

Preface

In this report, the National Bureau of Statistics presents the findings of the **2000/01 Tanzanian Household Budget Survey** (HBS). It is the largest household budget survey conducted by NBS, covering over 22,000 households. It represents an important achievement.

The **NBS** is an independent executive agency of government. Its aim is to:

"...facilitate decision-making within the government and the business community, to stimulate research and inform public debate through the provision of relevant, reliable and timely statistics and quality statistical services..."

The survey results provide a baseline for monitoring progress under the Government's poverty reduction policies. They also show the trends in many poverty indicators over the 1990s.

I am pleased to present this report as a contribution to monitoring and ultimately eradicating poverty in Tanzania.

Hon. Dr. Abdallah O. Kigoda
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The 2000/01 Household Budget Survey has been an important achievement for Tanzania and the National Bureau of Statistics. I would like to express our gratitude to all the households and enumerators who provided and collected information across the country.

The data from this and previous Household Budget Surveys represent an important resource for further research and analysis. The data will be made available to researchers and other interested parties on application to the Director General of the National Bureau of Statistics

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This report presents the findings of the 2000/01 Tanzanian Household Budget Survey (HBS). It focuses on poverty-monitoring indicators and offers a set of baseline measurements for the future. Data on key poverty indicators are presented for each region. Trends over the 1990s are also assessed by comparison with the 1991/92 HBS.

The 2000/01 Household Budget Survey

A nationally-representative sample of 22,178 households was interviewed in this latest HBS. Between 12 and 24 households were surveyed in each sampled area. Fieldwork was between May 2000 and June 2001.

Households interviewed were selected from the regional sample of the National Master Sample (NMS). In each region the final sample comprised around 1,000 households. Sampling weights are used to make the estimates representative of mainland national and regional populations.

The HBS collected information on a range of individual and household characteristics. These included:

- household members' education, economic activities and health status
- household expenditure, consumption and income
- ownership of consumer goods and assets
- housing structure and materials
- household access to services and facilities, and
- food security

Information was collected using one main household questionnaire, together with a diary recording household consumption, expenditure and income over a calendar month. Personal diaries enabled individuals to record their consumption outside the household.

The analysis focuses on indicators defined in the Government's Poverty Reduction Strategy Paper and by the National Poverty Eradication Division in the Office of the Vice-President. The aim is to provide a baseline for the future and an examination of trends over the 1990s. The 1991/92 data were analysed again to maximise the comparability of estimates over time.

Key findings

HOUSEHOLD DEMOGRAPHIC COMPOSITION

There has been a large rise in the proportion of households headed by a woman – from 18 per cent in 1991/92 to 23 per cent in 2000/01. Urban areas other than Dar es Salaam have the highest proportion of such households.

There has been a fall in household size – from an average of 5.7 to 4.9 people – and a small rise in the proportion headed by the over-65s.

HOUSEHOLD CONSTRUCTION AND FACILITIES

There has been an increase in the proportion of households living in dwellings built with modern materials – concrete, stone, cement and metal. Some 43 per cent of Tanzanian houses now have a metal roof and 25 per cent have walls of concrete, cement, stone or baked or burnt brick. These improvements usually have been greater in urban areas but are also seen in rural areas.

Nationally, 84 per cent of households own the house they live in, although in urban areas over a third rent privately. There was very little change in tenure over the decade.

Overall, 10 per cent of Tanzanian households are connected to the electricity grid. Coverage is much greater in urban areas – 59 per cent of households in Dar es Salaam and 30 per cent in other urban areas. In rural areas, only two per cent of households are connected. Over the 1990s, coverage of the grid increased in urban areas but showed little change in rural areas.

Dar es Salaam, Kilimanjaro and Arusha are the regions with the highest proportion of households connected to the grid. Those in Shinyanga and Kagera are least likely to be connected.

Around nine per cent of households use electricity as their main energy source for lighting, while 84 per cent depend on paraffin. Use of electricity for cooking is less common – reported by about one per cent of households. Firewood and charcoal are the most important cooking fuels – used by 78 and 14 per cent of households respectively. In urban areas, use of electricity for cooking declined over the decade while its use for lighting rose, probably reflecting its increased real cost to households.

Some 93 per cent of households report having use of a toilet; over 90 per cent in rural areas. There was no change over the decade.

Average distance to a number of important services fell over the 1990s. Such services include markets, shops and public transport, although distance to a primary court and primary cooperative society increased. In rural areas there are long average distances to some important facilities. Rural households are on average 37 kilometres from a bank and 18 kilometres from a police post.

Urban households are more likely than rural ones to own a range of consumer goods. Such ownership rose over the 1990s. While the rise was largest in Dar es Salaam and other urban areas, rural areas also saw an increase in ownership of a number of goods that do not require mains electricity, including bicycles and radios. Some 46 per cent of rural households now own a radio.

EDUCATION

A quarter of Tanzanian adults have no education and 29 per cent can neither read nor write. Some 30 per cent in rural areas have no education, compared with only eight per cent in Dar es Salaam and 13 per cent in other urban areas.

Women are about twice as likely as men to have no education. Rural women in particular have missed out, with 41 per cent unable to read or write.

The proportion of adults with any education is highest in Dar es Salaam, Kilimanjaro, Ruvuma, Iringa and Mbeya; lowest in Lindi, Pwani and Shinyanga.

Improvement in the level of adult education over the decade was limited. There was a rise in the highest standard achieved for those with primary schooling but no apparent decline in the proportion of adults without education.

Some 59 per cent of seven to thirteen-year-olds were enrolled in Standards I-VII in 2000/01. Enrolment levels are much higher in urban areas than in rural ones – 71 per cent compared with 56 per cent. Girls have slightly higher enrolment rates than boys in this age range, although boys are more likely to stay in school at older ages. Kilimanjaro, Dar es Salaam and the south-west regions have the highest enrolment ratios; Lindi and Shinyanga the lowest.

There are many over-age children in primary schools – partly because they often enter school late, particularly in rural areas. As a result, even children in school are often well below the class they should be in according to their age. For example, some 82 per cent of the 13-year-olds in school are enrolled in Standard V or below.

There was a small rise in children's participation in education over the decade, with the proportion of seven to thirteen-year-olds up from 57 to 61 per cent. Enrolment increased most in urban areas but by only two percentage points in rural areas.

Enrolment in secondary education is much lower than in primary. Only five per cent of 14 to 17-year-olds are enrolled in forms I-IV; in rural areas it is two per cent.

Almost two-thirds of Tanzanian households are within two kilometres of a primary school; even in rural areas 58 per cent are within this distance. This suggests distance is not a major impediment to primary schooling for most households. Average distance to a primary school appears to have lengthened slightly over the decade.

Households are furthest from a primary school in Shingyanga, Kagera and Dodoma, and closest in Dar es Salaam, Kilimanjaro, Lindi, Ruvuma and Rukwa.

Households are much farther from secondary schools: a quarter of rural ones are more than 20 kilometres distant.

HEALTH

In rural areas, some 28 per cent of individuals were ill in the four weeks preceding the survey, compared with 19 per cent in Dar es Salaam and 24 per cent in other urban areas. Children under five and older adults are the age groups most likely to be ill or injured. Women report more illness than men. However, among children under five, boys are ill more often than girls.

For individuals who have been ill, the most commonly reported complaint is fever/malaria – reported in 69 per cent of children and 60 per cent of adults.

Some 69 per cent of individuals who had been ill reported that they had consulted a health-care provider. Even in rural areas, 67 per cent reported consultation of some kind.

Some 54 per cent of individuals who consulted a health-care provider used a government service. The private sector is an important service provider in both urban and rural areas.

Users are more likely to report dissatisfaction with government providers than with private ones. Long waiting times, lack of drugs and, in the case of regional hospitals, high cost are the most commonly reported problems with government facilities. High cost is also the most common complaint about private providers.

Most households are reasonably close to primary health-care facilities. Even in rural areas, over 90 per cent reported being within 10 kilometres of a dispensary or health facility. The average distance to these facilities appears to have shortened slightly over the decade. The average to a hospital was 21 kilometres.

Over 90 per cent of households are within six kilometres of a dispensary or health centre in Dar es Salaam, Kilimanjaro and Kigoma, but less than half in Dodoma.

DRINKING WATER

Overall, 43 per cent of Tanzanian households use an unprotected source of drinking water, including unprotected wells and springs and surface water such as rivers and lakes. Some 39 per cent use piped water and another 16 per cent protected wells or springs.

People in urban areas have better drinking water supplies than the rural population. Some 53 per cent of rural households depend on an unprotected water supply, while 86 per cent of households in Dar es Salaam and 76 per cent in other urban areas have piped water of some kind. Rural households must also travel farther to their supply, with only 49 per cent within a kilometre of it. This compares with 84 and 73 per cent of households in Dar es Salaam and other urban areas respectively.

Urban and rural people saw quite different trends in drinking water supplies over the 1990s. In rural areas, sources improved, with the proportion of households depending on unprotected supplies falling from 64 to 53 per cent. In urban areas, by contrast, there was a fall in the proportion of water piped to the dwelling.

There are big differences in drinking water sources from region to region. Three-quarters or more of the households in Dar es Salaam, Kilimanjaro, Kigoma and Mbeya have a protected source, whereas more than three-quarters in Lindi and Tabora depend on an unprotected one.

Trends in the distance to drinking water supplies are divergent, with a rise in households reporting a source within a kilometre but also an increase in those with a source more than six kilometres away.

Only about one third of households are within a kilometre of drinking water in Mara and Shinyanga while over 80 per cent are within that distance in Ruvuma and Dar es Salaam.

PRODUCTIVE ACTIVITIES AND PRODUCTIVE ASSETS

Although most Tanzanians still depend on agriculture, households have diversified their economic activity. Some 70 per cent are now headed by an individual who works in agriculture or fishing, compared with 75 per cent in 1991/92. Sixty-three per cent of adults gave one of these as their main activity in 2000/01 compared with 73 per cent in 1991/92.

There has also been a drop in government and parastatal employment – from 5.2 to 2.5 per cent of adults. The fall is biggest in Dar es Salaam, where such employment is down from 21 to seven per cent of adults. There is a rise in private sector employment and in self-employment, which are now the main activities of 40 per cent of adults in Dar es Salaam and 31 per cent in other urban areas.

Women have experienced the largest reductions in agricultural activity: down from being the main activity of 77 per cent in 1991/92 to 63 per cent in 2000/01. Men saw a smaller fall, but have been more affected by the shift from government and parastatal employers to the private sector.

Some 62 per cent of children aged five to 14 undertake some form of work; slightly over half combine work with study. Girls are more likely to work than boys – 64 per cent of girls and 59 per cent of boys reported this. When they work, girls are most likely to do so in the household business or undertaking household chores. Boys are more likely than girls to work in agriculture or outside the home.

The sale of agricultural products was the main source of cash income for 62 per cent of households, compared with 67 per cent in 1991/92. Food crops remain the most important single source – the main one for 41 per cent of households, similar to 1991/92. The importance of cash crops fell and they now provide the main source for 17 per cent of households.

Some 42 per cent of households report having a business – the highest proportion is in urban areas, particularly outside Dar es Salaam.

In most regions, around 60 to 80 per cent of adults report agriculture as their main activity. The proportion is lower only in Dar es Salaam, Arusha and Mbeya, where employment and self-employment are more common than elsewhere.

Around 89 per cent of rural households report owning land for agriculture or grazing, a similar proportion to 1991/92. The average area owned by rural households is six acres, although five per cent of households have more than 20 acres. Some 29 per cent of rural households own cattle or other large livestock, 49 per cent medium-sized livestock, such as sheep or goats, and 65 per cent poultry. The degree of agricultural mechanisation among rural households is low: while some 11 per cent own a plough, only around 0.2 per cent have a tractor.

Only six per cent of households have one or more members with a bank account and only four per cent participate in an informal savings group; these activities are even less common in rural households. Use of banking and other savings groups fell over the 1990s.

HOUSEHOLD CONSUMPTION

Average consumption per person is highest in Dar es Salaam - 2.6 times higher than the rural average of about 8,500 TShs per month.

Household consumption rose by around 17 per cent in real terms between 1991/92 and 2000/01. Dar es Salaam saw the biggest rise – around 47 per cent – whereas rural areas witnessed only around 11 per cent. As a result, the gap between urban and rural areas widened.

Some 65 per cent of household consumption expenditure is on food. Rural households spend the highest proportion on food; those in Dar es Salaam the lowest. The proportion spent on food fell over the 1990s, from 71 to 65 per cent, consistent with the rise in real incomes. It was down 14 percentage points in Dar-es-Salaam and five points in rural areas.

The share of household spending on education and medical expenses has increased. Both are now about two per cent of average household expenditure, compared with one per cent in 1991/92. Dar es Salaam households spend the biggest proportion of their income on health and education; rural households the lowest. There was also a rise in the proportion of spending on other non-durable items – from 20 to 23 per cent.

INCOME POVERTY AND INEQUALITY

The rise in household consumption was accompanied by a small increase in inequality. The Gini coefficient, a measure of how unequally expenditure is distributed, rose from 0.34 to 0.35. The richest 20 per cent of the population now account for 44 per cent of household spending, compared with 43 per cent in 1991/92. The biggest rise in inequality was in urban areas, particularly Dar es Salaam.

Poverty lines were developed as part of the analysis. The price of a minimum food basket necessary to provide 2,200 calories per day was calculated, based on the consumption pattern of the poorest 50 per cent of the population. A higher, 'basic needs' poverty line was also set to allow for non-food consumption. This was done for both 2000/01 and 1991/92, so that trends in income poverty could be assessed.

There was a small fall in income poverty of about three percentage points over the decade. Some 36 per cent of Tanzanians now fall below the basic needs poverty line and 19 per cent below the food poverty line, compared with 39 and 22 per cent in 1991/92. However, this decline is not large enough to be statistically significant.

Rural areas have the highest poverty levels, with 39 per cent of the population below the basic needs poverty line compared with 18 per cent in Dar-as-Salaam and 26 per cent in other urban areas. Over the decade, poverty declined most in Dar es Salaam. Poverty remains overwhelmingly rural, with 87 per cent of the poor living in rural areas.

Absolute numbers in poverty increased over the 1990s because of population growth. Using national population projections, there are now 11.4 million Tanzanians below the basic needs poverty line compared with 9.5 million in 1991/92.

Regional comparison of income poverty levels should be undertaken with caution. However, looking at both income poverty and the share of expenditure on food, four regions are consistently identified as poorer than average: Lindi, Singida, Shinyanga and Mara. Dar es Salaam and Mbeya have lower levels of poverty than average.

POVERTY PROFILE

Households particularly likely to be poor include those with many members and those with a large proportion of dependants. Households headed by someone who is economically inactive are also more likely to be poor.

Households that depend on agriculture have somewhat higher levels of poverty than average, particularly those relying on the sale of livestock.

Poverty levels are also strongly related to the education of the head of household. Some 51 per cent of individuals are poor if the head has no education, compared with only 12 per cent when the head is educated above primary level.

Over the 1990s, poverty declined most among the employed and self-employed, particularly private sector employees. In contrast, poverty increased in households with a head who was economically inactive or uneducated and in those with a large proportion of dependants.

Only 50 per cent of children aged seven to thirteen from the poorest households were studying compared with 66 per cent from other households. The proportion of children studying from the poorest households fell over the 1990s. This risks creating a cycle of deprivation, since the survey also shows that adults' incomes are strongly related to their education.

In the case of adults, the poor do not report higher levels of illness and injury than wealthier households; for their children the reverse is the case. When they are ill, the poor are somewhat less likely to see a health-care provider, including a government provider, than individuals from other households, although the differences are not large.

Some 54 per cent of the poorest households depend on an unprotected source of drinking water, compared with 40 per cent of other households. The average distance to drinking water is also higher for the poorest.

REPORTED INCOME

Despite the overall importance of agriculture in rural areas, some 40 per cent of rural household income comes from sources outside their own farm production. Employment and self-employment account for around 71 per cent of income in Dar es Salaam. In other urban areas these sources contribute 57 per cent of income and agricultural sources provide another 20 per cent.

Rural households depend on a wider variety of income sources than urban households; 65 per cent report more than three sources. Such diversification seems to be an important way for rural households to raise their incomes, since households with a larger number of sources have higher mean incomes.

Individuals with a tertiary education earn almost four times the income of the least educated. These differences are particularly large in Dar es Salaam, where the most educated earn 10 times more than the least.

There are also large differences between average incomes of men and women, men earning 1.9 times more than women. A number of factors contribute to these differences but they persist even when allowance is made for the different educational levels of the sexes.

CONCLUSIONS: POVERTY AND WELFARE IN TANZANIA

The 2000/01 Tanzanian HBS confirms that income poverty is high and social indicators usually poor. It also points to large gaps between different groups.

The biggest gap is between urban and rural populations. At one extreme, Dar es Salaam is substantially better off than the rest of the country; at the other, rural households are much poorer than their urban equivalents – by almost any indicator. The need to focus on reducing poverty in rural areas remains compelling.

Regional differences are more complex and vary to some degree with the indicator being considered. But it is possible to identify a number of regions that are disadvantaged in most respects. These include Lindi, Singida and Shinyanga; they might also include Pwani, Mara and Tabora.

On the whole, differences in poverty and social indicators between the sexes are smaller than differences resulting from geography. Women have lower incomes than men, but it is not possible to assess differences in consumption between individuals. Households headed by women are no poorer than those headed by men. Adult women have lower levels of education than adult men, but current school enrolment rates are slightly higher for girls.

Over the 1990s there were modest improvements in welfare, with most indicators showing small but positive changes. The economy has diversified and household consumption has increased. The proportion of the population that is poor has fallen slightly, although absolute numbers have risen due to population growth.

However, such improvements are often associated with rising inequality. Many of them have been concentrated in urban areas, particularly Dar es Salaam. Generally, improvements in rural areas have been smaller. Some types of household have actually seen increases in poverty over the period. It is clear that the improvements of the last decade have not been equally distributed.

Key Indicators from the Household Budget Surveys

Indicator	1991/92	2000/01
THE FAMILY AND HOUSING		
Average household size	5.7	4.9
Mean percentage of dependants	40	42
Percentage of female-headed households	18	23
Percentage of households with a modern roof	36	43
Percentage of households with modern walls	16	25
Average number of persons per sleeping room	2.6	2.4
Percentage of households with electricity	9	12
Percentage of households using a toilet	93	93
Percentage of households owning a radio	37	52
EDUCATION, HEALTH AND WATER		
Percentage of adult men with any education	83	83
Percentage of adult women with any education	68	67
Percentage of adults literate	--	71
Primary net enrolment ratio	--	59
Percentage of children age 7-13 years studying	57	61
Secondary net enrolment ratio (forms I-IV)	--	5
Percentage of households within 2 km of a primary school	66	63
Percentage of ill individuals who consulted any health provider	--	69
Percentage of households within 6 km of a primary health facility	75	75
Percentage of households with a protected water source	46	55
Percentage of households within 1 km of drinking water	50	55
ECONOMIC ACTIVITIES		
Percentage of adults whose primary activity is agriculture	73	63
Percentage of children age 5-14 years who are working	--	62
Mean area of land owned by rural households (acres)	--	6.0
Percentage of households with a member with a bank account	18	6
CONSUMPTION AND POVERTY		
Average consumption expenditure per capita (2000/01 TShs, 28 days)	8,686	10,120
Percentage of consumption expenditure on food	71	65
Percentage of population below the food poverty line	22	19
Percentage of population below the basic needs poverty line	39	36
Gini coefficient	0.34	0.35
Percentage of total consumption by the poorest 20 percent of population	7	7

INTRODUCTION

1.1 Introduction

This chapter outlines the contents and the implementation of the 2000/01 Household Budget Survey. It discusses the questionnaire, the analysis undertaken, the sample used and data quality.

1.2 Implementation of the 2000/01 Household Budget Survey

The National Bureau of Statistics began preparations for the 2000/01 Household Budget Survey in late 1999 and training of the fieldworkers took place in March 2000. Fieldwork began in May 2000 for ten regions and in June 2000 for the remaining ten. It lasted for twelve months in each region, with all fieldwork being completed by June 2001.

The 2000/01 sample was much larger than previous Household Budget Surveys in order to provide estimates of key poverty measures for each of the twenty regions of Tanzania mainland. It initially covered 1,161 small geographical areas; these were used as primary sampling units (PSUs). If fully implemented, a total of 27,864 households would have been interviewed. However, it was decided during implementation that a number of rural PSUs would be excluded from the second six months of the survey as a cost saving measure. The anticipated final sample then became 22,584 households.

Two households were enumerated each month of the survey in each PSU. Over the course of the survey, 24 households would normally be interviewed per PSU. Enumerators, resident in or near the PSU, conducted an initial interview with the two households at the beginning of the survey month. They then visited the households during that month on a regular basis to record household transactions, covering expenditure, consumption and income. These visits were scheduled to take place every day for households without a literate member and every two to three days for others. Enumerators were supervised by field supervisors working out of the NBS regional offices. Supervisors collected and checked questionnaires, which were then sent on to the head office for data entry.

Data entry, using the data entry programme IMPS, went on in parallel with fieldwork and was completed by July 2001. Automated data consistency checking procedures were run on the entered data during fieldwork. The field staff were informed of the errors identified by these programmes and, where possible, a team in the head office corrected them. Additional consistency checks and cleaning continued until November 2001 and the analysis was completed by June 2002.

1.3 Sampling and Weights

The first stage of sampling in the 2000/01 HBS used the primary sampling units identified in the 'regional' sample of the National Master Sample (NMS)¹. This is a sample of 1,161 PSUs, designed to allow estimates of household-level variables to be made with reasonable precision for each of mainland Tanzania's twenty regions.

A comprehensive household listing was undertaken in each of the sampled PSUs. Information on a number of socio-economic variables was collected for each household during this listing. This was used to stratify households within each PSU into high, medium and low income households. Separate samples were then drawn from each of these groups. The samples were drawn automatically in the head office and each regional office was supplied with a list of pre-selected households.

The reduction in sample size was implemented during the survey by stopping fieldwork in the rural PSUs that were not part of the NMS 'national sample'. This meant that twelve households were interviewed in most of these PSUs. The resulting final sample size is shown in Table 1.1. It also shows the sample of the 1991/92 HBS, which used the 'national' sample of the NMS.

The resulting unweighted sample is disproportionately urban compared with the population of Tanzania. The analytical weights adjust for this, compensating for the over-representation of urban areas compared with rural areas. They also prevent bias being introduced into estimates for characteristics that vary seasonally because of the reduction in sample size half way through the year.

TABLE 1.1 NUMBER OF PRIMARY SAMPLING UNITS AND HOUSEHOLDS INCLUDED IN THE ANALYSIS (HBS, 1991/92 AND 2000/01)

	1991/92				2000/01			
	DSM	Other Urban	Rural areas	Total	DSM	Other Urban	Rural areas	Total
Number of PSUs	52	70	100	222	57	566	535	1,158
No. of households	1,124	1,489	2,210	4,823	1,225	13,384	7,569	22,178

The 2000/01 HBS interviewed 98 per cent of the (revised) intended sample size. It did so by relatively frequent use of replacement households, selected from a list provided by the head office. Almost 12 per cent of households included in the final analysis were replacements. The 1991/92 HBS suffered higher levels of losses but used a smaller proportion of replacements. The use of replacements is not usually considered good practice in sampling, since it runs the risk of estimates

1. For further details on the sampling, including the NMS, see Appendix A1.

being biased by replacement with non-comparable households. However, it was considered necessary because of the large sample size and demanding character of the data collection process.

Subsequent tables presented in this report do not show the sample size on which estimates are based, in order to make them easier to read. Unless otherwise indicated, estimates are always based on at least 100 cases; usually many more. Sampling errors and confidence intervals – measures of how reliable the estimates can be expected to be, given the size and nature of the sample that was surveyed – are presented for a limited number of variables in Appendix A1 and Appendix C.

Sampling errors are usually reasonably small for national, urban and rural estimates, meaning that they are quite reliable at these levels. They are larger in the 1991/92 HBS because of the smaller sample.

For the 2000/01 HBS, estimates are also presented for the regions. While the reduction in sample size should not have introduced any bias into the estimates, it did increase sampling error. This is appreciable for the regional estimates, where sampling errors can sometimes be large. The degree of sampling error depends on both the characteristic that is being measured and the region. Table C30 shows sampling errors for selected regional estimates. In addition, the percentage of the population that is urban in each region sometimes differs appreciably from the last Census. Regional estimates should be treated with some caution.

Particular caution is required when regional estimates are presented separately for urban and rural areas – particularly in rural areas of each region, where the sample size reduction was concentrated. Only around 400 households were interviewed in the rural part of each region, close to a minimum acceptable, although they were spread over a reasonable number of PSUs.

1.4 Areas Covered by the Survey and the Analysis

The 2000/01 Household Budget Survey collected information on a wide range of household and individual characteristics. Many of the indicators that can be calculated from the data are central to poverty monitoring in Tanzania, including measures of income poverty and of the performance of priority sectors. The analysis has focussed on indicators defined in the Poverty Reduction Strategy Paper and by National Poverty Eradication Division in the Office of the Vice-President.

The analysis provides important baseline measures for the monitoring of poverty in the future. In addition, trends in many indicators over the 1990s can be assessed by comparison of the 2000/01 HBS with the earlier 1991/92 Household Budget Survey.

Information collected in the 2000/01 Household Budget Survey includes:

- household members' education, economic activities and health status
- household expenditure, consumption and income
- ownership of consumer goods and assets
- housing structure and materials
- distance to services and facilities, and
- food security.

Information on consumption/expenditure was collected in two main formats. The first was a diary that records all transactions and consumption for that household for one calendar month. This was completed on a regular basis by the interviewers. The second was recall of the purchase of non-food items over the twelve months preceding the survey.

The 2000/01 HBS used a questionnaire that was very similar to the 1991/92 HBS, although there were a number of differences. Information on current school attendance and on literacy was collected in the 2000/01 questionnaire but not in 1991/92. Some information on food security, on land farmed and on animals owned was also collected only in 2000/01. The other main changes were in the recording of expenditure. In both the 1991/92 and 2000/01 surveys, information on consumption was collected using both the household diary and twelve-month recall. In addition, a personal diary was introduced to the 2000/01 HBS in an effort to reduce under-reporting of individuals' personal expenditure outside of the household. Each literate adult was given a diary and recorded daily expenditure; this was transferred to the household form by the interviewer. In households where an adult was illiterate, the interviewer visited daily and recorded the information directly. An explicit listing of the categories of items to be reported was also introduced into the section that records household expenditure in the preceding twelve months. Expenditure and income transactions were separated onto different pages in the household diary, when previously they were recorded together.

Overall, the two questionnaires are very similar and the two data sets are reasonably comparable. Both surveys were implemented by the National Bureau of Statistics; a number of staff members worked on both surveys. It is possible that the larger sample size of the 2000/01 HBS could have reduced the capacity for supervision and the quality of interviewers selected, but data quality control procedures at head office were stronger than in 1991/92.

In order to maximise the comparability of the estimates over time, the 1991/92 data was completely re-analysed. While this analysis was informed by earlier work on the 1991/92 data, a number of substantial changes were made². The changes included re-weighting the 1991/92 data to bring the population share of each area more into line with population estimates. A number of changes were made to the poverty analysis, which are outlined in Chapter 7. For this reason, the 1991/92 estimates that are presented in this report are better than in the previous analysis and supersede them.

For both surveys, the estimates will reflect the particular conditions at the time of the fieldwork. Some of the sectors described in this report may have seen appreciable changes since the data was collected. For example, fees for primary schooling have been abolished since 2000/01 and this is believed to have brought about a substantial increase in primary school enrolment. This would not, of course, be reflected in the survey findings.

A great deal more analysis can be undertaken with the data from the two Household Budget Surveys, which represent a resource that can be used to further inform poverty policy. It is expected that further analysis will be undertaken in the future, both within and outside the National Bureau of Statistics.

1.5 Data Quality

A number of data consistency checks were undertaken early in the fieldwork to assess quality and to assist in the development of the data processing system. These identified a large number of problems in the data coming in from the field, which reflected in part the ambitious size of the survey. The errors identified included consumption unit miscoding, miscoding of transactions, out of range unit prices and problems in the identifier variables. As a consequence, automatic consistency checking programmes were strengthened and a data editing team was created. Where possible, errors were corrected at the data processing centre and the field teams were notified of the problems. This resolved a large number of problems.

Additional cleaning was also carried out at the beginning of the analysis. The main area in which additional cleaning was required was in the consumption/expenditure information, particularly in the household diary which consisted of over 5.6 million records. Similar cleaning was required in the 1991/92 data. Under-reporting of household size was also identified as a problem.

2. National Bureau of Statistics and Oxford Policy Management (2000): 'Developing a Poverty Baseline in Tanzania', Dar es Salaam.

On the whole, there were few other problems in the data by the time it was analysed. There was some evidence of 'age heaping' – a tendency for individuals to round their reported ages to certain memorable digits (10, 15, 20 etc) - as is common in most developing country surveys. There was also some over-reporting of four year olds, which is likely to be due to interviewers mis-recording ages to avoid completing the extra questions for respondents of five and above. Other data quality issues are discussed together with the analysis to which they are relevant.

HOUSEHOLD
DEMOGRAPHIC
COMPOSITION

2. HOUSEHOLD DEMOGRAPHIC COMPOSITION

9

2.1 Introduction

This chapter presents information on household demographic structure, in particular: household size; the age, sex and marital status of household members; the number of dependants; and the distribution of household heads by sex and age.

2.2 Household Demographic Structure

Average household size has declined appreciably over the period, from 5.7 to 4.9 members; the decline has taken place in all areas (Table 2.1). This may in part be due to the decline in fertility that has occurred³. There has been a decline in the frequency of large households and a small increase in one- and two-person households (Appendix Table B2.5)⁴.

TABLE 2.1 AVERAGE HOUSEHOLD SIZE

	Dar es Salaam	Other urban areas	Rural areas	Mainland Tanzania
HBS 1991/92	4.8	4.9	5.9	5.7
HBS 2000/01	4.3	4.5	5.1	4.9

The age distribution of the two surveys looks broadly similar (Table 2.2). In urban areas, there has been a small decline in the proportion of children, consistent with declines in fertility. There has also been an increase in the proportion of individuals over 65. This could be due to an increase in younger adult mortality due to HIV, though this explanation cannot be tested in the data.

TABLE 2.2 DISTRIBUTION OF HOUSEHOLD MEMBERS IN BROAD AGE GROUPS

	Dar es Salaam		Other urban areas		Rural areas		Mainland Tanzania	
	91/92	00/01	91/92	00/01	91/92	00/01	91/92	00/01
0 – 14	35.6	34.9	42.8	40.3	45.2	45.7	44.4	44.3
15 – 29	37.2	34.7	30.5	30.4	27.5	25.1	28.4	26.4
30 – 44	19.0	18.7	16.4	17.1	14.5	15.3	15.0	15.8
45 – 64	7.1	9.5	8.4	9.5	9.9	9.9	9.5	9.8
65 +	1.1	2.2	1.9	2.8	2.9	3.9	2.7	3.7
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

3 National Bureau of Statistics & Macro International Inc. (1999) 'Tanzania Reproductive and Child Health Survey', Dar es Salaam.

4 Although there is some evidence that the number of household members is under-reported in the later stages of the 2000/01 survey, the decline in average household size between the surveys is unlikely to be due to this because both surveys show a similar problem (see Appendix A2).

The age-sex distribution of the two surveys is shown in Table 2.3. Both surveys show fewer men than would be expected in the age group 15-29 years. This may partly be due to a greater tendency to age exaggeration by men; migration by young men to reside in places not captured by the household sample frame is also likely to be part of the explanation.

TABLE 2.3 DISTRIBUTION OF HOUSEHOLD MEMBERS BY SEX AND AGE (%)

	Dar es Salaam		Other urban areas		Rural areas		Mainland Tanzania	
	91/92	00/01	91/92	00/01	91/92	00/01	91/92	00/01
Males								
0 – 14	17.1	16.5	22.0	20.1	23.1	23.1	22.6	22.3
15 – 29	17.2	15.8	13.8	12.5	12.6	11.0	13.0	11.5
30 – 44	10.2	9.8	7.7	8.7	7.1	7.6	7.3	7.9
45 – 64	5.0	6.0	5.2	4.9	5.3	4.9	5.2	4.9
65 +	0.7	1.2	1.1	1.4	1.7	1.9	1.6	1.8
Total	50.2	49.1	49.8	47.5	49.8	48.5	49.8	48.4
Females								
0 – 14	18.5	18.4	20.8	20.2	22.1	22.6	21.8	22.0
15 – 29	20.0	18.9	16.7	17.9	14.9	14.1	15.4	14.9
30 – 44	8.8	9.0	8.7	8.4	7.4	7.8	7.6	7.9
45 – 64	2.1	3.5	3.3	4.6	4.6	5.0	4.3	4.9
65 +	0.4	1.0	0.8	1.4	1.2	2.0	1.1	1.9
Total	49.8	50.9	50.2	52.5	50.2	51.5	50.2	51.6

Dependants are members of the household who are under the age of 15 or are 65 and above. The proportion of dependants is highest in rural areas and lowest in Dar es Salaam (Table 2.4). Overall, the proportion of dependants has increased slightly over the 1990s, despite the decline in fertility.

TABLE 2.4 MEAN PROPORTION OF DEPENDANTS BY AREA

	Dar es Salaam	Other urban areas	Rural areas	Mainland Tanzania
HBS 1991/92	0.30	0.34	0.42	0.40
HBS 2000/01	0.30	0.36	0.45	0.42

There have also been some changes in the marital status of individuals over the period. There has been a decline in the proportion of adults who have never been married (Table 2.5). This is associated with an increase in the proportion of men who are currently married. This proportion has not increased for women, however, who have seen an increase in the proportion who are divorced/separated and who are widowed. These trends are seen in both urban and rural areas (see Appendix Table B2.6). An increase in widowhood would be expected as a result of HIV, although it should be remembered that other factors affect the extent of widowhood, including the age-structure of the population and re-marriage patterns.

TABLE 2.5 DISTRIBUTION OF ADULTS BY MARITAL STATUS (AGE 15+ YEARS)

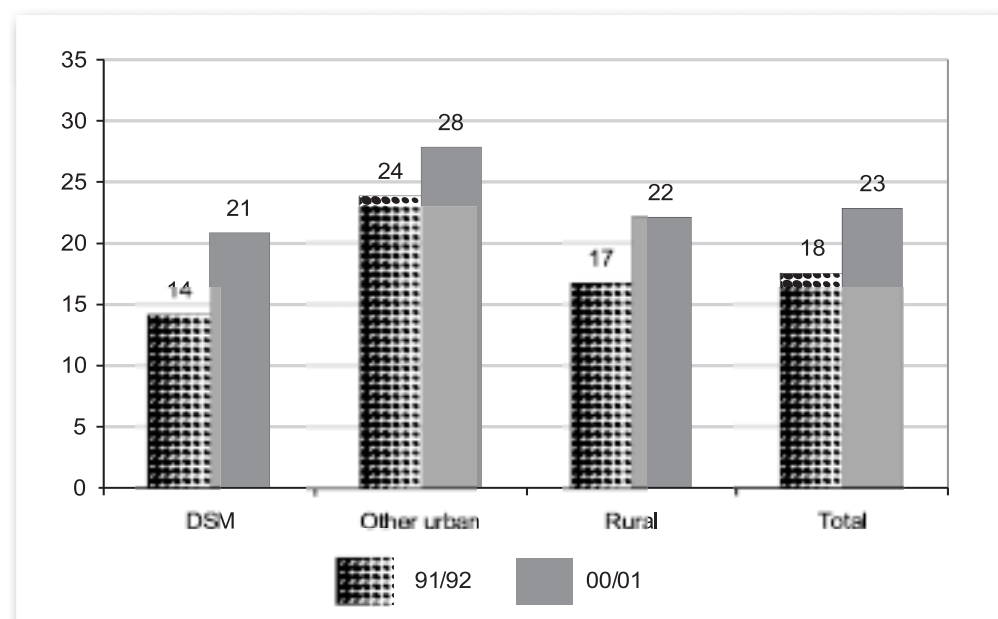
	Male		Female		Total	
	91/92	00/01	91/92	00/01	91/92	00/01
Never married	40.3	35.4	27.4	23.3	33.7	29.0
Married	56.1	59.9	61.7	61.2	59.0	60.6
Divorced/separated	2.6	2.9	5.1	6.5	3.8	4.8
Widowed	1.0	1.7	5.8	9.0	3.5	5.6
Total	100.0	100.0	100.0	100.0	100.0	100.0

There has been a large increase in the proportion of households that are headed by women in both urban and rural areas (Figure 2.1 and Table 2.6). This has been most marked in Dar es Salaam where some 21 per cent of households are female-headed compared to 14 per cent in 1991/92. However, other urban areas still have the highest proportion of female-headed households in Tanzania, with 28 per cent. By region, the highest proportions of female-headed households are found in Iringa, Mbeya, Singida, Mara and Dodoma (Appendix Table C1).

TABLE 2.6 DISTRIBUTION OF HOUSEHOLDS BY SEX OF THE HOUSEHOLD HEAD

	Dar es Salaam		Other urban areas		Rural areas		Mainland Tanzania	
	91/92	00/01	91/92	00/01	91/92	00/01	91/92	00/01
Male	85.9	79.1	76.1	72.1	83.3	77.9	82.4	77.1
Female	14.1	20.9	23.9	27.9	16.7	22.1	17.6	22.9

FIGURE 2.1 PERCENTAGE OF FEMALE-HEADED HOUSEHOLDS BY AREA (HBS 1991/92 AND 2000/01)



Household heads, and particularly female household heads, have seen some increase in the proportion who are widowed, as is shown by all adults. These changes are quite substantial in urban areas. However, the increase in the proportion of female-headed households in rural areas has occurred without any increase in the proportion of female heads who are widows, suggesting that the increase cannot be due simply to higher adult mortality caused by HIV (see Appendix Table B2.7).

There has been a small increase in the proportion of heads age 65 and over. This is associated, in part, with the increase in female-headed households, since female heads tend to have an older age profile.

TABLE 2.7 DISTRIBUTION OF HOUSEHOLDS BY AGE OF THE HOUSEHOLD HEAD

	Dar es Salaam		Other urban areas		Rural areas		Mainland Tanzania	
	91/92	00/01	91/92	00/01	91/92	00/01	91/92	00/01
Under 18	0.1	0.0	0.2	0.0	0.1	0.1	0.1	0.1
18-29	20.7	20.3	19.4	20.3	16.2	16.6	16.9	17.4
30-44	51.2	45.2	45.0	43.2	38.1	39.9	39.9	40.7
45-64	25.1	29.5	29.6	28.5	34.9	31.0	33.5	30.5
65+	2.9	5.1	5.9	8.0	10.8	12.4	9.6	11.3
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

2.3 Conclusions

This short chapter has looked at the demographic make-up of households. It has shown a decline in average household size over the 1990s, from 5.7 to 4.9 persons. It has also shown a substantial increase in the proportion of female-headed households and some increase in the proportion of households headed by those aged 65 and over.

