and primary care reflected in increased percent of government resources allocated to these levels to above those in the progress marker.	Sustain investment in nurses to support absorptive capacity, and monitor sustained commitment to primary care funding after fiscal decentralisation in 2013.
Implement incentives for health personnel	Schemes set up to attract, deploy and retain health workers but implementation not consistent, especially in poorer facilities.	Improve management and application of incentives at the lower levels of system (in rural + poorer areas) given stronger push factors in these services.
Recognise and support mechanisms for public participation	Policy commitment through PHC and decentralisation of decision making since 1998. Provision of facility committees and local government roles, supported by guidelines and commitment to resources.	Policy implementation unclear and costing of the strategy not available. Monitor and review policy implementation and raise visibility of community roles, including through civil society in Kenya.
A JUST RETURN FROM THE GLOBAL ECONOMY		
Reduce the debt burden	Fall in external debt and in the share of overall debt to GDP ratio, but rising overall debt stock overall and increased domestic debt.	Ensure debt relief negotiations lead to a share of debt relief allocated to the health sector and monitor reallocation of funds.
Allocate resources to agriculture and women smallholders	Policy commitment to improved budgets but slow progress. Strategy barely mentions women farmers. Women not being landowners are not recognized as farmers even when they do much of the work; statistics not gender disaggregated.	Increase efforts to measure women's contribution to agriculture. Improve access to loans for small scale farmers and research on food crops grown by women (vegetables, millet and sorghum).
Ensure health goals in trade agreements	TRIPS flexibilities in law and parallel importation used. Limited support for prequalification and local production Challenges in Anti-Counterfeit law.	Need to strengthen local production, and ensure vigilance in protecting access to generic drugs in patenting and Anti-counterfeit measures.
Bilateral and multilateral health worker agreements	Bilateral agreement with Namibia and investment in Human Resources Management Information System.	Strengthen negotiations with bilateral and multilateral agencies in line with WHO Code
Include health workers in trade negotiations	Active department and health diplomacy capacities and programme.	Strengthen capacities and communication with Geneva and regional interaction.

KEY  Improving Static, mixed or uncertain  Worsening

NOTE: In one case red is blended with yellow to make orange as the situation is not clear-cut – worsening in some issues and static in others. In another case the yellow is blended with the green to make a lime green – indicating some issues improving and others static

Conclusions

This report set out to analyse Kenya's progress towards equity in health in the past two decades. It highlights a number of positive features of Kenya's socio-economic and health system that signal the basis for health equity, including the following:

- Growth in the economy and political transformation that has widened opportunities for social and economic participation;
- A strong constitutional framework providing for the right to health and health care, and an aware community as a result of the wide engagement in producing the constitution;
- Clear policies over a period of time recognising the problems of inequity and identifying measures to improve universal coverage and enhance equity, such as removing user fees, widening coverage of health insurance, providing free primary education;
- Regular translation of policies into health sector strategies that include measures to operationalise policies for health equity, such as by defining an essential package for health, lifting user fees, investing in community health cadres and in prioritising public health issues such as access to treatment for AIDS;
- The allocation of specific resources towards health sector strategies, including improving tax collection, widening health insurance cover and allocating budgets to district and primary care level;
- The investment in capacities to put policies into practice, such as by establishing an information system to track health worker distribution or the establishing an international health relations department to engage on trade and other foreign policy issues that affect health.

The report indicates significant progress towards closing geographical, rural–urban, wealth and other social disparities in some health outcomes, such as in immunisation coverage, access to primary education, contraceptive use, access to antiretrovirals and access to safe sanitation.

Nevertheless, other areas have made less progress or now have wider differentials. Inequalities by wealth, gender or area have persisted or even widened in maternal mortality, in antenatal care coverage and access to skilled birth attendants, in child and infant mortality, and in access to safe water. HIV continues to be a high risk for some groups in Kenya, as evidenced by the wide or growing inequalities by province and gender as well as in particular social groups and for children born with HIV. Wealthier, urban groups continue to have higher coverage and uptake of services for prevention and treatment of HIV and AIDS. Geographical disparities in health outcomes and health services suggest that some regions face inequities in having both poor health and poor health care, such as North Eastern, Nyanza and Coast provinces. These regions also record the highest levels of poverty. Deliberate efforts are

needed to address historical patterns of deprivation in these areas, while being alert to new areas of deprivation, like urban slums.

Further work is needed to identify the drivers underlying these inequalities and the specific sub-regions and population groups that require further attention. This might include doing a district level analysis to identify the regions with the worst health indicators and then working closely with local officials on mechanisms to reverse the poor progress markers.

