2012

EQUITY WATCH

Assessing progress towards equity in health

Tanzania

Ministry of Health and Social Welfare

Ifakara Health Institute

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

Map of Tanzania showing regions

Source: NBS [Tanzania] and ORC Macro (2005) DHS 2004/5

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Foreword

It is with pleasure and pride that the Ministry of Health and Social Welfare presents the first *Equity Watch* report for Tanzania mainland. The *Equity Watch* is an important venture of the Regional Network for Equity in Health in East and Southern Africa (EQUINET) in association with the East, Central and Southern Africa (ECSA) Health Community. In February 2010 the ECSA Regional Health Ministers Conference resolved that countries 'report on evidence on health equity and progress in addressing inequalities in health'. By producing the *Equity Watch* report 2012, Tanzania joins other ECSA member countries that have produced such reports between 2009 and 2011.

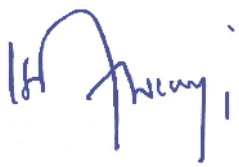
Tanzania has a longstanding commitment to health equity. The first five year development plan (1964–1969) aimed to ensure that every Tanzanian lives within five kilometres of a health facility. That was a bold move towards equity. The Arusha Declaration of 1967 was the birth of the primary health care concept even before the 1978 Alma Ata Conference on Primary Health Care. The National Health Policy of 1990 (revised in 2003), health sector reform proposals and successive national health sector strategic plans have given major focus to reducing inequalities in health.

The Tanzania *Equity Watch* report 2012 assesses the progress we have made in achieving health equity. The report indicates that Tanzania has relatively low levels of income inequality and has made progress in closing geographical, rural–urban, wealth and other social disparities in some areas of health and its determinants, such as in access to primary education and access to antiretrovirals. There have been declines in rural–urban inequalities in child survival and rural poverty has fallen.

We are also aware, however, that we need to ensure that rural, poorer women access antenatal care and skilled birth attendants. High child under-nutrition in areas of high cereal production is a matter of concern and we need to accelerate progress in access to safe water and sanitation, including in urban areas. Some regions with higher levels of poverty also have poorer health and poor health care and we need to make deliberate efforts to address these long-standing patterns of deprivation, and respond to new areas of deprivation, such as urban poverty.

The report also shows that the health sector cannot achieve health equity alone. Many sectors of government have a key role to play in addressing the social determinants that affect inequalities in health. We hope that the evidence in this report will stimulate wider discussions across sectors and with development partners, civil society and parliament on how we can work together to close the gaps in access to the resources and services that people need for health.

I wish to acknowledge the co-authors of the report, EQUINET through Training and Research Support Centre, the Ifakara Health Institute and staff of the Ministry of Health and Social Welfare who contributed to the report. This is our baseline, and we look forward to our further partnership to periodically update the report and review how far we have used the opportunities and addressed challenges raised to advance health equity in Tanzania.



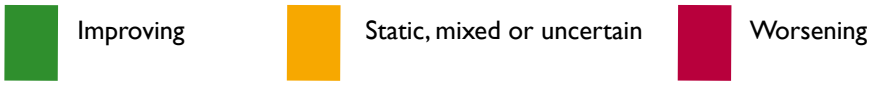
Dr Hussein Mwinyi, MP
Minister for Health and Social Welfare
Dar es Salaam

About the equity watch

An *Equity Watch* is a means of monitoring progress on health equity by gathering, organizing, analyzing, 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 East, Central and Southern African (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. 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. The report uses public domain demographic and household surveys, routine data and official reports, complemented by national surveys, as sources of evidence. The analysis is constrained by the same data quality limitations that affect these sources, such as lack of district disaggregations, inconsistent definitions across time in some indicators or exclusions of those falling out of services in routine data. We hope that producing the report uses the evidence and stimulates dialogue on it as one input to improving data quality.

This report presents information on health equity in Tanzania, using 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 what the situation is, whether broadly:



Combinations of these colours are used where trends are mixed. The relationship to the average in the east and southern African region is also shown, where this is clear (and left blank where comparisons are difficult or uncertain):

EQUINET defines equity as follows:

> *'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 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 how resources are distributed and strategies designed and applied towards ensuring access to the resources for health.

Key areas

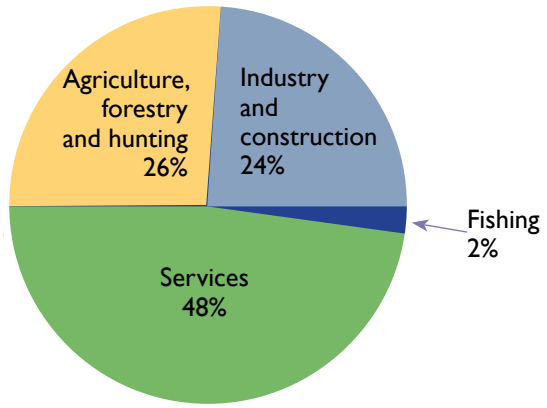
Introduction

EQUITY WATCH

The United Republic of Tanzania was formed in 1964 from a union of Tanganyika (Tanzania mainland) and Zanzibar islands. Health services are not part of union matters and each part of the union has its own ministry dealing with health issues. This *Equity Watch* report focuses largely on the Tanzania mainland, although there is some limited information covering the mainland and Zanzibar. It is envisaged that future *Equity Watch* reports will address both parts of the union.

Tanzania is classified as a low-income country, although it has an abundance of resources. The population in 2010 was 43 million (NBS, 2010). Although the population density tripled between 1967 and 2010, from 14 to 49 people per square kilometre, the country is still sparsely populated, with higher population densities in Zanzibar, Mwanza, Dar es Salaam and Kilimanjaro regions (NBS, 2010). The AIDS epidemic has reduced the population, although HIV prevalence in the 15–49 year old population fell from 7 per cent in 2003/04 to 5.7 per cent in 2010 (TACAIDS and NBS, 2005, 2011). The country is politically stable, peaceful and socially cohesive. There is formal provision for freedoms of press, speech and religion; for freedom of assembly and association; and for women's rights. National debate has opened on reform of the constitution (ADB and ADF, 2011).

Figure 1: Share of GDP at current prices, 2010

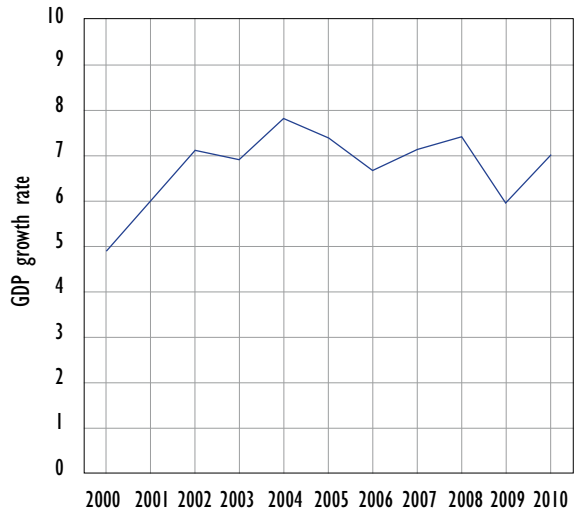


Source: NBS and MoF 2011

Tanzania's economy depends on agriculture which employs nearly 80 per cent of working people and, with industry and services, it makes up 98 per cent of gross domestic product (GDP) (see Figure 1). The country has large deposits of precious and other minerals, natural gas, uranium and oil, although mining is still a low share of GDP.

The GDP growth of 7 per cent annually over the past 10 years met the set targets of 6–8 per cent growth annually (NBS, 2011b). Growth was driven by private consumption, exports (with favourable gold prices) and gross fixed capital (mainly public investment) (ADB and ADF, 2011). Although GDP growth fell in 2009 with the global economic slowdown, it has since recovered (Figure 2).

Figure 2: GDP growth rate, 2000–2010



Source: URT, 2011c

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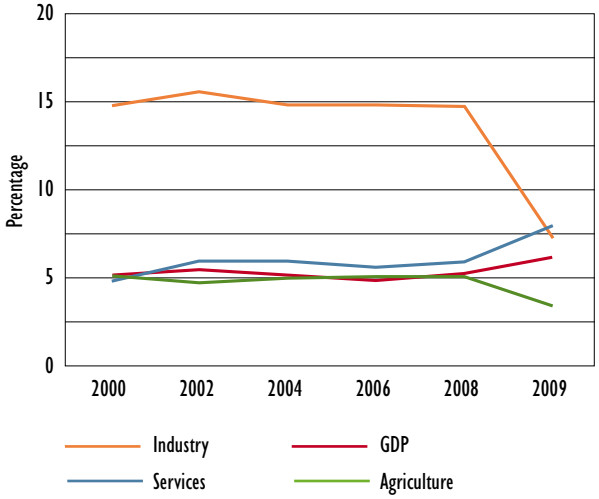
Table 1: GDP and inflation rate, 2006–2012 at 2001 prices

Year	2006	2007	2008	2009	2010	2011
Per capita GDP US$PPP	370	421	504	505	516	–
GDP US$ bn current	14.3	16.8	20.7	21.4	22.8	23.7
GDP growth rate	6.7	7.1	7.4	6.0	7.0	6.7
Inflation rate	7.3	7.0	10.3	12.1	10.5	7.0

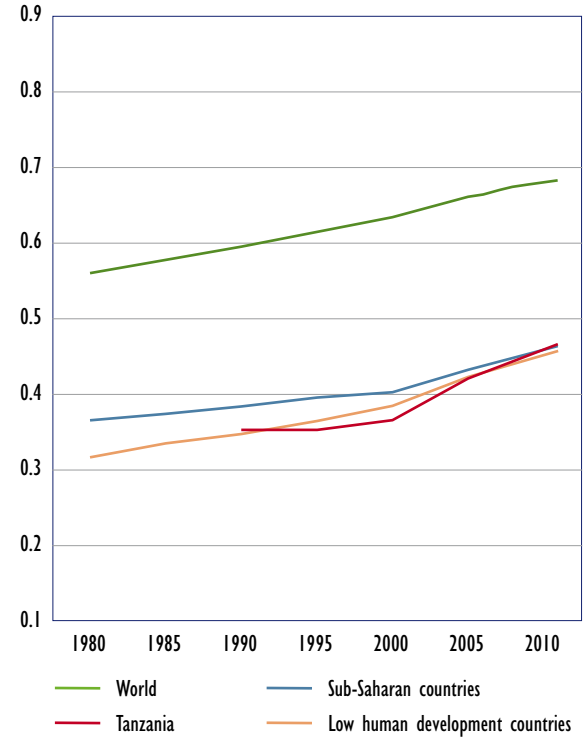
PPP = purchasing power parity
Source: NBS, 2011b; UNDP, 2012; World Bank, 2012; Global finance, 2012; URT, 2011c

Figure 3: GDP Growth rates by sector, 2000–2009 at 2001 prices



Source: UNDP, 2011; NBS

Figure 4: Trends in the human development index, Tanzania, 1990–2010



Source: UNDP, 2012b

The financial crisis and drought in 2008–2009 negatively affected agriculture, hydro power generation and industry (NBS, 2011b). In terms of sectors, growth largely derived from the service sector, with a decline after 2008 in agriculture and industry after the 2009 drought (Figure 3). Inflation increased markedly in this period only falling in 2010 (see Table 1).

The benefit from this sustained period of economic growth has not been felt by all. Economic growth has been associated with a small reduction in the rate of poverty from 35.7 per cent in 2001 to 33.4 per cent in 2007 (NBS, 2011). After 2007, household surveys indicated that the significant growth in the economy after 2000 had not translated into income poverty reduction (URT, 2011c). Household spending power was eroded by the increase in inflation shown in Table 1 and 44 per cent of people are still in severe poverty (UNDP, 2011).

The human development index (HDI) for Tanzania (combining measures of income, education and health) showed little increase in the 1990s, with high AIDS-related mortality, but it improved between 2000 and 2009 (see Figure 4). Tanzania graduated from the low to the middle human development group of countries, primarily due to investments in education and health (URT MoFEA, 2010).

This report assesses how far the opportunities of the recent period of economic growth in Tanzania have been tapped across regions, rural and urban areas and across different socio-economic groups, and whether they are translating into fairly distributed improvements in health and in the social determinants of health in the population. It examines progress made in implementing key features of health systems that distribute resources towards those with highest levels of health need. It also explores selected trends and interactions in Tanzania's global engagement that affect these outcomes.

EQUITY WATCH

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 under-nutrition
- Eliminating income and urban–rural differentials in immunization, 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

- Despite its critical importance, the Constitution of the United Republic of Tanzania of 1977 does not include the right to health or health equity in its Bill of Rights (Legal and Human Rights Centre, 2009). Article 30 mentions assurances of public health (*kuhakikisha afya ya jamii*) (URT, 2000). Unlike other countries in the region, Tanzania does not include the rights to shelter and safe water, to food and to health care services or general duties to public health (Mulumba *et al.*, 2010).
- Nevertheless Tanzania is a member of the United Nations (UN) and has ratified key international human rights instruments, including the International Covenant on Economic and Social Rights (ICESR) which obliges states to satisfy minimum essential levels of the right to health and its determinants (see Table 2).
- Public health policy after independence had a strong egalitarian focus (Smithson, 2006). Even after transition to more liberal market policies in the economy in the 1980s, the policy commitment to equity in health continued with the aim to 'improve health and wellbeing of all Tanzanians with a focus on those most at risk' and to ensure that 'health services are available and accessible to all urban and rural areas' (MoH, 1990, 2003).

Table 2: Ratification of international treaties in Tanzania

Treaty	Date signed/ratified
Convention concerning Forced or Compulsory Labour	January 1962
Medical Examination of Young Persons (Sea) Convention, 1921 (No 16)	January 1962
Equality of Treatment (Accident Compensation) Convention, 1925 (No 19)	January 1962
International Convention on the Elimination of All Forms of Racial Discrimination, 1965	October 1972
Convention on the Elimination of All Forms of Discrimination Against Women, 1979	October 1972
International Bill of Human Rights	June 1976
International Covenant on Economic and Social Rights, 1966	January 1976
Convention on the Rights of the Child, 1989	August 1985
Discrimination (Employment and Occupation) Convention, 1958 (No 111)	February 2002
Equal Remuneration Convention, 1951 (No 100)	February 2002
Right to Organize and Collective Bargaining Convention, 1949 (No 98)	February 2002

CURRENT LEVELS: 2006–2010

- The National Health Strategy 2007 continued to advocate equity and access to quality health services. It includes the vision of achieving a healthy community that contributes to the development of individuals and of the country as a whole. Its mission is to facilitate provision of basic health services which are proportional, equitable, high quality, affordable, sustainable and gender sensitive (MoHSW, 2008a). It proposes to strengthen the health system and widen access to services by rehabilitating existing health facilities, by constructing new ones, through outreach services and by ensuring medicines and other supplies are available, particularly at village level (MoHSW, 2007). The National Health Sector Strategic Plan III 2009–2015 (HSSPIII) further focused on the right to health and health care for equity in health in Tanzania. The Primary Health Services Development Programme 2007–2017 set out programmes, linked to frontline health services, to strengthen community health (MoHSW, 2007). There is a clear and consistent policy commitment to achieving equity by ensuring access to services in communities.
- The legal rights that underpin this commitment are currently under debate. Tanzania is in the initial stage of writing a new constitution, a process initiated in 2011. Article 12 of the International Covenant on Economic and Social Rights (ICESR) states that every human being is entitled to enjoy the highest attainable standard of health needed to live with dignity. General Comment 14 of the covenant elaborates on the core state obligations with regard to the right to health as: ensuring access to health facilities, goods and services; access to the minimum essential food; access to basic shelter, housing and sanitation, and an adequate supply of safe water; provision of essential drugs; equitable distribution of all health facilities, goods and services; and adoption and implementation of a national public health strategy. It remains to be seen how far these rights will be included in the constitution.
- The right to health in the Tanzanian constitution has not had a high profile in constitutional debates. Jukwaa La Katiba, a consortium of civil society organizations campaigning for a new constitution in Tanzania, is silent on health in its 2011 recommendations to the Parliamentary Committee for Constitution, Law, and Administration (Jukwaa La Katiba, 2011). Other civil society organizations have been more vocal. Sikika, a local health advocacy non-governmental organization, has engaged health service providers and policy makers on health rights, including on governance, transparency and accountability in the use of the resources for health (Sikika, 2010). People with disabilities have proposed that the new constitution include special representation of people with disability in parliament (Foundation for Civil Society, 2012), while civil society activists have demanded the inclusion of health in human rights advocacy (Isangula, 2012). The Health Equity Group, a consortium of non-governmental organizations, engaged parliament on the equitable delivery of health services at community level, by scrutinizing the health care budget and auditor general reports, and by raising the profile of health issues such as maternal mortality (IPU, 2009). Sikika has held weekly radio sessions to stimulate awareness and engages with district authorities and parliamentarians to hold their leaders accountable for delivery of accessible and affordable health services (Sikika, 2012).

Progress

Since independence, Tanzania's health policy has established strong support for health equity. Successive policy statements, plans and programmes have focused on strategies to deliver on this, most recently through strengthening community health and ensuring accessible health services and supplies to village level. The most recent strategy focuses on the health sector 'getting its own house in order' for equity. Later sections of this report assess delivery on these policy intentions.

Less clear are the approaches to the key determinants of health outside the health sector or the legal and constitutional provisions that will support strategies or entitlements relating to health, its determinants and to health care. The ongoing consultations for developing a new constitution by 2014 provide an opportunity to advance health equity in Tanzania and the growing civil society advocacy for the recognition and realization of health rights represents a positive trend in ensuring both legal expression and social delivery on policy commitments to health equity.

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

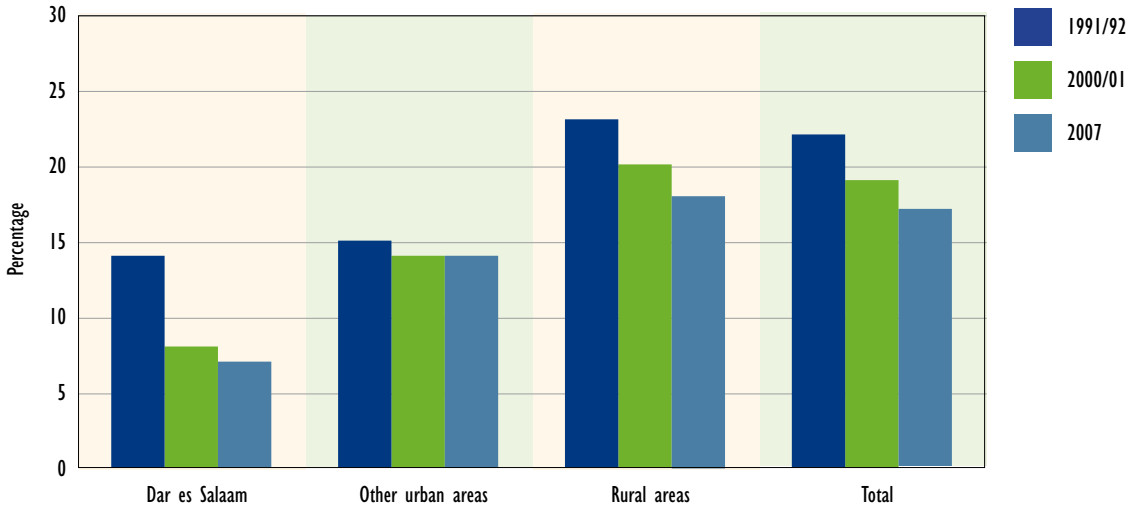
INDICATOR	PAST LEVELS (1980–2005) Level	Year	CURRENT LEVEL (most recent data) Level	Year*
% population living on less than US$1 a day (PPP)	65 .0	1983	33.6	2007
	51.0	1991		
	35.7	2001		
% population living below the poverty line	21.6	1991	16.6	2007
	18.7	2001		
Dar es Salaam	13.6	1991	7.4	2007
	7.5	2001		
Other urban	15.0	1991	12.9	2007
	13.2	2001		
Rural	23.1	1991	18.4	2007
	20.4	2001		
Ratio rural: urban	1.54:1	1991	1.43:1	2007
	1.55:1	2001		
% population living under the food poverty line	21.6	1991	16.6	2007
	18.6	2001		
% population living under the total consumption poverty line (TCPL)	35.5	2001	33.6	2007
Basic needs poverty %	38.6	1991	33.6	2007
	35.7	2001		
Food poverty %	21.6	1991	16.6	2007
	18.7	2001		
Rural food poverty %	23.1	1991	18.4	2007
	20.4	2001		
Multidimensional poverty index			0.367	2008
% share of consumption by wealth quintiles				
Rural				
% in lowest quintile	7.5	2000/1	7.5	2007
% in highest quintile	41.4	2000/1	41.2	2007
Urban				
% in lowest quintile	6.6	2000/1	6.8	2007
% in highest quintile	42.6	2000/1	42.0	2007
Ratio highest : lowest quintile				
Rural	5.5:1	2000/1	5.5:1	2007
Urban	6.5:1	2000/1	6.2:1	2007

Note: The food poverty line represents the cost of obtaining sufficient food to meet calorie needs. The basic needs poverty line includes an additional allowance for non-food essentials.
Source: NBS, 2002: URT and UN, 2011; UNDP, 2011; NBS and ICF Macro, 2011; NBS, 2009

PAST LEVELS: 1980–2005

- The proportion of people living below the poverty line declined between 1983 and 2001, although the absolute number of poor people increased because of population growth. During this period, rural poverty was about 50 per cent higher than urban poverty with about 83 per cent of poor people located in rural areas (NBS, 2009).
- Significant growth in the economy since 2000/01 did not translate into income poverty reduction, with the rate of poverty and incidence of food poverty falling only slightly and rural poverty remaining high (see summary table and Figure 5).
- There was a small decline in earning disparities between women and men and households headed by women were found to be no poorer than those headed by men (NBS and ICF Macro, 2005). The small reduction in poverty was achieved by the expansion of schooling, particularly primary schooling, and improved access to primary care services, even while access to safe water and ownership of farming land and livestock declined (NBS, 2009).