HOUSEHOLD
CONSTRUCTION,
FACILITIES AND
OWNERSHIP OF
CONSUMER GOODS

3.1 Introduction

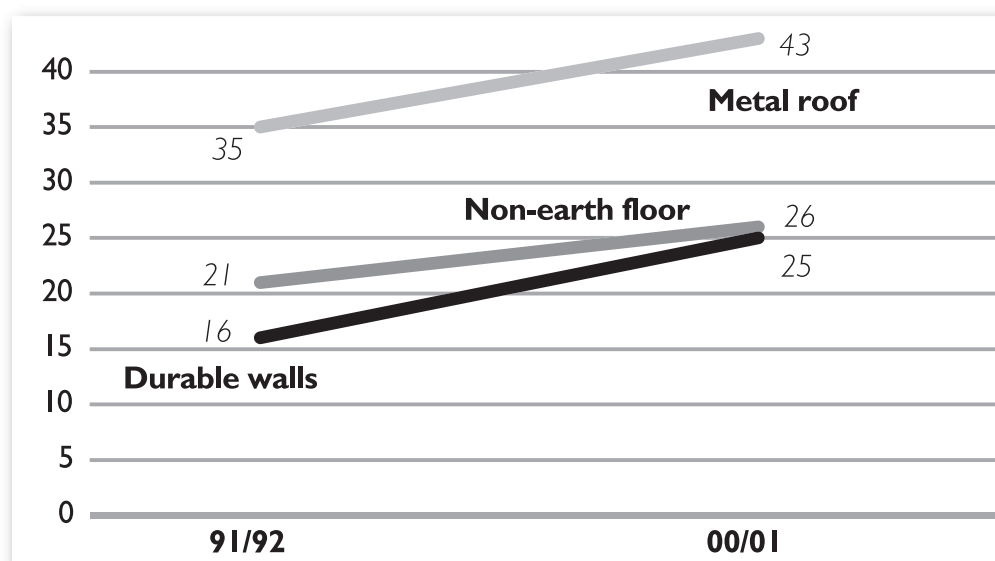
This chapter presents information on the materials that dwellings are constructed from, on housing tenure, on household facilities, on the distance to key social and economic services and on household ownership of consumer goods.

Information on building materials and tenure was collected on all buildings where household members reside. For consistency with previous reports, the data here is presented for the household's primary building (Tables 3.1 to 3.3). Patterns and trends are similar if all buildings are included in the analysis.

3.2 Housing construction and tenure

The use of modern housing materials has increased in all areas, although it has been largest in urban areas, particularly Dar es Salaam (Figure 3.1 and Table 3.1). The increase in stone and cement foundations, floors and walls all fit this pattern, although the use of baked brick walls has been largest in rural areas. The increase in the use of metal sheet roofing has been largest in urban areas, other than in Dar es Salaam.

FIGURE 3.1 PERCENTAGE OF DWELLINGS CONSTRUCTED WITH MODERN MATERIALS (HBS 1991/92 & 2000/01)



It is often wealthier households that are able to afford these materials and their increased use suggests an increase in household wealth, although changes in the relative price of these materials brought about by market reforms could also have played a role.

Regionally, the use of modern housing materials is highest in Dar es Salaam and Kilimanjaro and lowest in Lindi, Singida and Tabora, although the identification of the lowest-use regions depends somewhat on which characteristic is considered (Maps 3.1 and 3.2).

TABLE 3.1 DISTRIBUTION OF HOUSEHOLDS BY CONSTRUCTION MATERIALS

	Dar es Salaam		Other urban areas		Rural areas		Mainland Tanzania	
	91/92	00/01	91/92	00/01	91/92	00/01	91/92	00/01
House foundations								
No foundation	16.1	7.8	31.1	24.9	72.5	61.9	62.9	52.7
Stones in mud-mortar	11.3	6.8	27.7	22.9	11.2	12.9	13.6	14.0
Stones loosely laid	7.4	2.5	2.9	4.2	0.6	0.9	1.4	1.5
Concrete, cement, etc in cement / lime-mortar	64.8	82.8	33.2	44.0	13.9	20.0	20.0	27.8
Others	0.4	0.1	5.1	4.0	1.8	4.3	2.2	4.0
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
House floor								
Earth	14.5	6.7	44.6	38.3	90.8	86.6	79.2	74.0
Cement, tiles etc	84.3	92.4	54.2	61.1	8.0	12.5	19.6	25.2
Other	1.2	0.9	1.2	0.5	1.2	0.9	1.2	0.8
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
House walls								
Poles, branches, grass	3.4	0.9	5.7	5.3	23.7	19.3	19.8	16.0
Mud & poles / stones	15.1	5.2	16.3	13.1	27.7	21.8	25.3	19.4
Mud only	2.0	2.2	11.1	12.1	14.6	18.1	13.3	16.1
Mud bricks	12.0	3.2	37.6	30.8	24.2	23.5	25.4	23.3
Baked / burnt bricks	4.8	1.3	11.9	15.9	8.1	13.7	8.5	13.2
Concrete, cement, stone	62.1	87.2	17.1	22.4	1.5	3.0	7.6	11.5
Other	0.7	0.0	0.2	0.4	0.1	0.6	0.2	0.5
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
House roof								
Grass, leaves, bamboo	1.1	1.1	21.7	14.3	63.1	55.7	53.1	45.8
Mud & grass	0.2	0.7	1.7	1.5	12.8	12.5	10.4	10.1
Concrete, cement	3.4	3.6	0.7	0.5	0.1	0.0	0.4	0.3
Galvanised metal sheets	91.5	91.7	74.2	81.9	23.8	31.1	35.4	42.8
Asbestos sheets	0.1	0.5	0.0	0.3	0.1	0.0	0.1	0.1
Tiles	3.8	2.4	0.5	1.0	0.0	0.1	0.3	0.4
Other	0.0	0.0	1.3	0.5	0.1	0.5	0.3	0.5
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

In Tanzania as a whole there has been a decline in the average number of individuals per sleeping room due to the decline in household size (Table 3.2). The exception to this is Dar es Salaam, where there has been an increase, despite the decline in household size. This is because there has been an increase in the proportion of households reporting only one sleeping room in Dar es Salaam, presumably due to increased housing pressures (see Appendix Table B3.1).

TABLE 3.2 MEAN NUMBER OF PERSONS PER SLEEPING ROOM

	Dar es Salaam	Other urban	Rural areas areas	Mainland Tanzania
HBS 1991/92	2.45	2.31	2.61	2.56
HBS 2000/01	2.50	2.21	2.44	2.41

TABLE 3.3 DISTRIBUTION OF HOUSEHOLDS BY TYPE OF TENURE

	Dar es Salaam		Other urban		Rural areas areas		Mainland Tanzania	
	91/92	00/01	91/92	00/01	91/92	00/01	91/92	00/01
Owned by Household	31.2	32.4	55.8	54.2	95.3	94.5	85.4	84.3
Lived in Without Paying Rent	3.8	3.6	2.3	4.1	1.6	2.3	1.8	2.7
Rented Privately	54.6	54.9	36.9	35.9	2.0	2.3	10.5	10.8
Rented from NHC & other Public Real Estate Company	5.5	5.6	1.6	1.8	0.1	0.0	0.6	0.7
Rented From Employer (inc. govt.)	1.5	1.5	0.8	1.0	0.5	0.4	0.6	0.6
Subsidised Renting From Employer (inc. govt.)	2.7	1.2	0.8	1.1	0.3	0.2	0.5	0.4
Subsidised Renting From Relative / Friend	0.7	0.7	1.7	1.8	0.1	0.2	0.4	0.4
Other	0.0	0.1	0.0	0.2	0.1	0.1	0.1	0.1
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Table 3.3 shows the tenure of dwellings. Privately rented accommodation is most common in Dar es Salaam, whereas owner-occupiers are predominant in other urban and rural areas. There has been little change in housing tenure, even in Dar es Salaam; this is perhaps surprising given the large changes in employment patterns and household structure over the 1990s (see Chapters 2 and 5).

3.3 Household facilities and distance to services

TABLE 3.4 PERCENTAGE OF HOUSEHOLDS WITH ELECTRICITY

Measure	Dar es Salaam	Other urban	Rural areas areas	Mainland Tanzania
Any electricity	51.4	21.7	2.6	8.5
HBS 1991/92				
Electricity grid	58.9	29.7	2.0	10.0
HBS 2000/01				
Solar electricity	1.3	1.7	1.6	1.6
HBS 2000/01				

Around one tenth of households in Tanzania report a connection to the electricity grid, with 1.6 per cent reporting the use of solar electricity (Table 3.4). The grid serves the urban population above all – only two per cent of rural households report a connection. In rural areas, solar electricity is almost as important a source as the grid. Over the 1990s, the coverage of the grid has increased in urban areas. There has been little or no increase in rural areas⁵.

TABLE 3.5 DISTRIBUTION OF HOUSEHOLDS BY ENERGY SOURCE FOR LIGHTING AND COOKING

Energy Source	Dar Es Salaam		Other Urban Areas		Rural Areas		Mainland Tanzania	
	91/92	00/01	91/92	00/01	91/92	00/01	91/92	00/01
Lighting								
Electricity	50.2	56.4	20.7	28.6	0.5	1.4	6.6	9.2
Solar electricity	N/A	0.9	N/A	0.5	N/A	0.6	N/A	0.6
Gas	1.5	0.1	0.6	0.1	0.4	0.2	0.5	0.2
Paraffin	48.2	40.4	78.7	69.6	95.2	90.4	89.8	83.9
Candles	0.0	1.8	0.0	0.3	0.0	0.3	0.0	0.4
Firewood & other	0.1	0.5	0.0	0.7	3.9	7.1	3.1	5.7
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Cooking								
Electricity	9.7	4.4	4.8	2.4	0.2	0.3	1.5	0.9
Solar electricity	N/A	0.4	N/A	0.8	N/A	1.0	N/A	0.9
Gas - industrial	1.2	0.4	0.6	0.1	0.1	0.3	0.2	0.3
Gas - biogas	N/A	0.2	N/A	0.1	N/A	0.1	N/A	0.1
Paraffin	33.7	43.0	13.3	8.9	1.4	1.0	5.2	5.0
Coal	1.1	0.6	0.3	0.3	0.1	0.0	0.2	0.1
Charcoal	52.1	46.2	36.6	53.3	2.5	3.9	10.6	14.2
Firewood	1.2	4.6	43.4	33.8	94.9	93.4	81.5	78.5
Other	1.0	0.3	1.0	0.2	0.8	0.0	0.8	0.1
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Note: The 1991/92 HBS did not include a category for solar electricity, which is included in 'electricity'; neither did it distinguish the type of gas used for cooking – gas of all types is included in the first category for the 1991/92 data.

Dar es Salaam, Kilimanjaro and Arusha are the regions with the highest proportion of households connected to the grid. Households in Shinyanga and Kagera are least likely to be connected (Map 3.3).

The most common source of energy for lighting is paraffin, although there has been an increase in the use of electricity, particularly in urban areas (Table 3.5)⁶. Firewood is the most common source of fuel for cooking, being used by over 90 per cent of rural households, although charcoal and paraffin are the most important in urban areas. The use of charcoal in Dar es Salaam has declined, being replaced by paraffin. In other urban areas, by contrast, the use of charcoal has

5. The proportion of rural households connected to the grid in 1991/92 cannot be calculated exactly because a household was recorded as having electricity if it used any source, including solar power and generators.
6. The proportion of households reporting a source of electricity is slightly higher than the proportion reporting it as their main source of lighting, possibly due to temporary disconnections or to limited distribution of the electricity within the household.

increased while firewood and paraffin have declined. While the use of electricity for lighting has increased, its use for cooking has declined, reflecting the increase in its real price during the 1990s.

TABLE 3.6 DISTRIBUTION OF HOUSEHOLDS BY TYPE OF TOILET

[illegible]

There has been little change in the use of a toilet over the 1990s (Table 3.6). Some 93 per cent of households reported using a toilet of some type – the vast majority using a simple pit latrine. In rural areas, 90 per cent of households report having use of a toilet, a high proportion by comparison with many developing countries. The proportion of households not using a toilet has increased in Dar es Salaam.

The proportion of households not using a toilet varies quite substantially by region, the highest proportions being in Tanga, Arusha and Mara (Map 3.4).

There has been a decrease in the disposal of garbage outside the household compound and an increase in disposal within the compound, although the most common means continues to be disposal in a pit outside the compound (Table 3.7). There has also been an increase in the use of rubbish bins in urban areas. These changes are often large, although it is difficult to know how precisely the different categories were distinguished in the field.

TABLE 3.7 DISTRIBUTION OF HOUSEHOLDS BY MEANS OF GARBAGE DISPOSAL

[illegible]

TABLE 3.8 MEAN DISTANCE TO SELECTED SOCIAL AND ECONOMIC FACILITIES BY AREA (KM)

	Dar es Salaam		Other urban areas		Rural areas		Mainland Tanzania	
	91/92	00/01	91/92	00/01	91/92	00/01	91/92	00/01
Firewood/charcoal	**	0.21	**	1.22	3.24	3.15	(3.16)	2.67
Market place	0.81	0.57	1.02	0.52	5.30	3.54	4.35	2.87
Shop	0.16	0.12	0.33	0.26	2.13	1.85	1.74	1.50
Church/mosque	0.64	0.39	1.15	0.63	2.01	1.68	1.79	1.43
Primary court	2.30	2.60	1.91	2.70	10.23	11.91	8.52	9.85
Household's main farm	**	**	5.92	5.87	1.98	2.14	2.54	2.79
Public transport	0.74	0.46	0.95	0.82	6.07	5.40	4.98	4.36
Milling machine	0.40	0.83	0.48	0.38	4.41	2.35	3.57	1.95
Primary co-operative soc.	**	1.83	**	2.86	3.44	5.23	3.20	4.97
Bank	N/A	3.00	N/A	8.47	N/A	37.55	N/A	30.45
Post Office	N/A	2.64	N/A	4.67	N/A	28.14	N/A	22.63
Police Post	N/A	1.14	N/A	1.92	N/A	18.68	N/A	14.87
Community/social centre	N/A	0.58	N/A	0.75	N/A	2.39	N/A	2.01

Note: Estimates with over 10% of missing values are given in brackets; estimates with over 40 per cent of missing values are suppressed and indicated with **. N/A indicates that the information was not collected.

There has been a decline in the distance to a number of important services – including markets, shops and public transport. This is true of both urban and rural areas. However, the average distance to a primary court and to a primary cooperative society appears to have increased. The average rural household is over 37 km from a bank and over 18 km from a police post.

The average distance to firewood for rural households is generally highest in the western regions of Tanzania (Map 3.5). Distances to a shop (for rural households) and a bank show a more variable pattern (Maps 3.6 and 3.7).

3.4 Ownership of Consumer Goods

The proportion of households owning selected consumer good is presented in Table 3.9. Ownership of nearly all these items has increased over the 1990s. There are a few exceptions to this general trend. These are sometimes explicable by particular characteristics of the item – record and cassette players will tend to have been superseded by CD players for example – though others are more puzzling⁷.

The increase in ownership has not been uniform, however. Ownership of electrical items has increased much more in urban areas; this is inevitable given the limited coverage of the electricity grid in rural areas. Dar es Salaam has seen the largest increase in the ownership of most of these goods, where increases have often been large. The ownership of a number of items has increased in rural areas, however, including radios, bicycles, stoves and water heaters.

The ownership of household goods may be considered an approximate indicator of a household's wealth. On such a measure, Dar es Salaam and other urban areas are wealthier than rural areas, but there would appear to have been some increase in wealth in all areas. However, changes in the relative prices of goods during the decade could also affect trends.

TABLE 3.9 PERCENTAGE OF HOUSEHOLDS REPORTING OWNERSHIP OF SELECTED CONSUMER GOODS BY AREA

	Dar es Salaam		Other urban areas		Rural areas		Mainland Tanzania	
	91/92	00/01	91/92	00/01	91/92	00/01	91/92	00/01
Radio / radio cassette	79.5	79.6	55.7	71.5	30.6	45.7	37.4	51.9
Telephone	1.9	9.8	2.3	2.9	0.1	0.2	0.5	1.2
Refrigerator/freezer	7.1	20.2	2.9	5.6	0.1	0.4	1.0	2.5
Sewing machine	9.9	14.3	8.4	14.2	2.0	3.1	3.4	5.5
Television	0.8	20.1	0.6	7.0	0.0	0.2	0.1	2.6
Video	3.6	15.0	1.1	6.6	0.6	1.0	0.9	2.7
Chairs	83.7	81.9	92.7	88.2	81.0	74.7	82.9	77.2
Sofas	34.5	65.2	26.6	48.4	4.1	9.0	9.3	18.7
Tables	87.4	87.3	90.5	86.5	58.7	60.9	65.2	66.5
Watches	44.4	62.5	47.3	53.4	36.6	31.6	38.7	36.9
Beds	91.9	95.2	91.0	93.9	82.0	83.7	83.9	86.0
Lanterns	72.8	67.8	90.4	74.5	86.5	44.4	86.2	50.5
Computer	N/A	1.4	N/A	1.5	N/A	1.4	N/A	1.4
Kitchen utensils	66.5	87.1	76.9	92.9	88.3	92.2	85.3	91.9
Mosquito nets	N/A	79.6	N/A	66.3	N/A	27.9	N/A	37.1
Iron (charcoal / electric)	50.4	52.6	36.1	46.3	17.2	18.9	22.1	25.3
Electric/gas stove	16.6	13.4	7.8	8.9	0.6	1.2	2.7	3.2
Other stove	81.1	89.7	52.9	77.9	12.6	27.5	22.8	39.3
Water heater	12.2	8.5	21.1	20.7	17.8	23.4	18.0	22.0
Record / tape player	2.5	1.7	3.0	2.1	0.6	1.3	1.1	1.5
Complete music system	2.2	2.5	1.3	1.2	0.8	0.5	1.0	0.7
Books (not for school)	25.2	22.5	29.1	33.7	23.9	29.6	24.7	29.8
Motor vehicle	2.7	5.9	1.7	2.2	0.5	0.7	0.8	1.3
Motor cycle	0.4	1.4	1.5	1.8	0.6	0.7	0.7	0.9
Bicycle	9.7	11.6	21.9	34.3	24.8	38.4	23.4	36.0
Dish antenna/decoder	-	10.6	-	3.9	-	2.2	-	3.0

3.5 Conclusions

This chapter has examined a range of indicators of household welfare. There have been improvements in the materials used in dwelling construction, although many of these improvements have been concentrated in urban areas. Most rural households continue to dwell in houses constructed of natural, locally available materials. Outside of Dar es Salaam, there has been a decline in the density of occupation, as measured by persons per sleeping room. Density has increased in

7. It is possible that some reflect differences in definition of the items between the two surveys. It is difficult to see why there should be such a large decline in the ownership of lanterns, for example.

the capital city. Most dwellings are owner-occupied; renting is significant only in urban areas. There has been little change in housing tenure over the decade.

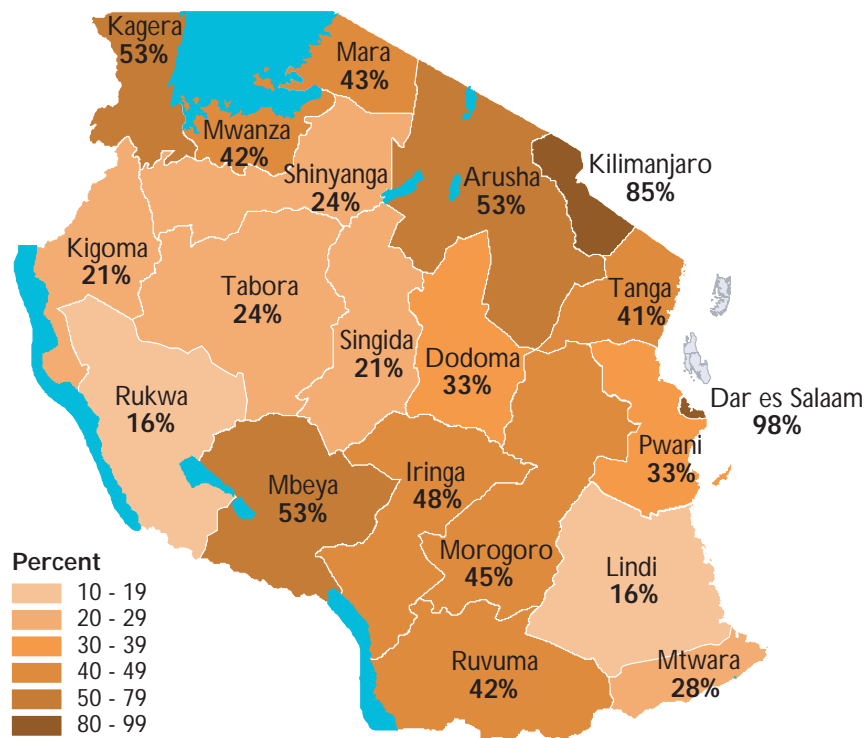
In urban areas, there has been some increase in the proportion of households connected to the electricity grid. The grid remains a predominantly urban service - very few households in rural areas have any source of electricity, where solar power appears to be almost as important as the grid. There has been some increase in the use of electricity for lighting but its use for cooking has declined.

Most households in Tanzania report using a toilet; over 90 per cent use a toilet even in rural areas. There has been no change in this measure over the decade. However, there appear to have been large changes in the pattern of garbage disposal in both urban and rural areas.

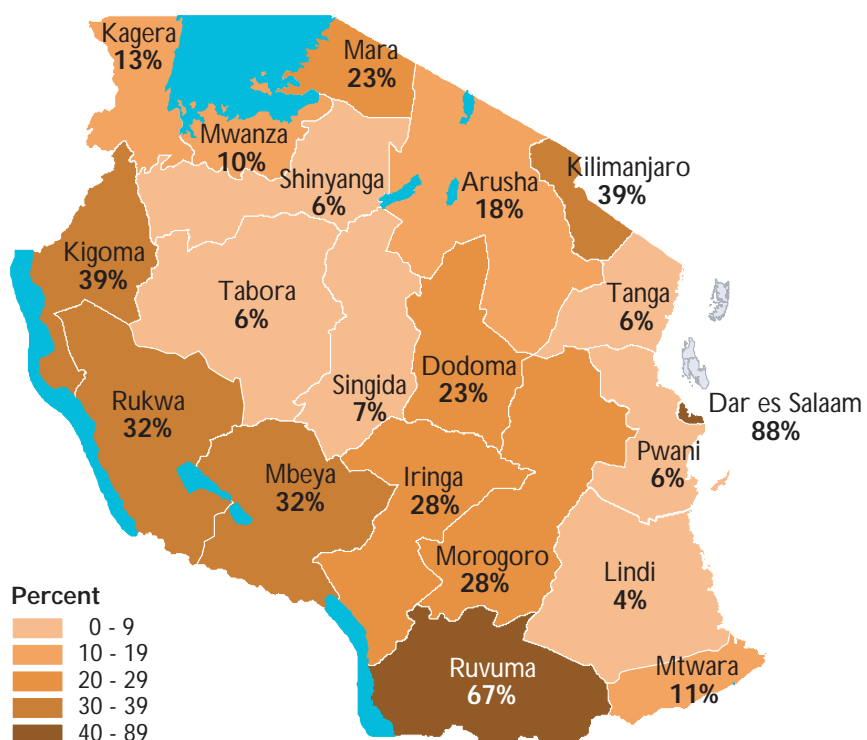
There has been a decrease in the distance to a number of important services – including markets, shops and public transport. However, the average distance to a primary court and to a primary cooperative society appears to have increased. The average rural household is over 37 km from a bank and over 18 km from a police post.

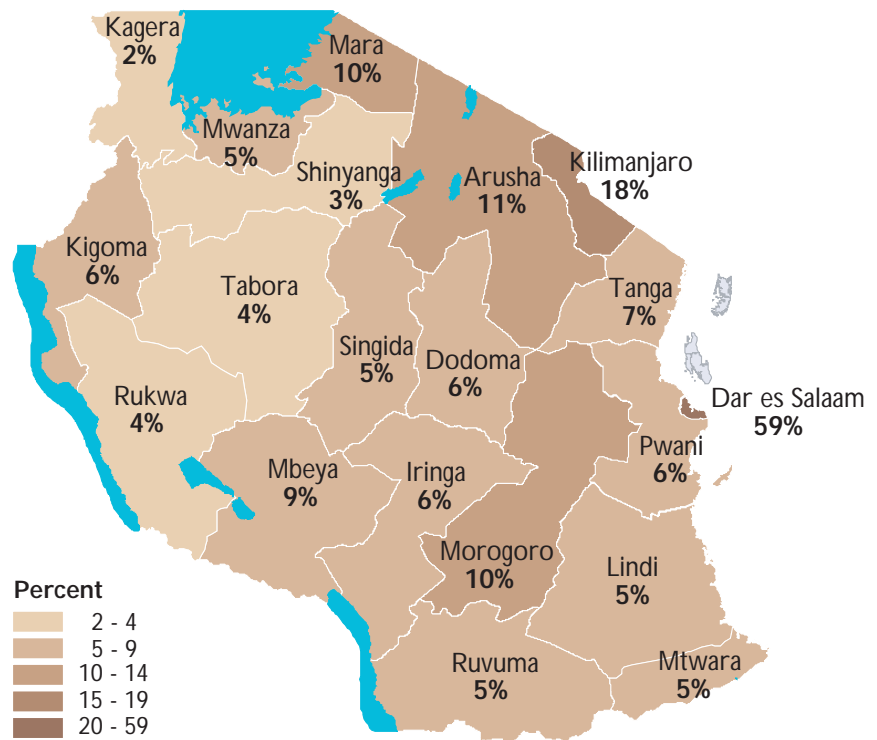
The ownership of many consumer goods has increased over the 1990s. Dar es Salaam has seen particularly large increases in the ownership of electrical goods. While households in urban areas own more items than rural households, a number of goods that do not require mains electricity show an increase in ownership in both urban and rural areas.

MAP 3.1
PERCENTAGE OF
HOUSEHOLDS IN
DWELLINGS WITH
A ROOF OF
MODERN
MATERIALS

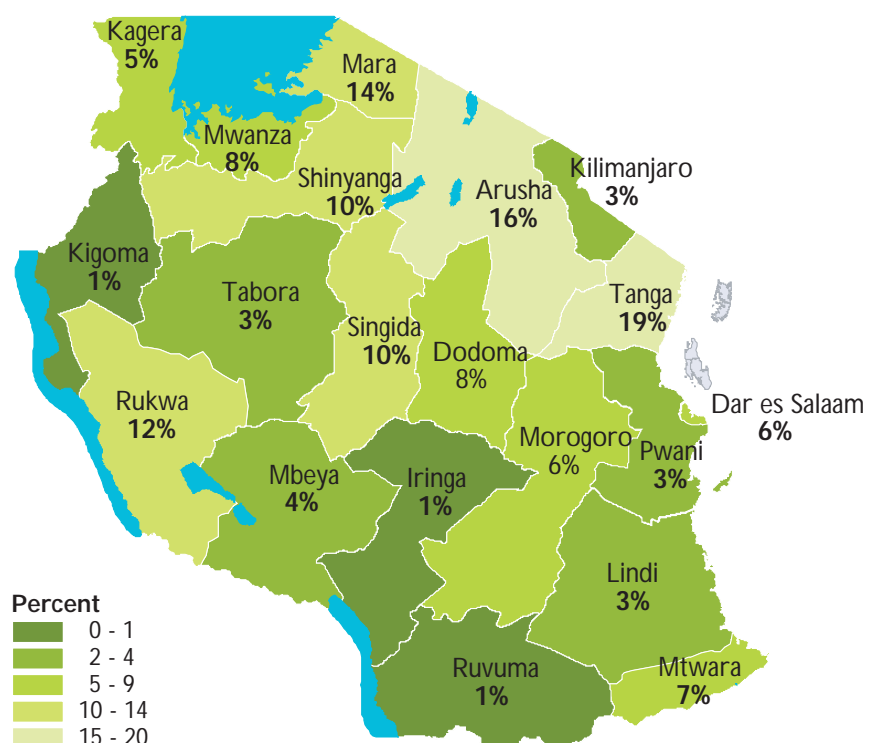


MAP 3.2
PERCENTAGE OF
HOUSEHOLDS IN
DWELLINGS WITH
MODERN WALLS



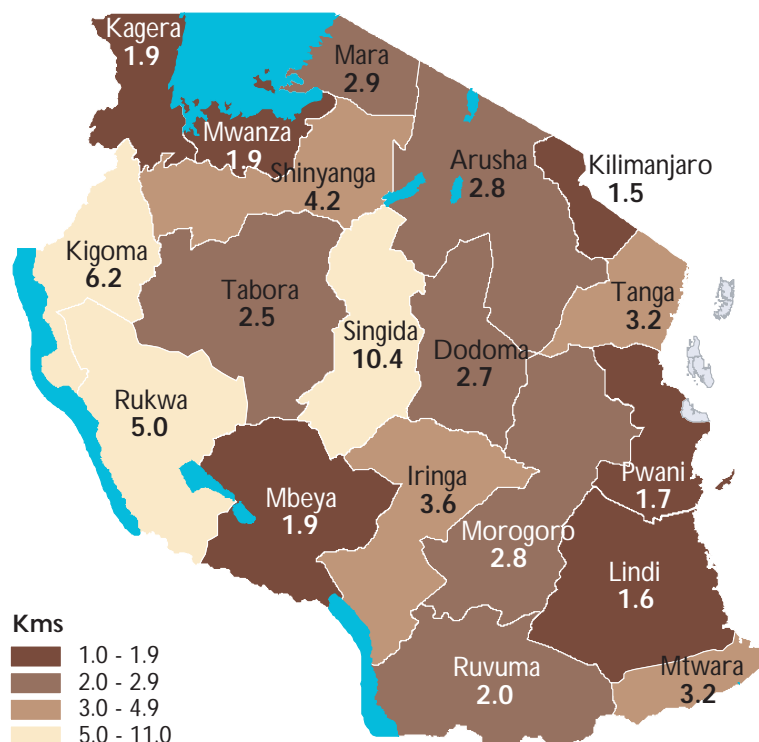


MAP 3.3
PERCENTAGE OF
HOUSEHOLDS
WITH MAINS
ELECTRICITY



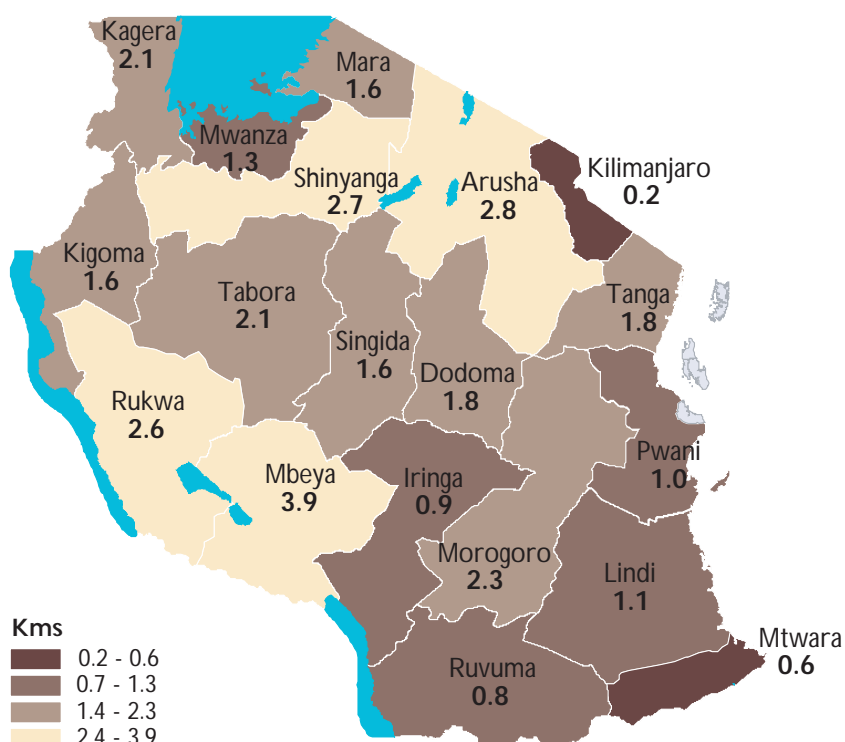
MAP 3.4
PERCENTAGE OF
HOUSEHOLDS
WHOSE MEMBERS
DO NOT USE
TOILET
FACILITIES

MAP 3.5
MEAN DISTANCE
TO COLLECT
FIREWOOD
(RURAL
HOUSEHOLDS
ONLY)



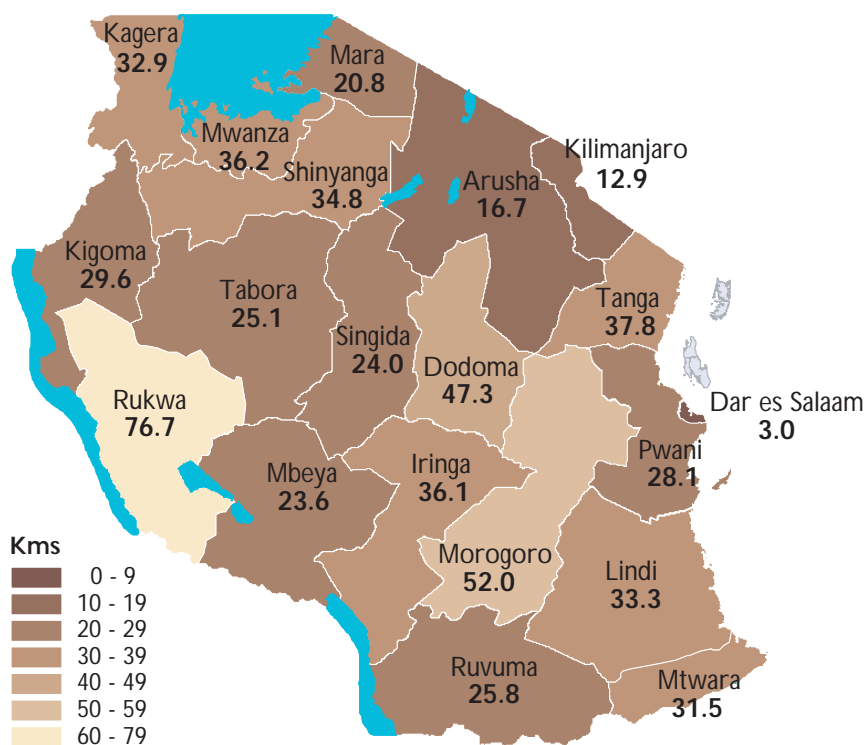
Note: No estimate is given for rural Dar es Salaam because of the small sample size there.

MAP 3.6
MEAN DISTANCE
TO A SHOP FOR
RURAL
HOUSEHOLDS
(KM)

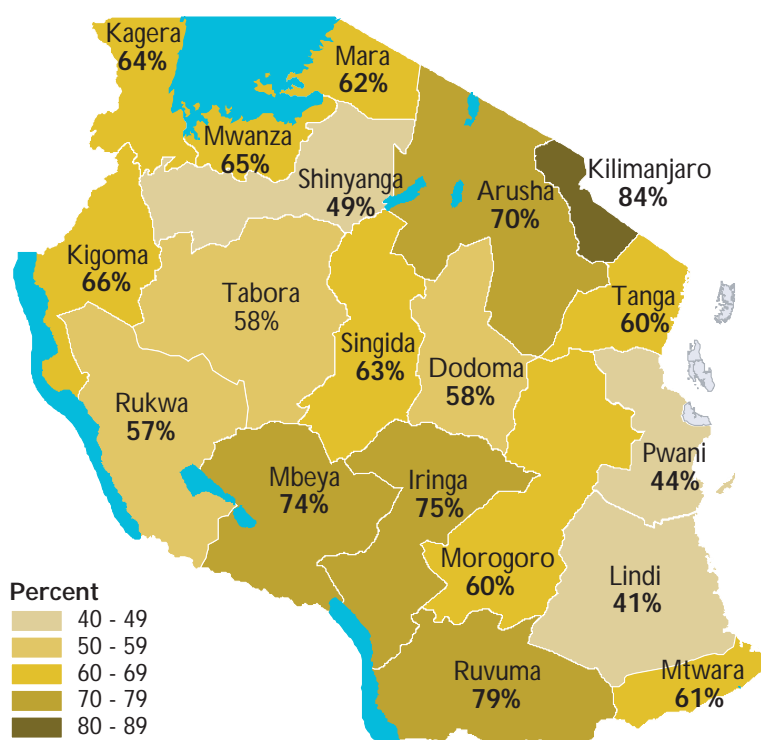


Note: No estimate is given for rural Dar es Salaam because of the small sample size there.

