

CREATING HEALTHY CITIES IN TANZANIA

USING THE SOCIAL DETERMINANTS OF HEALTH
FRAMEWORK TO UNDERSTAND HOW URBANISATION
IMPACTS ON HUMAN DEVELOPMENT IN TANZANIAN CITIES

TECHNICAL REPORT – November 2016



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ABOUT THIS REPORT

This report was written by Sara Thomas, Angela Donkin and Ruth Bell from the UCL Institute of Health Equity. Research and analysis were conducted by Gemma Todd, Eveline Geubbels, Masuma Mamdani and Francis Levira from Ifakara Health Institute.

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SECTION 1: INTRODUCTION

Population health, and the distribution of good health outcomes, are key measures of how well a society is doing. Tanzania has made significant strides in improving the health of the population, which has resulted in an increase in average life expectancy from 51 years in 2002 to 62 years in 2012. [3] Similarly to other countries in Africa, Tanzania's statistics on a number of health measures leave much room for improvement.

DFID Tanzania has commissioned UCL Institute of Health Equity (IHE) to help it understand the key drivers of poor health in this rapidly urbanising country, within the context of the wider social, economic, environmental and cultural issues that are relevant to sustainable human development in Tanzanian cities. DFID would also like to identify further work, opportunities and partnerships across sectors in order to improve urban health, wellbeing and living conditions.

IHE has led a number of international reviews of health inequality, including the global Commission on the Social Determinants of Health, chaired by Professor Sir Michael Marmot, [1] and the World Health Organisation (WHO) European Review of Social Determinants. [2] The social determinants of health (SDH) approach has been used by a number of international organisations including WHO, [4] the United Nations Development Programme (UNDP) [5] and the United Nations Children's Fund (UNICEF), [6] by transnational organisations including the European Union, [7] and by national governments including those of the UK [8] and Taiwan. [9] Examples of action, can be found in Norway, Sweden, Denmark, Slovenia, Brazil, Argentina, Chile and Australia. [10] The SDH approach has also been used in 16 countries within East and Southern Africa for a range of activities including research, monitoring and capacity-building. These activities have been carried out by EQUINET, a network of professionals, civil society members, policy-makers, state officials and others, within these regions. [11]

Applying an SDH framework offers a way of building synergies between health and other sustainable development goals. [5] The analyses in this report aims to contribute to a multi-sectoral approach, which will inform future policies and programming in Tanzania and potentially in Sub-Saharan Africa more widely. This has been achieved by identifying the drivers of health and human development inequalities in urban Tanzania, highlighting gaps in the data and pointing to opportunities for action to narrow these gaps and improve the health and wellbeing of urban populations. For this analysis, IHE partnered with Ifakara Health Institute, a leading health research institute in Tanzania, to apply the social determinants of health framework to the country's urban context.

URBANISATION AND THE SOCIAL DETERMINANTS OF HEALTH

More than half of the world's population lives in urban areas and the number living in cities will continue to increase rapidly. In 1950, the world had an urban population of 746 million; by 2014 this had increased to 3.9 billion and estimates suggest that by 2045 the figure will reach 6 billion. [14] Sub-Saharan Africa is the least urbanised region globally, with only one-third of the population living in cities. [12] Tanzania is no exception: the 2012 census showed that only 30 per cent of the

Tanzanian population lived in urban areas¹. [13] Urbanisation is often seen as a necessary condition for economic growth, [14] and as such Tanzania's low level of urbanisation has been criticised for delaying economic development in the country. [15]

However, urbanisation is now happening very rapidly in Tanzania and its urban population has been growing steadily over time: the percentage of the population in urban areas rose from only 6 per cent in 1967 to 30 per cent in 2012. This growth has mostly been seen in the largest cities, including the former capital Dar es Salaam, plus Arusha and Mwanza. The population growth rate in Dar es Salaam stands at 7 per cent per year, compared with a national growth rate of only 3 per cent. It is estimated that by 2030 more people will live in urban than rural areas. Indeed, Dar es Salaam has been named as the fastest-growing urban area in Sub-Saharan Africa, on track to become a 'megacity' inhabited by more than 10 million residents by 2025. [16, 17] This rapid urbanisation is being driven by three factors: migration, natural increase (more births than deaths), and reclassification (an administrative procedure that confers urban status on land formerly considered rural). Surprisingly, evidence suggests that migration only contributes to 17 per cent of urban population growth, meaning 83 per cent of the growth of cities is due to natural increase or reclassification (although this figure may hide urban-to-urban migration, and migration to peri-urban areas not yet classified as urban). [18] It is not fully understood what effects this rapid urbanisation is having on the health, wellbeing and human development of the urban population.

Urbanisation has led to an increasing focus on the urban environment, both internationally and within Tanzania. The eleventh of the United Nations' Sustainable Development Goals (SDGs) is dedicated to making cities inclusive, safe, sustainable and resilient. [19] The WHO has recently developed the Urban Health Index (UHI) to provide a standardised method for constructing a composite measure of population health in urban areas, which can be tailored to the local setting. It compared 57 cities – including Dar es Salaam – in low- and middle-income countries (LMICs), using indicators such as access to water and sanitation, use of solid fuels, women's education, women's knowledge of HIV and three child health service coverage indicators. [20] These indicators were combined to give a score between 0 and 1, with 1 being the highest score. The latest available data from the Demographic and Health Survey (DHS) was used to construct the index. While every attempt was made to ensure that this data was comparable, there were limitations, especially with respect to the selection of indicators and cities, and generalisability. Dar es Salaam scored 0.34, placing it 45th out of the 57 countries measured and lower down than other cities in East Africa, as Table 1 demonstrates.

¹For the purpose of Tanzania's Population and Housing Census, 2012, the urban population was taken to consist of people living in areas legally recognised (gazetted) as urban and all areas recognised by Local Government Authorities as urban.

TABLE 1: COMPARISON OF URBAN HEALTH INDEX (UHI) SCORE AND RANK FOR SELECTED EAST AFRICAN COUNTRIES

COUNTRY	CITY	UHI SCORE	RANK
KENYA	NAIROBI	0.7	13
ETHIOPIA	ADDIS ABABA	0.46	32
UGANDA	KAMPALA	0.37	42
TANZANIA	DAR ES SALAAM	0.34	45

Source: [20]

THE SOCIAL DETERMINANTS OF HEALTH AND SUSTAINABLE HUMAN DEVELOPMENT

Sustainable Development Goal 3 is focused on ensuring healthy lives and promoting wellbeing for all at all ages. While SDG 11 (discussed above) and 3 are not explicitly linked, synergy in achieving these goals should be a priority, as progress in one will positively impact on the other. Achieving these goals requires multi-sectoral action and support from wider society, and national and local systems and governance.

The social determinants of health approach can provide a framework for understanding the complex relationship between urbanisation, health and broader human development issues such as education and living standards. It has been applied in a number of countries and urban areas to understand inequality at a national and local level, and to inform policy decisions. [2, 4] Urbanisation is a key social determinant that is driving both health improvements and increased vulnerability and risks to poor health.

The social determinants of health are the conditions in which people are born, grow, live, work and age; they are driven by inequities in the distribution of power, money and resources. [1] Exposures and vulnerabilities to conditions and experiences that affect health occur at every stage of life. They are unequal depending on the form and magnitude of dimensions of inequity across society, typically influenced by gender, ethnicity, socioeconomic deprivation and area of residence. Those who are at the sharp end of inequalities face social determinants that negatively impact on their health, with disadvantaged groups more likely to suffer from a range of issues such as: child poverty and abuse; poor attendance at school and attainment; poor housing, unsafe environments and lack of sanitation; lack of good-quality, well-paid employment; and reduced physical and economic access to health care and health promoting services. All these factors, which are human development issues in their own right, will negatively impact on health outcomes. However, health inequalities follow a social gradient, meaning that everyone, except those at the very top, will be affected by the social determinants of health to some degree. [21]

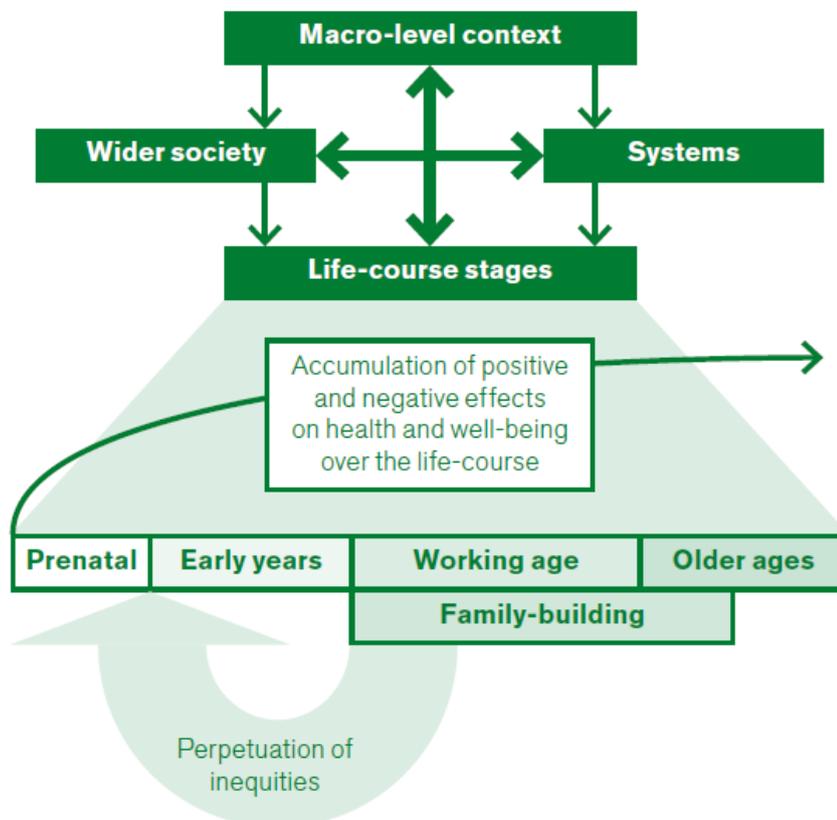
Figure 1 shows the broad themes for analysis and action developed for the WHO European Review; it builds on the conceptual framework of the WHO Commission on Social Determinants of Health.

Figure 1 illustrates how the wider contexts of people’s lives impact on individuals in different ways throughout their lives – or ‘**across the life course**’. These factors include:

- the **macro-level context** (global factors such as trade, aid and climate change; and the national socioeconomic and political context)
- **wider society** (the built, social and natural environment)
- the **systems** and institutions that interact with individuals and society such as the healthcare, education and judicial systems.

A strong principle running alongside these themes is intergenerational equity: the principle that future as well as current generations should be able to enjoy capabilities to lead lives they have reason to value. [22]

FIGURE 1: BROAD THEMES FOR AREAS OF ACTION ON THE SOCIAL DETERMINANTS OF HEALTH



Source: Review of Social Determinants and the Health Divide in the WHO European Region [23]

Urbanisation has been defined as a macro-level social determinant of health in a number of different countries. [23] It is a defining feature of Tanzania currently, and as such it is a key social determinant that is affecting health, in positive and in negative ways. This report will use the SDH framework to understand the key ways in which the urban environment in Tanzania is impacting on the health of

the population. Many of the social determinants will impact people in both rural and urban areas; however, the urban environment and rapid urbanisation will impact on the health of the urban population in a unique way. Distinctions will thus be made between Tanzania-wide SDH concerns and urban-specific issues.

REPORT STRUCTURE

Following this introduction, the main report begins with a discussion of the methodological issues in mapping health inequality, including how poverty is defined and measured, how urban areas are defined, how urban averages obscure inequalities in poverty within cities, how the availability of services in urban areas does not necessarily translate into greater access to services or access to quality services, the cost of living in cities, and inter-city level differences of urban poverty in Tanzania. This leads on to an analysis of health outcomes in urban areas, followed by analysis of key social determinants in the context of urban areas in Tanzania.

SECTION 2: METHODOLOGICAL ISSUES IN MAPPING HEALTH INEQUALITY

To understand health and health inequality in urban Tanzania, accurate and reliable data are needed on a range of indicators. These should be related to health outcomes (for example, life expectancy, morbidity, and communicable diseases) as well as social, economic, environmental and political factors such as standard of living, aspects of the built environment, education, employment and governance. [23] To understand how these factors relate to inequality, whether spatial (urban/rural) or by standard of living (wealth inequality), accurate information at a local level is needed. In high-income countries, the association between neighbourhood socioeconomic status and a number of health outcomes is well documented (for example, life expectancy in England; [24] cancer outcomes in USA [25]). The evidence of neighbourhood effects on health is consistent in studies and points to the need to look at community-level interventions. [26] There is a smaller but increasing evidence base from low- and middle-income countries. The following case study demonstrates the effect of household/neighbourhood characteristics on systolic blood pressure and risk for systolic pre-hypertension in South Africa.

CASE STUDY: MAPPING HEALTH BY NEIGHBOURHOOD LEVEL, SOUTH AFRICA [27]

The South African Birth to Twenty cohort (Bt20), bone health sub-sample, was used to understand the associations between household/neighbourhood socioeconomic status (SES) in infancy and at age 16 years, and systolic blood pressure and risk for systolic pre-hypertension, which are risk factors for cardiovascular disease (CVD).

To determine neighbourhood characteristics, a culturally relevant questionnaire was specifically developed in the Bt20 cohort using focus group discussions and in-depth interviews. The questions related to economic and social aspects of neighbourhoods such as crime and access to basic facilities, as well as information about schools. Administrative definitions of neighbourhood were avoided: instead, a more meaningful definition to the participants was determined from an earlier qualitative study to define a neighbourhood covering an area within approximately 20 minutes' walk (that is, two kilometres) of home in any direction. [28]

The results demonstrated that in early life water and sanitation are more important for systolic blood pressure than other SES measures. The authors hypothesise that high diarrhoea prevalence in infancy could result in repeated exposure to dehydration, which may 'programme' the body for increased water and salt retention to cope with a risky dehydration environment, leading to hypertension risk. [29, 30] Further research is needed to confirm this, however.

For 16-year-olds, only the crime prevention measure of neighbourhood SES was significant in its association with systolic blood pressure, and for females only.

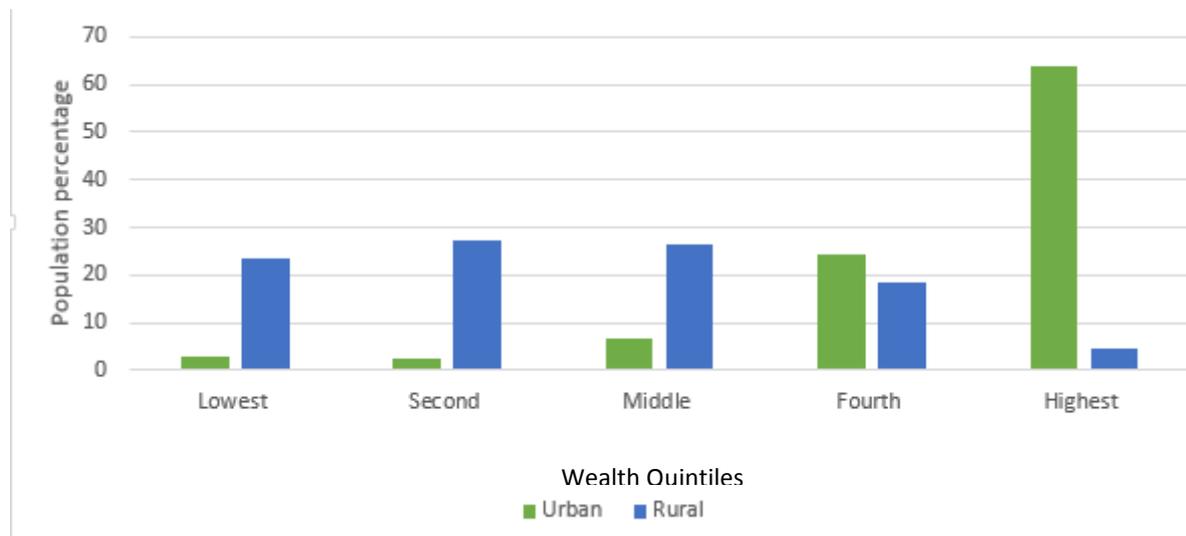
DATA IN TANZANIA

A recent review of data from Africa found that Tanzania was one of only 25 countries (out of 48) that had conducted two surveys related to poverty in the last decade. This suggests that Tanzania's statistical resources are comparatively good for the region; they have also been growing in recent years. [31] Nationally representative information on demographic and socioeconomic characteristics and health related to the social determinants of health in Tanzania is mainly found in household surveys. For example, the official source on poverty levels used by the Tanzanian government is the Household Budget Survey (HBS), which was last conducted for 2011/12 by the National Bureau of Statistics (NBS). [32] Other sources include the National Panel Survey, [33] the Tanzanian Demographic and Health Survey (TDHS) [34] and the Tanzanian HIV/AIDS and Malaria Indicators Survey (THMIS). [35] All of these surveys collect similar information to determine household poverty such as information on household consumption and ownership of goods (for example a television and mobile phone) as well as dwelling characteristics such as materials in construction and access to water and sanitation. However, methodological differences arise in how this information is collected and used; for more information, see [Appendix 2](#). For international comparison, the World Bank calculates international poverty lines.

All of these surveys demonstrate an overwhelming focus of poverty in Tanzania being located predominantly in rural areas. For instance, the HBS found that a higher percentage of the rural population live in poverty (33 per cent) than the urban population (4 per cent in Dar es Salaam and 21.7 per cent in other urban areas), as Figure 2 shows. Rural poor are also seen to be living in deeper poverty than urban poor as they are further below the poverty line. [32] Using this survey, the Tanzanian Mainland Poverty Assessment calculated that over 80 per cent of the poor and extreme poor live in a rural area. [36] Data from DHS 2010 suggests that over 60 per cent of the urban population are living in the highest wealth quintile compared with about 5 per cent of the rural population (see Figure 2). This gives a strong impression that urban populations have more wealth and less poverty than their rural counterparts.

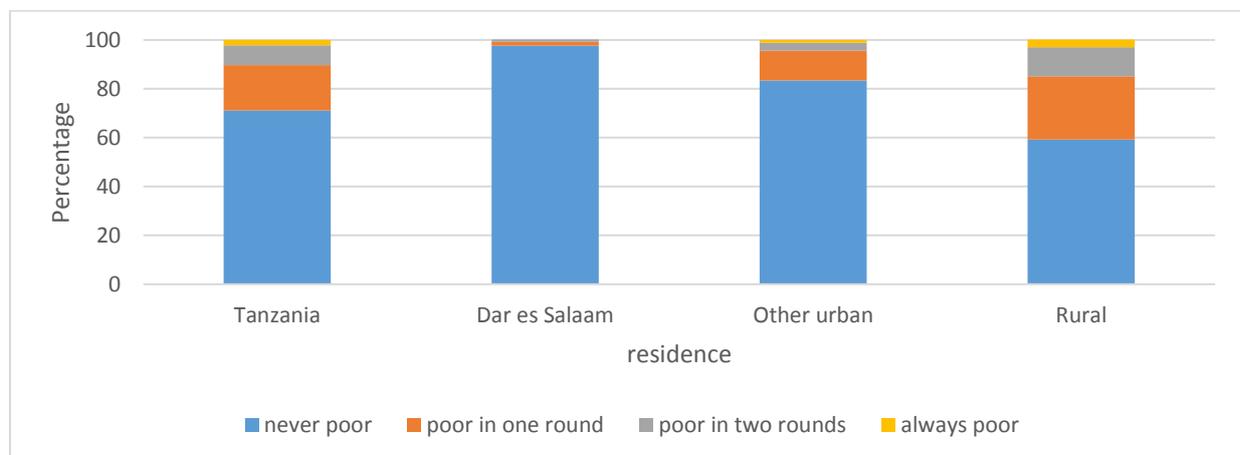
There is also evidence that poverty is a fluid state in Tanzania: many households move in and out of poverty over time. However, the evidence suggests that urban populations are more likely than rural populations never to be poor. Figure 3, from the National Panel Survey, looks at the same households' poverty levels over time, in rural and urban areas, showing that while 97.7 per cent of those surveyed from Dar es Salaam were never poor, only 59.2 per cent of those surveyed in rural areas were never poor.

FIGURE 2: RURAL AND URBAN DIFFERENCES IN WEALTH DISTRIBUTION IN THE TANZANIAN POPULATION



Source: Demographic and Health Survey 2010 [34]

FIGURE 3: PERCENTAGE DISTRIBUTION OF POVERTY, TRANSITIONS DURING THE THREE ROUNDS OF THE NATIONAL PANEL SURVEY



Source: National Panel Survey [33]

IS THERE AN URBAN ADVANTAGE?

These surveys paint a clear narrative of an urban advantage, where wealth is concentrated and services are more readily available. However, some have called this into question due to a number of methodological issues, which include the classification of 'urban' and 'poverty', and use of averages, which can obscure a large proportion of urban poverty at the local level. Others note that greater *availability* of services does not necessarily translate into better *access* to these services for all city residents. As urbanisation continues at a pace, services have become increasingly strained and the

traditional gap across the rural/urban divide has narrowed for many indicators in education, health, nutrition, water and sanitation. In some cases rural areas now outperform urban centres. [33]

DEFINITION OF POVERTY

It is assumed that those above the poverty line are able to achieve certain capabilities, which include a healthy and active life and full participation in society. [33] It is clear, however, that how poverty is defined has a profound effect on the number of people that are classified as poor in Tanzania, ranging from 9.7 per cent below the food poverty line to 65.6 per cent who are classified as ‘multi-dimensionally poor’; see Table 1.

TABLE 1: POVERTY LEVELS IN TANZANIA USING DIFFERENT MEASUREMENTS

Survey	Year	Poverty Line	Percentage below poverty line
Household Budget Survey [32]	2011/12	Basic needs poverty line – nationally used figure (minimum resources needed for physical wellbeing in terms of goods consumption). This is estimated at TZS 36,482 per adult per month (approximately US\$ 1 per capita per day at 2005 Purchasing Power Parity). [36]	28.2
		Food poverty line – spending less than needed to meet minimum nutritional requirements; often referred to as the extreme poverty line .	9.7
World Bank [37]	2011	International poverty line – US\$ 1.90 per capita per day (recently increased from US\$ 1.25 based on prices collected in 2011). Purchasing Power Parity exchange rates (PPPs) are used to convert this into the US dollar and create an internationally consistent figure i.e. US\$ 1 PPP should buy the same basket of goods in Tanzania, India or the UK.	46.6
Multidimensional Poverty Index [38]	2010	Multidimensional Poverty Index – classifies a person as poor if they are deprived in at least one third of the weighted indicators . The 10 indicators in this measurement include: Health: nutrition and child mortality Education: years of schooling and school attendance Living standards: type of cooking fuel, sanitation, availability of clean and safe water, access to electricity, type of floor, and ownership of assets.	65.6

Economic inequality is only part of the poverty picture; to fully understand deprivation in urban and rural areas there is a need to look at broader definitions that encompass human development indicators. Such a multi-dimensional understanding of deprivation recognises poverty beyond

economic measures and is becoming more broadly accepted globally. Other indexes that attempt to measure poverty more holistically in Tanzania include the Human Development Index², [40] and the Childhood Deprivation Index. [41] However, due to sample sizes it is not possible to disaggregate this data down to city level for comparisons at that scale.

In 2013, Tanzania's HDI value was 0.521, placing it 151st out of 187 countries – in the 'low' human development category and below the Sub-Saharan Africa average of 0.502.³ [42] While this score has been increasing steadily since the 1980s, the country's position in the HDI ranking decreased by seven positions between 2012 and 2013. Importantly, the UNDP can also factor in inequality, as shown in Table 2: this compares Tanzania to Sub-Saharan Africa, and to Uganda and Côte d'Ivoire, which were chosen as they are close to Tanzania in the 2014 HDI rank (ranked 163rd and 172nd respectively) and similar to some extent in population size. [40] The Inequality-adjusted HDI (IHDI) takes into account inequality in all three dimensions of the data by 'discounting' each dimension's average value according to its level of inequality. Under perfect equality the IHDI is equal to the regular HDI, but falls below the HDI when inequality rises.

When inequality is factored into the HDI scores, they drop, demonstrating that not everybody is benefitting from these human development aspects equally. UNDP have done this for Tanzania based on 2013 rankings, where Tanzania scored 0.488, placing it 159th out of 187 countries. This drops to 0.356, a loss of 27.1 percentage points, due to unequal distribution in each measure. This drop, although significant, is less than the average drop for low HDI countries (32.6 per cent) and for Sub-Saharan Africa (33.6 per cent). Inequality in life expectancy at birth contributes to this the most at 30.4 per cent, followed closely by education at 29.5 per cent.

TABLE 2: TANZANIA'S INEQUALITY-ADJUSTED HUMAN DEVELOPMENT INDEX (IHDI) VALUE RELATIVE TO SELECTED COUNTRIES AND GROUPS, 2013

²The UNDP's Human Development Index (HDI) assesses long-term progress in three basic dimensions of human development: a long and healthy life (life expectancy at birth), access to knowledge (mean years of education in adult population and expected years of schooling for children of school age), and a decent standard of living (Gross National Income/GNI per capita). Scores range from 0 for low human development to 1 for high human development. [39. UNDP, *Explanatory note on 2013 HDR composite indices Tanzania (United Republic of)*. 2013.

	IHDI value	Overall loss (%)	Human inequality coefficient (%)	Inequality in life expectancy at birth (%)	Inequality in education (%)	Inequality in income (%)
Tanzania (United Republic of)	0.356	27.1	26.9	30.4	29.5	20.9
Uganda	0.335	30.8	30.8	33.8	31.2	27.3
Côte d'Ivoire	0.279	38.3	37.9	40.2	45.4	28.1
Sub-Saharan Africa	0.334	33.6	33.5	36.6	35.7	28.1
Low HDI	0.332	32.6	32.4	35.0	38.2	23.9

Source: UNDP [40]

URBAN-SPECIFIC ISSUES

UNDERESTIMATED COST OF LIVING IN CITIES

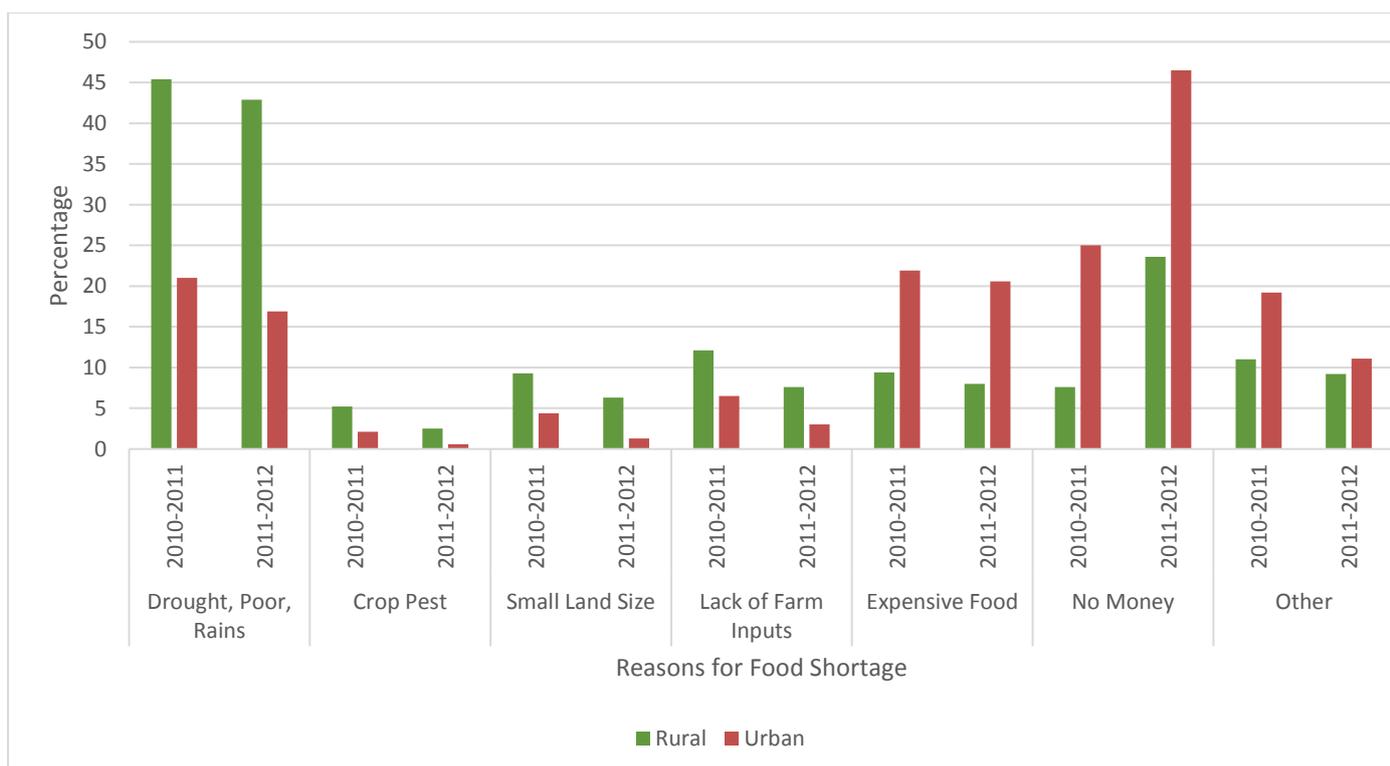
Poverty is determined in many surveys by using household consumption, access to services and dwelling characteristics. However, measuring in this way fails to factor in other forms of wealth. For example, the Household Budget Survey (2011/12) found that ownership of dwellings was higher in rural areas (89 per cent) than in Dar es Salaam (37 per cent) and other urban areas (58 per cent). Ownership is not factored into the poverty calculation. [32]

Standard measures of poverty typically underestimate its true extent in urban settings. It is clear that urban populations have higher expenditure than rural populations. For example, the HBS found that in 2011/12 the mean expenditure per capita in Dar es Salaam was TZS 111,237, compared with TZS 40,078 in rural areas. [32] Many of the household surveys, including the HBS and Tanzanian Demographic and Health Survey, take location and estimated cost of living into account when determining poverty levels, but it has been argued that these measures do not accurately reflect the higher cost of basic goods and services such as food, housing, schooling, health, transport and other necessities in urban areas. [43]

POVERTY LOOKS DIFFERENT IN URBAN AREAS

The National Panel Survey (NPS) (2010/11 and 2012/13) asked about food shortages in the preceding 12 months in its last two surveys. In 2011/12, rural households were more likely than urban households to report food shortages (45.8 and 33.8 per cent, respectively). However, the reasons for these shortages vary between rural and urban populations, as shown in Figure 4. [33] Urban households reporting food shortages were more likely to cite expensive food and lack of money as the main reasons, while drought and poor rains were more likely causes in rural areas. This suggests that urban poor are more vulnerable to market changes, while rural poor are more vulnerable to climate, and to climate change. However, these factors are interconnected as climate change and seasonal variations cause food shortages and increased prices in urban areas.

FIGURE 4: URBAN VERSUS RURAL DIFFERENCES IN REASONS FOR FOOD SHORTAGES IN THE PAST YEAR, 2010/11 AND 2011/12



Source: National Panel Survey 2011/12 [33]

AVERAGES OBSCURING INEQUALITIES WITHIN URBAN AREAS

By depicting rural and urban averages, official statistics can obscure the disparities found within cities and towns, leading to urban poor being missed in analysis and therefore in policy decisions. The HBS uses the Gini coefficient and the quantile ratio to measure inequality in Tanzania.⁴ The Gini coefficient is a measure of the deviation of the distribution of income among individuals or households within a country from a perfectly equal distribution. A value of 0 represents absolute equality, while a value of 1 represents absolute inequality. [44] Overall, the Tanzania mainland had a Gini coefficient of 0.34 in 2011/12. Tanzania's Gini coefficient is below the Sub-Saharan African average of 0.451 and the low-income countries' average of 0.40. [36] The Gini coefficient is higher in urban than rural areas, but urban areas outside of Dar es Salaam have higher inequality than the capital itself.

TABLE 3: GINI COEFFICIENT AND QUANTILE RATIO BY AREA, TANZANIA MAINLAND, 2011/12

⁴ The most common quantile ratio is the 90/10 ratio, which is the equivalent consumption at the 90th percentile of the equivalent consumption distribution divided by the equivalent income at the 10th percentile. For example, if the 90/10 ratio is equal to 4, then the poorest person of the richest 10 per cent of the population consumes 4 times as much as the richest person of the poorest 10 per cent.

Income Inequality Measure	Dar es Salaam	Other Urban areas	Rural Areas	Tanzania Mainland
Gini Coefficient	0.35	0.37	0.29	0.34
Quantile Ratio	4.1	4.7	3.5	4.1

Source: Household Budget Survey [32]

Small-scale studies demonstrate vast differences in wealth and access to resources across wards in the same city and municipality, demonstrating, that despite greater wealth in cities, there is still a significant amount of poverty. [18, 45-47]. For instance, when looking at disaggregated district-level data, Muzzini and Lindeboom (2008) found that for one-third of the cities analysed, income poverty was lower in rural than urban centres. In the case of Kilosa, intra-urban poverty ranged from 2.3 per cent in Kidido ward to 63.4 per cent in Magubike ward. In four of 12 townships, almost 70 per cent of the population lived in wards that were poorer than the surrounding rural area. Intra-urban differences in poverty are thus substantial, with some cities increasingly representing spaces of inequality. Another study found that urban centres have poverty ranging between 12 and almost 50 per cent. [14] A third of the urban centres selected had poverty rates higher than the surrounding rural areas. Even in urban centres where poverty rates were lower than in the adjacent rural areas, a significant share of the urban population lived in wards with higher poverty rates than in the adjacent rural areas. [18]

INTRA-CITY LEVEL DIFFERENCES OF URBAN POVERTY IN TANZANIA

A study by Research on Poverty Alleviation (REPOA) (2005) demonstrated that poverty is concentrated in different ways from one city to another. [48] For example, it found that in Mwanza, there is a high urban–rural poverty gap, and low intra-city inequality, while the reverse was true for Mbeya. Overall, urban Bukoba, Arusha and Mbeya had fewer than 15 per cent of households living below the basic needs poverty line, whereas Bunda, rural Musoma and Geita had over 60 per cent of households living below this line. However, rural Musoma and Bunda rank among the top 20 districts for primary education enrolment, with a net rate of 100 per cent.

As mentioned earlier, income indicators do not reflect the multi-dimensions of social life and development; nor are income indicators matched by progress in non-income indicators. REPOA concludes that the government needs to stringently apply the formulae for allocating resources: taking into account district population and density, distance to service, and percentage of poor people. Poverty intervention and tackling inequality requires a focus on the specific rates within districts, and intra-urban/rural spaces: it needs to focus on the specific underlying reasons for inequities. Therefore the policy interventions should be very different for different cities and a one-size-fits-all urban poverty reduction plan will not accurately reflect the intra-city level differences. [18]

DEFINING 'URBAN'

How urban areas are defined is critically important in how we understand urban poverty. Due to different perspectives, a consistent definition of urban is not possible. [49] The World Bank has noted three different perspectives on the term, commonly used in Tanzania:

1) The politico-administrative perspective used by the President's Office, Regional Administration and Local Government (PO-RALG): the urban population consists of people living in areas legally recognised (gazetted) as urban and all areas recognised by Local Government Authorities as urban. [3]

2) The human settlements perspective, used by the Ministry of Lands and Human Settlements Development.

3) The statistical perspective, used by the National Bureau of Statistics (NBS): formal cities and towns characterised by high population densities, high levels of economic activities and high levels of infrastructure. [27] [18]

Commonly, the politico-administrative perspective is used. [3] This does not account for population density which means that heavily populated areas are often counted as 'rural' simply because they are not officially classified as 'urban'. While some have explored the potential of density-based definitions (for example, more than 150 persons per square kilometre), to date this has not been applied in Tanzania. [18, 49] This means that conditions that are typical of urban areas are more widespread across Tanzania than official figures disclose. [14]

One study found a large gap, of 16.7 per cent, between the politico-administrative definition of urban (under which Tanzania is 16.8 per cent urbanised) and the density-based perspective (33.5 per cent). [18] This has major implications for how poverty is understood in the urban setting. For example, when looking at access to basic services, the density-based perspective suggests a much lower access rate than the politico-administrative urban perspective. [18] Urbanisation therefore appears to be happening off the radar of government agencies, particularly in the case of informal settlements, where the urban poor are likely to reside. This needs to be considered when looking at resource distribution to local authorities.