Figure 5: Share of people living below the food poverty line, 1991–2007



Source: NBS, 2009

CURRENT LEVELS: 2006–2010

- Poverty levels fell between 1991/92 and 2007 with more improvement in rural than in urban areas (see summary table). The 2007 household budget survey, however, showed slow progress in reducing extreme poverty and weak social safety nets to support the health and nutritional needs of vulnerable groups (URT and UN, 2011). Food poverty levels, at 17 per cent, are half the total poverty levels of 34 per cent, indicating the significant contribution of food insecurity to deprivation in Tanzania (discussed in the later progress marker on nutrition and on agriculture). The multidimensional poverty index (MPI) is the new UNDP measure of poverty that shows deprivation aggregated across three dimensions: health, education and standard of living, measured using ten indicators, with each dimension equally weighted. Although it was not available before 2006, it is included for future comparisons and for its value in indicating contributors to poverty. In the 2005-2008 period, living standards and income poverty were greater contributors to Tanzania's multidimensional poverty index than health (see Table 3).

Table 3: Multidimensional poverty in Tanzania, 2005–2008

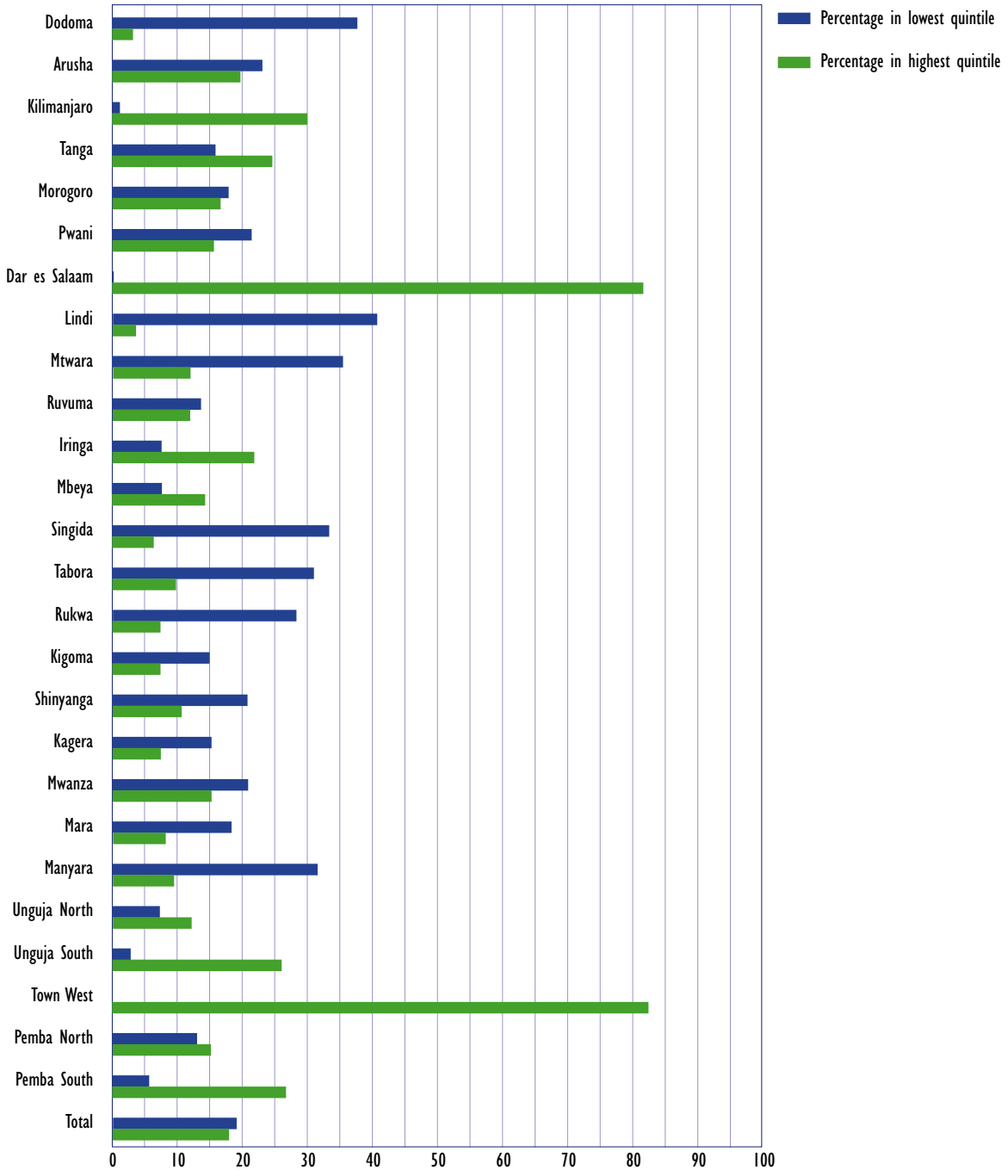
Multidimensional poverty index	Intensity of deprivation % *	Health	Living standards	% below PPP US$1.25 a day	% below national poverty line
0.367	56.3	35.5	90.6	88.5	35.7

* % suffering from overlapping deprivations in 2 out of 10 indicators of the MPI

Source: UNDP, 2011

- Poverty levels vary by residence and region. The urban–rural poverty gap has closed but primarily due to declining rural poverty. Wealth differentials in urban areas in 2010 were extremely wide (21 fold between richest and poorest), suggesting that urban economic growth has not translated into comparable levels of poverty reduction. Inequality in the share of consumption between highest and lowest wealth groups is higher in urban than in rural areas, and higher shares of wealthier people are also found in Dar es Salaam, while higher shares of poorest people are found in Lindi, Dodoma and Mtwara regions (see Figure 6). Urban poverty is associated with multiple dimensions of insecurity, including rising land prices and administrative procedures leading urban poor people to live in unplanned, marginal and overcrowded areas. Within areas, households are reported to be more likely to be poor if they have many dependants, an economically inactive head and if they depend on the sale of crops, with no regular income. Households with a head who has above-primary level education are five times less likely to be poor compared with those where the head has had no education (NBS, 2009).

Figure 6: Share of people in the lowest and highest wealth quintile by regions, 2010



Source: NBS, 2011

- Tanzania has implemented a range of measures for poverty reduction and pro-poor growth, including improving school attendance, increasing access to clean water and reducing maternal deaths (URT, 2010; UN, 2011; NBS, 2011). In 2005, the Ministry of Lands began giving residential licences to landowners in unplanned areas of Dar es Salaam to address urban deprivation, although further measures are needed to overcome administrative delays and cost barriers (Kironde *et al.*, 2006). The Tanzania Social Action Fund (TASAF), set up by government with World Bank support, has sought to provide a funding facility for community-driven and public works interventions to reduce poverty, with over 11,375 interventions implemented up to 2010 and cash payments made to food insecure households involved in road, irrigation and other infrastructure works. By 2010, a total of 928 public works projects had been implemented, generating a wage benefit to poor households of over Tsh12 billion (US$7,6 million) (WB and TASAF, 2010).

Progress

Tanzania has not achieved its own target and the Millennium Development Goal of reducing by half the number of people in poverty. Poverty reduction has not occurred at the pace of economic growth. The rural–urban poverty gap has fallen due to falling rural poverty, with relatively static urban poverty levels after 2001. Given that food and income insecurity and poor living conditions are major contributors to poverty, measures aimed at improving rural incomes and environments and urban land access are relevant to poverty reduction. The evidence suggests a need to extend these poverty-reducing measures more intensively for vulnerable urban households and to overcome cost and information barriers to accessing these interventions in poorest districts and households (Baird *et al.*, 2011).

Queuing for bed-nets, 2009

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	0.34	1991	0.35	2007
	0.35	2001	0.35	2010
	0.35	2005		
Gini coefficient by region				
Dar es Salaam	0.30	1991	0.34	2007
	0.36	2000		
Other urban	0.35	1991	0.35	2007
	0.36	2000		
Rural	0.33	1991	0.33	2007
	0.33	2000		

Source: NBS, 2009; UNDP, 2010

PAST LEVELS: 1980–2005

- The gini coefficient is a measure of the inequality in wealth or income, with values ranging from 0 (perfect equality) to 1 (perfect inequality). Inequality in Tanzania is lower than many other countries in the region, although the gini coefficient rose marginally from 0.34 in 1991 to 0.35 in 2001, varying by region in 2001 from 0.35 in Kilimanjaro to a much higher 0.54 in Singida (Mkenda *et al.*, 2004).
- Income inequality in the population remained unchanged between 2000/01 and 2005, with the gini coefficient stagnant at 0.35. There was a small fall in inequality in Dar es Salaam and other urban areas, based on the more restricted consumption measure used in the poverty analysis, which does not reflect all elements of consumption. Overall, however, the National Bureau of Statistics observed that 'inequality has increased slightly since 1991/92' (NBS, 2009; see summary table).

CURRENT LEVELS: 2006–2010

- Inequality plateaued in Tanzania between 2007 and 2010 with the gini coefficient remaining at 0.35. The gini coefficient has thus not changed for over a decade. Economic inequality is marginally higher in urban than in rural areas, particularly for urban areas outside Dar es Salaam (see summary table).

Progress

Tanzania has lower levels of income inequality measured by the gini coefficient than other countries in the region (EQUINET, 2012). This is attributed to policies that were applied in the 1980s that supported economic inclusion, such as through investment in the small-scale agricultural and production sector, and support for infrastructure, research, education, extension services and technology. However the plateauing gini coefficient and persistent or widening within areas inequality, particularly in urban areas, are a matter for concern. This suggests the need for specific policy dialogue on measures to strengthen economic inclusion in urban areas, while sustaining measures being applied for economic inclusion in rural areas, to widen the benefit from current economic growth (NBS, 2009). The wide differences in wealth between richest and poorest quintiles within urban areas merit attention, both to better understand the drivers of inequality and to identify specific service, policy and social interventions to close the gap.

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 years / 1,000 (CMR)	55	2004	35	2010
Rural	58	2004	35	2010
Urban	38	2004	35	2010
Ratio rural : urban	1.5:1	2004	1:1	2010
Highest quintile	31	2004	23	2010
Lowest quintile	54	2004	45	2010
Ratio lowest : highest quintile	1.74:1	2004	1.9:1	2010
Lowest mothers' education	66	2004	36	2010
Highest mothers' education	21	2004	23	2010
Ratio lowest : highest mothers' education	3.1:1	2004	1.6:1	2010
Lowest region	36	2004	18	2010
Highest region	67	2004	48	2010
Ratio highest : lowest region	1.9:1	2004	2.7:1	2010
Under five mortality rate / 1,000 (U5MR)	137	1996	91	2007
	112	2004/5	81	2010
Rural	138	2004	92	2010
Urban	108	2004	94	2010
Ratio rural : urban	1.3:1	2004	0.98:1	2010
Lowest quintile	137	2004	103	2010
Highest quintile	93	2004	84	2010
Ratio lowest : highest wealth quintile	1.5:1	2004	1.2:1	2010
No education	160	2004	97	2010
Secondary+	76	2004	73	2010
Ratio lowest : highest mothers' education	2.1:1	2004	1.3:1	2010
Infant mortality rate / 1,000 (IMR)	88	1996	58	2007
	68	2004	51	2010
Rural	86	2004	60	2010
Urban	72	2004	63	2010
Ratio rural : urban	1.2:1	2004	0.95:1	2010
Lowest wealth quintile	88	2004	61	2010
Highest wealth quintile	64	2004	60	2010
Ratio lowest : highest wealth quintile	1.4:1	2004	1.01:1	2010
No education	101	2004	63	2010
Secondary+	56	2004	52	2010
Ratio lowest: highest mothers' education	1.8:1	2004	1.2:1	2010
Western	76	2004	56	2010
Northern	67	2004	40	2010
Central	75	2004	57	2010
Southern Highlands	82	2004	70	2010
Lake	90	2004	64	2010
Eastern	84	2004	70	2010
Southern	121	2004	68	2010
Ratio highest : lowest region	1.81:1	2004	1.75:1	2010

INDICATOR	PAST LEVELS (1980–2005) Level	Year	CURRENT LEVEL (most recent data) Level	Year*
Maternal mortality rate / 100 000				
From facility data	880	1990	454	2010
From demographic surveillance	578	2004		
Stunting in children < 5 years (height for age <2SD) – % total children	44	1999	42	2010
	38	2004		
Ratio rural : urban	1.82:1	1999	1.41:1	2010
	1.57:1	2004		
Ratio lowest : highest wealth quintile	2.86:1	2004	1.84:1	2010
Ratio lowest : highest mothers' education	2.05:1	1996	2.07:1	2010
	2.16:1	2004		
Ratio highest : lowest region	2.74:1	1996	2.86:1	2010
	3.72:1	2004		
Under-nutrition in children under five (weight for age<2SD) % total	29.4	1999	15.8	2010
	21.8	2004		
Ratio rural : urban	1.52:1	1999	1.50:1	2010
	1.35:1	2004		
Ratio lowest : highest wealth quintile	2.03:1	2004	2.31:1	2010
Ratio lowest : highest mothers' education	3.10:1	1996	2.61:1	2010
	2.01:1	2004		
Ratio highest : lowest region	2.55:1	1996	2.91:1	2010
	2.39:1	2004		

Sources: URT, 2010; WHO, 2011; NBS and ORC Macro, 2005, 2011

PAST LEVELS: 1980–2005

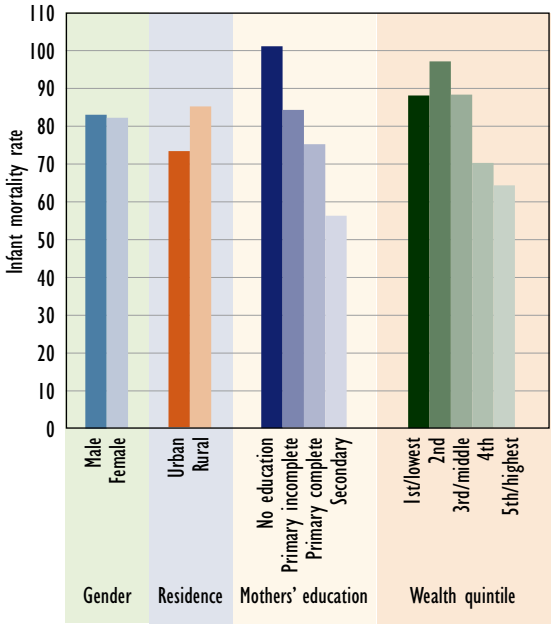
- Infant, child and under five mortality rates in 2004 were between 20 and 50 per cent higher in rural than in urban areas, 40 to 74 per cent higher in poorer than in wealthier groups, with area variations of up to 1.9:1. (see summary table).
- Child mortality ranges from a low of 36 in the Southern zone to a high of 67 in the Western zone. Infant mortality showed the reverse pattern, from a low of 67 in the Northern zone to a high of 121 in the Southern zone. The reason for this inverse pattern is unclear and needs further investigation.
- Social differentials were wider for child mortality than for infant and under five mortality, although inequalities by mothers' education and wealth were wide across all ages (see Figures 7a and 7b). Aggregate improvements in mortality have not necessarily been felt by all groups. Table 4 shows that while under five mortality fell by 22 per cent between 1995 and 2005, the gap in mortality between the poorest and wealthiest households increased. The reasons for this in terms of social determinants and access to services are explored in later progress markers.

Table 4: Under five mortality by wealth, 1995–2005

Under five mortality *			Poorest to richest quintile under five mortality rate ratio				DHS survey year	
Year 1	Year 2	% change	Year 1	Year 2	Change	% change	Year 1	Year 2
161.1	132.2	-21.6	1.18	1.47	increase	20%	1999	2004–05

* Using the under five mortality rates in the DHS survey database http://www.statcompiler.com

Figure 7a: Differentials in infant mortality, 2004



- Child stunting fell between 1999 and 2004. By 2004, as summarized in Table 5, there were 1.7 fold differences by area in children underweight; the differences were even wider by wealth and mothers' education.
- Differentials in birth-weight were wider than those for child under-nutrition, across wealth, residence and education. There were, paradoxically, higher levels of low birth-weight in urban, educated and wealthier groups (see Figures 8a and 8b). The reasons for this need to be further explored.
- Child under-nutrition was higher in the 6–11 months age group (younger than in many other countries in the region) and more common in rural, less educated and poorer households. The variation in under-nutrition was greater within than between regions, with small urban centres having less under-nutrition than surrounding rural areas (Minot *et al.*, 2006).

Figure 7b: Differentials in under five mortality, 2004

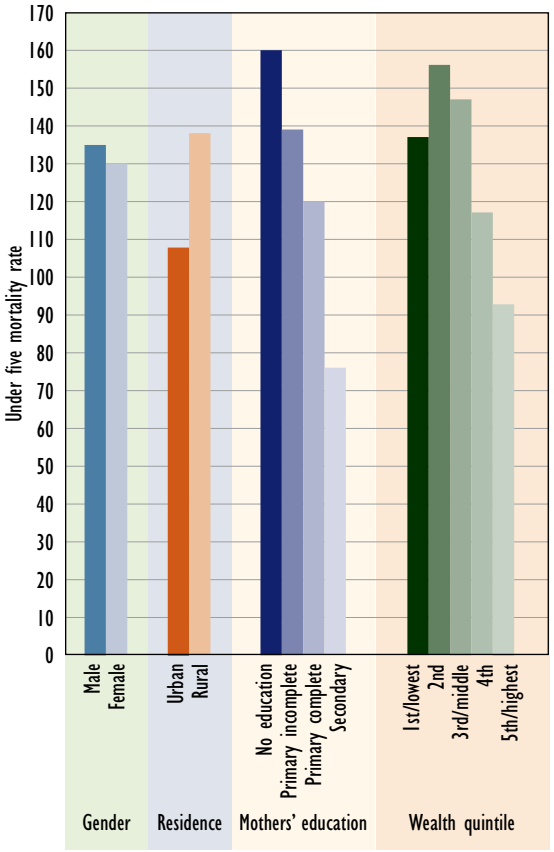


Figure 8a: Differentials in child under-nutrition, 2004

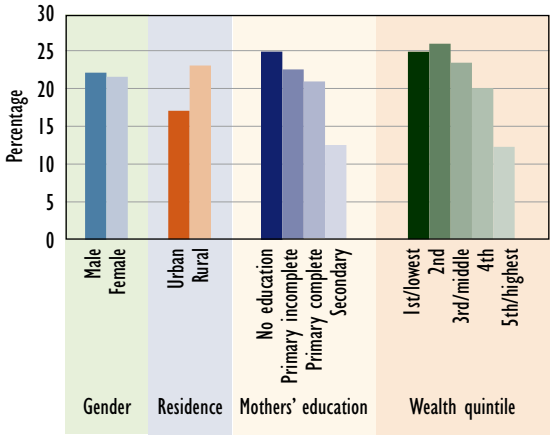
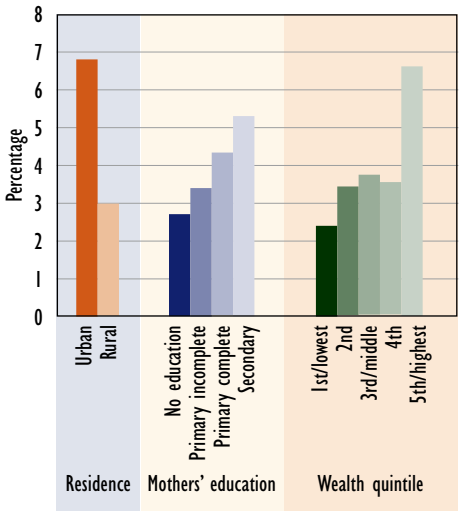


Figure 8b: Differentials in low birth-weight, 2004



Source (for figures 7 and 8): NBS [Tanzania] and ORC Macro, 2005

CURRENT LEVELS: 2006–2010

- By 2010 child mortality, under five mortality and infant mortality had all fallen, more so for under five mortality than for the others (see summary table). Urban–rural inequalities had closed significantly by 2010 with rural areas showing reduced levels of mortality. For infant and under five mortality, contrary to expectations, urban rates were higher than rural rates in the 2010 Tanzania demographic and health survey. At the same time, wealth and geographical inequalities widened for child mortality but narrowed or remained the same for infant and under five mortality.
- Determinants for this improvement in Tanzania may include improvements in mothers' level of education, exposing mothers to information about better nutrition, use of contraceptives to space births and knowledge about the prevention and treatment of childhood illnesses (NBS and ICF Macro, 2011). Evidence on maternal and child health services, discussed in the next progress marker, suggests that these services did not improve significantly in coverage in the period so may have made less contribution.
- While differences by residence, education and wealth had narrowed by 2010 (as shown in Figures 9a and 9b), regions with highest under five mortality (Lake and Southern Highlands with 109 and 102 deaths per 1,000) had double the rates of the region with lowest mortality (Northern zone with 58 per 1,000). Infant mortality follows the same pattern, ranging from a low of 40 per 1,000 in the Northern zone to a high of 70 per 1,000 in the Eastern and Southern Highlands zones (NBS and ORC Macro, 2011).