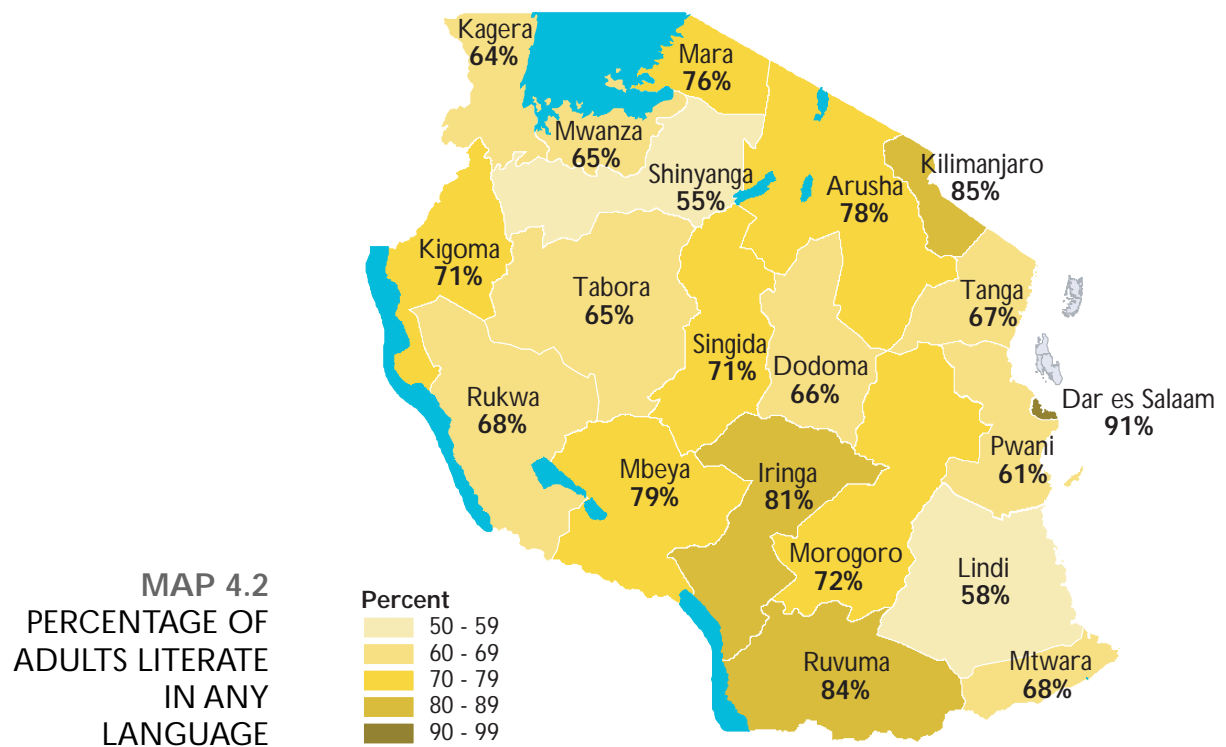
MAP 3.7
MEAN DISTANCE
TO A BANK (KM)



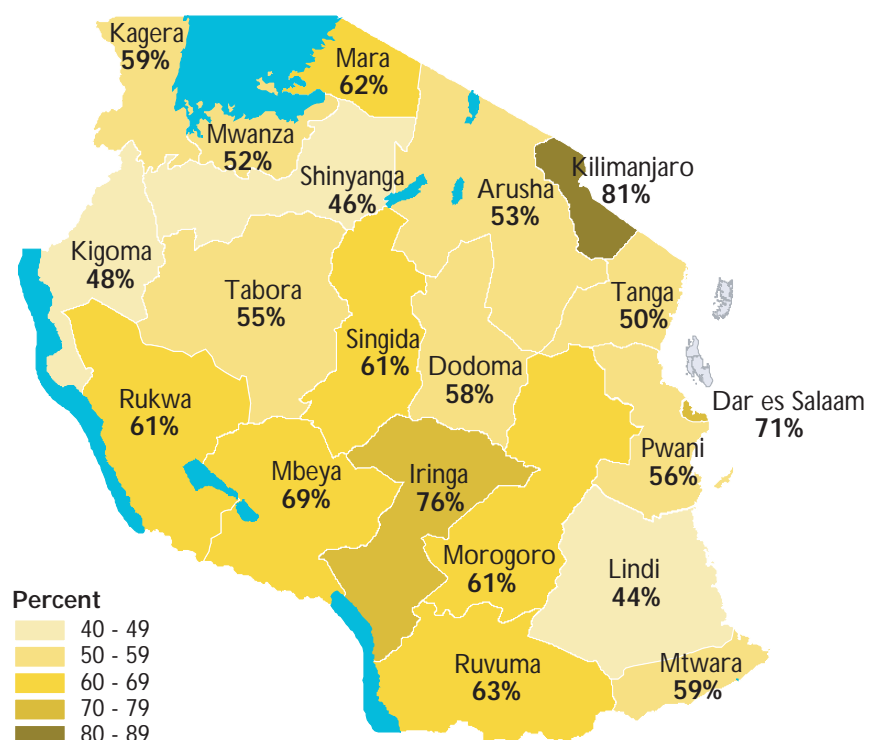
MAP 4.1
PERCENTAGE OF
ADULT WOMEN
IN RURAL AREAS
WITH ANY
EDUCATION



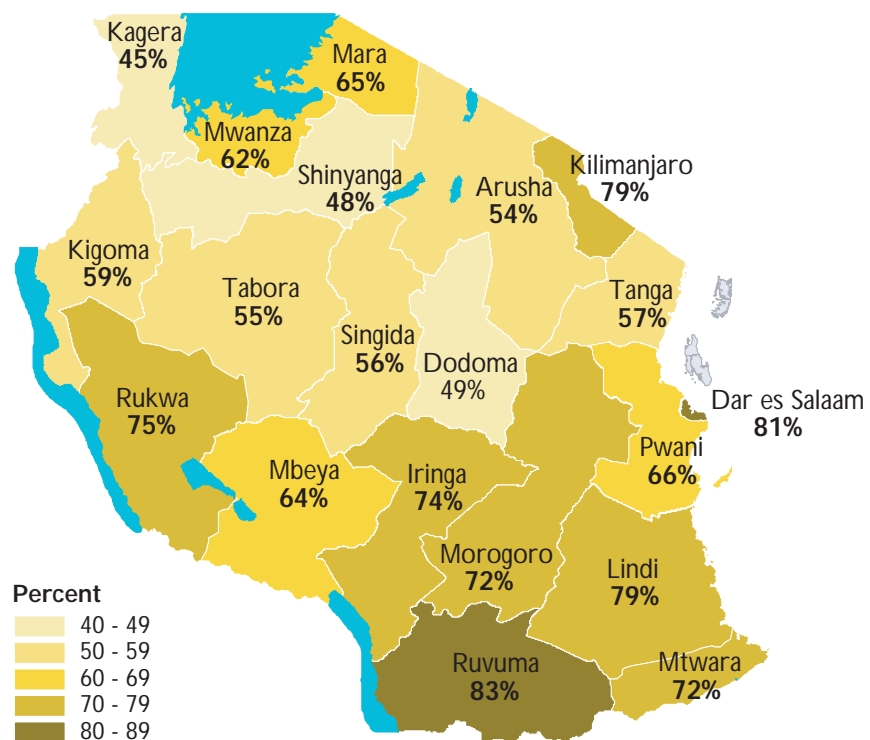
Note: No estimate is given for rural Dar es Salaam because of the small sample size there.



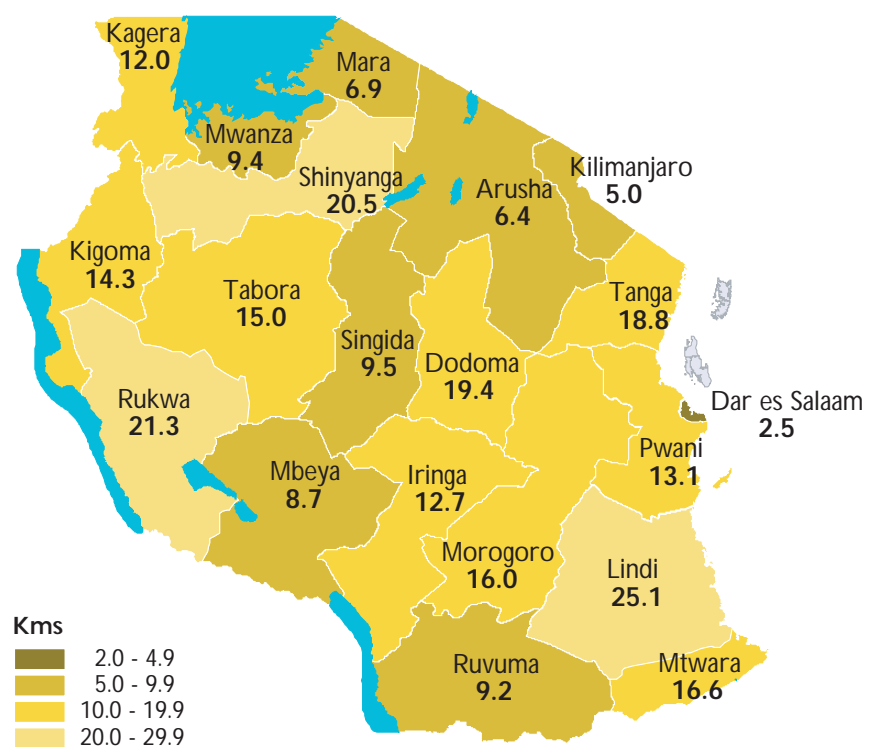
MAP 4.3
PRIMARY NET
ENROLMENT
RATIO



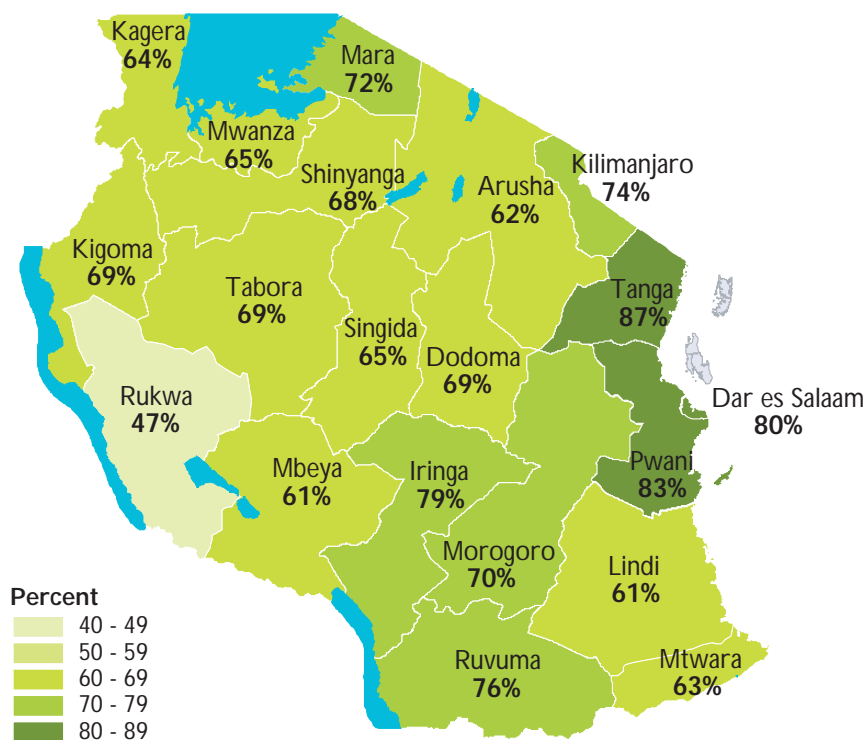
MAP 4.4
PERCENTAGE OF
HOUSEHOLDS
WITHIN
2 KILOMETRES
OF A PRIMARY
SCHOOL



MAP 4.5
MEAN
DISTANCE TO A
SECONDARY
SCHOOL (KM)



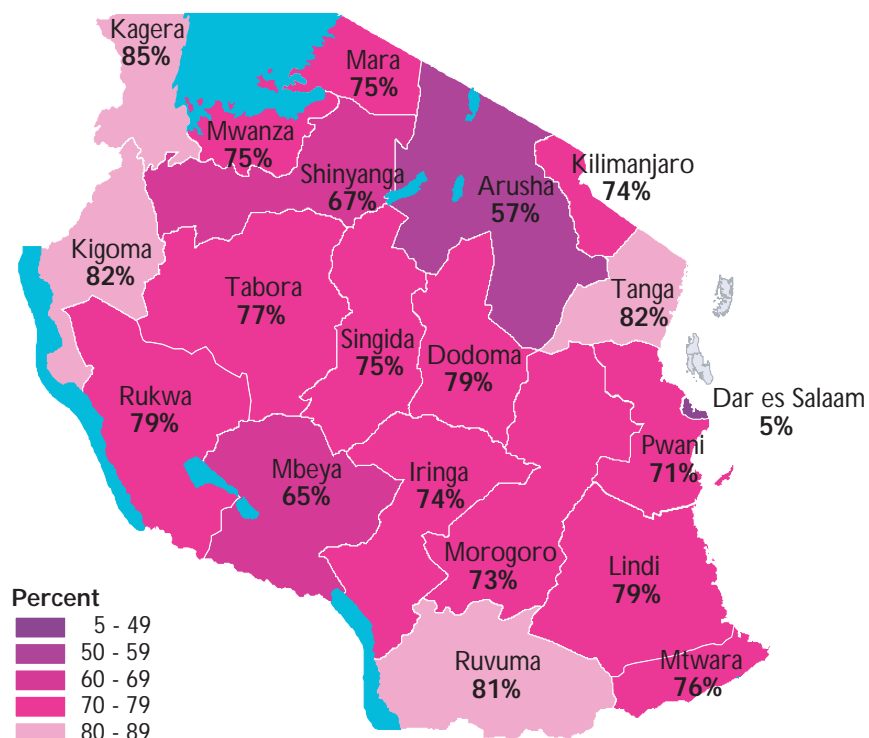
MAP 4.6
PERCENTAGE OF
INDIVIDUALS
WHO WERE
ILL IN THE
PREVIOUS 4
WEEKS WHO
CONSULTED ANY
HEALTH CARE
PROVIDER



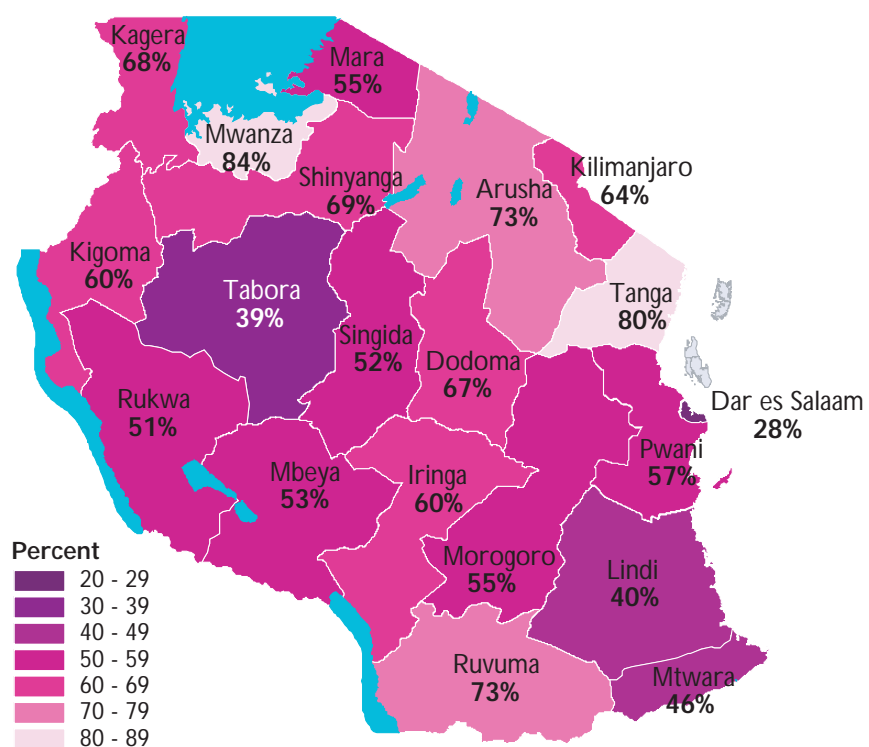
MAP 4.7
PERCENTAGE OF
HOUSEHOLDS
USING IMPROVED
WATER SOURCES
(PIPED WATER
AND PROTECTED
SOURCES)



MAP 5.1
PERCENTAGE OF
HOUSEHOLDS
WITH A HEAD
ENGAGED IN
FARMING/
LIVESTOCK OR
FISHING



MAP 5.2
PERCENTAGE OF
CHILDREN
AGE 5-14 YEARS
REPORTED AS
WORKING
(AT ALL)



PRIORITY SOCIAL
SECTORS: EDUCATION,
HEALTH AND WATER

4.1 Introduction

The 2000/01 Household Budget Survey collected information on the education and health status of household members and on the household's source of drinking water. It also collected information on the distance to the source of drinking water and to education and health facilities. Education, health and water are priority sectors in Tanzania's Poverty Reduction Strategy Paper and they are analysed together in this chapter.

The 1991/92 HBS collected more limited information on these three sectors, particularly in health. This means that changes since the 1991/92 HBS cannot be presented for all measures.

4.2 Education

For individuals of five years and older, the 2000/01 HBS collected information on literacy and school attendance. Information was recorded on the highest class completed, on current school attendance and on reasons for non-attendance. The 1991/92 HBS collected information on highest class passed but did not include any of the other information collected in the 2000/01 survey. However, some additional information on school attendance was recorded in both surveys in the questions on household members' activities. This can be used to make some comparisons over time, although some caution is required.

One quarter of adults have no education (Table 4.1). Rural women have the lowest levels of education – over one third have none - while men in Dar es Salaam are most likely to have had some education (Figure 4.1 and Table 4.2). Very few adults in rural areas have any education above primary level.

TABLE 4.1 HIGHEST LEVEL OF EDUCATION ACHIEVED BY ADULTS

Level Achieved	Dar es Salaam		Other urban areas		Rural areas		Mainland Tanzania	
	91/92	00/01	91/92	00/01	91/92	00/01	91/92	00/01
No education	9.0	7.6	13.0	13.1	28.0	29.0	24.9	25.2
Adult education only	1.2	0.9	1.3	1.1	3.7	2.3	3.3	2.1
Primary 1 - 4	8.6	6.4	14.3	9.8	15.8	12.8	15.2	11.9
Primary 5 - 8	57.0	60.6	58.8	57.6	49.0	52.5	50.7	53.8
Form 1 - 4	17.4	14.9	8.9	12.7	2.1	2.2	3.9	4.6
Form 5 - 6	1.4	1.7	1.0	0.9	0.1	0.2	0.3	0.4
Diploma / university	1.6	2.9	0.4	0.7	0.0	0.1	0.2	0.4
Course after primary	0.2	1.6	1.1	1.4	0.8	0.4	0.8	0.6
Course after secondary	2.3	2.7	0.6	2.2	0.2	0.2	0.4	0.7
Other certificate	1.3	0.8	0.6	0.6	0.2	0.2	0.3	0.3
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Notes: Adults are aged 15 years and above. 'No education' includes pre-school in 2000/01; pre-school was not included as a category in 1991/92.

FIGURE 4.1 PERCENTAGE OF ADULTS WITH ANY EDUCATION BY SEX AND AREA (HBS 2000/01)

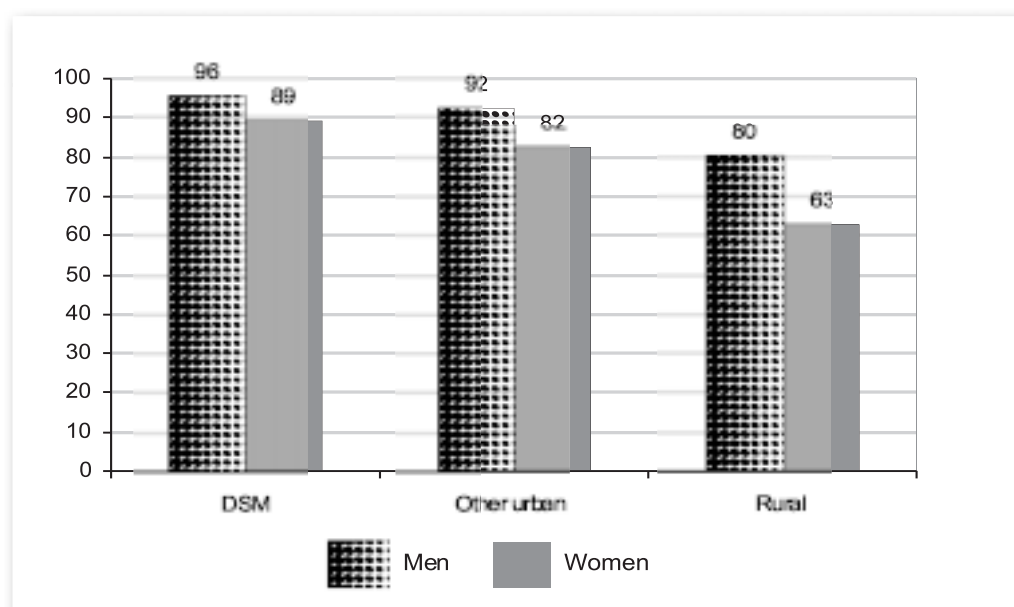


TABLE 4.2 ADULTS' HIGHEST LEVEL OF EDUCATION ACHIEVED BY SEX

Level Achieved	Dar es Salaam		Other urban areas		Rural areas		Mainland Tanzania	
	91/92	00/01	91/92	00/01	91/92	00/01	91/92	00/01
Men:								
No education	6.3	4.5	7.0	7.6	19.6	19.8	17.1	16.9
Adult education only	1.1	0.5	0.9	1.0	3.9	2.7	3.3	2.3
Primary 1 - 4	9.1	7.4	16.6	11.2	18.7	15.4	17.8	14.2
Primary 5 - 8	55.4	59.6	58.4	56.1	53.0	57.6	53.9	57.5
Form 1 - 4	18.8	16.7	11.4	15.7	2.8	2.8	5.0	5.7
Form 5 - 6	2.0	1.8	1.8	1.7	0.2	0.3	0.5	0.6
Diploma / degree	2.5	4.1	0.9	1.2	0.1	0.3	0.3	0.7
Course after primary	0.4	1.6	1.1	1.8	1.0	0.6	1.0	0.8
Course after secondary	2.6	3.0	0.8	2.9	0.4	0.3	0.6	0.9
Other certificate	1.7	0.7	1.0	0.8	0.3	0.3	0.5	0.4
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Women:								
No education	11.7	10.6	18.7	17.7	36.0	37.1	32.3	32.5
Adult education only	1.2	1.4	1.7	1.2	3.5	2.0	3.2	1.8
Primary 1 - 4	8.0	5.3	12.1	8.5	13.1	10.6	12.7	10.0
Primary 5 - 8	58.7	61.7	59.1	59.0	45.1	48.1	47.7	50.6
Form 1 - 4	15.9	13.0	6.5	10.1	1.4	1.7	2.9	3.7
Form 5 - 6	0.8	1.5	0.1	0.3	0.1	0.0	0.1	0.2
Diploma / degree	0.7	1.7	0.0	0.3	0.0	0.0	0.1	0.2
Course after primary	0.1	1.5	1.2	1.0	0.6	0.2	0.6	0.4
Course after secondary	2.0	2.4	0.3	1.6	0.1	0.1	0.2	0.5
Other certificate	0.8	0.9	0.2	0.5	0.1	0.2	0.2	0.3
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Notes: Adults are aged 15 years and above. 'No education' includes pre-school in 2000/01; pre-school was not included as a category in 1991/92.

Outside of Dar es Salaam, there does not seem to have been a decline in the proportion of adults without any education over the decade. However there are reasons to suspect that there may have been some reporting inconsistencies between the two surveys, so this finding should be treated with some caution⁸. For adults who have received any education at all, the average level has increased over the decade, with a higher proportion passing beyond Standard IV in primary school.

The proportion of adults with any education is highest in Dar es Salaam, Kilimanjaro, Ruvuma, Iringa and Mbeya. It is lowest in Lindi, Pwani and Shinyanga (Appendix Table C8). A similar pattern is seen when educational levels in rural women are examined (Map 4.1).

Some 71 per cent of adults are literate in at least one language (Table 4.3). Literacy is highest in Dar es Salaam and lowest in rural areas. Literacy in Swahili is much more common than literacy in English. Reflecting their lower levels of education, women, and particularly rural women, are less likely to be literate.

TABLE 4.3 LITERACY OF ADULTS (HBS 2000/01)

	Dar es Salaam	Other urban areas	Rural areas	Mainland Tanzania
All adults: literacy by language				
Swahili	68.0	66.7	60.0	61.5
English	3.8	4.1	1.9	2.4
Swahili & English	19.4	14.9	4.8	7.2
Other languages	0.2	0.2	0.2	0.2
Illiterate	8.7	14.2	33.1	28.6
Total	100.0	100.0	100.0	100.0
Per cent of adult men literate	94.3	91.5	76.1	79.6
Per cent of adult women literate	88.3	81.0	58.8	64.0

Note: Adults are aged 15 years and above. The percentage of adults literate by sex is for literacy in any language.

The pattern of literacy by region broadly follows the pattern of education. Literacy is particularly low in Shinyanga, Lindi and Pwani (Map 4.2).

The education and literacy of adults reflects the performance of the education system in the past. The HBS also collected information that can be used to assess the current coverage of the school system. Table 4.4 presents gross and net enrolment ratios for primary education⁹. This shows that 59 per cent of children

8. In particular, if the same cohort is compared over time, the educational level of the youngest adults appears to have declined – this is highly unlikely and suggests some reporting differences between the two surveys (see Appendix Figures B4.1 and B4.2).
9. These rates are calculated using Standards I-VII and ages 7-13 in order to make them comparable with the MoEC figures. Strictly speaking, the surveys give estimates of participation rates rather than enrolment rates.

aged seven to thirteen years are in school in Standards I to VII. The vast majority of the remaining 41 per cent are not studying, although some seven year olds report enrolment in pre-school.

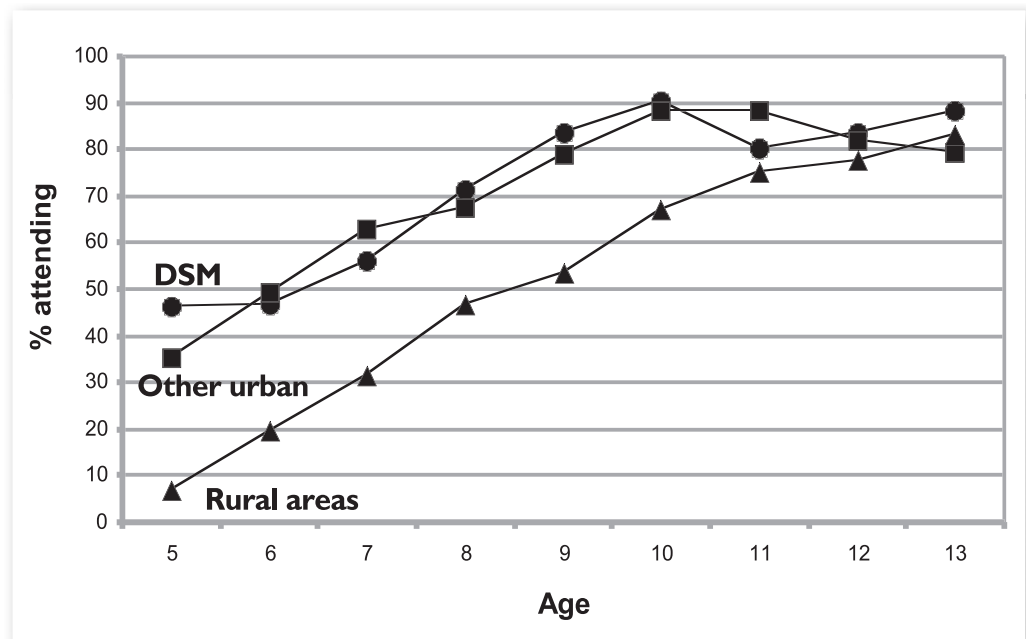
Gross enrolment ratios are higher than net enrolment ratios because many over-age children are present in primary schools. This is partly due to beginning schooling late. This is particularly a problem in rural areas; only a little over 50 per cent of children in rural areas are studying by age nine (Figure 4.2).

Overall, girls have higher primary enrolment ratios than boys. This is largely a feature of rural areas, where boys' higher levels of participation in agriculture may be part of the reason (see Chapter 5). In urban areas, boys' enrolment tends to be higher than girls', although the pattern is mixed. These sex differences are also partly a result of the age group that is analysed – that is, the standard primary age group of seven to thirteen years. The HBS data suggests that boys may often have a lower participation rate than girls at these ages, but that the reverse is true for older children. Girls are less likely to be in school than boys after about thirteen years of age (Figure 4.3).

TABLE 4.4 PRIMARY NET AND GROSS ENROLMENT RATIOS BY SEX (HBS 2000/01)

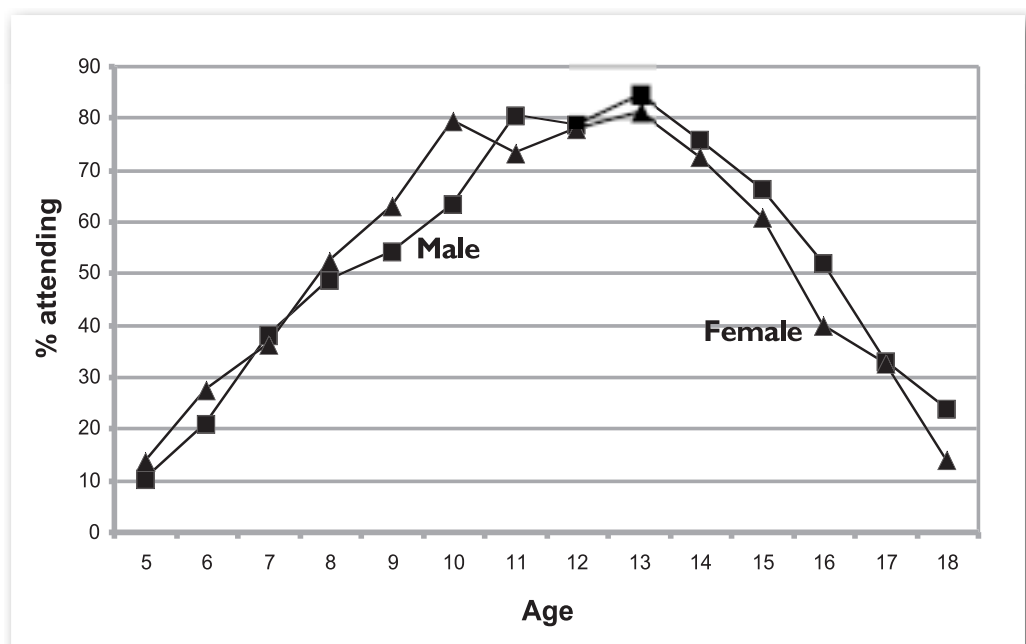
Measure	Dar es Salaam	Other urban areas	Rural areas	Mainland Tanzania
Net enrolment ratio:				
Total	71.0	71.4	56.0	58.7
Boys	68.3	72.0	53.9	56.7
Girls	73.4	70.7	58.4	60.8
Gross enrolment ratio:				
Total	98.3	96.3	81.5	84.2
Boys	104.4	99.9	79.9	83.5
Girls	93.1	92.8	83.2	85.0

FIGURE 4.2 PERCENTAGE OF CHILDREN ATTENDING SCHOOL BY SINGLE YEARS OF AGE AND AREA (HBS 2000/01)



Note: Source table in Appendix

FIGURE 4.3 PERCENTAGE OF CHILDREN STUDYING BY SINGLE YEARS OF AGE AND SEX (HBS 2000/01)



Note: Source table in Appendix.

The regional pattern of primary school enrolment shows some similarities to that of adult educational levels. Kilimanjaro, Dar es Salaam and the regions of the south-west have the highest enrolment ratios. Lindi and Shinyanga have the lowest (Map 4.3).

Late entry into school, coupled with repetition of classes, means that many children are far below the class that they should be in according to their age. Thirteen-year-olds most commonly reported being in standards IV and V, for example; only four per cent of them were in Standard VII (Table 4.5).

TABLE 4.5 CLASS ATTENDED BY AGE OF CHILD (HBS 2000/01)

Age	Pre-school	St. I	St. II	St. III	St. IV	St. V	St. VI	St. VII	Above St. VII	Total
7	37.2	52.5	9.3	1.0						100
8	13.0	51.2	29.3	5.4	1.1					100
9	8.0	41.2	31.1	13.4	4.7	1.4				100
10	5.6	23.8	33.4	26.2	9.1	1.4	0.4			100
11	1.0	17.8	24.5	26.9	19.3	7.7	2.4	0.4		100
12	1.3	8.1	12.1	25.0	27.0	18.8	6.4	1.2	0.1	100
13	1.6	3.7	7.8	17.5	24.7	26.3	13.7	3.9	0.9	100

The 1991/92 HBS did not ask directly about school attendance. However, it is possible to use the information that was provided on individuals' activities to estimate the proportion of children who were studying at the time. To maximize comparability, the same information was also used for the 2000/01 HBS in Table 4.6.

This information suggests that there has been some increase in the coverage of the school system over the 1990s. Overall, 57 per cent of children aged seven to thirteen reported studying in 1991/92, rising to 61 per cent in 2000/01. Increases were large in urban areas – some 10 to 13 percentage points. In rural areas, by contrast, the increase was only around two percentage points. Whether this reflects an uneven expansion of the state education system or the growth of private schools in urban areas cannot be assessed from the survey data.

The enrolment of boys appears to have increased somewhat more than girls over the decade, narrowing the gap between them.

TABLE 4.6 PERCENTAGE OF CHILDREN AGED 7-13 YEARS REPORTING STUDYING BY YEAR OF SURVEY

HBS	Dar es Salaam	Other urban areas	Rural areas	Mainland Tanzania	Boys	Girls
1991/92	65.7	63.6	55.9	57.4	55.3	59.6
2000/01	76.0	76.5	58.1	61.4	60.6	62.4

Note: Based on whether children were reported to study at all in the information on activities.

Using the 2000/01 HBS data, it is also possible to calculate net and gross enrolment ratios for secondary education. These rates are presented in Table 4.7. Secondary enrolment ratios are low, with about five per cent of children aged 14 to 17 years attending secondary school. Gross rates are higher than net because of the presence of overage children. Enrolment is particularly low in rural areas, where under three per cent of children of this age are enrolled in secondary schools. A similar pattern is shown by enrolment ratios calculated for the 14-19 year old age group.

These figures suggest that girls' enrolment is slightly higher than boys' even at secondary school. However, this finding should be treated with some caution as this age group is affected by the under-reporting of young men described in Chapter 1; sex ratios are distorted and this may affect the enrolment ratios.

TABLE 4.7 SECONDARY NET AND GROSS ENROLMENT RATIOS BY SEX (HBS 2000/01)

Measure	Dar es Salaam	Other urban areas	Rural areas	Mainland Tanzania
Forms I-IV:				
Net enrolment ratio:				
Total	18.9	15.2	2.0	5.1
Boys	17.2	12.7	1.5	4.0
Girls	20.4	17.1	2.5	6.1
Gross enrolment ratio:				
Total	28.8	27.2	4.3	9.4
Boys	28.9	29.4	3.6	8.8
Girls	28.7	25.5	4.9	9.9
Forms I-VI:				
Net enrolment ratio:				
Total	16.0	15.3	2.3	5.3
Boys	14.5	14.9	1.8	4.6
Girls	17.4	15.6	2.8	5.9
Gross enrolment ratio:				
Total	21.1	19.4	3.1	6.9
Boys	20.9	21.1	2.7	6.6
Girls	21.3	18.0	3.4	7.1

Note: These rates are calculated using the age groups 14-17 (Forms I-IV) and 14-19 years (Forms I-VI).

The reasons given for primary-age children not attending school depends on where they live (Table 4.8). In Dar es Salaam, cost is the most frequently given reason. In rural areas, 'other' reasons predominate – that is, other than the pre-coded answer categories given in Table 4.8. An examination of the distribution of these answers by single years of age suggests that many are likely to have stated that the child was too young, since the frequency of 'other' declines rapidly with age. If this is correct, it suggests that the parents' or schools' understanding of the appropriate age to begin schooling is an important factor in young children's non-attendance at school in rural areas. The cost, a perception that school is not useful and the fact that the children are working are also important reasons in rural areas.

TABLE 4.8 REASONS FOR NOT ATTENDING SCHOOL FOR CHILDREN AGED 7 TO 13 YEARS BY AREA (HBS 2000/01)

Reason	Dar es Salaam	Other urban areas	Rural areas	Mainland Tanzania
Too old / completed school	6.3	5.4	4.0	4.2
Too far away	0.6	1.3	5.2	4.8
Too expensive	42.2	24.3	9.6	11.7
Is working	1.1	3.9	9.7	9.0
School is useless/uninteresting	2.3	6.2	10.5	9.9
Illness/ pregnancy	5.4	3.7	3.5	3.6
Failed exam	0.0	0.1	0.1	0.1
Got married	0.0	0.7	0.0	0.1
Others	42.0	54.3	57.5	56.8
Total	100.0	100.0	100.0	100.0

In older children, the main reason given why children are not in school is that they have completed their schooling (to whatever level that may be) or that they are too old (Table 4.9). The cost and a belief that school is not useful or is not interesting are also important reasons.

Households are furthest from primary schools in rural areas, but even there some 58 per cent of households are within two kilometres of a primary school (Table 4.10). Together with the fact that relatively few respondents gave distance as a reason for not attending school, this suggests that distance to primary schools is not a large factor in non-attendance, although for a minority of rural households distance is a problem - some 8 per cent reported the nearest primary school to be more than 6 km away.

TABLE 4.9 REASONS FOR NOT ATTENDING SCHOOL FOR CHILDREN AGED 7 TO 17 YEARS BY SEX AND AGE GROUPS (HBS 2000/01)

Reason	7-13 years			14-17 years		
	Male	Female	Total	Male	Female	Total
Too old / completed school	3.7	4.8	4.2	44.5	49.2	47.1
Too far away	4.3	4.5	4.8	2.6	1.5	2.0
Too expensive	12.6	10.8	11.7	11.9	13.3	12.7
Is working	8.7	9.3	9.0	3.4	3.3	3.4
School is useless/uninteresting	9.5	10.4	9.9	17.1	11.3	13.9
Illness/ pregnancy	4.2	2.9	3.6	2.8	5.4	4.3
Failed exam	0.0	0.1	0.1	5.5	4.2	4.8
Got married	0.0	0.1	0.1	0.3	1.9	1.2
Others	57.0	56.9	56.8	11.9	9.8	10.7
Total	100.0	100.0	100.0	100.0	100.0	100.0

TABLE 4.10 DISTRIBUTION AND MEAN OF THE DISTANCE TO NEAREST PRIMARY SCHOOL

	Dar es Salaam		Other urban areas		Rural areas		Mainland Tanzania	
	91/92	00/01	91/92	00/01	91/92	00/01	91/92	00/01
Distribution of distance:								
Less than one km	66.3	53.6	51.6	54.5	39.9	32.3	43.3	37.1
1 to 1.9	20.2	27.7	24.9	27.8	22.9	25.9	23.0	26.3
2-2.9	4.9	10.2	11.1	12.4	16.4	14.6	14.9	14.0
3-3.9	2.0	4.7	5.2	4.1	7.2	10.7	6.6	9.3
4-5.9	2.3	2.6	4.1	0.7	9.2	8.0	8.0	6.5
6+	4.3	1.2	3.1	0.5	4.5	8.4	4.3	6.7
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Mean	0.8	0.8	1.1	0.7	1.5	2.1	1.4	1.8

Note this table shows the distances as recorded by interviewers, which were integers ('1 to 1.9' is '1', for example).

There appears to have been a small increase in average reported distances to a primary school between 1991/92 and 2000/01. This has largely taken place in rural areas and could possibly be due to rural households migrating back to farms and thereby moving away from central services that were provided under 'villageisation'. However, the decrease in the proportion of households that are within 2 kilometres of a primary school is not statistically significant and health services do not show the same trend, which might have been expected if this explanation were correct (see below).

Households are least likely to be close to a primary school in Shingyanga, Kagera and Dodoma, where under one half of households are within two kilometres. By contrast, three quarters or more are within two kilometres in Dar es Salaam, Kilimanjaro, Lindi, Ruvuma and Rukwa (Map 4.4)¹⁰.