THE CHARACTERISTICS OF DAR ES SALAAM

Another key methodological concern is that city-level information in Tanzania often comes from Dar es Salaam. Dar is unique in many ways, as we will discuss. This means that our understanding of cities, and Tanzania generally, is skewed by this city. Any policy or programme that uses data skewed by Dar may not be appropriate elsewhere. Creating city-level data to allow the direct comparisons between cities would enable us to understand the inter-city-level differences.

Below, we summarise the key ways in which Dar es Salaam is unique; these are elaborated upon throughout the report. Compared with other parts of Tanzania, these properties include the greater

concentration of wealth in Dar es Salaam (but also greater inequality), the larger and faster growing population, a greater proportion of young people, higher levels of unemployment, a unique governance structure, and better access to a number of services.

GREATER WEALTH CONCENTRATIONS

There is an overwhelming concentration of wealth in urban areas, and in Dar es Salaam in particular, as was discussed [earlier in this section](#). For instance, the HBS found that only 4 per cent of the population in the capital live in poverty, significantly fewer than in other urban areas at 22 per cent. [32] Even considering the methodological issues of how ‘urban’ and ‘poverty’ are defined, evidence indicates that Dar es Salaam has a greater concentration of wealth than other cities. This wealth creates a number of opportunities for development in Dar, if it is harnessed in a way that promotes human development.

GREATER INEQUALITY IN WEALTH

As discussed [above](#), the HBS demonstrated that inequality in wealth is generally greater in cities than in rural areas, and there is even greater inequality in Dar es Salaam than in other urban areas. [32] This means that while Dar es Salaam has more wealth, it still has large amounts of people living in poverty, who need to be supported.

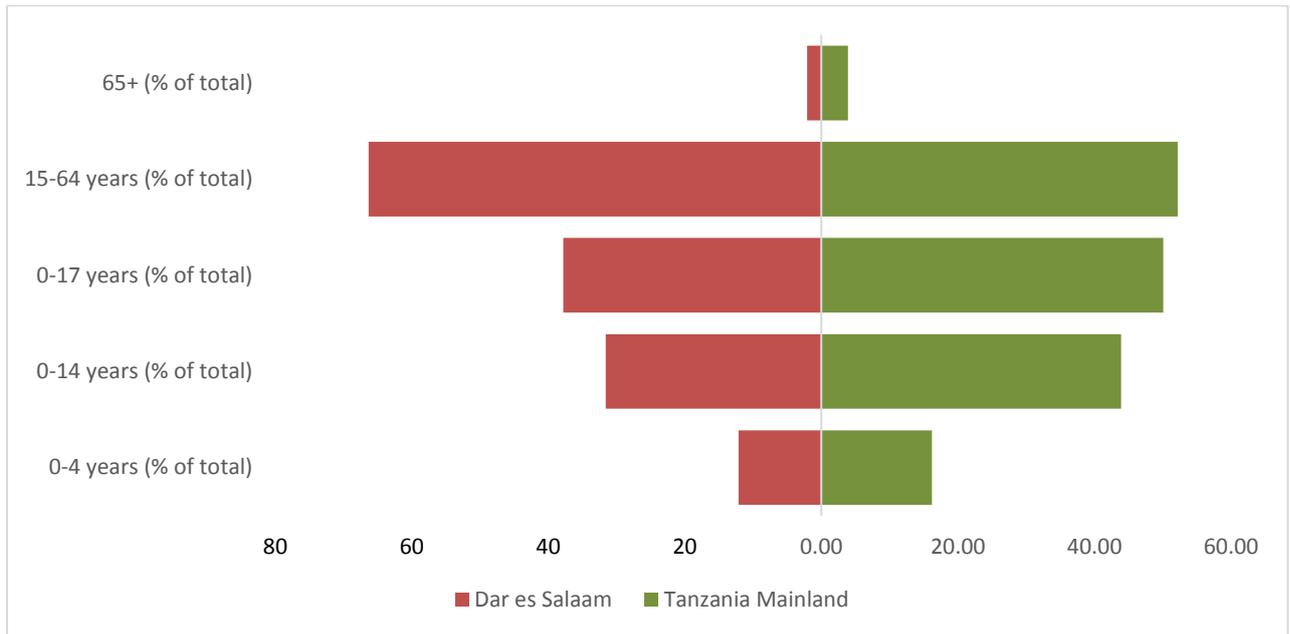
LARGE, FAST-GROWING POPULATION, ON THE WAY TO MEGACITY STATUS

The 2012 census recorded Dar es Salaam’s population as being 4.4 million – 10 per cent of the total Tanzanian mainland’s population and much greater than that of the next largest region, Mwanza, which is home to 2.8 million people. [3] Population growth in Dar es Salaam stands at 7 per cent per year, compared with a national growth of only 3 per cent. Dar es Salaam has been described as the fastest growing urban area in Sub-Saharan Africa, on track to become a ‘megacity’ home to more than 10 million residents by 2025. [16, 17] The rapidly increasing urban population is placing mounting pressure on national and local government to supply food, jobs, housing, sanitation, transport facilities, education, health care and services, including controlling pollution and crime. It is essential to understand the needs of this growing population.

MORE YOUNG WORKING-AGE ADULTS

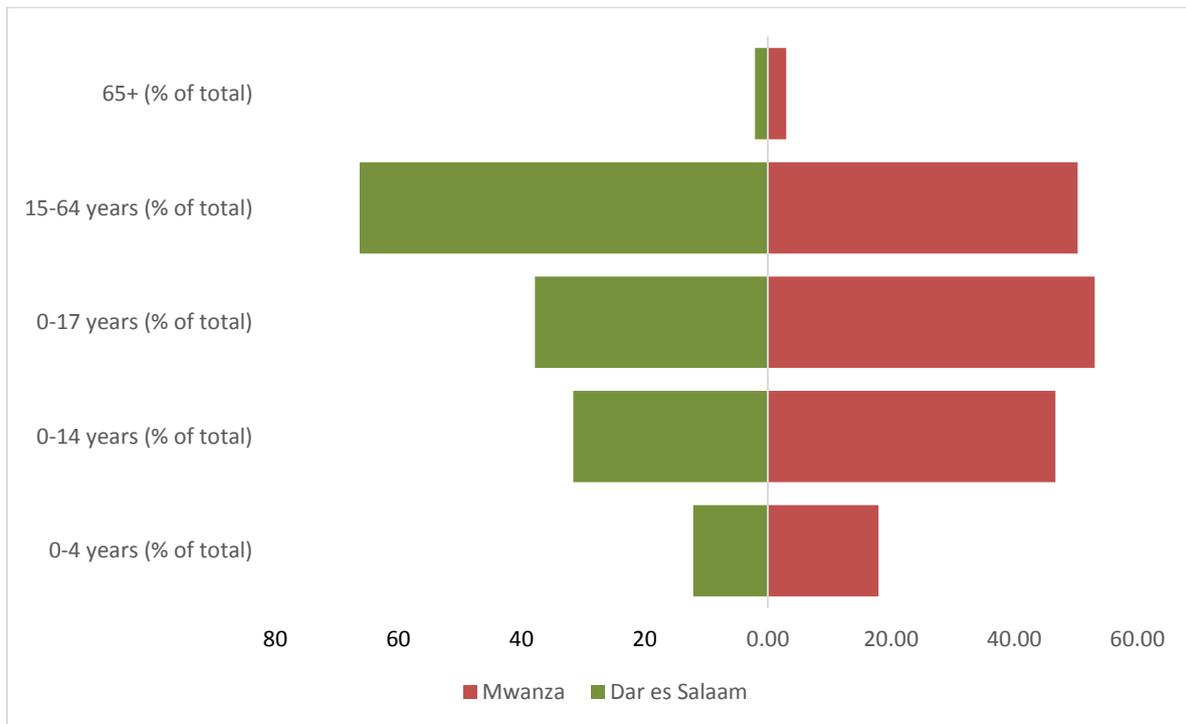
The age distribution of Dar es Salaam’s population is also unique in Tanzania. Sixty-six per cent of the city’s population is aged between 15 and 64, the highest proportion by far for any region and far above the average for Tanzania, which is 52 per cent in this age range. Consequently, Dar has the smallest proportion of the population between 0 and 14 (31 per cent), compared with the 44 per cent Tanzania mainland average (see Figure 4), and compared with other cities, such as the next biggest city, Mwanza, where 50.3 per cent of people are aged between 15 and 64 (see Figure 5).

FIGURE 5: POPULATION PYRAMID COMPARING AGE DISTRIBUTION IN DAR ES SALAAM WITH THE TANZANIA MAINLAND AVERAGE



Source: National Census 2012 [3]

FIGURE 5: POPULATION PYRAMID COMPARING AGE DISTRIBUTION IN DAR ES SALAAM WITH MWANZA REGION

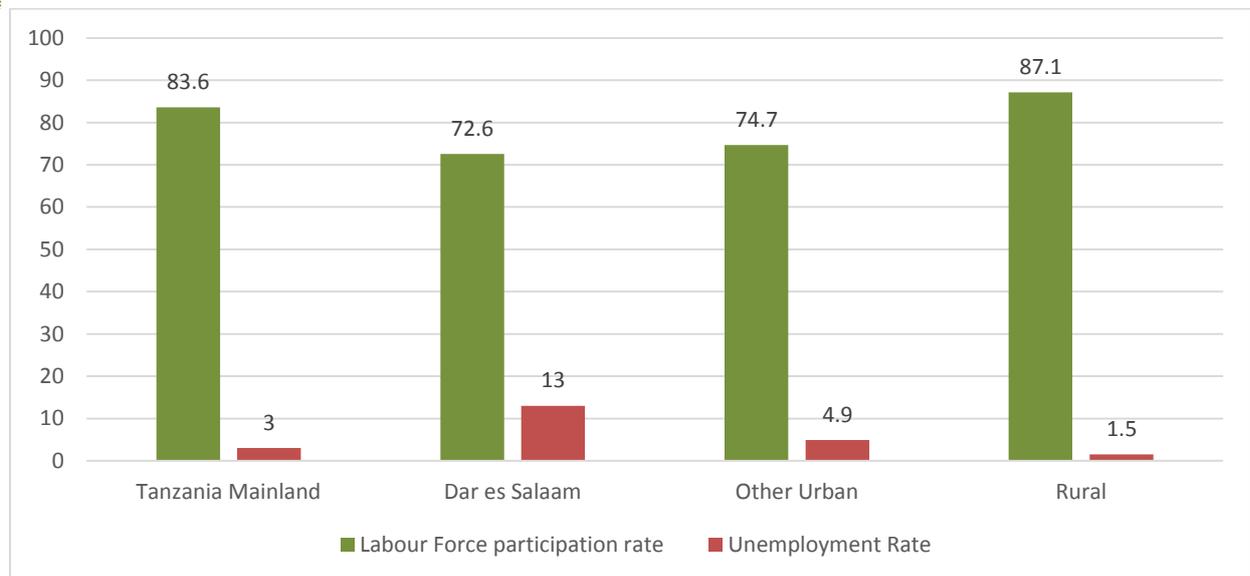


Source: National Census 2012 [3]

LOWER LEVELS OF EMPLOYMENT

Data from the DHS shows, surprisingly, that urban areas, particularly Dar es Salaam, have lower employment levels and higher levels of unemployment than rural areas (see Figure 6). This is due to a number of reasons, which are discussed in section [3.1 on Employment](#). A key driver is the number of working age adults in Dar es Salaam. With an estimated 800,000 working-age Tanzanians entering the job market annually, this growth in labour supply is increasing at a much faster rate than the number of jobs; the figure is proportionally higher still in Dar es Salaam.

FIGURE 6: LABOUR FORCE PARTICIPATION AND UNEMPLOYMENT RATES IN TANZANIA



Source: demographic and health survey [34]

HIGHER LEVELS OF INFORMAL EMPLOYMENT

Dar es Salaam also has higher levels of informal employment than other urban areas, and this is increasing faster in Dar than elsewhere. Between 2006 and 2014 the proportion of households with at least one member engaged in informal business increased from 57 to 64 per cent in Dar, compared with an increase from 54 to 57 per cent in urban areas generally and decreased slightly from 33 to 32 per cent in rural areas. [50] Informal employment is associated with lower wages, is more precarious and provides much less access to social protection and healthcare than the formal sector. [42] However, it has also been highlighted as a key way to develop the economy and wealth of poor people in low-income countries, particularly in urban areas. The Commission for Legal Empowerment of the Poor (CLEP) emphasised the right of those in the informal economy to trade and to do business effectively, including, for example, rights to viable space and relevant services. [51] This large and growing workforce in urban areas, but particularly in Dar es Salaam, requires protection and support.

UNIQUE LOCAL GOVERNANCE STRUCTURE

Dar es Salaam’s governance structure is unique in that it consists of one city council and three municipal councils (Ilala, Temeke and Kinondoni). The city council acts as a coordinator between the three municipalities, which have full policy and legislative implementation authority. [52] The city council is seen to be poorly coordinated and lacks resources. [53] A mayor and city director governs the Dar es Salaam city council. The director is responsible for waste management and sanitation, engineering and fire services, urban planning, transportation, environment, health, and finance and administration. The municipalities each have their own council and are headed by their own mayor and executive director (appointed by PO-RALG). [54]

BETTER ACCESS TO BASIC SERVICES, BUT GREATER NEED FOR HIGH-FUNCTIONING SERVICES

Dar es Salaam has better access than the rest of the country to basic services such as drinking water and sanitation, as shown in Figures 7 and 8 below. However, highly populated urban areas have a greater need for functioning systems, and rapid urbanisation puts increased pressure on these systems. This can be illustrated by looking at access to sanitation in Tanzania. As highlighted in [section 3.3](#), current definitions of ‘access’ do not account for the safety and sustainability of sanitation facilities, which require safe locations and the emptying, removal, treatment and disposal or reuse of waste. [55] These are larger issues in built-up urban areas where both crime and use are much higher.

FIGURE 7: POPULATION WITH ACCESS TO SAFE DRINKING WATER IN DIFFERENT AREAS AND SEASONS, 2008–13 (%)

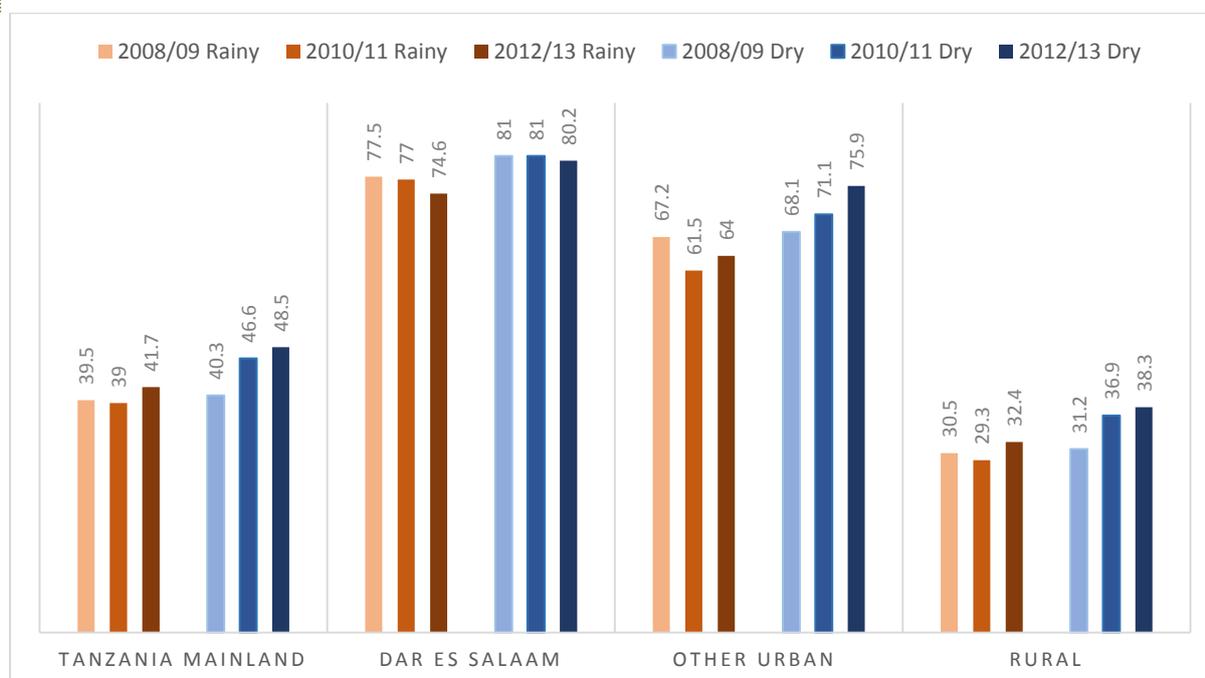
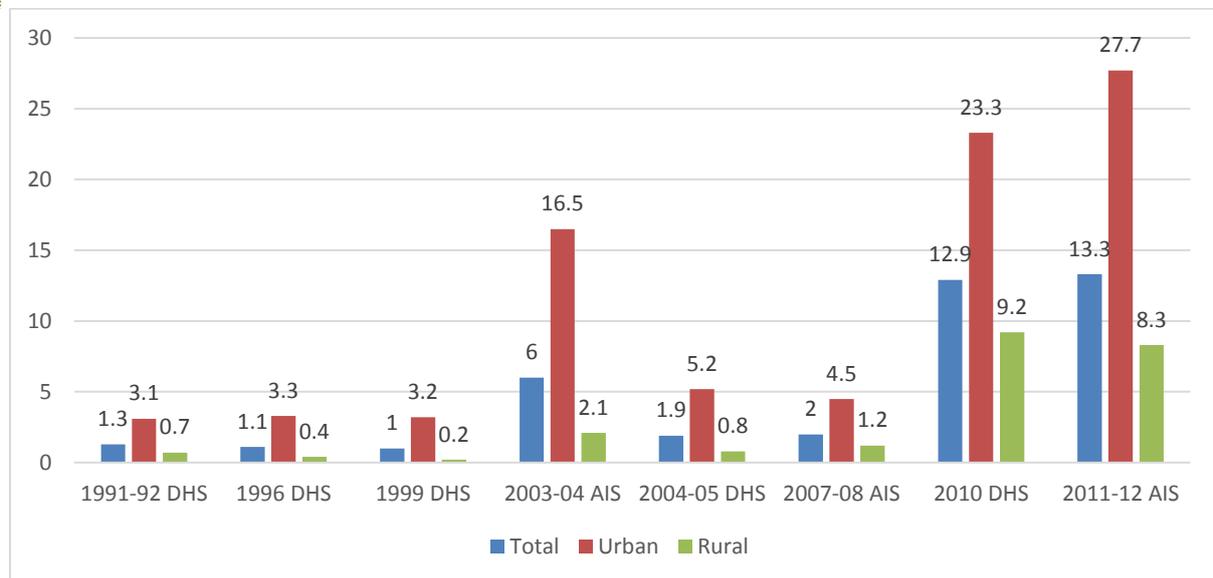


FIGURE 8: PERCENTAGE OF HOUSEHOLDS WITH IMPROVED, NON-SHARED TOILET FACILITIES



Source: Demographic Health Survey and, AIDS Indicator Survey various years [56]

THE IMPORTANCE OF ADDRESSING METHODOLOGICAL ISSUES

The issues described above suggest that the urban poor are not accurately counted and that poverty in urban areas is not fully understood. This has major implications for future policy and programme development, and suggests that this population’s needs are not being met. There is a need to more fully understand at the requirements of the urban poor and to create city-specific tools for urban areas to monitor and evaluate their unique requirements. Increased urbanisation will create more pressure on over-worked systems and will negatively impact on people’s health. Action on these issues is urgently needed in Tanzania.

SECTION 3: THE IMPACTS OF URBANISATION ON HEALTH

Considering the methodological issues – such as how to define urban and rural – highlighted in section 1, reported differences in health between urban and rural areas should be interpreted with caution. That said, it is important to look at what the available data reveals about how health outcomes are distributed by area of residence (rural versus urban) in Tanzania. This section highlights a rural advantage in overall life expectancy and mortality, despite rural areas having poorer preventative measures and access to health facilities. In the following section, we first compare specific health outcomes between rural and urban areas; then we discuss urban-specific health concerns in more detail, and possible reasons for the urban disadvantage.

COMPARISON OF RURAL VERSUS URBAN HEALTH OUTCOMES

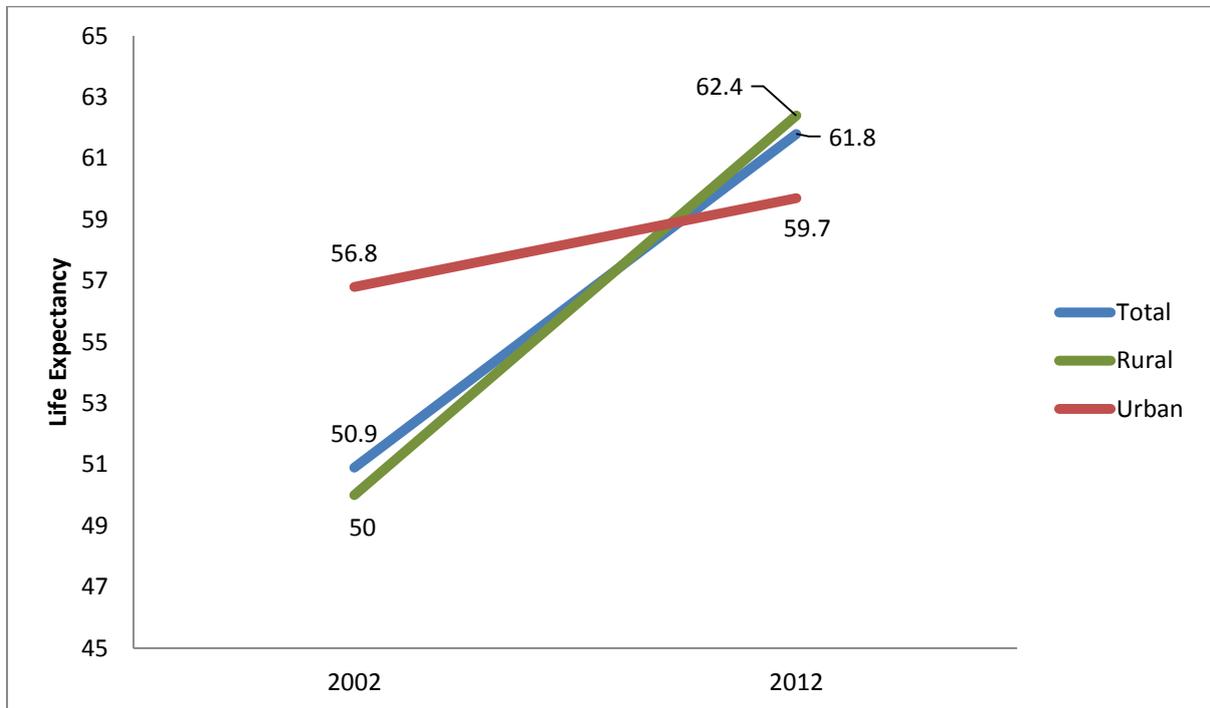
LIFE EXPECTANCY AND MORTALITY RATES

In Tanzania, life expectancy at birth has been increasing steadily for everyone over time. Yet increases in life expectancy in urban areas have not kept pace with increases in rural areas. Data from the Tanzanian national census from 2002 and 2012 demonstrate that in 2002 average population life expectancy was 50.9 years and was higher in urban areas⁵ (56.8 years compared with 50.9 years). However, by 2012 life expectancy in rural areas exceeded that of urban areas (62.4 years compared with 59.7 years), for both men (60.3 years compared with 57.7 years) and women (64.4 years compared with 61.7 years). Rural areas thus made a substantial 12.9-year increase in life expectancy over ten years, while the urban population's gain was far more modest at 2.9 years.

When comparing mortality rates for different age groups and areas of residence, for both men and women, we can see that the rural advantage is most pronounced for under-5s, particularly males (showing a 6.6-year gap for males and a 3.9-year gap for females), and then persists, until being reversed for people aged over 65. Higher mortality rates for male children compared with female are found in all Sub-Saharan African countries except Sierra Leone and Swaziland. [57] The higher mortality rate of children and young people in cities as compared with rural areas could contribute to this gap in life expectancy, as this means there are more years lost.

⁵Consisting of people living in areas legally recognised (gazetted) as urban.

FIGURE 9: CHANGE IN LIFE EXPECTANCY IN RURAL AND URBAN AREAS BETWEEN 2002 AND 2012



Source: National census 2002 and 2012 [3] [58]

When comparing mortality rates for different age groups and areas of residence, for both men and women, we can see that the rural advantage is most pronounced for under-5s, particularly males (showing a 6.6-year gap for males and a 3.9-year gap for females), and then persists, until being reversed for people aged over 65. Higher mortality rates for male children compared with female are found in all Sub-Saharan African countries except Sierra Leone and Swaziland. [57] The higher mortality rate of children and young people in cities as compared with rural areas could contribute to this gap in life expectancy, as this means there are more years lost.

FIGURE 10: COMPARISON OF RURAL AND URBAN MALE MORTALITY RATE BY AGE, 2012

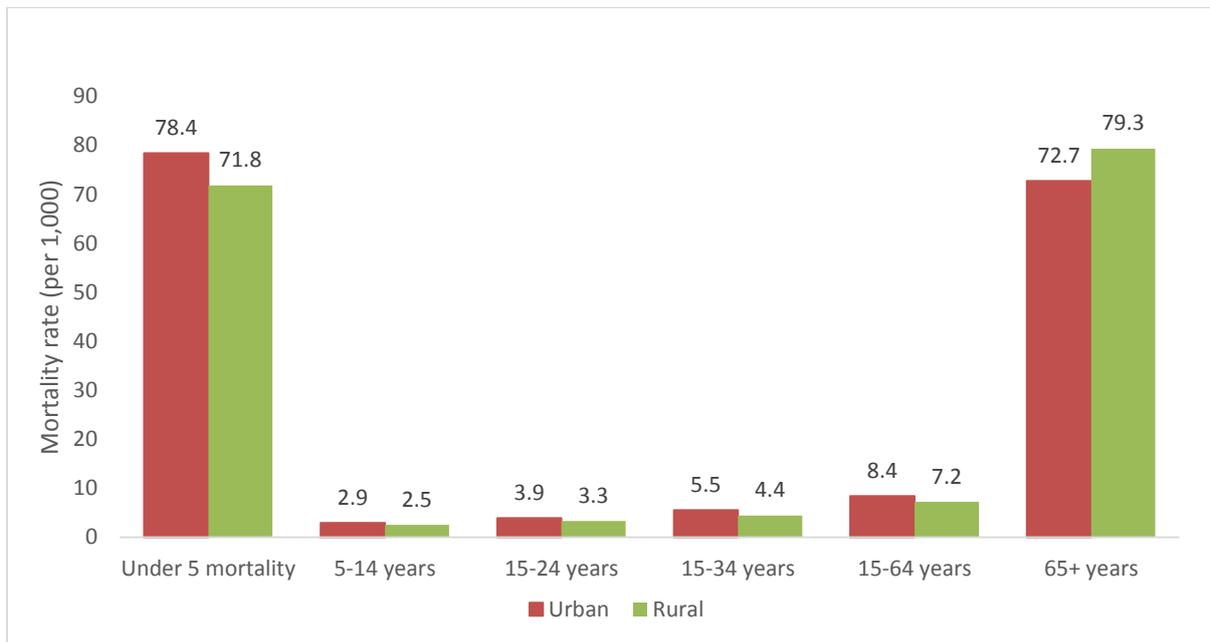
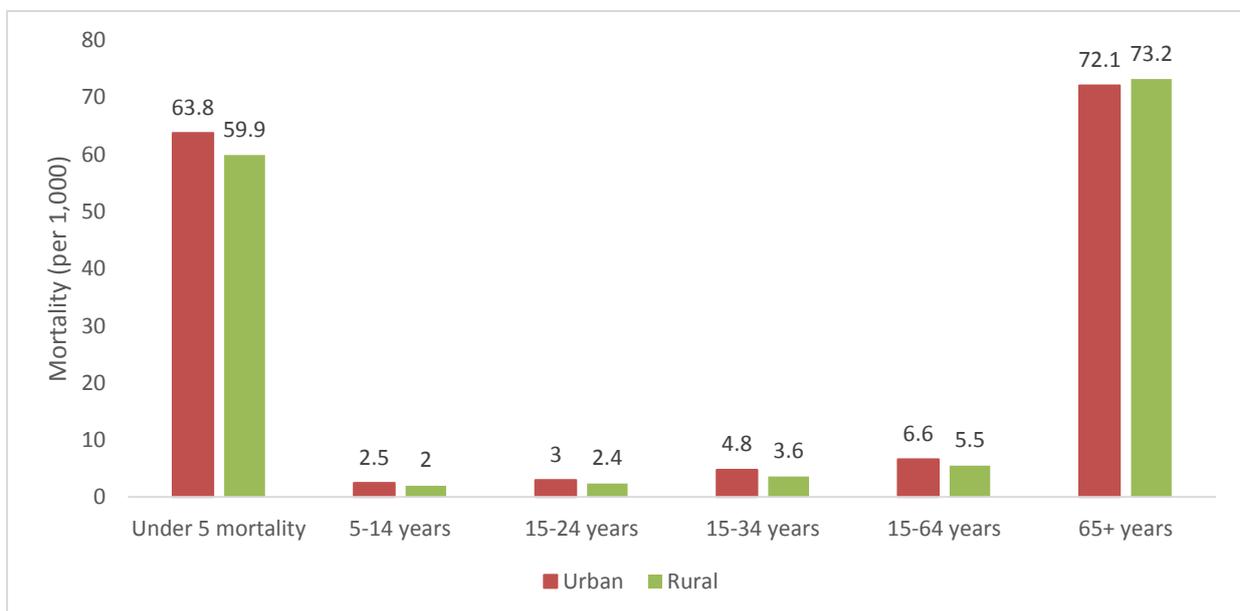


FIGURE 11: COMPARISON OF RURAL AND URBAN FEMALE MORTALITY RATE BY AGE, 2012

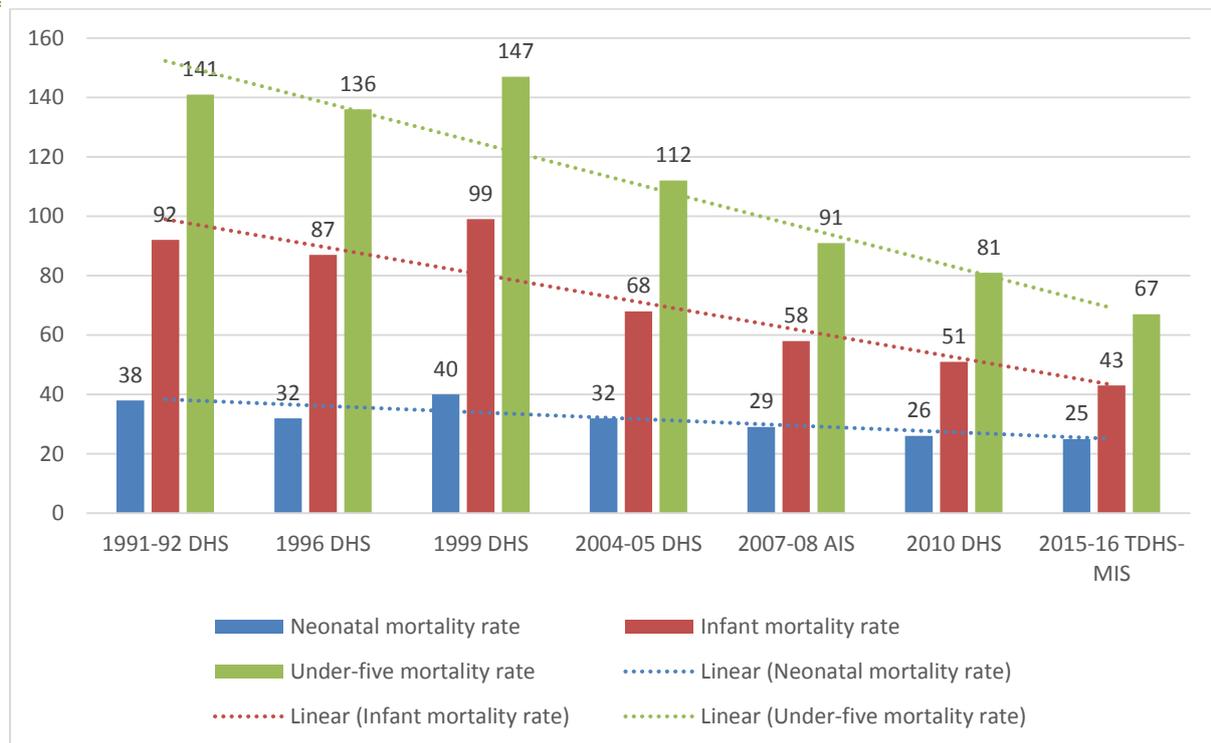


Source: National Bureau of Statistics [59]

TRENDS IN CHILD MORTALITY RATES

Child mortality rates have been decreasing in Tanzania, particularly under-5 mortality, which decreased from 141 per 1,000 live births in 1991–92 to 81 per 1,000 live births in 2010 (Figure 12). Infant mortality (before the first birthday) and neonatal mortality (before the first month) rates have also decreased but at a slower rate.

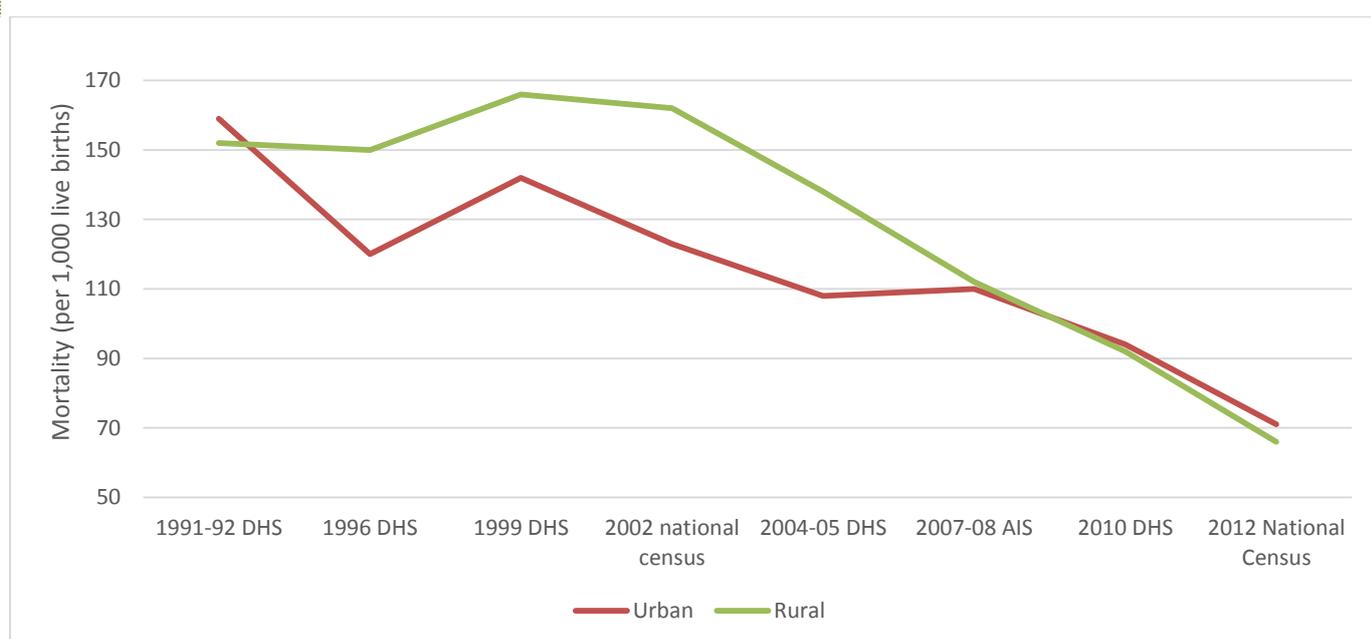
FIGURE 12: NEONATAL, INFANT AND UNDER-5 MORTALITY RATES, 1991–2016



Source: Demographic and Health Survey; AIDS Indicators Survey (AIS) and Tanzania HIV/AIDS and Malaria Indicator Survey (THMIS) various years [60]

While neonatal and infant mortality rates are not available by area of residence in Tanzania, under-5 mortality rate data is available. Comparing under-5 mortality over time by area of residence demonstrates a general decrease for all groups and shows how rural areas have closed the gap with, and indeed begun to outperform, urban areas in the most recent surveys (DHS 2010 and the 2012 national census), as Figure 13 demonstrates.