Figure 9a: Differentials in infant mortality, 2010

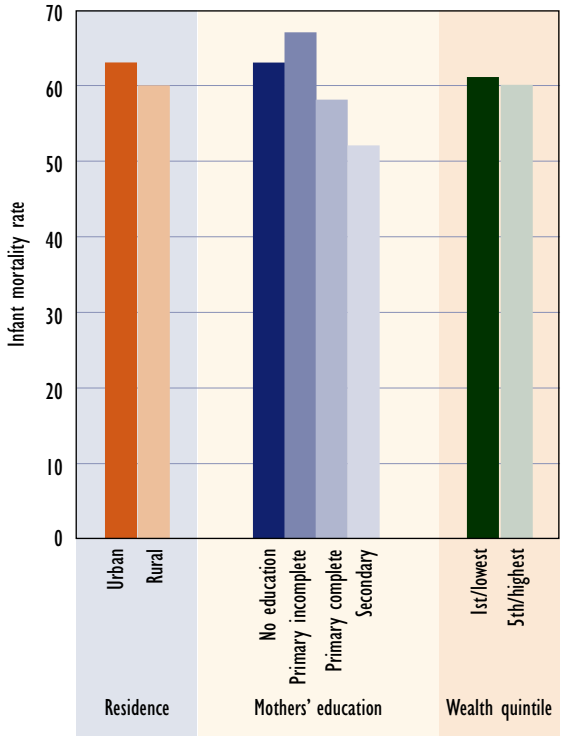
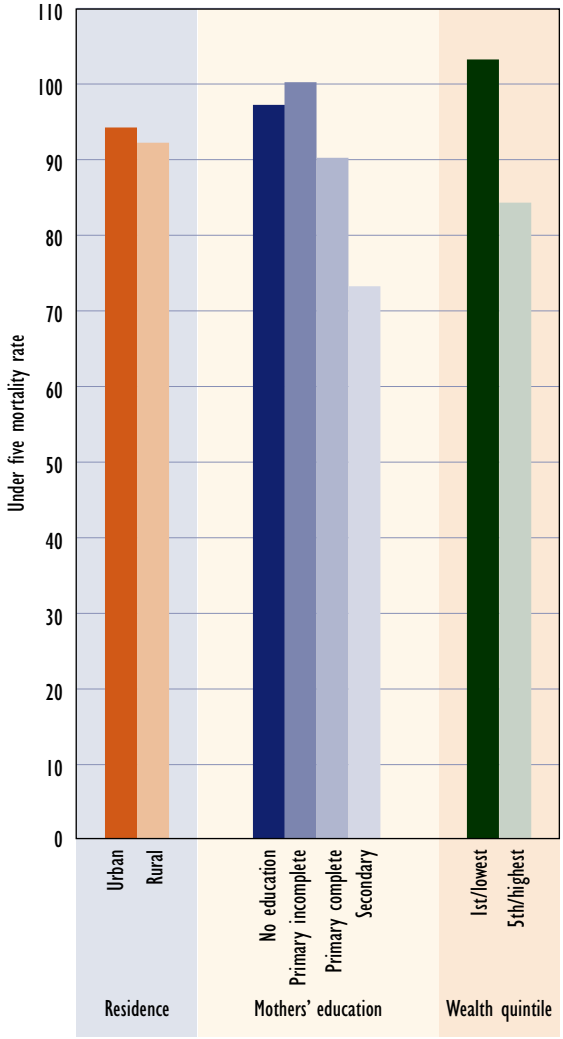


Figure 9b: Differentials in under five mortality, 2010



Source: NBS (Tanzania) and ICF Macro, 2011

- While there have been improvements in child survival, levels of stunting and under-nutrition in children have remained high, with reduced levels of child under-nutrition between 2004 and 2010 and increased levels of child stunting. Poor breast-feeding and child feeding practices with early introduction of nutritionally inadequate and contaminated complementary foods (particularly cereal-based porridges) are reported to contribute to persistent child malnutrition (Muhimbula, 2010). Differentials in child under-nutrution by wealth, education, area and residence widened between 2004 and 2010 (see summary table). Paradoxically, areas of the country that are the source of cereal surpluses, mainly the south and the west, are also the areas with relatively high rates of malnutrition. Lindi, Mara, Ruvuma, Rukwa, Kigoma, Iringa, Dodoma and Tanga regions all recorded more than 20 per cent of children under five as stunted in 2010 (URT and UN, 2011). Poor food security in areas of high production may be due to commercialization of cereal production and sale of food stocks, in a context of climate change and adverse weather conditions (MoFEA, 2010). The 2005 National Strategy on Infant and Young Child Feeding and Nutrition set out cooperation with the private sector to advance salt iodization and food fortification to improve the quality of foods purchased in commercial markets (URT and UN, 2011).
- Maternal mortality fell from 578 per 100,000 in 2004 to 454 per 100,000 in 2010 (see summary table). The 95 per cent confidence intervals overlap in the 2004 and 2010 surveys (2004-05: 466 to 690 and 2010: 353 to 556) but the fall in the upper limit in 2010 suggests that maternal mortality may have started to decline (NBS and ICF Macro, 2011). With limited improvement in coverage of maternity services, one factor linked to the improvement may be the increase in contraception rates from 20 to 27.4 per cent between 1990 and 2010 (Kagashe, 2010). Maternal mortality is not disaggregated by region, rural or urban areas and wealth quintiles in household surveys, due to the large sample sizes needed.

Progress

Improvements and closing rural–urban inequalities in infant, child, under five and maternal survival after 2004 are positive developments. However, wealth and geographical inequalities in child mortality have widened and child under-nutrition showed relatively limited improvements and a widening in wealth, area and social inequalities after 2004. Progress is thus mixed. The next section discusses maternal and child health service interventions, including in terms of service coverage in more disadvantaged households and regions where children are more at risk. Improving and closing social differentials in child survival and nutrition calls for wider inter-sectoral action. The evidence confirms the attention being paid in national strategy to improving the quality of affordable foods in commercial markets. However, poor nutritional outcomes in regions of high cereal production further suggest a need for investments to improve household food production, including by investing in women smallholder farmers, as discussed later. Poorer child nutrition outcomes among mothers with lower education levels suggest that additional social interventions may be needed to enhance exclusive breast-feeding and weaning practices in such households (URT and UN, 2011).

A rural food market

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

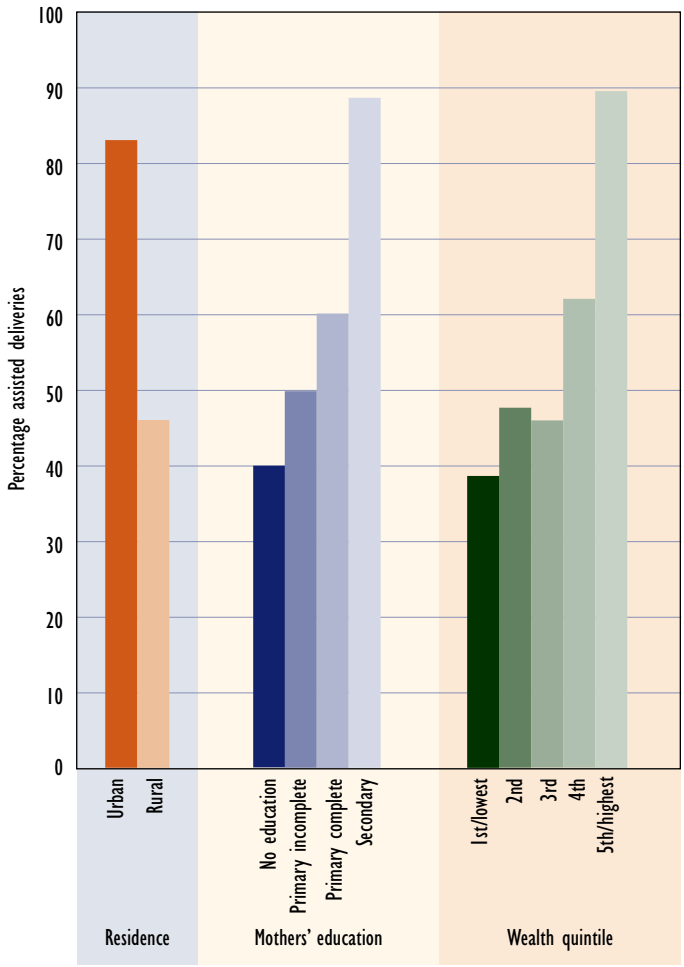
INDICATOR	PAST LEVELS (1980–2005) Level	Year	CURRENT LEVEL (most recent data) Level	Year*
Full immunization % coverage 12–23 months	68 .0	1999	33.6	2007
	71.0	2004	75.0	2010
Rural	68.8	2004	72.6	2010
Urban	81.5	2004	85.6	2010
Ratio urban: rural	1.2:1	2004	1.2:1	2010
Lowest mothers' education	55.6	2004	62.6	2010
Highest mothers' education	79.2	2004	87.7	2010
Ratio highest : lowest mothers education	1.4:1	2004	1.4:1	2010
Lowest wealth quintile	58.3	2004	69.1	2010
Highest wealth quintile	80.7	2004	84.8	2010
Ratio highest : lowest wealth quintile	1.4:1	2004	1.2:1	2010
Lowest region	36.7	2004	42.1	2010
Highest region	89.9	2004	89.9	2010
Ratio highest : lowest region	2.4:1	2004	2.1:1	2010
% pregnant women with at least one antenatal care visit	94.0	2004	96.0	2010
Rural	93.6	2004	95.1	2010
Urban	96.7	2004	98.6	2010
Ratio urban: rural	1.03:1	2004	1.03:1	2010
Low mothers' education	90.6	2004	93.5	2010
High mothers' education	99.2	2004	97.8	2010
Ratio high: low mothers' education	1.1:1	2004	1.04:1	2010
Lowest region	88.6	2004	92.6	2010
Highest region	99.2	2004	100	2010
Ratio highest to lowest region	1.1:1	2004	1.08:1	2010
% pregnant women with more than four antenatal care visits	61.0	2004	42.0	2010
% births attended by skilled personnel	46.0	2004	51.0	2010
Rural	38.0	2004	42.3	2010
Urban	80.9	2004	83.0	2010
Ratio urban: rural	2.1:1	2004	2.0:1	2010
Lowest wealth quintile	31.0	2004	33.0	2010
Highest wealth quintile	86.8	2004	90.4	2010
Ratio highest : lowest wealth quintile	2.8:1	2004	2.7:1	2010
Lowest mothers' education	30.7	2004	34.1	2010
Highest mothers' education	84.3	2004	86.3	2010
Ratio highest : lowest mothers' education	2.7:1	2004	2.5:1	2010
Lowest region	30.0	2004	25.0	2010
Highest region	90.6	2004	91.0	2010
Ratio highest : lowest region	3.02:1	2004	3.6:1	2010

Sources: NBS [Tanzania] and ORC Macro, 2005; NBS and ORC Macro, 2011

PAST LEVELS: 1980–2005

- Implementing Tanzania's expanded programme on immunization (EPI) started in 1975 and had spread throughout the country by 1996. The proportion of children fully immunized increased slightly between 1999 and 2004 (68 to 71 per cent), with relatively low inequalities by mothers' education, residence or wealth (see summary table). The widest variation was across regions, where Kilimanjaro, with the highest coverage at 89 per cent, had 2.4 times the coverage of Tabora at 37 per cent (NBS and ORC Macro, 2005).
- The percentage of women having at least one antenatal care visit during pregnancy in 2004 was 94 per cent, higher in urban than rural areas and among more educated mothers, although with relatively low differences. What was of concern was that the number of women with four antenatal care visits fell to only 61 per cent, suggesting that women were not getting the frequency of antenatal care attendance needed to detect and manage risks.
- This was compounded by the low share of births attended by skilled personnel (41 per cent of total births in 2004), which was higher in urban areas, in wealthier households and among more educated mothers, with threefold differences across wealth, education and region (see Figure10).
- In the 2004/05 demographic and health survey, most women reported barriers to using these key services in terms of lack of money (40 per cent), distance to health facilities (38 per cent) and having to take transport (37 per cent). Women also reported barriers associated with quality of care, for example, unfriendly providers (14 per cent) and lack of female providers (8 per cent), while 6 per cent of all women cited having to obtain permission and knowing where to go as big problems. These barriers were more frequently reported by: rural, older women; women with larger families; divorced, separated, or widowed women; and women not working for cash (NBS and ORC Macro, 2005).

Figure 10: Differentials in deliveries assisted by skilled personnel, 2004



Source: NBS [Tanzania] and ORC Macro, 2005

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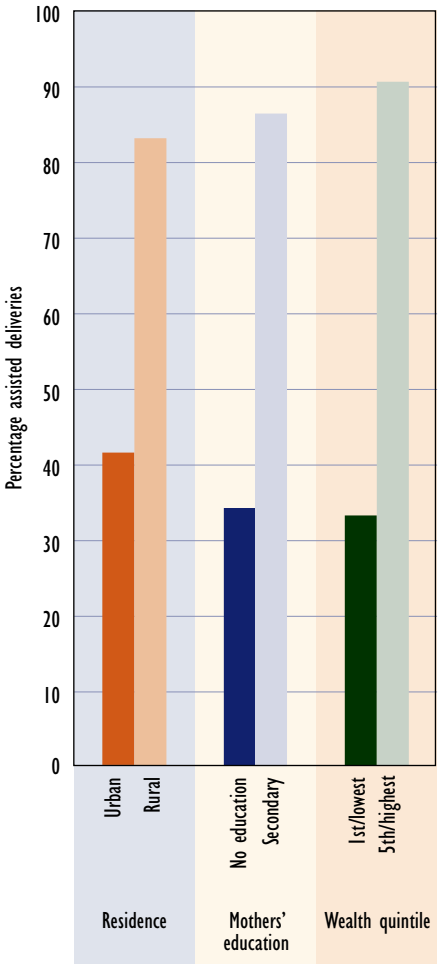
A pregnant mother reviews her card after an antenatal care visit, Bungu dispensary, Rufiji District

CURRENT LEVELS: 2006–2010

- Tanzania seeks to increase immunization coverage to 90 per cent by 2015 by ensuring access to quality vaccines and by strengthening the systems (NBS and ORC Macro, 2011). However, by 2010 rates of full immunization had risen marginally to 75 per cent of children aged 12–23 months, a modest increase relative to 2004 levels (NBS and ORC Macro, 2011). Urban–rural, wealth, education and regional differentials in immunization remained relatively unchanged compared to 2004 levels (no or small differences), with rates as low as 42 per cent coverage in the poorest and more marginalized households and regions. As noted in the previous marker, these are also households with higher levels of child mortality and under-nutrition, and poorer households are also less able to afford to deal with child illness. Given that transport costs and distance barriers have been identified, these differentials suggest a need to strengthen outreach in poorly performing regions and to poorly covered households to improve coverage levels.
- Household surveys in 2010 show similar levels of one antenatal care visit as in 2004 and similarly low differentials in antenatal care coverage with one visit (see summary table). However the rate of attendance for four visits fell from 61 to 42 per cent between 2004 and 2010. This dropout from antenatal care merits urgent attention given the need for more frequent contact with antenatal care services to benefit from risk screening and other health promotion services.
- Further, rates of deliveries attended by skilled personnel rose only marginally between 2004 and 2010 (from 46 to 51 per cent) and are at low levels. Inequalities by residence, wealth and education remain high, with negligible change after 2004 (see Figure 11).

Figure 11: Differentials in deliveries assisted by skilled personnel, 2010



Source: NBS [Tanzania] and ORC Macro, 2011

Maternity ward nurse at Bagamoyo hospital, 2009

Ujiji health centre in the Kigoma region, 2012

- Geographical inequalities have widened from 3.02 to 3.64 between highest and lowest regions. The highest region (Dar es Salaam) with 91 per cent assisted deliveries, had 66 percentage points higher coverage than the lowest (Pemba North) in 2010. The measures currently being implemented to enhance coverage include expanding training of health workers, providing delivery packs to pregnant women at antenatal clinics and a media and mobile health campaign (M4RH) to encourage early antenatal care visits and facility deliveries.
- Social factors appear to be less serious barriers than cost and service availability. In the 2010 demographic and health survey, women seemed to have acquired more social autonomy in service uptake by 2010, with only 2 per cent of all women citing the need to obtain permission as a barrier. The major reported barriers to accessing care were lack of money (24 per cent), distance to health facilities (19 per cent) and not wanting to go alone (11 per cent). Problems in accessing maternal health care was still felt most acutely by: rural, older women; women with larger families; divorced, separated or widowed women; women not working for cash; and women with no education or in the lower wealth quintiles (NBS and ORC Macro, 2011).

Progress

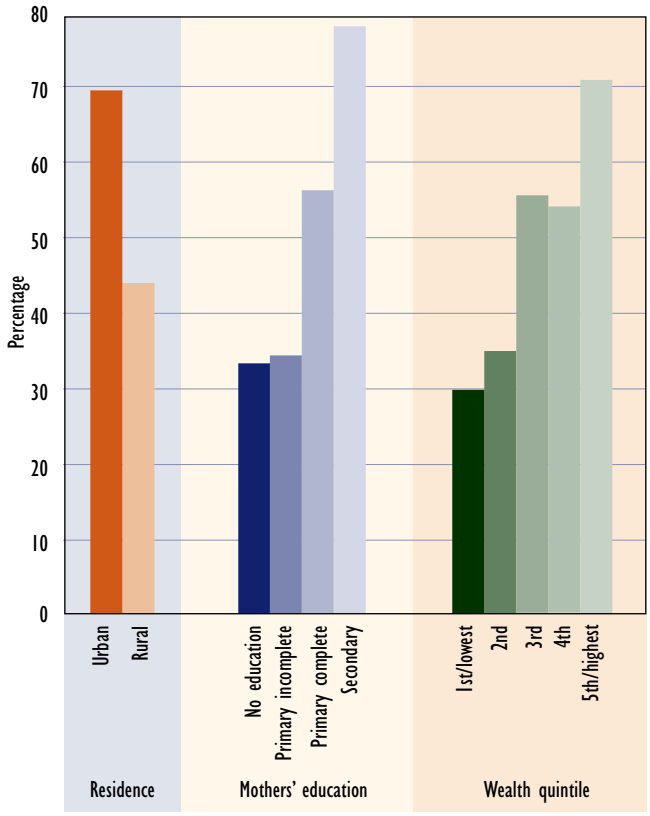
There has been limited progress in two areas that are key to improving children and mothers' survival – immunization and ensuring four antenatal care visits – with no change in inequalities across residence and mothers' education and negligible change across wealth and region. Coverage of deliveries assisted by skilled personnel has improved, particularly in rural areas, although with limited success in closing social and geographical differentials in coverage. Rural, poorer and less educated women continue to be disadvantaged, primarily due to cost and distance barriers. This suggests the need to continue investing in efforts to improve staffing, training and supplies and in achieving aggregate coverage of four antenatal visits and assisted deliveries, with particular attention to coverage in rural areas and poorly serviced regions (Rukwa, Kigoma, Shinyanga and Mara). Additional social outreach to promote uptake in poor, less educated and rural households will also help close the gaps. The service delivery factors that affect the possibility of extending coverage (health workers – especially midwives – and supplies) are further discussed in a later progress marker.