The 2000/01 HBS also collected information on the distance to pre-schools and secondary schools. The average distances to these facilities differ much more between urban and rural areas than do distances to primary schools. The average distance to a secondary school in rural areas is over 15 km and one quarter of rural households reported being 20 kilometres or more from a secondary school.

The average distance to a secondary school is 20 kilometres or more in Shinyanga, Rukwa and Lindi, while it is less than seven kilometres in Dar es Salaam, Kilimanjaro, Arusha and Mara (Map 4.5).

10. Note that sampling errors on these and other distance estimates at the regional level are sometimes large (Table C30).

TABLE 4.11 DISTRIBUTION AND MEAN DISTANCES TO PRE-SCHOOL AND SECONDARY SCHOOLS (HBS 2000/01)

	Dar es Salaam	Other urban areas	Rural areas	Mainland Tanzania
Pre-school:				
Distribution of distance:				
Less than 1 km	77.4	65.5	31.6	41.5
1 to 1.9	15.4	22.3	20.4	20.4
2-2.9	4.4	7.3	12.2	10.6
3-3.9	1.3	2.7	10.7	8.4
4-5.9	0.4	1.2	6.2	4.9
6+	1.1	1.1	18.9	14.2
Total	100.0	100.0	100.0	100.0
Mean distance	0.7	0.7	5.2	4.0
Secondary school:				
Distribution of distance:				
Less than 2 km	47.8	50.7	7.2	16.7
2-5.9	46.8	38.6	20.9	25.4
6-9.9	2.1	4.3	18.5	15.2
10-19.9	2.3	3.1	28.0	22.4
20+	1.0	3.2	25.4	20.3
Total	100.0	100.0	100.0	100.0
Mean distance	2.5	3.0	15.4	12.6

Notes: This table shows the distances as recorded by interviewers, which were integers ('1 to 1.9' is '1', for example). A high proportion of rural households did not report distance to the nearest pre-school (25%), so the estimates of distance to this facility for the rural and total population are likely to be too low.

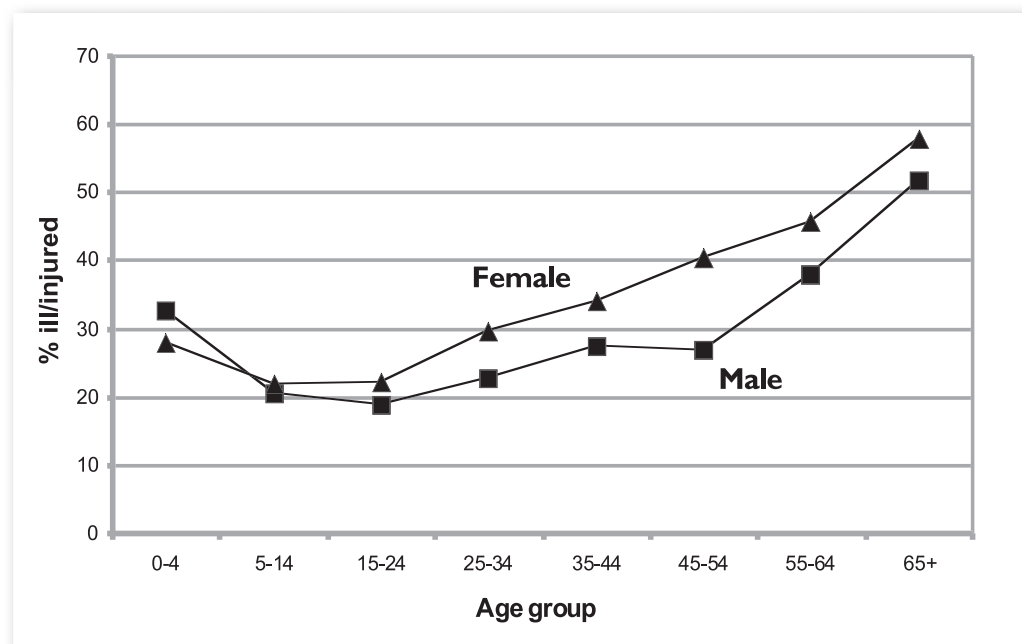
4.3 Health

The 2000/01 HBS collected information on whether individuals had been ill or injured in the preceding four weeks, on the type of illness, on which type of health provider had been consulted, if any, and on satisfaction with the source of care. The 1991/92 HBS did not collect this information so no information on trends in these measures can be presented. Both surveys collected information on the distance to health facilities.

TABLE 4.12 PERCENTAGE OF INDIVIDUALS REPORTING ILLNESS OR INJURY IN THE PAST FOUR WEEKS BY AGE GROUP AND AREA (HBS 2000/01)

Age Group	Dar es Salaam	Other urban areas	Rural areas	Mainland Tanzania
0-4	33.9	27.8	30.4	30.2
5-14	15.7	19.1	21.9	21.2
15-24	12.0	17.3	22.2	20.7
25-34	18.6	21.9	28.1	26.5
35-44	20.9	24.4	32.7	30.6
45-54	22.0	30.2	35.4	33.8
55-64	27.3	43.6	42.0	41.5
65+	39.3	53.0	55.5	54.7
Total	19.4	23.5	28.3	27.1

FIGURE 4.4 PERCENTAGE OF INDIVIDUALS ILL OR INJURED IN THE PAST FOUR WEEKS BY AGE GROUP AND SEX (HBS 2000/01)



Individuals in rural areas are the most likely to report having been ill or injured in the previous four weeks; some 28 per cent of the rural population reported this (Table 4.12). Surprisingly, this was not the case for children under five, who had the highest reported illness rates in Dar es Salaam. It should be remembered that illness is reported by the respondent and reflects perceptions of illness and health, as well as a respondents' clinical health status as would be assessed by a physician.

Reported illness shows a common pattern by age, with the highest rates occurring in the under fives and older adults. Levels are particularly high in older adults outside of Dar es Salaam. Women report higher levels of morbidity than men at all ages, with the exception of the under fives where boys have higher morbidity levels (Figure 4.4).

Fever/malaria was the most commonly reported complaint, being reported by 60 per cent of adults and almost 70 per cent of children (Table 4.13). Diarrhoea was the second most common complaint in children, while adults reported more accidents and a large proportion of 'other' complaints that did not fit into any of the pre-coded categories.

TABLE 4.13 TYPE OF ILLNESS OR INJURY REPORTED BY AGE GROUP AND SEX (HBS 2000/01)

Age Group and Condition	Male	Female	Total
Children (under 15 years):			
Fever/Malaria	68.7	70.1	69.3
Diarrhoea	14.1	14.7	14.4
Accident	3.0	1.8	2.5
Dental	2.4	2.3	2.4
Skin condition	2.9	4.3	3.6
Eye	7.4	6.8	7.1
Ear, nose or throat	10.7	10.5	10.5
Other	12.3	11.7	12.0
Per cent reporting multiple complaints	17.8	19.3	18.5
Adults (15+ years):			
Fever/Malaria	60.4	59.9	60.1
Diarrhoea	9.7	10.1	9.9
Accident	8.7	2.4	5.0
Dental	5.1	6.1	5.6
Skin condition	2.2	2.0	2.1
Eye	5.2	5.2	5.2
Ear, nose or throat	7.8	9.2	8.6
Other	25.1	29.2	27.5
Per cent reporting multiple complaints	19.9	19.6	19.7

Note: For each age group, the first panel gives the frequency with which each condition was reported, for individuals who reported illness or injury in the preceding four weeks; since more than one condition could be reported, the columns may sum to over 100%. The final line shows the percentage of individuals who reported more than one complaint.

Over two-thirds of individuals who reported being ill or injured in the past four weeks said that they had consulted a health-care provider of some type (Table 4.14). Individuals in Dar es Salaam are most likely to have consulted a health-care provider, but two-thirds reported a consultation even in rural areas.

TABLE 4.14 PERCENTAGE OF ILL OR INJURED INDIVIDUALS WHO CONSULTED ANY HEALTH-CARE PROVIDER BY SEX AND AREA (HBS 2000/01)

	Dar es Salaam	Other urban areas	Rural areas	Mainland Tanzania
Both sexes	80.2	76.2	67.1	68.7
Male	75.9	74.2	66.2	67.6
Female	84.3	77.9	67.8	69.7

Over half of the individuals who consulted any health-care provider saw a government provider (Table 4.15). Use of government services is lowest in Dar es Salaam, where use of the private sector is highest. Private providers play an important role even in rural areas, where traditional healers and missionary facilities are also important sources of care. Some 11 per cent of individuals consulted more than one provider.

TABLE 4.15 SOURCE OF CONSULTATION FOR INDIVIDUALS WHO CONSULTED ANY HEALTH-CARE PROVIDER (HBS 2000/01; %)

	Dar es Salaam	Other urban areas	Rural areas	Mainland Tanzania
Source of care:				
Government				
Public dispensary/hospital	40.0	37.9	42.3	41.6
Regional hospital	2.9	12.2	1.7	3.1
Community health centre	6.6	8.3	10.9	10.4
Private modern:				
Private dispensary/hospital	47.4	31.8	19.3	22.3
Private doctor/dentist	1.9	5.1	7.6	7.0
Missionary hospital/dispensary	1.2	6.6	10.1	9.2
Other:				
Traditional healer	2.6	5.5	17.2	15.0
Pharmacy/chemist	4.1	3.1	2.3	2.5
Other	0.7	0.8	1.9	1.7
Per cent who consulted multiple providers	6.9	10.3	11.4	11.0
Per cent who consulted any government source	49.5	57.7	53.8	54.1

Note: The first panel gives the frequency with which each source was consulted for individuals who consulted any source; since more than one source could be reported, the columns may sum to over 100%.

The frequency of reported illness varies substantially between the regions, from 19 per cent of individuals in Dar es Salaam to over 30 per cent in others (Appendix Table C16). The proportion of individuals who consult a health provider when they are ill also varies, from 80 per cent or more in Dar es Salaam, Tanga and Pwani to only 47 per cent in Rukwa (Map 4.6). Amongst individuals who consulted any provider, the residents of Tabora and Mtwara were most likely to consult a government provider while those of Kilimanjaro and Shinyanga were least likely to consult one (Appendix Table C16). These consultation patterns will reflect the variety of alternative providers that are used, including both traditional healers and the modern private sector.

Enumerators also asked about users' satisfaction with the source of health care - specifically, whether the user had any problems at the time of the consultation. For all sources of care, over half of the users reported that there was no problem (Table 4.16). Users were more likely to report a problem at a government facility than for any private source of care. A long waiting time, a lack of drugs and (for the regional hospitals) high cost were the problems most commonly reported in government facilities. High cost was the most frequent complaint about private providers, with the exception of traditional healers who were most often complained to be ineffective.

TABLE 4.16 SATISFACTION WITH SERVICE PROVIDED BY SOURCE OF CARE (HBS 2000/01)

	No problem	Not clean	Long wait	No trained professional	Expensive	No drugs	Unsuccessful treatment	Other	Total
Public dispensary/hospital	68.0	3.8	12.2	1.5	4.7	11.2	6.2	1.0	100.0
Regional hospital	59.0	2.5	13.2	2.0	16.9	6.2	5.6	1.1	100.0
Community health centre	59.3	4.9	20.0	5.9	1.9	20.6	6.0	0.3	100.0
Private dispensary/hospital	76.9	1.2	5.6	1.5	11.5	5.4	1.8	0.9	100.0
Private doctor/dentist	82.2	0.2	2.2	1.1	10.1	2.3	1.2	1.8	100.0
Missionary hospital/dispensary	78.3	1.6	6.9	1.3	8.3	0.9	4.2	0.6	100.0
Traditional healer	73.7	3.7	3.4	1.2	5.7	2.1	11.7	2.5	100.0
Pharmacy/chemist	93.1	0.1	0.7	0.1	4.1	0.2	0.4	1.3	100.0

Note: Table gives reported satisfaction with the source of care used for individuals who used only that source; users of multiple sources are excluded.

The most common reason given for not consulting a health provider was that there was no need, probably because respondents often diagnosed and treated the condition themselves (Table 4.17).

TABLE 4.17 REASONS FOR NOT USING MEDICAL CARE FOR INDIVIDUALS WHO REPORTED ILLNESS IN THE PAST FOUR WEEKS (%; HBS 2000/01)

	Dar es Salaam	Other urban areas	Rural areas	Mainland Tanzania
No need	58.1	50.3	42.5	43.6
Too expensive	34.5	39.1	32.4	33.1
Too far	6.7	2.8	10.9	10.0
Other	6.9	8.9	20.2	18.8

Note: Table gives the frequency with which each reason was given; since more than one reason could be reported the columns may sum to over 100%.

Both the 1991/92 and 2000/01 surveys collected information on distance to the nearest dispensary or health centre and nearest hospital. The distance to primary health facilities appears to have declined over the decade, with the mean reported distance to a facility declining in all areas¹¹. Even in rural areas, almost 90 per cent of households report being within 10 km of a dispensary or health centre. As would be expected, the distance to a hospital is greater. On average, rural households reported being 26 km from a hospital. This average appears to have increased somewhat over the decade, although it is difficult to know how accurately such large distances are reported.

11. Although the difference between the two surveys in the proportion within 6km of a facility is not statistically significant (Appendix A1).

TABLE 4.18 DISTRIBUTION AND MEAN DISTANCE TO HEALTH FACILITIES

	Dar es Salaam		Other urban areas		Rural areas		Mainland Tanzania	
	91/92	00/01	91/92	00/01	91/92	00/01	91/92	00/01
Dispensary/ health centre:								
Distribution of distance:								
Less than 2 km	71.4	85.6	68.8	70.3	25.7	27.7	34.3	37.9
2-5.9	23.6	12.5	28.0	27.4	44.6	41.6	41.0	37.5
6-9.9	3.3	1.7	2.0	1.4	18.4	19.9	15.3	15.9
10-19.9	1.6	0.2	1.2	0.4	8.8	9.0	7.3	7.1
20+	0.1	0.0	0.0	0.5	2.6	1.9	2.1	1.5
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Mean distance	1.4	0.7	1.4	1.3	5.1	4.7	4.4	3.9
Hospital:								
Distribution of distance:								
Less than 2 km	48.3	51.6	45.7	37.3	4.7	5.1	13.6	13.3
2-5.9	36.5	36.4	42.4	41.0	12.4	13.1	18.4	19.1
6-9.9	11.4	9.4	4.7	8.6	11.2	14.9	10.2	13.5
10-19.9	2.7	1.5	2.2	2.7	30.4	25.0	24.4	20.0
20-39	1.1	0.1	1.3	4.9	16.4	20.2	13.1	16.4
40+	0.0	0.9	3.7	5.4	24.9	21.6	20.2	17.7
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Mean distance	2.8	2.8	5.3	7.4	23.8	25.7	19.7	21.3
Mean distance to T.B.A.	N/A	**	N/A	**	N/A	(1.5)	N/A	(1.4)

Notes: Note this table shows the distances as recorded by interviewers, which were integers ('1 to 1.9' is '1', for example). T.B.A. means traditional birth attendant. Estimates with over 10% of missing values are given in brackets; estimates with over 40 per cent of missing values are suppressed and indicated with **. N/A indicates that the information was not collected.

Although many households did not report the distance to a traditional birth attendant, the information from those that did show that households are often very close to them.

Over 90 per cent of households are within 6 kilometres of a dispensary or health centre in Dar es Salaam, Kilimanjaro and Kigoma, while less than half of households in Dodoma are within that distance (Appendix Table C17). It is rural households in Dodoma, in particular, that are far from primary health care facilities. The average distance to a hospital is greatest in Rukwa and Dodoma.

4.4 Drinking Water

Both surveys collected information on the source of household drinking water and the distance to that source in the dry season. The source is used as an approximate indicator of the quality of the water. The categories used to classify the sources were slightly different between the two surveys, with 2000/01 including the use of a neighbour's piped water supply. It is likely that this would have been recorded as 'piped outside house' or 'piped in community' in 1991/92. When the categories are aggregated to 'piped water' they should be reasonably comparable.

Some 44 per cent of all Tanzanian households, and over half the population in rural areas, depend on an unprotected source of drinking water (Table 4.19). Almost 40 per cent of households have use of piped water and another 16 per cent use a protected well or spring. As would be expected, use of a piped source is much more common in urban areas, particularly Dar es Salaam.

TABLE 4.19 SOURCE OF DRINKING WATER

	Dar es Salaam		Other urban areas		Rural areas		Mainland Tanzania	
	91/92	00/01	91/92	00/01	91/92	00/01	91/92	00/01
Piped water	93.0	85.7	72.7	75.6	24.5	28.3	35.9	39.3
Private piped to house	22.1	13.7	20.3	15.1	1.1	0.8	5.2	3.8
Private piped outside house	52.6	19.1	22.7	17.0	3.3	2.1	9.2	5.5
Piped to neighbour	N/A	46.4	N/A	28.9	N/A	3.5	N/A	10.2
Piped in community	18.4	6.6	29.7	14.6	20.2	21.9	21.5	19.8
Other protected sources	3.8	7.9	10.9	12.4	10.3	17.6	10.0	16.2
Public well (protected)	3.5	4.7	10.5	7.5	9.4	13.3	9.2	11.8
Private well (protected)	0.4	3.2	0.4	4.2	0.7	1.4	0.7	2.0
Spring (protected)	0.0	0.0	0.0	0.7	0.2	2.9	0.2	2.4
Unprotected sources	1.8	3.6	10.1	11.2	63.9	53.2	52.1	43.6
Public well (unprotected)	1.7	2.2	5.5	5.1	26.5	21.2	21.9	17.5
Private well (unprotected)	0.1	1.0	0.8	1.2	2.6	3.8	2.2	3.2
Spring (unprotected)	0.0	0.2	0.4	2.0	11.6	12.4	9.2	10.0
River, dam, lake	0.0	0.1	3.4	3.0	23.2	15.8	18.8	12.8
Other sources	1.4	2.8	6.2	0.8	1.2	0.9	2.0	1.0
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Note: Use of a neighbour's piped source was not included as an answer category in the 1991/92 survey. 'Other sources' includes rain catchment tank (0.2% in 2000/01) and 'other'.

However, rural areas have seen substantial improvements in their source of drinking water over the 1990s. There has been an increase of around 11 percentage points in the proportion of rural households who use piped water or other protected sources and a corresponding decline in the proportion using unprotected sources, particularly surface water.

There has also been some increase in the use of piped water and other protected sources in urban areas other than in Dar es Salaam, although the proportion of households with water piped into the dwelling appears to have declined. In the capital, the proportion of households with any piped water, and with water piped into the dwelling, have both declined and there has been an increase in reliance on other sources. Some 46 per cent of households in Dar es Salaam now depend on a neighbour for water. The water supply system in the capital appears to have suffered a serious decline in the proportion of the population it serves, perhaps in part due to the growth in population there.

TABLE 4.20 DISTRIBUTION AND MEAN OF THE DISTANCE TO DRINKING WATER IN THE DRY SEASON

	Dar es Salaam		Other urban areas		Rural areas		Mainland Tanzania	
	91/92	00/01	91/92	00/01	91/92	00/01	91/92	00/01
Distribution of distance:								
Less than one km	88.5	84.0	66.8	73.2	43.8	48.9	49.9	54.9
1 to 1.9	7.8	6.5	17.3	12.2	25.0	21.1	22.8	18.8
2-2.9	2.3	1.7	8.7	6.7	11.2	9.4	10.3	8.5
3-3.9	0.1	3.3	2.1	4.1	7.1	8.8	6.0	7.8
4-5.9	0.6	2.3	4.2	1.9	6.7	3.6	6.0	3.2
6+	0.6	2.2	0.9	1.9	6.1	8.2	5.0	6.9
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Mean	0.2	0.5	0.7	0.6	1.5	1.7	1.3	1.5

Note this table shows the distances as recorded by interviewers, which were integers ('1 to 1.9' is '1', for example).

Household drinking water supplies are much closer in urban areas than in rural areas (Table 4.20). Over half of rural households have to travel more than one kilometre to their drinking water source in the dry season. The distribution of the distance to drinking water appears to have become wider during the 1990s. On the one hand, there has been an increase in the proportion of households reporting a drinking water source within one kilometre in all areas except Dar es Salaam; on the other, there has also been an increase in the proportion of households reporting having to travel over six kilometres to their drinking water. The net effect is a slight increase in mean distance to drinking water¹².

There are large differences between the regions in the source of drinking water (Map 4.7). Three quarters or more of the households in Dar es Salaam, Kilimanjaro, Kigoma and Mbeya have a protected source of drinking water. In contrast, over three quarters of households in Lindi and Tabora depend on an unprotected source. The distance to drinking water also varies greatly. Only about one third of households are within 1 kilometre of drinking water in the dry season in Mara and Shinyanga, whereas over 80 per cent of households are within that distance in Ruvuma and Dar es Salaam (Appendix Table C19).

12. Although the difference in the proportion within 1km of the source is not statistically significant and again it is not clear how sensitive these findings would be to inaccuracies in the distances reported by households.

4.5 Conclusions

One quarter of adults in Tanzania have had no education and some 29 per cent are illiterate. Rural women have particularly missed out on education, 41 per cent being illiterate. There have been limited improvements in the level of educational attainment of adults over the decade.

Some 59 per cent of seven to thirteen-year-olds are enrolled in Standards I-VII. Enrolment levels are substantially higher in urban areas than in rural areas – 71 per cent compared to 56 per cent. Gross enrolment ratios are higher than net enrolment ratios because of the presence of many over-age children in primary schools. This is due, at least in part, to a tendency for children to enter school late, particularly in rural areas. As a result, many children are also well below the class that they should be in according to their age.

Secondary enrolment ratios are much lower than primary. In rural areas, only two per cent of children aged 14 to 17 years are enrolled in secondary school.

The HBS data suggest that there have been modest increases in children's participation in primary education over the decade. However, increases in enrolment in rural areas have been small while urban areas have seen large increases. As a result, the gap between urban and rural areas has widened considerably.

Girls have slightly higher primary enrolment rates than boys, although this is partly because the analysis focussed on primary-age children. The HBS data suggests that boys are more likely to stay in school at older ages, although this does not seem to be reflected in higher secondary enrolment ratios. The gap between boys' and girls' primary enrolment ratios appears to have narrowed over the 1990s.

For most of the population, even in rural areas, the physical distance to primary schools does not appear to be a large problem. Almost two thirds of Tanzanian households are within two kilometres of a primary school. Neither is distance given as a particularly important reason for non-attendance at school. There is some evidence that the average distance to a primary school has increased slightly over the decade. Secondary schools are much further away; one quarter of rural households reported being over 20 kilometres from a secondary school.

The 2000/01 HBS also collected information on health. Children under five and older adults were the most likely to have been ill or injured in the four weeks preceding the survey. Overall, rural areas report the highest levels of illness, but children under five were most likely to be reported as ill or injured in Dar es Salaam. Women reported more illness than men, though these sex differences

were reversed in children under five. The most commonly reported complaint, for both children and adults, was fever/malaria

Over two-thirds of individuals who had been ill reported that they had consulted a health-care provider. Over half of the individuals who consulted a provider used a government service, although the private sector is an important service provider in both urban and rural areas. Users were more likely to report dissatisfaction with government providers than with private providers.

Households are not generally far from primary health care facilities. Even in rural areas, over 90 per cent of households reported being within 10 kilometres of a dispensary or health facility. The distance to these primary facilities appears to have declined slightly over the decade.

As might be expected, urban populations continue to enjoy better drinking water supplies than rural areas. Over half of the households in rural areas depend on an unprotected source, while over three-quarters of urban households use piped water of some kind. Trends in the two populations over the 1990s appear to have been quite different, however. There has been an increase in the proportion of rural households using piped or protected supplies, while there has been a decline in the proportion of urban households with water piped to the dwelling. In Dar es Salaam, in addition, there has been a decline in the proportion of households using any type of piped supply.

There seems to have been divergent trends in the distance to drinking water, with an increase in households reporting a source within one kilometre and also in households reporting a source more than 6 kilometres away.

PRODUCTIVE ACTIVITIES AND PRODUCTIVE ASSETS

5. PRODUCTIVE ACTIVITIES AND PRODUCTIVE ASSETS

55

5.1 Introduction

This chapter presents information on the economic and other activities of household members, including the household head and children. It presents information on the sources of cash income, on household businesses and on the ownership of productive assets, particularly agricultural assets. It also presents information on the use of banking and saving facilities.

5.2 Activities of Household Members

In the 2000/01 HBS, the interviewer recorded the main and secondary activities of each household member aged five years and over. The main activity of adults aged 15 to 60 years is shown in Table 5.1. Farming and related activities occupy the time of three-quarters of adults in rural areas, while paid employment, self-employment and housekeeping predominate in Dar es Salaam. Housewife/household chores were the most commonly reported secondary activity; some 45 per cent of adult women reported this as a secondary activity, compared with four per cent of adult men (see Appendix Table B5.1).

TABLE 5.1 MAIN ACTIVITY OF ADULTS IN THE PREVIOUS SEVEN DAYS (HBS 2000/01)

Activity	Dar es Salaam	Other urban areas	Rural areas	Mainland Tanzania
Farming/livestock/fishing	3.0	26.1	74.1	61.8
Employee - government	3.8	5.1	1.2	1.9
Employee - parastatal	3.1	1.6	0.2	0.6
Employee - other	16.0	9.6	1.9	4.0
Self-employed with employees	5.9	4.4	0.9	1.8
Self-employed without employees	17.4	15.6	2.8	5.7
Unpaid family helper in business	7.7	7.5	3.1	4.1
Housewife/housemaker/household chores	20.1	14.7	6.0	8.3
Student	11.5	9.8	6.8	7.6
Not active	11.5	5.7	3.1	4.1
Total	100.0	100.0	100.0	100.0

Note: Individuals whose activities were recorded by sector only (mining and tourism) are assumed to be employed; the number of cases in these categories is small (less than 0.5%).

The 1991/92 HBS did not record information on activity in the same format as the 2000/01 survey. Instead, it first recorded information on economic activities. It then collected information on non-economic activities in a second question. This means that the information in the two surveys is not directly comparable. Table 5.2 presents a recoding of the activity information in the two surveys, covering both primary and secondary activities, to maximise the comparability of the measures across the two surveys¹³. It is likely that the information on

13. The activity variable was constructed to record any economic activity first and only to include information on a non-economic activity if no economic activity was recorded for that individual.

activities classed as economic in the 1991/92 HBS - the first seven categories in Table 5.2 - is reasonably comparable across surveys. Information on non-economic activities (the remainder) is less comparable.

There has been a substantial decline in the importance of agricultural activities over the 1990s. In urban areas, there has also been a decline in employment provided by the government and parastatal companies, reflecting privatisation and government retrenchment during the 1990s; there has been a corresponding rise in other sources of employment and self-employment. There also appears to have been a shift from self-employment with employees to self-employment without employees, although the size of the change over the period raises the question of whether there was a problem in distinguishing these categories in one of the surveys, most likely the 1991/92 HBS.

TABLE 5.2 ECONOMIC ACTIVITY OF ADULTS BY AREA AND YEAR OF SURVEY

Activity	Dar es Salaam		Other urban areas		Rural areas		Mainland Tanzania	
	91/92	00/01	91/92	00/01	91/92	00/01	91/92	00/01
Farming/livestock/fishing	2.3	3.0	43.0	26.9	83.4	75.8	72.8	63.2
Employee - government	8.7	3.8	9.1	5.1	2.1	1.2	3.4	1.9
Employee - parastatal	12.7	3.1	3.2	1.6	0.6	0.2	1.8	0.6
Employee - other	9.7	16.0	4.1	9.6	1.0	1.9	2.0	4.1
Self-employed with employees	17.3	5.9	13.3	4.5	2.0	1.0	4.5	1.9
Self-employed without employees	1.1	18.1	0.5	16.7	0.2	2.9	0.3	6.1
Unpaid family helper in business	4.8	10.5	4.7	13.0	1.1	7.5	1.8	8.5
Housewife/housemaker /household chores	21.6	19.2	10.1	11.2	1.0	4.0	3.6	6.2
Student	14.7	8.6	6.4	4.3	5.7	2.0	6.3	2.8
Not active	7.2	11.6	5.4	7.2	2.9	3.5	3.5	4.6
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

An examination of economic activity by sex shows similar trends, with the decline in agricultural activity particularly affecting women and the shift from government and parastatal employment to the private sector particularly affecting urban men (Table 5.3). While women are now as likely as men to work in agriculture, they remain much less likely to be employed or self-employed. These activities are reported by around 10 per cent of women compared to 20 per cent of men.

Women's involvement in economic activities appears to have declined slightly over the 1990s, except in Dar es Salaam. However, this finding should be treated with caution because of the question of the comparability of the non-economic activity information between the two surveys.

TABLE 5.3 ECONOMIC ACTIVITY OF ADULTS BY SEX, AREA AND YEAR OF SURVEY

[illegible]

TABLE 5.4 ECONOMIC ACTIVITY OF THE HOUSEHOLD HEAD BY AREA AND YEAR OF SURVEY

[illegible]

Household heads are more likely to be engaged in an economic activity than are other adults in the household. They are correspondingly less likely to report a non-economic activity (Table 5.4). They have seen similar shifts in economic activity, however, with a decline in the importance of agriculture and government/parastatal employment and an increase in self- and private sector employment. Disaggregation by the sex of the household head shows similar findings to all adults (see Appendix Table B5.2).

In most regions, around 60 to 80 per cent of adults report agriculture as their main activity. Only in Dar es Salaam, Arusha and Mbeya is this proportion lower. In these regions, employment and self-employment are more common than elsewhere; a larger proportion of adults also report being housewives in Arusha. (Appendix Table C20). The majority of households in all regions except Dar es Salaam have a head working in agriculture. Arusha, Mbeya and Shinyanga have the lowest proportions of such households (Map 5.1).

TABLE 5.5 ACTIVITIES OF CHILDREN IN THE PREVIOUS SEVEN DAYS BY AGE GROUP

Activity	5-9 Years	10-14 Years	Total (5-14)
Agriculture/fishing/employed & does not study	8.6	11.3	9.9
Housework/household business & does not study	25.9	10.3	18.2
Agriculture/fishing/employed & studies	1.1	5.9	3.5
Housework/household business & studies	16.1	44.7	30.1
Studies only	16.7	22.4	19.5
No activity	31.6	5.4	18.8
Total	100.0	100.0	100.0

Since the 2000/01 HBS recorded information on primary and secondary activities for all individuals over five years of age, it is possible to examine the activities of children (Table 5.5). Around one third of children aged five to fourteen years combine some kind of work with study. This work includes agricultural work, paid employment and helping with the household business or household chores – the latter being much more commonly combined with study. An additional 28 per cent of children were reported to work without studying, giving a total of 62 per cent of children who undertake work of some type. Almost one fifth studied without undertaking any type of work¹⁴. As might be expected, activities varied with age, ten to fourteen year olds being more likely to report studying and working.

14. The 1991/92 HBS data on children's activity are probably not comparable with the 2000/01 HBS because they will be especially affected by the different ways of recording activity in the two surveys (particularly the recording of only one non-economic activity in the 1991/92 questionnaire).

Girls are more likely to work than boys, with 64 per cent of girls and 59 per cent of boys aged five to fourteen years reporting working (Table 5.6). The most common activity for children of both sexes who work is to help in the home or in a household business; boys are more likely than girls to work in agriculture or to undertake work outside the household.

TABLE 5.6 ACTIVITIES OF CHILDREN IN THE PREVIOUS SEVEN DAYS BY AGE GROUP AND SEX

Activity	5-9 Years	10-14 Years	Total (5-14)
Boys 5-14 years:			
Agriculture/fishing/employed & does not study	9.4	12.9	11.1
Housework/household business & does not study	24.1	8.0	16.4
Agriculture/fishing/employed & studies	1.3	8.3	4.7
Housework/household business & studies	14.8	39.8	26.8
Studies only	16.3	25.0	20.5
No activity	34.0	6.0	20.5
Total	100.0	100.0	100.0
Girls 5-14 years:			
Agriculture/fishing/employed & does not study	7.4	9.6	8.5
Housework/household business & does not study	27.6	12.6	20.1
Agriculture/fishing/employed & studies	0.9	3.6	2.2
Housework/household business & studies	17.7	49.6	33.6
Studies only	17.2	19.8	18.5
No activity	29.2	4.9	17.1
Total	100.0	100.0	100.0

The proportion of children reported to work varies greatly between the regions, ranging from 28 per cent in Dar es Salaam to 84 per cent in Mwanza (Map 5.2).

5.3 Household Income Sources and Household Businesses

In addition to information on the employment and activities of household members, information on household sources of cash income and on household businesses was collected. Further information on household income is given in Chapter 9.

As might be expected, the main sources of cash income in rural areas are the sale of food and cash crops, while in urban areas the main sources are wages, salaries and business income (Table 5.7). In urban areas, the importance of regular paid employment has declined over the 1990s while the importance of a business income and casual earnings (which include casual labour) has increased. This mirrors the changes in employment patterns seen in Table 5.2. On a smaller scale, similar trends are seen in rural areas, although the decline in cash crops as a source of income is also notable in the rural population.

TABLE 5.7 DISTRIBUTION OF MAIN SOURCE OF HOUSEHOLD CASH INCOME

	Dar es Salaam		Other urban areas		Rural areas		Mainland Tanzania	
	91/92	00/01	91/92	00/01	91/92	00/01	91/92	00/01
Sales of food crops	1.7	2.8	20.7	13.8	48.5	48.9	41.4	40.6
Sales of livestock & products	0.1	0.3	0.4	0.9	5.3	5.5	4.3	4.5
Sales of cash crops	1.2	0.6	8.3	7.4	25.6	20.5	21.6	17.2
Business income	26.8	31.1	26.8	30.3	6.1	8.1	10.4	13.0
Wages or salaries in cash	62.7	40.7	31.1	23.9	5.8	3.8	13.1	9.3
Other casual cash earning	2.9	15.2	4.9	12.0	1.9	4.2	2.4	6.1
Cash remittances	1.0	4.8	2.1	5.4	1.0	3.0	1.1	3.5
Fishing	0.7	0.6	2.0	0.8	1.9	2.2	1.9	1.9
Other	3.0	3.9	3.7	5.3	3.9	3.6	3.8	3.9
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

While agriculture is an important source of cash income everywhere except Dar es Salaam, there are considerable differences between regions in cash income sources. The sale of food crops is particularly important in Rukwa and Kigoma, while cash crops are more important in Ruvuma, Mtwara and Lindi. Livestock is relatively important in Arusha and Tanga. Wages and salaries are the most important source of household cash income in Dar es Salaam and are also relatively common in Arusha. Income from business is important in Dar es Salaam and Singida (Appendix Table C25).

TABLE 5.8 PERCENTAGE OF HOUSEHOLDS REPORTING A BUSINESS BY AREA

Dar es Salaam	Other urban areas	Rural areas	Mainland Tanzania
42.3	54.7	39.6	42.1

In Tanzania as a whole some 42 per cent of households reported having a business. A business is most common in the urban areas excluding Dar es Salaam; it was not much more common in the capital than in rural areas, presumably reflecting the importance of paid employment in Dar es Salaam. Inconsistencies in the recording of this information in the 1991/92 HBS mean that trends cannot be assessed.

5.4 Household Ownership of Productive Assets

The 1991/92 and 2000/01 surveys collected information on household ownership of productive assets, particularly items used in agricultural production, together with information on the ownership of animals and land. As would be expected, ownership of these items is most common in rural areas (Table 5.9). The proportion of households owning specialised agricultural equipment is often low even in rural areas. Only 0.2 per cent of rural households own a tractor, showing that the level of mechanisation remains very low.

TABLE 5.9 PERCENTAGE OF HOUSEHOLDS OWNING PRODUCTIVE ASSETS

	Dar es Salaam		Other urban areas		Rural areas		Mainland Tanzania	
	91/92	00/01	91/92	00/01	91/92	00/01	91/92	00/01
Cart	0.7	2.0	0.7	1.7	1.7	2.4	1.5	2.3
Boat/canoe	0.0	0.1	1.4	0.3	0.4	0.8	0.5	0.7
Wheel barrow	1.0	1.9	3.1	4.4	2.6	3.1	2.6	3.2
Livestock	1.1	2.9	13.5	14.1	44.6	44.5	37.4	37.1
Poultry	4.7	6.4	25.9	26.7	60.1	64.5	51.6	54.9
Donkeys	0.4	0.2	1.1	0.5	3.8	3.9	3.2	3.1
Fields/Land	8.3	16.9	57.6	46.9	90.1	89.4	80.2	78.1
Hoes	11.0	17.5	59.2	56.0	90.3	91.8	80.8	81.5
Spraying machines	0.6	0.4	1.9	1.9	3.7	2.7	3.2	2.5
Tractor	0.0	0.0	0.3	0.2	0.2	0.2	0.2	0.2
Plough	0.0	0.7	1.4	1.8	11.3	11.1	9.2	9.0
Hand milling machine	0.0	0.0	0.0	1.1	1.6	1.9	1.3	1.6
Coffee pulping machine	0.0	0.0	0.1	0.2	0.1	1.5	0.1	1.2
Fishing net / equipment	0.1	0.3	2.1	0.6	2.9	2.6	2.6	2.1
Beehives	0.0	0.0	0.7	0.4	4.9	6.4	4.0	5.1

Note: With the exception of tractors, agricultural items owned by 0.5% or less of households have been excluded from this table.

Some 89 per cent of rural household reported owning land for agriculture and grazing, a similar proportion to 1991/92. Many households in urban areas also own land, particularly those in urban areas other than Dar es Salaam.

The 2000/01 HBS asked questions about the area of land and the number of animals owned that were not asked in 1991/92. On average, rural households own around 6 acres, although this reflects a skewed distribution in which 52 per cent of households own less than 4 acres (Table 5.10). The mean area of land owned by urban households is smaller. Except in Dar es Salaam, agriculture is a common activity in urban areas and the land owned may be worked by household members; for most of the households in the capital it is probably not, since agriculture is rarely reported as a main economic activity (see Table 5.2).

TABLE 5.10 OWNERSHIP OF LAND FOR AGRICULTURE AND GRAZING

	Dar es Salaam	Other urban areas	Rural areas	Mainland Tanzania
Amount owned in acres:				
Less than 1	14.4	9.9	6.2	6.7
1 to 2	21.1	23.6	12.7	13.8
2 to 3	14.4	22.2	18.3	18.6
3 to 4	16.0	12.7	14.5	14.4
4 to 5	6.6	8.7	10.6	10.4
5 to 6	6.5	5.6	8.1	7.9
6 to 7	6.7	3.7	6.7	6.5
7 to 8	1.2	1.6	3.6	3.4
8 to 9	4.1	1.9	4.2	4.0
9 to 10	0.7	0.7	1.7	1.6
10 to 20	6.8	5.4	8.6	8.2
20+	1.5	3.8	4.7	4.6
Total	100.0	100.0	100.0	100.0
Mean amount owned	3.8	5.0	6.0	5.8

Note: The distribution and mean of amount of land owned are presented for households owning any land; categories of land area include the lower boundary and exclude the upper one.