FIGURE 13: COMPARISON OF RURAL AND URBAN UNDER-5 MORTALITY RATES, 1991–2012

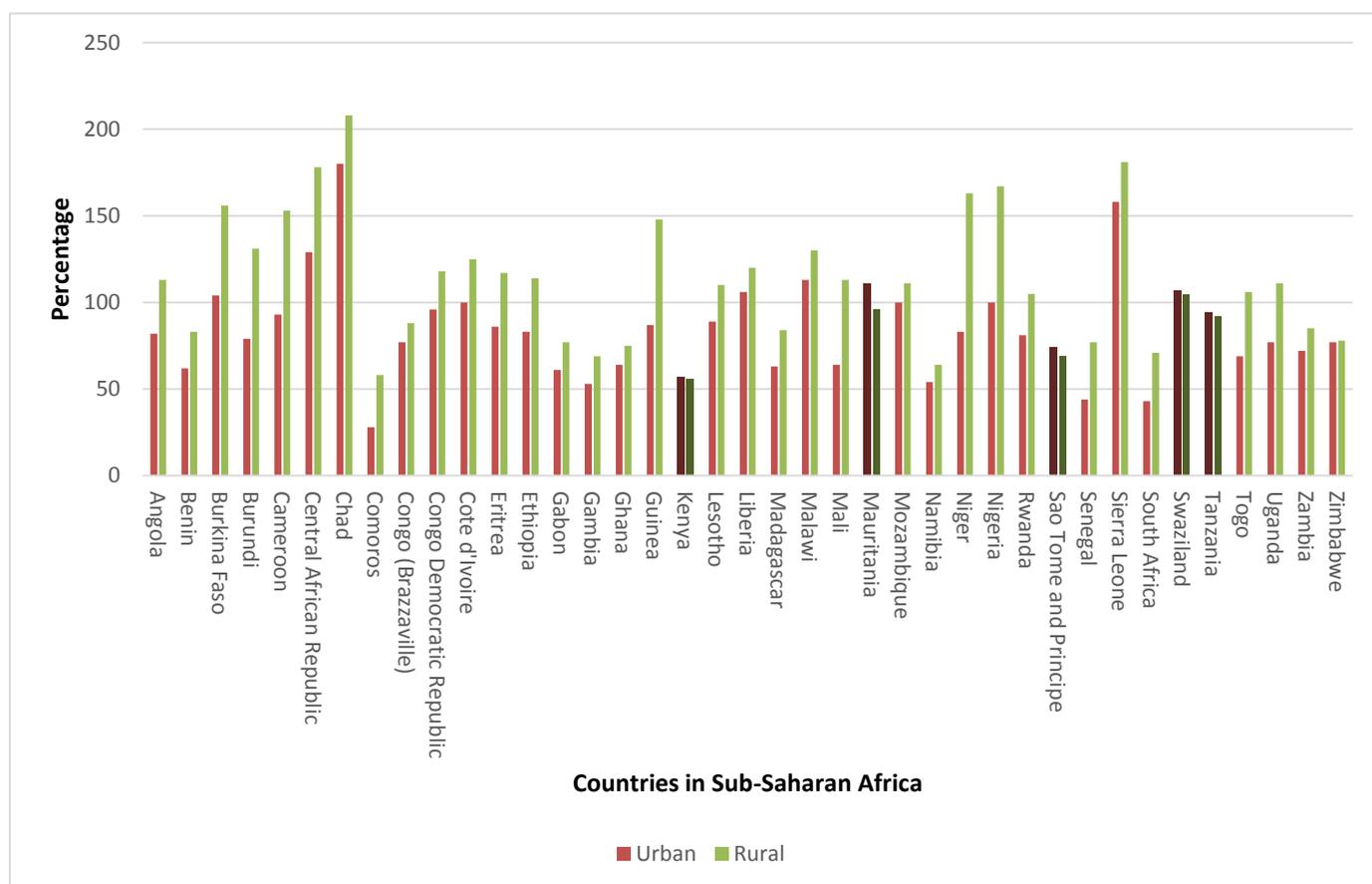


Source: Demographic and Health Survey; AIDS Indicators Survey (AIS) and National Census, various years [60]

HEALTH INEQUITIES BETWEEN RURAL AND URBAN AREAS INTERNATIONALLY

The rural advantage in under five mortality rates observed in Tanzania is relatively uncommon elsewhere in Sub-Saharan Africa. While data on life expectancy by rural versus urban residence in Sub-Saharan Africa is not available, data for under-5 mortality rates does exist and it shows that an urban advantage is the norm, with the gap between rural and urban areas being very high in many places (see Figure 14). However, this gap has been decreasing over the last ten years, and some places have seen a reversal with rural areas now seeing the advantage, including Tanzania (94 deaths per 1,000 live births in urban areas against 92 in rural areas in 2010). [60] Other countries showing this trend include Mauritania (111 urban and 96 rural, 2000–01), São Tomé and Príncipe (74 urban and 69 rural, 2008–09), Swaziland (105 urban and 105 rural, 2006–07) and Kenya (57 urban and 56 rural, 2014). [60] There is nothing immediately obvious to connect these countries; further work is needed to clarify what is causing this trend.

FIGURE 14: COMPARISON OF RURAL AND URBAN UNDER-5 MORTALITY RATES ACROSS SUB-SAHARAN AFRICA, VARIOUS YEARS⁶



Source: Demographic and Health Survey [60]

If the gains in health outcomes in Tanzania are to be maintained, population health in the urban environment must be reviewed. The social determinants of health approach can be used to understand this process. However, there is a need to look at the methodology that is applied to understanding urban and rural differences in Tanzania, as well as looking at the causes of mortality for different groups.

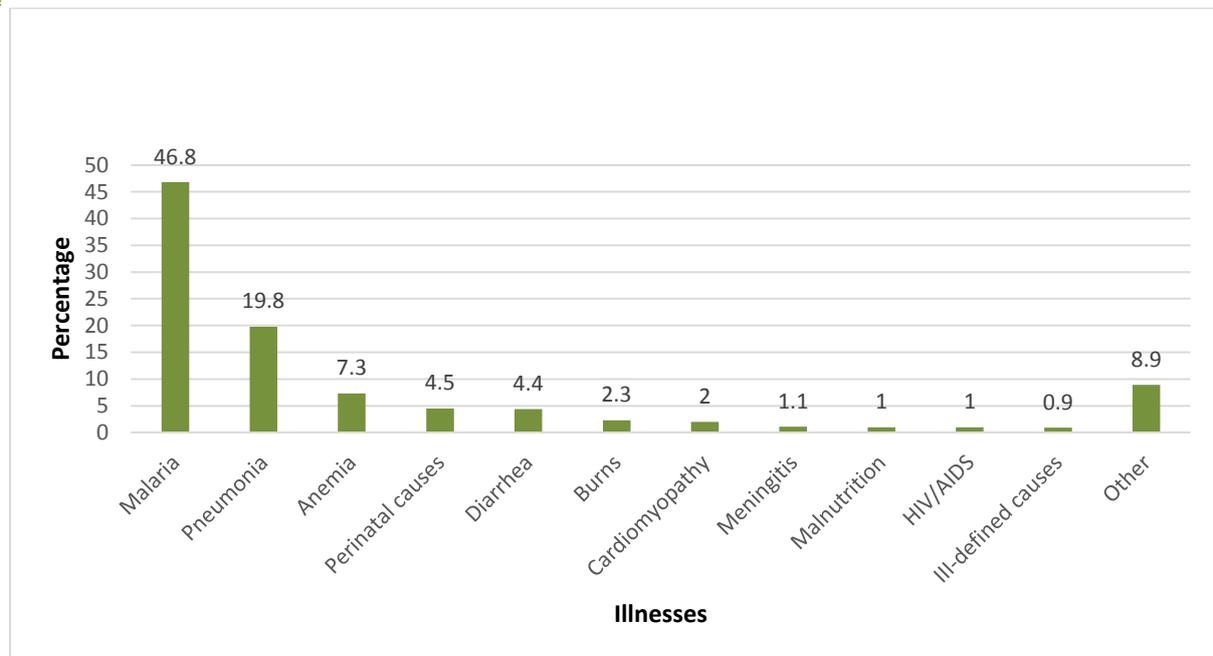
CAUSES OF MORTALITY IN PRENATAL AND EARLY YEARS OF LIFE

As discussed in [section 3.3 on civil registration](#), accurate information on the causes of morbidity and mortality is difficult to acquire in Tanzania due to a lack of birth and death registration, and a

⁶Data from the most recent surveys from Demographic and Health Surveys for Sub-Saharan countries have been used where a breakdown by area of residence was possible. Figures represent the probability of dying before the fifth birthday (in the ten years preceding the survey [five years for Total]) per 1,000 live births.

number of health conditions which remain untreated. Figure 15 demonstrates that the leading causes of mortality for children aged under 5 are malaria, pneumonia, anaemia, perinatal causes and diarrhoea. We have not been able to find data broken down by area of residence however, which would help to make sense of the difference in rates described above. More work is needed to understand causes of death in different settings in Tanzania.

FIGURE 15: CAUSES OF UNDER-5 MORTALITY IN HEALTH FACILITIES, 2014 (%)



Source: Ifakara Health Institute [61]

CAUSES OF MORTALITY AND MORBIDITY IN LATER YEARS

The Global Burden of Diseases, Injuries, and Risk Factors Study (GBD), an internationally comprehensive effort to measure epidemiological levels and trends, provides some details of the leading causes of mortality in Tanzania. [62] It is important to note that the health data used to compose these figures include many gaps, particularly relating to low income countries with weaker civic registration, including Tanzania, so complex estimation techniques are needed to create overall pictures. [63] These estimates could be flawed so accurate measurement of the causes of morbidity and mortality in Tanzania are still needed. However, data and estimates arising from the GBD are useful for considering causes of death and morbidity in the country.

As the figures below demonstrate, HIV/AIDS has become the leading cause of premature death in Tanzania, increasing by 128 per cent between 1990 and 2013 while all other causes have demonstrated a decrease. However, it is important to note that overall the HIV/AIDS prevalence rate is lower in Tanzania than in other countries in East Africa. Of the top ten causes of premature death in Tanzania, malaria is the only condition that is more common in Tanzania than in the rest of the region. It is also clear that communicable, maternal, neonatal and nutritional diseases are among the

leading causes of premature death, although non-communicable diseases such as depressive disorders and low back and neck pain are the leading conditions for 'years lived in less than ideal health' (YLDs). While mental health disorders are not known by residence, international evidence suggests that urbanisation and urban poverty increase the risk of mental illness. [64] Research on the effect of urbanisation on mental health is needed in Tanzania.

FIGURE 16: LEADING CAUSES OF YEARS OF LIFE LOST TO PREMATURE DEATH, TANZANIA, 1990 AND 2013

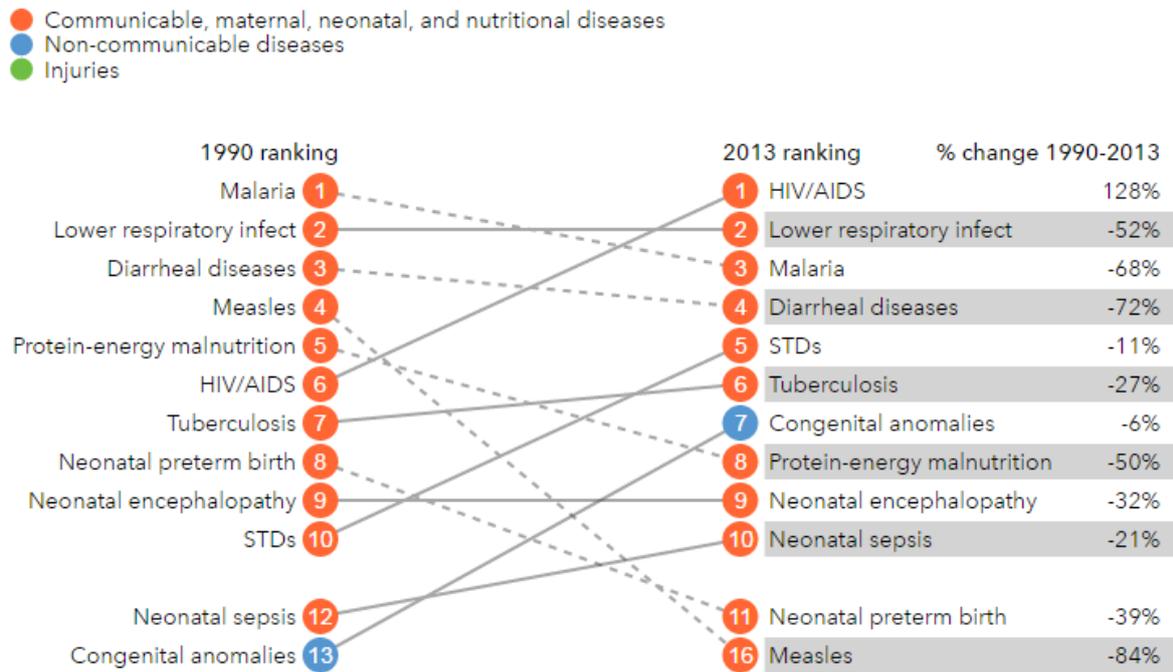
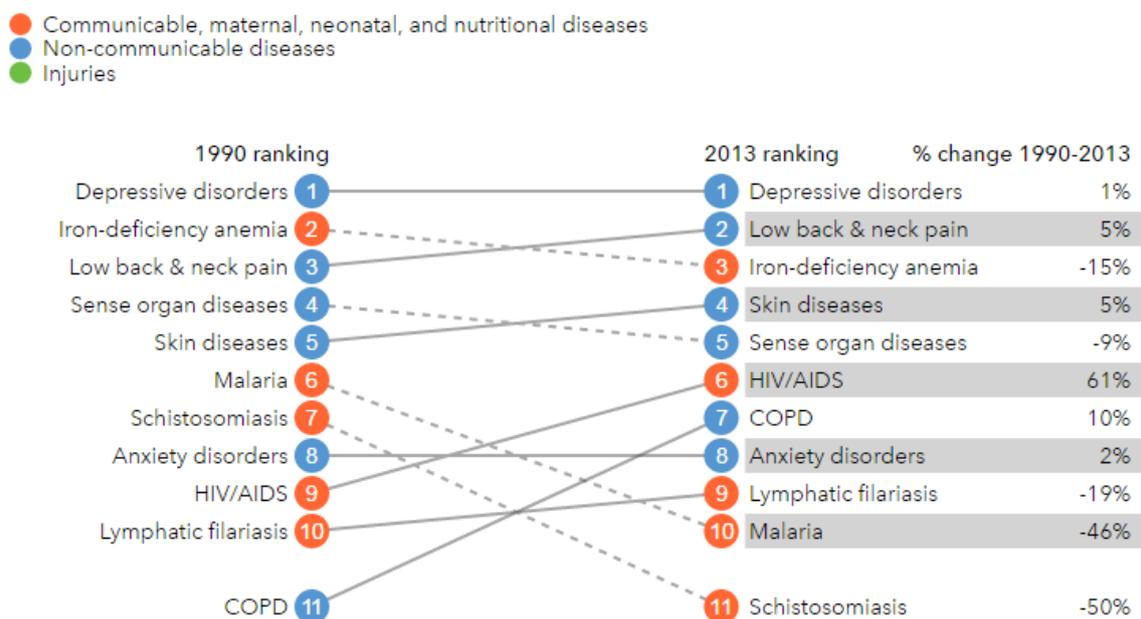


FIGURE 17: LEADING CAUSES OF YEARS LIVED IN LESS THAN IDEAL HEALTH, TANZANIA, 1990 AND 2013



YLDs are years lived in less than ideal health. This includes conditions that may last for only a few days, as well as conditions that can last a lifetime.

Source: Global Burden of Disease [62]

DIFFERENCES IN HEALTH OUTCOMES AND INTERVENTIONS BETWEEN RURAL AND URBAN AREAS

Urban and rural differences in a number of health outcomes and interventions can be disaggregated, using nationally representative surveys. Table 4 demonstrates a clear urban advantage when looking at prevention measures and access. However, for health outcomes a rural advantage is seen for the majority of indicators available (see Table 5). Nationally representative data on a number of health outcomes that are likely to affect urban populations to a greater extent – non-communicable diseases, air pollution, cholera, road traffic accidents – are not available.

TABLE 4: SUMMARY OF KEY PREVENTATIVE INTERVENTIONS BY AREA OF RESIDENCE

Outcome	Definition	Urban (%) [1]	Rural (%) [1]	Advantage	Source [2]	Year
Women's health and risk factors						
Nutritional status in women of reproductive age	Body Mass Index (BMI)					
Thin	< 18.5	8	13	Urban	AIS [3]	2011-12
Normal	18.5-24.9	56	72	Rural	AIS	2011-12
Overweight or obese	> 25	36	15	Rural	AIS	2011-12
Anaemia in women of reproductive age	Haemoglobin (g/dl)					
Mild	10.0-11.9	32	33	No/small difference	AIS	2015-16
Moderate	7.0-9.9	11	11		AIS	2015-16
Severe	<7	1	1		AIS	2015-16
Any anaemia	<12	45	45		AIS	2015-16
Vitamin A consumption	% of children age 6–59 months who received vitamin A supplements in the 6 months preceding the survey	62	62	No/small difference	DHS	2010
Begin childbearing in teenage years		19	32	Urban	AIS	2015-16
Maternal mortality ratio	Annual no. of female deaths per 100,000 live births (not %)	432	336	Rural	National census	2012

Children's health and risk factors

Birth weight						
Low birth weight	< 2.5kg	9.1	5.8	Rural	AIS	2011-12
Birth weight very small		3.7	1.3		AIS	2011-12
Birth weight smaller than average		7.7	6.2		AIS	2011-12
Nutritional status of children < 5 years						
Stunting	< -2 SD (height-for-age)	25	38	Urban	AIS	2015-16
Wasting	< -2 SD (weight-for-height)	4	5	No/small difference	AIS	2015-16
Overweight	< +2 SD (weight-for-height)	4	4	No/small difference	AIS	2015-16
Infectious diseases						
Prevalence of diarrhoea in children	% of children under 5 with diarrhoea in the past 2 weeks	18	15	Rural	AIS	2011-12
Malaria prevalence in children	% of children age 6–59 months tested using a rapid diagnostic test (RDT) who are positive for malaria	3.3	10	Urban	AIS	2011-12
Under 5-mortality per 1,000 live births		71.2	65.9	Rural	National Census	2012

General health trends

Life expectancy at birth (years)		60	62	Rural	National Census	2012
Men who smoke cigarettes		19.2	19	No/small difference	DHS	2010
HIV prevalence		7.2	4.3	Rural	THMIS	2012

Key: Green = urban areas doing better than rural; amber = neutral; red for rural areas doing better than urban.

Notes:

- 1. Figures represent percentage except where stated for maternal mortality, under-5 mortality and life expectancy.**
 - 2. Sources are nationally representative surveys. However, these results need to be interpreted with caution, due to methodological issues discussed earlier.**
 - 3. At the time of writing (August 2016), AIDS Indicators Survey (AIS) datasets were still being released and not all data was available; AIS 2011–12 has been used when more up-to-date data was not available.**
 - 4. SD = Standard deviation**
-

The effect of these key health outcomes will be discussed before looking at health outcomes that are likely to be more pronounced in the urban environment.

MALARIA

Malaria is a leading cause of morbidity for all ages and of mortality among children younger than five years. Pregnancy causes a reduction in natural immunity against malaria and puts pregnant women at increased risk of contracting the disease. Malaria is also a risk factor for adverse pregnancy outcomes and neonatal mortality. Evidence suggests that malaria is much more common in rural areas than in urban, as Table 4 demonstrated.

Possession of insecticide treated nets (ITN) is considered the most effective prevention strategy for transmission of malaria in Tanzania. The distribution of ITN has been a key government and donor strategy in the bid to reduce malaria, with national programmes distributing ITN to rural and urban groups. The results show a large proportion of households in both urban and rural areas have possession of at least one ITN (urban 87 per cent versus rural 93 per cent). On the other hand, net use per person is low. The coverage of at least one ITN for every two persons within a single household is low in both urban settings (63 per cent) and rural (54 per cent). One ITN for every two people in a household was the national guideline recommendation.

Among both children under 5 (77.8 urban; 77.1 rural) and pregnant women (79.7 urban and 78.7 rural), the percentage that slept under an ITN the night before the survey was conducted or in a dwelling sprayed with IRS (indoor residual spraying) in the past 12 months was similar for both urban and rural areas. On average, 63 per cent of women took an antimalarial drug during their last recorded pregnancy (78 per cent urban and 60 per cent rural). Access to the treatment and prevention drug Sulphadoxine-Pyrimethamine (SP)/Fansidar through antenatal care (ANC) visits was reported to be slightly higher in urban areas (39 per cent) than in rural (27 per cent).[35]

However, urbanisation could increase the risk of malaria in cities, due to the built environment of cities, and weak systems. For example, in Dar es Salaam, a survey found that 70 per cent of the breeding grounds for malaria and/or filariasis-carrying mosquitoes were man made: drains, holes, house foundations under construction, borrow pits (used on construction) and pit latrines. Drains are more likely to be a breeding ground for mosquito larvae when they contain stagnant water, as opposed to functioning drains with flowing water. [65, 66] This suggests that in urban areas environmental management for control of vectors including mosquitoes may be an appropriate

preventative strategy. A relevant case study is provided in section 4.2, where the built environment is discussed.

DIARRHOEA

Diarrhoea is one of the leading causes of morbidity and mortality among young children in Tanzania. Exposure to diarrhoeal disease-causing agents through poor hygiene practices and detrimental environments normally leads to dehydration which puts the child at risk if appropriate treatment measures are not acquired promptly. Results from the DHS show that prevalence of diarrhoea is higher in urban than in rural areas. However, the prevalence of severe diarrhoea with blood seems to be relatively similar in both urban and rural areas.

Prompt treatment through facility or health care providers is advised, and the standard care recommended and provided is the prescription of oral rehydration salts (ORS) packets with zinc, or treatment with recommended home fluids (RHF). Results of care-seeking behaviour showed that a slightly higher proportion of parents/carers in urban areas (56 per cent) sought care for their children younger than five than those in rural areas (52 per cent). Treatment with recommended home fluids was practised more in urban than rural locations. There was almost no difference in the proportion of children who were not treated at all. Research suggests that generally there is inadequate knowledge on the causes of diarrhoea, such as poor hand washing practices, particularly using a common pot to wash hands. [67] There is a need both to improve access to clean water and sanitation, and to improve knowledge of water, sanitation and hygiene (WASH).

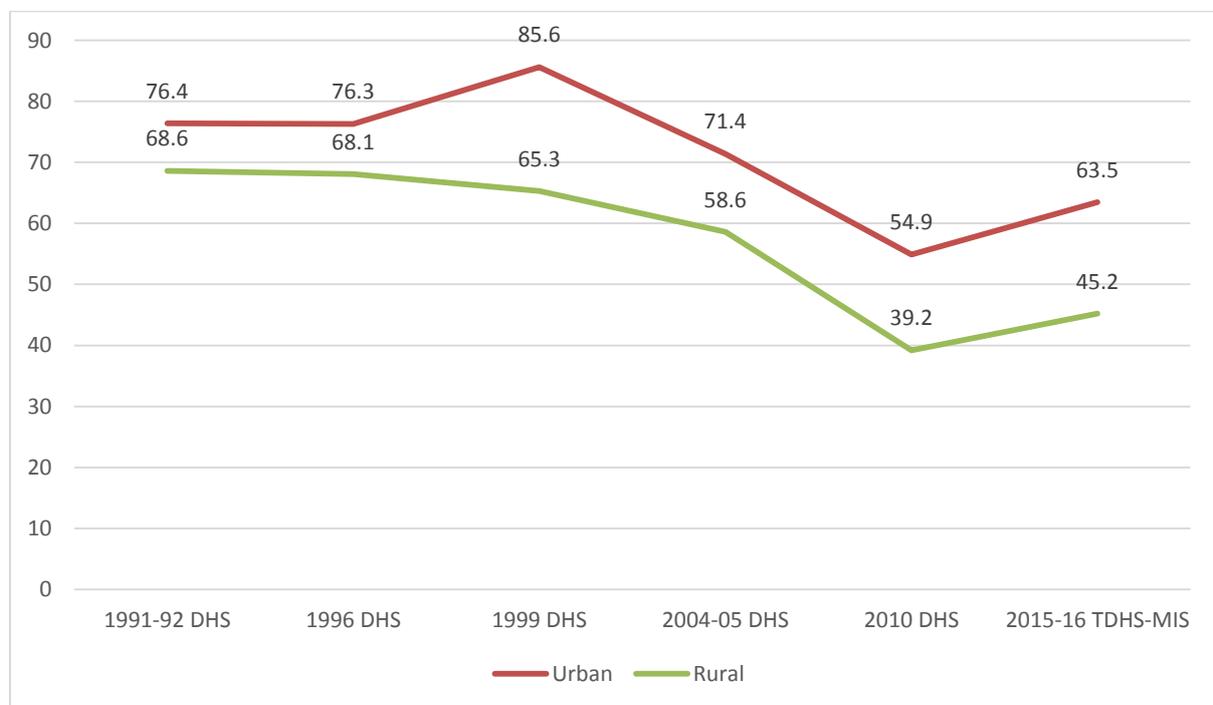
PREGNANCY ANTENATAL CARE SERVICES

Neonatal deaths are linked to the health of the mother during pregnancy and to the conditions of delivery and new-born care. Current recommendations from the WHO suggest that women complete at least four antenatal care (ANC) visits that include specific technical interventions (including anaemia status, position of a child, heartbeat, size of baby and need for caesarean section). [68] More frequent visits are also recommended for women with risk factors or complications. Tanzania adopted this policy in 2002, [69] and has integrated a number of other services into ANC visits, including HIV testing and prevention of mother-to-child transmission (PMTCT) of HIV, [70] and malaria and family planning services. [71] Partner attendance to ANC visits is 'encouraged', but not required, in formal policy. [72] However, the proportion of women completing four visits ('ANC-4') has dropped since 1991 (76 percent urban and 69 per cent rural), although increased slightly in the latest TDHS-MIS report (from 43 per cent in 2010 to 51 per cent in 2015–16), [73] and the rate of initiating at least one visit has remained steady at above 95 per cent. [34]

Both the rate of women making at least four ANC visits and timing these visits within 4 months of pregnancy are higher in urban areas. This is mainly due to higher access and availability of services in urban areas. However, the percentage has been falling for people in both urban and rural areas at a similar rate (see Figure 18). Declines in ANC-4 completion have also been observed in Malawi, Zambia and Zimbabwe. [74] Factors found to negatively impact on completion include women

having a lower education level, never having been married, reporting a long distance to travel to a health facility and delaying ANC initiation past four months of pregnancy. [75] Qualitative analysis with service providers and users in the Morogoro region of Tanzania found a number of additional or increasing barriers for women, including changes in the timing and content of ANC visits, routine HIV testing during ANC (which may reduce completion due to stigma of being diagnosed), a shift towards partner-involvement in ANC visits and HIV testing (which is sometimes enforced in health centres and is difficult for many women to accomplish), and changing norms about birth spacing and family planning (which causes stigma for women who have not spaced pregnancies or used family planning when they attend facilities). [74] The health implication of late ANC initiation and declines in total visits in Tanzania is not yet known.

FIGURE 18: PERCENTAGE OF WOMEN WHO HAD A LIVE BIRTH IN THE FIVE OR THREE YEARS PRECEDING THE SURVEY WHO HAD 4+ ANTENATAL CARE VISITS, 1991–2016



Source: Demographic Health Survey [34]

BIRTH IN HEALTH FACILITY

Proper medical attention and hygienic conditions during delivery are necessary for prevention of infections and reduction of maternal and new-born deaths associated with birth complications. Giving birth in a health facility is therefore an important intervention for reducing mortality and morbidity during childbirth and promoting facility delivery is at the front of the policy agenda

towards reduction of maternal and new-born health. Facility delivery is higher in urban than in rural areas (82 versus 42 per cent), according to DHS conducted in 2011/2012.

Facility delivery is also higher among women in the highest social quintile than in the lowest social quintile (90 per cent versus 33 per cent). Several factors are associated with low coverage of facility delivery including uneven geographical distribution of health care personnel (there are more midwives in urban than rural areas), long distance to health facilities and inadequate skill provision. Facility delivery is an essential intervention indicator of access to reproductive health care, and currently urban residents outperform rural residents in this respect.

MATERNAL MORTALITY

Maternal mortality is an important health outcome indicator in most developing countries. Most maternal deaths occur during pregnancy and the few days following delivery. Major causes of maternal deaths are direct obstetric conditions, where haemorrhage and hypertensive disorders are accounting for more than a third of maternal deaths. The national census of 2012 showed that maternal deaths in urban areas are higher than those reported in rural areas (432 versus 336 deaths per 100,000 live births). Local estimates of maternal mortality estimated that in Ifakara urban and rural areas⁷ show a similar picture despite higher coverage of ANC and facility delivery in urban areas. [61] The reason for this is unclear but quality of services as well as wider social determinants of health could both be contributing to the situation.

NUTRITION AND CHILD GROWTH

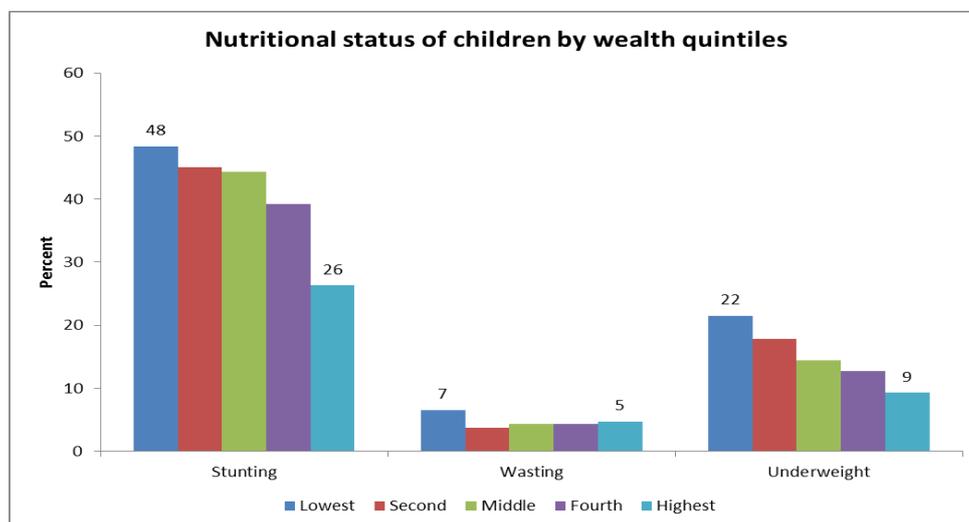
Proper feeding is an important intervention for preventing stagnant growth, mental impairment, morbidities and mortality among children. The anthropometric data on height and weight are collected in all Demographic and Health Surveys to evaluate the nutritional status of young children by age, geographic areas and other socioeconomic factors necessary for appropriate measures and interventions to be developed. The most recent survey showed that a higher proportion – 45 per cent – of children younger than five years of age in rural areas are stunted than in urban areas (35 per cent) and more are underweight (17 per cent versus 11 per cent in urban areas). A higher proportion of stunted and underweight children are concentrated in households in the lowest wealth quintile relative to households with highest wealth quintiles (Figure 19 below). A slightly higher proportion of children younger than five years are overweight or obese in urban areas (5.8 per cent) than in rural areas (4.9 per cent), with little variation according to wealth quintile.

Stunting is an inter-generational proxy indicator of failure to fulfil the nutritional needs of children over a long period of time and of the presence of recurrent and chronic illness. Wasting is an

⁷ HDSS sites-Health and Demographic Surveillance sites located in Ifakara rural (villages in Kilombero and Ulanga districts in Tanzania) and Ifakara Urban (Ifakara town, Kilombero district).

indicator of inadequate nutrition in the time period preceding the survey and may be associated with inadequate food intake or episodes of illness leading to weight loss.

FIGURE 19: NUTRITIONAL STATUS OF CHILDREN UNDER AGE FIVE BY WEALTH QUINTILE, 2010



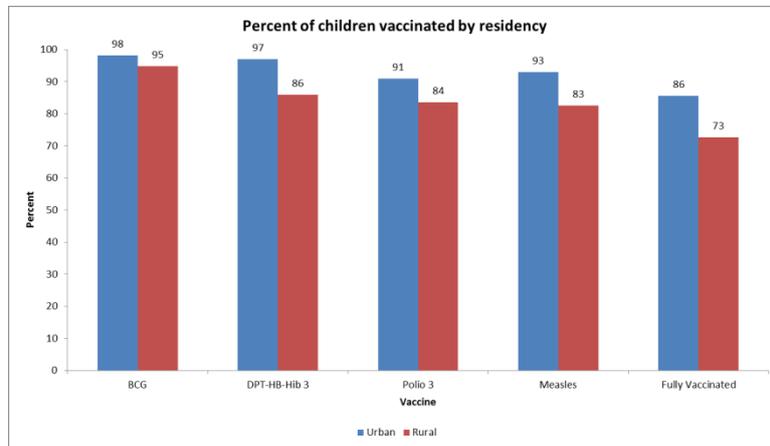
Source: Demographic and Health Survey [34]

VACCINATIONS BY AREA OF RESIDENCE

Vaccines are provided to children to protect them against diseases and reduce the risk of mortality. Essential vaccinations in Tanzania are BCG (one dose), DPT (three doses), polio (three doses), and measles (one dose). The BCG is given at birth to protect a child against tuberculosis, DPT protects against diphtheria, pertussis (whooping cough) and tetanus. The DPT and polio vaccines are provided in three doses at four, eight and 12 weeks of age. The measles vaccine is provided at nine months. Based on vaccination guidelines, a fully vaccinated child is defined as a child who has received BCG, DPT, polio and measles vaccines at the recommended dose intervals. It is recommended that children receive all vaccinations before they are 12 months old.

BCG vaccination coverage was high both in urban and rural areas (Figure 20). Coverage of DPT, polio and measles is high in urban areas (~90 per cent) but lower in rural areas (~85 per cent). With regards to full vaccination status, coverage in rural areas is substantially lower than in urban areas (73 and 86 per cent, respectively).

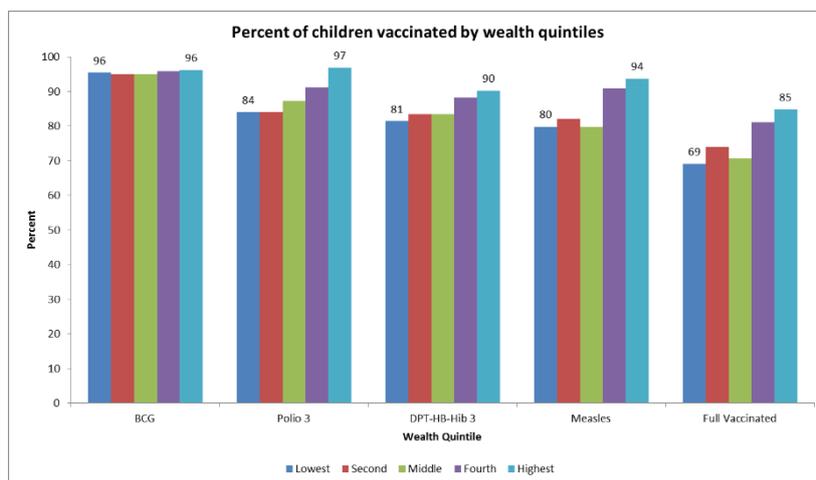
FIGURE 20: CHILDHOOD VACCINATION RATES BY AREA OF RESIDENCE (URBAN AND RURAL), 2010



Source: Demographic and Health Survey [34]

Children born in the lower wealth quintiles have lower vaccination rates than those from the higher wealth quintiles (Figure 21 below). Substantial differences in coverage between urban and rural areas prevail for the polio (84 in rural versus 97 per cent in urban), DPT (81 versus 90 per cent), measles (80 versus 94 per cent) and full vaccination (69 versus 85 per cent).