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 (%)	8.1	1999	6.0	2007
	7.8	2001		
	7.0	2003		
Urban	10.9	2004	9.0	2007
Rural	5.3	2004	5.0	2007
Ratio urban : rural	2.0:1	2004	1.8:1	2007
Lowest wealth quintile	3.4	2004	4.6	2007
Highest wealth quintile	10.5	2004	8.1	2007
Ratio highest : lowest wealth quintile	3.0:1	2004	1.8:1	2007
% pregnant women having voluntary counselling and testing as part of antenatal care				
Urban: rural ratio	5.4:1	2004	1.6:1	2010
Ratio highest : lowest mothers' education	9.4:1	2004	1.8:1	2010
Ratio highest : lowest wealth quintile	8.8:1	2004	1.8:1	2010
Ratio highest : lowest region	12.6:1	2004	1.8:1	2010
% women attended voluntary counselling and testing given an HIV test and test results in last 12 months	6.2	2004	29.5	2010
Urban	12.2	2004	36.9	2010
Rural	3.9	2004	26.5	2010
Ratio urban: rural	3.1:1	2004	1.4: 1	2010
No education	2.2	2004	23.9	2010
Primary	6.6	2004	29.8	2010
Secondary +	12.8	2004	34.9	2010
Ratio highest : lowest education	5.8:1	2004	1.5:1	2010
% in need on antiretroviral therapy			42	2010
% Pregnant women in need on prevention of mother to child transmission treatment			59	2010
Female condom use at last high risk sex 15–49 year age group	27.5	2004	27	2010
Urban	41	2004	29	2010
Rural	18	2004	26	2010
Urban: rural ratio	2.3:1		1.1:1	2010
Lowest wealth quintile	11.4	2004	15.6	2010
Highest wealth quintile	44.5	2004	27.2	2010
Ratio highest : lowest wealth quintile	4.0:1	2004	1.7:1	2010

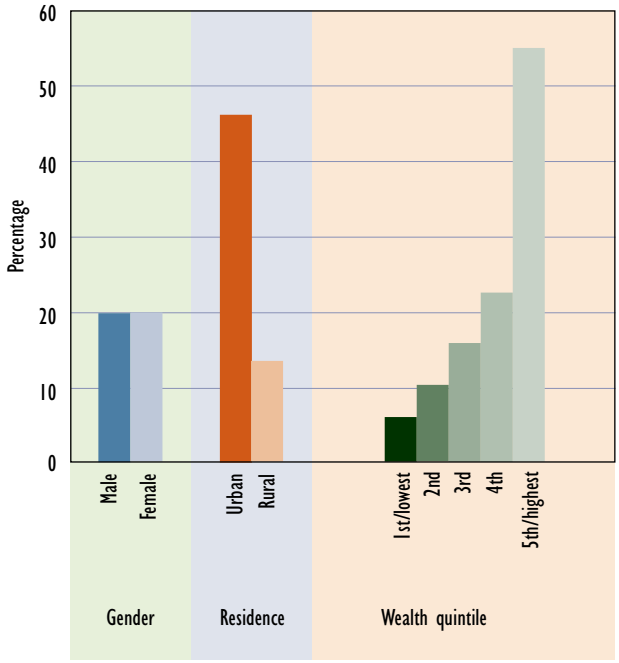
Sources: NBS and ORC Macro, 2005; NBS and ICF Macro, 2011; TACAIDS et al., 2005; NBS, 2008; ICF International, 2012

Figure 12: Differentials in male condom use at last high risk sex, 2004



Source: NBS [Tanzania] and ORC Macro, 2005

Figure 13: Percentage of children under five who slept under an insecticide-treated bed net, 2005



Source: NBS [Tanzania] and ORC Macro (2005)

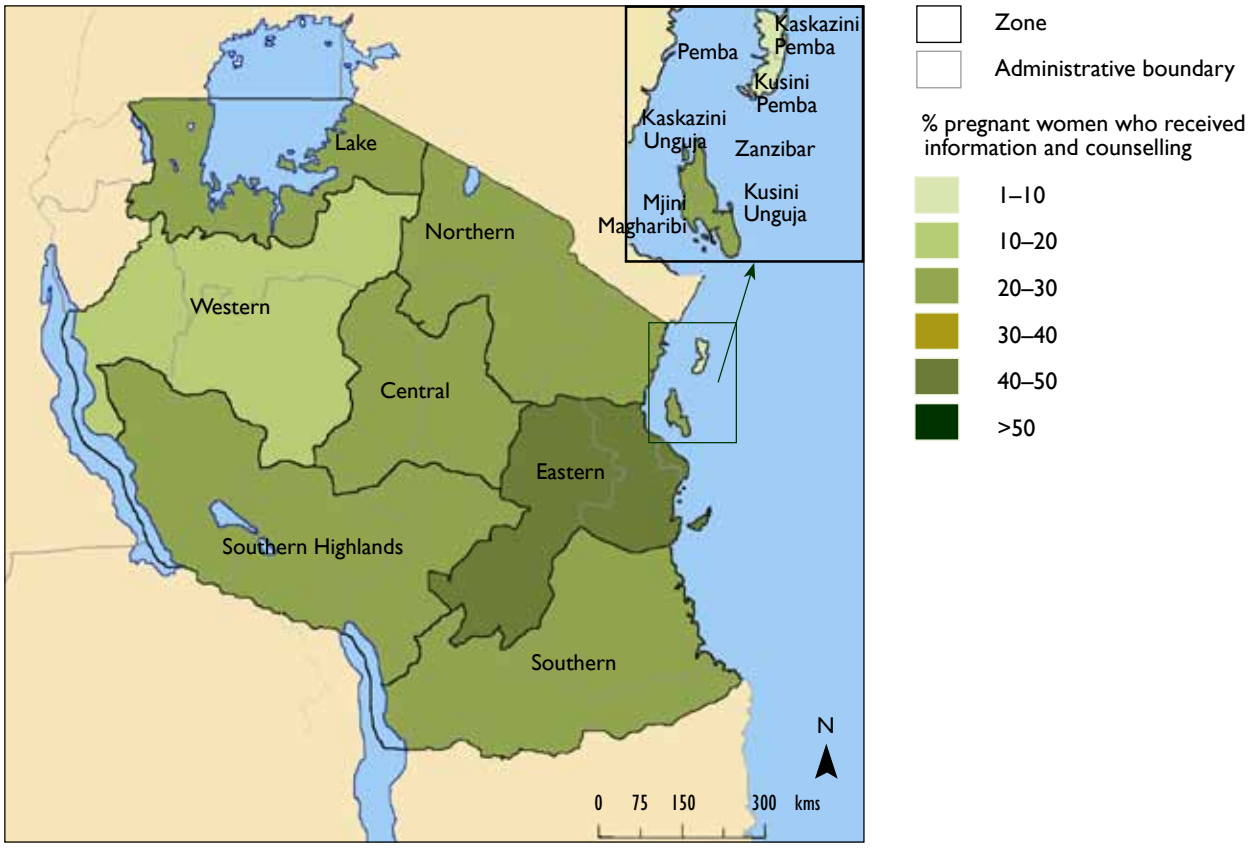
PAST LEVELS: 1980–2005

- Adult HIV prevalence declined from 8 per cent in 1999 to 7 per cent in 2003 and by 2004 was higher in urban areas, in the Southern Highlands region, in the highest wealth quintile and among mothers with complete primary education (NBS and ORC Macro, 2005). Its distribution was thus different from other disease profiles, given its higher rate in wealthier, urban, educated populations.
- The National HIV/AIDS Control Programme (NACP), set up in 1987, formulated a succession of five-year medium-term plans for the periods 1987–1991 (MTP1), 1992–1996 (MTP2) and 1998–2002 (MTP3) and they were backed by community information and participation. A multi-sectoral strategic framework for HIV and AIDS set roles for every sector on AIDS, coordinated by the Tanzania Commission for AIDS (TACAIDS) (NBS and ORC Macro, 2005). The health sector response focused on HIV prevention, care and support and, in 2003, government developed a national care treatment and plan (NCTP) and introduced antiretroviral therapy, supported by training health workers, upgrading health infrastructure and laboratory capacities and establishing a monitoring and evaluation system (URT, 2003). Antiretroviral therapy scale up was, however, slow. Prevention interventions for HIV showed wide differentials by education, residence and wealth, with much higher access in wealthier, urban social groups. For example, there was a fourfold difference in female condom use between wealthiest and poorest women (see summary table), male condom use was higher in wealthier, educated and urban populations (Figure 12) and coverage of services for HIV, such as testing and counselling, was significantly concentrated in higher income groups, and in more educated and urban populations.
- Social differentials in access to prevention interventions were higher than the geographical differentials shown in Figure 14 on page 21. While in 2004 this inequality matches the pattern of HIV prevalence, it foretells a reversal of prevalence towards poorer, less educated groups.
- Similar inequalities were found in relation to malaria prevention, as shown in Figure 13.

CURRENT LEVELS: 2006–2010

- By 2007, adult HIV prevalence had declined to 6 per cent of adult Tanzanians, higher in women than men (6.6 per cent versus 4.6 per cent) (NBS, 2008). A significant decline in HIV prevalence has taken place among men but not among women (NBS, 2008). HIV remains 1.8 fold higher in urban, wealthier groups than in rural, lower-income groups but prevalence in the lowest wealth quintile has risen. The falling wealth differential is thus not a positive finding.
- Achievements have been made in the increased availability of treatment for sexually transmitted infection at health centres and dispensaries, in a three-fold increase in voluntary counselling and testing centres (VCT), in service availability for prevention of vertical transmission and in antiretroviral coverage. By June 2012, 1,078,018 people living with HIV had been enrolled in treatment cumulatively and 660,723 were receiving antiretroviral therapy (NAC, 2012). There have been a number of challenges in expanding coverage, including: delays and difficulties in providing timely funding to districts and communities; access to antiretroviral therapy being confined to urban areas; and weaknesses in service delivery in rural areas. For example, only 37 per cent of pregnant women attending antenatal care were reached by prevention of mother to child transmission services during the first half of 2009 and inadequate counselling and testing centres have meant that more than 60 per cent of adults remain untested for HIV (URT MoFEA, 2010).
- Coverage levels of prevention interventions, such as use of female condoms and HIV testing, remain higher in urban, wealthier groups than in rural, lower-income groups. Between 2004 and 2007, rural–urban and mothers' education differentials fell in the coverage of voluntary counselling and testing among women attending antenatal care, at the same time as coverage improved in all groups. Residence and wealth differentials also fell for female condom use but this was due as much to falling use in urban, wealthier women as rising use in poorer, rural groups (see summary table). Reduced differentials due to worsening outcomes in more advantaged groups is not a positive finding.

Figure 14: Geographic differences in female HIV counselling, 2004



Source: NBS [Tanzania] and ORC Macro, 2005

- As service availability widens, it is important to track uptake across different social groups and to address social factors, such as sexual violence, that may be sustaining HIV prevalence and leading some groups to not use available services (UNICEF, 2011). Falling condom use reported by urban women between 2004 and 2007 would, for example, need to be investigated. A number of issues have been found to affect women's uptake of antiretroviral therapy. For example, Tanzania prevention of mother to child transmission guidelines limit the distribution of antiretroviral drugs to women who are in at least the 28th week of gestation, so that women who come for their first antenatal care visit prior to 28 weeks and who do not return, as most do not, do not access antiretrovirals. Transport costs and distance are barriers to access to referral facilities for HIV testing and there continue to be information barriers on services in poor communities and inadequate support for uptake of treatment and care services (Elizabeth Glaser Pediatric AIDS Foundation and USAID, 2011; Tanzania Commission for HIV/AIDS, 2002).

Progress

HIV sero-prevalence has continued to decline, significantly more in men than in women, with improvements in access to prevention and treatment interventions and in changes in sexual behaviour, particularly among young people. Rising coverage and narrowing geographical and social (wealth, education) differentials have taken place in women's uptake of voluntary counselling and testing, a positive trend. At the same time, some differentials have narrowed, such as in HIV prevalence in highest and lowest wealth quintiles or in female condom use at last high risk sex, due partly to worsening outcomes for one group. Social and geographical differentials of about 1.8:1 in coverage of prevention and treatment interventions can generate future inequities in HIV prevalence if they are not addressed. Surveys suggest that barriers lie in service availability and access (cost, distance, social factors) that can be addressed by further integrating HIV programmes in primary level services and strengthening information and social support for uptake, especially among rural, poor women.

Incorporating HIV counselling with primary health care services, Biharamulo district Kagera region, 2007

EQUITY WATCH

© Mbarwa Kivuyo, 2010

Household access to the national resources for health

Progress markers

- Achieving and closing gender differentials in attainment of universal primary and secondary education
- 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 GDP
- Allocating at least 10 per cent of budget resources to agriculture, particularly for investments in smallholder and women producers
- Overcoming the barriers that disadvantaged communities face in accessing and using 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 social determinants of health, which are the educational, environmental, income, health care and social protection resources they need to improve their health. It also explores how far differentials in the social determinants of health are being closed. The parameters chosen are consistent with those identified by the WHO Commission on the Social Determinants of Health (WHO CSDH, 2008).

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	Year*
% net enrolment in primary school age children	73.0	2004	79.7	2010
Male	75.4	2004	78.0	2010
Female	70.9	2004	81.0	2010
Ratio female: male	0.94:1	2004	1:1	2010
Urban	85.0	2004	88.2	2010
Rural	70.0	2004	77.6	2010
Ratio urban : rural	1.2:1	2004	1.1:1	2010
% net enrolment in secondary school age children	7.1	2004	25.3	2010
Male	6.8	2004	25.9	2010
Female	7.5	2004	24.7	2010
Ratio female : male	1.1:1	2004	1.:1	2010
Primary school completion rates % (overall)	58.0	1997	73.0	2006
	55.0	2005	83.0	2007
			90.0	2010
Secondary school completion rates % (overall)	5.0	2004		
Primary school drop out rates				
Male	62	2004		
Female	66	2004		
Ratio female : male	1.1:1	2004		
Urban	50	2004		
Rural	75	2004		
Ratio rural : urban	1.5:1	2004		
Low quintile	92	2004		
Highest quintile	48	2004		
Ratio low : high quintile	1.9:1	2004		
% adult literacy (overall)				
Males over 15 years	78	1999	82	2010
	80	2004		
Females over 15 years	64	1999	72	2010
	68	2004		

Sources: NBS and ORC Macro, 2005; NBS and ORC Macro, 2011; URT, 2010; NBS, 1999, World Bank, 2012

PAST LEVELS: 1980–2005

- In 2004, nearly three quarters (73 per cent) of primary school age children (7–13 years) in Tanzania were enrolled in primary school, slightly lower for girls than for boys (see summary table). Enrolment in secondary school was significantly lower (7 per cent) with a higher level of girls than boys enrolled. There appeared to be a significant fall out from primary to secondary school level, with only 28 per cent completion rates, and dropout rates 1.5 times higher among rural children than urban children, and twice as high in poorer than in wealthier households.
- Government embarked on a countrywide primary education development programme (PEDP) after 2002 to ensure that every eligible child got the best quality education. The implementation of the programme is reported to have brought positive changes in primary and secondary school construction, in primary school enrolment, in textbook and other supplies to schools, and in community involvement in decisions on schools through school committees (Ngodu, 2009; URT MoFEA, 2010). However, the demand for teachers, textbooks, science laboratories and teachers' housing outstripped supply in the period (URT MoFEA, 2010).

- School attendance and gender equity improved at primary and secondary levels, in both urban and rural areas. The poorest households saw a rise in education participation rates of more than 30 percentage points between 2000/01 and 2007. Nevertheless overall levels at secondary school remained low, with only 10 per cent of rural children aged 14–17 years attending secondary school and girls leaving school earlier (NBS, 2009).
- Adult literacy improved between 1999 and 2004, although remained significantly higher for men at 80 per cent than for women, at 68 per cent.

CURRENT LEVELS: 2006–2010

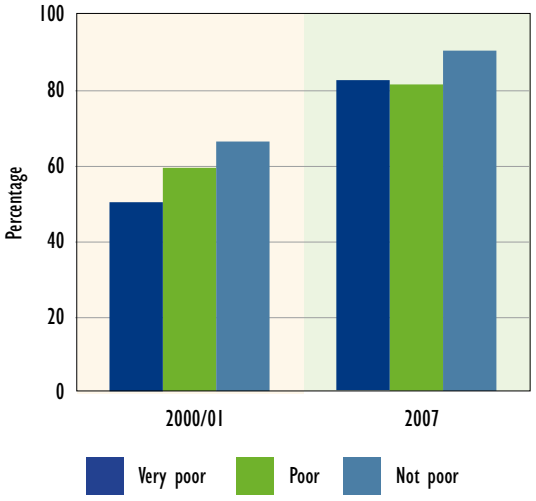
- By 2010, enrolment in primary school had risen to 80 per cent with close to gender parity. The number of primary schools increased from 14,257 in 2005 to 15,727 in 2009, a 10 per cent increase (Ngodu, 2009). Secondary school enrolment rose to 25 per cent, also with improved gender parity. Urban–rural and income differentials fell (as shown in Figure 15 and Table 5), although school-age children from the wealthiest households were more likely to attend primary school than those from the poorest households (NBS and ORC Macro, 2011).
- The continued implementation of the primary education development programme over the decade sustained progress in gender parity in primary education, although the gender balance deteriorates with transition to secondary school. The share of girls in secondary schools was still only 46.8 per cent in 2007 and the share of women in higher education institutions was at 34 per cent.

Table 5: Children aged 7–13 years studying, by poverty status, 1991, 2001, 2007

	HBS 1991/92			HBS 2000/01			HBS 2007		
	very poor	poor	not poor	very poor	poor	not poor	very poor	poor	not poor
Dar es Salaam	59.2	69.7	66.1	56.3	69.6	79.9	89.9	91.8	96.1
Other urban areas	57.4	65.7	64.9	60.2	68.1	91.9	89.9	94.5	95.9
Rural areas	53.9	55.7	56.9	48.8	57.7	62.2	80.2	79.2	87.3
Total	54.4	57.3	58.6	50.1	59.2	66.3	81.8	81.3	89.6

HBS = Household budget survey
Source: NBS, 2009

Figure 15: Percentage of children studying by poverty status and year, 2001, 2007



Source: NBS, 2009

Table 6: Pupils dropping out in the primary school cycle, 2004–2008

Reasons for dropout	2004	%	2005	%	2006	%	2007	%	2008	%
1 Truancy	32,469	77.6	44,742	77.3	44,603	77.6	53032	66.6	50401	69.5
2 Pregnancy	2590	6.2	3479	6.0	3190	5.6	4362	5.5	3370	4.6
3 Death	3078	7.4	3268	5.6	2705	4.7	4492	5.6	3898	5.4
4 Illness	–	–	1284	2.2	1425	2.5	1561	2.0	1432	2.0
5 Parent/guardian illness	–	–	725	1.3	536	0.9	731	0.9	630	0.9
6 Lack of school needs	–	–	4389	7.6	4986	8.7	3018	3.8	3163	4.4
7 Other reasons	3702	8.8	–	–	–	–	12374	15.6	9585	13.2

Source: URT MoFEA, 2010

- The gender disparities in both rural and urban areas are attributed to high dropout rates, truancy, financial problems, early pregnancy and marriage. One in ten girls dropped out due to pregnancy in 2008 (URT, 2008; URT MoFEA, 2010; see Table 6). Low-income households report not being able to pay for books, uniforms and other school-related expenses. Children work to support poor families or families can no longer afford to send them to school. Some children repeatedly fail and so stay in the same grade year after year. Low participation in science subjects was reported to leave girls vulnerable in the labour market. Hence, in addition to encouraging enrolment among girls, government is encouraging female enrolment in science subjects and mathematics (URT, 2008).
- Schools have faced challenges in retaining enrolled pupils and teachers in hard to reach areas, in ensuring supplies for quality education and in ensuring access to schooling for children with disabilities and for orphans. The reported average distance to a primary school increased after 2000/01, particularly in rural areas, although average distances to secondary schools in rural areas have fallen (NBS, 2009). Children from families with uneducated mothers, from low-income households, from conflict and remote areas or from households affected by HIV/AIDS are less likely to attend schools (Ngodu, 2009). Social barriers are compounded by inequity in resource allocation and in distribution of teachers and supplies, particularly in remote and hard to reach areas (URT MoFEA, 2010).
- Further obstacles are reported to stand in the way of young children realizing their potential to learn within communities in Tanzania. The first is malnutrition, discussed earlier, and the second is poor preparation for formal learning. In 2010, 63 per cent of children were reported to not attend preschool or to be in preschools with student–teacher ratios as high as 74 to 1. When this is added to constraints to quality in primary schools, where, despite net enrolment rates of 95 per cent, the ratio of qualified teachers to students is 54 to 1, it helps to understand why only 50 per cent of primary school leavers are able to pass their final examinations, with worse outcomes in rural areas (Bernard van Leer Foundation, 2011).
- Tanzania developed an integrated early childhood development (IECD) policy that aims for 100 per cent net enrolment in pre-primary schools by 2015 (UNICEF, 2011). The policy seeks to support, deliver and monitor integrated health, nutrition and early childhood development interventions and to give greater profile to children under five in evidence and monitoring. This has led to some progress on expanded availability of holistic early childhood development services, including community-based integrated management of childhood diseases. This inter-sectoral, integrated and holistic approach across health, education and social welfare has led to an increase from 24.6 per cent early childhood development enrolment in 2004 to 36.2 per cent in 2008 in the areas covered (UNICEF, 2011). In some areas, community-based preschools are created and managed with local resources, teachers are nominated by the community, grandparents serve as resource people and local health workers visit centres to provide health care (Modica *et al.*, 2010).

- Male adult literacy changed by only two percentage points between 2004 and 2010 but female literacy improved by four percentage points, somewhat closing the gap between men and women although still with low levels for the latter. The gender disparity in adult literacy continues to be large, with 30 per cent of adult women having no education compared with 17 per cent of men in 2007. Rural women remain particularly disadvantaged, with about 40 per cent being illiterate (NBS, 2009).

Progress

Tanzania has improved enrolment rates in education in the last five years in both primary and secondary school and has also improved gender parity in education. This is a contribution to health equity in supporting female education.

In 2010, however, nearly a fifth of females were still not enrolled in primary school and over 75 per cent were not enrolled in secondary school. Given the importance of women having higher levels of education for health outcomes, efforts to reach universal coverage need to be sustained. At the same time, stakeholders in the December 2012 peer review meeting on the report raised the importance of improving the quality of education, with poor results and high dropout rates in standard seven, especially for rural households and poor groups (Ngodu, 2009). Barriers to quality have been identified in terms of adequacy of teachers, textbooks and other supplies. These factors interact with child under-nutrition, discussed earlier, inadequate preschools and cost barriers for socially and economically disadvantaged and rural households. Hence, in addition to measures to encourage girls' enrolment, government measures to encourage female enrolment in science subjects need further support, as do the inter-sectoral, integrated and holistic approaches across health, education and social welfare for early childhood education. This is particularly important where early childhood education centres involve community actors and act as an entry point for primary health care. The peer review meeting also highlighted the deficiency in science teacher candidates in teacher training schools and the negative impact this can have on future graduates in this area from primary and secondary schools. Future *Equity Watch* reports will track developments in this.

Azimo school, 2010

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*
% households using improved water source (overall)	49	1990	55	2006
	53	2000	54	2010
Rural	39	1990	46	2006
	44	2000	44	2010
Urban	90	1990	81	2006
	84	2000	79	2010
Ratio urban : rural	2.3 :1	1990	1.7:1	2006
	1.9 :1	2000	1.8:1	2010
% households using improved sanitation (overall)	35	1990	33	2006
	34	2000		
Rural	36	1990	34	2006
	34	2000		
Urban	29	1990	31	2006
	31	2000		
Ratio urban : rural	0.8 :1	1990	0.9:1	2006
	0.9 :1	2000		

Source: WHO, 2008; NBS and ORC Macro, 2011

PAST LEVELS: 1980–2005

- Poor access to safe drinking water and sanitation raises the risk of waterborne diseases, including cholera, diarrhoea and dysentery. For example, in 2005 the incidence of cholera was 3,284 per 100,000 (MoHSW, 2009). While piped water, protected wells and springs should be free of risk for waterborne disease, these sources may be contaminated between treatment and user, for example, through pipes bursting or waste filtering into ground water supplies. The share of households using safe water sources increased between 1990 and 2000, from 49 to 53 per cent, with increased coverage in rural areas but a fall in urban areas, due to rapid and unplanned urbanization. The first national strategy for growth and reduction of poverty promoted interventions to improve access to water, although with significant challenges in covering the geographical scale of need (URT MoFEA, 2010).
- With regard to sanitation, the summary table shows a negligible change in the share of households using improved sanitation between 1990 and 2000 in both rural and urban areas. Only about a third of households had access in both areas.