The average amount of land owned by rural households for agriculture or pastoralism is highest in Shinyanga. Average land holdings tend to be smaller in regions close to the coast (Appendix Table C26).

Almost half of rural households reported owning medium-size grazing livestock such as sheep or goats (Table 5.11). Although ownership of cattle or large livestock was less common, the average number of larger livestock owned was similar to the number of medium size livestock owned, for households that owned any.

TABLE 5.11 OWNERSHIP OF FARM ANIMALS

	Dar es Salaam	Other urban areas	Rural areas	Mainland Tanzania
Per cent of households owning cattle / other large livestock	1.2	8.9	28.9	24.0
Mean number owned	--	--	--	11.2
Median number owned	--	--	--	5
Per cent of households owning any sheep/ goats/other medium sized livestock	2.5	17.3	49.4	41.5
Mean number owned	--	--	--	12.0
Median number owned	--	--	--	5

Note: Mean and median numbers owned are presented for households owning at least one animal of the type stated.

5.5 Banking and Savings

There has been a large decline in the proportion of households making use of bank accounts (Table 5.12). This may reflect the re-structuring of the banking sector during the 1990s and the move from bank transfers to cash payment of government employees. A bank was the most distant of all services reported in the 2000/01 HBS, although it was not possible to assess whether this distance had increased over the 1990s (see Chapter 3).

The proportion of households taking a bank loan in the year preceding the survey is low and has also declined during the 1990s; even participation in informal savings groups declined over this period.

Rural households benefit very little from any type of savings arrangement, formal or informal, suggesting their access to credit is also low.

TABLE 5.12 PER CENT OF HOUSEHOLDS WITH ONE OR MORE MEMBERS PARTICIPATING IN SAVINGS/BANKING ACTIVITIES

Activity	Dares Salaam		Other urban areas		Rural areas		Mainland Tanzania	
	91/92	00/01	91/92	00/01	91/92	00/01	91/92	00/01
Operates a saving/current account	43.1	18.9	35.0	14.4	12.9	3.8	18.0	6.4
Took a bank loan last year	6.7	1.1	2.6	1.0	0.5	0.4	1.2	0.6
Participates in an informal savings group	12.4	7.9	10.0	6.7	3.6	2.8	5.1	3.8
Participates in any non-bank formal savings group	N/A	5.2	N/A	3.6	N/A	1.3	N/A	1.9

5.6 Conclusions

The Household Budget Surveys collected information on the activities of household members, on household sources of cash income, ownership of assets and on banking and savings activities.

Although the Tanzanian population continues to be largely dependent on agriculture, non-agricultural activities have become increasingly important over the 1990s. A decline in government and parastatal employment and a rise in the private sector and self-employment are also apparent, particularly in urban areas. Women have seen the largest reductions in agricultural activity whereas men have been particularly affected by the changes in employer. Men are still much more likely than women to be employed or self-employed.

The economic activity of household heads shows similar trends to all adults. Some 70 per cent of households are now headed by an individual who works in agriculture or fishing.

More than half of children aged five to fourteen years undertake some form of work, usually combined with study. Girls are somewhat more likely than boys to work.

Most households depend on agricultural products for their cash income. Food crops remain the most important source and the importance of cash crops has declined. Trends in the importance of other income sources reflect the changes in the labour market outlined above. Some 42 per cent of households reported having a business. Almost nine in ten rural households own land for agriculture or grazing, with an average reported area of about six acres.

There is very limited uptake of banking or other savings facilities, particularly in rural areas; even participation in informal savings groups is rare amongst rural households. The use of banking and savings groups has declined over the 1990s.

6

HOUSEHOLD CONSUMPTION AND EXPENDITURE

6.

HOUSEHOLD CONSUMPTION AND EXPENDITURE

67

6.1 Introduction

The Household Budget Surveys collected extensive information on household consumption and expenditure. This includes information on which items were consumed, on their source and their cost. This chapter examines the overall level of household consumption and how it has changed over the 1990s. It also examines the structure of household consumption, presenting the share of consumption that is taken by the various categories of goods and services.

6.2 Measuring Consumption and Expenditure

The 2000/01 HBS collected information on household consumption and expenditure in three ways. A diary was kept in each household to record items purchased and consumed each day for one calendar month. This was filled in by a household member or, where household members were illiterate, by the interviewer. The interviewer was expected to visit households every two to three days to ensure that the diary was being correctly completed; visits were expected every day in the case of illiterate households. In addition to this diary, individual adults were provided with a personal diary that they used to record their personal expenditure outside the household. This information was later added to the household diary. In a separate part of the questionnaire, respondents were also asked to recall expenditure on non-food items in the last year. The same procedures were used in the 1991/92 HBS except that personal diaries were not provided.

The consumption recorded in the diary included both items that were purchased and items that were consumed but which had not been purchased: home produced items, transfers received by the household (such as gifts or support from other households) and payments in kind for work done. Both the quantity consumed and its value were recorded. Items that had not been purchased were valued at local market prices.

Since all items that were consumed were priced, a single monetary measure of household consumption can be calculated, denoted household consumption expenditure. This includes food consumption, health and educational expenses, expenditure on consumer durables and expenditure on other non-durables. It is standardised to 28 days.

The surveys also collected information on household incomes. However, household income in developing countries fluctuates more than expenditure over the short term and is often reported less accurately. Consumption expenditure provides a more reliable measure of household income, reducing reporting errors and smoothing out short-term fluctuations. For this reason, consumption expenditure is used as the basis for a monetary measure of welfare.

The collection of consumption data in a monthly diary generates a large volume of data, unavoidably producing some errors, which necessitated a careful data cleaning procedure. This cleaning was carried out for both the 1991/92 and 2000/01 data to ensure comparability. For some items, it was possible to derive information on consumption either from the diary or from the twelve-month recall section, the choice being based on an analysis of relative frequencies and values in the two sources. These and other technical issues are discussed in Appendix A2.

Chapter 7 compares household consumption levels to a poverty line. There, a more restricted consumption measure is used to provide a more precise measure of welfare. However this chapter focuses on describing consumption patterns more broadly.

6.3 Average Consumption Expenditure Levels

Table 6.1 shows the average levels of consumption expenditure for 28 days by area. Mean expenditure per capita is 10,120 Shillings. The median – which shows the value below which half of the population falls – was substantially lower, because a small number of high values have more effect on the mean.

Mean per capita expenditure in Dar es Salaam is 2.6 times higher than in rural areas. Differences in average consumption expenditure per household were slightly smaller because rural households tend to be larger.

Comparing the regions, average expenditure is highest in Dar es Salaam, Mbeya and Mtwara and lowest in Rukwa, Singida and Kigoma (Map 6.1).

TABLE 6.1 AVERAGE CONSUMPTION EXPENDITURE LEVELS IN 2000/01 (28 DAYS, TSHS)

Measure	Dar es Salaam	Other urban areas	Rural areas	Mainland Tanzania
Mean expenditure per capita	21,949	14,377	8,538	10,120
Median expenditure per capita	16,349	11,561	6,860	7,523
Mean expenditure per household	117,893	78,079	52,649	59,935

Note: Consumption expenditure in nominal prices.

An adjustment for price inflation is required to compare expenditure in 2000/01 with 1991/92. This is calculated using price information contained within the HBS data itself, because both the quantity consumed and its value were recorded. From this data, a Fisher Ideal price index is calculated. This suggests that an average consumption basket has increased in price by a factor of 2.49 since 1991/92, well below the increase in the consumer price index. The Fisher Index has the benefit of taking into account changes in consumption patterns that have occurred over the period¹⁵.

Table 6.2 presents mean and median per capita consumption expenditure for 2000/01, together with their equivalents for 1991/92 inflated by the Fisher Index. The inflated figures give the values that would be expected if average consumption levels had remained constant over the period and only prices had increased.

This comparison shows that average real consumption levels have increased over the 1990s. Mean consumption levels have increased by around 17 per cent in real terms. Median levels have increased by around 10 per cent. The increases have been largest in Dar and smallest in rural areas. The increase in real rural consumption levels is lower still if prices are adjusted separately. Nevertheless, in all areas there has been an increase in household average real consumption over the 1990s.

TABLE 6.2 TRENDS IN REAL PER CAPITA CONSUMPTION EXPENDITURE (28 DAYS, 2000/01 TSHS)

	Dar es Salaam	Other urban areas	Rural areas	Mainland Tanzania
Mean expenditure:				
2000/01	21,949	14,377	8,538	10,120
1991/92	14,896	12,733	7,661	8,686
Ratio (00/01) / (91/92)	1.47	1.13	1.11	1.17
Ratio with area-specific price adjustment	1.48	1.18	1.09	1.16
Median expenditure:				
2000/01	16,349	11,561	6,860	7,523
1991/92	12,106	9,622	6,300	6,816
Ratio (00/01) / (91/92)	1.35	1.20	1.09	1.10
Ratio with area-specific price adjustment	1.36	1.25	1.07	1.10

Note: 1991/92 values are inflated to 2000/01 prices using the national Fisher Index calculated from the HBS data (2.49). The second ratio for each measure gives the increase in real consumption when prices are adjusted separately for each of the three areas.

15 Further details on the calculation of the Fisher Index are given in Appendix A2.

6.4 The Structure of Consumption

In addition to providing information on the overall level of household consumption, the HBS can be used to look at the structure of consumption. Table 6.3 shows the mean expenditure per capita on food, household durables, medical and education costs and on other non-durables¹⁶. In this table, 1991/92 data are left in 1991/92 prices.

TABLE 6.3 MEAN EXPENDITURE PER CAPITA BY CATEGORY OF ITEM (NOMINAL FIGURES, 28 DAYS, TSHS)

Category	1991/92				2000/01			
	Dar es Salaam	Other Urban	Rural	Mainland Tanzania	Dar es Salaam	Other Urban	Rural	Mainland Tanzania
Food - purchased	3,873	2,862	1,011	1,397	10,301	7,114	3,118	4,085
Food – not purchased	36	361	1,175	1,011	368	876	2,375	2,051
Total food	3,910	3,223	2,186	2,409	10,668	7,989	5,492	6,137
Durables	577	541	262	314	2,565	1,501	706	923
Medical expenditure	52	65	26	32	569	338	190	232
Education expenditure	66	47	19	25	974	431	138	227
Other non-durables	1,377	1,237	583	708	7,172	4,118	2,012	2,602
Total	5,982	5,114	3,077	3,489	21,949	14,377	8,538	10,120

Note: 'Food - not purchased' includes food produced for home consumption, received as payment in kind or gifts etc. Figures are not adjusted for inflation.

In both years, mean expenditure in all categories is highest in Dar es Salaam and lowest in rural areas, with the exception of home-produced food.

There has been a fall in the share of household expenditure being spent on food (Table 6.4). Within this, the proportion of food that is purchased has increased while the proportion that is home produced has declined, suggesting a decline in the importance of subsistence farming. Other items have seen substantial increases in their share of household expenditure – particularly medical and educational costs and other non-durables¹⁷.

The proportion of household expenditure that is devoted to food is usually related to a household's income. Households with higher incomes spend a lower proportion on food. Households in Dar es Salaam spend the lowest proportion on food (54 per cent), while rural households have the highest food share (67 per cent). The share of expenditure on food has declined in all areas. The decline is largest in Dar es Salaam and smallest in rural areas, consistent with the growth in real consumption levels.

16. Other non-durables include personal effects, personal care, recreation, fuel, transport, utilities and services, clothes, alcohol and other items. More details of expenditure by item are given in Appendix Table B6.2.

17. The decline in the share of expenditure on food will in part reflect increases in expenditure on some items that households may have been unable to avoid – for example, in education and medical costs. Food share declines even if these elements are removed, though it declines less than in Table 6.4.

TABLE 6.4 MEAN PERCENTAGE SHARE OF CONSUMPTION EXPENDITURE BY CATEGORY OF EXPENDITURE

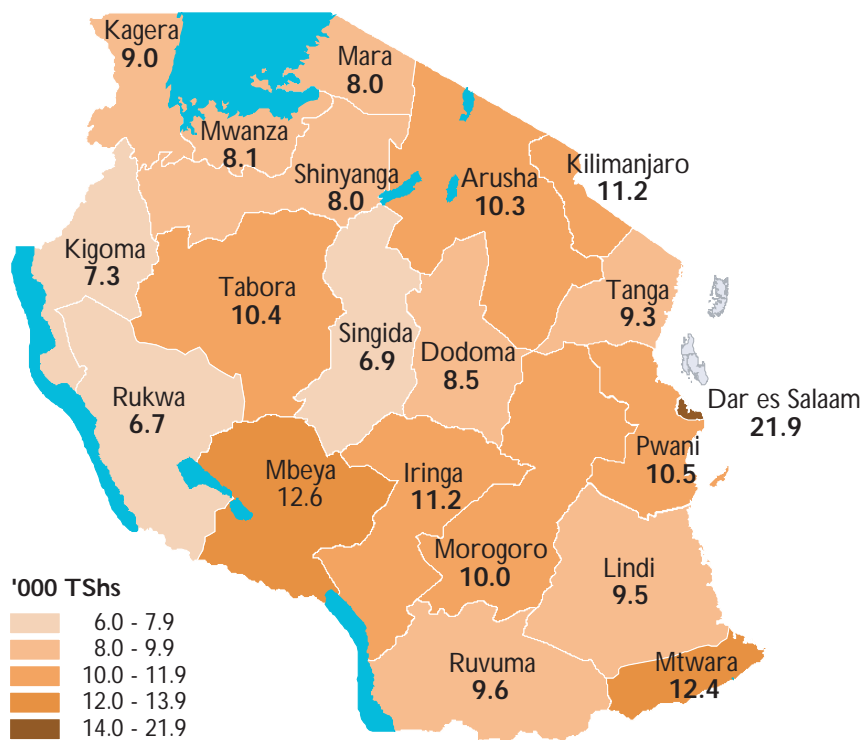
Category	Dar es Salaam		Other urban areas		Rural areas		Mainland Tanzania	
	91/92	00/01	91/92	00/01	91/92	00/01	91/92	00/01
Food - purchased	67.1	52.2	56.9	52.8	30.5	35.2	35.8	38.6
Food – not purchased	0.7	2.1	9.4	7.9	41.8	31.8	35.5	26.8
Durables	7.6	7.8	7.4	8.0	7.2	7.1	7.2	7.3
Medical expenditure	0.9	2.9	1.2	2.4	0.9	2.1	0.9	2.2
Education expenditure	1.1	4.0	1.1	3.0	0.8	1.6	0.8	2.0
Other non-durables	22.6	31.1	24.0	25.9	18.9	22.1	19.7	23.1
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Of which, total food	67.8	54.2	66.3	60.7	72.3	67.0	71.3	65.4

Note: These budget shares are means of the shares calculated for each household.

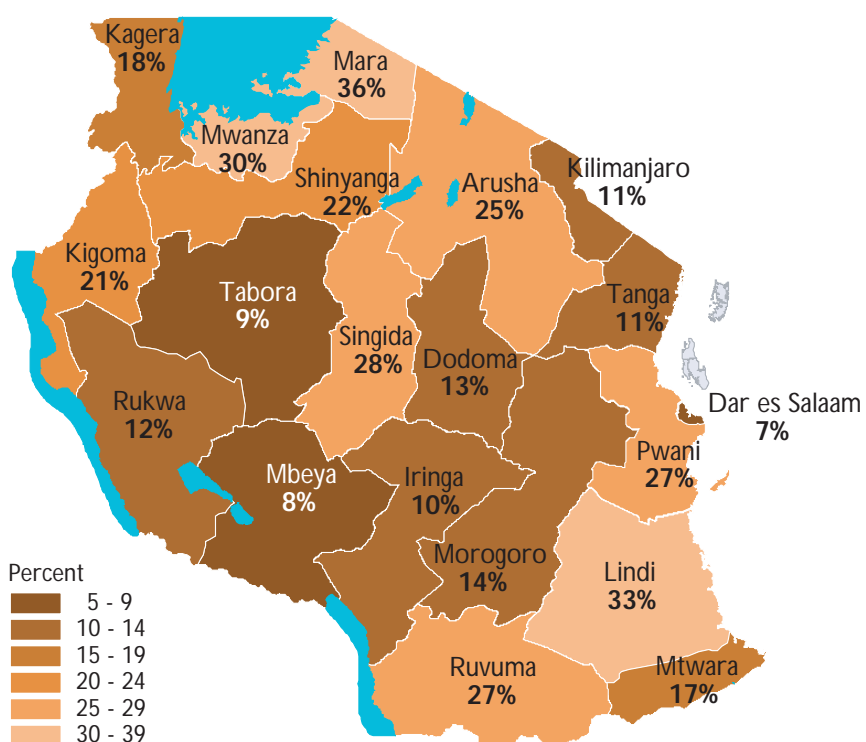
6.5 Conclusions

Average consumption expenditure per capita is around 2.6 times higher in Dar es Salaam than in rural areas. Mean real expenditure levels have increased by around 17 per cent between 1991/92 and 2000/01, suggesting that household real incomes have been rising. The proportion of expenditure devoted to food has also declined, as would be expected if real incomes have risen. There has also been a decline in the proportion of food that is home produced, as dependence on subsistence has declined. The share of expenditure devoted to health and education has increased.

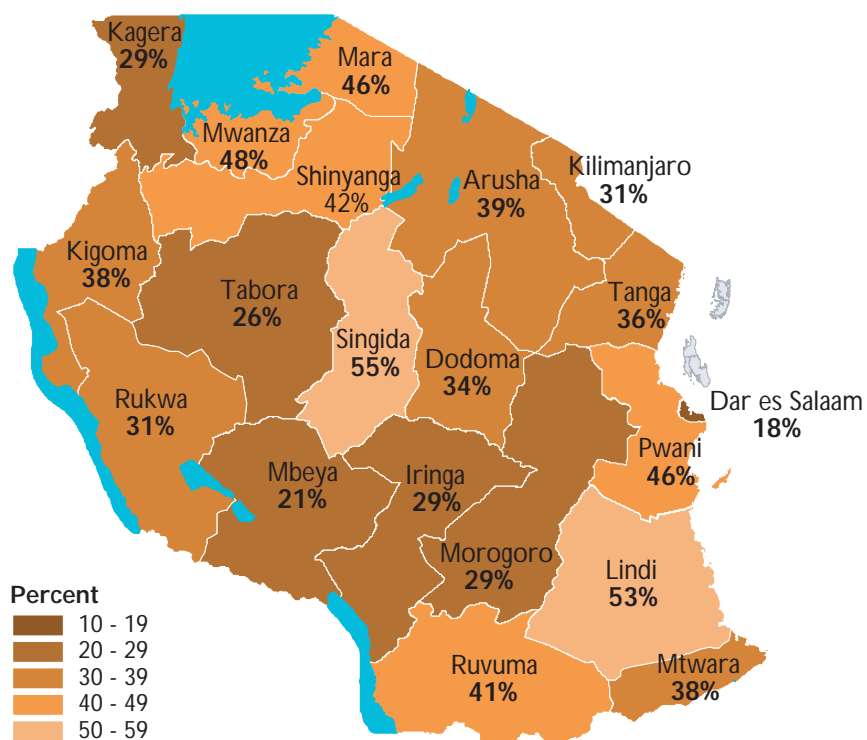
All areas have seen a real increase in household consumption and a fall in the food share. However, there has also been a substantial widening of the gap between Dar es Salaam, other urban areas and rural areas. Consumption levels have risen most in Dar es Salaam and least in rural areas. The share of expenditure on food shows a correspondingly larger fall in Dar es Salaam and a smaller fall in rural areas.



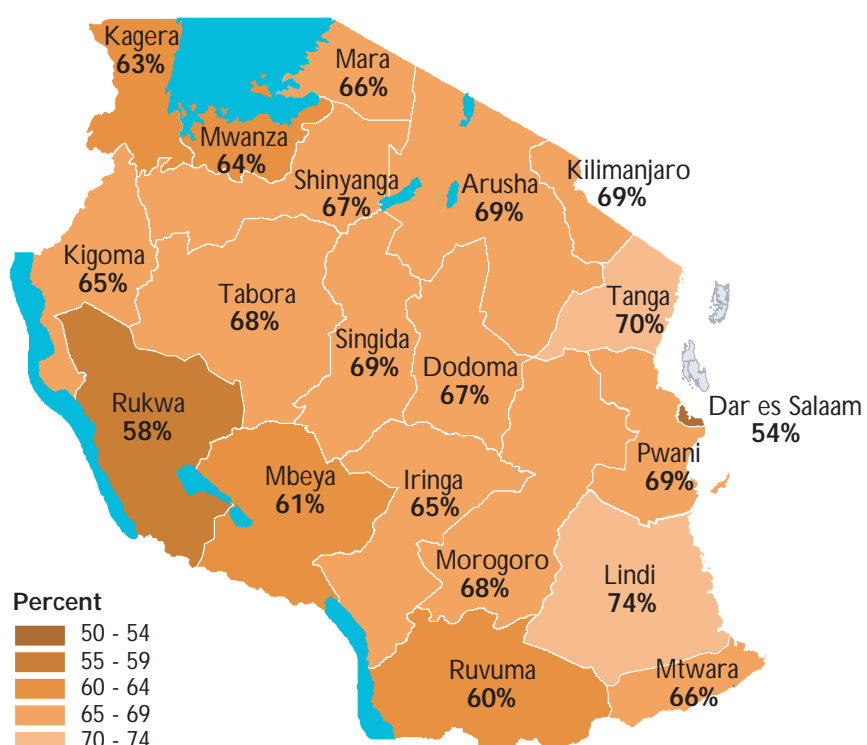
MAP 7.1
PERCENTAGE OF
THE POPULATION
BELOW THE
FOOD POVERTY
LINE



MAP 7.2
PERCENTAGE OF
THE POPULATION
BELOW THE BASIC
NEEDS POVERTY
LINE



MAP 7.3
AVERAGE FOOD
SHARE IN
HOUSEHOLD
BUDGET



INCOME POVERTY AND INEQUALITY

7.1 Introduction

In this chapter, consumption expenditure information is used to look at income poverty and inequality. Information provided by households in response to questions on food security is also presented.

7.2 Measuring Income Poverty

The basis for assessing income poverty is a measure of household consumption expenditure similar to the one outlined in Chapter 6. This is compared with a poverty line, which represents the cost of a basic basket of consumption. Households that fall below the poverty line are poor; individuals are classed as poor if they live in a poor household. In practice, undertaking this analysis has a number of complications, particularly when the objective is to compare income poverty levels over time. This section briefly outlines the analysis that was undertaken for the Household Budget Surveys. Further details are given in Appendix A2.

The Consumption Aggregate

Unlike the wider consumption measure outlined in Chapter 6, the consumption measure in the poverty analysis excludes large durable items, which are rare purchases and are not typical of the household's usual consumption level. Expenditure on medical care, education, water and postage is also excluded because the data showed large differences in the frequency and value of payments between 2000/01 and 1991/92, probably due to increased cost recovery. In so far as households are paying for what had previously been free to them, higher expenditure in these areas would not be considered an improvement in welfare. Including them would tend to suggest that welfare has increased more than it has. Rent and imputed rent are also excluded because of the poor reporting of the latter.

Total household consumption is then adjusted for the number of individuals present in the household, since larger households require a higher expenditure to meet their needs than smaller households. The adjustment uses an adult equivalence scale, which allows for the fact that children have lower consumption needs than adults. Children count as a fraction of an adult on this scale, the fraction depending on their age. In this way, household size is represented by the number of 'adult equivalents' rather than simply the number of individuals. The basic measure of household welfare used in this analysis is then each household's consumption expenditure per adult equivalent over 28 days.

The resulting consumption measure shows slightly different growth by area over the decade, with an increase in rural areas of around 7 per cent. The increase in this measure is statistically significant for the population as a whole and for Dar es Salaam. It is barely significant for other urban and rural areas¹⁸.

The Poverty Line

Two poverty lines were defined for 1991/92 and 2000/01. These are the food poverty line and the basic needs poverty line.

The food consumption pattern reported by the poorest 50 per cent of the population was used as the basis for the food poverty line. The median quantity consumed per adult equivalent per day was tabulated for all food items whose consumption was recorded in the survey. The quantities of each item consumed were then adjusted by a constant factor so that the sum of their calorific values equalled 2,200 calories per day, the minimum necessary for an adult. These quantities were then priced using median unit prices calculated from the survey data. The sum of these values gave the cost of meeting the minimum adult calorific requirement with a food consumption pattern typical of the poorest 50 per cent of the population. This is the food poverty line. It was calculated separately for the two surveys, so the poverty lines are based on the food consumption patterns of each year¹⁹.

A higher 'basic needs' poverty line is also calculated. This makes allowance for the fact that individuals need more than just food to live. The share of expenditure on non-food items in the poorest 25 per cent of the population was calculated for both survey years. This fraction was used to increase the food poverty line to allow for non-food consumption.

TABLE 7.1 POVERTY LINES PER ADULT EQUIVALENT FOR 28 DAYS (TSHS, NOMINAL PRICES)

	Dar es Salaam	Other urban areas	Rural areas	Mainland Tanzania
Food Poverty				
2000/01	6,719	5,607	5,107	5,295
1991/92	3,031	2,387	1,958	2,083
Basic Needs Poverty				
2000/01	9,203	7,680	6,996	7,253
1991/92	3,841	3,088	2,603	2,777

Note: In each year, national poverty lines for the population as a whole are adjusted using Fisher Indexes to calculate the lines for each area. These area-specific lines for 2000/01 are illustrative because in practice separate lines are calculated for each region in the analysis of this data.

18. Where it is significant only at the 10 percent level (see Appendix A1).

19. An alternative approach would be to define a poverty line for a single year and use the Fisher Index to adjust this line to the other point in time. The approach used makes the poverty lines slightly 'relative' – for example, if incomes have increased and food consumption shifts towards more expensive items, the 2000/01 poverty line would be slightly higher using this approach than using a Fisher Index. In practice, poverty lines calculated with a Fisher Index take quite similar values.

A national poverty line calculated in this way makes no adjustment for the variation in prices faced by households in different areas. The price of most foodstuffs, for example, is higher in Dar es Salaam than in rural areas. The expenditure required to meet a given minimum consumption level therefore varies depending on where the household lives. For this reason, the poverty line is adjusted for the prices faced by the household. This is done using a Fisher Index, this time calculated to compare prices over space rather than time. The much larger sample in 2000/01 allows a separate Fisher Index to be calculated for each region, giving a more precise adjustment. However the 1991/92 sample is not large enough to permit this. Instead, price adjustments are made separately for the three areas considered in the analysis: Dar es Salaam, other urban areas and rural areas. The resulting poverty lines are presented in Table 7.1.

The analysis of the 1991/92 data presented here has a number of substantial differences from the earlier poverty analysis²⁰. The main differences are:

- a number of elements were removed from the consumption aggregate to give a measure that is more comparable to the 2000/01 measure;
- the consumption data was subjected to the same consistency checking and cleaning procedures as the 2000/01 data;
- the Fisher Index was used to adjust the consumption measure rather than the consumer price index, because the CPI is not representative of the whole population of Tanzania;
- a new poverty line was defined using a full year of data and all food items;
- the weights were adjusted to ensure that the rural population was represented in proportion to its population.

For this reason, the 1991/92 poverty estimates presented in this report are substantially more accurate than in the previous analysis. They supersede the previous estimates and are not comparable.

7.3 The Incidence of Poverty

Table 7.2 shows the percentage of the population below the two poverty lines in 1991/92 and 2000/01 (called the 'headcount ratio'). Some 36 per cent of Tanzanians fall below the basic needs poverty line and 19 per cent below the food poverty line in 2000/01. Poverty is highest in rural areas, where 39 per cent of the population falls below the basic needs poverty line. Dar es Salaam has the lowest level of poverty, with 18 per cent below the same line (Figures 7.1 and 7.2).

20. 'Developing a Poverty Baseline in Tanzania' (2000), op. cit.

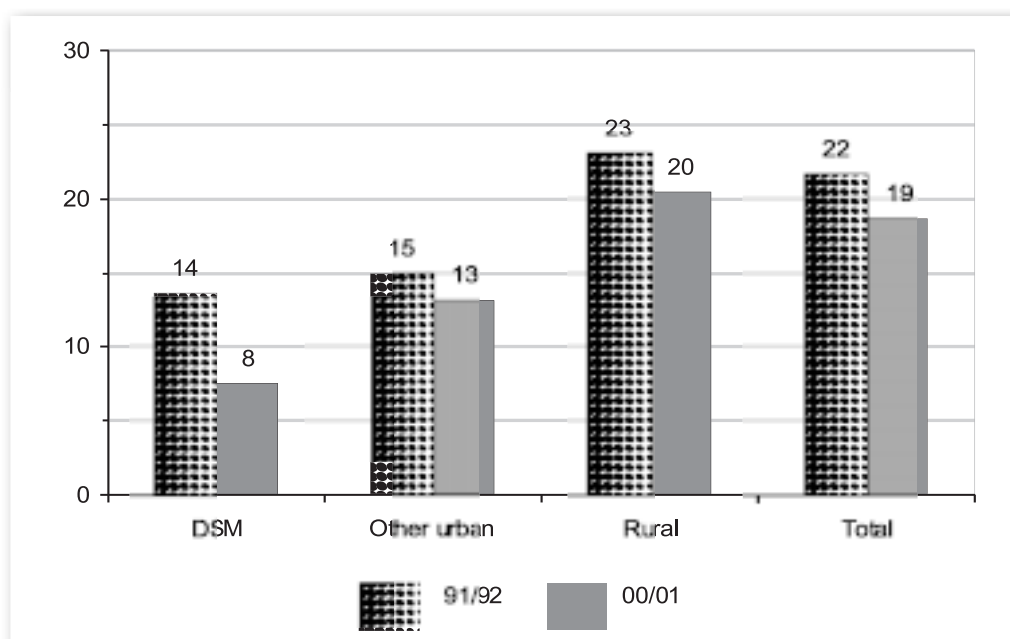
Nationally, there has been a modest decline of about 3 percentage points in both food poverty and basic needs poverty over the decade. There has also been a small decline in the poverty gap, a measure of the depth of poverty that indicates the extent to which the poor fall below the poverty line (and expressed as a burden over the population as a whole). Poverty has declined most in Dar es Salaam and less in other urban and rural areas²¹.

TABLE 7.2 INCIDENCE AND DEPTH OF POVERTY IN TANZANIA

	Dar es Salaam		Other urban areas		Rural areas		Mainland Tanzania	
	91/92	2000	91/92	2000	91/92	2000	91/92	2000
Headcount: percentage below the poverty line								
Food Poverty	13.6	7.5	15.0	13.2	23.1	20.4	21.6	18.7
Basic Needs	28.1	17.6	28.7	25.8	40.8	38.7	38.6	35.7
Poverty gap								
Food Poverty	3.2	1.5	3.5	3.5	6.5	5.1	5.9	4.6
Basic Needs	7.5	4.1	8.1	7.7	12.7	11.5	11.8	10.5

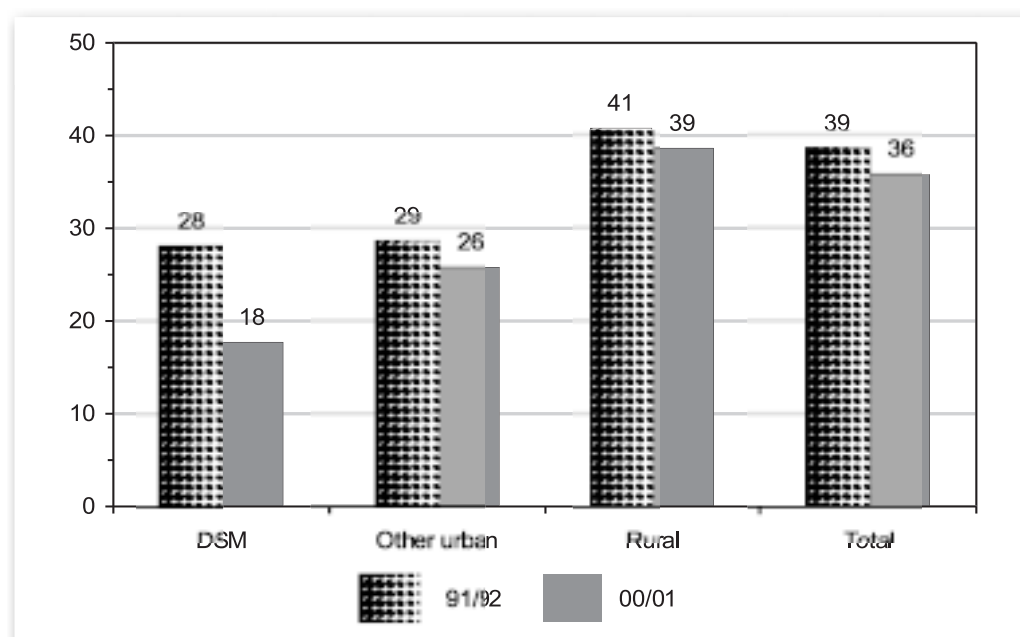
Note: The poverty estimates for 2000/01 are calculated using price adjustments calculated separately for each region.

FIGURE 7.1 PERCENTAGE OF THE POPULATION BELOW THE FOOD POVERTY LINE, 1991/92 AND 2000/01



21. Note that there is some evidence that consumption expenditure was under-reported in Dar es Salaam in the 1991/92 HBS. This would mean that poverty levels may in fact have been slightly lower in 1991/92 and the decline smaller. Nevertheless the large growth in mean real consumption levels in Dar suggests that it will indeed have seen the largest decline in poverty. Although the earlier analysis cited above attempted to adjust for this under-reporting in the 1991/92 data, this was not repeated in this analysis as it was difficult to assess its accuracy.

FIGURE 7.2 PERCENTAGE OF THE POPULATION BELOW THE BASIC NEEDS POVERTY LINE, 1991/92 AND 2000/01



Despite the large sample size, the decline in poverty is not large enough to be statistically significant, despite the significant increase in mean real consumption levels^{22 23}. Note also that these estimates provide a 'snapshot' for the year of the survey and will reflect any short-term factors that affect household income at that time. In particular, rural incomes may have been affected by the low level of rainfall and staple crop production in 2000, although this recovered in 2001 (see Appendix Figure B7.1).

Although the proportion of the population who are poor has declined, the absolute number of individuals who are poor increased during the 1990s because of population growth (Table 7.3). Using official population figures projected from the 1988 Census, which imply about 30 per cent growth in the population, some 11.4 million Tanzanians are below the basic needs poverty line. This compares with 9.5 million in 1991/92. Poverty remains an overwhelmingly rural phenomenon – about 87 per cent of the poor are located in rural areas, similar to the proportion in 1991/92.

22. The difference in significance is in part due to the very high level of within-cluster correlation estimated by STATA for the poverty measures (deff).

23. Note that a price adjustment for the 2000/01 data using the same approach as the 1991/92 (i.e. using just three price indexes for Dar es Salaam, other urban and rural areas) would also suggest that poverty has declined by a smaller amount (and for rural areas using the basic needs line, not at all) - see Appendix Table B7.2. However, other approaches would tend to have the opposite effect - for example, calculating one of the poverty lines using a temporal Fisher Index. For this reason, the estimates presented here are considered to be appropriate.

TABLE 7.3 DISTRIBUTION OF THE POOR IN TANZANIA

	Dar es Salaam		Other urban areas		Rural areas		Mainland Tanzania	
	91/92	00/01	91/92	00/01	91/92	00/01	91/92	00/01
Total population '000	1,313	1,845	3,094	4,405	20,154	25,650	24,561	31,900
Share of population	5.3	5.8	12.6	13.8	82.1	80.4	100.0	100.0
Number of poor:								
Food Poverty '000	179	138	464	581	4,656	5,233	5,305	5,965
Basic Needs '000	369	325	888	1,136	8,223	9,926	9,481	11,388
Percentage of poor:								
Food Poverty	3.4	2.3	8.7	9.7	87.8	87.7	100.0	100.0
Basic Needs	3.9	2.9	9.4	10.0	86.7	87.2	100.0	100.0

A comparison of income poverty levels by region is shown in Maps 7.1 and 7.2. The identification of the poorest regions depends to some extent on the poverty line that is used. However, for both measures the following regions consistently fall into the poorest four: Mara, Lindi, Mwanza and Singida. Pwani, Ruvuma and Shinyanga are also consistently among the poorest. The regions with consistently low levels of income poverty are Dar es Salaam, Mbeya and Tabora.

Regions with low average expenditure per capita are not necessarily always the poorest, since poverty levels also depend on the distribution of expenditure across households and the prices they face in each region. These prices vary substantially (Appendix Table C27).

The comparison of income poverty levels between regions should also be undertaken with caution. It is possible that measurement errors were more common in some regions than others and sampling errors are quite high (see Appendix Table C30). It is better to assess the status of each region by looking at a number of indicators, not just income poverty.

One such measure is the average proportion of expenditure that is used for food, the food share. This share is generally lower for households with higher incomes. Regions with a low food share include Dar es Salaam, Rukwa, Ruvuma and Mbeya. Regions with a high food share include Lindi, Tanga, Singida, Pwani, Arusha, and Kilimanjaro (Map 7.3).

A number of factors may affect the average food share in a region and there is a considerable scatter in the relationship between it and poverty (see Appendix Figure B7.2). However, where the two are consistent, we have more confidence in identifying richer and poorer regions. Dar es Salaam and Mbeya have both low levels of income poverty and a low average food share. Lindi and Singida have high levels of income poverty and a high food share. Pwani, Shinyanga and, to a lesser extent, Mara, also have somewhat higher than average food shares associated with higher poverty levels. However, a number of other regions do not fit the relationship. Mwanza and Ruvuma both have low food shares compared with their apparently high poverty levels. Tabora has a particularly low level of poverty

compared with food share. Tanga, Kilimanjaro and Morogoro also have relatively high food shares. This suggests that these regional poverty estimates should be treated with caution.

Information on regional variation in the social sector indicators described elsewhere in this report should also be taken into account in evaluating the status of the regions.

7.4 Inequality

It is also possible to examine the degree of inequality in consumption. Table 7.4 shows the Gini coefficients for 1991/92 and 2000/01. This measure summarises how equal or unequal an income or expenditure distribution is. Higher values indicate greater inequality. It is calculated on a per capita basis.

Inequality is highest in urban areas and lowest in rural areas. Income inequality has increased slightly over the decade, with the largest increase taking place in Dar es Salaam.

TABLE 7.4 GINI COEFFICIENTS

	Dar es Salaam	Other urban areas	Rural areas	Mainland Tanzania
1991/92	0.30	0.35	0.33	0.34
2000/01	0.36	0.36	0.33	0.35

Another measure of income inequality is the share of total consumption accounted for by different expenditure classes. In Table 7.5, individuals have been divided into five groups based on their level of consumption. The poorest fifth of the population accounts for just 7 per cent of total consumption expenditure, while the richest fifth accounts for 44 per cent.