FIGURE 21: VACCINATION COVERAGE OF CHILDREN BY WEALTH QUINTILE, 2010

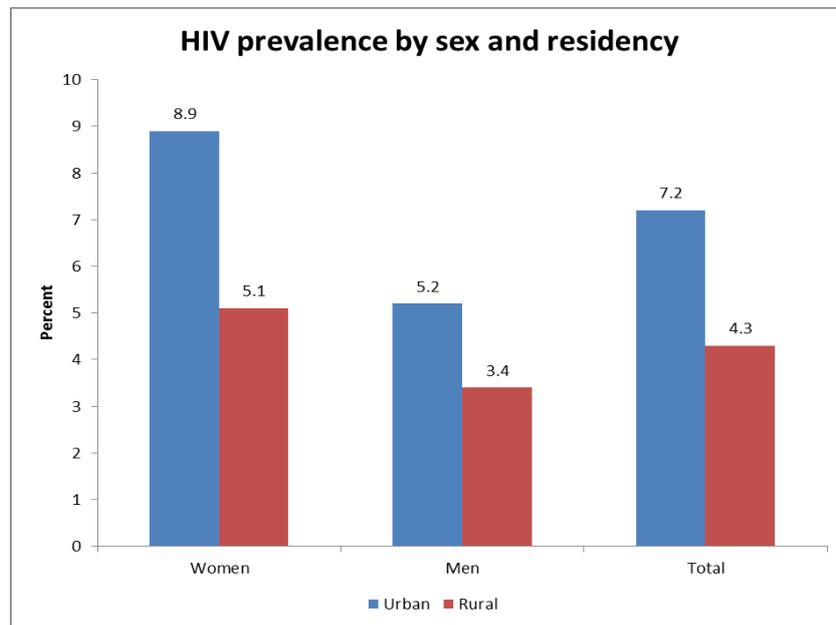


Source: Demographic and Health Survey [34]

HIV PREVALENCE

The adverse impacts of HIV and AIDS include reduced life expectancy and quality of life, increased morbidity and mortality (for both infants and adults), a reduced workforce, and an increased financial burden from the cost of prevention, care and treatment. [76] A national HIV prevalence study conducted in 2012 clearly revealed higher prevalence in urban than rural areas (7.2 versus 4.3 per cent respectively). The distribution by sex shows women have a higher prevalence of HIV in both settings (Figure 22 below). The higher prevalence in urban areas may be due to high-risk behaviour being more common there – such as having multiple partners and spending more time away from home, and to there being a younger population in urban areas, as well as other social determinants.

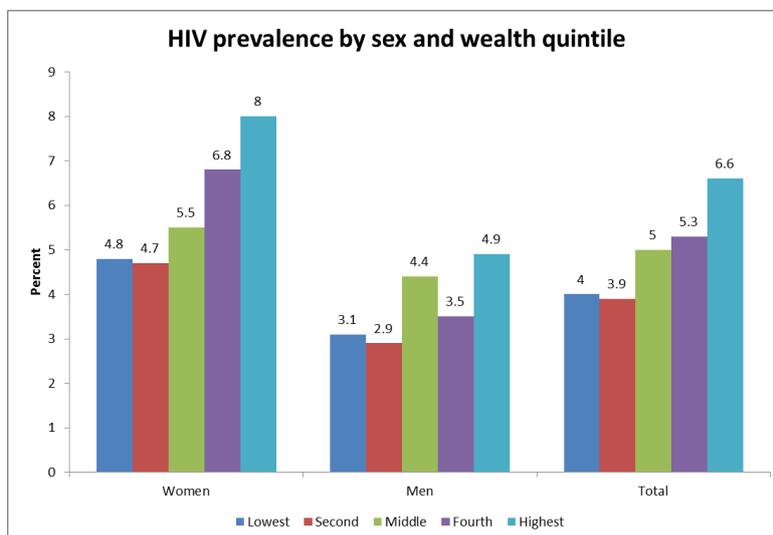
FIGURE 22: HIV PREVALENCE RATE BY SEX AND AREA OF RESIDENCE (URBAN AND RURAL), 2012



Source: Tanzania THMIS, 2012

Analysis by socioeconomic status revealed high prevalence in individuals within the higher wealth quintiles compared with those in the lower quintiles. These results conflict with the commonly held notion that poverty is a risk factor for HIV transmission, although they may be explained by the increased prevalence of HIV being in urban settings, which is where the highest wealth quintile live.

FIGURE 23: HIV PREVALENCE RATE BY WEALTH QUINTILE, 2012

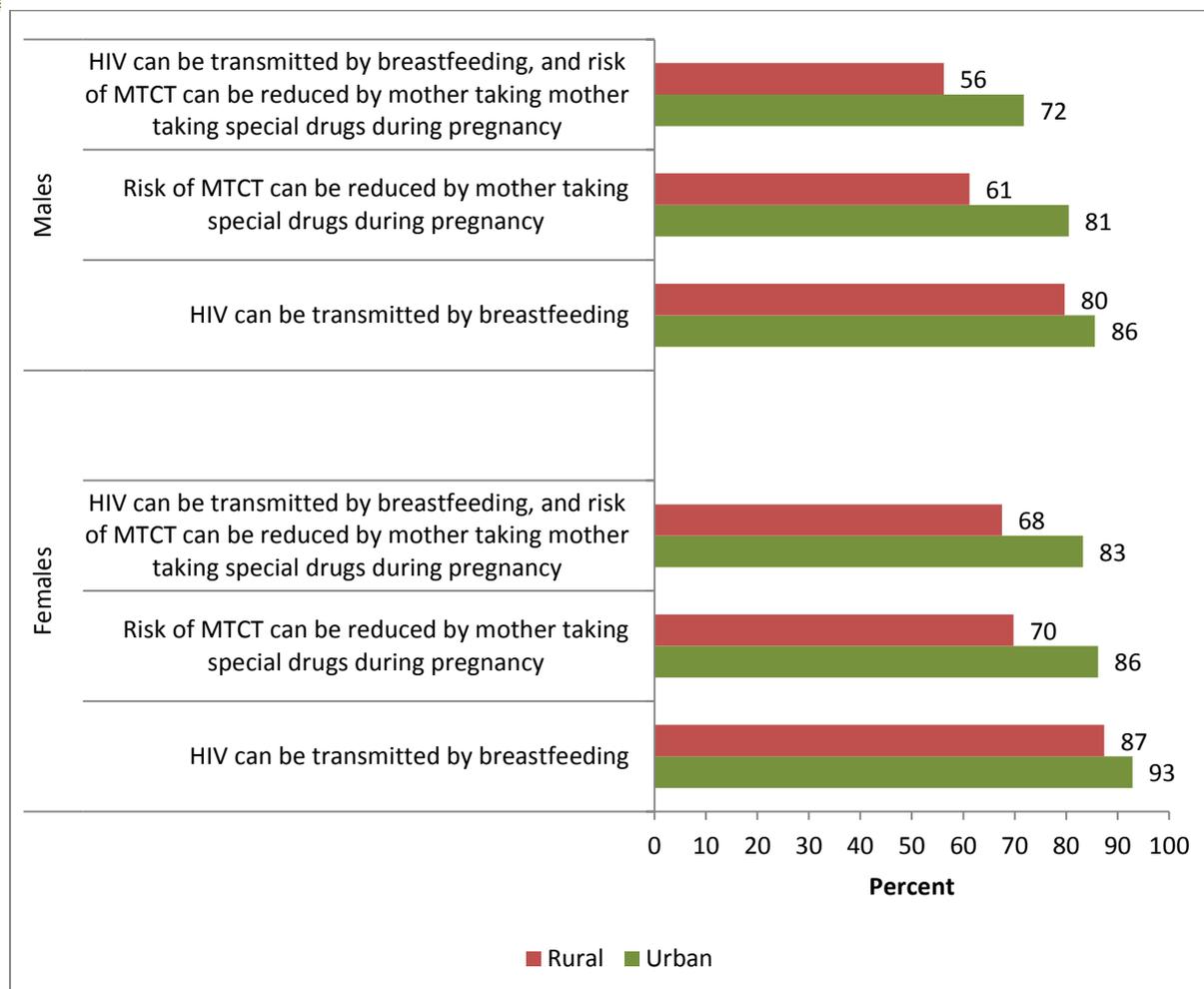


Source: Tanzania THMIS, 2012

PREVENTION OF MOTHER-TO-CHILD TRANSMISSION OF HIV

Pregnant women with HIV are at increased risk of transmitting the virus to their new-born if they do not have access to antiretroviral drugs (ARTs). Knowledge of HIV transmission from mother to child and awareness of service availability during ANC visits is crucial to all efforts aimed at reducing mother-to-child transmission (MTCT) of HIV during pregnancy, delivery and breastfeeding. Similar to indicators of other intervention coverage, knowledge of mother-to-child transmission of HIV is higher in urban areas than in rural areas (Figure 23). Knowledge is slightly greater among females than males, possibly due to women accessing information during ANC visits.

FIGURE 24: KNOWLEDGE OF HIV TRANSMISSION PREVENTION



Source: Demographic and Health Survey [34]

URBAN HEALTH CONCERNS

While the conditions discussed above, such as HIV and malaria, are common in both urban and rural areas and are measured through national surveys, there are a number of health outcomes which are more commonly associated with the urban environment and are not commonly reported through national census and surveys such as the DHS. These include the spread of some infectious diseases such as cholera, and non-communicable diseases such as diabetes and cardiovascular disease. The result is that accurate understanding of the levels of these conditions over time is not possible, and health conditions that affect the urban population are not commonly recorded.

CHOLERA

The most common route of cholera contraction is through the ingestion of water or food contaminated with faecal matter. Therefore, risk factors include lack of safe drinking water, poor sanitation, high population density and crowding, all of which are found in urban slum areas. [77] Lack of previous exposure is also a risk factor. In 2015 and 2016 Tanzania faced a major outbreak of 24,108 cases, including 378 deaths. [78] As with previous outbreaks the majority of cases were found in urban areas, particularly Dar es Salaam. For example, during a major outbreak in 2006, Dar es Salaam accounted for 63 per cent of all cases and 40 per cent of all deaths in the country. [79] A spatial study of this outbreak found that living in informal settlements, high population density, and low income level were all associated with higher cholera incidence. However, no association was found between lower cholera incidence and access to improved water sources or improved sanitation at the ward level. [80] This suggests that urban poor are most at risk of a cholera outbreak, and that action on the social determinants of health, particularly improvements to housing and income are required. . More information on responses such as improving water sources and planning in flood-prone areas are outlined in sections 4.2 and 4.3.

IMPACTS OF URBAN ROAD TRAFFIC ACCIDENTS AND AIR POLLUTION ON HEALTH

The Tanzania Revenue Authority (2011) estimates that 70 per cent of registered vehicles are located within cities, with the number of vehicles increasing by 10 per cent a year, [81] emphasising the ‘car culture’ in cities. This brings a number of negative effects to society, including traffic congestion, longer commuting time, parking difficulties and loss of public space. Economically, traffic congestion causes an estimated loss of TZS 4 billion every day. [81] There are also many public health problems associated with an increase in car numbers, particularly road traffic accidents (RTAs) and air pollution. Accurate information on associated mortality and morbidity is difficult to estimate. However, evidence suggests that deaths due to RTAs have been increasing over the past 10 years in a number of cities. [82-84] Pedestrians are the most likely to be killed (a leading cause of death for young people), estimated at 31 per cent of road traffic deaths, followed by passengers (28 per cent) and motorcycle drivers (22 per cent). [61] Information of how this is broken down by cities has not been published.

Additionally, an inventory of air pollutants found that a number of air pollutants have been increasing steadily in Tanzania between 2000 and 2005, particularly in large cities, due mainly to the transport sector. [85] The main pollutants were CO₂, CH₄, N₂O, NO_x, NH₃, non-methane volatile organic compounds, and particulate matter. The report highlighted rapid urbanisation along with poor town planning, as key causes to this issue as they are leading to longer routes and traffic congestion and slow driving during peak times. While the rising rate of motorisation, often from old, inefficient and unmaintained vehicles were exacerbating the release of air pollutants. A number of factors on top of vehicular emissions contribute to air pollution such as open waste burning, biomass burning, dust, particulate matter, industrial emissions, and natural methane emissions from wetlands.

Air pollutants have a large range of health impacts, particularly increasing the likelihood of respiratory and cardiovascular conditions. Internationally, more than two million premature deaths each year can be attributed to the effects of urban outdoor air pollution and indoor air pollution ,

with more than half of the disease burden found in developing countries. [86] Evidence from high income countries suggests that deprived neighbourhoods have higher levels of air pollution than wealthier areas, [87] although it is not clear if this is true in Tanzania. A number of small-scale studies have aimed to monitor air quality in urban areas; for example, the Air Quality Monitoring Capacity Building Project (AQMCBP) was implemented in three municipalities within Dar es Salaam over two years. [88] However, our research indicates that this project has not been conducted consistently over time.

RESPONSE TO TRANSPORT-RELATED HEALTH ISSUES

Recently there has been moves to improve road safety by targeting groups perceived to be a danger on the road such as commercial motorcycles, or *boda bodas*. [89] A study of motorcyclists, passengers, driving school owners, traffic police, health officers and Tanzania Revenue Authority officers in the Morogoro municipality highlighted the perception that *boda boda* drivers were dangerous and accidents were the result of driving without formal training, substandard motorcycles and motorcycle defects such as brake failure, as well as non-observance of traffic laws and drinking alcohol before driving. [90] These groups and problems have been targeted, but more joined-up action is needed to reduce RTAs and also air pollution. Although urban transport is identified as a local responsibility, local (city) authorities do not have the mandate – or funds – to plan or manage transport and traffic in their urban centres. [91, 92]

Interventions that promote public transport will likely have positive impacts on air pollution and road traffic accidents. [93] The box contains an example of a programme that is currently being developed in the Tanzanian capital which has the potential to reduce air pollution: the Dar Rapid Transit (DART).

EXAMPLE 1: DAR ES SALAAM BUS RAPID TRANSIT (BRT)

The Dar Rapid Transit Agency (DART) is responsible for Dar es Salaam's new Bus Rapid Transit (BRT) system that started operating in May 2016. Its aim is to provide a better, more modern and more efficient public transport service to the residents of Dar es Salaam. [94] Efforts were made to ensure that the buses were affordable and there are special prices for students and an effort to service low-income areas. [95]

The project is expected to benefit at least 1.2 million people, or 25 per cent of the city's population. However there were many voiced concerns around the cost of the scheme and that the pricing strategy will not benefit poorer citizens. Key expected outcomes include reduced travel time and congestion, and increased accessibility to suburban areas in the city. Monitoring and reducing road traffic accidents has been highlighted as a further aim; investment in road infrastructure along with education on road safety are planned to reduce the risk. [96]

There is a need to monitor the extent to which these plans have been carried out adequately, and whether or not they will have the intended impacts.

While improved air quality is a likely outcome suggested within the project literature, [97] plans to measure the impact on air quality are currently lacking. For example the buses may clear the roads more and motivate people to drive, leading to negligible if any impact on intended outcomes. This presents an opportunity for public health to work inter-sectorally to ensure that this infrastructure has the intended beneficial health impacts.

NON-COMMUNICABLE DISEASES

Tanzania, like many low-income countries, has an increasing prevalence of non-communicable diseases (NCDs), particularly diabetes and cardiovascular disease (CVD). NCDs were estimated to account for 31 per cent of total deaths in 2012. [98] Risk factors include alcohol and substance use, unhealthy diet and obesity. However, there is a need to look beyond lifestyle factors, to the causes of the causes of health-related behaviours. Urbanisation is a complex process that has a number of positive and negative influences on individuals' health. By understanding urbanisation as a social determinant of health, it is possible to unpack the characteristics of urbanisation that have a negative impact on health, and to understand how to harness the many benefits of the urban environment to improve the population's health.

DIABETES

Incidence of Type 2 diabetes mellitus (T2DM) has been increasing rapidly worldwide and Sub-Saharan Africa is no exception. Current estimates suggest that 909,600 people out of Tanzania's population of approximately 41 million have diabetes and prevalence is expected to increase by 50 per cent within the next 20 years. [99] More epidemiological data is needed, as a small-scale study demonstrated that 80 per cent of diabetes was undiagnosed. [100] However, studies indicate that there is a higher prevalence rate in urban versus rural Tanzania, 5.8 per cent and 1.7 per cent respectively in 2003. [101] Risk factors for diabetes also appear higher in urban areas, including high Body Mass Index (BMI), not eating a healthy diet, and lack of physical activity. [102] Incidence is increasing among the poor in Tanzania, and it is no longer primarily a disease of the affluent. Recently, the Tanzania Diabetes Association in collaboration with the Tanzanian Ministry of Health (MoH) have developed diabetes clinics throughout the country, reaching approximately 100,000 people. Efforts have been made to ensure that these facilities are accessible to everyone. Consultations are free and clinical assessment procedures (of, for example, weight, blood pressure and blood glucose level) are subsidised, while the poorest patients pay nothing because of the national exemption waiver system. However, in practice an evaluation showed that many of those who should be eligible for exemptions do not have access. [15] While increasing access to services is essential, there is a need to look at preventative measures to reduce the incidence of diabetes in the population, too.

CARDIOVASCULAR DISEASE

At least three-quarters of the world's deaths from CVD occur in low- and middle-income countries, particularly among the poorest in those countries. [103] There is growing recognition of the

increased risk of CVD in African cities; however, research in Tanzania is limited. However, evidence suggests that there is high prevalence of lifestyle and biological risk factors for NCDs such as diabetes and cardiovascular disease (CVD) across all of Tanzania. [104, 105] and an even higher lifestyle-related risk profile in urban areas. [105]

ALCOHOL, SMOKING AND OTHER SUBSTANCE USE

Substance use is associated with a wide range of health outcomes (including CVD and diabetes incidence). For example, alcohol impacts on a number of diseases and injuries such as neuropsychiatric conditions, gastrointestinal diseases, some cancers, intentional injuries – including domestic violence, unintentional injuries, cardiovascular disease, foetal alcohol syndrome and diabetes mellitus. [106] Tobacco use is a known risk factor for chronic diseases such as CVD and lung cancer, and for premature mortality in adults.

As a general rule, high-income countries have higher rates of substance use and abuse than middle- and low-income. For example the highest alcohol per capita consumption (APC) and the highest prevalence of heavy episodic drinking among drinkers are found in the WHO European Region and the WHO Region of the Americas. [106] Intermediate levels of consumption are found in the WHO African region, and on average 29.8 per cent of people (aged 15-plus) in the African region are current drinkers (with the rate being higher for males at 40.2 per cent and lower for females at 19.6 per cent). A number of studies indicate that use of alcohol, tobacco and cannabis is less prevalent in Tanzania [107, 108] than in high-income countries such as Britain [109] and less than in other Sub-Saharan African countries too. [110] One study found rates of substance use in urban areas of Tanzania to be below international levels: 17.2 per cent, 8.7 per cent and 0.8 per cent for alcohol, tobacco and cannabis respectively. [108] However, patterns of substance use appear to be changing, and is a growing concern, particularly for young people in Tanzania. [111]

SMOKING AND ALCOHOL – A TANZANIA-WIDE ISSUE

In Tanzania the evidence suggests that smoking and alcohol use and abuse more associated with wealth, gender and employment than residing in urban or rural areas.

For example, in the case of smoking, men in households in the lowest wealth quintile have the highest prevalence of smoking (26.6 per cent) compared to individuals in the highest wealth quintile (16.3 per cent). However, there is no variation in tobacco use according to area of residence (19 per cent for both urban and rural men). [112]. The rate of smoking in women was less than 1 per cent for all groups.

In terms of alcohol, international evidence suggests that people with lower socioeconomic status (SES) appear to be more vulnerable to tangible problems and consequences of alcohol consumption. [113] In Tanzania, one study found that hazardous alcohol consumption was unaffected by the poverty disparities of the areas studied, but was independently associated with male gender, employment status (employed or unemployed) and higher incidence of common mental disorders (CMD). [108] Further, a qualitative study of young people and drinking found that alcohol

consumption was common among young males, college students and those in the informal sector employment. [111]

The prevalence of home-brewed alcohol has a bearing. In the African region, 51.6 per cent of alcohol consumed is classified as 'other' (such as fortified wines, rice wine or other fermented beverages made of sorghum, millet or maize). In Tanzania, traditional alcoholic beverages such as Tanzanian beers (Mbege and Komoni), wines (Mnanasi, Wanzuki and Mofru) and gongo (an illicit spirit) are commonly home-brewed and consumed throughout the country. The wide use of home brewing makes regulation of these drinks difficult and there is evidence of unsanitary conditions and use of rudimentary equipment for processing, packaging and storage, resulting in beers and wines of low quality and short shelf-life [114] as well as the inclusion of unacceptable amounts of aflatoxins, methanol and other fossil fuels. [115]

YOUTH SUBSTANCE USE – AN URBAN ISSUE

Interviews conducted in Dar es Salaam suggest that going to bars and drinking is increasingly popular with the urban youth, for both males and females.⁸ Evidence for this is mixed, however. For example, one study found significantly lower alcohol consumption rates among students aged 13–14 years in Dar es Salaam than for this age group in other cities in Sub-Saharan Africa (Cape Town, South Africa and Harare, Zimbabwe). However, solvent use (sniffing or inhaling substances to get high) was significantly greater in Dar es Salaam than in these other cities. [110] Reasons for the lower rates of alcohol consumption in this study could include less disposable income and the prominence of Islam, which prohibits alcohol, in Dar, which contrasts with the rest of Tanzania which is predominantly Christian. It is possible that solvents are used as a substitute for alcohol. A study of young people in the Kilimanjaro and Mwanza regions reported high prevalence of alcohol use and heavy episodic drinking. Males (47–70% ever users and 20–45% current users), those in Kilimanjaro and college students (45% among males; 26% among females) reported the highest prevalence. [111]

DOUBLE BURDEN: MALNUTRITION AND OBESITY

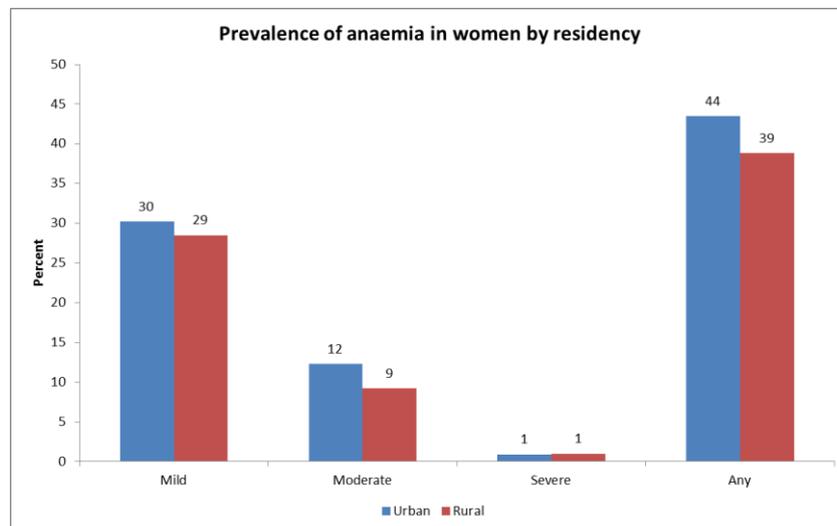
Anaemia during pregnancy has been associated with adverse outcomes including maternal and perinatal mortality, pre-term delivery, and low birth weight. The difference between levels of anaemia by urban or rural residence is negligible (see Figure 25).

Inadequate nutrition among women during childhood and adolescence may result in short stature, which is a risk factor for poor birth outcomes and obstetric complications that increase the likelihood of difficulty during delivery and the risk of bearing low birth weight babies. Figure 26 provides results from Demographic and Health Surveys that measured Body Mass Index (BMI) and classify women's status as thin (BMI < 18.5), normal (BMI = 18.5–24.9) and overweight or obese

⁸Personal communication: interviews with DFID youth panel in Tanzania, March 2016.

(BMI > 25). A higher proportion of women have a BMI within the 'normal' range in rural than in urban areas. Thinness is more prevalent in rural areas than urban areas (a 5 per cent difference). A higher proportion of women are overweight and obese in urban than in rural areas.

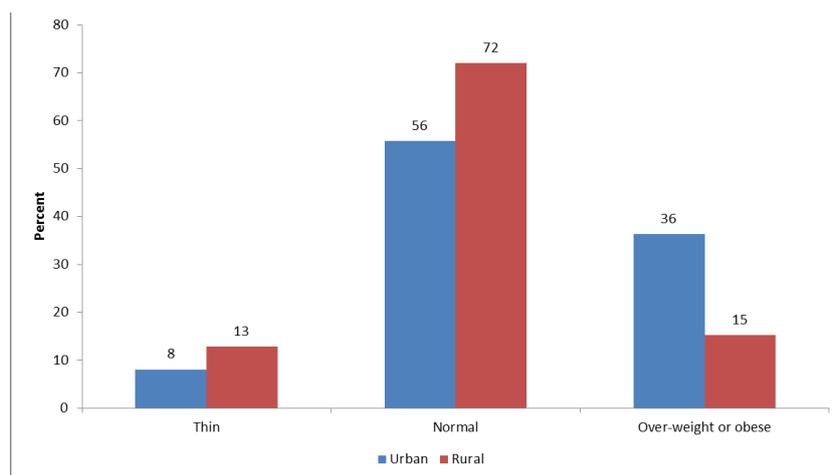
FIGURE 25: FEMALE ANAEMIA⁹ PREVALENCE BY AREA OF RESIDENCE (URBAN AND RURAL)



Source: Demographic and Health Survey, 2011/2012

FIGURE 26: FEMALE BODY MASS INDEX BY AREA OF RESIDENCE (URBAN AND RURAL)

⁹Prevalence of anaemia, based on haemoglobin levels, is adjusted for altitude using formulas in CDC, 1998. Haemoglobin is measured in grammes per decilitre (g/dl). Mild anaemia is characterised by 10.0–11.9 g/dl, moderate anaemia by 7.0–9.9 g/dl, severe anaemia by <7.0 g/dl and any anaemia by <12.0 g/dl.

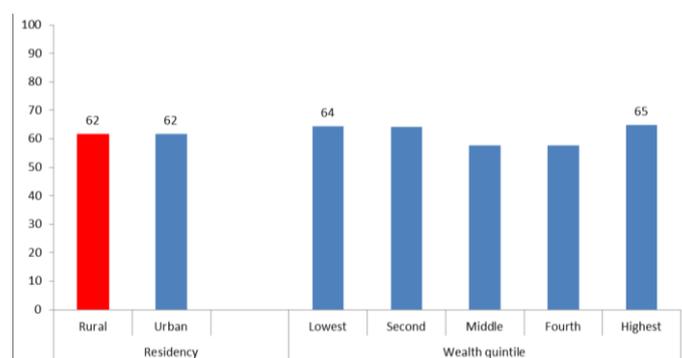


Source: Demographic and Health Survey, 2011/2012¹⁰

EATING FRUIT AND VEGETABLES

Consumption of a balanced diet, including food rich in vitamins, is essential for health for all, including new mothers and their children, especially unborn and those breastfeeding. The WHO advises that, to improve children’s growth, pregnant women in developing countries should take iron supplements, and lactating mothers should take Vitamin A supplements. There is no difference in the proportion of women consuming Vitamin-A-rich food or vegetables between women residing in rural or urban areas, or by wealth quintiles, based on the DHS carried out in 2011/12 (Figure 27).

FIGURE 27: VITAMIN A CONSUMPTION BY AREA OF RESIDENCE AND BY WEALTH QUINTILE FOR WOMEN AGED 15–45 WITH CHILDREN UNDER 3 YEARS OLD



Source: Demographic and Health Survey, 2011/2012

¹⁰Thin is characterised by a BMI < 18.5, normal by a BMI of 18.5–24.9, and overweight or obese by a BMI > 25.

SECTION 4. APPLYING THE SOCIAL DETERMINANTS OF HEALTH TO URBAN AREAS

As discussed in section 1, the social determinants of health approach provides a framework through which to understand the wider determinants of health and inequality. Figure 1 illustrates how the wider contexts of people's lives impact on individuals in different ways throughout their lives – or '**across the life course**'. These factors include:

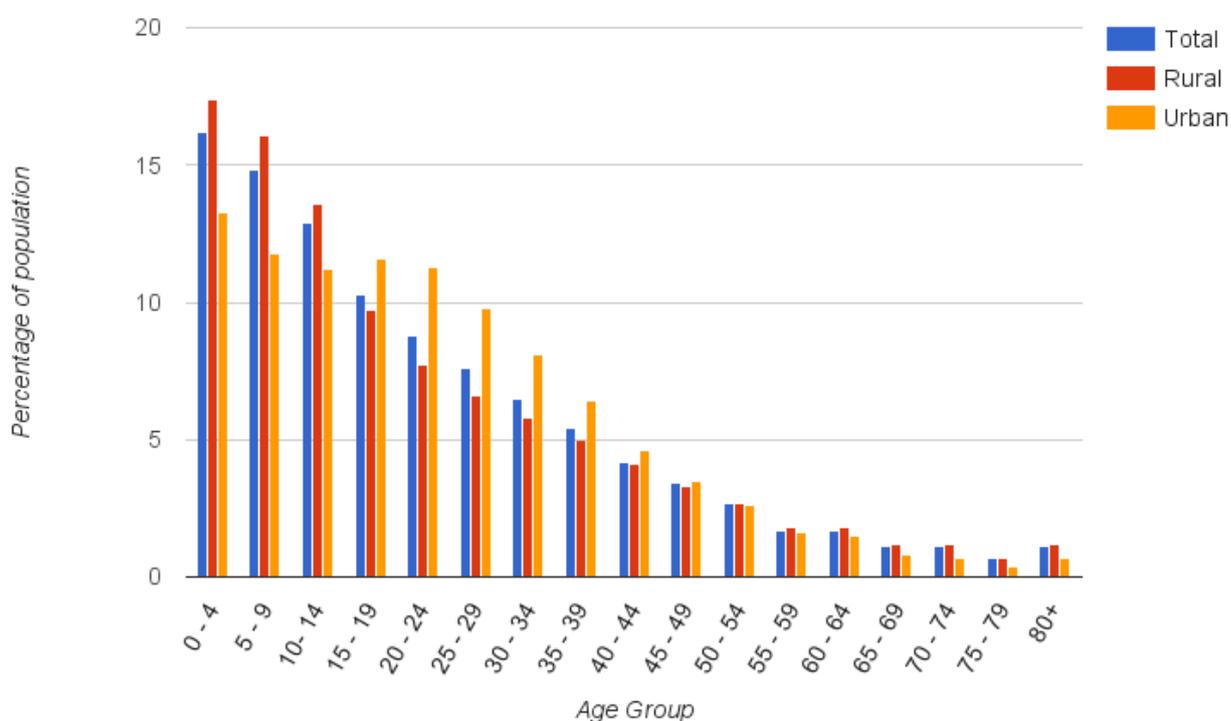
- the **macro-level context** (global factors such as trade, aid and climate change; and the national socioeconomic and political context)
- **wider society** (the built, social and natural environment)
- the **systems** and institutions that interact with individuals and society, such as the healthcare, education and judicial systems.

These factors were analysed to understand how appropriate this framework is for understanding health and health inequalities in Tanzanian cities. Many of the key social determinants of health that are of concern in the country's cities are general issues affecting rural and urban residents alike, and are highlighted as such. However, there are many social determinants of health that are of much more significance for urban residents, as will be demonstrated.

4. 1 LIFE COURSE STAGES

Taking a life course approach is crucial to identifying areas for action throughout the stages of life, in order to improve overall population health and reduce health inequities. Positive and adverse influences on health start even before birth and accumulate throughout life, from the early years, through years of education, work and family-building, and into older ages until the end of life. [1] These positive and negative exposures are unequally distributed across the population according to a number of characteristics, such as gender and socioeconomic deprivation, as well as spatial differences (within and between urban/rural areas). In Tanzania young people account for a large proportion of the population: 47 per cent of the population were aged under 15 in 2012. [3] Generally urban areas in Tanzania have a higher percentage of individuals at working age (between 15 and 64) than rural areas, and a lower percentage of individuals under the age of 14 and over the age of 65, as Figure 28 demonstrates. [3]

FIGURE 28: POPULATION STRUCTURE BY AGE IN URBAN AND RURAL AREAS, AND FOR THE TOTAL POPULATION, 2012



Source: [13]

EARLY YEARS AND CHILDHOOD DEVELOPMENT

Evidence of high rates of under-5 mortality and inequality in mortality rates by residence, as discussed in section 2 above, suggests that the early years are a particularly vulnerable period and therefore a key area in which to focus intervention, in both rural and urban contexts. Deprivation in early life is associated with a number of health and development related problems in later life such as poor diet and deficits in physical, social, emotional, cognitive and language domains of development. As such, early childhood development is a key social determinant of health. [2]

The WHO European Review recommended that ensuring a good start in life is key to tackling health inequality, and highlighted the evidence of the effectiveness of high-quality early years services on later development. The following characteristics of mothers and babies were highlighted as providing a good start in life:

a mother is in a position to make reproductive choices, is healthy during pregnancy, gives birth to a baby of healthy weight, the baby experiences warm and responsive relationships in infancy, the baby has access to high-quality child care and early education and lives in a stimulating environment that allows safe access to outdoor play. [23]

Therefore, interventions require a focus on parenting skills, employment and social protection of parents, equitable education for boys and girls and a system for developing life and work skills for young people.

EARLY CHILDHOOD DEVELOPMENT

Indicators suggest that physical development is a key area of concern across Tanzania, but particularly in rural areas. For example, 25 per cent of urban children and 38 per cent of rural children are stunted. [73] According to UNICEF's Childhood Deprivation Index, in 2009 almost half of all children in rural Tanzania (48 per cent) suffered three or more severe deprivations of basic need compared with 10 per cent of children in urban areas. [41]

Early childhood development includes physical development, but also social/emotional and language/cognitive development, which are key to improving health outcomes in the early years and which also influence the ability to achieve good outcomes in terms of education, employment, social participation, and health outcomes throughout later life. [23] A number of stakeholders in Tanzania highlighted the need for interventions focusing on social and emotional development, along with interventions to improve physical development such as tackling malnutrition, and an understanding of how urbanisation is affecting these issues. The following case study from Jamaica highlights the importance of addressing these broader socio-emotional issues for improving physical health outcomes and later health and human development outcomes.

CASE STUDY: MALNOURISHED CHILDREN'S PROGRAMME, JAMAICA [116]

The Tropical Metabolism Research Unit of the University Hospital of the West Indies established the Malnourished Children's Programme in Jamaica in 1994 after hospital personnel noted that many children admitted with malnourishment who recovered and were sent home had to be readmitted for the same condition after a short time.

OVERVIEW OF INTERVENTION

Interventions such as nutritional supplements, psychosocial stimulation, and mother and family support have been evaluated in isolation and in combination since then. The results demonstrate that nutritional supplementation is more effective when combined with broader psychosocial interventions and family support than when delivered in isolation.

In these interventions, home visits are organised after the child is discharged from the hospital with the aim of identifying specific and interconnected social determinants of children's health and that of their family. Paraprofessional health staff (health aides) deliver the intervention in addition to their usual duties. Staff focus on stimulation, environmental factors and nutritional status of children. They also work to increase the economic stability of families. Parents are enrolled in a weekly parental education programme and social welfare project. They are supported to develop income-generating skills, and to find jobs and shelter. They make job referrals and sponsor parents to take advantage of skills training opportunities. Food packages, bedding and clothing for needy, unemployed parents are provided. A community outreach programme has been developed in three locations in poor areas with high prevalence of malnutrition. The

programme includes psychosocial stimulation of children up to age 3, and a mobile toy-library.

IMPACT

Evaluations of interventions revealed a number of important findings. Interventions that included nutritional supplementation alone were shown to be insufficient to reduce malnourished children's developmental deficit, demonstrating that medical and nutritional care are not sufficient to reduce the long-term effects of this health inequity. When nutritional supplementation was combined with home visits that included a play programme with the aim of promoting mother-child interaction and self-esteem, over a three-year period, malnourished children were shown to catch up to the nourished group after 24 months. While this dipped once the intervention finished, it remained substantially above the malnourished control group. Mothers in the intervention group had improved knowledge of child-rearing and reductions in depressive symptoms.

A 22-year follow-up study demonstrated benefits through to adulthood in areas such as cognition, educational attainment, mental health and reduced violent behaviour. [117] The group's research has also demonstrated that it is feasible and effective to integrate the interventions into primary care services with benefits to children's development and mothers' child-rearing knowledge and practices. [118]

However, an understanding of how the urban environment is impacting on early child development, and how increasing urbanisation is affecting this in Tanzania, is currently lacking.

The health system has been utilised to address childhood development issues in many low- and middle-income countries. Evidence has demonstrated that key to early childhood development is the child's caregiver's ability to provide effective care: sensitivity and responsiveness to the child. [119] The Kenya case study below highlights how health workers can intervene to improve secure attachment between parents and children.

CASE STUDY: SUPPORTING SOCIAL/EMOTIONAL DEVELOPMENT IN ROUTINE PRIMARY HEALTH CARE BY COMMUNITY HEALTH WORKERS, NAIROBI, KENYA [120]

Research found that insecure attachment relationships were uncommon in the target group (9.8% of children were at risk of being insecurely attached) and that risk was most often associated with situations where the caregiver was suffering from depression, raising children who were not her own biological offspring (as in the case of AIDS orphans), encountering severe poverty, or had become pregnant as teens. There was also a clear link between attachment and health. Children assessed as at-risk for being insecure were much less likely than children with assessments consistent with secure attachment to regularly wash hands ($p < 0.05$) and to have a normal weight for age ($p < 0.001$) and more likely to have diarrhoea and malaria ($p < 0.001$).