CURRENT LEVELS: 2006–2010

- There was little change in either safe water or sanitation between 2006 and 2010, with a fall in overall access to safe water due to a continuing decline in urban areas, and static coverage of sanitation in both rural and urban areas (NBS and ORC Macro, 2011). Rural and urban areas remain at similarly low levels in relation to sanitation and the rural–urban differential in safe water fell due to falling urban coverage – a negative outcome (see summary table). Wealth differentials in safe water and sanitation coverage are not available in household surveys as these indicators are used in compiling the wealth index.

- Some indications are available, however, on the distribution of the burden of unsafe water and its effects. For example, the task of walking long distances to collect water in rural areas is reported to be a burden mainly for women and schoolgirls and households that use reduced volumes of water are reported to suffer from ill health (Water Aid ,2011). In addition to low rates of improvement in sanitation, public hygiene has been constrained by shortages of water and soap and poor waste disposal practices by households as well as by poor sanitation and hygiene facilities in public places. A 2009 survey of water, sanitation and hygiene facilities in 2,697 schools in 16 rural districts found inadequate supplies in schools from pre-school to secondary level. Furthermore, 60 per cent of the latrines for girls did not have doors, depriving the girls of privacy and dignity (SNV, Water Aid and UNICEF, 2009). In 2010, it was reported that about 58 female pupils shared one latrine against the target of 20 per latrine and 61 male pupils shared one latrine against the target of 25 per latrine, with the worst ratios in the poorest urban areas (URT MoFEA, 2010).
- The Water Sector Development Programme (WSDP), launched in July 2007, has mobilized financial resources to improve water supplies and sanitation, including water for productive activities (URT MoFEA, 2010). Improving coverage in small towns and district headquarters will reportedly need significant investment to address old and sometimes malfunctioning infrastructure and to keep pace with rising populations (URT MoFEA, 2010). Given these constraints and pressure from the multilateral finance institutions (IMF, World Bank), the government conceded to privatizing the public water utility in Dar es Salaam in return for a loan of US$143 million to rehabilitate and expand the network (Mushi, 2007). The government leased the Dar es Salaam water utility to City Water, a private company, in an attempt to improve water services. However, City Water did not perform as expected. Less revenue was collected than when it was under public ownership and the public was dissatisfied with supplies (Mushi, 2007).

Progress

Tanzania has made little progress towards its Millennium Development Goal commitment of halving the proportion of people with no access to safe drinking water. Coverage of safe water in urban areas, including after privatizing water supplies in Dar es Salaam, has worsened. Rural women and female schoolchildren face the time-consuming burden of collecting water when supplies are distant. The evidence points to the need to mobilize and sustain significant investment to improve water and sanitation availability in both rural and urban areas, including for public facilities such as schools. Community-led sanitation initiatives have the potential to rapidly expand sanitation coverage and improve solid waste management. In urban areas, the privatizing experience in Dar es Salaam suggests that further audit of approaches to improving infrastructure and overcoming cost barriers is needed to ensure access to the basic levels of water needed for health.

Piped water source, Baraka, 2007

Increasing the ratio of wages to GDP

PAST LEVELS: 1980–2005

- The urban informal sector and rural agriculture are the major sources of employment, largely due to the inability to find other work or an expressed need to earn second incomes, particularly for women (NBS and MPEE, 2007). Unemployment rose between 2001 and 2006, more so in urban areas, increasing from 4.6 per cent to 6.4 per cent in urban areas and from 5.5 per cent to 6.5 per cent in rural areas. Unemployment rates for women showed a sharp increase from 4.7 per cent in 2001 to 6.2 per cent in 2006 (NBS and MPEE, 2007). Unemployment rates increase with increasing levels of education nationally, except in Dar es Salaam where the inverse applies due its more developed labour market (NBS and MPEE, 2007). Even after adjusting for inflation, mean and median incomes rose by 5-10 per cent annually between 2000/1 and 2006 for both paid and self-employed workers (NBS and MPEE, 2007; see Table 7). There is however no available data on how these incomes related to the GDP. Given the average GDP growth of 7 per cent it would appear that income growth matched GDP growth, although with variability across workers and gains being limited by rising unemployment.

Table 7: Adjusted mean real income (Tsh) of employees, 2001, 2006

Type of employment	2000/01			2006		
	Male	Female	Total	Male	Female	Total
	Mean income					
Paid employees	54,423	38,888	49,954	81,256	59,902	75,083
Self-employment	48,988	21,335	36,005	72,038	40,672	57,840
	Median income					
Paid employees	30,000	25,000	30,000	38,580	23,148	38,580
Self-employment	22,714	12,857	17,143	30,864	15,432	23,148

Source: NBS and MPEE,2007

CURRENT LEVELS: 2006–2010

- The wage bill as a share of GDP rose from 5.2 per cent in 2005/6 to 7.9 per cent in 2008/9 and to 9.9 per cent in 2010/11 (URT, 2011c). While this rising share of wages to GDP has been viewed as crowding capital expenditure (URT, 2011c), the monthly minimum wage fell 6.8 and 6.6 per cent in 2006 and 2007 respectively, it rose by 22.8 per cent in 2008 and fell by 10.8 per cent in 2009, in a rather volatile pattern (ILO, 2010).
- A national employment creation programme (NECP) was launched in 2007 with the aim of creating over one million jobs by 2010, including in construction, mining and tourism (URT, 2007b). By early 2008, 43.7 per cent of the envisioned one million new jobs were reported to have been created by various stakeholders (URT, 2008). While there appears to have been a small decline in earning disparities between women and men, in 2006 the unemployment rate was higher for women at 15.4 per cent compared to 14.3 per cent for men (URT MoFEA, 2010). Women constituted only 24.7 per cent of paid employees and they tend to take on high levels of unpaid work, such as collecting water (NBS, 2009).

Progress

Wages as a share of GDP have risen and there has been a small decline in earning disparities between women and men, although real wages have fluctuated. The creation of 437,000 new jobs is a boost to the improvement of incomes needed to support health and further focus can be given to ensuring that employment and income improvements take place for women workers.

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

INDICATOR	PAST LEVELS (1980–2005) Level	Year	CURRENT LEVEL (most recent data) Level	Year*
Government spending on agriculture as a percentage of total government expenditure	2.95	2002	5.78	2006
	3.81	2003	6.21	2008
	5.70	2004	7.17	2009
	4.71	2005	7.60	2010
			7.78	2011

Source: URT, 2011

PAST LEVELS: 1980–2005

- In 2003, African governments approved the Comprehensive African Agricultural Development Programme (CAADP) committing member states to allocating at least 10 per cent of national budgets to agriculture and rural development within five years (NEPAD Secretariat, 2009). Agricultural financing in Tanzania in nominal terms increased between 2002 and 2005, as shown in the summary table, but remained well below the African Union target of 10 per cent.

CURRENT LEVELS: 2006–2010

- Government spending on agriculture increased after 2006, rising to 7.8 per cent in 2011. The agricultural sector has been financed mainly through an agricultural sector development programme (ASDP) framework and has benefited from development partner support through an ASDP basket holding account since 2006/7 (URT, 2011). Agriculture has been identified as a 'growth driver', with potential in water supplies and diverse climatic zones for crop and livestock diversity. Agriculture has the potential to reduce poverty and food insecurity. Cultivation of cassava, a more drought-tolerant crop that can be stored in the ground, has increased dramatically, providing new potential to stabilize food security in the face of maize production shortfalls (Jayne, 2007). Increased food demand in neighbouring countries provides further motivation to invest in the sector. Nevertheless, although the sector is dominated by small-scale farmers, the second national strategy for growth and reduction of poverty (NSGRP II) made no mention of investing in women smallholder farmers. As a sign of under-investment, about 70 per cent of farmers are dependent on the hand hoe, 20 per cent on the ox-plough and only 10 per cent use tractors (URT MoFEA, 2010).
- Input subsidy programmes are being reintroduced for fertilizer and other inputs. The aim is to kick-start production and lift farming out of its low yields, vulnerable to shocks and low and insecure income status. As subsidies are reported to leak to wealthier groups and fertilizer or seed vouchers may be sold for cash, spending on 'public goods' such as extension, research, drip irrigation and rural roads is argued to be less easily captured by the better-off for individual use (Curtis, 2010).
- At the same time there has also been a surge in large-scale land acquisitions for biofuel and food production (URT MoFEA, 2010). For instance, the Sweden-based companies Biomassive and Sekab have planted 20,000 hectares in Tanzania's coastal region and have plans to expand this to 400,000 hectares for biofuels, with the ambition to use this to replace all petrol and diesel used by cars in Sweden and Norway (FAO, 2010).

Progress

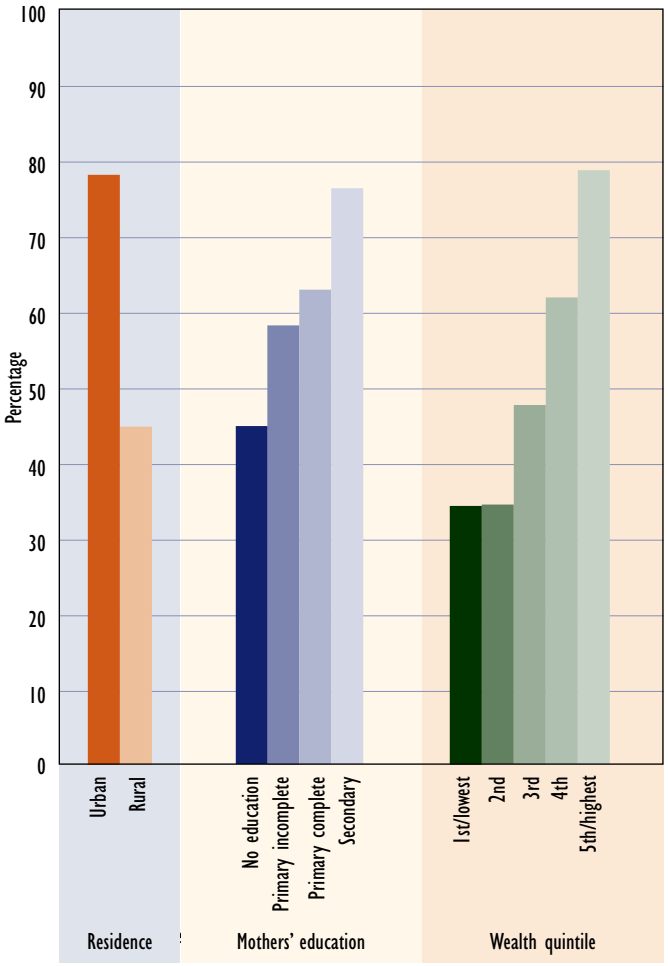
In Tanzania, where 80 per cent of the population depends on the rural sector for their jobs, food and income, investment in agriculture can make a significant difference to incomes, food security and health (Ministry of Industry and Trade, 2010). Tanzania's current expenditure on agriculture, while it has improved, does not yet reach the 10 per cent target set in African Union commitments. The improvement in spending after 2006 was motivated by policy support, although with high inputs from external funding and still limited investment in agricultural technology, infrastructure and training for smallholder and women farmers. Spending on 'public goods' such as extension, research, drip irrigation and rural roads is proposed as less easily captured by better-off groups, while large-scale foreign land acquisitions for biofuels need to be tracked for their impact on biodiversity and local food production and for whether they benefit local communities.

Overcoming the barriers that disadvantaged communities face in accessing and using essential health services

PAST LEVELS: 1980–2005

- There is limited quantified evidence on the barriers communities face in accessing services and surveys provide qualitative evidence. In the 2000s, communities reported barriers to uptake of services that included distance from health facilities, transport costs, shortfalls in medicines, medical supplies and laboratory tests and unavailable health workers. Households facing cost barriers reported borrowing from friends, family members or money lenders and having to sell assets or delay care (Macha *et al.*, 2012). Communities called for channels to discuss these barriers with those who plan services and to participate in decision making on these services. Participatory research by the Tanzania Essential Health Intervention Project (TEHIP) found that community support significantly improved communication and care from health workers. The project, working with the Ministry of Health, developed a community voice tool that uses participatory action research to give communities the opportunity to reflect on their service and development preferences and to be involved in identifying and solving their own problems (Semali *et al.*, 2005).
- Within these processes it is important to disaggregate the understanding of community. Even when mechanisms for participation are provided, not all community members actively participate and more active measures may be needed to reach those who are more vulnerable. Gendered roles and relations often place women in a subordinate position to men that undermines their uptake of services. When gender inequality is higher in poorer households, this widens social inequalities in access to services. Such gender inequalities were found in the 2004 demographic and health survey, where women had a significantly higher level of control over their earnings in wealthier households than they had in poorer households (see Figure 16).

Figure 16: Differentials in women's control over earnings



Source: NBS [Tanzania] and ORC Macro (2005)

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Selling bananas in Arusha, 2007

CURRENT LEVELS: 2006–2010

- Service (staff and medicine) availability is discussed later as a constraint in service uptake. Tanzania has taken various measures to reduce such availability barriers. With 90 per cent of Tanzanians living within five kilometres of a primary health care facility, the government has prioritized ensuring resources and health workers at this level and maintaining the quality of service at these facilities (USAID, 2011). The primary health service development programme (PHSDP/MMAM) strategy aims to provide a health centre in every ward and a dispensary in every village as well as to improve outreach services. The programme commitments require constructing and rehabilitating 8,100 health centres and dispensaries, 62 district hospitals and 128 training institutions. According to the third health sector strategic plan (HSSP III), the total estimated cost of this initiative is US$8.4 billion (USAID, 2010). As discussed, there are shortfalls and challenges in delivering on this.
- There are few comparative assessments of access or acceptability barriers to service uptake. In one comparison between 2001 and 2007, the most common reason given for not consulting a health provider when ill in 2001 was 'no need' but this shifted to 'had medicine at home' in 2007. It is unclear whether the 'no need' raised in 2001 may have been due to people having medicines to self treat as this category was not provided for in 2001 (see Table 8). There was a fall in the mention of cost as a barrier between 2001 and 2007, with cost barriers more commonly reported in rural areas than in Dar es Salaam (HBS, 2009).
- Social factors also affect uptake of services. For example, with a 7.8 per cent prevalence of disability in 2008, people with disability are reported to face barriers to using services in transport, building design, information and social stigma (URT MoFEA, 2010). There is however limited time trend evidence on acceptability barriers. Research in Kenya and Tanzania found that men facing loss of self esteem from poverty and unemployment reinforced their masculinity through norms and behaviours such as multiple sexual encounters that raised their risk of illness but also reduced their use of services (Silberschmidt, 2001).
- The 2007–2017 primary health care services programme envisioned training community health agents to reduce community barriers to service uptake. These agents will promote, educate and provide basic curative services at community level and issue referrals to health facilities. This model is currently being tested by Ifakara Health institute. There has been investment in health boards and facility governing committees to address barriers and these mechanisms are discussed in a later progress marker. The role of these mechanisms is still limited, however, as they are not yet widespread, and lack capacity, incentives, financial means and guidance to effectively implement their roles (Kessy, 2010).

Table 8: Reason given for not using services in people with illness in the past 4 weeks, 2001, 2007

	Dar es Salaam		Other urban areas		Rural areas (other)		Mainland Tanzania	
	2000/01	2007	2000/01	2007	2000/01	2007	2000/01	2007
No need	58.1	32.4	50.3	23.7	42.5	15.1	43.6	16.7
Too expensive	34.5	13.0	39.1	24.4	32.4	27.4	33.1	26.5
Too far	6.7	0.7	2.8	3.6	10.9	8.3	10.0	7.5
Had medicine at home	n/a	51.3	n/a	51.6	n/a	55.5	n/a	54.9
Other reason	6.9	3.3	8.9	4.0	20.2	4.3	18.8	4.2

Source: HBS, 2009

Progress

Surveys indicate that availability, cost and social factors act as barriers to service uptake, with some qualitative evidence that cost barriers have fallen, although this would need to be further assessed given the rise in the share of out of pocket spending reported in the next section. The limited time trend evidence makes progress unclear. The policies set out in the primary health service development programme strategy will help to overcome availability and access barriers by improving the distribution of primary health facilities, improving transport infrastructures and investing in community health workers. Strengthening health facilities committees and governing boards as a means of enhancing community participation may, with the contribution of community health workers, help overcome social barriers and support uptake of services, although this would need to be assessed.

EQUITY WATCH

Resourcing and providing 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
- Abolishing user fees from health systems backed up by measures to resource services
- Allocating at least 50 per cent of government spending on health to district health systems and 25 per cent to primary health care
- Harmonizing 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
- Meeting standards of adequate provision of health workers and of vital and essential medicines at primary and district levels of health systems
- Implementing a mix of non–financial incentives for health workers
- Formal recognition of and support for mechanisms for direct public participation in all levels of health systems

EQUITY WATCH

Resourcing and providing 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), as discussed in the previous 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. Aggregate progress in some of these areas is also important for equity. Hence, for example, improvements in overall levels of public funding or in tax funding shares are themselves elements of fair financing needed to support health equity.

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

INDICATOR	PAST LEVELS (1980–2005) Level	Year	CURRENT LEVEL (most recent data) Level	Year*
Government spending on health as a percentage of total government expenditure	11.0	2001/2	10.6	2006/7
	9.7	2003/4	13.9	2008
	10.1	2004/5	12.9	2009
	11.1	2005/6	13.8	2010
Total expenditure on health as a percentage of GDP	5.0	2003	7.6	2006
	3.9	2005	8.2	2009

Source: MoHSW, 2008c, 2010b; WHO, 2009

PAST LEVELS: 1980–2005

- There was a negative trend in this period. After making the Abuja commitment, government spending on health fell by 1 per cent, from 11 per cent to 10 per cent of total government expenditure in 2003. The total expenditure on health as a share of GDP also fell from 5 to 3.9 between 2003 and 2005, as the health sector was not among the priority areas for government spending, with much of the focus on education and infrastructure.

CURRENT LEVELS: 2006–2010

- After 2005 government gave greater priority to the health sector, reversing the earlier decline and increasing the share of its total spending on health and its share of health spending in the GDP (see summary table). Government renewed the focus on the health sector with the primary health service development programme while advocacy from civil society organizations like Sikika and TWAWEZA pushed for social accountability for health equity. Civil society more actively engaged with parliament on the budget and on delivery on commitments made (IPU, 2009). There has been a positive health gain from increased spending on health by government, with improvements reported in use of services, tuberculosis treatment success, antiretroviral access, prevention of vertical transmission and child survival (MoHSW, 2010b).

Progress

Although health as a share of government spending and as a share of GDP has been rising, there is scope for further improvement given the investments needed to improve health equity and meet service delivery commitments, outlined in earlier sections. Furthermore, government's contribution to achieving the Abuja commitment must be separated from external funding to assess domestic commitment. The evidence that improved levels of public spending have resulted in improved health outcomes should encourage greater commitment to this spending on health, including as part of the national strategy for addressing poverty and inequality.

An immunization session at Sinza hospital, Dar es Salaam

Achieving US$60 per capita public sector health expenditure

In addition to the Abuja commitment, in 2001 the World Health Organization (WHO) estimated that US$34 per capita was needed for a package of priority health interventions for sub-Saharan Africa, excluding the wider systems costs, and US$60 per capita including these costs (WHO, 2001).

INDICATOR	PAST LEVELS (1980–2005) Level	Year	CURRENT LEVEL (most recent data) Level	Year*
Per capita government expenditure on health US$ exchange rate (Using average US$ exchange rates for the year)	3	1995	14	2006
	4	1999	15	2007
	4	2000	17	2008
	5	2001	18	2009
	5	2004	21	2010
	7	2005		
Per capita government expenditure on health purchasing power parity (PPP) US$ (Based on US$ PPP from World Bank/ WHO estimates)	10	1995	43	2006
	9	1999	44	2007
	11	2000	43	2008
	13	2001	48	2009
	15	2004	56	2010
	20	2005		
Per capita total expenditure on health US$ exchange rate (Using average US$ exchange rates for the year)	6	1995	23	2006
	10	1999	23	2007
	10	2000	27	2008
	11	2001	27	2009
	12	2004	31	2010
	15	2005		

Source: WHO, 2012c

PAST LEVELS: 1980–2005

- Government per capita health expenditure at exchange rate and purchasing power parity (PPP) US$ doubled between 1995 and 2005 (see summary table). Both total and government spending were much lower than the US$60 per capita considered necessary for a basic health system to function, indicating under funding of the public health system, although with improvement in the period.

CURRENT LEVELS: 2006–2010

- Government health expenditure per capita at exchange rate and purchasing power parity US$ rose further between 2006 and 2009 (see summary table), reflecting rising budget allocations in these years. The level of public spending using purchasing power parity US$ almost reaches the WHO US$60 target.

Progress

Although Tanzania has not yet achieved the Abuja commitment, as discussed, between 2006 and 2012 government health expenditure per capita increased, with the per capita resources allocated to the health sector almost at the US$60 per capita for health systems, using purchasing power parity US$, although much below at exchange rates. There are however new demands on the budget, from non-communicable diseases, rising costs of medical technology and costs of outreach services in less accessible or marginalized areas to overcome inequalities in health, that would lead to an upward revision of these targets. There is need to continue the gradual increases in domestic funding levels to the public health sector, and to make effective and equitable use of existing resources. Ways of enhancing resource mobilization are discussed in later sections.