Some of the factors underlying poor performance are indicated in the report. The report suggests that the health care system cannot make progress on its own. It will be difficult to achieve health equity unless we also address the social and economic determinants of health. This means addressing the following issues:

Community health literacy

- The skew in the benefits from the high economic growth rates reported in recent years in favour of wealthier groups, with only a minority of the population controlling the national income, a falling share of GDP to wages and limited investment in small-scale women farmers;
- The uneven distribution of poverty reduction and worsening poverty in some of the poorest regions suggests a need for greater focus on equity in the distributing economic and development resources;
- The gaps in access to some key social determinants of health, such as safe water and sanitation, particularly in rural and slum areas, or to healthy foods as evidenced by rates of under-nutrition.

However, the health sector does play a role and the report points to implementation rather than policy gaps. Some issues that constrain delivery on health equity policy goals include:

- Inadequate budget allocation to health, well below the Abuja commitment, leading to inadequate per capita domestic funding, limited resources to fund and implement policies and heavy reliance on external and out of pocket funding for health services. This fragments financing and delivery and maintains cost barriers for critical services;
- Limited application of health worker incentive and retention policies at the very levels of services where they are most needed – in poorer districts and within services closer to communities;
- Continued user fees at the hospital level acting as a cost barrier, raising the need to fund health services through prepayment (either tax funding or health insurance);
- Continued fragmentation in the health system with faltering measures to align health financing with the goal of universal coverage. A potential starting point to promote a unitary system is to pool the National Health Insurance Fund with tax funding and purchase health services centrally. Linking community-based health insurance schemes and other microfinance institutions offering financial risk protection to those outside the formal sector with the National Health Insurance Fund, in order to maximise income cross-subsidisation, would also promote harmonisation. Integrating donor funds into the health system to ensure a coherent approach to health care delivery is also critical.

There is evidence of some contestation in applying policies to enhance equity, such as over social health insurance or including and using TRIPS flexibilities in national law to facilitate access to medicines. Translating strong equity policies into practice seems to demand greater focus on two key resources – health workers and communities. The gaps in institutionalising incentives that value and retain health workers and the contrasting progress made in areas where health workers have been capacitated suggest the role health workers play in health equity needs more attention and support. The limited documented evidence of functioning mechanisms, resources or capacity support for community roles in health equity suggests that this too may be an area for greater attention, investment and coordination, given the critical nature of community roles in promoting and protecting the many constitutional, policy, institutional and other resources for advancing health equity in Kenya.

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EQUITY WATCH

Equity in health implies addressing differences in health status that are unnecessary, avoidable and unfair. It is achieved through the distribution of societal resources for health, including but not only through the actions of the health sector. All countries in eastern and southern Africa have policy commitments to health equity, as do the regional organisations, the Southern African Development Community and the East, Central and Southern African Health Community. In February 2010, the ECSA Regional Health Ministers resolved to track and report on evidence on health equity and progress in addressing inequalities in health. EQUINET is working with countries and the regional organisations to implement the *Equity Watch*, to monitor progress on health equity by gathering, organising, analysing, reporting and discussing evidence on equity in health at national and regional level.

This report of the Kenya Equity Watch has been produced by the Kenya Health Equity Network, Ministries of Health in Kenya and Training and Research Support Centre in EQUINET. The summary table below shows the progress markers that were assessed, the trends, with green for improving progress, red for worsening trends and yellow for uncertain or mixed trends. The report provides the evidence on these trends and proposes areas for action.

PROGRESS MARKER	
EQUITY IN HEALTH	
Formally recognising equity and health rights	
Halving the number of people living on US$1 per day	
Reducing the gini coefficient of inequality	
Eliminating differentials in child, infant and maternal mortality and under nutrition	
Eliminating differentials in access to immunization, antenatal care, skilled deliveries	
Universal access to prevention of vertical transmission, antiretroviral therapy and condoms	
HOUSEHOLD ACCESS TO THE RESOURCES FOR HEALTH	
Closing gender differentials in access to education	
Halving the proportion of people with no safe drinking water and sanitation	
Increased ratio of wages to gross domestic product	
Provide adequate health workers and drugs at primary, district levels	
Abolish user fees	
Overcoming barriers to access and use of services	
REDISTRIBUTIVE HEALTH SYSTEMS	
Achieving the Abuja commitment	
Achieving US$60 per capita funding for health	
Improve tax funding and reduce out of pocket spending to health	
Harmonize health financing into a framework for universal coverage	
Establish and ensure clear health care entitlements	
Allocate at least 50% public funding to districts and 25% to primary health care	
Implement non-financial incentives for health workers	
Formal recognition of and support for mechanisms for public participation in health systems	
A JUST RETURN FROM THE GLOBAL ECONOMY	
Reducing the debt burden	
Allocate resources to agriculture and women smallholder farmers	
Ensure health goals in World Trade Organisation (TRIPS, GATS) agreements	
Bilateral and multilateral agreements to fund health worker training	
Health officials included in trade negotiations	