At-risk children were assigned an especially trained community health worker (CHW) and caregivers were provided with parenting workshops and follow-up home visits from the CHW. Following the intervention, CHWs found improved attachment between children and parent or caregiver among children previously assessed as having insecure attachment.

URBAN ISSUES

MATERNAL AND CHILD HEALTH

The relationship between urban environments and the health of young children is complex. There is a clear rural advantage related to key birth measurements, particularly maternal mortality [34] and low birth weight. The national census of 2012 showed that maternal mortality rates in urban areas were significantly higher than those reported in rural areas (432 versus 336 deaths per 100,000 live births). Local estimates of maternal mortality in Ifakara show a similar picture of higher urban maternal mortality despite higher coverage of ante-natal care and facility delivery. [61]

Considering that access to health facilities is higher in urban areas, the reasons for the urban disadvantage are unclear but quality of services as well as wider social determinants of health could be contributing. Although a number of wider determinants, such as child-bearing in teenage years, demonstrate an urban advantage, we heard a number of other possible factors which could be further investigated. Commentators cited preferences among some groups for non-formal health services, abrupt and uncaring health service staff, and financial barriers to getting to and engaging with health centres, as potential reasons for higher mortality rates.

Yet for children under age 5, urban areas have an advantage in several indicators including less incidence of stunting and a smaller risk of malaria. The reason for this is not fully understood and could include a number of social and environmental conditions.

CHILD PROTECTION

Incidences of sexual, physical and emotional abuse of children have been described as Adverse Childhood Experiences (ACEs) and there is growing evidence (mostly from high-income countries such as the USA and the UK) of the long-term effects that ACE have on later health and wellbeing outcomes. Those exposed to ACE are more likely to die at a younger age and experience a range of illnesses – including cancer, heart disease, lung disease, liver disease, stroke, hypertension, diabetes, asthma and arthritis. [121] They also run an increased risk of mental ill health and the WHO estimates that 30 per cent of adult mental illness in 21 countries could be attributed to ACE. [122] Evidence suggests that ACEs are a large concern in Tanzania generally. In addition, there are a large number of street children, living in cities, that are particularly vulnerable to ACEs.

TANZANIA-WIDE ISSUES

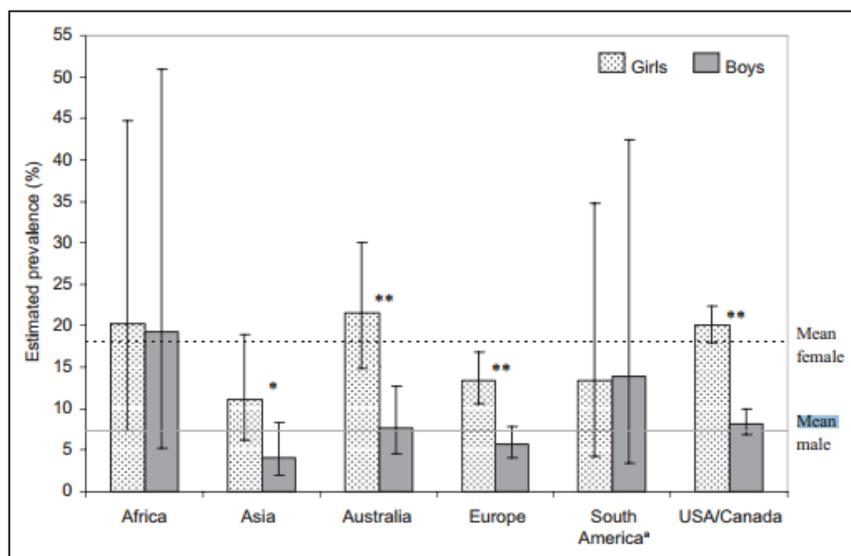
Physical, sexual and emotional abuse of children is not often reported or documented in Tanzania. However, during a number of interviews for this research with youth workers, social workers and

young people, abuse was raised as a major issue facing young people in Tanzania today. A national survey was conducted in 2009 which demonstrated very high rates of sexual, physical and emotional abuse of children. [123] Child abuse should be considered a key public health concern in Tanzania.

SEXUAL ABUSE

A meta-analysis of childhood sexual abuse globally estimated the prevalence rate to be on average 13 per cent, while rates in Africa from self-report studies were much higher at close to 20 per cent for both males and females (Figure 29). These rates for females are higher than the global mean but comparable with Australia and the USA, but for males they are double those reported from other regions of the world. [124]

FIGURE 29: ESTIMATED PREVALENCE OF SEXUAL ABUSE IN DIFFERENT WORLD REGIONS FOR MALE AND FEMALE CHILDREN¹¹



Source: Stoltenborgh et al 2011 [124]

The Tanzanian national survey found that nearly 30 per cent of females and 13 per cent of males surveyed aged 13 to 24 reported experiencing at least one incident of sexual violence before turning age 18. [123] This suggests that sexual violence for males and females is significantly higher than the world average and female sexual violence is higher than the African average (although different methodologies in surveys means that direct comparisons between studies are not possible).

¹¹Stars represent a significant difference between girls and boys within a geographical area of origin of the sample (*p,.05; **p<.01)

PHYSICAL ABUSE

A meta-analysis on global prevalence of child physical abuse found that on average 23 per cent of children, regardless of gender, experience physical abuse, and differences between continents or cultures were not significant in the study. [125] The study also noted the urgent need for more research on this issue in Africa as there were few studies in this region to draw from. In Tanzania, the national study found that almost three-quarters of both females and males reported experiencing physical violence by a relative, authority figure (such as a teacher), or an intimate partner prior to the age of 18. [126] There is some evidence from small-scale studies that corporal punishment is common.[127] Direct comparisons are difficult due to methodological differences, but the data do suggest that physical abuse of children is a particular problem in Tanzania.

EMOTIONAL ABUSE

Childhood emotional violence and neglect are areas of research and measurement left wanting globally: one meta-analysis found only 13 studies (in total 59,655 participants) of emotional neglect compared to 200 studies (amounting to 400,000 participants) of child sexual abuse. [128] The majority of these studies were from high-income countries, and there is a need for more research from low-income countries. The global prevalence of self-reported child physical neglect was estimated to be 16 per cent and child emotional neglect 18 per cent, with no apparent gender differences. In the Tanzanian survey approximately one-quarter of females and nearly 30 per cent of males aged 13 to 24 years reported experiences of emotional violence by an adult prior to turning 18. Between 4 and 5 per cent of females and males aged 13 to 24 years reported that they were threatened with abandonment by an adult prior to turning 18 years of age. Again, while direct comparison is difficult, the available information suggests that emotional violence is a key concern in Tanzania.

URBAN ISSUES

STREET CHILDREN

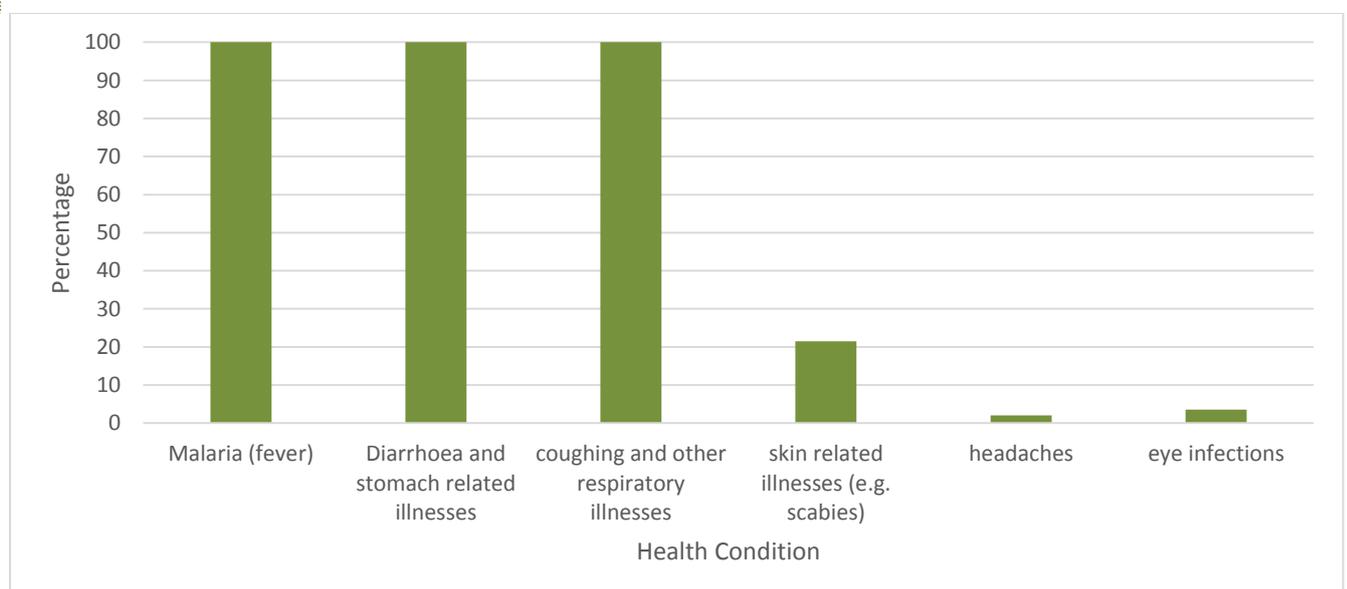
Anecdotal evidence suggests that there may be a rising number of street children, known as *watoto wa mitaani*, in urban areas, particularly in big cities including Dar es Salaam, Arusha, Morogoro, Moshi, Tanga, Mbeya and Mwanza. However, there is a severe lack of data on this vulnerable population, so little is known about them. The charity Railway Children has conducted headcounts in various years in the city of Mwanza. Its most recent headcount found that between 10 and 18 December 2014 a total of 1,548 children and youth were living or working on the streets during the day. [129] They were mostly aged between 15 and 18, and two-thirds were boys. During the night a total of 738 children and youth were identified as either spending time on, or working on, the streets with a further 380 recorded as sleeping there.

Research that does exist illuminates the key reasons for the growing number. A study of street children in Dar es Salaam found a number of similarities among the children living on the street. [130] The majority (94 per cent) had migrated from rural areas, particularly certain regions such as

Dodoma (44 per cent), Tabora (11 per cent) and Lindi (11 per cent). Most of these children had never been to school and could not read or write (95 per cent). Seventy-one per cent had been living with their biological or step-mothers and 67 per cent identified their mother or female guardian as the primary breadwinner. Seventy-eight per cent had come from large families of between six and 15 children. Poverty was by far the main driver for children going to the street, while matrimonial problems including parental separation also ranked highly. Very few mentioned the ‘allure of city life’ as a motivational factor.

Street children are also at an increased risk of developing a number of communicable illnesses and mental health disorders, due to the conditions of life on the street and their reasons for leaving home. In Lugalla’s study, malaria, diarrhoea and respiratory illnesses were reported by all children. [130]

FIGURE 30: SELF-REPORTED HEALTH CONDITIONS OF STREET CHILDREN



Source: Lugalla and Mbwambo (1999) [130]

Street children are also more vulnerable to physical and sexual abuse (increasing the risk of sexually transmitted infections [STIs] and HIV/AIDS, and of unwanted pregnancies). The headcount in Mwanza of girls on the street at night found an 82 per cent increase on the 2012 headcount (although methodological changes could explain some of this increase), and many of these girls are engaged in sex work.

We are unaware of systematic studies analysing the psychological suffering of this group in Tanzania. However, studies from other countries suggest that this group is at an increased risk of a number of mental health problems, including depression. [131]

However, a number of interventions can support this group and reduce the risk of children ending up on the street in the first place. For example, Railway Children has been working in Mwanza for a number of years and found a significant decrease in young children aged up to 10 years on the

street, and it has hypothesised that intense focus on children new to the street could explain this (see case study).

CASE STUDY: RAILWAY CHILDREN IN MWANZA

A diverse range of interventions are conducted in Mwanza by the charity Railway Children, including street-based outreach. [129] The aim is for the child to make the decision to leave the streets his or herself, rather than being forced to leave. A family-therapeutic approach is also incorporated, allowing social workers to emphasise the importance of education to the family and also assist transferring responsibility from child to the caregiver. Family support programmes target vulnerable families, which can prevent children from ending up on the streets. These programmes offer comprehensive support enabling families to improve their relationships, economy and connections to other people or institutions in the community.

Headcount surveys are used to provide social and geographical information to allow outreach workers to target where the most vulnerable children work and live. The headcounts in Mwanza suggest that boys entering adolescence are the most likely to enter the streets full time. Suggested factors include a need for them to become breadwinners for their family, lacking the opportunity to go to secondary school, and exposure to peer pressure in the community or the streets. Interventions attempt to take these factors into account. Family interventions aim to help parents understand appropriate ways to respond to the needs of an adolescent as opposed to a younger child and enable older family members to increase their income. When this is not possible, efforts focus on helping them to learn a profession that can make them a living. They also focus on assisting the children forge healthy friendships with other children in the community even though they are no longer in school.

Female children are particularly vulnerable to different forms of abuse and exploitation, and run a high risk of becoming pregnant or exposed to STIs and HIV/AIDS. This group needs emotional support, and sexual and reproductive health care, as well as help in exploring ways to break out of a life in prostitution. A large number of girls are living with their babies or young children in the streets, guesthouses, ghettos or camps. Railway Children's approach is to ensure that the babies have necessary medical care, nutrition, protection and emotional care, while working with the mother. This includes helping pregnant girls to have a healthy pregnancy and delivery.

Young people aged between 19 and 25 tend to have been on the streets for a number of years, and are often very difficult to work with due to the problematic behaviours they have developed. Support for this groups focuses on offering friendship, psychosocial support and encouragement for behavioural change throughout a longer period of time. The impact of peer pressure is key and needs to be integrated throughout the process. They are encouraged to choose a trade and earn an income and secure housing. This is not possible until they have managed to make well informed decisions and make healthy behaviour choices. However, this group is also more likely to be key abusers of the

younger children, therefore engagement needs to ensure the safety of the younger group.

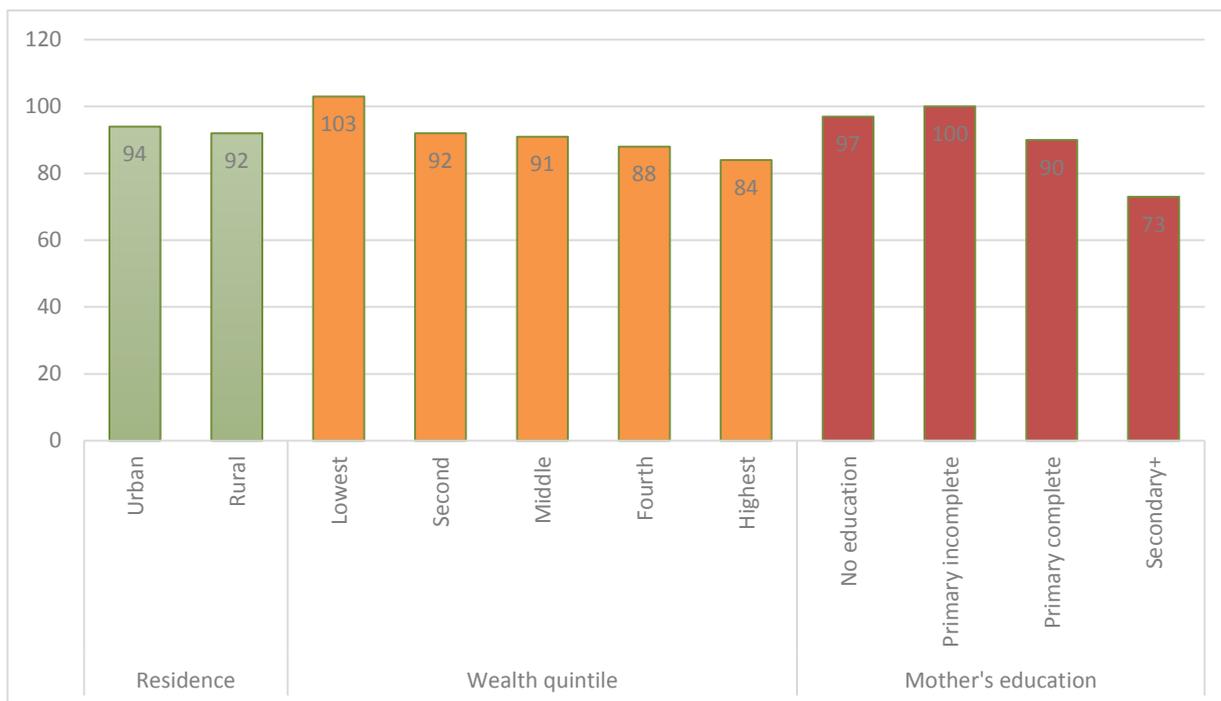
IMPACT

A social return on investment (SROI) evaluation of the Railway Children approach was conducted in a small pilot programme in Undugu, Kenya. [132] By the end of the evaluation, the following achievements were demonstrated: 70 per cent of the families had improved their ability to provide for, protect and include everyone in family activities; 90 per cent of the children contacted on the streets were off the streets and at home; 90 per cent of the children (on average this equates to the contact child and two siblings in each family) were empowered to participate in society and prevented from going back to street life. The evaluation determined that for every 1.00 Kenyan Shilling invested, the social value in return equated to 5.13 Kenyan Shillings. This evaluation demonstrated significant improvements to health of both the child and his or her family, with large reductions in substance abuse and improved nutrition. There was also a significant decrease in the number of families that experience physical violence (from 90 per cent to 50 per cent).

EDUCATION

Ensuring equitable access to high quality education has been highlighted as a key way to tackle health inequality in a number of international and national reviews. [1, 23, 133] A clear relationship between health and education is seen throughout the world and in Tanzania. For example, in the graph below we can see there are greater differences in under-5 mortality as measured by mother's education than when measuring by area of residence or wealth quintile. As the mother's level of education increases, under-5 mortality decreases, up to those educated to secondary school and above. [34]

FIGURE 31: UNDER-5 MORTALITY RATIO (DEATHS PER 100,000) BY SOCIOECONOMIC CHARACTERISTICS



Source. Demographic and Health survey [34]

There is also a clear relationship between education and poverty. The National Panel Survey, which looked at households over time, found that almost one-tenth of households that never experienced poverty had household heads that attained at least some secondary or university education, whereas not even one in one hundred household heads among the chronically poor had that level of education. [33] This highlights the importance of education, particularly to breaking the cycle of poverty across generations.

TABLE 6: POVERTY STATUS OF HOUSEHOLDS BY THE EDUCATION LEVEL OF THE HEAD OF HOUSEHOLD, 2012/13

Education	Never poor (%)	Move out of poverty (%)	Move into poverty (%)	Always poor (%)	Total (%)
None	19	42.6	31	36.5	23.5
Primary	62	55	65.6	60.7	61.7
Secondary or more	10	1.4	1.8	0.6	7.8
Other education	9	1	1.5	2.2	7

Source: National Panel Survey [33]

TANZANIA-WIDE ISSUES

EARLY CHILDHOOD EDUCATION

The government recently announced that one year of pre-primary school will become compulsory and pre-primary will be expanded for 3-, 4-, and 5-year-old children. [134] To roll out improved and better coordinated early childhood education services, the government will need to mobilise financial, human and technical resources, including an expanded teaching workforce, which, at present, is largely informal, untrained and costly.

Considering the importance of the early years for children's development and later outcomes, this policy has the potential to have wide-ranging positive impacts on wider social determinants of health. However, we heard reports that schools were creaking under the pressure of higher numbers of eligible students across all age groups, and of poorly paid and often poorly trained staff. Pre-primary education was also cited to be of a lower priority to schools than teaching older children. A mapping of the numbers attending pre-primary school and the quality of that provision is warranted.

Pre-primary education in Tanzania is largely regarded as a preparation for primary education and the curriculum focuses on the development of literacy and numeracy skills while social skills and emotional development tend to be neglected. [135] It is therefore important for interventions to include broader aspects of child development. The case study below from Zanzibar demonstrates a low-cost support for teachers to guide their planning, and could include social and emotional development aspects.

CASE STUDY: SUPPORTING EARLY YEARS EDUCATION, RISE, ZANZIBAR

The Radio Instruction to Strengthen Education (RISE) programme in Zanzibar provides 30-minute radio sessions to guide untrained or under-trained pre-school and early primary teachers with maths, Kiswahili, English and life skills lessons for children in community-based settings or in regular primary schools. The programme, which is low-cost, has increased access and education outcomes. [136]

FREE EDUCATION?

Tanzania's decision in 2002 to offer free primary education led to a surge in school enrolment: in 2000 only 59 per cent of primary school-aged students were enrolled and by 2010 this had jumped to 96 per cent on the mainland and nearly 80 per cent on Zanzibar. [137] This has meant that a large number of children are now able to access education who were not able to in the past. To replace revenue lost by schools due to the abolition of school fees and contributions, the government introduced a capitation grant which aims to provide schools with finances, dependent on the number of pupils attending. However, not all of this money has reached schools, and irregular disbursement of this grant makes it very difficult for schools to plan their spending. [138]

Unfortunately, the larger numbers attending schools have been associated with large increases in class sizes, and a reduction in examination pass rates: primary school leaving examinations (PSLE) pass rates have varied widely in recent years falling from 57 per cent in 2011 to 30 per cent in 2012. [139] However pass rates have been rising since, and now only 2 areas have pass rates below 40% [140].

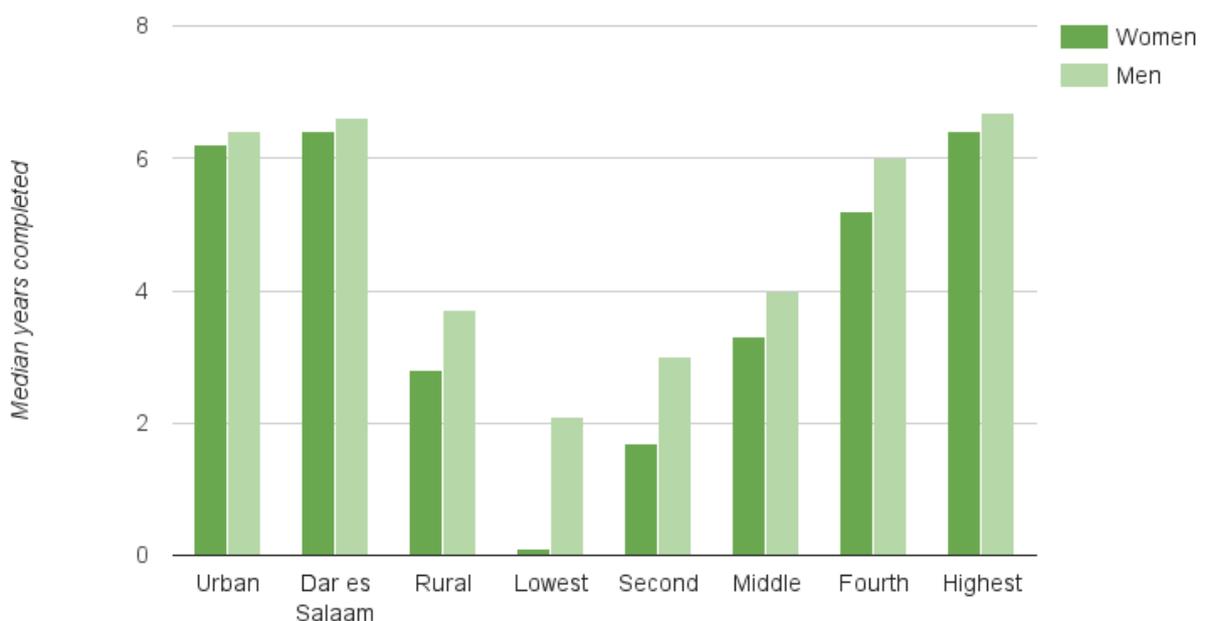
In 2015 Tanzania cancelled education fees at secondary level, which will likely lead to more enrolment at this level too, increasing the number of years in schooling for Tanzanian children. [141] However, despite the abolition of formal fees, families can still find themselves paying significant amounts for their children’s education, for instance on school uniforms, transport, examination papers, school lunch and extra tuition. [141] Addressing these hidden costs is essential to ensuring equitable access to education.

INEQUALITY IN EDUCATION

GENDER INEQUALITY

There is a gender disparity in the number of years spent in education. For females, 27 per cent have never attended school and the median number of years of schooling is 3.6. In contrast, for males, 18 per cent have never attended school and the median number of years of schooling is one year more than for females at 4.6 years. The largest variation in years of schooling is across wealth quintiles, particularly for females. Almost half of females in the poorest wealth quintile have never been to school (46 per cent). This drops to 7 per cent in the wealthiest quintile. For males the gap is also large – 33 per cent in the poorest households have never been to school compared with only 4 per cent in the highest wealth quintile. This suggests inequality in access to education.

FIGURE 32: MEDIAN YEARS OF EDUCATION COMPLETED BY MEN AND WOMEN, BY AREA OF RESIDENCE AND WEALTH QUINTILES, 2010



Residence

Wealth Quintile

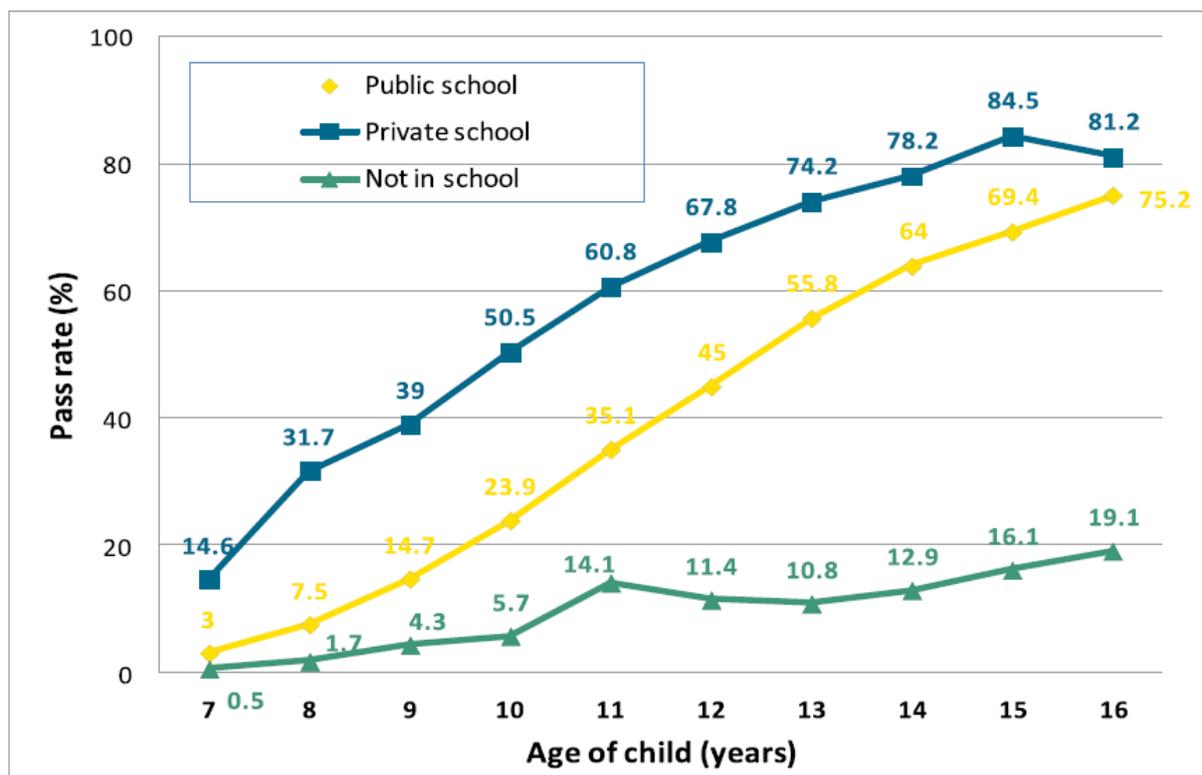
Source: UNESDOC [142]

WEALTH INEQUALITY: While urban students perform better than rural students, the gap between those in the highest and lowest wealth quintile is far greater than the urban–rural divide, which may be due to a two-tiered education system which includes a private sector for those able to afford it. [143]

Uwezo monitors educational standards. Through a large survey of children, they assess children’s competencies in English and Kiswahili literacy and numeracy using tools developed through a rigorous process. These studies are conducted across East Africa. The literacy and numeracy tools are based on the national Standard 2 curricula. Uwezo pegged the literacy and numeracy levels to Standard 2 to align with the majority of countries across the world that specify that all children should have developed basic literacy and numeracy skills by the end of second year in primary schools. The last report was in 2012 for Tanzania and illustrated that only 4 in 10 standard 3 pupils could read a basic story in Kiswahili and only 3 in 10 can add, subtract and multiply. This level of literacy and numeracy should be achieved at standard 2. Figure 33 shows how private school students are more likely than public school students to be meeting the Standard 2 proficiency .At all ages, but the gap is largest in the younger years, after which public school students begin to catch up.[144]

FIGURE 33

Percentage of children aged 7-16 years who passed the Kiswahili and numeracy tests expected at standard 2 level, by school status, 2012



Source: Uwezo 2012

URBAN ISSUES

Urban residents are more likely than rural residents to have attended school and to stay in school for a longer time. The gender gap in years of education is also much smaller in urban areas (6.2 years and 6.4 years, respectively), compared with just 2.8 years and 3.7 years for rural females and males, respectively. In Dar es Salaam this increases slightly (6.4 and 6.6). [142] However, there are a number of areas in which urban students have a disadvantage to their rural counterparts. In Tanzania, class sizes are generally large (74 students per classroom). However, the average urban primary school has 20 more students per classroom. [142] Teachers in urban areas are also far more likely to be absent (20 per cent of rural teachers are not in school at any given time compared with 36 per cent in urban areas), and the actual teaching time for students is less in urban areas (on average 1 hour 24 minutes in urban areas compared with 2 hours 11 minutes per day in rural areas).

WAYS FORWARD

A number of reports have highlighted the need to improve the quality of teaching [145-147] while others have highlighted the need to improve teachers' working and living conditions. [148, 149] Any programme to improve teacher quality should take a whole-school and whole-community approach. Below is a case study of a programme currently being developed that has the potential to positively impact on the health, wellbeing and human development of the population by both improving educational outcomes and developing teacher and community capacity to support children in developing reading skills.

CASE STUDY: USAID TUSOME PAMOJA ('LET'S READ TOGETHER') PROJECT

The Tusome Pamoja programme's primary goal is to increase the percentage of children who can read and comprehend text and solve grade-level arithmetic problems. To achieve this, the programme is working at national, district and ward levels to build capacity of the Tanzania Institute of Education (TIE), Zanzibar Institute of Education (ZIE), Ministry of Education, Science and Technology, and PO-RALG on several policy and institutional issues.

Following are the key areas of work.

- **Creating teacher guides and student materials, and providing training in their use**

The programme is working collaboratively with stakeholders to develop appropriate instructional material for the '3 Rs' (reading, writing and arithmetic). It will also develop training sessions and materials that support teachers to adapt existing practices into evidence-based practices. The project will also work with pre-primary education units to develop learning materials for this group.

- **Building coaching and mentoring support**

The project will work with inspectors at the regional and local level to develop a model for regular contact with school principals. It will work to build the capacity of Ward Education Coordinators (WECs) and Training Resource Center (TRC) tutors as key school support resources able to provide consistent, frequent and targeted instructional support.

There will also be work to develop the capacity of parents and communities to support children in practising at home, and addressing issues related to school safety and the importance of education.

- **Collecting data for evidence-based decision-making and change.**

Between 2016 and 2021 the project will be working in Morogoro, Iringa, Ruvuma, Mtwara, Unguja and Pemba. There is an opportunity to work with similar programmes that are trying to develop capacity of schools to incorporate health and wellbeing into the design.

EMPLOYMENT AND UNEMPLOYMENT

Tackling adverse physical and psychosocial working conditions is increasingly recognised as being key to human development. [150] While there is no universally accepted definition of what constitutes ‘good work’, many of the definitions available share common features. For example, the International Labour Organization, the Trades Union Congress (UK), and the international Employment Conditions Knowledge Network all highlight the following conditions to be associated with good work as being work that:

- sustains the worker financially
- provides security
- enriches the worker’s life through a good work–life balance
- promotes good physical and mental health. [151] [152] [153]

Employment and good-quality work are critically important for population health and health inequalities in several interrelated ways. [154] This is mainly as it provides access to regular wages and social status. [2] There is comprehensive scientific evidence on increased health risks, including mental health problems resulting from precarious employment, which carries a heightened risk of becoming unemployed, and from unemployment itself – particularly long-term unemployment. [2] People in low status jobs have an increased risk of a number of physical and mental health conditions including depression, [155] increased coronary risk and metabolic syndrome. [156]

EMPLOYMENT IN TANZANIA

Tanzania actually has one of the highest employment–population ratios in Africa, with 85% of working age adults in employment[42] Overall, surprisingly the results show that employment decreases as wealth increases, is lower for the urban population than the rural, and for those with secondary level education and above. [112] Unemployment rates are higher in urban areas (4.9 per cent), particularly in Dar es Salaam (13 per cent), whereas in rural areas it stands at 1.5per cent (Table 7). It is important to note that rural–urban migration for work is not a driver of urbanisation in Tanzania. [49, 157]

TABLE 7: LABOUR FORCE PARTICIPATION AND UNEMPLOYMENT BY REGIONS (2010–2011)

Labour force participation and unemployment rate

Region	Labour force participation rate	Labour force participation rate	Unemployment rate	Unemployment rate
	NPS 1	NPS 2	NPS 1	NPS 2
Tanzania Mainland	78.0	83.6	2.3	3.0
Dar es Salaam	68.0	72.6	16.0	13.0
Other urban	68.3	74.7	4.1	4.9
Rural	81.4	87.1	0.6	1.5

Source: Tanzania National Panel Survey (NPS) Report, Round 2 (2010–2011)

Source: ESRF [42]

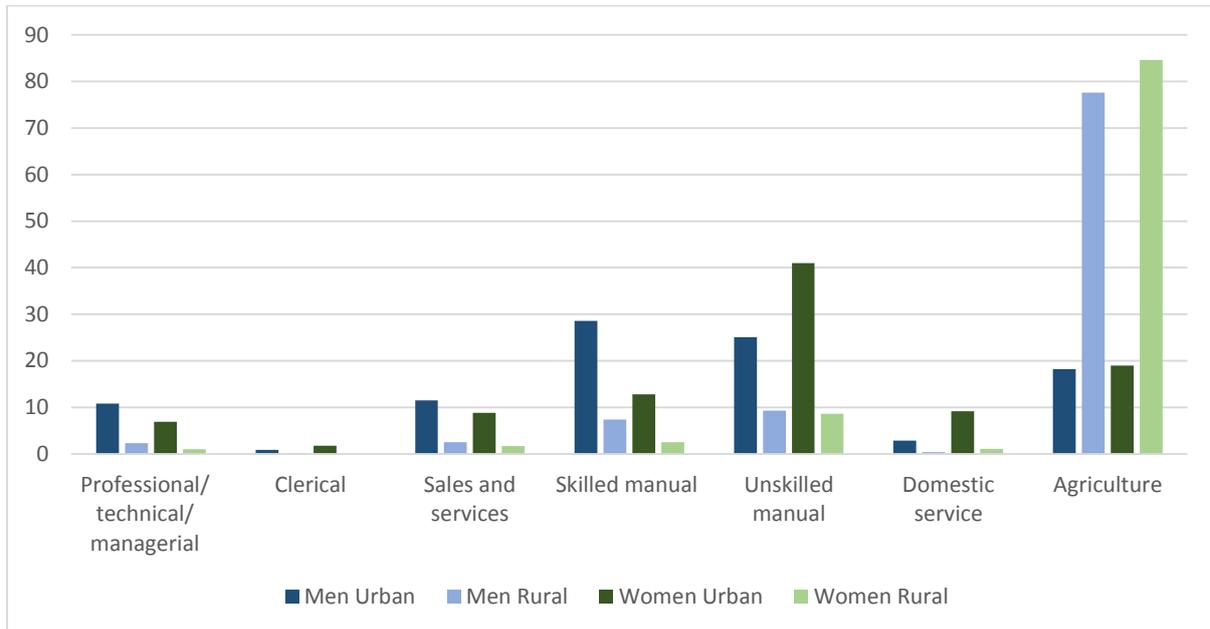
How employment is defined is key to understanding these results. For example, the DHS uses self-reported definitions of employment by asking respondents whether they were employed at the time of the survey and, if not, whether they were employed in the 12 months preceding the survey. This is useful as it captures informal employment and seasonal work, but leaves definitions of employment open to the individual.