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*
% Total health expenditure (THE) that is:				
Government spending on health	42.8	1995	58.9	2006
	43.4	2000	61.7	2008
	49.5	2003	66.1	2009
	47.0	2005	67.3	2010
Private spending on health	57.2	1995	41.1	2006
	56.6	2000	38.3	2008
	50.5	2003	33.9	2009
	53.0	2005	32.7	2010
Social health insurance*	0	1995	4.0	2006
	3.0	2003	2.0	2010
Out of pocket spending as % of total health expenditure	40.6	2003	32.0	2009
	26.0	2005		
External resources as % of total health expenditure	10.0	1995	44.1	2006
	27.4	2003	50.0	2008
	35.0	2005	49.0	2010

* The information on social health insurance is for the National Health Insurance Fund (NHIF)

Source: MoHSW, 2008c; MoHSW, 2010b; WHO, 2012c

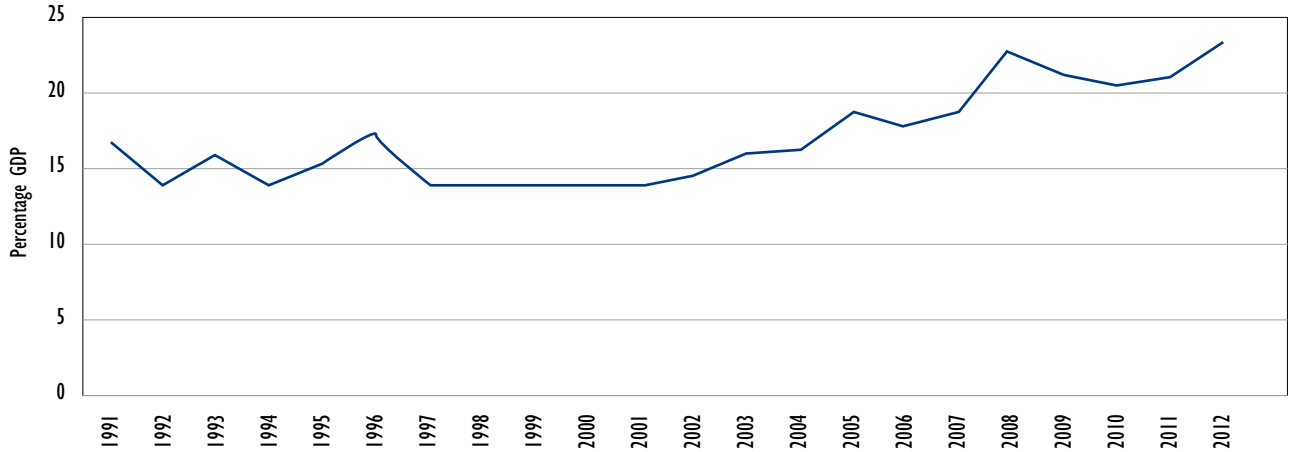
PAST LEVELS: 1980–2005

- 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 so there are 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). In 2003, public expenditure as a share of total health expenditure was only 25 per cent while private expenditure was almost half of total health expenditure. As noted earlier this led to high out of pocket spending in this period, with burdens on poor households. Tanzania had a low (11–12 per cent) and fluctuating tax-revenue/GDP ratio prior to 2005. Import taxes were reduced and large tax incentives offered for new investments, even while sluggish private-sector growth generated limited tax revenue (World Bank, 2000). The tax system failed to capture potential revenues from economic activities, particularly with a large and fast growing informal sector, and the tax rate was higher for the poorest two deciles (Levin, 2004).

CURRENT LEVELS: 2006–2010

- The summary table above indicates that both government and external funding shares increased from 2006 to 2010, while private spending fell. Public sector spending rose with additional external funding through basket (sector wide approach) funding and general budget support, enabling pooling and equitable allocation of resources, discussed in a later section. A rising share of external resources, if it substitutes government funding, may make Tanzania dependent on more unpredictable funding for key services. This flags the need to explore domestic revenue alternatives.

Figure 17: Tax revenue as a share of GDP, 1991–2012



Source: IMF 2012

- As Figure 17 above shows, tax revenue as a share of GDP improved after 2004, suggesting the possibility of improving income from tax-based sources. Value-added tax (VAT) grew in Tanzania at an average annual rate of 22.9 per cent (AfDB, 2010). Tanzania's tax–GDP ratio of 14.8 per cent in 2007 was slightly below the average of 14.9 per cent for other African lower-income countries (Fjeldstad and Heggstad, 2011).
- There appear to be options to be explored. VAT has been identified as regressive when applied to goods that are purchased by poor people. However, an assessment in Tanzania found that VAT, excise tax and import duty, particularly on alcoholic drinks and fuel, were all progressive, with rich people paying more than poor, although less so than income taxes (Mtei *et al.*, 2010). Uwazi (2010) observed that tax exemptions between 2006 and 2010 were high, arguing that if Tanzania had brought tax exemptions in line with levels in neighbouring Kenya, Tsh 484 billion would have been saved in 2008/9 and Tsh 302 billion in 2009/10 (Uwazi, 2010). Government may need to review such exemptions, making them time bound and improving enforcement (Uwazi, 2010).
- The National Health Insurance Fund (NHIF) introduced in 2001 is mandatory for public sector and formal sector workers and is opening up to other sectors. A 6 per cent salary contribution is shared between employers and employees and the scheme in 2007 covered almost 6 per cent of the total population with inpatient and outpatient care in its benefits package (NHIF, 2008). Claims levels have been low, spending was only 18.4 per cent of revenue in 2009 and the fund has built up a considerable reserve (Mtei and Mulligan, 2007; MoHSW, 2010b).
- A community health fund piloted in 1996 underwent national rollout in 2001. It was designed as a pro-poor intervention to improve the financing and provision of health care to households in rural areas. This fund, together with *Tiba kwa Kadi* (TIKA) (a similar scheme for urban areas) covered 6.6 per cent of the population in 2010, with its management now assigned to the NHIF (MoHSW, 2010; MoF, 2008). It collects voluntary prepayments, with premiums of between US$4.2 and US$12.7 per household per year. Recent evidence on the community health fund suggests that using a flat rate premium and excluding inpatient care makes it a highly regressive form of financing, with higher burdens borne by poorer groups (Mills *et al.*, 2012). This raises the need to improve incentives, regulation and enforcement to integrate schemes, increase their risk pool, cover low income populations and contribute to public health services, if equity is to be improved.

Progress

There has been a steady increase in public and external funding, and some improvement in prepayment insurance schemes, decreasing regressive out of pocket payments. There are options for improving tax-based domestic financing through VAT and earmarked shares of excise and import taxes on alcohol and fuel, given that they are progressive. The national and community health funds may have a positive impact in buffering against point of care payments if measures are effectively applied to regulate and ensure risk pooling and cross subsidies to integrate schemes and avoid placing higher burdens on poorer groups.

Abolishing user fees from health systems backed up 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 percentage of total health expenditure*	40.6 26.0	2003 2005	32.0	2009

* Out of pocket spending covers health-related household spending for health facilities, drugs, including over the counter medicines, medical consultations and diagnostic services, estimated from public and private health facility revenue.

Source: MoHSW, 2011; WHO, 2012b

Countries enhance equity by moving away from out of pocket (or point of service fee) payments to financing health systems through prepayments, including tax funding and health insurance. Poor households can face financial catastrophe from the charges associated with using health services, pushing them below the poverty line. Enhancing equity thus calls for low levels of out of pocket spending with a preference for prepayment measures on the basis of ability to pay.

PAST LEVELS: 1980–2005

- Out of pocket spending on health as a share of total health expenditure decreased from 40.6 per cent in 2002/03 to 26 per cent in 2005/06 (see summary table). The share was reduced by the increase in public spending due to increased external funding, particularly from large funders like the Global Fund for AIDS, TB and Malaria (MoHSW, 2008c). Prepayment was supported through two main insurance schemes: the National Health Insurance Fund, a mandatory scheme for the formal sector, established in 2001, and a community health fund, a voluntary scheme for the informal sector in rural areas (MoHCW, 2008c).

CURRENT LEVEL: 2006–2010

- By 2009, out of pocket spending had increased to 32 per cent of total health expenditure (see summary table). Data on catastrophic expenditure before 2006 is not available but by 2011 out of pocket payment in Tanzania was on the threshold for incidence of catastrophic expenditure, set at about 15 per cent (USAID, 2011). Mills *et al.* (2012) found that 1.52 per cent of the population incurred catastrophic expenditure due to health care, with 0.37 per cent of the population moving below the poverty line due to out of pocket medical expenses. While exemption and waiver mechanisms have been applied at health services and through the community health fund, the increasing share of out of pocket spending as a share of total health expenditure raises questions about the effectiveness of waivers. Studies suggest that vulnerable groups make unofficial payments or fail to use health services when they do not access exemptions to which they are entitled (REPOA, 2004; Kruk *et al.*, 2008). The limited integration of community health insurance within a national system of social health insurance and targeting poorer groups with flat rate premiums has also weakened their financial protection (Mtei, 2012), discussed in a later section.

Progress

Out of pocket spending rose after 2006 as a share of total health expenditure. There is a small risk of out of pocket payments leading to impoverishment from catastrophic expenditure and this needs to be monitored in the future. Areas to examine to reduce out of pocket spending include reviewing effectiveness of the exemption and waiver mechanisms, avoiding unofficial charges and shortfalls in medicines leading to private purchase, avoiding segmentation and flat premiums in insurance arrangements and strengthening prepayment and cost control in private services.

Allocating at least 50 per cent of government spending on health to district health systems and 25 per cent to primary health care

INDICATOR	PAST LEVELS (1980–2005) Level	Year	CURRENT LEVEL (most recent data) Level	Year*
% total health budget allocation to primary and community level	5 7 8	2002 2003 2005	10 11 9 16 12	2006 2007 2008 2009 2010
% budget allocation to district hospitals, regional hospitals and local government councils	78 81 82	2002 2003 2005	79 81 81 76 80	2006 2007 2008 2009 2010
% budget allocation to zonal referral and specialized hospital level	16 11 9	2002 2003 2005	9 6 10 7 7	2006 2007 2008 2009 2010
% budget allocation to central Ministry of Health level	1 1 1	2002 2003 2005	2 2 1 1 2	2006 2007 2008 2009 2010
Local government health spending as a % total health spending			14.7 29.6 13.6 12.2	2007/8 2008/9 2009/10 20010/11

Source: MoHSW, 2004; URT, 2011

PAST LEVELS: 1980–2005

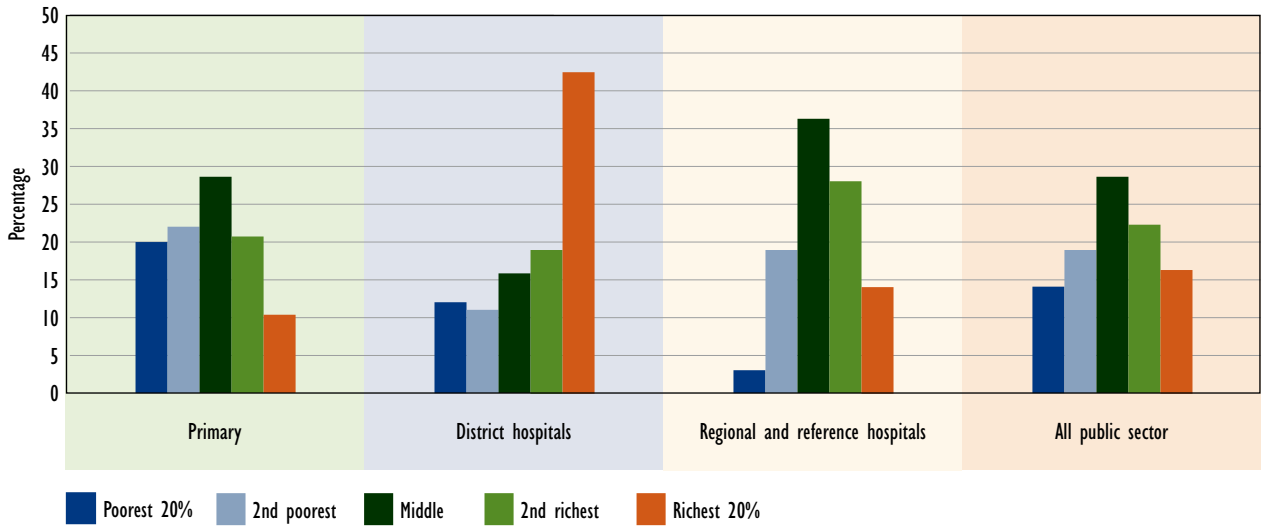
- There are two main modes of financing district health activities: block grants and basket funding. Block grants are transferred from the central to local government, with the amount depending on central tax revenue levels. Local government allocates these funds to six main areas: education, water, transport, local government administration, agriculture and health. On average, about 70 per cent of the funds are allocated to the education sector and 18 per cent to health services. Local government administration consumes about 6 per cent of the funds while the other sectors receive the remaining 6 per cent (roads, water and agriculture). The data in the summary table highlights that the greater share of resources before 2005 were allocated to the secondary level (district hospitals), above the 50 per cent indicated, and with primary care and community levels below the 25 per cent identified in the progress marker. Allocations to secondary, primary and community levels increased as shares in this period.

CURRENT LEVELS: 2006–2010

- Resources are allocated to health sector priorities based on a formula, in line with the poverty reduction strategy that directs resources towards poor communities and rural areas (MoHSW, 2004). The allocation formula applied to the health block grant (excluding staff) distributes the grant among local governments based on four allocation factors: population (70 per cent); poverty count (10 per cent); district vehicle route (mileage to reach a district) (10 per cent) and under-five mortality rates (10 per cent). However, it is not consistently applied so wide inter-district disparities in funding relative to need are possible.

- In the period after 2006, the share of funding to primary care and community levels improved to 16 per cent by 2009 but fell to 12 per cent in 2010, not reaching the 25 per cent set in the progress marker but at higher levels than in the previous period. This resulted from a gradual increase in per capita allocation of basket funds to local government level (from US$0.5 per capita in 1999/2000 to the current level of US$1.3 per capita). The share of local government spending rose to 29.6 per cent in 2008/9 but fell to 12.2 per cent in 2010/11 when procurement of medicines and supplies was moved from local to central government budgets. The allocation to secondary level fell up to 2009 and rose back to 80 per cent in 2010, above the level set in the progress marker.
- The evidence suggests that Tanzania has prioritized district, primary care and community systems in its allocations. However, expenditures are also important. The evidence at local government level suggests that expenditures at community and primary care levels fell after 2008. Analysis of benefit incidence from expenditures at different levels shows that health care spending at public primary facilities (dispensaries/ health centres) is pro-poor, so a fall in expenditure at this level could disproportionately affect poor households. In contrast, at outpatient care at district hospitals the richest 20 per cent obtained over 40 per cent of benefits, and at regional and referral hospitals the benefit was also greater for wealthier groups (Makawia *et al.*, 2010; Figure 18).
- While faith-based services showed a similar pattern to public services, in the private for profit services, richer groups had higher benefit than poorer groups for all levels of care (Makawia *et al.*, 2010). Poorer groups benefited less from public hospitals and private services, and mainly used lower-cost primary public facilities and local pharmacies or medicine retailers. Poor communities faced barriers in meeting the costs of medicines, laboratory tests and transport, in staff attitudes and due to medicine stock-outs. Costs were higher for rural patients, for those travelling to referral facilities or where clients had to buy drugs not available at lower level services. They were especially high for those with chronic conditions who needed to visit services regularly (Makawia *et al.*, 2010).

Figure 18: Distribution of the benefits of public outpatient services in Tanzania



Source: Makawia et al., 2010

Progress

The government budget reveals that allocations to primary care and district services improved in the period after 2006, although primary and community levels remain below the 25 per cent target in the progress marker. However, progress is mixed as evidence suggests that expenditures fell at community and primary care level after 2008 (local government level). Since spending at primary care level is pro-poor and there is less pro-poor benefit at other levels, falling primary care level spending negatively affects poor households. It is important to report annually on expenditures by level. Communities can also monitor to ensure that allocations translate into expenditures and service delivery at primary and community levels.

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

Harmonized funding for universal coverage depends on progress in improving tax financing, regulating and creating wider risk pools, and reducing reliance on external funds, as well as harmonizing funds and facilitating cross subsidies through sector-wide, pooled funding.

PAST LEVELS: 1980–2005

- Harmonizing health financing presents a number of challenges. Low overall shares of government financing, high levels of formal and informal out of pocket financing and small health insurance pools were discussed earlier, the latter combined covering less than 20 per cent of the population. High income individuals had cover for comprehensive benefit packages, including inpatient care in formal schemes, while informal sector schemes were often limited to primary care services with few including outpatient services in hospitals. This called for these schemes to be harmonized to expand the size of the risk pool and improve equity (Mills *et al.*, 2012). External funds have increased as a share of financing and, while they have provided valuable support to the health system, they can weaken harmonized funding when allocated directly to projects, outside government budget support.
- In 2000/01 the Ministry of Health and Social Welfare prepared a rolling three year medium term expenditure framework, integrating recurrent, development, government and development partner budget estimates, based on defined performance indicators within a strategic plan. The framework improved the predictive value of budgets, bringing external funding into the budget framework in support of agreed priorities and shifting development partner finance towards budget support for capital and recurrent costs. External funds were pooled under a sector wide approach (SwAp) and allocated to local governments on an equal per capita basis (Burki, 2001).

CURRENT LEVELS: 2006–2010

- The low share of domestic tax resources and increased external funding continue to pose a challenge to harmonizing health financing. Combined, the national and community health funds only covered about 13.5 per cent of the population cumulatively in 2010/11 (Mills *et al.*, 2012). In 2009, the National Health Insurance Fund was mandated by the Ministry of Health and Social Welfare to support the management of the community health fund for a three year period, as a first step towards merging these schemes. Merging these insurance schemes may be a precursor for developing social health insurance (Obermann *et al.*, 2006). It is reported to have doubled community health fund membership and may increase the risk pool and address weaknesses noted in administrative capacity, overheads and limited coverage (Dekker, 2008; Jacobs *et al.*, 2008; Kwon, 2005; International Social Security Association, 2009; Borghi *et al.*, 2012).
- External funding is coordinated through the sector-wide approach. This provides for technical committees, monitoring and evaluation and health information system reforms, to strengthen harmonization of data collection, dissemination and use (USAID, 2011). The sector-wide approach intends to reduce transaction costs of different reporting to different funders. However, multiple reporting still takes place as the ministry still engages funders outside the programme, including those providing general budget support or direct project support (MFAD, 2007).

Progress

Policy support for universal coverage is yet to be supported by constitutional guarantees and external funding has been relatively significant in increased public funding, discussed earlier. The medium-term expenditure framework and sector-wide approach support pooling and harmonizing external resources, although many external funds are still channelled through parallel mechanisms, with diverse reporting frameworks. Efforts to expand and pool health insurance have been enhanced through the National Health Insurance Fund managing the community health fund but coverage of these schemes is still low and equalizing the risk across these different pools is required to enhance equity.

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

PAST LEVELS: 1980–2005

- Prior to 1993, the government, in policy, guaranteed the health of every individual. Tanzanians had access to a comprehensive health care benefit package, regardless of income, and were not charged for health services. The policy aimed to expand services and bring them closer to the population. Private health practice was banned and government became the sole provider of health services. This period was associated with improvements in infant mortality rates, life expectancy and other health indicators but poor economic performance limited the resources to deliver on the policy guarantees.
- Government adopted measures to improve use of limited resources; these included the primary health care strategy, tax waivers on raw materials for local production of medicines and cost-sharing (discussed earlier, together with discussion on limitations in the waiver and exemption measures) (MoH, 1994; Mtei and Mulligan, 2007).
- Health insurance schemes introduced in the early 2000s provided comprehensive benefit packages to members, although, as noted earlier, while the National Health Insurance Fund covered outpatient and inpatient services, the community health fund only provided outpatient services in primary facilities leaving its members less well covered, with implications for catastrophic spending (Macha *et al.,* 2012).

CURRENT LEVELS: 2006–2010

- A National Essential Health Interventions Package (NEHIP) was developed in 2000. It defined the interventions to be provided to all and was updated and applied in this period. A comprehensive council health plan was used as a vehicle for its implementation, linked to the resource allocation formula discussed earlier.
- The primary health services development strategy (PHSDS/MMAM) was designed to improve availability and accessibility of primary health services, supplies and personnel, especially in rural areas. The third health sector strategic plan for the 2009–2015 period (HSSP III) further addresses the provision of accessible quality services by local government authorities. Support for this plan was directed in line with the priorities defined under the renamed Tanzania National Package of Essential Health and Social Welfare Interventions. This followed the move of the social welfare division to the Ministry of Health. The new package includes services that respond to the diseases and health conditions responsible for the major burden of disease in Tanzania. Users of tax-funded services access this benefit package, in line with guidelines and assessment tools. Health systems costing and assessment studies were implemented to inform the financing and implementation strategy, and to define the service delivery, roles, activities and cadres required at all levels (MoHSW, 2010b).
- The Ministry of Health is currently developing a national health financing strategy. This will review strategies to harmonize health insurance schemes and expand the risk pool to provide the benefit package to the whole population. The block grant and basket funding resource allocation formulae are also being reviewed to strengthen needs-based resource allocation.

Progress

The National Essential Health Interventions Package and the Tanzania National Package of Essential Health and Social Welfare Interventions both reflect government's policy commitment and technical efforts to define and implement comprehensive health care entitlements. As a positive list of entitlements it can be costed and funded by government and other providers, including through district councils. Aligning resources to services that have the greatest public health impact can support equity, depending on the resourcing and implementation of the benefit. Studies to realign the benefit following a costing and health systems assessment indicates that government recognizes these concerns. The measures to align the private sector and insurance benefits are not yet clear, nor is the input from communities in setting the benefit. This may affect public support for the work to deliver on entitlements.