This measure shows inequality to be highest in Dar es Salaam and lowest in rural areas. It also shows that inequality has generally increased over the decade, particularly in Dar es Salaam.

TABLE 7.5 PERCENTAGE SHARE OF CONSUMPTION EXPENDITURE BY QUINTILE

Quintile	Dar es Salaam		Other urban areas		Rural areas		Mainland Tanzania	
	91/92	00/01	91/92	00/01	91/92	00/01	91/92	00/01
Q1 - poorest	7.8	6.7	7.1	6.7	7.2	7.1	7.0	6.9
Q2	11.9	10.4	11.3	11.2	12.3	11.9	12.0	11.4
Q3	15.1	14.5	15.3	15.5	16.4	16.1	16.0	15.6
Q4	21.9	20.0	21.0	22.1	22.6	22.7	22.1	22.0
Q5 - richest	43.3	48.4	45.3	44.5	41.6	42.2	43.0	44.2
Ratio of Q5:Q1	5.6	7.2	6.4	6.6	5.8	5.9	6.1	6.4

7.5 Food Security

Food security is one dimension of poverty, assessing whether a household can meet its food needs and its vulnerability to shocks. While the food poverty estimates discussed above are a more direct measure of a household's ability to meet its food needs, the 2000/01 HBS also collected information on food security in a series of specific questions. These were not asked in the 1991/92 survey. They included questions about the usual number of meals per day consumed by the household and the number of days in the preceding week in which certain types of food were consumed.

Most households report that they usually consume either two or three meals per day (Table 7.6). In urban areas three meals is the norm. Respondents were also asked whether the household had had fewer meals than usual on any days in the preceding month. Respondents were most likely to report that they had had fewer in Dar es Salaam and least likely to report it in rural areas, in direct inverse to the distribution of poverty in Tanzania. The responses presumably reflect the expectation of more meals per day in urban areas.

TABLE 7.6 USUAL NUMBER OF MEALS PER DAY BY AREA (HBS 2000/01)

	Dar es Salaam	Other Urban areas	Rural areas	Mainland Tanzania
Usual number of meals per day:				
1	0.4	0.8	1.2	1.1
2	9.5	21.5	55.8	47.5
3	89.6	77.1	42.8	51.1
4	0.5	0.5	0.2	0.3
Total	100.0	100.0	100.0	100.0
Per cent reporting fewer than usual	37.1	28.3	27.6	28.3

The average number of days on which households had eaten certain foodstuffs show a pattern more in line with income poverty measures. The average number of days in which all types of high protein, and usually high cost, food was consumed was consistently highest in Dar es Salaam and lowest in rural areas (Table 7.7). Beans and other legumes were the most frequently consumed of the specified items and eggs the least.

TABLE 7.7 MEAN NUMBER OF DAYS OF CONSUMPTION OF SPECIFIED FOODS IN THE PRECEDING WEEK (HBS 2000/01)

	Dar es Salaam	Other Urban areas	Rural areas	Mainland Tanzania
Meat	2.27	1.81	1.24	1.39
Fish	2.05	2.19	1.93	1.98
Eggs	0.82	0.42	0.28	0.34
Milk or dairy products	1.75	1.62	1.62	1.63
Beans or other legumes	3.10	2.67	2.80	2.80

7.6 Conclusions

There has been an increase in household consumption over the 1990s. This increase was largest in urban areas and more modest in rural areas. Only in the population as a whole and in Dar es Salaam are these increases large enough to be statistically significant. There has also been a small increase in inequality, the largest increase being in Dar es Salaam.

The net effect of these trends has been a small decline in income poverty of about 3 percentage points over the 1990s. The decline has been largest in Dar es Salaam. The decline is not large enough to be statistically significant.

Some 36 per cent of Tanzanians now fall below the basic needs poverty line and 19 per cent below the food poverty line. The absolute number of people living in poverty has increased because of population growth. Based on official population projections, there are now 11.4 million Tanzanians below the basic needs poverty line, compared with approximately 9.5 million in 1991/92. Poverty remains overwhelmingly rural, with 87 per cent of the poor living in rural areas.

A POVERTY PROFILE

8.1 Introduction

This chapter looks at the relationship between income poverty and other characteristics of households and individuals. It looks at how far poverty is associated with a household's demographic structure and with the economic activities of its members. It also looks at the extent to which the distance to, and uptake of, basic social services is related to income poverty.

8.2 Poverty and household economic and demographic characteristics

The chances of a household being poor are usually related to its demographic structure and its economic activities. In this section, we look at how poverty levels vary according to the demographic structure and economic characteristics of the household. The tables present the percentage of individuals in each category who are poor according to the basic needs poverty line – the 'headcount ratio'. They show, in addition, the share of all the poor made up by individuals in that category – labelled the '% of the poor'. These two measures give a clear indication of whether a particular characteristic is associated with high levels of poverty and, if so, how much of a contribution this group makes to poverty in Tanzania.

These are simple descriptive relationships. Having a particular characteristic may be associated with poverty without necessarily causing poverty. Instead it could be an outcome of poverty, or both poverty and the characteristic may be due to association with another factor. Although the tables included in this section focus on characteristics that may contribute to causing poverty, it is not possible to assess their causal importance using these simple tabulations.

TABLE 8.1 DISTRIBUTION OF POVERTY BY HOUSEHOLD SIZE

Number of members	HBS 1991/92		HBS 2000/01	
	Headcount ratio	% of the poor	Headcount ratio	% of the poor
1	5.8	0.2	4.7	0.2
2	10.7	0.9	11.0	1.3
3	12.9	2.1	15.8	4.3
4	20.4	4.8	21.4	7.6
5	27.0	7.5	28.1	10.9
6	38.3	12.3	35.2	13.6
7	44.0	13.5	46.1	15.5
8	45.2	11.7	44.8	10.5
9	35.7	7.7	48.3	8.1
10 or more	57.2	39.2	56.8	27.9
Total	38.6	100.0	35.7	100.0

Larger households are more likely to be poor. The headcount ratio increases with household size in both surveys (Table 8.1). Over half of the individuals in households with ten or more members are poor, and these households contain 28 per cent of all the poor in Tanzania. This is somewhat less than in 1991/92 because the frequency of such large households has declined over the decade, as described in Chapter 2.

Large households will be poor in part because they tend to include larger numbers of children. Table 8.2 suggests that households with a higher proportion of dependants – that is, children under 15 years and adults of 65 years and over – are more likely to be poor. These households appear to have become more disadvantaged over the 1990s.

TABLE 8.2 DISTRIBUTION OF POVERTY BY PROPORTION OF DEPENDANTS

Proportion of dependants	HBS 1991/92		HBS 2000/01	
	Headcount ratio	% of the poor	Headcount ratio	% of the poor
0.00 to 0.25	27.9	10.6	19.2	7.5
0.25 to 0.50	41.2	50.0	33.8	41.8
0.50 to 0.75	40.0	37.1	42.7	47.0
0.75 to 1.00	32.9	2.2	37.5	3.7
Total	38.6	100.0	35.7	100.0

Note: Dependants are individuals aged under 15 and 65 and above.

While the 1991/92 HBS found male-headed households to have slightly higher poverty levels, the 2000/01 HBS suggests that male and female-headed households are now equally likely to be poor (Table 8.3). Male-headed households still contain over 80 per cent of the poor because they are more common than female-headed households, although the proportion of the poor in female-headed households is now higher than in 1991/92 because they have increased in frequency.

TABLE 8.3 DISTRIBUTION OF POVERTY BY SEX OF HOUSEHOLD HEAD

Sex of Head	HBS 1991/92		HBS 2000/01	
	Headcount ratio	% of the poor	Headcount ratio	% of the poor
Male	39.1	87.7	35.8	81.4
Female	35.3	12.3	35.3	18.6
Total	38.6	100.0	35.7	100.0

Households headed by individuals who are not economically active have high levels of poverty²⁴. This includes the unemployed and individuals who are unable to work because of age, disability or illness. Individuals living in households whose head works in agriculture are also more likely than average to be poor. Some 40

24. Although the headcount level is higher for heads that report working unpaid in a family business, these cases are rare and the sample size is small.

per cent of individuals in these households are poor and they constitute 81 per cent of the poor, because agriculture is such a common occupation. The employed and self-employed have lower levels of poverty than average.

Over the decade, households headed by the employed and self-employed appear to have seen appreciable declines in poverty levels²⁵. Government employees have seen a smaller decline than other employees. Farming households have seen a small decline. Poverty has increased amongst the economically inactive

TABLE 8.4 DISTRIBUTION OF POVERTY BY MAIN ACTIVITY OF THE HOUSEHOLD HEAD

Activity of the Head	HBS 1991/92		HBS 2000/01	
	Headcount ratio	% of the poor	Headcount ratio	% of the poor
Farming/livestock/fishing	42.3	85.7	39.9	80.8
Employee - government	18.6	3.3	15.3	1.8
Employee - parastatal	12.2	1.1	8.1	0.3
Employee - other	29.8	2.0	20.2	3.0
Self employed with employees	31.7	4.9	19.1	1.4
Self employed without employees	24.5	0.2	22.5	5.0
Unpaid family helper in business	--	0.0	57.4	1.5
Housewife / household chores	14.7	0.1	27.7	0.7
Not active – all reasons	41.8	2.7	45.1	5.5
Total	38.6	100.0	35.7	100.0

Amongst households depending on agriculture, those who depend on the sale of livestock are particularly likely to be poor (Table 8.5). Selling cash crops, rather than food crops, as the main source of cash income appears to have limited benefits, with cash crop dependent households having only slightly lower poverty levels. Households with formal sector incomes – wages and salaries or business income – have the lowest levels of poverty, in agreement with Table 8.4.

TABLE 8.5 DISTRIBUTION OF POVERTY BY MAIN SOURCE OF CASH INCOME OF THE HOUSEHOLD (HBS 2000/01)

Main Source of Cash Income	Headcount ratio	% of the poor
Sales of food crops	40.6	46.9
Sales of livestock	59.1	7.2
Sales of livestock products	33.3	1.4
Sales of cash crops	38.6	20.5
Business income	24.0	8.4
Wages or salaries in cash	14.9	3.6
Casual cash earnings	32.8	4.9
Cash remittances	35.2	2.3
Fishing	28.3	1.5
Other	34.0	3.3
Total	35.6	100.0

25. Although the decline in poverty levels appears to be largest for the self-employed with employees, the trends in the frequency of this occupation suggest that there may have been some misclassification in the 1991/92 survey (see Chapter 5). The high levels of poverty in this group in 1991/92 also suggest this. The self-employed as a whole do seem to have benefited from a decline in poverty levels, however.

Households without any employed members are particularly likely to be poor (Table 8.6). Many of these will be households that depend exclusively on agriculture. Beyond this, there is little relationship between the number of employed members in the household and poverty levels.

Poverty levels are strongly related to the educational level of the head (Table 8.7). Individuals in a household where the head has no education are over four times more likely to be poor than individuals in household with a head educated above primary level. These differences have widened over the 1990s – poverty levels have increased for households with uneducated heads whereas they have declined for other groups (Figure 8.1).

TABLE 8.6 DISTRIBUTION OF POVERTY BY NUMBER OF EMPLOYEES

Number of Employees	HBS 1991/92		HBS 2000/01	
	Headcount ratio	% of the poor	Headcount ratio	% of the poor
None	42.5	82.4	40.3	80.5
1	23.5	10.2	23.8	12.9
2	33.1	5.2	26.2	4.8
3	39.0	1.6	24.9	1.0
4 or more	31.2	0.6	23.4	0.7
Total	38.6	100.0	35.7	100.0

Note: Employees includes both employed and self-employed members.

TABLE 8.7 DISTRIBUTION OF POVERTY BY EDUCATION OF THE HOUSEHOLD HEAD

Education of the Head	HBS 1991/92		HBS 2000/01	
	Headcount ratio	% of the poor	Headcount ratio	% of the poor
None	45.6	32.2	51.1	36.9
Adult education only	51.0	9.8	46.4	5.2
Primary only	36.4	56.0	31.7	55.1
Above primary	13.2	2.1	12.4	2.8
Total	38.6	100.0	35.7	100.0

The poor are often further from economic and other facilities than households that are not poor – for example from public transport, a market and firewood (Figure 8.2). However, the average distance is not always higher for the very poor than for the poor, and the relationship does not hold for all facilities²⁶.

26. Nor always in both surveys for a particular facility - see Appendix Table B8.1. This comparison uses the approach outlined below in Section 8.3.

FIGURE 8.1 PERCENTAGE POOR BY EDUCATION OF THE HOUSEHOLD HEAD (HBS 1991/92 & 2000/01)

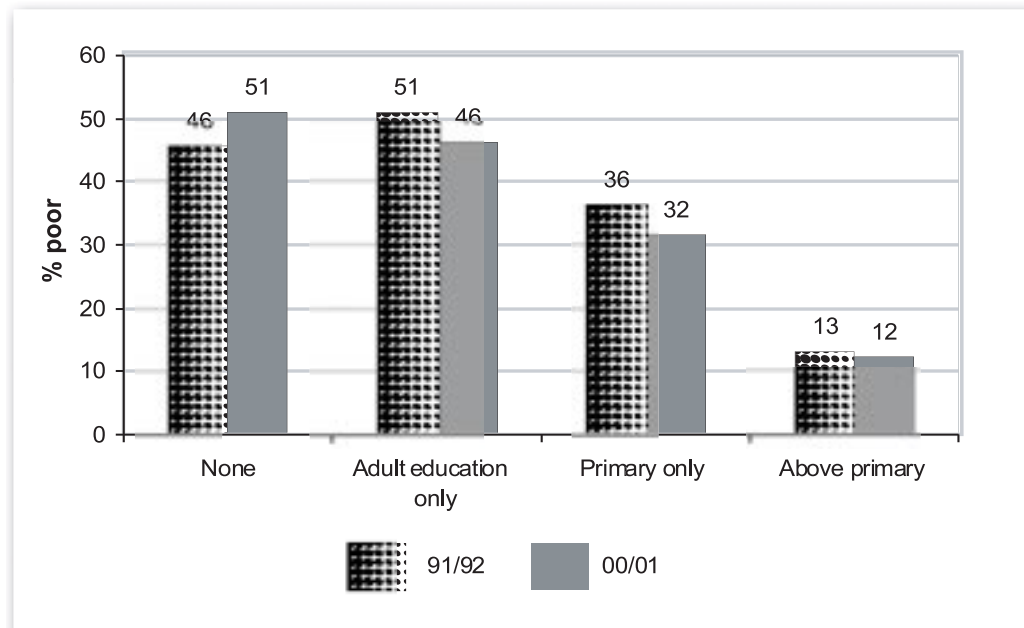
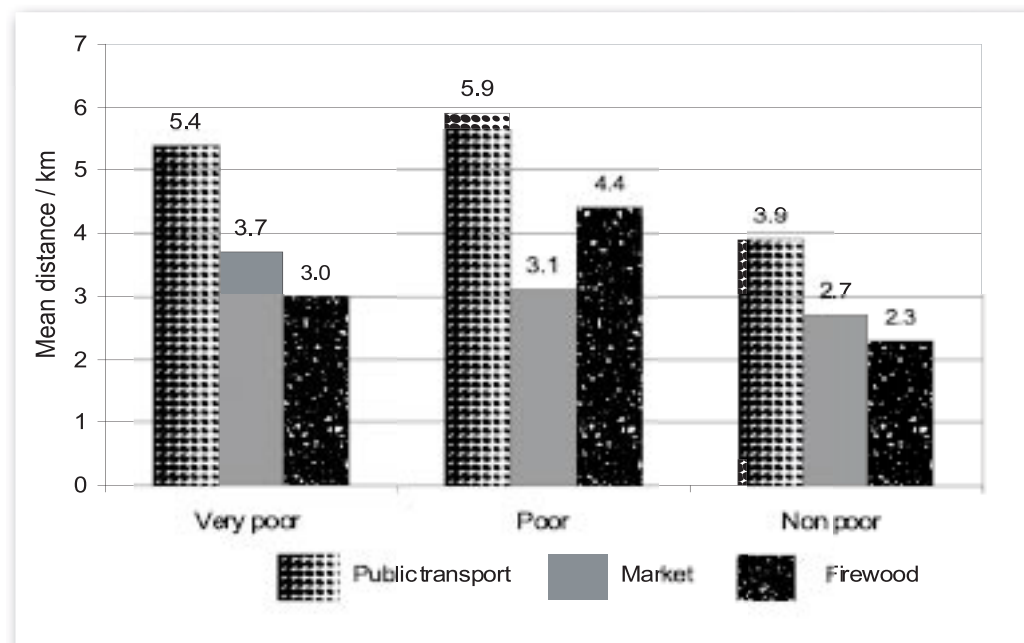


FIGURE 8.2 MEAN DISTANCE TO SELECTED FACILITIES BY POVERTY STATUS (HBS 2000/01)

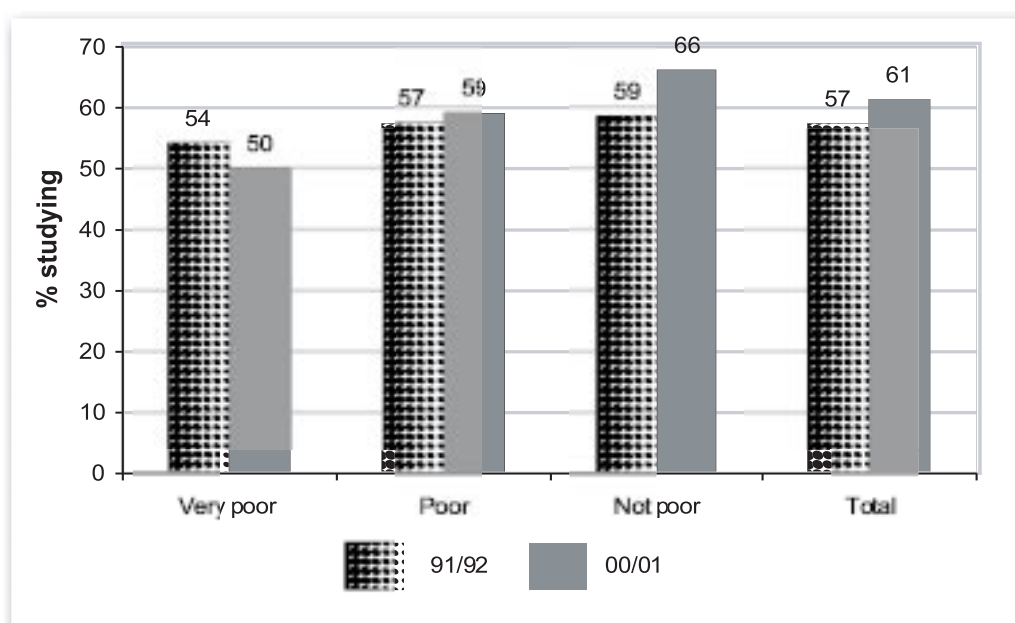


8.3 Poverty and the social sectors

This section examines the association between household poverty status and the priority social sectors – education, health and water. Instead of showing the percentage of individuals who are poor for a given characteristic, the tables show how social indicators vary between poor households and those that are not poor. Amongst the poor, the very poor are identified as a separate category. These are households that fall below the food poverty line, while poor households are below the basic needs poverty line but above the food poverty line. The remaining households are not considered poor.

Poor households are less likely to send their children to school than other households. Two-thirds of the children aged seven to thirteen years in households that are not poor are attending school, compared with only half the children in the poorest households (Figure 8.3). Furthermore, the enrolment of children in the poorest households actually appears to have declined over the 1990s, from 54 to 50 per cent, while it has increased slightly for the poor and more substantially for the households that are not poor.

FIGURE 8.3 PERCENTAGE OF CHILDREN STUDYING BY POVERTY STATUS AND YEAR (HBS 1991/92 & 2000/01)



Similar trends are seen in both urban and rural areas. In all cases, the increase in enrolment of children from households that are not poor is largest, while the enrolment of children from poor households has either declined (as in Dar es Salaam and rural areas) or it has seen only a small increase (Table 8.8). The poor, and particularly the rural poor, have fallen behind while more advantaged households have managed to improve their children's schooling²⁷.

TABLE 8.8 PERCENTAGE OF CHILDREN AGED 7-13 YEARS WHO ARE STUDYING BY POVERTY STATUS

	1991/92			2000/01		
	Very poor	Poor	Non- poor	Very poor	Poor	Non- poor
Total	54.4	57.3	58.6	50.1	59.2	66.3
Dar es Salaam	59.2	69.7	66.1	56.3	69.6	79.9
Other urban	57.4	65.7	64.9	60.2	68.1	81.9
Rural	53.9	55.7	56.9	48.8	57.7	62.2

The frequency of self-reported illness in adults shows very little relationship with poverty (Table 8.9). In children, the relationship is the opposite of what might be expected, with higher levels of illness reported in households that are not poor; this finding persists even if urban and rural areas are considered separately. It may be that these findings in part reflect different perceptions of illness in the different groups.

TABLE 8.9 PERCENTAGE OF INDIVIDUALS REPORTING ILLNESS OR INJURY BY POVERTY STATUS (HBS 2000/01)

Age group	Very poor	Poor	Not poor
Children < 15 years	21.4	23.3	26.3
Adults	29.8	28.3	28.9

When they are ill, the poor are slightly less likely to consult a health provider than the rest of the population (Table 8.10). The poor are less likely to use a government provider and more likely to use a traditional healer. As a result, the poor will benefit somewhat less than the rest of the population from government spending on health care, although differences in the use of services are not large²⁸.

27. Neither are these findings an artefact of the way in which poverty is measured. Between the two surveys, the proportion of children attending school declines in households in which the head has no education while it increases for households where the head has higher levels of education, for example (see Appendix Table B8.3).

28. It is not possible to assess whether there are differences in the cost of the services received by the different groups, a factor that sometimes introduces larger differences in the benefits received by different groups.

TABLE 8.10 FREQUENCY AND SOURCE OF HEALTH CONSULTATIONS BY POVERTY STATUS (HBS 2000/01)

	Very poor	Poor	Not poor
% who consulted a health provider	68.5	62.1	70.4
Source of consultation for individuals who consulted any provider:			
Government:			
Public dispensary/hospital	39.1	39.4	42.8
Regional hospital	2.1	2.4	3.5
Community health centre	9.2	11.4	10.4
Private modern:			
Private dispensary/hospital	22.4	21.0	22.6
Private doctor/dentist	8.9	5.3	6.8
Missionary hospital/dispensary	6.8	9.6	9.8
Other:			
Traditional healer	17.7	19.8	13.2
Pharmacy/chemist	1.3	1.6	3.0
Other	3.2	1.5	1.3
% who consulted a government source	49.5	52.4	55.7

Poor households are more likely to depend on an unprotected source of drinking water, and less likely to have piped water, than households that are not poor (Table 8.11). These differentials appear to be larger than in the 1991/92 survey. However, an examination of the data separately for urban and rural areas suggests that we cannot be confident that there has been a genuine widening in inequalities in the use of improved water sources over the decade.

The poor are less likely to have use of a toilet or to have an electricity connection than other households.

TABLE 8.11 HOUSEHOLD FACILITIES BY POVERTY STATUS

	1991/92			2000/01		
	Very poor	Poor	Non- poor	Very poor	Poor	Non- poor
Water supply:						
Piped	37.5	32.8	36.1	28.6	30.0	43.0
Other protected	13.3	11.3	9.0	16.9	18.1	15.7
Unprotected	47.8	54.4	52.6	54.4	50.9	40.2
Other	1.4	1.4	2.2	0.2	0.9	1.2
Total	100.0	100.0	100.0	100.0	100.0	100.0
Per cent with any toilet	91.5	90.8	93.5	88.6	90.9	94.1
Per cent with electricity	4.0	4.9	10.2	2.9	5.4	12.1

29. The distribution of water source by poverty status in the 1991/92 rural data is so odd that it suggests there may be some problem in the measure (see Appendix Table B8.4).

30. This is true even when urban and rural populations are considered separately (see Appendix Table B8.4).

The 2000/01 HBS shows that the distance to a health centre and drinking water is somewhat higher for poor households than for households that are not poor, although differences in the means are not large (Table 8.12). The distance to a primary school does not show a clear relationship with poverty. Overall, there are not large differences in the distance to most basic social services by poverty status. The 1991/92 data present a similar picture.

TABLE 8.12 MEAN DISTANCE TO KEY SOCIAL SERVICES BY POVERTY STATUS (KM)

	1991/92			2000/01		
	Very poor	Poor	Non- poor	Very poor	Poor	Non- poor
Primary school	1.4	1.4	1.4	1.7	2.1	1.7
Dispensary/ health centre	4.4	4.9	4.2	4.3	4.6	3.7
Drinking water	1.2	1.2	1.3	1.7	1.6	1.4

8.4 Conclusions

This chapter has shown that households with a large number of members, and a large number of dependants, have high levels of poverty, as do households with a head who is economically inactive. Households that depend on agriculture also have high levels of poverty; amongst these, those that depend on the sale of livestock are particularly likely to be poor.

Poverty levels are strongly related to education. Over half of the individuals in households where the head has no education are poor, compared with only 12 per cent in households where the head has been educated above primary level. The sex of the household head, by contrast, shows no relationship with poverty in the 2000/01 data, though male-headed households were found to have a higher level of poverty in 1991/92.

Not all groups have benefited equally from the 1990s. Poverty has declined most amongst the employed and self-employed, particularly employees in the private sector. In contrast, poverty appears to have increased in the economically inactive, the uneducated and in households with large numbers of dependants.

This chapter also looked at the relationship between social sector indicators and poverty. Poor households were much less likely than other to send their children to school. These differentials have increased over the decade – while the enrolment of children in households that are not poor has increased, enrolment has fallen for the poorest households. In the future, these children may then go on to be uneducated household heads, which are particularly likely to be poor, creating a cycle of poverty that the education system has failed to break.

The poor do not report higher levels of illness and injury; in children the reverse is the case. It may be that this is due to different perceptions of illness in the different groups. When they are ill, the poor are somewhat less likely to see a health provider, including a government health provider. This means that they will benefit less from public expenditure on health than the rest of the population, although the differences in the use of health services are not large.

Poor households are more likely to depend on an unprotected source of drinking water, and less likely to have piped water, than households that are not poor. They are also less likely to use a toilet and to have an electricity connection.

On the whole, there do not appear to be large differences between poor households and the rest of the population in the distance to basic social services. Primary schools and health centres are reasonably equitably distributed. The poor have further to travel to drinking water, but differences in the average distances are not large.

HOUSEHOLD INCOME

9.1 Introduction

In addition to collecting information on consumption and expenditure, the Household Budget Surveys also collected information on household income. The main focus of the analysis presented in this report has been on income and non-income poverty indicators. Consumption expenditure information is a more reliable basis for this analysis. For completeness, information on reported income is presented in this chapter for the 2000/01 HBS.

9.2 Household Income

The 2000/01 HBS collected information on household income in two ways. First, households were requested to record in the diary all the income coming into the household during the survey month, together with an indication of its source and the household member who received it. In addition, a separate schedule was used to record annual household income at the end of the survey month. Each approach will have its own benefits and limitations. In this chapter, we present information derived from the monthly diary, which may provide more comprehensive information on the range of sources in the population as a whole.

Households recorded income received from a wide variety of types and sources. It included income from employment and self-employment, including payment in kind. It distinguished income derived from agricultural sources and included the value of household consumption of home-produced items. It also included information on transfers received. The information was collected as gross revenue for some of the sources. For this reason, average per capita receipts may be well above per capita expenditure.

While reported income and expenditure per capita would not be expected to be equal for each household, a correlation between the two would be expected. This is observed, with a correlation coefficient of 0.596 between income and expenditure per adult equivalent (significant at the 1% level).

TABLE 9.1 MEAN PER CAPITA HOUSEHOLD MONTHLY INCOME BY SOURCE (TSHS, HBS 2000/01)

Source	Dar es Salaam	Other Urban	Rural	Mainland Tanzania
Employment in cash	15,251	7,936	1,261	2,982
Employment paid in kind	218	156	75	94
Non-farm self-employment	20,868	14,026	3,722	6,138
Agricultural income	431	3,923	7,387	6,510
Producers co-operatives	316	195	33	72
Interest & dividends	21	59	7	15
Rent received	408	365	59	122
Transfers	1,041	1,058	770	826
Other receipts	2,213	2,709	821	1,169
Total	40,767	30,426	14,134	17,928

Table 9.1 shows mean per capita receipts by source. It presents monthly income per capita across all household members by summing income across all members and dividing by the total number of members. Per capita income is highest in Dar es Salaam, at nearly 41,000 TSh. It is lowest in rural areas, at 14,134 TSh.

The importance of each source of income is indicated most clearly by examining the share of household income that it contributes (Table 9.2). Wages and other income from employment provide 41 per cent of household income in Dar es Salaam and 24 per cent in other urban areas. Income from self-employment represents almost 30 per cent of income in Dar es Salaam, and 33 per cent in other urban areas. In rural areas, 60 per cent of income is from agricultural sources; the remaining 40 per cent shows the importance of income from outside the households' own farms even in rural areas. Transfers are appreciable in all areas, but particularly in Dar es Salaam³¹.

TABLE 9.2 PERCENTAGE OF HOUSEHOLD INCOME BY SOURCE (HBS 2000/01)

	Dar es Salaam	Other Urban	Rural	Mainland Tanzania
Employment in cash	41.1	24.1	7.8	12.0
Employment paid in kind	0.6	0.4	0.5	0.5
Non-farm self-employment	29.1	32.8	17.8	20.6
Agricultural income	1.9	19.6	60.4	51.4
Producers co-operatives	0.6	0.4	0.3	0.4
Interest & dividends	0.2	0.1	0.1	0.1
Rent received	1.8	1.2	0.2	0.5
Transfers	12.1	10.1	7.1	7.8
Other receipts	12.6	11.1	5.7	6.9
Total	100.0	100.0	100.0	100.0

It is also possible to examine the number of household income sources, differentiating each type of source recorded in the monthly diary. For example, two individuals earning a salary would count as one type of source – wages and salaries. Rural households stand out for the diversity of income sources that they depend on (Table 9.3). In contrast, over one-third of households in Dar es Salaam depend on a single type of source³².

31. Note that this table presents the mean of each household share, so the apparent importance of each source is quite different from Table 9.1. For example, the share of income from transfers is high because a significant fraction of households depend almost entirely on transfers.
32. Although the 1991/92 income data was not analysed, a preliminary examination suggests that the diversity of income sources has increased substantially over the decade, particularly in rural areas (see Appendix Table B9.3).

TABLE 9.3 DISTRIBUTION OF NUMBER OF INCOME SOURCES PER HOUSEHOLD (HBS 2000/01)

Number of sources	Dar es Salaam	Other Urban	Rural	Mainland Tanzania
1	37.0	20.3	5.4	9.3
2	19.7	18.9	12.9	14.1
3	17.6	19.3	16.8	17.2
4	13.1	13.8	19.3	18.1
5	7.3	10.7	16.0	14.8
6	2.5	7.6	11.8	10.7
7	1.7	4.2	8.0	7.1
8	0.7	2.7	4.2	3.8
9+	0.4	2.4	5.7	4.9
Total	100.0	100.0	100.0	100.0

Households with a larger number of income sources tend to have higher per capita incomes (Table 9.4). This is seen clearly in the median values, which show such a pattern in both urban and rural areas. This pattern is also strongly shown in the mean incomes for rural areas, although it is not seen in the means for urban areas.

TABLE 9.4 MEAN AND MEDIAN MONTHLY INCOME PER CAPITA BY NUMBER OF HOUSEHOLD INCOME SOURCES (TSHS, HBS 2000/01)

Number of income sources	Dar es Salaam		Other urban areas		Rural areas		Mainland Tanzania	
	Mean	Median	Mean	Median	Mean	Median	Mean	Median
1-3	42,966	13,330	30,600	13,075	10,980	5,250	18,245	6,530
4-6	32,556	20,375	30,391	14,167	14,497	7,812	16,701	8,412
7+	49,894	27,400	29,447	17,450	19,359	12,090	20,502	12,843
Total	40,767	16,473	30,426	13,810	14,134	7,513	17,928	8,328

Examining mean income calculated per earner, rather than averaging total household income across all household members, makes it possible to look at how income varies with the characteristics of the individual who generates the income. It should be remembered that these averages are calculated across all individuals who report any income from any source. They make no adjustment for the amount of time spent generating that income; neither do they include in the denominator individuals who reported no income for the month. They will also be affected by some of the limitations discussed above, particularly the inclusion of gross income for some sources.

More educated individuals have much higher average earnings than the least educated (Table 9.5). Individuals with tertiary education earn 3.9 times what individuals with no education earn. These differentials are largest in Dar es Salaam – where earnings differ by a factor of 10 – and are lowest in rural areas.

TABLE 9.5 MEAN MONTHLY INCOME PER EARNER BY EDUCATIONAL LEVEL (TSHS, HBS 2000/01)

Educational level	Dar es Salaam	Other Urban	Rural	Mainland Tanzania
None	17,901	20,815	16,732	17,007
Primary / adult education	57,296	45,390	25,079	28,669
Secondary	86,506	110,606	50,601	75,425
Tertiary	178,968	116,689	33,994	66,612
Total	69,038	51,163	22,660	27,463

Men's average earnings are around 1.9 times higher than women's average earnings (Table 9.6). The differences are largest in urban areas, particularly Dar es Salaam. They are smaller in rural areas, where men's average earnings are about 1.7 times that of women.

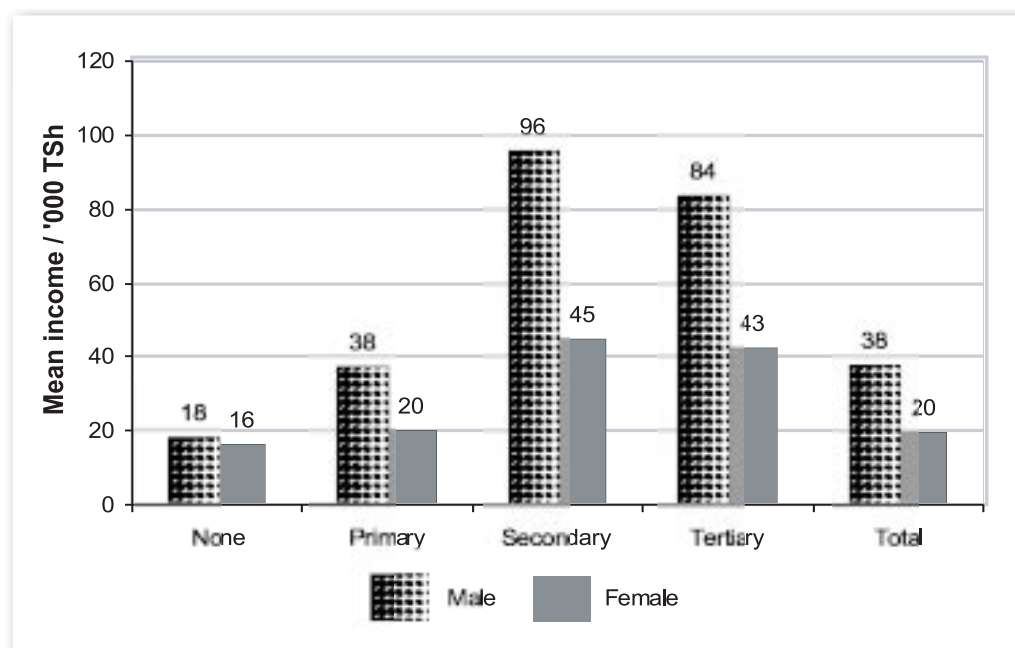
TABLE 9.6 MEAN MONTHLY INCOME PER EARNER BY SEX (TSHS, HBS 2000/01)

	Dar es Salaam	Other Urban	Rural	Mainland Tanzania
Male	96,069	73,406	29,212	36,758
Female	40,053	32,451	17,148	19,577
Total	69,038	51,163	22,660	27,463

These differences in income will reflect a number of factors. One of them may be the level of participation in the labour market, since some of the women may not work full-time because of household responsibilities. Another will be education. More educated individuals have higher earnings and men have higher levels of education than women.

However, it is clear that educational differences alone do not explain much of the difference between men and women. Men's income remains above women's even when we allow for their levels of education. Differences generally increase with educational level (Figure 9.1).

FIGURE 9.1 MEAN INCOME PER EARNER BY SEX AND EDUCATIONAL LEVEL ('000 TSHS, HBS 2000/01)



Note: Source table in appendix.

9.3 Conclusions

Limited analysis of the household income data was undertaken because the main objective of this report has been to measure poverty indicators. Reported income is frequently an unreliable measure of welfare. It was shown to correlate reasonably well with the expenditure data, however.

The data show the predominance of wages and self-employment in urban areas, particularly Dar es Salaam. However, even in rural areas some 40 per cent of income comes from sources outside the households' own farm production. Rural households depend on a much wider variety of income sources than do urban households. This diversification seems to be an important means of raising incomes in rural areas, where households with more sources of income have higher incomes.

There are large differences in the income earned by the most and least educated. These differences are particularly large in Dar es Salaam, where the most educated earn ten times the average income of individuals without any education. There are also substantial differences between the average incomes of men and women. Men earn around 1.9 times what women earn. While these differences will reflect a number of factors, they remain even allowing for the differences in education between men and women. In fact, sex differences in average earnings are larger in the more educated.

10

CONCLUSIONS

This report has presented the results of the 2000/01 Household Budget Survey. The focus of the analysis has been on indicators for poverty monitoring, both to provide a set of baseline measures for the future and to assess trends over the 1990s. It has examined a range of non-consumption measures, including those covering the priority sectors of education, health and water. It has also looked at household consumption and income poverty. This chapter outlines some of the main findings.

Households and Housing Conditions

There has been a substantial increase in the proportion of households headed by women, now making up 23 per cent of all households. Female-headed households are particularly common in the urban areas excluding Dar es Salaam. There has also been a decline in average household size over the 1990s, from 5.7 to 4.9 persons. As a result there has been a decline in the density of household occupation, except in Dar es Salaam.

Most inhabited buildings are constructed of natural, locally available materials. However, there has been an increase in the proportion of households living in dwellings built with 'modern' materials – concrete, stone, cement and metal. Although the improvements have tended to be larger in urban areas, they are also observed in rural areas.

Most households in Tanzania report using a toilet; over 90 per cent have a toilet even in rural areas. There has been no change in this measure over the decade.

Only 10 per cent of Tanzanian households are connected to the electricity grid. Coverage has increased in urban areas but has shown little change in rural areas.

There has been a decline in the distances between households and a number of important services – including markets, shops and public transport. However, the average distance to a primary court and to a primary cooperative society appears to have increased. Facilities are nearby in most urban areas, but distances can be more substantial in rural areas. The average rural household is over 37 kilometres from a bank and 18 kilometres from a police post, for example.