However, this also demonstrates that employment is complex in Tanzania. While many people are working, they are still living below the poverty line, leading to high rates of in-work poverty. [42, 50] Youth employment is a growing concern and gender inequality remains persistent, as will be discussed. There is also a growing informal sector, particularly in urban areas, which presents a number of opportunities but also a number of risks, as will be discussed.

IN-WORK POVERTY AND INSECURITY

There are a number of people in Tanzania working but earning below the national poverty line. [50] [42] [34] This is largely because the agriculture sector is the largest employer, with 69 per cent of women and 62 per cent of men engaged in agricultural occupations, and is affected by low or no pay. This occupation is more common for people in rural areas, in the lower wealth quintile and for those with no education. [112]

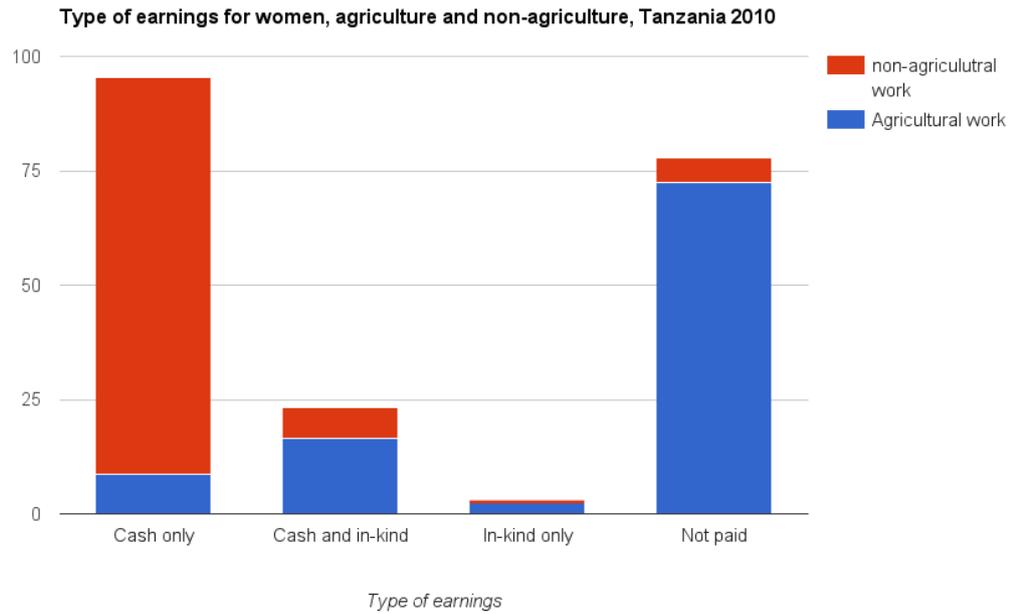
FIGURE 34: OCCUPATIONS FOR MEN AND WOMEN BY AREA OF RESIDENCE (URBAN AND RURAL), 2010 (%)



Source: Demographic Health Survey, 2010 [34]

The agricultural sector provides valuable work and a source of food for a large number of Tanzanians, but the work is often unpaid. Figure 35 demonstrates that for women, agricultural work is mostly unpaid, while most other occupations are cash-only. [112] Much agricultural work is also seasonal at 82 per cent, contrasting with 74 per cent of non-agricultural work being all-year-round. [50]

FIGURE 35: TYPE OF EARNINGS FOR WOMEN, AGRICULTURAL AND NON-AGRICULTURAL, 2010 (%)



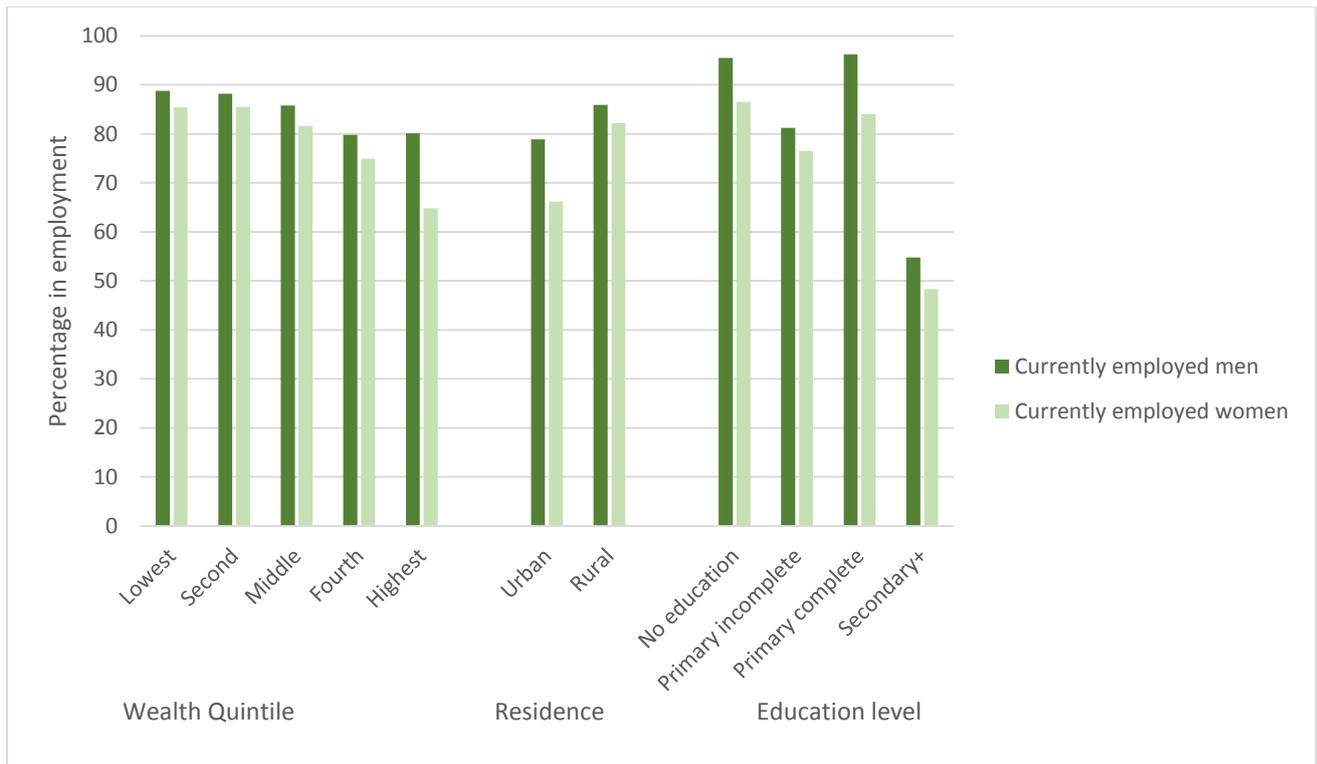
Source: Demographic and Health Survey 2010 [34]

The agriculture sector may explain why rural areas have higher employment rates, but also greater levels of poverty. The NPS found that people heading households that were never poor are significantly less likely to work in agriculture, livestock or fishery and considerably more likely to work in non-agricultural jobs. [33] Work should be done to promote financial security for those working in agriculture, in both urban and rural areas.

GENDER INEQUALITY

Throughout Tanzania, as in the rest of the world, men are more likely to be in employment than women, while women are more likely to do unpaid domestic and care work. Men also earn significantly more than women. Women are more likely to work in the agriculture sector, while men, particularly urban men, are also more likely to work in professional roles, sales and services, and skilled manual professions. In urban areas, for men skilled occupations are the most common (29 per cent), followed by unskilled (25 per cent) and thirdly agriculture (18 per cent). Unskilled employment is more common than skilled employment for women in urban areas (41 per cent of those employed) followed by agriculture (19 per cent). [34]

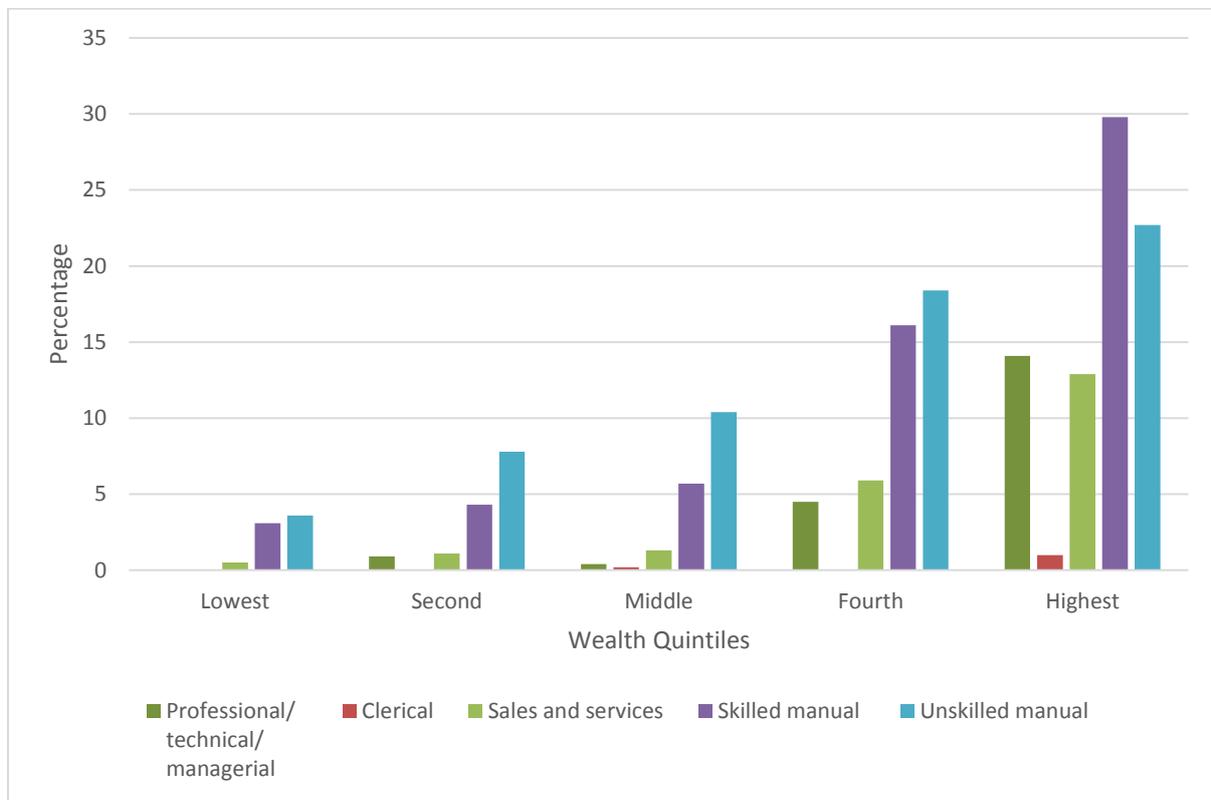
FIGURE 36: EMPLOYMENT STATUS OF MEN AND WOMEN BY WEALTH QUINTILE, AREA OF RESIDENCE AND EDUCATION LEVEL, 2010



Source: Demographic and Health Survey 2010 [34]

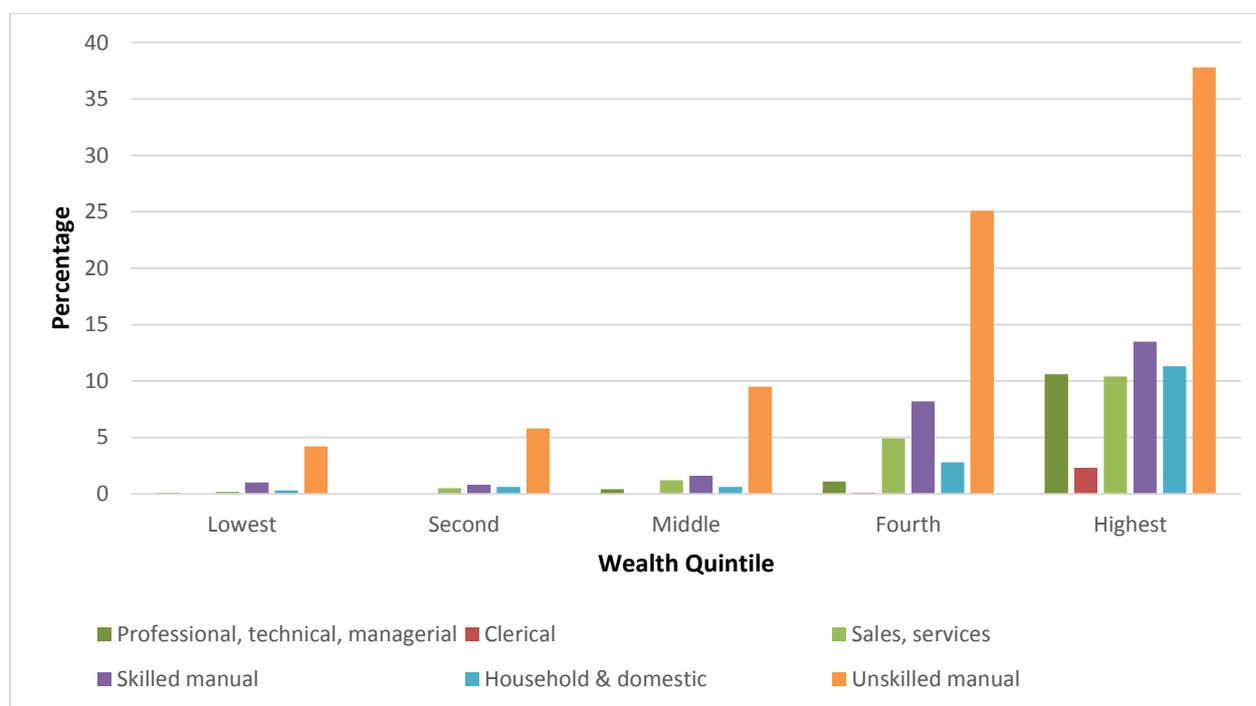
Figures 36 and 37 look separately at men's and women's employment type by wealth quintile, with agriculture removed from the analysis. Unskilled manual occupations are the second most common employment type for both genders (16.6 per cent of employed women and 13.4 per cent of employed men). For men, skilled manual occupations become the most common in the highest wealth quintile, while for women, unskilled occupations are the most common at this level. This suggests that, as discussed earlier, there is a relationship between increased wealth and working in non-agricultural professions, for both genders. However, it also demonstrates that women are not accessing skilled manual work or professional work at the same rates as men, irrespective of wealth. These professions are more common in urban areas: half of non-farm businesses are in urban areas – a third of these are in Dar es Salaam. [158] However, it is important to note that a large percentage of urban residents engage in agricultural work (19 per cent of urban women and 18.2 per cent of urban men).

FIGURE 37: MEN'S EMPLOYMENT TYPE (%) BY WEALTH QUINTILE, 2010 (NOT INCLUDING AGRICULTURE)



Source: Demographic and Health Survey 2010 [112]

FIGURE 37: WOMEN'S OCCUPATION (%) BY WEALTH QUINTILES, 2010 (NOT INCLUDING AGRICULTURE)



Source: Demographic and Health Survey 2010 [112]

YOUTH UNEMPLOYMENT

Youth unemployment is a growing concern in Tanzania as an estimated 800,000 working-age Tanzanians enter the job market annually; this growth in supply of labour is increasing at a much faster rate than the number of jobs. A survey by the non-governmental organisation Restless Development found that out of more than 1,000 young people across Tanzania, only 14 per cent reported working in a formal, wage-earning job. [159]

While this young workforce is increasingly educated to tertiary level, recent evidence suggests that they are not graduating with the necessary skills needed for employment. Inter-University Council for East Africa (IUCEA) and the East African Business Council (EABC) looked at employers' perceptions of graduates and indicated that more than 50 per cent of university graduates are graduating without attaining the basic and technical skills required in the job market. Tanzanian universities perform second worst in the East Africa region with only 39 per cent of its degree holders rated as 'competent'. [160] A key area highlighted by employers was a perceived lack of confidence among graduates to put forward their ideas, and 47 per cent of employers reported that lack of the right skills was a major reason they did not fill vacancies.

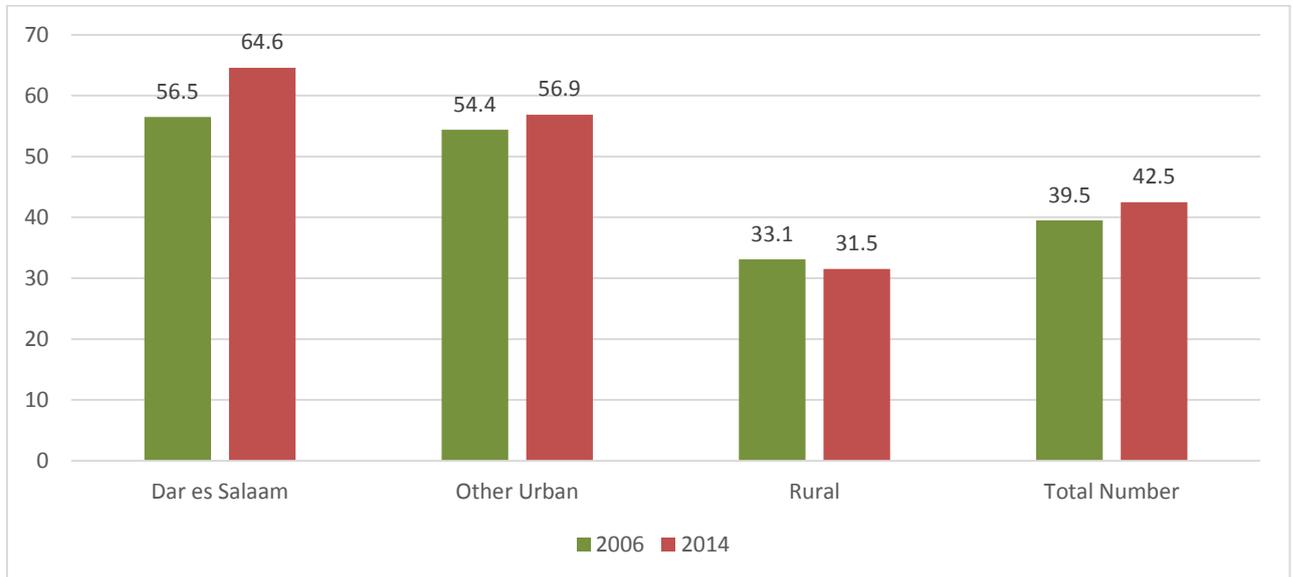
URBAN ISSUES

The most common jobs in cities are unskilled manual jobs, followed by skilled manual jobs. Data from more developed countries has illustrated that there is a social gradient in health whereby those in unskilled manual work have the worst health outcomes, followed by those in skilled manual jobs. Some of this will be related to income levels which are typically lower for these jobs, which require none or little education or training; however, in addition these jobs are typically physical in nature, putting more strain on the body, and are more hazardous. Efforts to regulate for safety, job security, and wage levels will go some way to protecting these workers from negative health and social consequences. [8]

INFORMAL SECTOR IN THE URBAN ENVIRONMENT

With this growing workforce unable to find formal employment, job seekers are increasingly turning to the informal economy, particularly in cities. Urbanisation, along with globalisation and liberalisation, is associated with a rise in informal work in Tanzania. [161] The 'informal economy' has received multiple definitions over time as to what it includes and excludes but generally it is taken to include both self-employment and wage employment that exists outside of state regulation. [162] Informal employment is associated with low income per capita and high poverty rates. [163] It is more precarious and provides much lower access to social protection and healthcare than formal work. [42] Between 2006 and 2014 the number of households with at least one member engaged in informal business (such as petty trade, food and water vending, stone quarrying, agriculture, sand and salt mining, and livestock rearing) increased from 40 to 43 per cent. This increase was mainly found in Dar es Salaam (from 57 to 64 per cent) and other urban areas (from 54 to 57 per cent). [50]

FIGURE 38: PERCENTAGE OF HOUSEHOLDS WITH MEMBER ENGAGED IN INFORMAL SECTOR ACTIVITY, BY AREA, TANZANIA MAINLAND, 2006 AND 2014



Source: National Bureau of Statistics [50]

FORMALISING THE INFORMAL ECONOMY

Micro-entrepreneurship ((Small businesses generally with nine employees or fewer) has been highlighted as a key way to develop the economy and wealth of poor people in low-income countries, particularly in urban areas. The Commission for Legal Empowerment of the Poor (CLEP) emphasised the right of those in the informal economy to trade and to do business effectively, including, for example, rights to viable space and relevant services. [51]

Efforts are being introduced nationally to formalise the informal economy (through the MKURABITA/ Property and Business Formalisation Programme); and to create jobs. Through the National Employment Creation Programme (2007), the government of Tanzania aimed to create over one million jobs by 2010, across sectors. However, the reality remains that small businesses are restricted from transitioning into the formal market due to excessive and bureaucratic regulations. [164] There is only one location to legally register a business – the Business Registrations and Licensing Agency (BRELA) in Dar es Salaam [165] – and it remains a costly and time-consuming procedure for entrepreneurs to gain formal registration (although efforts are being made to allow businesses to register online). Additionally, taxation imposed in the formal sector remains high. As a result, these national efforts have been largely unsuccessful. [166]

Other countries have been more successful in supporting small enterprises to formalise. As the case study below from Brazil demonstrates, effective policies to support those in the informal sector such

as providing access to loans and credit, and removing barriers to formalisation, can lead to a large increase in the number of micro-entrepreneurs formalising their businesses.

CASE STUDY: SUPPORTING MICRO-ENTREPRENEURS TO FORMALISE, SEBRAE, BRAZIL

Brazil has been implementing a series of measures to encourage the formalisation of micro and small enterprises and to promote the creation of formal employment for more than 30 years. This process has included laws to differentiate microenterprises in terms of tax and labour obligations, and increasing their access to credit and development services, as well as streamlining or removing administrative obligations. The most notable of these was Simples Nacional, which allows companies to file a single simplified annual tax declaration, exempts micro and small enterprises from paying additional social contributions required at the federal level, and reduces a few other fiscal obligations. Key to this success was the creation of SEBRAE (Serviço Brasileiro de Apoio às Micro e Pequenas Empresas) in 1990, described below. (For a more complete list of all of these policies see ILO, 2014. [167])

SEBRAE is an autonomous agency that supports and promotes small enterprise by offering assistance in technology development, market access, credit guarantees and local economic development as well as playing a larger role in the design and implementation of the regulatory framework for micro and small enterprises. It is decentralised to different regions and has over 700 support centres throughout the country. In 2013, SEBRAE provided assistance to micro and small enterprises, either individually or in groups, on 1.5 million occasions. SEBRAE also works to build capacity in local government and enhance cooperation between local governments and technical support bodies in the creation of a favourable business environment for micro and small enterprises.

SEBRAE runs a credit guarantee fund (FAMPE) for micro and small enterprises that provides guarantees worth up to 80 per cent of the extended loan amounts. This fund has supported 150,000 micro and small enterprises. It has also supported the development of a mutual guarantee association, Serra Gaúcha, which has facilitated access to credit worth BRL 12 million, benefiting 350 micro and small enterprises.

IMPACT

Between 2002 and 2012, the percentage of the working population occupied in formal employment rose by 15.6 per cent and in 2012 70.2 per cent of urban wage earners were covered by health and/or pension provisions. Almost 60 per cent of registered micro-entrepreneurs declared that their revenue had increased after they had formalised their operations. While the exact contribution of SEBRAE to this process is difficult to determine, many note the key role that this agency has played. [167]

Tanzania is expected to see a large increase in the absolute number of older people (aged 60 and above), from 1.95 million in 2005 to 7.16 million in 2050: an increase of 270 per cent. [168] The percentage of older people in the Tanzanian population is currently the highest in the East African region (5.1 per cent in 2005) and will increase up to 10.7 per cent by 2050. [169] [170] In Tanzania the majority of older people live in rural areas, while urban areas have a higher percentage of young and working-age people (aged 15 to 49 years). [3]

In 2003 the government responded to the challenges of ageing by creating a National Policy on Ageing to set a base for promoting health care, participation and income security for its older population; older people are also a focus of the National Strategy for Growth and Reduction of Poverty (MKUKUTA). Both in the National Policy on Ageing and the MKUKUTA, persons aged 60 years and above are entitled to free health care services, but this age limit varies from district to district.

TANZANIA-WIDE ISSUES

Implementation of the National Policy on Ageing has been met with a number of barriers, such as poor administrative structures and procedures, bureaucratic hindrances, unavailability of proper medical services and medication, as well as reluctance of health care staff and local government officials to adequately deliver older people their entitled services. There is also low awareness among the population of older people's rights and entitlements: in one study in Kineng'ene, only 11 per cent of the total respondents were able to state any specific right or entitlement to services for older people. [168] In practice it is non-governmental agencies that provide much of the support for this group. There are a number of national pension schemes (see Appendix 3), but in practice they do not apply to the majority of the population, who are employed in the informal sector.

URBAN ISSUES

Evidence from Sub-Saharan Africa more widely suggests that many older people, particularly older women, are negatively affected by urbanisation as they are left in rural areas taking care of children while young people migrate to cities for work. Those remaining are left with little support from family and little or no access to formal support and social protection. [171] This was discussed by a number of stakeholders in Tanzania during research for this report, but documented evidence for these issues was not found. We can say that in Tanzania older people are more likely to live in rural areas, while urban areas have a higher percentage of young working-age people, which may suggest that this is happening. [3]

3.2. WIDER SOCIETY: CHANGES TO THE BUILT ENVIRONMENT AND SOCIAL NORMS

The urban built and social environment brings an increased risk of a number health outcomes, as shown in the previous section. In particular, high-density informal settlements common in urban areas increase the risk of developing a number of infectious diseases, and there is growing evidence of environmental diseases being more concentrated in the urban environment. Urban lifestyles are also associated with a number of risk factors for non-communicable diseases such as those associated with increased BMI, and substance abuse. This section discusses the social environment, changing gender roles and associated issues including gender-based violence. Following this we discuss the built environment including the issues associated with formal and informal settlements, and land rights.

SOCIAL ENVIRONMENT

Social capital has often been used to understand the relationship between the social environment and health. [2] Social capital concerns social norms, the levels of social and civic trust, and the levels of social support and networks that lead to coordination and cooperation for mutual benefit. [172] Nyaran and Pritchett (1999) showed how social capital, defined as the “quantity and quality” of social relationships and norms, impacts the opportunities a household has in rural Tanzania. [173] The research study showed that if a household had more social connections, joining different associations and groups (church groups, political and so on), the household members were more likely to access “better public services, use advanced agricultural practices, join in communal activities, and use credit for agricultural improvements”. [173] In a study of social capital in the Bukoba urban district in the Kagera region, individuals who had low levels of access to structural social capital (e.g. e.g. social networks, social participation) and cognitive individual social capital (e.g. perceived social support, trust) were four and three times more likely to be HIV-positive compared with individuals who had access to high amounts of social capital. [174]

Evidence globally suggests that urbanisation can negatively impact on social capital as it leads to a reduction of support from extended family, [175] increase of distrust and crime in the community [176] and increased social isolation. [177] However, urbanisation can also offer an opportunity to redefine social norms and an opportunity for marginalised groups to access social and economic empowerment; this is particularly true for women. [178] It is not yet clear, however, how urbanisation is affecting social capital in Tanzania.

SAFETY AND VIOLENCE

A survey of people’s attitudes to crime found that urban populations are more likely to feel that crime has increased in the three years prior to being surveyed (50 per cent of urban residents compared with 28 per cent of rural residents). [179] The most common crime was theft of personal property and home burglaries, and less than half of these crimes are reported to the police. Reasons for not reporting included a feeling that police were unavailable or inaccessible. Many victims also stated that the crime was not important enough. However, two-thirds did report crimes to other authorities such as traditional authorities, local ward councillors and neighbourhood watch groups

(known as *sungusungu*). Many people report changing their behaviour due to feelings of insecurity, which is negatively affecting social cohesion in neighbourhoods. [180] This insecurity can affect human development as it can lead to isolation of groups and stigmatisation of neighbourhoods, and reduces social cohesion. Action to reduce crime should be multi-dimensional and enhance safety through planning and governance. The example from Dar es Salaam highlights the importance of these aspects.

CASE STUDY: SAFER CITIES APPROACH TO URBAN CRIME PREVENTION, DAR ES SALAAM

The Safer Cities approach is a global strategy that aims to build capacities at city and municipal level to address crime and insecurity, and to establish a crime prevention culture. This approach was applied in Dar es Salaam in 1997. Local authorities were provided with technical support to develop sustainable ways of preventing violence and crime in the context of reducing or preventing the occurrence of crime or the fear of crime. Community involvement and participation was essential to success. A sensitisation and awareness campaign concentrated on key partners at the local level and encouraged civil society participation.

Safer Cities Units were established in the four local authorities, and networking and collaboration was encouraged. Key aspects of the approach included:

- The Dar es Salaam Auxiliary Police Unit was also established along with the revival of Ward Tribunals in the 73 wards to expedite law and by-law enforcement.
- Support was given to neighbourhood watch groups (*Sungusungu*) and to young victims of drug abuse.
- Income-generating programmes were created for women, youth and the victimised.
- The Dar es Salaam One Stop Youth Resource Centre was set up, a prevention model that focused on providing youth with a safe community centre to increase their skills, access services, and organise youth led programmes and projects.

IMPACT

The capacity of local actors was improved, especially regarding urban crime prevention tools and issues. Institutional mechanisms for project implementation at council and city levels were established. The Safer Cities approach is being rolled out to all the municipalities in Tanzania, including Moshi, Dodoma, Arusha, Mbeya, Mwanza, Tanga and Bagamoyo. [181] UN-Habitat found that after the programme the perception among the authorities of the urban poor being the main offenders decreased, as survey results showed that they were in fact the main victims of crime, and youth were increasingly incorporated as part of the solution, as a resource. Overall, citizens were more engaged with the police than before. [182]

CHANGING GENDER ROLES

Gender inequality was raised as a major issue by stakeholders, who discussed the persistence of systemic patriarchy in Tanzania. A number of policies and funds are in place to promote gender

equality such as the Women and Gender Development Policy 2000; Women and Gender Development Strategy 2005; Women Development Fund; and Tanzania Women Bank. The Tanzanian Development Vision 2025 envisions equality between men and women as stipulated in the Constitution. One of the strategies of Vision 2025 is, “gender equality and the empowerment of women in all socio-economic and political relations and cultures”. [183] Institutional arrangements for promoting gender equality are also in place, including the Ministry of Community Development, Gender and Children (MCDGC), sectoral gender desks/focal points and committees within central government, regional administrations and district authorities, and civil society organisations (CSOs) which focus on women’s rights.

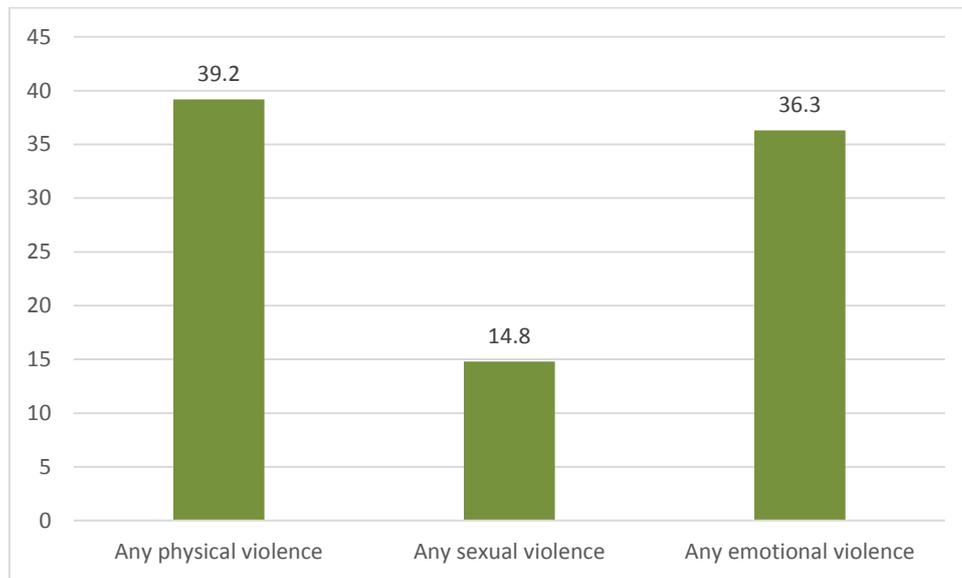
Despite these positive steps, a number of indicators suggest that gender inequality remains a large and pressing issue in Tanzania. Cities can offer an opportunity to transform gender identities, and loosen patriarchal structures. This can result in increased gender equity and improve human development in a number of indicators such as reducing gender-based violence, improving equality in education and employment, and improving women’s health outcomes. However, these associated benefits are not always found in Tanzanian cities. Key areas previously discussed include [women’s health](#), [inequality in education](#) and [employment](#). A further pressing issue in Tanzania (as in the rest of the world) is gender-based violence.

GENDER-BASED VIOLENCE

TANZANIA-WIDE ISSUE

Gender-based violence (GBV) takes many forms including physical, emotional, sexual and economic violence. [184] GBV has a large effect on the health of victims, ranging from death and disabilities caused by injuries, through to an increased vulnerability to a range of physical and mental health problems. [185] Poverty, income inequality and gender inequality are structural drivers of GBV and HIV. Levels of GBV have not been regularly recorded in Tanzania, but the latest Demographic and Health Survey (2010) asked a number of questions pertaining to GBV, with the results providing an indication of the extent of the problem: 39.2 per cent of women report physical violence, followed by emotional violence at 36.3 per cent and sexual violence at 14.8 per cent.

FIGURE 39: TYPES OF GENDER-BASED VIOLENCE EVER EXPERIENCED BY WOMEN (AGED 15–49) (%)

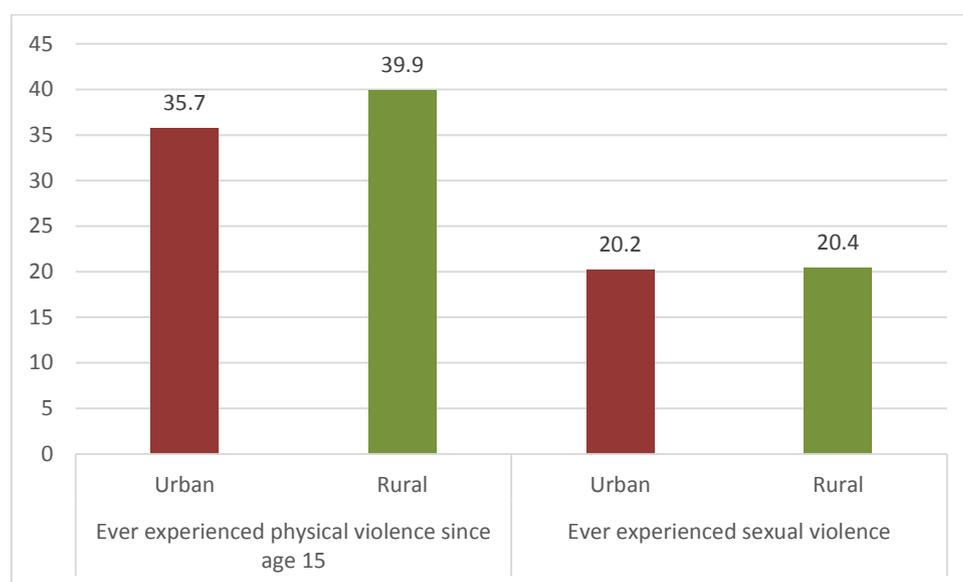


Source: Demographic and Health Survey 2010

URBAN ISSUES

Evidence from the DHS 2010 suggests that urban-residing women are slightly less likely to have experienced physical violence than rural-residing women, although the difference is small (38.7 per cent of rural women and 35.7 per cent of urban women having experienced physical violence), and there is no real difference between experiences of sexual violence by area of residence, as Figure 40 demonstrates.

FIGURE 40: TYPE OF VIOLENCE EXPERIENCED, BY AREA OF RESIDENCE (URBAN AND RURAL) (%)



Source: Demographic and Health Survey 2010

However, when marital control by husbands is considered, it is apparent that urban women are more likely to experience most types of this control than their rural counterparts.