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

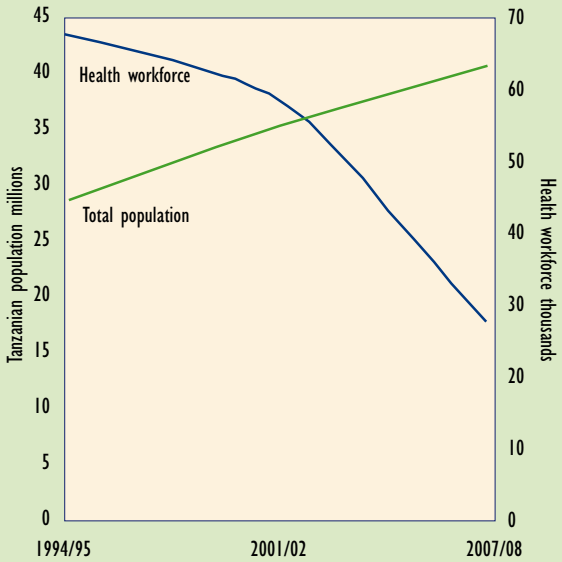
INDICATOR	PAST LEVELS (1980–2005) Level	Year	CURRENT LEVEL (most recent data) Level	Year
Total doctors per 10,000 people	0.03	2001	0.01 0.06	2006 2011
Nursing personnel per 10,000 people (registered and enrolled nurses)	0.4	2001	0.44 0.60	2006 2011
Health worker density/ 1,000 people	1.4	2001	1.29 1.35	2006 2011
Median availability selected generic medicines % Private sector Public sector	47.9 23.4	2004 2004	82.5 88.9	2007 2007

Source: WHO, 2008, MoHSW, 2012a

PAST LEVELS: 1980–2005

- After independence, the adoption of the primary health care approach to health management led to the expansion of health services backed by government creating and training new health cadres (medical assistants, assistant medical officers, public health nurses, maternal and child health aides and rural medical aides). This increased urban and rural health worker densities. Each rural village also had two village health workers working as volunteers.
- In the 1990s, implementing health sector reforms was associated with eliminating some lower cadres of health care workers (rural medical aides, maternal and child health aides, nursing assistants and public health nurses). This reduced health worker density (see summary table), a fall that becomes even more marked when compared with population growth (Figure 19). The fall from 1994 levels of 67,600 health workers for 28.8 million people, to 25,000 health workers for more than 40 million people by 2007 was a 75 per cent decline in health worker density. In 2004 Tanzania had the world's lowest coverage of physicians (SPHSS Muhimbili, 2009).

Figure 19: Health workforce vs population, 1994–2007



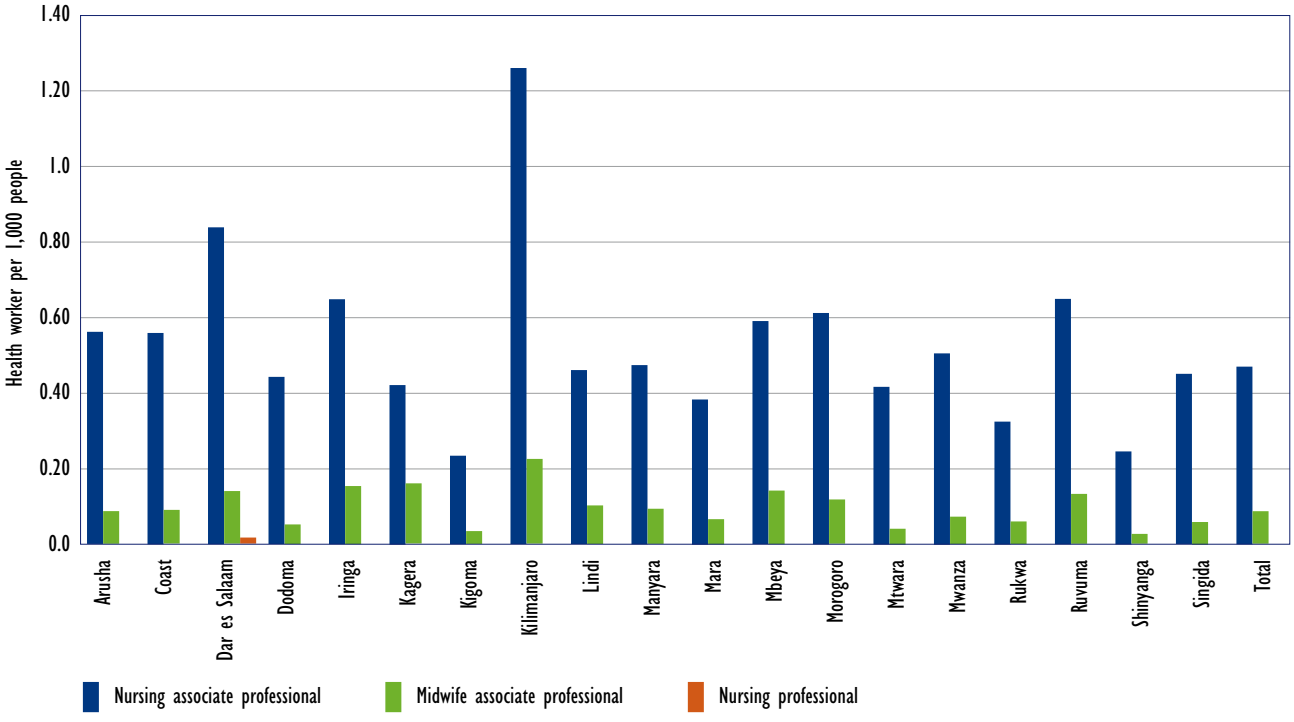
Source: MoHSW, 2011d

- Absolute shortfalls in staff were exacerbated by poor distribution, with only one third of doctors working in rural areas, despite 80 per cent of the total population living in these areas (Khan *et al.*, 2006). Skilled health workers were lost through attrition, due to the freezing of employment between 1993 and 2005 and a low absorption rate in the regions. Between 1995 and 2005, government hired only 16 per cent of the 23,474 graduates produced (MoHSW, 2008).
- A national drug policy (1991) and pharmaceutical master plan (1992-2002) guided developments on medicines and supply of health commodities. The medical stores department was established in 1993 as an autonomous government department under the Ministry of Health and Social Welfare. It is responsible for procuring, storing and distributing medicine, equipment, medical devices, diagnostics and hospital supplies. Despite some improvement in the availability and quality of medicines and other supplies, the health sector continued to experience shortages at health facilities in the period.

CURRENT LEVELS: 2006–2010

- Although enrolment in medical schools increased after 2006, there was still a 65 per cent shortfall in health professionals and this was higher for skilled cadres. This poses a challenge to implementing the primary health services development programme (PHSDP or MMAM in Swahili). Health professionals continue to be unevenly distributed between and within regions, with shortfalls highest in remote districts (URT MoFEA, 2010).
- In 2007, the primary health services development programme stated its aim to have a dispensary in every village, a health centre in every ward and a district hospital in every district. This was estimated to call for an additional 88,829 professional staff (MoHSW, 2007). In 2011, staffing norms were reassessed together with criteria for effective allocation of staff. There were 56,600 health personnel nationally, against an estimated requirement of 133,572 (MoHSW, 2012b). Trained health workers were found to be more concentrated in regions with zonal hospitals (Dar es salaam, Kilimanjaro, Mbeya, and Mwanza). Hard to reach regions like Lindi, Mtwara, Kigoma and Rukwa had a lower density of workers compared with other regions (MoHSW, 2012b).
- In 2009, the least served 20 per cent of the population was reported to access only 8 per cent of all health workers and the best served 20 per cent to access 46 per cent of health workers (Munga *et al.*, 2009). In 2011 it was reported that only 32,036 health workers (55 per cent) and a reduced share of specialized cadres (specialist medical practitioner, nursing professionals, dentists, pharmacists and physiotherapists) were serving in rural areas where 75 per cent of the total population is found (MoHSW, 2012b). Shortages were also found to be severe in training institutions, dispensaries and district hospitals in the public sector and in faith-based hospitals, health centres and dispensaries in the private sector (Nils *et al.*, 2012).
- The distribution of nurses is a key indicator of the adequacy or otherwise of health personnel. The wide ranging differences in the density of the different categories of nurses by region is shown below in Figure 20. Some aspects of policy and systems contribute to this inequity. The needs-based formula for distributing block grant funds for health (discussed later) does not apply to personnel. Budget funds for personnel are allocated based on demand (in other words, where the health workers are). Staffing norms are identical for each health facility of the same type (hospital, health centre or dispensary), irrespective of usage levels, resulting in uneven workloads between facilities (USAID, 2011). The shortfall has been compounded by funds being released late and wage payments being delayed (IPU, 2009).

Figure 20: Nurse density by region, 2010



Source: MoHSW 2012b

- In 2011, some new facilities were reported to be lying idle because they either lack staff or have poor quality staff (USAID, 2011). Facilities were found to suffer high levels of absenteeism (44 per cent of clinical staff unavailable on the day of the survey) due to training or leave to attend seminars (38 per cent), long-term training (8 per cent), official travel (25 per cent) or leave (20 per cent), and staff reported a lack of support from supervisory visits (Manzi *et al.*, 2012).
- Government has made policy commitments to dealing with this situation by: investing in training, including by the private sector; deploying existing personnel equitably to underserved areas; revisiting staffing norms to take workloads into account; and improving management, monitoring and reward systems (MoFEA, 2010). The Ministry of Health and Social Welfare developed the Human Resources for Health Strategic Plan 2007–2017 to address the production, deployment and retention of health care workers. After 2007 government and faith-based (private not for profit) organizations increased capacities and enrolment in health training institutions, in terms of classrooms, student hostels, tutors, teaching and learning materials (MoHSW, 2011c). Although health worker recruitment should be done at local government level, government has retained authority to hire and deploy workers at central level to allow for equity considerations in deploying health workers. Furthermore, the primary health services development programme for 2007-2017 sets a goal to ensure that there is at least one community health worker attached to a dispensary in each village.
- Beyond numbers of staff, improved skills are also important. In 2009/10, a programme to train health centre staff in eleven rural districts improved skills in assistant medical officers, nurse midwives and clinical officers, with significant increases in institutional deliveries (by 300 per cent), a decrease in the fresh stillbirth rate and reduced obstetric referrals. This indicates the impact of improved clinical management skills in non-physician clinicians on service quality (Nyamtema *et al.*, 2011). A later progress marker further reviews the incentives provided to attract, retain and improve performance of personnel, to build on these investments.
- It would be useful to make data available on the distribution of medicines and medicine stock-outs, by region and service level. There is evidence that medicine stock-outs are a barrier to service access and that services with poorer infrastructure may be more affected. During 2006/07, only 21 per cent of the population had access to affordable essential drugs on a sustainable basis (URT, 2008). In a 2008 survey, a prescriber or nurse was present on the day of the survey in about 40 per cent of 114 dispensaries (Schellenberg *et al.*, 2008). A 2011 survey of district and primary level facilities found that insufficient stock levels of medicines and supplies (for example, surgical gloves and syringes) compromised the quality of care (Sikika, 2011). In the 2007 survey, stock-outs were found to be associated with the following: poor physical storage conditions for medicines; inadequate management capacities for medicine procurement; a lack of buffer stocks; non-conformity of quantities delivered to orders; and constraints in the adequacy of the medicines budget (Euro Health Group, 2007; MFAD, 2007; MoHSW, 2008b).
- Measures are being taken to address some of these constraints. The ministry's medical stores department currently delivers medicines and supplies directly to the health facilities rather than to the council health management team at the district level to address the bottlenecks. The national drug policy and pharmaceutical master plan were reviewed after 2004 but further review is needed to address a shift from a push to pull system, cost-sharing and the role of insurance schemes in ensuring accessible medicine supplies (Bannenberg, 2007).

Progress

Tanzania faces an absolute shortage of key health workers. A 2011 review of human resources for health provided up to date information on shortfalls against projected needs. With only 42 per cent of estimated staff needed available, the shortages contribute to inequities in coverage of key services described earlier. Shortfalls are more severe in training institutions, dispensaries, health centres and district hospitals in the public sector, and in faith-based hospitals, health centres and dispensaries in the private sector. Policies are in place to address this by investing in training, equitable deployment and community health workers, particularly in the most underserved levels and areas. There are also programmes of task shifting and training of teams, for example for nurse–midwifes, to make more effective use of cadres and provide key services in rural remote health centres (Nyamtema *et al.*, 2011), as well as ensuring community health worker support for home-based services. There is inadequate evidence to assess the equity impact of these measures at this stage. While medicine availability is generally high, the problem of stock-outs undermines access. Policy and planning documents on medicines need to be updated.

Implementing a mix of non–financial incentives for health workers

Countries attract, deploy and retain health workers in underserved areas through a range of financial and non-financial incentives.

PAST LEVELS: 1980–2005

- Since independence, Tanzania has invested in training, deploying and re-orienting health workers around health policy priorities (MoHSW, 2003). This was accompanied by non-monetary incentives for housing, transport, education and recreational activities to support staff morale. However, implementation was poor, with health facilities not having adequate staff houses and not offering transport allowances or other incentives, mainly due to resource scarcities. This had negative effects on staff retention (MoH, 1994).

CURRENT LEVELS: 2006–2010

- Limited incomes, benefits and opportunities for self development are reported to have reduced health worker motivation, while service disparities and poor work environments affected deployment to and retention in rural areas (SPHSS Muhimbili, 2009). Strikes, such as the July 2012 doctors strike over working conditions, indicate dissatisfaction (East African News Post, 2012) and there continues to be a preference for public over private employment, attributed to the better pension benefits offered (Songstad, 2012). The Human Resources for Health Strategic Plan 2008–2013 sought to encourage health workers to accept and stay in postings in remote localities through performance management, allowances, housing and career development opportunities (MoHSW, 2008). Various retention incentives were offered in the public sector after 2006, including: dual practice, part-time work, housing, uniforms, night duty, on call pay, post-basic training and improved work environments. Dual practice, a selective accelerated salary enhancement scheme, stipends and end-of–service bonuses provided increased income, especially for mid-level cadres (MFAD, 2007). Further non-financial incentives were added in 2011 including open performance appraisal and management, the Benjamin Mkapa Fellows Programme for skills enhancement (shown in Table 12 below), alumni association membership, continuing medical education; recognition of higher qualification, medical cover for nuclear families and antiretroviral therapy (Munga and Mbilinyi, 2008).
- Tanzania is piloting a results-based financing, paying health workers bonuses every six months for achieving verified targets on maternal and newborn health. A 2011/12 interview survey of 43 health workers found that results-based financing can improve quality but can also demotivate health workers in less well resourced areas unless other health system constraints are addressed (Mamdani *et al.*, 2012).

Table 12: Benjamin Mkapa Fellows Programme Retention package, 2011

Financial incentives	Non-financial incentives
Reallocation allowance Enhanced salary Annual leave and housing allowance Gratuity of 5% of three years basic salary after 3 years	Induction training on comprehensive HIV/AIDS management. Laptop and mobile phone with monthly airtime NSSF and social health insurance benefits; Biannual refresher training on HIV/AIDS and related fields Membership of an alumni association

Progress

A wider range of incentives have been set to retain health workers. They need to be evaluated for their level of implementation and impact on health worker distribution, retention and orientation.

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

PAST LEVELS: 1980–2005

- While community participation was central to health policy, beyond the establishment of a community-based health workforce (traditional birth attendants and community health workers), there is limited evidence of the measures applied to ensure and resource it in the period.

CURRENT LEVELS: 2006–2010

- The 2007–2017 primary health services development programme focused on community participation and involvement in health actions. The programme provided for community home-based care and community health agents (MoHSW, 2007). Tanzanians already have a high degree of social participation. In one survey, over 90 per cent of rural and urban Tanzanians were found to be involved in various collective activities, including in savings and credit cooperatives, community actions on water, production, health and other areas of social development (see Table 13 below) (Civicus, 2011).
- Communities participate in developing comprehensive council health plans and are part of the management of health systems through representation on council health service boards and health facility governing committees. These mechanisms have apparently improved resource management and quality of health care (Kessy, 2010). However, shortfalls are evident in their coverage and functioning; they do not exist in all districts, they face shortfalls in training, capacities, resources, incentives and guidance for their roles and lack annual work plans or any platform for sharing their experiences (Kessy, 2010). A recent study in Mbarali district found a gap between policy and practice in participation in district-level priority-setting processes, with limited formal mechanisms for the public to share information or to engage on or enforce decisions (Maluka *et al,* 2010).

Table 13: Collective community actions, 2010

	Geographical area			Physical profile			Level of infrastructure			Total
	Urban	Peri-urban	Rural	Urban	Peri-urban	Rural	Urban	Peri-urban	Rural	
Cooperative, credit or savings group	4.48	8.39	16.18	5.61	11.61	12.63	3.74	10.73	16.8	90.17
Farmer/fisherman group or cooperative	15.09	7.88	0	0.98	3.93	10.34	18.24	5.66	0	62.12
Health group/social service association (for people with disabilities)	8.02	0	0.86	5.12	0	0.62	4.84	0.4	0	19.86
Sports	1.65	4.07	1.62	1.71	4.26	1.68	1.54	4.06	0.93	21.52

Progress

There is policy support for community participation, institutional mechanisms have been defined to facilitate this and there is some evidence of their positive impact. However, these mechanisms needs to be set up in all districts and be supported by training, incentives, mechanisms and guidance for their roles, to strengthen meaningful participation in health.

Community meeting in Bagamoyo

EQUITY WATCH

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A more just return from the global economy

Progress markers

- Reducing debt as a burden on health
- Ensuring health goals in trade agreements, including in relation to GATS and 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. Tanzania is affected by such global opportunities and challenges, including those associated with the World Trade Organization (WTO), climate change and the financial crisis. It engages at regional level in the East African Common Market, the Southern Africa Development Community (SADC), the Indian Ocean Ream and the Nile Basin Initiatives. This raises issues of trade, infrastructure development, movement of labour and capital that affect health and other social outcomes (URT MoFEA, 2010). The final section examines selected parameters of the policy space and support for protecting health equity within this global environment.

Reducing debt as a burden on health

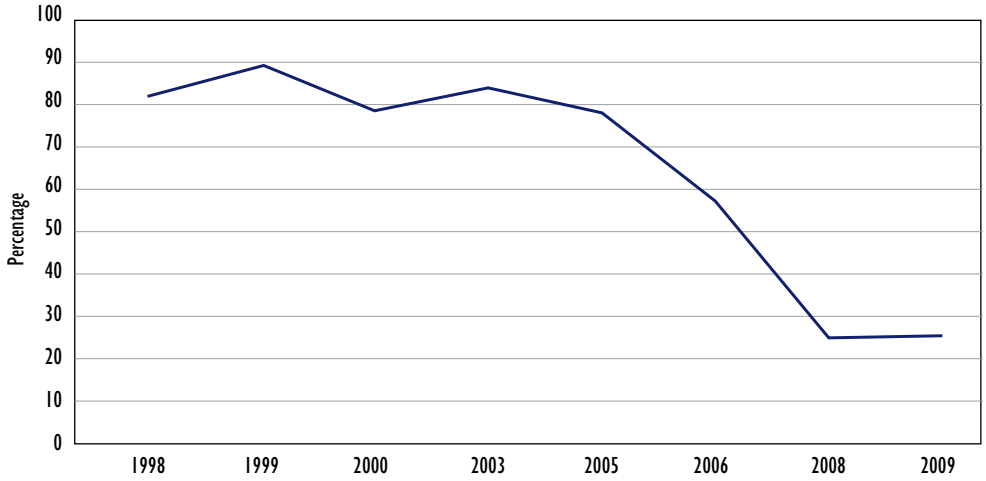
INDICATOR	PAST LEVELS (1980–2005) Level	Year	CURRENT LEVEL (most recent data) Level	Year*
External debt as a % GDP	1998	82.1	57.3	2006
	1999	89.5	24.9	2008
	2000	78.5	25.6	2009
	2003	83.5		
	2005	77.5		

Source: URT, 2012; IMF, 2010

PAST LEVELS: 1980–2005

- External debt as a share of GDP fell between 1998 and 2005 but the debt burden remained high, with US$7,516 million total external debt and a debt service amount of US$9180 million paid between 1970 and 2003. In 2002 the per capita expenditure on servicing the debt (not repaying it) was nearly a quarter of what was spent on health per capita (Africa Action, 2005).

Figure 21: External debt stocks as a percentage of GDP, 1998–2009



Source: URT, 2012; IMF, 2010

CURRENT LEVELS: 2006–2010

- Tanzania benefited from debt relief under the HIPC (highly indebted poor countries) Initiative and the Multilateral Debt Relief Initiative, reducing the debt burden sharply, with all debt indicators declining to levels well below risk thresholds. External debt declined from 57.3 per cent of GDP in 2006 before the Multilateral Debt Relief Initiative and to 24.9 per cent in 2008. After 2008, external debt rose, with a report of a rise in 2012 to 43 per cent of GDP (BOT, 2012). The debt service relief of US$3 billion committed to Tanzania under the HIPC Initiative was to be used for poverty reduction. The funds were invested in primary and secondary education, water and road projects.
- The debt relief contributed to improved immunization but there was no evidence of any other links to increased health spending (WHO, 2007).

Progress

There has been progress in reducing external debt through debt relief initiatives, with benefit to education and some benefit to health. However rising external debt after 2008 warns of future high levels of debt servicing, reducing the resources for health.