The ownership of many consumer goods has increased over the 1990s. Dar es Salaam has seen particularly large increases in the ownership of electrical goods. While households in urban areas own more items than rural households, a number of goods that do not require mains electricity show an increase in ownership in both urban and rural areas.

Education

Many adults in Tanzania have not been educated: one quarter have had no education and some 29 per cent are illiterate. Rural women have particularly missed out on education, 41 per cent being illiterate. Improvements in adults' level of education over the decade have been limited.

Education in adults reflects past schooling. The HBS also provides information on the recent performance of the education system by looking at children's schooling. It shows that 59 per cent of seven to thirteen-year-olds were enrolled in Standards I-VII in 2000/01. Enrolment levels are substantially higher in urban areas than in rural areas – 71 per cent compared to 56 per cent. Girls have slightly higher enrolment ratios than boys, although this is partly because the analysis focussed on primary-age children. The HBS data suggest that boys are more likely to stay in school at older ages. The gap between boys and girls appears to have narrowed during the 1990s.

There are many over-age children in primary schools. This is because they often enter school late, particularly in rural areas. As a result, many children are also well below the class that they should be in according to their age. Just five percent of 14 to 17-year-olds are enrolled in secondary school.

There have been modest increases in children's participation in education over the decade, with a rise of about three percentage points in the proportion of seven to thirteen-year-olds reporting studying. However, the school system has not met the needs of the most disadvantaged in Tanzania during this period. While participation levels have increased appreciably in urban areas and amongst richer households, they have increased by only a small amount in rural areas and have declined amongst the poorest households. Since adults' incomes are strongly related to their education, the risk of sustaining a cycle of deprivation is clear.

Even in rural areas, the distance to primary schools does not appear to present a large problem for many households. Almost two-thirds of Tanzanian households are within two kilometres of a primary school, although the average distance has increased slightly over the decade. Secondary schools are much farther; a quarter of rural households reported being over 20 kilometres from a secondary school.

Health

The 2000/01 HBS collected a good deal of information on health; this was not collected in the 1991/92 survey. It showed a typical age-pattern of morbidity, in which children under five and older adults were most likely to have been ill or injured in the four weeks preceding the survey. Overall, rural areas have the highest levels of illness, though children under five were most likely to be reported as ill in Dar es Salaam. Women reported more illness than men, though in children under five boys were more often reported ill than girls. By far the most commonly reported complaint in both children and adults was fever/malaria.

Over two-thirds of individuals who had been ill reported that they had consulted a health-care provider. Even in rural areas, consultation levels were high. Over half of the individuals who consulted a provider used a government service, although the private sector is important even in rural areas. Users were more likely to report dissatisfaction with government providers than with private providers.

The poor do not report higher levels of illness and injury than wealthier households; in children the reverse is the case. It may be that this is due to different perceptions of illness in the different groups. When they are ill, the poor are somewhat less likely to see a health-care provider, including a government provider.

Primary health care facilities are reasonably close to most households. Even in rural areas, over 90 per cent of households reported being within 10 kilometres of a dispensary or health facility. The average distance to these facilities appears to have declined slightly over the decade.

Drinking Water

Urban populations have better drinking water supplies than rural areas. Over half of rural households depend on an unprotected supply, while over three quarters of urban households use piped water of some kind. Rural households must also travel further to their supply, slightly over half of them being one kilometre or more from their drinking water source.

Poor households are more likely to depend on an unprotected source of drinking water, and less likely to have piped water, than households that are not poor. The average distance to drinking water is also higher for them.

Urban and rural populations have seen quite different trends in drinking water supplies over the 1990s. There has been an increase in the proportion of rural households using piped or protected supplies, while there has been a decline in the proportion of urban households with water piped to the dwelling.

The trends in distance to drinking water supplies are puzzling. There appears to have been an increase in households reporting a source within one kilometre and also an increase in households reporting a source more than 6 kilometres away.

Economic Activities

Households have diversified their economic activities. Although Tanzanians continue to be largely dependent on agriculture, non-agricultural activities have become increasingly important during the 1990s. Some 70 per cent of households are headed by an individual who works in agriculture or fishing, compared with 75 per cent in 1991/92. A decline in government and parastatal employment and a rise in private-sector and self-employment are also apparent, particularly in urban areas. Women have seen the largest reductions in agricultural activity whereas men have been particularly affected by the changes in employer.

Some 62 per cent of children aged five to fourteen years undertake some form of work, usually combined with study. Girls are more likely than boys to work.

Households were asked to report their main source of cash income. Some 62 per cent of households reported that the sale of agricultural products was their main source, compared with 67 per cent in 1991/92. Food crops remain the single most important source; the importance of cash crops has declined.

Despite the overall importance of agriculture in rural areas, an analysis of rural household income reported in the monthly diary shows that some 40 per cent comes from sources outside their own farm production. Rural households also depend on a much wider variety of income sources than do urban households. This diversification seems to be an important means of raising rural incomes.

There are large differences in the income earned by the most and least educated; individuals with a tertiary education have almost four times the income of the least educated. These differences are particularly large in Dar es Salaam. There are also substantial differences between the average incomes of men and women, which persist even when an allowance is made for their different levels of education.

There is very limited uptake of banking or other savings facilities, particularly in rural areas. Even informal savings groups are rare there. The use of banking and savings groups has declined over the 1990s.

Household Consumption and Income Poverty

Consumption is highest in Dar es Salaam, at nearly 22,000 TShs per person per month, and lowest in rural areas where it is only 8,538 TShs. Consumption has increased by around 17 per cent in real terms between 1991/92 and 2000/01. The proportion of expenditure on food has also declined, as would be expected if real incomes have risen.

Both urban and rural areas have seen an increase in consumption and a fall in the food share. However, there has also been a substantial widening of the gap between urban and rural areas, as consumption levels have risen most in Dar es Salaam and least in rural areas. The share of expenditure on food shows a correspondingly larger fall in Dar es Salaam and a smaller fall in rural areas. There has also been a small increase in inequality, the largest rise being in Dar es Salaam.

The net effect of these trends has been a small decline in income poverty, about 3 percentage points over the decade. Some 36 per cent of Tanzanians now fall below the basic needs poverty line and 19 per cent below the food poverty line. The absolute numbers in poverty have increased because of population growth and there are now 11.4 million Tanzanians below the basic needs poverty line. Poverty remains overwhelmingly rural, with 87 per cent of the poor living in rural areas.

The interpretation of these findings is complicated by the large sampling errors that surround the estimates, despite the large sample size in 2000/01. The increase in real consumption levels, using the restricted measure that forms the basis for the poverty estimates, is significant at the 5 per cent level only in the population as a whole and in Dar es Salaam. The decline in poverty levels is not statistically significant, although it is difficult to capture the full complexity of the sample design in undertaking the significance tests.

Poverty levels vary with household characteristics. Households with a large number of members, and a large number of dependants, have high levels of poverty, as do households with a head who is economically inactive. Households that depend on agriculture also have high levels of poverty; amongst these, those that depend on the sale of livestock are particularly likely to be poor.

Poverty levels are strongly related to education. Over half of the individuals in households where the head has no education are poor, compared with only 12 per cent where the head has been educated above primary level.

Poverty has declined most amongst the employed and self-employed, particularly employees in the private sector. In contrast, poverty appears to have increased in the economically inactive, the uneducated and in households with large numbers of dependants.

Conclusions: Poverty and Welfare in Tanzania

The 2000/01 Household Budget Survey provides information on a wide range of poverty indicators. These were presented for the national population and were examined according to a number of key characteristics – place of residence and sex, particularly.

Unsurprisingly, the 2000/01 HBS confirms that income poverty is high and that many social indicators are poor in Tanzania. It has also shown large differences between groups. The most consistent of these is between the urban and rural populations. At one extreme, Dar es Salaam is substantially better off than the rest of the population on almost all measures. Housing materials, electrification, ownership of consumer goods, education and water supplies are better in Dar es Salaam than elsewhere. The average expenditure per person is twice the national average and income poverty is about half as common as in the population as a whole.

Most indicators are also better than average in other urban areas, while rural households are usually much poorer than urban households. They are less likely to live in 'modern' housing, to have a connection to the electricity grid and to own consumer goods. They depend on poorer quality drinking water and travel further to reach it. Adults have much lower levels of education and their children are less likely to attend school. The rural population has the lowest average expenditure and the highest level of income poverty. The need to focus poverty reduction in rural areas remains compelling.

Regional differences are more complex and vary to some degree with the indicator that is examined. Caution is also required because sampling errors are larger. In addition to Dar es Salaam, the regions that are commonly better off in terms of housing conditions and facilities are Kilimanjaro and Mbeya, while Shinyanga, Singida, Tabora, Pwani and Lindi tend to be less well off. Distances to health and education facilities do not show the same patterns. The educational level of adults, and school enrolment in children, are both high in Dar es Salaam, Kilimanjaro and south-west Tanzania. They are low in Shinyanga, Lindi and Pwani. Lindi, Singida, Shinyanga and Pwani are also usually found to be poor on income poverty measures, as is Mara. Dar es Salaam and Mbeya have lower levels of income poverty. Overall, it is possible to identify a number of regions that are disadvantaged on most measures and would warrant particular attention in poverty reduction.

Where possible, indicators were also examined by sex. The largest differences are in income earned, where men earn almost twice what women do. Women are about half as likely as men to be employed or self-employed. Household budget surveys do not look at the distribution of consumption within the household, so it is not possible to assess sex differences in consumption for individuals. Female-headed households are no poorer than those headed by men, however.

Adult women have substantially lower levels of education than do adult men, reflecting differences in school attendance in the past. However, current school enrolment rates are slightly higher in girls than in boys. Girls are more likely than boys to work. Women are more likely to report illness or injury than men, although in children under five the reverse is the case. On the whole, sex differences in most indicators are much smaller than geographical differences.

Trends over the 1990s were also assessed by comparison with the 1991/92 HBS. The general picture is one of modest improvements in welfare over the decade, as most indicators show small but positive changes. Housing materials improved and the ownership of consumer goods increased. The distance to a number of key services declined, although not all showed this trend. Primary school enrolment increased, although adult educational levels appeared to improve little. The use of piped and protected water supplies increased.

The economy has diversified. Household dependence on agriculture has declined and private-sector employment has increased. Household consumption has increased. The proportion of the population who are poor has declined slightly, although absolute numbers have increased because of population growth.

These improvements have often been associated with increasing inequality, however. For many indicators, improvements have been concentrated in urban areas. Improvements in housing construction have been largest in urban areas, as have increases in primary schooling. One exception is in drinking water supplies, where rural supplies improved while urban supplies appeared to become worse. The growth in consumption has been largest in urban areas, particularly in Dar es Salaam. The decline in poverty has also been largest in Dar es Salaam.

There has been some increase in the share of expenditure accounted for by the richest households and some groups do not appear to have benefited from the increase in consumption. Poverty appears to have increased in households whose heads are economically inactive or uneducated and in households with a large number of dependants. Primary school enrolment has fallen amongst the poorest households. The benefits of improvements during the decade have not been equally distributed.

Appendix

A

TECHNICAL NOTES

A1. Sampling and sampling errors

Sample design

The sample of households interviewed in the 2000/2001 HBS was selected in two stages. In the first stage, 1,161 small areas called Primary Sampling Units (PSUs) were selected throughout the country. In the second stage, 24 households were initially selected in each PSU.

The sampled households are located in the National Master Sample (NMS) of PSUs. The NMS is a generalised set of area units that can be used as PSUs for conducting various household surveys. It is a fixed sample of rural and urban clusters, which, among other things, make possible the performance of a continuous survey programme as well as ad hoc sample surveys. The NMS has four modules, A, A+B, A+B+C and A+B+C+D, which can provide urban and rural estimates at National, Zonal, Regional and District levels respectively³³.

The HBS 2000/01 used Module A+B+C of the NMS comprising 621 urban EAs and 540 rural villages drawn from each of the 20 regions of Mainland Tanzania. In the second stage, 24 households were selected using systematic random sampling (SRS) from stratified lists of households compiled from each of the sampled PSUs. These lists were stratified into high, middle and low socio-economic groups based on socio-economic data collected during the listing exercise. The stratification and selection of households was conducted in the NBS head office and interviewers were supplied with a list of pre-selected households for interview.

Sample frame and sample selection

Rural frame. The initial rural NMS frame was based on the 1978 Population Census and later updated with information from the 1988 Population Census. At the beginning, a ward or a group of wards was used as a Primary Sampling Unit (PSU), but later a village was used instead. The rural frame of the NMS was divided into "normal," "large town surroundings" and "low density" strata. In total, 150 strata were created and 2 to 8 PSUs (villages) were selected from each stratum to come up with the sample of villages that can provide estimates for each region of Mainland Tanzania (Module A+B+C). These villages were selected using the probability proportional to size (PPS) selection procedure. The PSUs (villages) for Module A of the rural NMS are automatically included in the regional sample.

33. For further details see National Bureau of Statistics (1991): 'The Rural National Master Sample – Technical Report' and National Bureau of Statistics (1993) 'The Urban National Master Sample – Technical Report'.

Urban frame. The urban frame for the NMS was the sample used for the 1988 Population Census detailed questionnaire. For each district in a region, a list of the urban EAs was compiled and a specific number of EAs was selected from this frame using the systematic random sampling (SRS) procedure to produce the regional urban sample.

First stage sampling weights

Dar-es-Salaam. First stage sampling weights for Dar-es-Salaam are those used for Module A because the PSUs are the same. The EAs from the 1988 Census sample were stratified into proxy income levels and combined for all districts within the Dar-es-Salaam region. They were then selected independently within each level using the SRS procedure. Details on how these weights were calculated are found in "*The National Master Sample (NMS) – Technical Report*" (cited above). The formula for calculating the weights is:

$$W_{hk} = \frac{\sum_h \frac{V_h}{A_{hk}} \times N_h}{\sum_h \frac{V_h}{A_{hk}} \times n_h} \times \frac{\sum_h A_{hk}}{a_k}$$

where:

W_{hk} = First stage weight for an EA in stratum k of cluster h

V_h/A_{hk} = the proportion of the sample that falls into district h to the selection interval

N_h = number of EAs in district h

n_h = number of sampled EAs in district h

A_{hk} = number of EAs in district h and NMS stratum k

a_k = number of sampled EAs in NMS stratum k

When the multiple of the selection interval is completely within stratum k of district h , the proportion V_h/A_{hk} becomes 1.

Other Urban. For other urban areas, a sample of about 30 EAs was targeted for each region. Each district within the region contributed a certain proportion of the 30 EAs. The EAs were then selected independently from each district in the region using the SRS procedure. EAs representing municipalities and other urban areas in Module A of the NMS were automatically included in the regional sample. The formula for calculating the weights for an EA in district j of region i is given by:

$$W_{ij} = \frac{T_{ij}}{C_{ij}} \times \frac{C_{ij}}{S_{ij}} = \frac{T_{ij}}{S_{ij}}$$

where:

- W_{ij} = First stage weight for a selected EA in district j of region i
 T_{ij} = total number of urban EAs in district j of region i
 C_{ij} = number of selected urban EAs for the census sample in district j of region i
 S_{ij} = number of selected urban EAs for the NMS (Module A+B+C) in district j of region i

Rural. The rural NMS (Module A+B+C) has been used by a number of previous agricultural surveys. The first stage selection of PSUs was done using the PPS sampling procedure. The formula for the first stage weights is as follows:

$$W_{ij} = \frac{P_i}{P_{ij} \times n_i}$$

where:

- W_{ij} = First stage weight for a selected village j from stratum i
 n_i = number of villages selected from stratum i
 P_i = 1998 population of stratum i
 P_{ij} = 1998 population of village j from stratum i

Second stage sampling weights

The basic second stage weights are given by:

$$W_{khl} = \frac{M_{kh}}{m_{kh}}$$

where:

- W_{khl} = Second stage weight for a selected household l in socio-economic group h (High, Middle or Low) of PSU k
 M_{kh} = total number of households in socio-economic group h (High, Middle or Low) of PSU k
 m_{kh} = number of households interviewed in socio-economic group h (High, Middle or Low) of PSU k

Adjustments

These weights were adjusted for the reduction in the sample during the second half of the survey. This adjustment inflated the weight of rural households in the second half of the survey so that estimates of variables with seasonal patterns are unbiased.

In addition, it was found that the sum of the weights (multiplied by household size) did not equal the projected population of Tanzania. A constant adjustment factor was incorporated to correct this sum. In practice this will have no effect on the estimates, since totals are never estimated directly from the data. It is not clear what the cause of the problem was. If it were due to under-listing of households, there would be concern if households of different types were under-represented to different degrees. A similar problem was experienced in the 1991/92 HBS.

An adjustment for household non-response is included in the specification of the second stage weights given above.

1991/92 Household Budget Survey

The 1991/92 HBS used Module A of the NMS, which comprised 122 urban EAs, drawn independently from the City of Dar-es-Salaam (52 EAs,) Municipalities (40 EAs,) and Other Urban Centres (30 EAs;) and 100 villages for the rural sample. First and second stage weights were calculated as specified above for the 2000/01 HBS, although the adjustment for non-response was incorporated at the PSU level rather than by socio-economic group within a PSU. During the re-analysis of the 1991/92 data, the effect of adjusting for non-response within each group was examined and found to be negligible.

However, the original weights were found to under-represent the rural population in the final sample analysed; this was large enough to have some effect on estimates. The weights were adjusted to increase the weight given to rural households and bring their share of total population into line with the 1988 Census. The share of the population constituted by each area in the final weighted sample of each survey is given in Table A1.1.

Both surveys used the urban-rural classification of PSUs given in the NMS. As a result, the only way in which the urban share of the weighted sample can increase is through differential growth of the PSUs, since no PSUs have been reclassified. This means that there may be a small number of peri-urban PSUs that are classed as rural in this analysis but would be considered urban if classified now. The effect on the estimates is likely to be small. The 2000/01 Dar es Salaam estimates also include a small number of rural households, whereas the 1991/92 sample included only urban households; the effect of this difference is very small.

TABLE A1.1 POPULATION SHARE OF WEIGHTED SAMPLE (%)

Area	1991/92	2000/01
Dar es Salaam	5.3	5.8
Other urban areas	12.6	13.8
Rural areas	82.1	80.4
Total	100.0	100.0

Sample size, losses and replacement

The final sample analysed for the 2000/01 HBS consisted of 22,178 households, a large sample for any household budget survey. Three PSUs were lost entirely from the sample. Households were included in the analysis if they had at least one record in both the roster and the monthly diary. The weights were calculated for this group of households.

Field supervisors were supplied with a list of twelve 'replacement' households, drawn as a separate sample at the same time as the main household sample, to be used if a sampled household could not be interviewed for the duration of the survey. The 2000/01 HBS sample had a high level of replacement of households that were not interviewed – around 12 per cent.

A total of 4,823 households were analysed for the 1991/92 sample. Losses were higher; levels of replacement were lower (Table A1.2). In both surveys, households that were part of the initial selection constitute around 85 per cent of the sample analysed.

TABLE A1.2 HOUSEHOLDS SAMPLED, LOST AND REPLACED

	2000/01	1991/92
No of PSUs included in final sample analysed	1,158	222
No of households selected in final sample	22,584	5,328
Total number analysed	22,178	4,823
No of first selections interviewed	19,500	4,466
No of replacements interviewed	2,678	357
Total number analysed as a percentage of initial sample	98.2	90.5
No of first selections interviewed as a per cent of initial sample	86.3	83.8
Replacements as a percentage of initial sample	11.9	6.7

The distribution by region of the 2000/01 HBS sample is given in Table A1.3.

TABLE A1.3 NUMBER OF HOUSEHOLDS INTERVIEWED BY REGION (HBS 2000/01)

Region	Urban	Rural	Total
Dodoma	710	502	1,212
Arusha	693	432	1,125
Kilimanjaro	642	435	1,077
Tanga	701	416	1,117
Morogoro	716	408	1,124
Pwani	700	287	987
Dar Es Salaam	1,167	58	1,225
Lindi	718	379	1,097
Mtwara	695	396	1,091
Ruvuma	718	384	1,102
Iringa	730	395	1,125
Mbeya	720	412	1,132
Singida	714	358	1,072
Tabora	715	381	1,096
Rukwa	682	324	1,006
Kigoma	744	406	1,150
Shinyanga	668	406	1,074
Kagera	700	449	1,149
Mwanza	712	404	1,116
Mara	706	395	1,101
Total	14,551	7,627	22,178

Sampling errors

Table A1.4 shows standard errors and confidence intervals around a number of estimates, calculated in STATA. It also presents the results of statistical tests for a significant difference between the 2000/01 and 1991/92 estimates, for the total population and each of the three areas. While STATA allows the specification of sample design in the calculation of sampling errors, identifying the strata and PSUs used, it is not possible to specify fully the complexity of the design of the HBS 2000/01. The standard errors, confidence intervals and tests are therefore approximate.

TABLE A1.4 STANDARD ERRORS AND CONFIDENCE INTERVALS AROUND SELECTED ESTIMATES

Estimate	Estimate	SE	95% Confidence Intervals		Significance of diff. 91/92 - 00/01 (p)	
			Lower	Upper		
Percentage of female-headed households						
2000/01	Total	0.229	0.009	0.212	0.246	0.000
	Dar es Salaam	0.209	0.019	0.172	0.246	0.009
	Other urban	0.279	0.012	0.255	0.302	0.140
	Rural	0.221	0.011	0.200	0.242	0.001
1991/92	Total	0.176	0.011	0.154	0.197	--
	Dar es Salaam	0.141	0.017	0.107	0.175	--
	Other urban	0.239	0.024	0.192	0.286	--
	Rural	0.167	0.013	0.142	0.192	--

Percentage of households owning a radio						
2000/01	Total	0.518	0.013	0.493	0.543	0.000
	Dar es Salaam	0.794	0.019	0.757	0.831	0.976
	Other urban	0.713	0.014	0.685	0.741	0.002
	Rural	0.457	0.015	0.428	0.486	0.000
1991/92	Total	0.374	0.020	0.335	0.412	--
	Dar es Salaam	0.795	0.027	0.741	0.849	--
	Other urban	0.557	0.048	0.462	0.652	--
	Rural	0.306	0.023	0.261	0.352	--

Percentage of adults with no education						
2000/01	Total	0.252	0.010	0.232	0.271	0.869
	Dar es Salaam	0.076	0.011	0.053	0.098	0.400
	Other urban	0.131	0.007	0.116	0.147	0.992
	Rural	0.290	0.012	0.266	0.314	0.618
1991/92	Total	0.249	0.122	0.225	0.273	--
	Dar es Salaam	0.090	0.012	0.066	0.113	--
	Other urban	0.130	0.020	0.091	0.169	--
	Rural	0.280	0.015	0.252	0.309	--

Percentage of children aged 7-13 years reported as studying						
2000/01	Total	0.614	0.015	0.585	0.642	0.086
	Dar es Salaam	0.760	0.024	0.713	0.807	0.010
	Other urban	0.765	0.019	0.727	0.803	0.012
	Rural	0.581	0.017	0.549	0.614	0.395
1991/92	Total	0.574	0.018	0.538	0.609	--
	Dar es Salaam	0.657	0.031	0.596	0.718	--
	Other urban	0.636	0.047	0.542	0.729	--
	Rural	0.559	0.021	0.518	0.599	--

Percentage of households with piped or protected water sources						
2000/01	Total	0.555	0.020	0.514	0.595	0.016
	Dar es Salaam	0.936	0.023	0.891	0.981	0.212
	Other urban	0.880	0.016	0.849	0.910	0.340
	Rural	0.459	0.025	0.411	0.508	0.020
1991/92	Total	0.459	0.034	0.394	0.525	--
	Dar es Salaam	0.968	0.011	0.946	0.990	--
	Other urban	0.837	0.042	0.753	0.920	--
	Rural	0.349	0.040	0.270	0.428	--

Percentage of adults in agriculture (main economic activity)						
2000/01	Total	0.633	0.013	0.607	0.658	0.000
	Dar es Salaam	0.030	0.007	0.016	0.045	0.441
	Other urban	0.269	0.017	0.236	0.303	0.006
	Rural	0.758	0.011	0.737	0.780	0.000
1991/92	Total	0.728	0.012	0.705	0.752	--
	Dar es Salaam	0.023	0.006	0.010	0.035	--
	Other urban	0.430	0.056	0.321	0.540	--
	Rural	0.834	0.011	0.812	0.857	--

Percentage of households within 2km of a primary school						
2000/01	Total	0.635	0.017	0.600	0.669	0.393
	Dar es Salaam	0.813	0.039	0.736	0.890	0.364
	Other urban	0.823	0.022	0.779	0.866	0.243
	Rural	0.583	0.022	0.541	0.625	0.277
1991/92	Total	0.663	0.029	0.607	0.719	--
	Dar	0.866	0.042	0.782	0.949	--
	Other urban	0.765	0.044	0.677	0.852	--
	Rural	0.628	0.035	0.558	0.697	--

Percentage of households within 6km of dispensary / health centre

2000/01	Total	0.755	0.020	0.716	0.794	0.972
	Dar es Salaam	0.981	0.009	0.963	0.998	0.097
	Other urban	0.978	0.005	0.968	0.987	0.551
	Rural	0.693	0.025	0.645	0.741	0.842
1991/92	Total	0.754	0.033	0.690	0.818	--
	Dar es Salaam	0.950	0.016	0.918	0.982	--
	Other urban	0.968	0.015	0.937	0.998	--
	Rural	0.702	0.040	0.624	0.781	--

Percentage of households within 1km of drinking water

2000/01	Total	0.549	0.018	0.514	0.584	0.174
	Dar es Salaam	0.840	0.046	0.749	0.930	0.393
	Other urban	0.732	0.022	0.688	0.776	0.343
	Rural	0.490	0.021	0.448	0.531	0.237
1991/92	Total	0.499	0.032	0.436	0.562	--
	Dar es Salaam	0.885	0.026	0.833	0.937	--
	Other urban	0.668	0.064	0.543	0.794	--
	Rural	0.438	0.038	0.362	0.513	--

Mean expenditure per adult equivalent (in 2000/01 prices)

2000/01	Total	10,884	250	10,393	11,374	0.003
	Dar es Salaam	15,944	779	14,415	17,472	0.000
	Other urban	13,533	496	12,560	14,506	0.078
	Rural	10,064	273	9,528	10,601	0.099
1991/92	Total	9,746	285	9,186	10,306	--
	Dar es Salaam	10,640	387	9,874	11,407	--
	Other urban	11,865	806	10,283	13,447	--
	Rural	9,362	326	8,722	10,002	--

Percentage of individuals below the food poverty line

2000/01	Total	0.187	0.014	0.159	0.215	0.215
	Dar es Salaam	0.075	0.017	0.042	0.108	0.020
	Other urban	0.132	0.018	0.097	0.168	0.697
	Rural	0.204	0.017	0.171	0.238	0.341
1991/92	Total	0.216	0.019	0.178	0.254	--
	Dar es Salaam	0.136	0.020	0.098	0.174	--
	Other urban	0.150	0.041	0.068	0.231	--
	Rural	0.231	0.023	0.186	0.276	--

Percentage of individuals below the basic needs poverty line

2000/01	Total	0.357	0.016	0.325	0.389	0.293
	Dar es Salaam	0.176	0.027	0.124	0.229	0.008
	Other urban	0.258	0.022	0.215	0.301	0.604
	Rural	0.387	0.020	0.349	0.425	0.520
1991/92	Total	0.386	0.023	0.342	0.430	--
	Dar es Salaam	0.281	0.028	0.226	0.336	--
	Other urban	0.287	0.050	0.187	0.386	--
	Rural	0.408	0.026	0.357	0.460	--

A2. Calculating the consumption aggregate and defining the poverty lines

This appendix outlines the cleaning of the consumption data, the calculation of the consumption aggregate and the setting of the poverty lines.

Cleaning the consumption data

The data on consumption were the most problematic because such a large volume was collected – there were 5.6 million records in the files containing the data from the monthly diaries. Despite the consistency checks built into the data entry and checking programmes, a substantial number of households had problems in the consumption/expenditure component of the final data set, which had to be resolved at the beginning of the analysis. The same cleaning procedures were carried out on the 1991/92 data.

Food consumption data

Most errors were identified in the food consumption data. These were largely due to a number of identifiable, simple errors, most of which could be corrected. An important quality indicator used was daily calorie consumption per person. This was calculated for all households and out-of-range households were investigated. About 1,000 households had a consumption of over 8,000 calories per person per day and a smaller number had very low calorie consumption.

The main causes of high calories were clear: interviewers miscoding as consumption bulk items that had been bought for re-sale or storage; miscoding as consumption harvested food that was stored or sold; and miscoding the units of quantity (grams as kilograms etc).

Cleaning took place in a number of stages:

1. A programme written in Visual Basic identified extreme outlying unit prices and automatically corrected the units of quantity. These were identified when the z-score of the unit price was brought within range by transformation by a factor of 10^3 or 10^{-3} or powers of the same. This identified gram/kilogram and similar errors very effectively.
2. Less extreme outliers were then identified by examining consumption per person for each commodity. Outliers with consumption over 20 times the median were flagged and the quantity was replaced with the median level of consumption for the size of the household. For some commodities, a larger multiple than 20 was used as a cut-off, to be sure that plausible values were not being replaced. This dealt with much of the mis-coding of items bought for trade or harvested and stored/sold.

3. Households with low calorie consumption were also investigated. In a number of cases, unit miscoding of staple carbohydrates could be identified as the cause, through the presence of outlying unit prices for these items. The correct quantities were imputed using the reported expenditure on the item consumed.

After cleaning, calorie consumption was re-calculated. Far fewer households were found to have outlying values.

Non-food items

Some problems were also identified in the non-food items. It is not possible to calculate a unit value for these items. Instead, outliers were identified using two criteria: that the expenditure per capita on that item/category was high (more than 10 times the mean value), and that the budget share of the item was also high in comparison with the average share. The latter criterion helps ensure that wealthy households with genuinely high expenditure on a range of items are not mistakenly identified as outliers. For example, a household would clearly not spend 90 per cent of its budget for laundry soap: the mistake could be a miscoding of items bought for trade or some erroneous extra digit. Outlying expenditure values for a given item were replaced with the mean expenditure calculated across all households that had consumed that item.

Reporting of household size and the number of transactions

It was found that average household size dropped significantly during the fieldwork of the 2000/01 survey (Figure A2.1). This is not a true reflection of actual household size and is too large to be a consequence of changes in the sample enumerated over the period. It is almost certainly an outcome of enumerator fatigue. It could potentially have a very damaging effect on consumption and poverty estimates. However, it was found that the average number of transactions also declined over the period (Figure A2.2). As a result, the average number of transactions per person does not show a downward trend over the period, suggesting that the biases have to some degree cancelled out. Furthermore, the 1991/92 data show the same trends (Figures A2.3 and A2.4). Note that the 1991/92 data files contained the transaction data already summed to item level, so Figure A2.4 is not directly comparable to Figure A2.2. Figure A2.5 shows more comparable data for 2000/01.

FIGURE A2.1 MEAN NUMBER OF HOUSEHOLD MEMBERS BY MONTH OF SURVEY (HBS 2000/01)

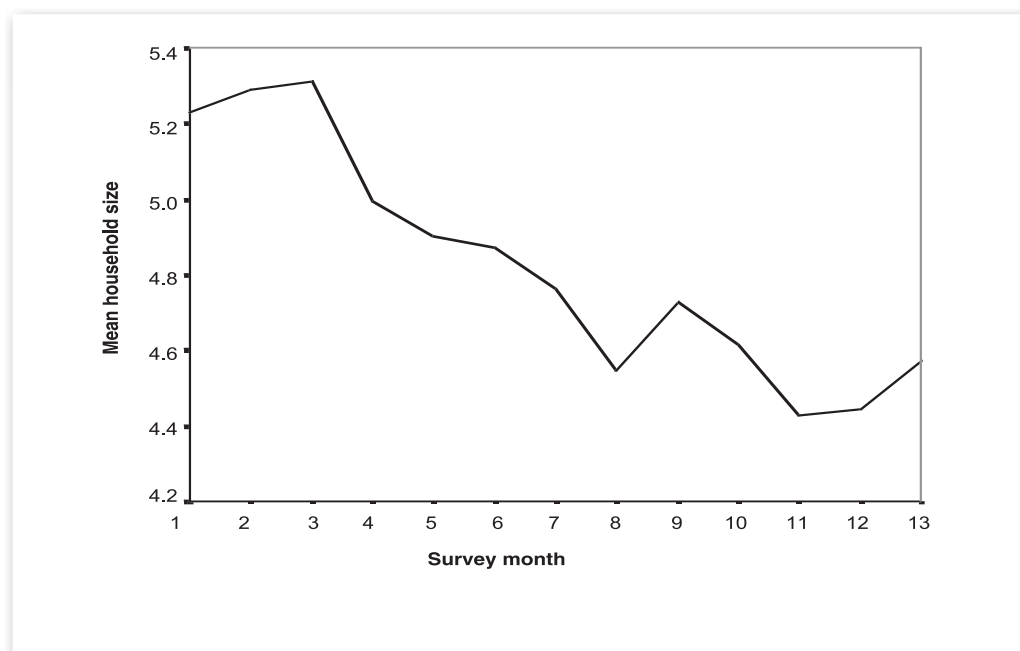


FIGURE A2.2 MEAN NUMBER OF TRANSACTIONS RECORDED IN THE DIARY BY MONTH OF SURVEY (HBS 2000/01)

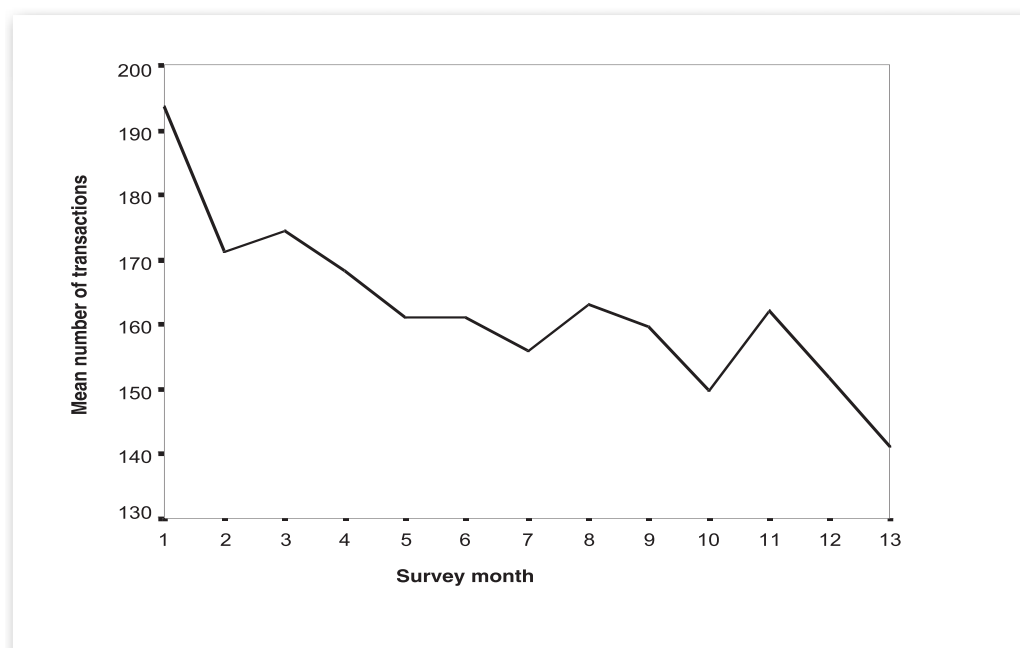


FIGURE A2.3 MEAN NUMBER OF HOUSEHOLD MEMBERS BY MONTH OF SURVEY (HBS 1991/92)

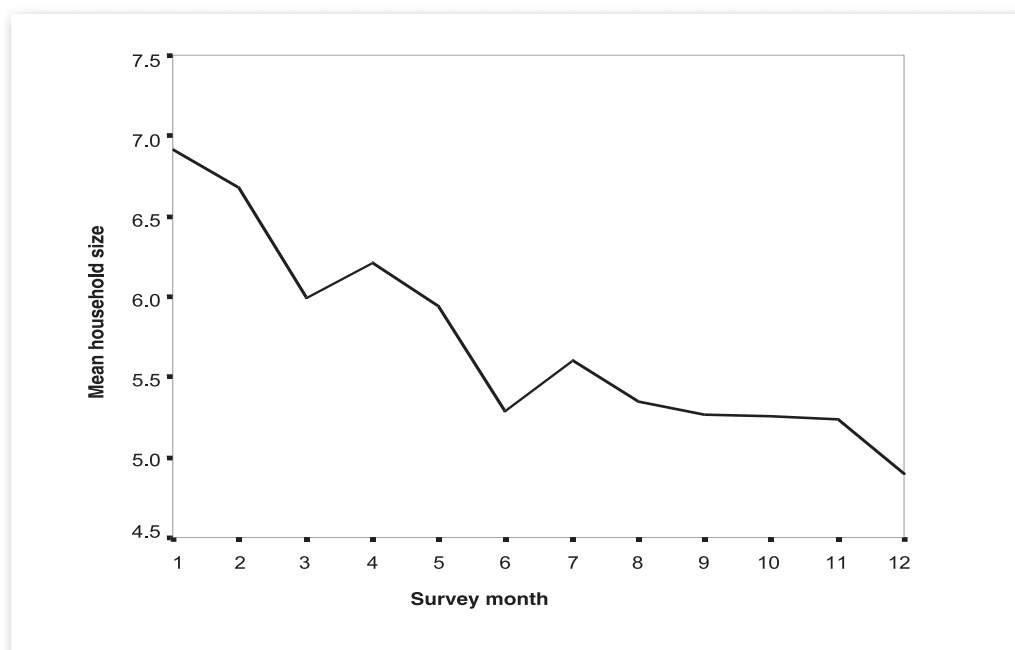


FIGURE A2.4 MEAN NUMBER OF TRANSACTIONS (AT COMMODITY LEVEL) RECORDED IN THE DIARY BY MONTH OF SURVEY (HBS 1991/92)

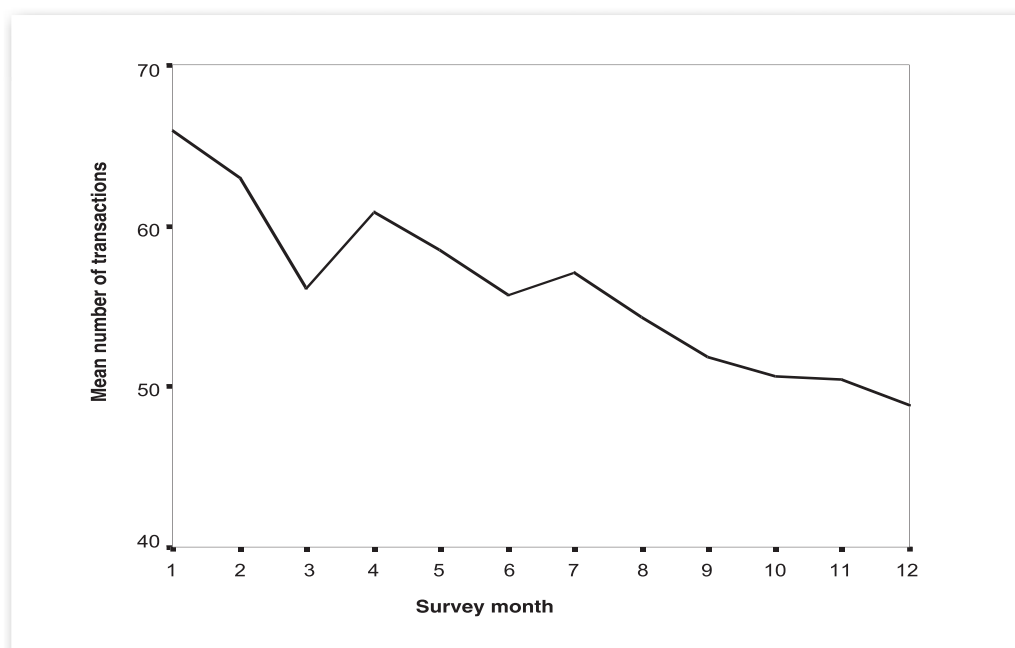
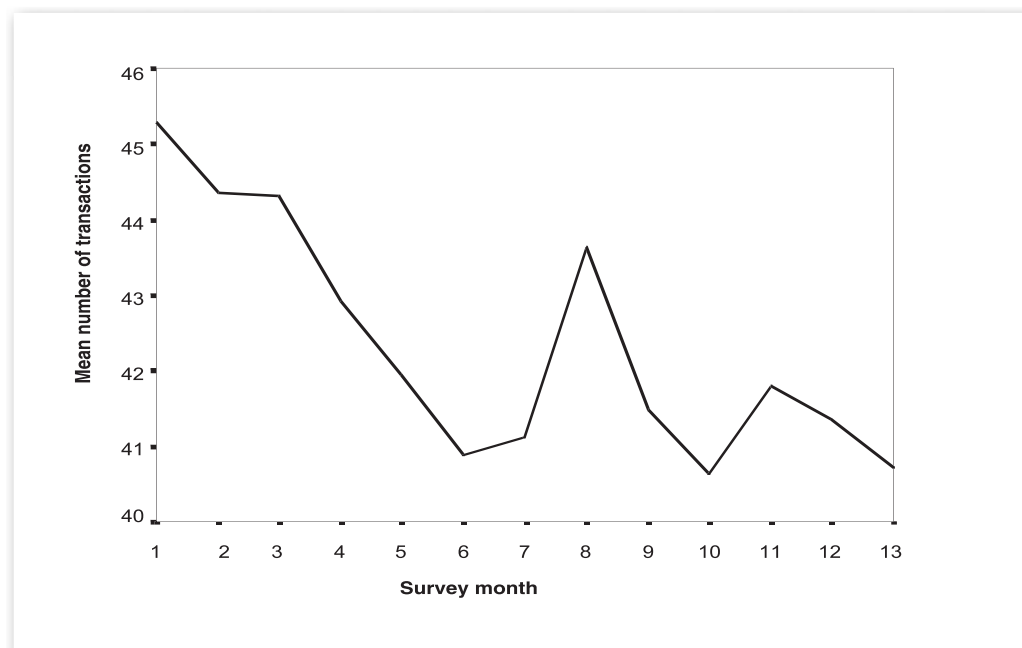


FIGURE A2.5 MEAN NUMBER OF TRANSACTIONS (AT COMMODITY LEVEL)
RECORDED IN THE DIARY BY MONTH OF SURVEY (HBS 2000/01)



Calculation of the consumption aggregate

The consumption aggregate sums the value of all items consumed. This includes purchased and home produced items, as well as items received as payment in kind or as gifts. It includes food and drinks, clothing and personal effects, most household effects and consumables (but excluding durables), recreation and transport. Non-consumption expenditure – such as production costs – is excluded.