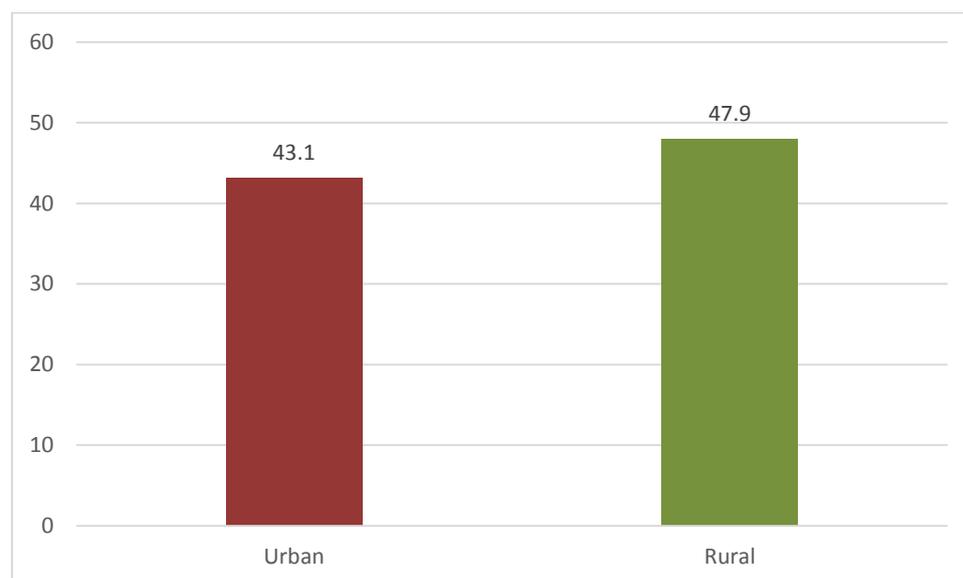
TABLE 8: MARITAL CONTROL DISPLAYED BY HUSBANDS, RED BOXES DEMONSTRATE A RURAL ADVANTAGE, AND GREEN BOXES DEMONSTRATE AN URBAN ADVANTAGE

Marital Control displayed by husband	Residence	Percentage
Women whose husband/partner is jealous or angry if she talks to other men	Urban	70.3
	Rural	64.2
	Total in 15–49 age group	65.7
Women whose husband/partner frequently accuses her of being unfaithful	Urban	32.7
	Rural	31.8
	Total in 15–49 age group	32
Women whose husband/partner does not permit her to meet her female friends	Urban	23.9
	Rural	18.9
	Total in 15–49 age group	20.1
Women whose husband/partner tries to limit her contact with her family	Urban	21.7
	Rural	16.9
	Total in 15–49 age group	18.1
	Urban	58.1
	Rural	45.5

Women whose husband/partner insists on knowing where she is at all times	Total in 15–49 age group	48.7
	Urban	18
Women whose husband/partner does not trust her with any money	Rural	14.6
	Total in 15–49 age group	15.5
Women whose husband/partner displays three or more of the specific behaviours	Urban	39.3
	Rural	33.6
Women whose husband/partner displays none of the specific behaviours	Total in 15–49 age group	35.1
	Urban	17.7
	Rural	24.9
	Total in 15–49 age group	23.1

Source: Demographic and Health Survey 2010

FIGURE 41: WOMEN WHO SOUGHT HELP TO STOP VIOLENCE, BY AREA OF RESIDENCE (URBAN AND RURAL), 2010 (%)



Source: Demographic and Health Survey 2010

While there is a need for more research on the relationship between the urban built and social environment and GBV in Tanzania, international research illuminates potential links. While cities can provide a space to transform gender identities, and loosen patriarchal structures, this can increase the risk of GBV in some instances rather than reducing it. [178] This is because men can feel threatened by changes in gender roles and identities, resulting in men asserting themselves

violently, and in the case of Tanzania, this could take the form of a man controlling his wife's behaviour.

A multi-country review indicates that the urban environment can increase the risk of GBV for women, especially for violence perpetrated by a non-partner. In Tanzania, 56 per cent of women in rural areas experienced violence at the hands of an intimate partner, compared with 41 per cent in cities. Conversely, 19 per cent of women in rural areas experienced violence at the hands of a non-partner compared with 34 per cent of women in urban areas. [186] These are similar results to research from other countries which suggests that violence against women by male partners is less prevalent in cities than in rural areas, while gender-based violence by a non-partner is higher in urban areas. [11]

The urban built environment can increase the risk of GBV by a non-partner in a number of ways. For example, living in insecure dwellings can increase the risk of burglary, theft and rape, with little recourse to protection, either formally or informally. [187] When sanitation facilities are far away from people's homes, there is an increased risk of violence if women walk alone to use them, particularly at night. [188]

The urban social environment can also increase the risk of GBV. In many countries, partner alcohol abuse is strongly and consistently associated with an increased likelihood of a woman experiencing domestic violence. [189] Places where alcohol is bought and consumed are also associated with an increased risk of GBV, and these tend to be concentrated in cities. As stated in section 3, the data on drinking patterns by area of residence in Tanzania is mixed; while drinking and heavy drinking by urban Tanzanians appears lower than in other Sub-Saharan African cities, drinking culture appears to be changing. [108] Some types of occupations put women at greater risk of GBV: sex workers in particular are vulnerable to violence, and they tend to be more concentrated in cities. [190] There is also debate about the effect of urbanisation on women's ability to seek help or leave abusive relationships. Some studies suggest that cities increase women's help-seeking behaviour as they have access to greater social and economic independence, therefore women have more opportunities to challenge this violence. [191] However, there are also studies that suggest that cities are associated with reduced social capital, which can increase the risk of GBV as women have fewer people to talk to.

BUILT ENVIRONMENT

HOUSING AND INFORMAL SETTLEMENTS

In Tanzania, around 70 per cent of city residents today live in informal housing and slums. [192] With the population projected to grow by tens of millions in coming decades, some anticipate far more informal housing. The prevalence of slums has focused attention on the environments and social conditions in which a large proportion of urban dwellers live. Slums are defined by physical, environmental and socio-political characteristics. They feature five key deprivations: inadequate water supply, inadequate sanitation, overcrowding, poor housing quality, and insecurity of tenure. [193] Slums remain off the map, vulnerable to exploitation, and their existence showcases the

widening gap of urban inequalities. [194-196] However, some have called into question this uniform definition of slums, both in Tanzania and internationally. Many of the informal areas in Tanzanian cities are good quality and have access to services, while others have a wide range of deprivations. Accurate mapping to better understand communities' needs, as discussed in the case study on community mapping below, would allow better targeting of interventions.

A global systematic review carried out in 2013 suggests that interventions are most likely to happen when the upgrading is targeted at those with poor health and inadequate housing specifically. [197] This suggests that interventions need to have better data to target those in need. In addition to these settlement conditions, the growth of the urban rental market has also been identified as a less 'visible' component of the housing crisis. Cadstead's (2010) study of tenants in Mwanza's informal settlements shows that private rental tenants remain ignored in policy and programme planning, and lacking sufficient rights. [198]

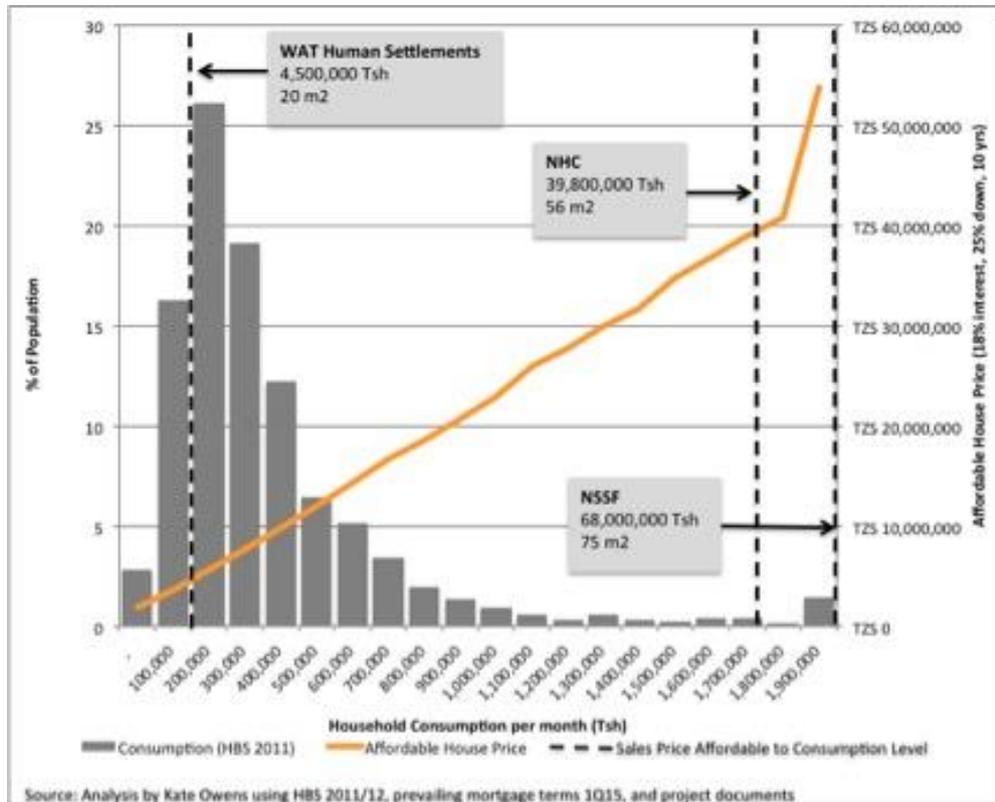
ACTIONS TO IMPROVE INFORMAL SETTLEMENTS

A number of actions have been taken over the years to improve the conditions of people living in informal environments in Tanzania. The National Housing Development Policy (NHDP) (1982) identified a number of key issues interlinked to Tanzania's settlement needs: availability and access to land; planning and building regulations and standards; access and availability of infrastructure and social services; informal and unplanned building; poverty, gender, housing finance, capacity, rapid urbanisation and sprawl, and more. The growth of informal housing, unplanned and slum settlements remains interlinked to such factors. The key areas that have been focused on include building formal settlements, increasing land rights and improving housing and service quality in informal areas, as discussed below.

BUILDING FORMAL SETTLEMENTS

The National Housing Corporation (NHC) was formed in 1990 to build and provide affordable accommodation countrywide. However, evidence from the African Development Bank (2014) shows that on average the cheapest newly built house by a formal developer cost just under US\$30,000 in 2013. This is far above the average sum a Tanzanian could afford. Research from the World Bank demonstrates that the NHC only provides housing for the upper 2 per cent income market, as Figure 42 demonstrates. [199] This suggests that there is a need to provide housing that is targeted to lower income earners and vulnerable populations. Providing affordable homes is an issue in many countries and a number of interventions have attempted to tackle the issue internationally, such as 'shared ownership schemes', rent control and rent assistance. However, it is unlikely that these interventions will provide housing for all of the lowest income earners, who are those most at risk of negative health-related outcomes due to their housing. It is therefore essential that interventions that focus on improving conditions in informal settlements are made a priority.

FIGURE 42: RANGE OF CONSUMPTION FOR HOUSEHOLDS AND AFFORDABLE HOUSING PRICES IN TANZANIA



Source: Bald (2016) [199]

INCREASING ACCESS TO LAND RIGHTS

Despite the presence of master plans, and a strong constitutional framework, urban areas operate within informal and formal systems of land management and planning. With regards to land and property, the government has introduced several ‘formalisation’ programmes for land – MKURABITA (the Property and Business Formalisation Programme), and the Strategic Plan for the Implementation of Land Acts (SPILL). [200] There remains informality in land transactions, planning and administration. As Kironde (2000) shows through researching Dar es Salaam’s land market, land transactions are frequent and occur between the planned and unplanned sectors. [201] It is argued that such land transactions are hidden, and constitute a gap requiring greater understanding. The fact that such informal land transactions occur, between sellers and buyers, means the government claims lower dividends and revenue, and potentially the market is less efficient.

A detailed analysis of the land titling process found it to be expensive and involve a lot of bureaucracy: urban residents must go through 11 discrete steps, deal with two separate government institutions, and spend between US\$300 and 600 for the basic prerequisites alone. [202] This study demonstrated that when these barriers are removed, people are more likely to claim land rights; 73 per cent of households take up land rights while receiving an 80 per cent subsidy for the cost of claiming rights.

These programmes assume that by formalising ownership of land – by providing certification and titles, for example – residents will have greater tenure security, invest more, and be able to use their rights and access financial credit. However, credit is not always more accessible, and rights are not always respected. [203-205] They also assume the informal and formal systems are separate dual binaries, rather than attached and interconnected. Kombe and Kreibich (2001) highlight the flaw in this thinking. [206] The notion of the informal sector being illegal, outside of the law, is flawed – rather, informal land regularisation is conducted through different social groups, norms, and institutions, all of which are closely linked to the formal sector. Informal does not mean illegal, and needs to be better integrated into public land management.

There is also a large issue of equity in claiming land rights. The National Land Policy (1995) stated that the government would ensure equity in land rights and protection of land and improve the efficiency of land administration. Subsequent acts built upon this – such as Tanzania’s Land Act and Village Act (1999). Within these acts, women are able to own land and it is stated that access to land is equal for all citizens, with no discrimination allowed on the basis of sex. However, there is no clarification as to which ‘law’ holds true in the case of inheritance and marriage. The land system is more complex, operating whereby land tenure and rights are defined through the constitution and national policies; and whereby land operations are customary, and informal. [207] Patriarchal customary laws continue to put women at a disadvantage with regards to land rights: at higher risk of land grabbing and losing land by inheritance, divorce or widowhood. The 1995 National Land Policy was heavily criticised for marginalising the interests of women, continuing with the use of patriarchal customary laws that deny women’s inheritance rights and ownership, and lack of provision for women’s representations in land institutions. [205] NGOs such as TGNP, TAMWA, TAYOA and TAWLA have been key stakeholders in changing discriminatory policies to include a gender perspective. Such organisations remain active in calling for gender sensitivity, with varied successes documented. In 2013, TGNP advocated for a gender responsive new Constitution and gender equality. [208]

IMPROVING SERVICES IN INFORMAL AREAS

A number of examples can be found of plans and programmes to improve access to basic services for urban residents. For example, a Citywide Action Plan was developed, and implemented by the Citywide Slum Upgrading and Prevention Programme Unit (CSUPPU), to improve service access in Dar es Salaam’s informal settlements. [209] Working with communities, with the CSUPPU acting as technical support, the Citywide Action Plan aimed to increase waste and sanitation services from 30 to 60 per cent by 2020. [209] Alternative community-upgrading initiatives have also been identified, such as the Hanna Nassif programme (1992) and community mapping. [210] Such schemes demonstrate that when local communities are involved in service upgrading, it is more likely to be maintained over time, and has the potential to improve local employment opportunities. However, any improvements need to be focused on the specific issue that individual areas face. The Dar Ramani Huria case study below demonstrates how community mapping can improve local authority knowledge.

EXAMPLE 3: COMMUNITY MAPPING FOR LOCAL DECISION-MAKING: DAR RAMANI HURIA

Increased population growth in many urban areas puts a strain on services to provide clean water, basic sanitation and waste disposal. For example, Tandale is an administrative ward in the Kinondoni district in western Dar es Salaam. It has a population of around 54,781, largely in unplanned settlements, is bisected by the Kwamkunduge stream and has large flood-prone areas. A drastic rise in population combined with a public open market has meant that accessibility to clean water and sanitation has become an increasing challenge. In the rainy season road surfaces become muddy, and drains are often blocked, leading to a lot of flooding and stagnant water, a breeding ground for diseases such as typhoid, cholera and diarrhoea.

In 2011 Tandale became one of the first areas to be mapped by Dar Ramani Huria, a community mapping project that uses volunteers from the local community and university students to map wards that are particularly prone to flooding. [211] These volunteers use a combination of GPS, aerial imagery and drone footage to provide accurate and up-to-date maps of previously unmapped areas. The main aim of the maps is to assist in disaster planning and response, but they are freely available for anyone to use, such as communities and ward officers for planning and development.

The ward officer in Tandale has used these maps for urban planning such as road and drainage investments, and to assist health authorities to respond to a cholera outbreak. In Dar es Salaam the maps have also been used by communities to map *dala* routes (the routes of minibus share taxis) and to make these routes available on mobile phones. [212]

Dar Ramani Huria is working in wards throughout Dar es Salaam and elsewhere in Tanzania such as Dodoma and Arusha.

CASE STUDY: COMMUNITY-BASED ENVIRONMENTAL MANAGEMENT FOR MALARIA CONTROL [213]

Between 2005 and 2007, a community-based environmental management programme for malaria control was conducted in Dar es Salaam. It was organised by Japan International Cooperation Agency (JICA), the National Malaria Control Programme (NMCP), and the Urban Malaria Control Programme (UMCP) in two districts, Temeke municipality and Kinondoni municipality.

The programme involved the following steps:

- An assessment of drains (two drains in two districts were selected for repair and community sensitisation, two for repair and no sensitisation, and two had no intervention)

- Community sensitisation (providing information on malaria transmission and environmental management activities through community leaders' seminars, house-to-house visits and mass meetings)
- Drain cleaning (this was transferred to municipalities by the end of the project)
- An evaluation using a control neighbourhood which received drain cleaning without community sensitisation

Drain cleaning was done in a participatory manner involving community members, and city, municipal and ward representatives; no work was executed before community evaluation.

While initial repair costs were high, the maintenance costs were low. In total the cost of both repair and maintenance was calculated as US\$0.60 for one year per resident (although not all costs are captured in this figure) in the Temeke district, which was more successful than Kinondoni in maintaining the drain over time. While Temeke hired community members for 18 days per month for US\$3/day to maintain the drains, Kinondoni district allocated fewer resources for repair, and failed to maintain intersectoral action.

The results of the evaluation demonstrated a number of insights. There was an enhancement in people's perception about the risk of dirty and blocked drains, an 88 per cent decrease in the odds of malaria infection, and a decline in the larval/pupae presence in one of the treated drains.

Four conditions were highlighted as being integral to the success of the programme:

- Political will and commitment
- Community sensitisation and participation
- Provision of financial resources for initial cleaning and structural repairs
- Inter-sectoral collaboration (such as between engineering, waste management, agriculture, transportation, urban planning and public health)

Such programmes are not only expected to reduce malaria transmission, but also have the potential to empower communities, improve health and environmental conditions, and ultimately contribute to poverty alleviation and sustainable development.

IMPROVING HOUSING QUALITY

Thomas *et al* (2013) conducted a systematic review of studies on the relationship between housing improvements and improved health outcomes. [65] This found that improved health is most likely when the housing improvements are targeted at those with poor health and inadequate housing conditions, as opposed to general, area-based improvements carried out regardless of need. However, the review found that evidence from low- and middle-income countries and historical studies of rehousing from slums was limited both in quantity and quality. One study which

demonstrated a positive effect on health in a middle-income country was a slum development in Havana, Cuba, as discussed in the case study below.

CASE STUDY: SLUM DEVELOPMENT IN AN INNER CITY COMMUNITY IN HAVANA, CUBA [214]

The Cayo Hueso Community in central Havana had seen a reduction in quality and accessibility of housing quality and services due to urbanisation. More than half the population did not have daily access to potable water, and the capacity to dispose of liquid and solid waste had decreased, with regular waste collection being carried out in commercial zones only. There was also an increase in a number of negative health outcomes. Disease vectors were becoming increasingly prevalent, and diarrhoeal diseases, leptospirosis, TB and sexually transmitted infections had increased. Levels of chronic non-communicable diseases (heart diseases, cancer and diabetes), as well as injuries, were also higher here than in all other municipalities in Havana.

Due to pressure from the local community, with local health practitioners drawing attention to the issue, an upgrading programme was carried out between 1996 and 1999. The intervention included a number of interrelated improvements such as repairs to housing, improvements to water and sanitation infrastructure and street lighting, and repair of public buildings. Leisure activities and a club for the local community were also initiated. As a result of this work, there was a greater perceived improvement in conditions, and people were more satisfied with their housing situation. Lifestyle-related risk factors and self-rated health also improved. Smoking rates dropped, particularly for young women, and physical activity increased, particularly for young men. There were significant improvements in self-rated health in the most vulnerable subgroups (elderly and adolescents) and reductions in the incidence of suicides and respiratory illness. However, it is difficult to attribute many of the health improvements to the intervention alone.

NATURAL ENVIRONMENT

There is a lack of green spaces across urban Africa. [215] In Tanzania, the National Environmental Policy (NEP) (1997) recognises the importance of sustainable development, and the effect the environment has on wellbeing. [216] Marine areas have also been highlighted as 'blue spaces', but they are being increasingly privatised in Tanzania, reducing access to the general public. [217]

The NEP emphasised environmental protection and conservation for social and economic development. City Master Plans often emphasise the presence of green parks and public open spaces, such as the Arusha City Plan, discussed in [section 4.3](#). However, such spaces continue to be neglected and sidelined in Tanzania, despite recognition that they improve the liveability of cities and wellbeing of city dwellers. [218] There is a need to ensure that the green spaces set out in city plans are protected.

Urban areas are increasingly at risk from natural hazards, mainly flooding and droughts attributed to climate change. [Section 3.4](#) discusses the effects of climate change on the urban environment.

4.3. SYSTEMS

To address the social determinants of health (SDH), there is a need to develop and implement policies, practices and frameworks to improve health and wellbeing. These are partly situated in governance structures at all levels – transnational, national and local. ‘Governance’ usually describes the institutions, rules and norms by which policies are prioritised, developed and implemented, and enforced through accountability measures. [2] This requires that systems are proficient in generating and using evidence and monitoring effects of their actions. As stated, a number of the determinants of health and health equity are shared priorities, such as climate change mitigation, social inclusion, poverty reduction and education. ‘Governance for health’ requires a whole-of-society and whole-of-government approach. While a whole-of-government approach is required to bring action on the SDH together, a number of actions can be taken by individual sectors such as local government, health, social protection, finance and environment and at different levels, from national to ward. In order to improve population health and health equity, there needs to be more coherence of action at all levels of government – transnational, national, regional and local – and across all sectors and stakeholders – public, private and voluntary. This section highlights the systems of governance in Tanzania before focusing on the effect of urbanisation on these systems.

OVERVIEW OF GOVERNANCE IN TANZANIA

Tanzania has a two-tier system of government consisting of a central government, which frames policy, and local government authorities (LGAs) responsible for planning and implementation within their constituency. The President’s Office for Regional Administration and Local Government (PO-RALG) (previously Prime Minister’s Office for Regional Administration and Local Government) supervises and provides resources to local authorities. In 1997 the Government of Tanzania embarked on a process of governance reform – the Decentralisation by Devolution Programme (‘D by D’) with the objective of improving overall service delivery by devolving roles and responsibilities from central to local government. Decentralisation has mainly occurred in public service sectors: health, water and education. Following decentralisation, the government of Tanzania, alongside other stakeholders, has defined committees to identify who is in need of social support in urban and rural areas. For example, the Most Vulnerable Children Committee at the ward level operates to identify vulnerable children in need of support. In the health sector, Council Authorities, Health Service Boards, Facility Committees, and Health Management Teams at the district level are given the responsibility for the management and administration of health services. However, as critiques note, D by D has not necessarily been met by the redistribution of more political power to the local level, and remains incomplete for all sectors: in other words, there has been decentralisation but not devolution.

LOCAL GOVERNANCE IN URBAN AREAS

Urban government authorities with legal and autonomous status include cities, municipalities and town councils, which for administrative and electoral purposes are divided into wards and neighbourhoods (*mitaa*). Although decentralisation has aimed to decentralise authority to the regional and local levels, regions and districts have not been made autonomous and still have to be

given approval from central ministries [219] and there continues to be central control over administrative functions, meaning that administrative decentralisation is yet to occur. [220] Local government authorities lack institutional capacity and financial resources to address the problems associated with urbanisation and communication between local authorities and national government is often poor. [221]

CIVIC TRUST AND ENGAGEMENT

At the national level, the government performs poorly on a number of global indicators. Transparency International's Corruption Perceptions Index ranks countries/territories based on how corrupt a country's public sector is perceived to be (from 0 being highly corrupt to 100 being very clean). Tanzania scored 30/100 in 2015, giving it a global ranking of 117/168. [222] The World Bank's Voice and Accountability Index captures perceptions of the extent to which a country's citizens are able to participate in selecting their government, as well as freedom of expression, freedom of association, and a free media. Tanzania's percentile rank in 2014 was 46 per cent, meaning that Tanzania scores greater or equal to only 46 per cent of countries. However, this is higher than the Sub-Saharan African average rank of 33. [223] A governance survey carried out in Dar es Salaam in 2009 found that many citizens were unaware of how government finances were spent. [54]

To analyse the public's perceptions of the health sector, the Tanzanian government uses data from *Sauti za Wananchi*, Africa's first nationally representative high-frequency mobile phone survey. [84] The 2016 survey demonstrates a number of improvements to previous years. For example, the number of Tanzanians seeking treatment in government facilities if they are ill increased substantially, from 47 per cent in 2015 to 61 per cent in 2016. 70 per cent received medication from the facility, and improvements were seen in treatment from staff, cleanliness of facilities, and availability of health professionals. However, 40 per cent of Tanzanians who were in a hospital in the past year had to share beds, 60 per cent complained of a lack of medicine or other supplies, and 40 per cent knew of an elderly citizen, pregnant woman or child under five having to pay (all of these groups should be entitled to free health care).

At the local level, a 2012 study found that people view ward executive officers, village executive officers and council staff positively. [14] Another study found that men and the elderly are more active in local government leadership than women and young people, implying that work needs to be done to encourage participation of these groups. It also suggested that the majority of citizens (78 per cent) believe that local government reforms have contributed to improving service delivery in cities, although corruption was still deemed a major problem. Youth Engagement

Young people have formally been acknowledged in decision-making in Tanzania from the local to the national level since the introduction of the Youth Development Policy of 1997. [224] However, in reality young people's participation has been minimal. A survey conducted by Restless Development demonstrated that in the Southern Highlands, Dar es Salaam and Dodoma young people's knowledge and participation in policy development, implementation and monitoring is low at 10.4 per cent, while awareness of key national policies including Mkukuta II was as low as 24 per cent in some regions. [225]

New technologies and social media offer new opportunities for young people to engage with national and local debates, planning and monitoring of policies. A number of organisations have developed to address the issue of civic, and particularly youth, engagement in decision-making, such as Femina HIP, a youth-oriented communication initiative. [226] The Dar Ramani Huria community-based mapping project in Dar es Salaam, discussed in section 4.2 above, is one such example, helping university students and communities to map previously uncharted residential areas, roads, streams, floodplains and other relevant features, to enable local decision-makers to create disaster prevention and response programmes.

SOCIAL PROTECTION

Within Tanzania, informal social support mechanisms remain important, although a number of formal social protection schemes have also been established. It has been recognised that informal social security schemes and ‘common bonds’, such as self-help groups, Village Community Banks (Vicoba), women’s groups, farmers’ associations, trade unions, and cash in kind, as well as drawing upon social capital, remain prevalent and indeed of greater importance across Tanzania than formal support programmes are. For more information on informal support mechanisms see [section 3.2 on the social environment](#). As suggested earlier, the incompleteness of the national population database makes tracking, monitoring and evaluating social protection – and claiming rights – difficult.

FORMAL SUPPORT

Formal schemes reflect where funds are being provided and who is being targeted, to reduce poverty and vulnerability. Social security in Tanzania has three domains: mandatory schemes, social assistance, and voluntary, market-based schemes, aiming to support the vulnerable and poor. [227] It operates on a three-tier system with schemes that are income-tested and non-contributory; mandatory; and private. In an effort to bring about a more coordinated approach and cost-effective use of available resources, a task force has been established, led by the Ministry of Finance and Economic Affairs (MoFEA) and PO-RALG, to provide a universal framework. This was set to be ready in 2015 but did not get approval from the Cabinet, and it is unclear if or when it will be approved. [228]

Over time numerous policies have been constructed and implemented to provide support to vulnerable groups across their life courses. Each of the policies highlights the rights and opportunities of potentially vulnerable groups (see Table A3 in Appendix 3). Some of the interventions aim to improve access to finance and loans through Development Funds, while others are legally binding, identifying the entitlements of being a child.

CONTRIBUTORY SCHEMES

Private, non-governmental, and public bodies have set up several contributory schemes, or social insurance, for social protection (see Table A3 in Appendix 3 for summary of public initiatives). In each of the cases, individuals contribute to a fund, which may be voluntary or mandatory, for

example as part of employee–employer relations. The schemes are designed for pension contributions and the saving of financial assets for accessing health care. However, the key clients and contributors are citizens who are formally employed, neglecting a large proportion of the working population and vulnerable. For example, only around 10 per cent of the total labour force is estimated to be covered by social insurance schemes provided by the six major social security institutes. [229] This is due to the lack of financial security, low wages, and employer unwillingness to provide contributions, in the informal sector.

POVERTY REDUCTION

Poverty has been recognised as a key factor of social exclusion and unjust opportunity; hence the government has invested to target poor communities and families. The key framework for social protection today is the National Social Protection Framework (NSPF). [230] The NSPF includes several components and builds upon the government’s overall policy for poverty reduction and aim to protect the poor and vulnerable. [231] The NSPF identifies how Tanzania sets out to provide social protection – the strategy and plan of action. It identifies that social protection in Tanzania aims to address the, “structural and multi-causal vulnerabilities that can lead to persistent poverty and generalised insecurity”. [230]

TANZANIA SOCIAL ACTION FUND (TASAF)

In addition to government drives for social support, the international community has been an important player in developing the national social support framework. A key programme is the donor-funded Tanzania Social Action Fund (TASAF). TASAF is a community-driven development project being implemented in both rural and urban contexts. A randomised control study found that the beneficiary households were less likely to be ill than the control group; this effect was even more prominent for the poorest households (who experienced a half-day per month reduction in sick days). Beneficiary households were also far more likely to contribute to health insurance. Benefits were also seen in education, particularly in terms of an increase in the number who had ever attended school, girls’ completion of primary school, and literacy rates. [232] TASAF is currently on its third round, aiming to provide cover for 6 million extremely poor people across Tanzania.

TASAF aims to alleviate poverty through targeting and supporting the following three different groups, which are most vulnerable to poverty, in different ways:

- **Communities lacking in adequate services** – they are provided with improved social services and infrastructure
- **Food-insecure households** – a public works programme provides cash transfers to this group in exchange for temporary employment at low wages, mainly to unskilled workers on labour-intensive projects. These projects include construction of charco dams (also known as *Milambo* in Kiswahili, a small simple dam usually owned by just one person or family), small irrigation schemes, solid waste management, watershed management and restoration of degraded areas. [233]

Vulnerable groups, such as the elderly, people with disabilities, widows, orphans, and those affected by HIV/AIDS – they are provided with assistance to manage sustainable economic activities for income generation purposes. Applicants apply to enter a group that creates a business plan, which is funded for a collective venture. Projects are typically animal husbandry, but also grain milling machines, irrigation projects, and tailoring. [234]

For more details of how TASAF works and evaluation, see the sub-section 'Systems responses to improve equity' below.

HEALTH

Tanzania's aim for universal health care is shown through the 2000 national essential health benefits package (NEHP), whereby the government identified key health priorities to be provided to all citizens. [235] The NEHP has not yet been fully rolled out. In theory, three groups of vulnerable citizens have been identified that qualify for user-fee exemption: the over-65s, under-5s and pregnant women. However, free health care, or universal access and availability, is still not a reality across Tanzania. This is due to financial, geographical, social and political barriers. The urban poor have frequently been excluded from 'decent' private and public health care since the commercialisation of the health sector and they need to make out-of-pocket payments for services. [236]

In reality it has remained difficult to put exemptions into effect. Out-of-pocket payments for accessing health care and services remain prevalent in Tanzania. [237] In order to improve health coverage and financial security in health, the government and private sector have introduced a variety of insurance schemes. The schemes, such as NHIS, Jubilee's Multi-peril crop insurance, and the Workers Compensation Fund, focus mainly on those employed within the formal sector, a population that is taxable, with income documented. However, recognising that there is a large informal sector requiring financial insurance, the government is adapting its insurance strategy and focus in order to include informal sector workers. Public-private bodies have created insurance schemes for the informal sector. This includes the rural-based Community Health Fund (CHF) and urban equivalent *Tiba kwa Kadi* (TIKA), which intends to operate on a similar basis as the CHF but is implemented in urban councils. TIKA has so far been rolled out in 18 urban councils, and is in the process of a national rollout in cities. These schemes are voluntary, but attempt to alleviate the risk of financial burden and catastrophic spending as a result of health needs.

URBANISATION AND SYSTEMS

Generally, urban residents have better access than rural residents to a number of services – they are more likely to have a birth certificate and access to health facilities and basic services such as water and sanitation. However, Muzzini and Lindeboom (2008) show that although, on average, urban areas have better access to services, the coverage is much lower compared to the Sub-Saharan Africa average and it has not kept up with Tanzania's pace of urbanisation. Need is still not being met and in some key areas urban access is declining: for example, urban water supply dropped from

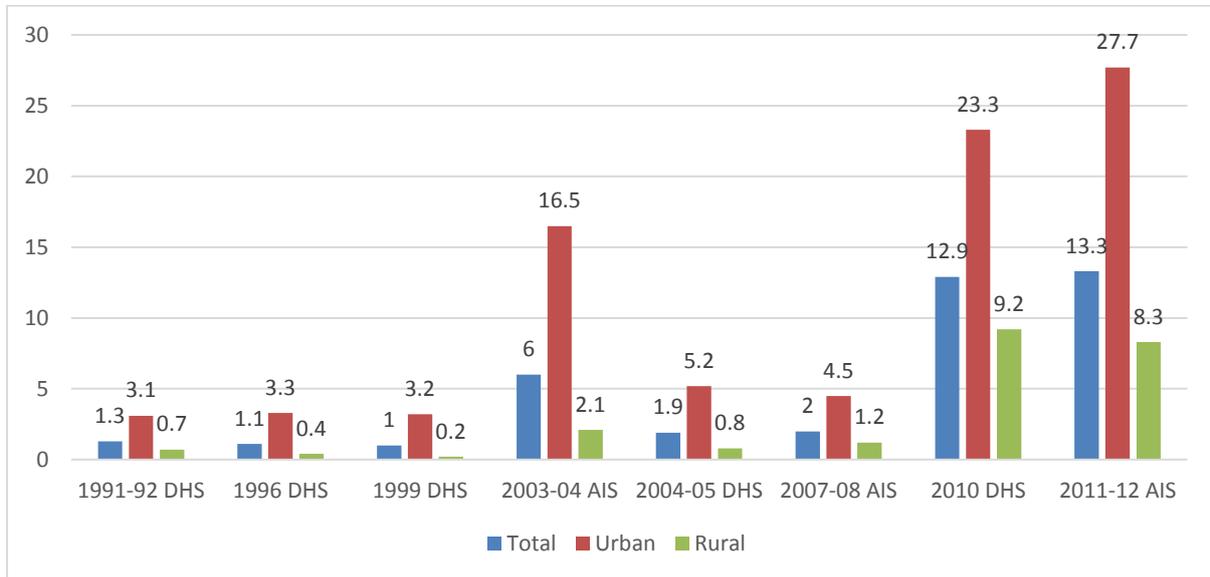
80 to 70 per cent between 1988 and 2002. [18] Additionally, inequalities of access to services are evident, and demonstrated in informal settlements.

Penchansky and Thomas grouped access along the ‘five As’: affordability, availability, accessibility, accommodation and acceptability. [238] *Affordability* looks at the client’s ability and willingness to pay for services. *Availability* assesses whether the service meets the needs of the client (for example, personnel; technology). *Accessibility* relates to geographic accessibility and transport. *Accommodation* relates to how the service meets the constraints and preferences of the client (for example, in terms of opening times). Finally, *acceptability* relates to how comfortable service users are with the provider, and vice versa (for example, in terms of characteristics such as the age, sex, social class and ethnicity of the provider and client, as well as the diagnosis and type of coverage of the client). This definition requires a more nuanced understanding of access to services available to the urban poor in Tanzania’s cities. Sanitation services highlight the urgent need for this, although this is true for a range of services, including electricity, internet and safe drinking water.