Ensuring health goals in trade agreements, including in relation to GATS and TRIPS flexibilities in national laws

PAST LEVELS: 1980–2005

- Tanzania has not committed to the General Agreement on Trade in Services (GATS) and it has included all World Trade Organization trade-related aspects of intellectual property rights (TRIPS) agreement flexibilities in its laws. The Tanzania Patents Act 1987, allows compulsory licences to be issued on grounds of: non-use of the patent; non-reasonable use for the Tanzanian market demands; patented products being imported and hindering the working of the invention; refusal of the patent owner to grant licences on reasonable terms and for products vital to the economy (section 54). Section 61 permits government or a designated third party, to exploit an invention without the owner's consent on grounds of public interest, public health or national security. Prior to 2005 these provisions were not being used, although the country does apply an essential drugs list and promotes generic drugs across public and private sectors (Munyuki and Machemedze, 2010). The national policy on HIV/AIDS, launched in 2001, recognized antiretroviral treatment as a right for all people living with HIV.

CURRENT LEVELS: 2006–2010

- Acknowledging AIDS as a national emergency supported a policy of providing free antiretrovirals for all people living with HIV and implied a demand for affordable medicines. Until 2016, Tanzania has to comply with TRIPS. As noted earlier, the 1987 Tanzanian Patent Act makes both pharmaceutical process and product patents available, integrating TRIPS flexibilities, but the current application is unclear. Article 38(1) of the Tanzanian Patent Act states, for example, that patents are only granted for ten years from filing, as opposed to the 20 years mandated by TRIPS, while information published on the website of the Business Registrations and Licensing Agency states that a 20 year patent term is given.
- Government considered domestic production as a means of scaling up treatment, with research and development capacity, infrastructure and technology transfer identified as key priorities in the pharmaceutical sector. Exploiting article 31 of TRIPS, the local manufacturer, Tanzania Pharmaceutical Industries, entered into an agreement to produce first-line antiretrovirals. In so doing, it faced a number of obstacles (Wilson *et al.*, 2012). In the 'make-or-buy' debate, as for many other countries in the region, there was lack of consensus amongst different ministry agencies on the appropriate level of intellectual property protection. While the Ministry of Health and Social Welfare explicitly promotes local production, the Ministry of Trade and Industries and the Ministry of Science and Technology place more emphasis on protecting intellectual property. This, with the lack of WHO pre-qualification for externally financed tenders, excluding Tanzania Pharmaceutical Industries, and significant cost barriers in entering regional markets, has raised challenges for local production (Wilson *et al.*, 2012).

Progress

Barriers in administration, politics, policy and capacity have limited the full use of TRIPS flexibilities. While the health sector seeks to develop local industry for medicines, it needs wider partners and cross ministry support, adequate economies of scale and a more supportive regional environment to take full advantage of the current TRIPS flexibilities, particularly for local medicine production (Wilson et al., 2012).

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In December 2012, Tanzania launched the joint pneumococcal and rotavirus vaccines at the Buguruni Health Clinic in Dar-es-Salaam

Bilateral and multilateral agreements to fund health worker training and retention

PAST LEVELS: 1980–2005

- In response to the health worker crisis, government considered bilateral cooperation agreements on managed migration. This was to ensure that migration was temporary and to facilitate professionals returning to Tanzania and was coupled with support for training (MITM, 2006). Government also considered committing to GATS to allow a commercial presence in the health sector while using the flexibilities to limit this to larger foreign investments that would implement universal service obligations. This would in turn limit the number of foreign health professionals. These professionals would not benefit from government subsidies and health service suppliers at a certain level would be obliged to provide a particular service in the public sector or to low income, rural communities (MITM, 2006). There is no evidence that either measure was pursued. Furthermore, Tanzania made no GATS commitments in its health sector.

CURRENT LEVELS: 2006–2010

- The World Trade Organization services database indicates that Tanzania made no commitment to GATS in its health services. A number of bilateral agreements for funding health worker training, facilitating recruitment and initial salary payment are in place, such as support from the Global Fund for AIDS, Tuberculosis and Malaria, described earlier. As a multilateral response to the migration of health workers, the World Health Assembly in 2010 adopted a code of practice on the international recruitment of health workers that discourages active recruitment from countries with critical health workforce shortages. It encourages use of the code norms as a guide when entering into bilateral, regional and multilateral arrangements to further international cooperation and coordination. According to article 7.3 of the code, member states 'should designate a national authority responsible for the exchange of information regarding health personnel migration and the implementation of the code and should inform WHO.' As of June 2011, Tanzania had not yet reported its national authority in relation to the code to WHO and the use and usefulness of the code to bilateral agreements that address the significant health worker shortfalls has not yet been assessed.

Progress

Tanzania has a severe health worker crisis and although it has not committed its health services to GATS, there is no evidence that it has taken advantage of the provisions in the WHO code to negotiate new bilateral agreements with receiving countries on training, managing migration, returning professionals or other responses to health worker shortfalls.

Health officials included in trade negotiations

PAST LEVELS: 1980–2005

- Health officials had limited direct involvement in trade negotiations in this period, with trade and patent rights issues managed by the Ministry of Trade (Mwalimu, 2003).

CURRENT LEVEL: 2006–2010

- The policy and planning department of the Ministry of Health provides input to health diplomacy. Tanzania has a health specialist in its embassy in Geneva to provide specific health input to diplomacy at United Nations level, including on trade issues.

Progress

It is unclear how far health is exerting influence in global trade agreements and related diplomacy. The Ministry of Health and Social Welfare has identified a need to build capacities on trade policy negotiations, health diplomacy and regulatory capacities to enforce positions reached. There is also need to build dialogue mechanisms with non-state actors for input on areas of global negotiation.

Information available on Tanzania's global diplomacy and engagement is limited. Nevertheless the influence of global actors, global contexts, such as climate change and the financial, environmental, food and other crises, and global influences on health worker and medicine access is acknowledged. The paucity of evidence of Tanzania's protection of health within these global processes suggests a need to encourage research, policy analysis, training and publication within this area.

Helene D. Gayle of CARE, USA and David Homeli Mwakyusa, Tanzania's Minister of Health and Social Welfare, World Economic Forum Annual Meeting, Davos 2010

EQUITY WATCH

Summary, conclusions and recommendations

PROGRESS MARKERS	STATUS AND TRENDS	PRIORITY AREAS FOR ACTION
EQUITY IN HEALTH		
Formal recognition of health rights	There has been a consistent policy commitment to health equity, although not reflected in the current constitution.	Growing civil society advocacy on health rights, including in constitutional review, is raising social awareness on health.
Halve, the number living in poverty and on less than US$1 per day	Tanzania is off track in achieving its targets on poverty reduction, which has lagged behind economic growth. While rural poverty has fallen, urban poverty and inequality has increased.	Public works have contributed to poverty reduction but with some bias against poorest districts and households. Implementing policy commitments to pro-poor growth may have wider, more inclusive benefit.
Reduce the gini coefficient	Tanzania has low levels of income inequality. Despite GDP growth the gini coefficient has not improved and urban inequality has widened.	The wide differences in wealth within urban areas merit attention to understand the causes and identify specific service, policy and social interventions to close the gap.
Eliminate differentials in child, infant and maternal mortality rates and under-nutrition	Infant, child and under five mortality rates and rural–urban inequalities have declined but wealth and geographical inequalities have widened. Child under-nutrition has not improved, even in areas of high cereal production. Maternal mortality has improved slightly since 2004.	Maternal and child health services could make greater contribution to reducing mortality, particularly for those most at risk (discussed next). Primary health care interventions need to lever support for household food production, exclusive breast-feeding and improved weaning practices.
Eliminate differentials in access to immunization, antenatal care and skilled deliveries	There has been limited progress in immunization; ensuring four antenatal care visits and deliveries assisted by skilled personnel. Rural, poorer, less educated women continue to be disadvantaged and to face cost and distance barriers.	Greater attention needs to be given to improving immunization outreach and coverage in poorly serviced regions and to social outreach and measures to overcome cost and distance barriers to ensure four antenatal care visits and assisted delivery.
Universal access to prevention of mother to child transmission services and antiretroviral therapy, condom uptake	Access to HIV services and changes in youth sexual behaviour have reduced HIV prevalence but less so in women. Geographical and social differences in service coverage are due to availability and access barriers (funding, service capacities, cost, distance and social factors).	Barriers to service availability call for measures to strengthen service delivery at primary care level. Access barriers call for strengthened participatory measures to provide information to communities and social support of uptake in rural, low-income people, women and young people.
HOUSEHOLD ACCESS TO RESOURCES FOR HEALTH		
Close gender differentials in education	Enrolment rates and gender parity in primary and secondary education have improved but at low levels, particularly in secondary school. Shortfalls exist in quality of education (teachers, supplies) in rural households and poor communities, compounded by child under-nutrition, inadequate preschools and cost barriers.	In addition to current measures to encourage female enrolment, further support is needed for quality improvements, female enrolment in science subjects and for inter-sectoral, integrated, holistic approaches to early childhood development that involve community actors and act as an entry point for primary health care.
Halve the share living without safe water and sanitation	Little progress has been made in access to safe water and sanitation, with worsening urban coverage of safe water due to old infrastructure, poor returns from commercialization and cost barriers for poor households.	Increased sustained investment is needed in safe water and sanitation, with measures to involve communities in maintenance, to reduce cost barriers in accessing basic water needs and to revisit the privatization of water in Dar es Salaam
Increase ratio of wages to GDP	Wages as a share of GDP have risen. There has been a small decline in earning disparities between women and men, although real wages have fluctuated.	Recent job creation will boost the incomes needed to support health. Further focus can be given to ensuring that employment and income improvements take place for women.
Allocate resources to agriculture and women smallholders	Agricultural spending has risen, but does not yet reach the 10% AU target, with limited investment in agricultural technology, infrastructure and training for smallholder and women farmers and large-scale foreign land acquisitions for biofuels.	Spending on 'public goods' – extension, research, drip irrigation, rural roads – is proposed as less easily captured by better-off groups. Large-scale biofuel investments need to be tracked for their costs and benefit to health.
Overcoming barriers to use of services	Availability, social and cost factors continue to act as barriers to service uptake, although with some decline in cost barriers.	Investment in primary health care, community health workers and committees and boards for community participation are important measures to support uptake.

PROGRESS MARKERS	STATUS AND TRENDS	PRIORITY AREAS FOR ACTION
REDISTRIBUTIVE HEALTH SYSTEMS		
Achieving 15% government spending on health	Health as a share of government spending and as a share of GDP has been rising since 2006.	Improved public spending has led to gains in health that encourage the further spending needed to improve health equity.
Achieving US$60 per capita health funding	Between 2006 and 2012 government health expenditure per capita increased to almost the US$60 target using PPP US$, but much lower at exchange rate.	Demands on the health system, costs of outreach to more inaccessible or marginalized groups call for continued improvement in domestic health funding.
Improve tax funding and reduce out of pocket funding for health	Public and external funding has steadily increased and prepayment insurance schemes have improved, decreasing regressive out of pocket payments. Prepayment in the NHIF and community health fund have reduced out of pocket payments.	Tax based domestic financing could be improved through earmarked (progressive) VAT and excise and import taxes on alcohol and fuel. Integration, improved risk pooling and cross subsidy in the NHIF and community health fund would improve equity.
Abolish user fees	Out of pocket spending has fallen since 2003 through waiver and exemption measures and prepayment arrangements (NHIF, community health fund) but out of pocket payment is on the threshold for incidence of catastrophic expenditure.	Reducing out of pocket spending calls for review of exemption and waiver effectiveness; control of unofficial charges, avoiding segmentation and flat premiums in the community health fund; and improved private sector prepayment and cost control.
Allocate at least 50% of public finances to districts, 25% to primary health care	Public allocation formulae and spending in the past decade reflect a commitment to funding primary care and district services, with some fluctuations in primary care spending despite its greater pro-poor benefit.	Tracking and reporting on spending by level, specifically on primary health care and primary care level services, is important. Communities can also play a role in monitoring spending and ensuring delivery at this level.
Harmonize financing into a framework for universal access	The MTEF and sector-wide approach harmonized external resources; integrating NHIF and community funds reduced segmentation and coordinating private funders is planned. Constraints include no constitutional guarantees, limited risk pools, off budget external funding and low insurance coverage.	Government progress in improving tax financing, coordinating external funds through sector-wide, pooled funding; regulation and risk equalization of insurance funds and coordination with private actors continues to be important, as are monitoring outcomes and measures to build public confidence and support.
Establish and ensure clear health care entitlements	A positive list of health care benefits have been defined, costed, assessed against health system capacities and integrated in council plans. Implementation is in process. Measures to align private and insurance benefits are not yet clear.	Aligning resources to services that have greatest public health impact may improve equity, if resources are allocated to ensure the services defined. The input from communities also needs to be included to ensure public support.
Adequate health workers and drugs at primary level	Staff shortfalls are severe in public training institutions, dispensaries and district hospitals and in private hospitals. Medicine stock-outs undermine access.	Investment and implementation is needed in training, equitable deployment and community health workers. Policy documents on medicines need updating.
Implement incentives for human resources for health	A package of financial and non-financial incentives set to attract and retain health workers. A preference for public over private employment is attributed to better pension benefits offered in the former.	There is a need for systematic evaluation of the various incentive schemes, including in terms of their implementation and impact on overcoming shortfalls and maldistribution of health workers.
Recognize and support mechanisms for public participation	Policy support for participation and institutional mechanisms defined to facilitate this but investment still inadequate in training, resources, incentives and guidance for their roles.	This gap between policy and practice needs to be addressed with resources, capacity support and meaningful processes for participation in health.
A JUST RETURN FROM THE GLOBAL ECONOMY		
Reduce the debt burden	There has been progress in reducing external debt through debt relief initiatives, with benefit to education and to health.	Rising external debt after 2008 warns of future high levels of debt servicing, reducing the resources for health.
Ensure health goals in trade agreements	Tanzania law provides for TRIPS flexibilities, but administrative, political, policy and capacity barriers limit their full use.	Local medicine production needs cross ministry support, including for pre-qualification and measures to secure regional markets.
Bilateral and multilateral health worker agreements	Tanzania has not committed its health services to GATS. There is no report of provisions in the WHO code of practice being used to negotiate new bilateral agreements to manage health worker migration.	There is scope to use the WHO code to negotiate agreements with receiving countries on training, managed migration, professional return or other responses to health worker shortfalls.
Include health workers in trade negotiations	Tanzania has a health attaché in its embassy in Geneva. It is unclear how far health is exerting influence in global diplomacy.	Ministry of Health and Social Welfare has identified a need to build capacities on trade policy, negotiations, health diplomacy and regulatory capacities.

Tanzania has many opportunities for improving health equity, including through its political stability and social cohesion. It has had a decade of consistent economic growth, its income inequality levels are low, the wage to GDP ratio has improved and there have been recent improvements in job creation. It graduated from the low to middle human development group of countries, primarily due to investments in education and health, with many decades of policy support for health equity, including the adoption of the primary health care approach a decade before Alma Ata.

ACTION

- The current constitutional debate offers an opportunity to incorporate rights that are important for health, including the rights to social determinants such as safe water, nutritious food, shelter, and sanitation, and to health services and access to essential medicines.

Within this positive context, the movement from centrally-planned socialist principles to a more liberalized market economy could potentially increase inequalities in wealth and inequity in health. Tanzania is off track in achieving its Millennium Development Goal commitments on poverty reduction and, while rural poverty has fallen, urban poverty and inequality has increased, with incomes and living conditions contributing significantly to poverty. While child and maternal survival have improved, child under-nutrition has not, and geographical and social differentials in child under-nutrition have widened. The report highlights social determinants that can play an important role in reducing deprivation and improving health outcomes, including improved mothers' and early childhood education and improved household food production.

ACTION

- Beyond primary enrolment, there is need to boost the quality of education, to support an affordable transition from primary to secondary school and to widen children's access to and participation in preschools.
- Local markets need to be stimulated to ensure that food is retained and sold within local areas, investments need to be made in the small-scale agricultural and production sector and options for local food storage need to be explored and improved.
- Significantly more investment needs to be made in improving coverage of safe water and sanitation, using participatory approaches to mobilize community inputs and tariff structures to adequately protect urban poor households' access to water.

Waiting for water

There have been gains in the past decade, including in targets related to the Millennium Development Goals. Infant, child, under five and maternal mortality rates have fallen and inequalities between rural and urban areas have closed. HIV sero-prevalence has declined, with significant improvements in access to prevention and treatment interventions and positive changes in sexual behaviour. Service access is, however, inverse to need. There are regional disparities in immunization and both wealth quintile and regional differentials in achieving the requisite four antenatal care visits, in condom use and in deliveries assisted by skilled personnel. This suggests that rural, poorer, less-educated people with higher health needs remain disadvantaged.

An immunization session at Melela health facility, Morogoro region

ACTION

- For key services, such as those ensuring four antenatal care visits, HIV prevention and treatment services and assisted deliveries, there is need to address, firstly, availability barriers (funding, staffing, medicine supplies and service capacities in the most poorly serviced districts; and service decentralization to primary care level). Secondly, there is need to address accessibility barriers (including transport and other charges). Also, community-oriented participatory measures need to be strengthened to support awareness, outreach and uptake in specific groups, such as people with disabilities, the poorest households and less-educated parents.
- Intensifying delivery on Tanzania's strong policy focus on the community and primary care level services will help enhance equity, particularly given the greater benefit from this service level to the most disadvantaged groups.
- Within the general measures taken there is need to focus more on poorly serviced regions (such as Pemba North, Rukwa, Kigoma, Shinyanga and Mara) and to use participatory approaches to identify and strengthen additional social outreach measures to promote uptake in those not using services.

Tanzania has made progress in tax and insurance based financing and in overall health spending although the different shares of external and domestic funding need to be separated in future reporting. Evidence that improved levels of public spending have resulted in improved health outcomes should encourage greater commitment to spending on health as part of the national strategy for addressing poverty and inequality. Out of pocket payment has however increased and is impoverishing in lowest income households. While the allocation formula and patterns over the past decade reflect a commitment to funding primary care and district services, it is not consistently applied and local government primary care and community level spending fell after 2006, despite the pro-poor benefit of spending at primary care level.

ACTION

- There is need to monitor and review the effectiveness of the exemption and waiver mechanisms at services. This will ensure that facilities receive sufficient resources to apply exemptions and avoid informal charges, to avoid flat premiums and to strengthen ongoing measures to overcome fragmentation in insurance arrangements. Expenditures need to be reported by level with specific attention to resource flows to primary care level, including for deploying and retaining health workers at this level and in underserved areas. Communities can play a role in monitoring that allocations translate into expenditures and effective local service delivery.
- The institutional mechanisms and procedures for community participation need to extend to all districts and to be backed by still greater investment in training, capacities, resources, incentives and guidance for community roles.

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A farmer in her field of cassava, Tiniu village, near Mwanza

These policy measures and investments are being advanced within an increasingly challenging and influential global environment. The financial crisis had an impact on production and trade, and while debt relief benefited education and health, rising external debt after 2008 may constrain the resources for health. The policy choices being made in the global economy have an influence on health and demand greater capacities within the health sector to engage in global diplomacy to protect public health, such as on trade in food and other goods and services, intellectual property and biodiversity issues that affect food security, local medicine production and access, and to fully use the global instruments, processes and flexibilities needed to support the implementation of national policies.

Tanzania has significant knowledge resources to support health equity. There are 170 publications in the bibliography for this report, highlighting the body of work and evidence available. It was also evident from this first report that there are gaps in gathering and reporting on evidence that would support more effective analysis and reporting on health equity. Current household surveys do not disaggregate evidence to district level, nor do they disaggregate key indicators like safe water access or maternal mortality. Furthermore, reporting on expenditures and resources by level and district is not compiled annually.

ACTION

- Equity analysis should be integrated and reported on within the regular demographic and health surveys, national health accounts, Millennium Development Goal reports and any reports using routine data. Analyzing routine administrative and information systems and district site surveillance could provide regular disaggregated evidence on key service and health outcomes, for the health sector and for areas such as food security and living environments that affect health.

The report highlights areas that need further investigation or evaluation. For example, wide differences in wealth between richest and poorest quintiles within urban areas merit attention, both to better understand the drivers of inequality and to identify specific service, policy and social interventions to close the gap. The application of incentives to attract and retain health workers need to be evaluated for their impact in ensuring resources reach those with high health need.

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Sharing information at Sinza hospital, Dar es Salaam

Finally the report suggests the need to encourage and raise dialogue on research and policy analysis of the impacts on health of global influences on climate, trade, economy, environment, land and biodiversity and engagement, as input to diplomacy and planning. It is anticipated this report will be widely disseminated and used as a resource to raise social awareness, advocacy and accountability by all on the delivery on Tanzania's policy commitments to health equity. Data gaps and quality are a constraint in some areas. However, the available evidence highlights opportunities for further reducing unfair and avoidable inequalities in health, and motivates intensified efforts to ensure fair access to resources for the social determinants of health and health care.

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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 organizations, 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 organizations to implement the *Equity Watch*, to monitor progress on health equity by gathering, organizing, analyzing, reporting and discussing evidence on equity in health at national and regional level.

This report of the Tanzania Equity Watch has been produced by Ifakara Health Institute working with Ministry of Health and Social Welfare Tanzania and EQUINET through TARSC. 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	
Formal recognition of 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 undernutrition	
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 GDP	
Allocate resources to agriculture and women smallholder farmers	
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	
Abolish user fees	
Allocate at least 50 per cent public funding to districts and 25 per cent to primary health care	
Harmonize health financing into a framework for universal coverage	
Establish and ensure clear health care entitlements	
Provide adequate health workers and drugs at primary, district levels	
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	
Ensure health goals in World Trade Organization (TRIPS, GATS) agreements	
Bilateral and multilateral agreements to fund health worker training	
Health officials included in trade negotiations	