PRESSURE ON SANITATION FACILITIES

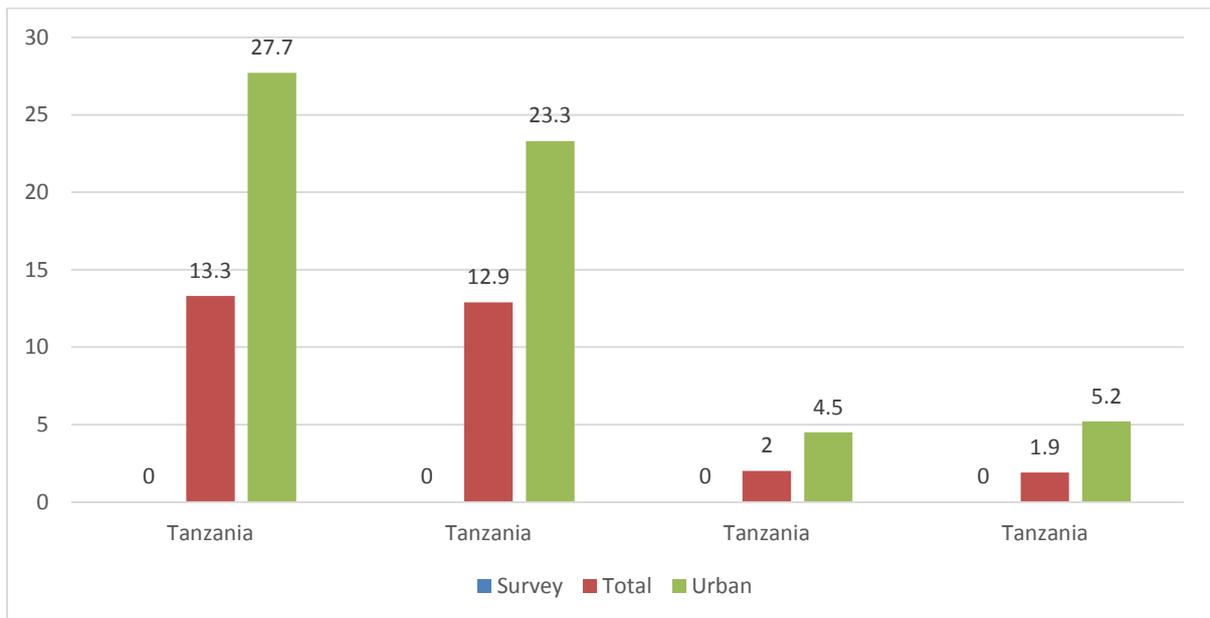
Official figures demonstrate a clear urban advantage over rural areas in terms of access to sanitation services, and this gap seems to be widening over time, as can be seen in Figures 43 and 44. However, sanitation access is particularly low for everyone (total access to improved sanitation was just 13 per cent in 2011/12 – falling far short of the Millennium Development Goal target of 62 per cent). [65] An overview from the African Minister’s Council on Water found that Tanzania was still in the process of establishing stages of urban sanitation service provision. The reasons for low levels of sanitation and safe water access were due to policy, planning, budget, expenditure, equity, markets, uptake and use. [239] A particular concern is that latrine construction in schools is lagging behind the number of children being enrolled into schools, following the shift to universal primary education.

FIGURE 43: PERCENTAGE OF HOUSEHOLDS WITH IMPROVED, NON-SHARED TOILET FACILITIES BY AREA OF RESIDENCE (URBAN AND RURAL)



Source: Demographic and Health Survey [60]

FIGURE 44: PERCENTAGE OF HOUSEHOLDS WITH A SHARED IMPROVED TOILET FACILITY BY AREA OF RESIDENCE (URBAN AND RURAL)



Source: Demographic and Health Survey [60]

Despite there being better access to improved sanitation in urban areas than rural areas, urban areas have higher incidences of environmental diseases associated with poor sanitation (cholera, diarrhoea, dysentery and lymphatic filariasis). [14] For instance, diarrhoea among children aged under 5 living in urban areas increased markedly between 2004 and 2010, from 10 to 18 per cent (two-week prevalence), surpassing the rate in rural areas (where in 2010 the two-week prevalence rate was 13 per cent). [14] Research in Tanzania and internationally has shown that limited access to latrines and water, factored with poor hygiene, is linked to maternal mortality [240, 241], which is also higher in urban areas than in rural. [60] This dichotomy between greater access to sanitation and worse health outcomes can be partly explained by inequality of access in cities, and the relevance of 'improved toilet' access as a measure in the urban setting.

INEQUALITY IN SANITATION SERVICES AND INAPPROPRIATE MEASUREMENT FOR CITIES

In Dar es Salaam the Water and Sewerage Corporation (DAWASCO) has the contract for water and sewerage provision. It has been criticised for failing to meet required services and for a reported lack of accountability and transparency to donors. [239] In the Tanga region, despite the construction of a new drainage system by the city council, over 75 per cent of the drains were not functioning properly, with most being blocked when surveyed. [242] 'Equity' has not been prioritised within Tanzania's Water Sanitation Development Programme, putting the poor at risk from further marginalisation and inequities. [243] Usefully, Water Aid has identified strategic country objectives for 2011–2016, focusing on issues of sustainability, urban areas, equity and enhancing partnerships with local government authorities (LGAs) and ministries. [244]

Poorer and marginalised groups often face a multitude of barriers that prevent them from accessing sanitation services. The situation is particularly evident in informal settlements. One study in Dar es Salaam found that on average 92.4 per cent of informal settlements across 45 wards did not have access to improved sanitation. [80] Without access to facilities, people either use their neighbour's, or defecate into rivers or reservoirs. [245] There are also large inequalities in access to sanitation services such as sewage and treatment facilities in different urban areas in different regions. [246]

This variation in access to wider services that are essential for adequate sanitation services suggests that the urban poor may also be wrongly classified as having access to services that they cannot actually use. Jenkins *et al* have argued that current definitions of 'improved' toilet technology are less appropriate in rapidly growing areas, where usage of an improved toilet does not factor in the number of users, or whether it is actually functioning. [247] Safety and sustainability of sanitation facilities, particularly in urban areas, are at least as dependent on the emptying, removal, treatment and disposal or reuse. [248]

A study in 35 unplanned, high-density sub-wards of Dar es Salaam applied more rigorous indicators and found access to be much lower than the official figures showed: only 13 per cent of properties had both a safe and sustainable facility and access to safe emptying service. [247] There were also marked inequalities in access to these services. The study found that those in the two poorest quintiles, plus residents with less education, residents who were temporary and transient, those living in areas with difficult hydro-geologic conditions, and those living in the Kikondoni Municipal Council district, were consistently the most vulnerable to poor sanitation conditions. [247]

SYSTEM RESPONSES TO IMPROVE EQUITY

IDENTIFYING VULNERABLE GROUPS

It is evident that Tanzania has made progress in building social protection for citizens and vulnerable groups. The National Social Protection Framework (NSPF) showcases the national conceptualisation of social protection; and the government is utilising new strategies in order to enhance coverage, include the informal sector, and build household resilience. However, the majority of Tanzanians, particularly the poorest, are not formally registered and live and work in the informal sectors, making it difficult to accurately target those who are the most in need.

CIVIL REGISTRATION

Civil registration of births and death is of vital importance to individuals and societies. For individuals, birth registration is essential to ensuring a child's legal status and, thus, basic rights and access to services. It proves identity and citizenship, allowing them access to state services and/or entitlements and provides them with a defence against exploitation. [249] The vital statistics that are derived from civil registration systems are public goods, allowing governments and programmes to generate comprehensive health data, especially when combined with accurate cause of death data. It can provide crucial information for policy planning and evaluation in all sectors. Setel *et al* argue that the health sector should work closely with registration authorities, national statistics offices and other agencies to promote and maintain civil registration.

Tanzania currently has a weak central civil vital registration system (CVRS) and the second-lowest rate of birth registration in the Eastern and Southern African region. [250] On average, only 15 per cent of the population are registered with birth certificates and there is wide variation in registration by residence [3]: 44 per cent of children in urban areas are registered compared with only 10 per cent in rural areas. Registration in Zanzibar is much more widespread than in mainland Tanzania (79 per cent and 15 per cent, respectively).

Reasons for low rate of birth registration on the mainland are varied. It has been linked to: the high number of home births (making registration in a health facility difficult); the lack of extra benefits provided from receiving formal registration (for example, failure to register does not preclude a child from health or education services); and the time-consuming (and expensive) process of registration. [251] There are currently large financial and distance barriers in registering a child. Parents have to pay TZS 3,500 (US\$1.6) if they request a birth certificate within 90 days of a child's birth, or TZS 4,000 after that time, as well as travel costs to the registry office, which is often far away. [252]

A number of projects have attempted to increase registration: for example, a new collaborative project has been set up to enable birth registration through mobile phones, as outlined in the case study below. [252]

CASE STUDY: REGISTRATION BY TEXT MESSAGE [250, 252, 253]

A collaboration between the Tanzanian government, UNICEF, the Registration, Insolvency and Trusteeship Agency (RITA), and the telephone provider Tigo aims to increase registration of children under 5. The strategy is to integrate health services with birth registration. Health providers, including community health workers, can easily register a child for a birth certificate by sending a text message with the baby's name, registration number, date of birth, mother's name and city of residence to a central database in Dar es Salaam. A birth certificate is then provided free of charge to the parent from the local health clinic or local authority.

The programme was initially trialled in the Temeke district in Dar es Salaam in 2012 and in the Mbeya region in July 2013. In the Temeke district there was an increase of 29 per cent of children under-5 registered in the 14 pilot wards, jumping from only 15 per cent with birth certificates to 44 per cent. In Mbeya, the registration of under-5s increased from around 10 per cent of children to around 36 per cent. The programme is now being rolled out nationwide. The aim is to register about a million children under the age of 5 before the end of 2016, and 90 per cent of all new-borns within the next five years.

A thorough understanding of causes of death is hampered by lack of a Civil Vital Registration System: relying on deaths happening in health facilities only presents a distorted view, as 80 per cent of people die at home. [254] In the absence of a CVRS, the country currently uses a Sample Vital Registration system with Verbal Autopsy (SAVVY) in a nationally representative sample of over 600,000 individuals while increasing efforts to strengthen the CVRS. [254] Additionally, without these systems in place, communities have been mobilised to identify vulnerable households in need of support, as the case study of TASAF below demonstrates. How effective this is in the urban environment is not yet fully understood.

CASE STUDY: IDENTIFYING VULNERABLE HOUSEHOLDS: THE CASE OF TASAF

Tanzania Social Action Fund (TASAF) is a community-driven programme, where local community leaders play a key role in identifying the most vulnerable people in the country. Similar community-driven development programmes exist in many low- and middle-income countries and are growing as a way for donors to distribute resources. There is debate about the effectiveness of these programmes, and the potential for 'elite capture', where powerful local actors take control of these funds. [255] A screening process exists with the aim of ensuring that this does not happen and that the most vulnerable groups in Tanzania are accessing these funds. The process includes a massive sensitisation programme involving outreach and training in every village on how to apply. More than 95 per cent of the 2,407 wards in mainland Tanzania submitted at least one application, with the median ward submitting 14 and the 95th percentile submitting 148 (the median ward population is 11,000 people). [234]¹²

¹²The hierarchy of Tanzanian regional units is Region, District, Division, Ward, and Village.

Applicants must pass district-level expert reviews and gain approval at the village level. The applications must then be approved by central government and by the TASAF Management Unit.

Baird *et al* (2009) analysed TASAF's targeting and found three key points:

- The application process appears regressive – communities that are richer and more literate are more likely to apply, and to submit numerous applications, although this is somewhat offset by the formula to allocate TASAF budgets to districts.
- Within the district, targeting is somewhat more effective, with the beneficiary population being only slightly poorer than the national average.
- The identification of 'vulnerable groups' appears progressive in targeting beneficiaries, however beneficiary households are disproportionately engaged in village-level meetings, and come disproportionately from well-connected households.

To the author's knowledge, analysis of TASAF targeting by urban/rural residence has not been done. This would be very beneficial as there may be large urban/rural differences in difficulties in targeting vulnerable groups, one hypothesis being that rural areas are less likely to apply, but are better at within-district targeting due to there being a more stable community and stronger social capital. However, analysis would need to be conducted to determine if more transient urban populations, particularly urban poor, are more difficult to identify than rural poor.

CITY MASTER PLANS

In addition to challenges of resource allocation and collection at the LGA level, planning at the urban level remains influenced by other challenges: timely process of planning approvals, and the need for greater communication both between local and national stakeholders but also within the LGA sectors. Currently, urban planning begins either through nationally defined priority areas or participatory approaches whereby the community identifies areas of intervention. These priorities are shared with planning coordinators and the Council Management Team, whereby evidence is obtained and an advisory decision made on what should be prioritised and budgeted for. This is voted and approved by councillors, the LGA and Ministry of Finance, where a finalised plan is made.

Most cities have master plans that are outdated and no longer legally binding. For instance, Dar es Salaam's development had no master plan between 1999 and 2012 and was guided by the Dar es Salaam Master Plan produced in 1979. [256] However, there has been a push for cities to develop master plans and the capital has recently completed a masterplan [257] while Arusha [258] and Mwanza [259] have master plans under construction. These cities were selected by the Ministry of Lands because they are among the fastest growing in Tanzania, and because of their strategic locations and future potential. Currently health is not central to the scope of these plans and health

impact assessments are not conducted.¹³ These plans should be designed to improve the overall health and wellbeing of the urban population.

CASE STUDY: ARUSHA 2035 MASTER PLAN [258, 260]

A Master Plan for Arusha City is currently being developed. This plan incorporates 19 wards that currently make up city boundaries, and wards into which the city is likely to expand as urbanisation continues, bringing in an additional 330 square kilometres of selected areas of Arusha Rural District and Meru District. In this way peri-urban areas will be incorporated into the plan. It is funded by government through the Ministry of Lands, Housing and Human Settlements Development and is currently in its strategic phase, with consultation meetings with various stakeholders.

The main aim of the plan is to create a sustainable urban growth strategy suggesting a new density distribution up to the year 2035. Ensuring green spaces are protected, expanded and secured is key to the plan, with the aim of ensuring 45 per cent green cover and with natural corridors incorporated into infrastructure development. The plan also recognises the needs of those in the informal sectors and plans to allocate spaces for the informal sector to exist in a regulated manner with proper infrastructure and management. There are plans to build low-rise homes in informal areas. It aims to ensure that public facilities such as hospitals, leisure areas, schools and shopping are easily accessible for citizens, and to improve transportation, to include public transport such as bus rapid transit systems (BRT) and green travel options such as bike lanes. Basic services such as water, sanitation and electricity supply are being designed for a growing population, and drainage systems are being planned for storm management control.

The plan is to create four distinct zones: a central business and finance district; a Western area focusing on light manufacturing and education; a Southern area featuring green industries, mainly agriculture; and a focus on tourism in the East.

While public health has not been immediately discussed in the planning at this stage, many of these plans have the potential to positively impact on the health of the urban population. There is an opportunity to work with city planners to ensure that public health is embedded as an objective and measurable outcome of the plans.

STAFF

Key frontline staff in local government and public services such as teachers, health professionals and social workers are often not working in the most desirable circumstances. This is true in both rural and urban areas, where difficulties including lack of services, affordable housing, high workload and inadequate pay and rewards are often cited as reasons for not wanting these jobs. To address health

¹³Personal communication with Arusha city planners

inequality, having excellent staff who are supported to achieve change is necessary. In March 2016, the Benjamin William Mkapa Foundation (BMF) and Ministry of Health constructed 60 homes in the Lindi region for health care staff. The aim of the project is to address a housing shortage and attract and retain more skilled health workers. This initiative is part of a wider initiative to ensure health staff are working in the most under-served regions, such as the provision of scholarships to health allied students on the condition that after completion they work in areas with high need of health workers.

COMMUNITY-LEVEL ACTION

Within Tanzania, informal social support mechanisms such as self-help groups, Village Community Banks (Vicoba), women's groups, farmers' associations, trade unions, paying cash in kind, and drawing on social capital, remain prevalent and indeed of greater importance than formal support programmes in the country. There is a need to support community initiatives to develop appropriate responses to the needs of their areas.

DECENTRALISATION BY DEVOLUTION

The Tanzanian government is working towards the Decentralisation by Devolution Programme ('D by D') with the objective of improving overall service delivery by devolving roles and responsibilities from central to local government. While critiques have suggested that the programme is incomplete and not necessarily enabling redistribution of more political, administrative and financial power to the local level, [221] [49] [220] it does present an opportunity to ensure that urban population health is incorporated into city planning and governance. [220]

4.4 MACRO-LEVEL CONTEXT

The macro-level context consists of national and transnational economic, social and environmental factors including trade, global policies, aid and development, migration and climate change. Urbanisation itself is a macro-level factor influencing the health of individuals in Tanzania.

Urbanisation offers an opportunity for economic growth and more sustainable jobs. However, so far, the process of rapid urbanisation and increased population density in Tanzania have not been associated with increases in economic density, in contrast to other regions and countries such as South America, China and India. Instead of agglomeration (the process of businesses clustering leading to an increase in the overall size and diversity of the urban economy), there is a trend of urban sprawl and low density development. Connectivity between people, industries and markets is generally poor due to inadequate transport, electricity and telephone infrastructure, reducing Tanzania's global competitiveness, as costs to import and export goods and services are higher. [261] The macro-level context is difficult to influence but efforts should be made to ensure that effects on public health and health inequality are factored into initiatives associated with these macro-level factors.

ECONOMY

The World Bank's African Economic Outlook 2016 determined that the continent is performing well with regard to economic, social and governance issues, and this is expected to continue over the next few years. GDP rose on average by 4 per cent in 2015, more than double the Euro area rate, and maintaining Africa's position as the second fastest growing economy globally. Tanzania is one of the countries leading this growth, and has one of the fastest growing economies in the world – in 2015 Tanzania's GDP growth rate was 7 per cent. [262] However, lower commodity prices and weather conditions have had an adverse effect in some areas. Droughts and floods slowed down growth in countries in East and Southern Africa in 2016.

FOREIGN AID

A large amount of financial and government support is provided through international aid. This is often subject to global changes, and can be unpredictable, affecting country planning. [263] While government budgets rely heavily on foreign aid, there has been a gradual decline in dependency. By 2010/11 rising domestic revenues reduced the share of aid to around 28.2 per cent of the national budget, compared with 42 per cent in 2007/08. [264] [42] For 2007/2008, excluding debt relief, Tanzania received 59 per cent of total aid in the form of grants. [265] Tanzania is a leading recipient of Official Development Assistance but this is subject to change. For example, the US government aid agency has recently pulled US\$ 472m of funding for a Tanzanian electricity project after criticising election procedures in Zanzibar. [266]

TRADE

Since the mid-1980s Tanzania has followed an economic policy of liberalisation and deregulation which has meant that it has become a more open economy with an increase in imports and exports.

Exports have grown by over 20 per cent per annum over the 2000s, and their share of GDP rose by 20.8 per cent while the share of imports rose by 17.6 per cent. [42] There has also been an increase in foreign direct investment in areas such as mining, tourism and financial services. These bring opportunities for development, and could impact positively on population health, but there are also associated risks. According to the WHO Commission on the Social Determinants of Health, Ministries of Health need to be aware of the wide-ranging effects of trade negotiations and export zones on health, especially in relation to policy and resources for health. Inclusion of health and health services as part of trade agreements are likely to impact positively on health governance and health inequality.

As irregular climatic conditions become more common, Tanzania needs to be able to respond. Urban areas are increasingly at risk from natural hazards. The main natural hazards affecting Tanzania are droughts and floods. Drought remains the greatest natural disaster risk throughout Tanzania, and for a country whose economy remains climate-sensitive, preparedness remains paramount. A collaborative study by DFID (2011) estimated the economic cost of natural disasters and climate change events of droughts and flooding contribute to around 1 per cent of GDP costs, impacting negatively on livelihoods and long-term growth prosperities. Based on future climate change modelling, the GDP costs are expected to rise by 1–2 per cent. [267]

In the case of Dar es Salaam, a risk assessment conducted by the World Bank identified the vulnerability of the urban poor and informal settlement residents to flooding. Planning to reduce risk needs to be incorporated into practice. The World Bank assessment calls for the better allocation and zoning of land use – understanding the role of wetlands in cities – and planning safe spaces for housing city dwellers. The construction of informal and illegal housing coupled with heavy rainfall in the city has resulted in extreme flooding. This picture of high flood risk in cities, as a result of inefficient urban planning, is mirrored across many cities in Tanzania. Recently, heavy rains in Mwanza and Dodoma resulted in displacement and deaths. [268] Blame was placed on the people themselves – for constructing houses close to the river and engaging in human activities in flood-prone areas. [269] In Ifakara, heavy rains resulted in a ferry accident and death of commuters and local residents. Finally, in Dar es Salaam, the government initiated the *Bomoa Bomoa* project to relocate inhabitants living in high flood-risk areas, as a result of revised land zoning. The project has resulted in much controversy concerning the unjust forced eviction of homeowners without compensation.

A number of initiatives seek to mitigate the effects of natural hazards. During the second round of TASAF, a food programme was introduced to provide food security to vulnerable communities. Protection programs of forest conservation, irrigation, soil management and tree planting were undertaken in communities prone to drought; and responsive programmes such as the Accelerated Food Security Program (AFSP) focused on providing food during the crisis. Additionally, the agricultural sector has created an Agriculture Climate Resilience Plan. [270]

CONCLUSION

This report has illustrated that there are inequalities in health and the social determinants of health in Tanzania. However, it has also identified some case studies from Tanzania and elsewhere where the social determinants have been improved, showing that health inequalities and inequalities in other aspects of human development are not inevitable and can be significantly reduced. Inaction will have large human and economic costs. Urbanisation is happening at a very fast rate in Tanzania, and we have shown that resources and systems are currently inadequate or inequitable in addressing this growth.

There are also many questions left unanswered due to a lack of data. To ensure that needs and priorities are properly identified and understood, further data collection and analyses is needed.

For Tanzanian cities to be healthy, inclusive, safe, sustainable and resilient, there is a need for change in systems, governance and processes to equitably address the needs of urban residents across the life course. This requires multi-sectoral strategies that will lead to sustainable development and tackle inequalities. The health and wellbeing of Tanzanians needs to be at the heart of decision-making.

Table 9 sets out the key issues in tabular form and Table 10 the data issues that need to be addressed. The key points are set out in the executive summary and associated summary document.

AN SDH FRAMEWORK FOR TANZANIAN CITIES

In this section we summarise the social determinants of health framework for Tanzanian cities, based on the key themes and issues identified by the present analysis. The framework builds on the broad themes emphasised in the SDH approach developed by the Institute of Health Equity for the WHO, including the macro-level transnational and national context; governance, delivery and monitoring systems; aspects of the wider society in which people live, and the conditions experienced at different stages of the life course and provides examples specific to Tanzania. As we can see generally in Tanzania, and in Tanzanian cities specifically, there are a number of factors at each of these levels that are impacting on health and health inequality as well as other sustainable development indicators. These are highlighted in Figure 45 and summarised in Table 9.

FIGURE 45: HOW URBANISATION IMPACTS ON THE SOCIAL DETERMINANTS OF HEALTH IN TANZANIA

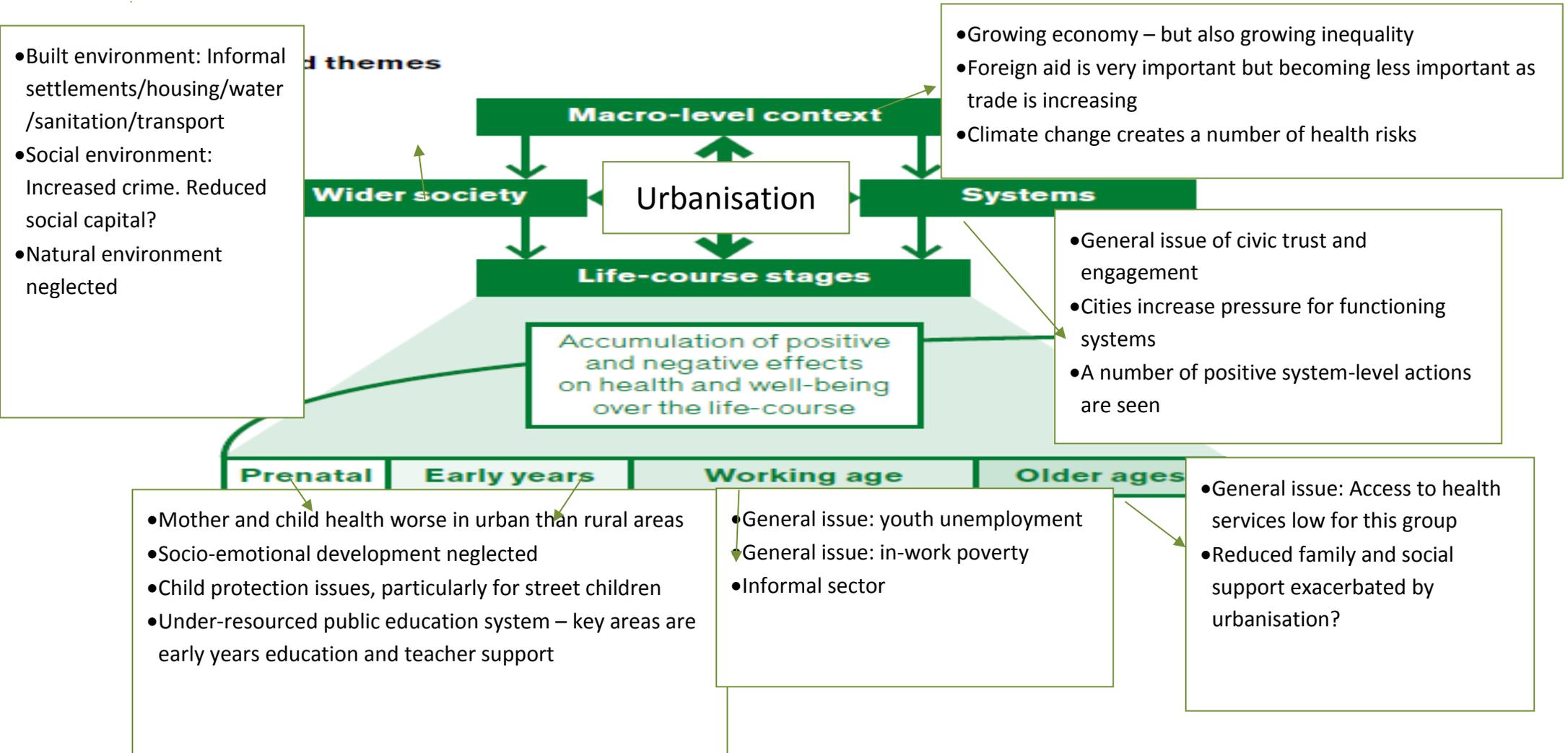


TABLE 9: KEY ISSUES AT A GLANCE

SDH area	General issues for Tanzania	Urban-specific issues
Life course stage: early years	<ul style="list-style-type: none"> • Early childhood socio-emotional development neglected • Under-resourced public education system – key areas are early years education and teacher support 	<ul style="list-style-type: none"> • Early years is a key area to intervene due to the large variations in under-5 mortality rates • Mother and child health worse in urban than rural areas • Child protection issues, particularly for street children
Life course stage: working age	<ul style="list-style-type: none"> • Youth unemployment • In-work poverty 	<ul style="list-style-type: none"> • Informal sector
Life course stage: older ages	<ul style="list-style-type: none"> • Access to health services low for this group 	<ul style="list-style-type: none"> • Reduced family and social support for this group exacerbated by urbanisation
Wider society		<ul style="list-style-type: none"> • Built environment: informal settlements/housing/water/sanitation/transport • Social environment: increased crime, reduced social capital? • Natural environment neglected
Macro-level context	<ul style="list-style-type: none"> • Growing economy – but also growing inequality • Foreign aid is very important but becoming less important as trade is increasing • Climate change creates a number of health risks 	<ul style="list-style-type: none"> • Income inequality is higher in urban areas • Climate change increases the risk of drought and flooding in cities
Systems	<ul style="list-style-type: none"> • General issue of civic trust and engagement 	<ul style="list-style-type: none"> • Cities increase pressure for functioning systems • A number of positive system-level actions are seen

IMPLEMENTING CHANGE

A number of issues, gaps and opportunities have been highlighted throughout the report, including:

1. Improving the data. For example, a better understanding of both ‘poverty’ and ‘urban’ is urgently needed.
2. Expanding knowledge to support understanding and implementation of action. Table 10 outlines the key knowledge gaps that are highlighted throughout the report.

TABLE 10: KEY KNOWLEDGE GAPS AT A GLANCE

Report section	Gaps
Is there an urban advantage? Defining poverty and urbanisation	Tanzania’s surprising urban disadvantage in life expectancy and under-5 mortality rate requires a greater understanding of what makes Tanzania different from other countries in the region.
	Due to sample sizes of surveys, it is not possible to meaningfully disaggregate multi-dimensional poverty indexes down to city level. Greater city-level understanding of multi-dimensional poverty is needed.
	Urbanisation is happening beneath the radar of government agencies, particularly for informal settings outside of official definitions of city limits. The urban poor are more likely to reside in these areas. This has important implications for resource distribution to local authorities. An accurate methodology is needed to ensure that the urban poor are accurately measured, and the use of city-level data would illuminate urban opportunities and barriers to success.
The impacts of urbanisation on health	Health issues that are likely to have a greater impact in urban areas are not regularly measured in Tanzania: issues such as non-communicable diseases and road traffic accidents. There is an urgent need to accurately and consistently measure urban health issues.
Life course stages	More evidence is needed, including mapping of the different causes of mortality by area of residence (urban versus rural).
	There is a need for analysis to better understand why maternal mortality is significantly higher in urban than rural areas despite better access to health services.
	There is a need to understand how the urban environment is affecting childhood development, particularly social and emotional development. Interventions that support socio-emotional development in the early years are needed.
Wider society	There is a need to better understand how city life is affecting social relations, norms, support and trust.

	There is a need for better neighbourhood data on service provision, and housing quality.
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3. Tackling the key areas within the SDH framework that are applicable to Tanzania generally and within Tanzanian cities. The key areas are outlined in Figure 45 and Table 9.

4. Promoting multi-sectoral action. There are a number of actions that were found in Tanzania that are positively impacting on the lives of Tanzanians generally and on Tanzanian cities, including a large amount of community-level action, decentralisation by devolution, drawing up of city plans, and civil registration. There is a need for different sectors to work better together and provide support for areas that are working well.

APPENDIX 1: ACKNOWLEDGEMENTS

Organisation	Name
DfID	Yisambi Mwanshemele
	Jane Miller
	Lisha Lala
	Ian Attfield
	Phil Jones
	Gertrude Mapunda Kihunrwa
	Lukas Kwezi
DfID Youth Panel	Ian Tarimo
	Amina Mtengeti
UNICEF	Stehpanie Shanler
	Patricia Ruddy
Ministry of Education & Vocational Training	Clarence Mwinuka
	Dr. Mathew A Senga
REPOA	Dr. Lucas Katera

Workshop Attendees

Organisation	Name
CEFA	Dario de Nicola
TAMASHA	Richard Mabala
Aga Khan Development Network	Tahira Nizari

World Bank	Gayle Martin
	Andre Bald
TASAF	Amadeus Kamagenge
USAID	Laura Kikuli
Ifakara Health Institute	Masuma Mamdani
	Gemma Todd
	Eveline Geubbels
	Francis Levira
Mwanza Youth and Children Network	Shaban Ramadhani Maganga
Nyamanga Social Welfare Dept	Davis Credible
Railway Children	Pete Kent
	Robert Michel
Arusha City Plan	Enrico Morriello
Tanzania Gender Networking Programme (TGNP)	Marjorie Mbilinyi
Ministry of Health and Social Welfare	Oboline Kisanga
TACINE (Tanzania Cities Network)	Philotheus Justin Mbogoro
Economic and Social Research Foundation (ESRF)	DANFORD SANGO

Institute of Development Studies, University of Dar es Salaam	Vedasto Hamza
World Bank	Andre Bald
Research Center for Social Development services (RCSDS)	Abraham Shempemba -
Alliance of Mayors (AMICAALL) Tanzania	Cyprian Magere

APPENDIX 2: INFORMATION ON KEY SURVEY METHODOLOGIES

HOUSEHOLD BUDGET SURVEY

The Household Budget Survey (HBS), conducted by the National Bureau of Statistics (NBS), is the official source of poverty data in Tanzania. [32] It includes four main questionnaires and a diary recording household purchases and consumption over a 28-day period. It includes records on food and non-food items that were purchased as well as food that was grown by the household. Expenditure that was not for consumption, such as purchases for a farm or other business operated by the household, is excluded.

NATIONAL PANEL SURVEY

The NPS calculates poverty in a similar way to the HBS, with some differences largely attributed to different techniques of collecting consumption data between the two surveys. The benefit of this survey is that it monitors the same households over time, allowing a household-based understanding of poverty dynamics. [33]

APPENDIX 3: OVERVIEW OF POLICIES TO TARGET VULNERABLE POPULATIONS

TABLE A1: POLICIES, LAWS AND INTERVENTIONS IN TANZANIA FOR 'VULNERABLE GROUPS'

Vulnerable group	Policy/law/intervention
Children	Education Act 1978 Law of the Child Act 2009 Child Development Policy Zanzibar Child Survival Protection and Development Policy 2001 Most Vulnerable Children Programme National Costed Action Plan for Most Vulnerable Children 2007–2010 National Plan of Action for the Prevention and Response to Violence against Children 2013–2016
Disabled persons and albinos	Persons with Disability Act 2009
Race and ethnicity	-
Migrants	Employment Policy 2008
Refugees	Encampment Policy (Refugee Act 9 1998)
Victims of trafficking	Anti-trafficking in Person Act 2008
Youths	Youth Development Fund
Women	Women and Gender Development Policy 2000 Women and Gender Development Strategy 2005 Women Development Fund Tanzania Women Bank
Elderly	National Aging Policy 2003
Vulnerable population	National Food Reserve Agency National Social Protection Framework

TABLE A2: SUMMARY TABLE OF KEY URBAN AND HEALTH POLICIES IN TANZANIA OVER TIME

Policy/Programme	Implementer	Objective
<i>Ujamaa</i> – villagisation programme	Government of Tanzania	- Redistribute population

Dar es Salaam Master Plan (1948, 1967, 1979)	Government of Tanzania	<ul style="list-style-type: none"> - City Master Plans are created for all towns and cities in Tanzania
Growth Centre Policy (1969–1974)	Government of Tanzania	<ul style="list-style-type: none"> - Aim to reduce urban primacy of Dar es Salaam - Redirected investment and encouraged migration to nine alternative urban centres
Local Government Acts (1982)	Government of Tanzania	<ul style="list-style-type: none"> - Urban authorities (town, municipal, and city councils) instated - Local authorities given planning power within their jurisdiction settlements
Sustainable Dar es Salaam Project (1992)	UN-Habitat, UNDP, Government of Tanzania, Tanzania’s Urban Authorities Support Unit	<ul style="list-style-type: none"> - Focuses on the environmental planning and management process (EPM) - The EPM emphasises “inclusion, transparency, decentralization, efficient service delivery and responsiveness to civil society, and sustainability [to drive] urban poverty reduction”
National Land Policy (1995)	Government of Tanzania	<ul style="list-style-type: none"> - Aim to improve access to land (equity), ensure land rights and protection, and improve efficiency of land administration
Tanzania Youth Development Policy (1996, 2007)	Government of Tanzania	<ul style="list-style-type: none"> - 5 key objectives centred on empowering youths, and enabling the right to live, develop, protect, and participate

		<ul style="list-style-type: none"> - Timely with growing youth unemployment - Formed National Youth Council
National Employment Policy (1997)	Ministry of Labour and Youth, Government of Tanzania	
National Human Settlements Development Policy (1982, 2000)	Government of Tanzania, 2000 adapted from UN-Habitat Agenda	<ul style="list-style-type: none"> - To promote sustainable development of human settlements, and enable access to quality/affordable shelter for all
Agricultural Sector Development Strategy (2001)	Government of Tanzania	<ul style="list-style-type: none"> - Highlighted need for rural and agricultural development with increased out-migration of youths from rural to urban areas - Stated as the youths enter urban areas they lack employment, social capital and protection, becoming engaged in crime, drugs and idleness
National Strategy for Growth and Reduction of Poverty (NSGRP) II (MKUKUTA II) (2011)	Ministry of Finance and Economic Affairs, Government of Tanzania	<ul style="list-style-type: none"> - 3 clusters identified in the strategy: reducing income poverty; improving quality of life and wellbeing; good governance and accountability - The clusters touch on issues of environmental sustainability, nutrition, WASH, and service delivery
Dar Es Salaam – Draft Land Use Plan 2012–2032		

TABLE A3: SUMMARY OF CONTRIBUTORY AND NON-CONTRIBUTORY SOCIAL PROTECTION SCHEMES IN TANZANIA

Formal scheme	Type			Contribution Type	
	Income-tested/ assistance	Preventative	Protective	Mandatory (insurance)	Private/ voluntary
National Social Security Fund (NSSF)		X		X	
Political Service Retirement Benefits (PSRB)		X		X	
Parastatal Pension Fund (PPF)		X		X	
Local Authorities Provident Fund (LAPF)		X		X	
National Health Insurance Fund (NHIF)		X		X	
Community Health Fund (CHF)		X		X	
Government Employees' Provident Fund (GEPF)		X		X	
Public Service Pensions Fund (PSPF)		X		X	
National Health Insurance Fund (NHIF)		X		X	

Workmen's Compensation Scheme		X		X	
Tanzania Social Action Fund (TASAF)	X				
UMASIDA		X			X
Micro-Finance Institutes (MFI)		X			X
Zanzibar Social Security Fund (ZSSF)		X		X	
National Package for Essential Health Benefits			X		
Universal education			X		

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