For a number of items, information on consumption was collected in both the monthly diary and in the annual recall section. The question arises as to which is the better source of information for inclusion in the consumption aggregate. This was decided by examining three measures. These were: the proportion of households reporting consumption of that item in the annual recall; the ratio of the number of households reporting expenses on an item in the annual reports to the number reporting expenses in the diary; and the ratio of the reported amount spent in the annual recall over the amount reported in the diary (the latter multiplied by 12). They can be used to decide which appears to be the more reliable source for each item³⁴.

34. See Blaizeau, D, 'Household Expenditure in the seven UEMOA countries,' (mimeo).

This analysis was carried out for both years. A number of items were identified as having been paid for much more often in 2000/01 than in 1991/92. This included health, education, water, postage and telephone charges. These are all services that have seen increased cost recovery over the 1990s. On the assumption that these changes largely reflect an increase in payment for similar services (rather than a large increase in the quantity or quality of services supplied), it was decided to exclude them from the consumption aggregate used in the poverty analysis.

Since the diaries were completed over one calendar month, the consumption measure is standardised to 28 days. It is also standardised for the demographic composition of the household, adjusted for the consumption needs of different individuals using the adult equivalence scale shown in Table A2.1.

TABLE A2.1 ADULT EQUIVALENCE SCALE

Age groups	Sex			
	Male		Female	
0 – 2	X1	0.40	X2	0.40
3 – 4	X3	0.40	X4	0.48
5 – 6	X5	0.56	X6	0.56
7 – 8	X7	0.64	X8	0.64
9 – 10	X9	0.76	X10	0.76
11 – 12	X11	0.80	X12	0.88
13 – 14	X13	1.00	X14	1.00
15 – 18	X15	1.20	X16	1.00
19 – 59	X17	1.00	X18	0.88
60 +	X19	0.80	X20	0.72

Information is collected in the roster on the number of days that members were present in the household during the month that the diary is completed. It would be possible to adjust the consumption aggregate for the number of days that household members were present during the month of survey, either using this information or looking at the pattern of entries into the diary itself. It was thought that this could have explained some of the low, out-of-range calorie consumption values. In fact there was little relationship between the information on days present, the number of days in the month with transaction data and households with low calorie intake. Given how unreliable this information was, it was decided not to adjust the consumption aggregate. As a sensitivity check, households with a low number of days present per person were removed from the analysis – one per cent of the sample. As it had no appreciable impact on the poverty estimates, these households were left in the analysis.

Adjusting for prices: the Fisher Index

The consumption aggregate provides a measure of how much was spent by a household per adult equivalent. However, the goods and services that can be purchased with that expenditure depend on the prices faced by that household. The poverty line (or equivalently, the consumption aggregate) must be adjusted to reflect this. This is done using the Fisher Ideal Index³⁵.

The value of any price index will depend on the goods included in it. Consumption patterns vary between different areas, and over time, so a particular consumption basket cannot represent average consumption patterns everywhere. Different consumption patterns will tend to reflect differences in prices, as households substitute a more expensive good with a cheaper one. For example, if the relative price of one staple carbohydrate increases over time, households may shift to another one. A price index that failed to reflect this would overestimate the prices faced by households at the later time, because it would fail to reflect the change in consumption patterns. A Laspeyres index has this disadvantage. A similar argument applies to differences in consumption patterns in different geographical areas.

For this reason, the consumer price index (CPI) was not used to adjust for prices between the two surveys. In addition to the theoretical disadvantage of being a Laspeyres index, the CPI has a number of practical limitations. The consumption basket used is based on the 1991/92 HBS and so will tend to be out-of-date. It is explicitly an urban index. Dar es Salaam weights very heavily in the index, at about 40 per cent, while it is only around 6 per cent of the national population. This means it not representative of prices faced in rural areas.

Instead a Fisher Index is used to adjust for price variation both over time and across different geographical areas. It can be thought of as representing a sort of 'average' consumption pattern between the two populations being compared.

The index is calculated using the price and quantity information from the surveys themselves. Respondents were asked to provide information on how much they spent on each item and on the quantity consumed. The ratio of expenditure to volume provides a measure of price, or more precisely, a measure of unit value. There are half a million unit price observations in the 2000/01 data. In 1991/92 there is information on 272,178 transactions. It is therefore possible to construct a price index both between the surveys and between geographical areas within each year. For 2000/01 it is possible to construct price indexes across regions, although the sample size in 1991/92 does not allow this level of disaggregation. In the 2000/01 data, a separate Fisher Index is calculated for the urban and rural

35. For a detailed description of the Fisher Index and its benefits see Deaton, A. and Tarozzi, A. (1999) 'Prices and Poverty in India', Princeton University (mimeo).

populations of each region, with the national population as the reference population. For the 1991/92 data, indexes are calculated for Dar es Salaam, other urban areas and rural areas, relative to the national population. A separate Fisher index is calculated to measure price differences between the 1991/92 and 2000/01 surveys.

In each case, the largest possible basket of goods is compared between the two populations, subject to there being at least five observations for that item in each population. Items with fewer than this number are excluded from the index. Likewise, the index that is calculated to compare prices between 1991/92 and 2000/01 excludes items that are absent from one or other data set.

The HBS contains information on approximately 128 food items. Items that are not measured in standard units (grams, kilograms, litres and millilitres) are excluded, with the exception of eggs that are measured in 'number' and are included. This removes some 6 per cent of transactions. For a few commodities it is effectively impossible to measure quantities and so these are dropped from the calculation, for example, '10403 – syrups, jams, marmalades, jellies, chocolates, sweets'. Some non-food items were also included in the Fisher index. They were: fuel and lighting; cigarettes and tobacco; laundry soap; and petrol. These are included in the index, although there is little difference in the index if they are excluded.

Records that are missing information on quantity are excluded and the quantity of each item is then standardised to a common unit (grams to kilograms, etc). A unit price is calculated for each transaction record, dividing amount spent (or its equivalent) by the quantity. A small number of outlying unit prices are removed and median unit prices are then calculated for each item. The Fisher Index is then a weighted average of these unit prices, with the median quantity of each item consumed constituting the weights.

Between 1991/92 and 2000/01 the index is 2.49. By contrast, the CPI shows prices rising by a factor of about 4.4 over a similar period. Fisher Indexes for each region in the 2000/01 data are shown in Table C27.

In the analysis, the Fisher Index is used to adjust the consumption aggregate for price variation between the different geographical areas. It is also used to assess whether there has been growth in household consumption in real terms over the 1990s. However, the comparison of poverty levels over time does not use the Fisher Index. During stakeholder consultation, it was decided that separate poverty lines should be set, one for each year. This is outlined below.

Setting the poverty lines

The poverty lines define the minimum expenditure necessary to meet basic human needs. The food poverty line represents the expenditure necessary to eat sufficient calories. The basic needs poverty line includes the cost of other essential items of expenditure.

Food poverty line

Following Ravallion and Bidani (1994)³⁶, Ravallion (1998)³⁷ and others, the food poverty line was based on the food basket consumed by the poorest 50 per cent of Tanzanians. An infinite variety of food baskets, differing in price, are consistent with attaining a given level of calories. It would be unreasonable to set a poverty line based on the cheapest possible basket - a diet purely of the staple that provides the cheapest calories - since other nutrients are also necessary for survival. However, choosing which items to include in the basket can be very arbitrary. It was therefore decided to include all items consumed by the poor in the food basket, thus avoiding this problem. Only alcoholic drinks and items that cannot be assigned a calorific value are excluded.

Median quantities consumed per adult equivalent were estimated for every food item. Median unit prices were also calculated. The approximate calorific values of these foods were calculated. The food basket gives the share of consumption accounted for by each item. The level is set so that the sum of calories is 2,200 per day, the minimum necessary for survival. The food basket defined by these two parameters is then priced to give the food poverty line. The calculation of the consumption baskets for each year is shown in Tables A2.2 and A2.3. Note that the quantities shown are the reported quantities consumed, not the food basket quantities, which would need to be obtained by scaling down by the same factor as the total cost (ie around 0.4).

Basic needs poverty line

Adjusting the food poverty line to allow for non-food consumption gives the basic needs poverty line. This is done by calculating the share of expenditure that goes on food in the poorest 25 per cent of households. Multiplying the food poverty line by the inverse of this share inflates it to allow for non-food consumption. The food share was 75 per cent in 1991/92, and 73 per cent in 2000/01.

36. Ravallion, M (1998) 'Poverty Lines in Theory and Practice', Living Standards Measurement Study, Working Paper No. 133, Washington DC.

37. Ravallion, M and Benu Bidani (1994) 'How robust is a poverty line?' World Bank Economic Review 8(1):75-102.

Poverty lines are therefore set separately for the two surveys, although price adjustments within a survey year are made using Fisher Indexes. A poverty line set using the Fisher Index calculated to compare prices between the surveys would imply a slightly lower poverty line in 2000/01 or equivalently a slightly higher line in 1991/92, although the difference would be small - the food poverty line would be 2,126 TShs in 1991/92, for example.

TABLE A2.2 REPORTED CONSUMPTION BY ITEM AND THE CALCULATION OF THE FOOD POVERTY LINE FOR 2000/01

Item code	Item	Median quantity in g/ person /month	Median price per kg	Calories per 100g	Calories per day	Cost per day
10101	paddy	1250	155	361	161	193
10102	rice, husked	1149	400	364	149	459
10103	green maize cob	1136	139	165	67	158
10104	maize, grain	3333	100	368	438	333
10105	maize, flour	7183	165	368	944	1185
10106	millet, grain	439	200	350	55	88
10107	millet, flour	424	200	350	53	85
10108	sorghum, grain	1596	100	341	194	160
10109	sorghum, flour	7355	104	341	896	767
10110	wheat, grain	495	300	323	57	149
10111	wheat, flour	347	350	341	42	122
10201	bread	157	562	261	15	88
10202	baby food excl. milk	85	400	380	12	34
10203	biscuits	15	2000	450	2	30
10205	macaroni, spaghetti	144	577	342	18	83
10301	cassava fresh	1637	86	149	87	140
10302	cassava dry	1587	100	344	195	159
10303	cassava flour	4035	110	344	496	444
10304	sweet potatoes	1695	96	105	64	163
10305	yam, cocoyam	1067	100	118	45	107
10306	potatoes	753	143	79	21	108
10307	cooking bananas,	2564	91	135	124	234
10308	other starches	439	167	79	12	73
10401	sugar	589	598	400	84	352
10402	honey	120	585	400	17	70
10501	peas, dry	362	260	343	44	94
10502	beans, dry	962	294	333	114	283
10503	lentils & other	439	240	338	53	105
10504	pulse product	168	200	127	8	34
10601	groudnuts in shell	206	278	567	42	57
10602	groundnuts, shell	187	400	567	38	75
10603	coconuts, mature	828	168	376	111	139
10604	coconuts, immature	318	105	376	43	33
10605	cashewnuts	120	400	567	24	48
10606	almond & other nuts	231	200	567	47	46
10701	sesame seeds	130	400	605	28	52
10702	sunflower seeds	358	172	605	77	62
10703	products from nuts	51	500	567	10	25
10801	carrots	81	333	43	1	27
10802	radishes, beets,	272	200	43	4	54
10803	garlic	41	500	34	1	21
10804	onion	143	375	34	2	54

10805	leeks	123	250	34	1	31
10806	spinach	294	202	22	2	60
10807	lettuce	189	200	13	1	38
10808	cabbage	355	133	16	2	47
10809	other leafy vegetables	403	221	16	2	89
10810	tomatoes	417	239	19	3	100
10811	bitter tomatoes	118	200	13	1	24
10812	ladies finger	114	333	16	1	38
10813	cauliflower	142	263	13	1	37
10814	cucumber, pumpkin	974	100	26	9	97
10815	brinjals, eggplants	106	222	26	1	23
10816	green peas	287	242	36	4	70
10817	green beans	805	200	36	10	161
10818	fresh green pepper	23	417	25	0	10
10819	cultivated	373	222	13	2	83
10820	other wild vegetables	293	200	13	1	59
10821	dried vegetables	295	248	13	1	73
10822	canned vegetable	58	513	13	0	30
10901	sweet bananas	221	173	92	7	38
10902	orange, tangerine	187	150	47	3	28
10903	grapefruits, lemon	57	200	29	1	11
10904	mangoes, avocado	237	143	65	6	34
10905	pawpaw	439	91	39	6	40
10906	pineapples	446	114	49	8	51
10907	melons	998	62	32	11	61
10909	jack fruit	364	100	49	6	36
10910	apples, pears	149	160	49	3	24
10911	other cultivated	162	200	29	2	32
10912	other wild fruit	95	200	29	1	19
10913	dried fruits	31	250	238	3	8
10914	canned fruits	13	3000	238	1	39
11001	goat, sheep	347	700	122	15	243
11002	cattle meat	526	722	115	22	380
11003	pork	279	733	114	11	205
11004	other domestic animals	184	700	115	8	129
11005	wild animal	362	500	115	15	181
11006	offal	154	650	123	7	100
11007	dried, salted meat	110	1111	115	5	122
11008	canned meat	142	500	225	11	71
11009	other meat products	238	500	225	19	119
11010	chicken & other	338	925	139	17	313
11011	wild birds & insects	198	600	139	10	119
11012	eggs	1	50000	158	0	49
11201	fresh fish	692	400	82	20	277
11202	shell fish	143	1000	89	5	143
11203	fresh dried fish	183	667	225	15	122
11204	dried or salted	387	657	225	31	254
11205	canned fish/shellfish	72	1000	238	6	72
11301	fresh milk	741	200	61	16	148
11302	cream	118	714	355	15	84
11303	cheese	126	1125	355	16	142
11304	yoghurt	704	200	61	15	141
11305	canned milk	291	1700	134	14	494
11306	milk powder	17	2143	362	2	36
11401	cottonseed oil	90	1000	884	28	90
11402	groundnuts oils	63	1000	884	20	63
11403	sesame/sunflower	159	1000	884	50	159
11404	coconut cooking	27	1000	884	9	27

11405	other cooking oil	179	958	884	57	172
11406	butter, ghee	67	1050	717	17	70
11407	margarines cooking fat	85	1000	719	22	85
11408	other oil & fat	63	1000	717	16	63
11501	red pepper/black	32	625	25	0	20
11502	curry powder	11	1000	25	0	11
11503	other spices	19	857	25	0	16
11504	salt	329	200	25	3	66
Total					5,512	13,266
Ratio of calories needed per day (2,200) to reported consumed					0.40	
Cost of food basket adjusted by this ratio: food poverty line						5,295

Note: Full descriptions of each item code are given in the HBS 2000/01 interviewers' manual.

TABLE A2.3 CALCULATION OF THE FOOD POVERTY LINE FOR 1991/92

Item code	Item	Median quantity in g/ person /month	Median price per kg	Calories per 100g	Calories per day	Cost per day
10101	paddy	1217	67	361	157	81
10102	rice, husked	1369	146	364	178	199
10103	green maize cob	878	54	165	52	47
10104	maize, grain	5123	47	368	673	242
10105	maize, flour	5282	75	368	694	396
10106	millet, grain	565	80	350	71	45
10107	millet, flour	763	59	350	95	45
10108	sorghum, grain	1776	56	341	216	99
10109	sorghum, flour	4795	68	341	584	326
10110	wheat, grain	352	120	323	41	42
10111	wheat, flour	344	200	341	42	69
10201	bread	187	251	261	17	47
10202	baby food excl.	134	88	380	18	12
10203	biscuits	31	300	450	5	9
10205	macaroni, spaghetti	176	400	342	22	70
10301	cassava fresh	1451	39	149	77	56
10302	cassava dry	1386	40	344	170	55
10303	cassava flour	3623	53	344	445	193
10304	sweet potatoes	1747	37	105	66	64
10305	yam, cocoyam	1036	43	118	44	44
10306	potatoes	862	50	79	24	43
10307	cooking bananas,	3521	30	135	170	106
10308	other starches	1036	50	79	29	52
10401	sugar	517	241	400	74	124
10402	honey	182	200	400	26	36
10501	peas, dry	487	90	343	60	44
10502	beans, dry	1055	100	333	125	106
10503	lentils & other	545	74	338	66	40
10504	pulse product	167	80	127	8	13
10601	groundnuts in shell	287	100	567	58	29
10602	groundnuts, shell	214	150	567	43	32
10603	coconuts, mature	500	94	376	67	47
10604	coconuts, immature	267	60	376	36	16
10605	cashewnuts	174	161	567	35	28
10606	almond & other nuts	89	140	567	18	12

10701	sesame seeds	136	100	605	29	14
10702	sunflower seeds	247	117	605	53	29
10703	products from nuts	52	167	567	11	9
10801	carrots	53	133	43	1	7
10802	radishes, beets,	181	100	43	3	18
10803	garlic	66	86	34	1	6
10804	onion	152	111	34	2	17
10805	leeks	48	140	34	1	7
10806	spinach	225	100	22	2	23
10807	lettuce	242	119	13	1	29
10808	cabbage	357	52	16	2	19
10809	other leafy vegetables	355	96	16	2	34
10810	tomatoes	309	100	19	2	31
10811	bitter tomatoes	113	83	13	1	9
10812	ladies finger	96	130	16	1	13
10813	cauliflower	190	100	13	1	19
10814	cucumber, pumpkin	1116	35	26	10	39
10815	brinjals, eggplants	143	83	26	1	12
10816	green peas	489	80	36	6	39
10817	green beans	503	75	36	6	38
10818	fresh green peppers	22	300	25	0	7
10819	cultivated	277	94	13	1	26
10820	other wild vegetables	296	100	13	1	30
10821	dried vegetables	188	133	13	1	25
10822	canned vegetable	15	615	13	0	10
10901	sweet bananas	305	50	92	10	15
10902	orange, tangerine	250	50	47	4	13
10903	grapefruits, lemon	84	67	29	1	6
10904	mangoes, avocado	252	55	65	6	14
10905	pawpaw	375	25	39	5	9
10906	pineapples	342	50	49	6	17
10907	melons	648	11	32	7	7
10909	jack fruit	172	64	49	3	11
10910	apples, pears	110	93	49	2	10
10911	other cultivated	136	80	29	1	11
10912	other wild fruit	395	33	29	4	13
10913	dried fruits	20	500	238	2	10
11001	goat, sheep	285	200	122	12	57
11002	cattle meat	644	209	115	26	134
11003	pork	510	240	114	21	122
11004	other domestic animals	223	300	115	9	67
11005	wild animal	298	150	115	12	45
11006	offal	250	200	123	11	50
11007	dried, salted meat	250	100	115	10	25
11008	canned meat	196	300	225	16	59
11009	other meat products	321	140	225	26	45
11010	chicken & other	415	250	139	21	104
11011	wild birds & ins	230	125	139	11	29
11012	eggs	1	19474	158	0	23
11201	fresh fish	573	165	82	17	94
11202	shell fish	188	209	89	6	39
11203	fresh dried fish	192	211	225	15	40
11204	dried or salted	310	250	225	25	77
11205	canned fish/shellfish	25	80	238	2	2
11301	fresh milk	768	63	61	17	48
11302	cream	283	230	355	36	65
11303	cheese	1168	20	355	148	23
11304	yoghurt	679	70	61	15	48
11305	canned milk	155	50	134	7	8

11306	milk powder	201	120	362	26	24
11401	cottonseed oil	100	383	884	32	38
11402	groundnuts oils	114	384	884	36	44
11403	sesame/sunflower	87	417	884	27	36
11404	coconut cooking	43	320	884	13	14
11405	other cooking oil	152	444	884	48	67
11406	butter, ghee	39	800	717	10	31
11407	margarines cooking fat	135	474	719	35	64
11408	other oil & fat	103	333	717	26	34
11501	red pepper/black	56	150	25	0	8
11502	curry powder	16	500	25	0	8
11503	other spices	42	286	25	0	12
11504	salt	323	92	25	3	30
Total					5,418	5,130
Ratio of calories needed per day (2,200) to reported consumed					0.41	
Cost of food basket adjusted by this ratio: food poverty line						2,083

Note: Full descriptions of each item code are given in the HBS 1991/92 interviewers' manual.

ADDITIONAL TABLES
AND GRAPHS BY
CHAPTER

APPENDIX B.

ADDITIONAL TABLES AND GRAPHS BY CHAPTER

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Chapter 2

TABLE B2.1 AGE-SEX DISTRIBUTION OF HOUSEHOLD MEMBERS IN BROAD AGE GROUPS (HBS 2000/01)

Age Group	Dar es Salaam			Other urban areas			Rural areas			Mainland Tanzania		
	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total
0-14	16.5	18.4	34.9	20.1	20.2	40.3	23.1	22.6	45.7	22.3	22.0	44.3
15-29	15.8	18.9	34.7	12.5	17.9	30.4	11.0	14.1	25.1	11.5	14.9	26.4
30-44	9.8	9.0	18.7	8.7	8.4	17.1	7.6	7.8	15.3	7.9	7.9	15.8
45-64	6.0	3.5	9.5	4.9	4.6	9.5	4.9	5.0	9.9	4.9	4.9	9.8
65+	1.2	1.0	2.2	1.4	1.4	2.8	1.9	2.0	3.9	1.8	1.9	3.7
Total	49.1	50.9	100.0	47.5	52.5	100.0	48.5	51.5	100.0	48.4	51.6	100.0

TABLE B2.2 AGE-SEX DISTRIBUTION OF HOUSEHOLD MEMBERS IN BROAD AGE GROUPS (HBS 1991/92)

Age Group	Dar es Salaam			Other urban areas			Rural areas			Mainland Tanzania		
	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total
0-14	17.1	18.5	35.6	22.0	20.8	42.8	23.1	22.1	45.2	22.6	21.8	44.4
15-29	17.2	20.0	37.2	13.8	16.7	30.5	12.6	14.9	27.5	13.0	15.4	28.4
30-44	10.2	8.8	19.0	7.7	8.7	16.4	7.1	7.4	14.5	7.3	7.6	15.0
45-64	5.0	2.1	7.1	5.2	3.3	8.4	5.3	4.6	9.9	5.2	4.3	9.5
65+	0.7	0.4	1.1	1.1	0.8	1.9	1.7	1.2	2.9	1.6	1.1	2.7
Total	50.2	49.8	100.0	49.8	50.2	100.0	49.8	50.2	100.0	49.8	50.2	100.0

TABLE B2.3 AGE-SEX DISTRIBUTION OF HOUSEHOLD HEADS IN BROAD AGE GROUPS (HBS 2000/01)

Age Group	Dar es Salaam			Other urban areas			Rural areas			Mainland Tanzania		
	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total
Under 17	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.1	0.1	0.0	0.1
18-29	14.5	5.7	20.3	13.9	6.4	20.3	14.0	2.6	16.6	14.1	3.4	17.4
30-44	36.1	9.1	45.2	33.3	9.9	43.2	32.7	7.1	39.9	33.0	7.7	40.7
45-64	24.5	5.0	29.5	19.7	8.8	28.5	22.5	8.5	31.0	22.2	8.3	30.5
65+	3.9	1.2	5.1	5.2	2.7	8.0	8.6	3.9	12.4	7.7	3.5	11.3
Total	79.0	21.0	100.0	72.2	27.8	100.0	77.9	22.1	100.0	77.1	22.9	100.0

TABLE B2.4 AGE-SEX DISTRIBUTION OF HOUSEHOLD HEADS IN BROAD AGE GROUPS (HBS 1991/92)

Age Group	Dar es Salaam			Other urban areas			Rural areas			Mainland Tanzania		
	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total
Under 17	0.0	0.1	0.1	0.2	0.0	0.2	0.1	0.0	0.1	0.1	0.0	0.1
18-29	16.4	4.3	20.7	13.4	6.0	19.4	14.3	1.9	16.2	14.3	2.7	16.9
30-44	44.3	6.9	51.2	33.8	11.3	45.0	33.5	4.6	38.1	34.2	5.7	39.9
45-64	23.3	1.8	25.1	24.3	5.3	29.6	28.1	6.7	34.9	27.3	6.2	33.5
65+	2.4	0.5	2.9	4.8	1.0	5.9	8.7	2.1	10.8	7.7	1.8	9.6
Total	86.5	13.5	100.0	76.4	23.6	100.0	84.7	15.3	100.0	83.6	16.4	100.0

TABLE B2.5 DISTRIBUTION OF NUMBER OF HOUSEHOLD MEMBERS (%)

[illegible]

TABLE B2.6 DISTRIBUTION OF ADULT HOUSEHOLD MEMBERS BY SEX, MARITAL STATUS AND AREA (AGE 15+ YEARS)

[illegible]

TABLE B2.7 DISTRIBUTION OF HOUSEHOLD HEADS BY SEX, MARITAL STATUS AND AREA

[illegible]

Total								
Never married	16.3	18.4	17.3	13.3	6.3	6.8	8.5	8.5
Married	77.6	68.9	70.4	67.9	80.8	75.7	79.1	74.0
Divorced/separated	4.2	8.0	7.4	10.5	5.8	7.3	5.9	7.8
Widowed	2.0	4.7	5.0	8.4	7.1	10.3	6.5	9.6
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Chapter 3

TABLE B3.1 DISTRIBUTION OF HOUSEHOLDS BY NUMBER OF SLEEPING ROOMS (FIRST BUILDING)

Number of rooms	Dar es Salaam		Other urban areas		Rural areas		Mainland Tanzania	
	91/92	00/01	91/92	00/01	91/92	00/01	91/92	00/01
1	38.5	54.5	38.1	40.0	43.2	42.3	42.1	42.7
2	34.8	21.6	35.8	35.0	41.0	42.5	39.8	40.0
3	14.6	14.1	17.8	15.3	10.9	10.8	12.2	11.7
4	7.2	4.5	4.2	6.0	4.0	3.3	4.2	3.8
5	1.8	2.8	2.7	2.0	0.6	0.6	0.9	1.0
6+	3.2	2.4	1.4	1.7	0.4	0.5	0.7	0.8
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Chapter 4

TABLE B4.1 HIGHEST LEVEL OF EDUCATION ACHIEVED BY HOUSEHOLD HEADS

Level Achieved	Dar es Salaam		Other urban areas		Rural areas		Mainland Tanzania	
	91/92	00/01	91/92	00/01	91/92	00/01	91/92	00/01
No education / preschool only	8.7	7.8	13.4	13.9	31.9	28.6	27.7	25.0
Adult education only	2.7	0.6	2.0	1.6	7.0	4.2	6.0	3.6
Primary 1 - 4	11.1	7.7	17.1	12.6	21.4	15.2	20.1	14.3
Primary 5 - 8	49.2	58.2	52.8	50.0	35.7	47.4	39.0	48.5
Form 1 - 4	16.2	13.0	9.0	12.6	2.1	2.5	4.0	4.7
Form 5 - 6	2.3	0.9	1.6	1.4	0.2	0.3	0.5	0.5
Diploma course/ university degree	3.9	5.7	1.1	1.4	0.1	0.2	0.5	0.8
Course after primary	0.5	1.7	0.7	1.9	0.8	0.6	0.8	0.8
Course after secondary	3.1	3.7	1.1	3.7	0.4	0.5	0.7	1.2
Other certificate	2.4	0.7	1.2	1.0	0.4	0.5	0.6	0.6
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Notes: Pre-school was not included as a category in 1991/92.

FIGURE B4.1 PERCENTAGE OF INDIVIDUALS WITH ANY EDUCATION BY AGE AT THE TIME OF THE SURVEY (AGE GROUP COMPARISON)

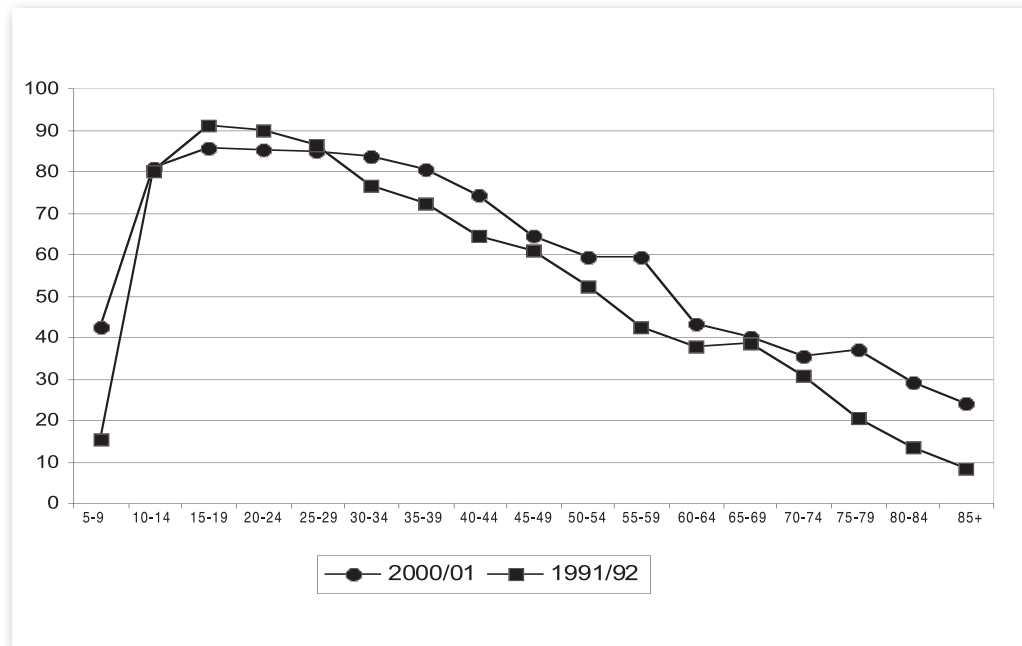


FIGURE B4.2 PERCENTAGE OF INDIVIDUALS WITH ANY EDUCATION BY AGE AT THE TIME OF THE 1991/92 SURVEY (COHORT COMPARISON)

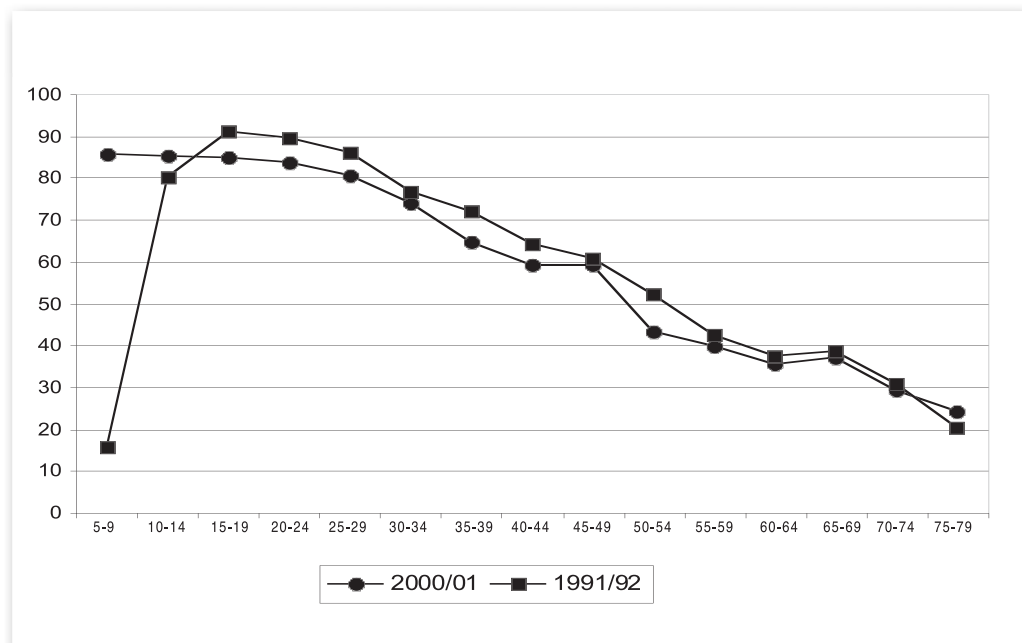


TABLE B4.2 PERCENTAGE OF CHILDREN ATTENDING SCHOOL BY SINGLE YEARS OF AGE, AREA AND SEX (HBS 2000/01)

Age	Dar es Salaam	Other urban areas	Rural areas	Mainland Tanzania	Boys	Girls
5	46.3	35.3	6.9	11.9	10.3	13.6
6	46.5	49.1	19.4	23.9	21.0	27.6
7	55.8	62.8	31.6	37.0	38.0	36.2
8	71.3	67.2	46.8	50.3	48.7	52.3
9	83.6	79.0	53.2	58.1	54.2	62.8
10	90.1	88.2	67.0	70.7	63.4	79.3
11	80.1	88.1	74.9	76.9	80.4	73.1
12	83.5	81.8	77.3	78.3	78.7	77.9
13	88.2	79.0	83.2	82.9	84.6	81.3
14	73.7	80.2	72.9	74.0	75.6	72.5
15	67.3	63.7	62.9	63.3	66.1	60.8
16	55.9	47.0	45.0	46.1	51.8	39.9
17	26.7	42.6	30.9	32.8	33.1	32.6
18	26.5	24.8	16.8	18.7	23.8	13.9

TABLE B4.3 PERCENTAGE OF INDIVIDUALS REPORTING ILLNESS OR INJURY IN THE PAST FOUR WEEKS BY AGE GROUP AND SEX (HBS 2000/01)

Age Group	Male	Female	Total
0-4	32.6	27.9	30.2
5-14	20.6	21.8	21.2
15-24	18.8	22.2	20.7
25-34	22.7	29.6	26.5
35-44	27.4	34.0	30.6
45-54	26.7	40.4	33.8
55-64	38.0	45.6	41.5
65+	51.6	57.7	54.7
Total	25.6	28.4	27.1

Chapter 5

TABLE B5.1 MAIN AND SECONDARY ACTIVITIES OF ADULTS IN THE LAST SEVEN DAYS (HBS 2000/01)

Secondary activity \ Main activity	Farming/ live-stock/ fishing	Employed or self employed	Unpaid Family Helper in Business	Housewife/ Household Chores	Student	No second activity	Total
All adults 15-60:							
Farming/livestock/fishing	1.5	6.4	8.5	22.0	0.0	23.3	61.8
Employee - government	0.5	0.2	0.1	0.3	0.1	0.8	1.9
Employee – parastatal	0.1	0.0	0.0	0.0	0.0	0.5	0.6
Employee – other	0.4	0.2	0.3	0.5	0.0	2.6	4.0
Self-employed with employees	0.2	0.0	0.1	0.2	0.0	1.3	1.8
Self-employed without employees	0.7	0.1	0.5	1.1	0.0	3.3	5.7
Unpaid family helper in business	0.2	0.1	0.1	0.2	0.0	3.4	4.1
Housewife/household chores	0.8	0.4	0.4	0.2	0.0	6.5	8.3
Student	0.6	0.1	4.0	0.8	0.1	2.0	7.6
Not active	0.1	0.0	0.2	0.2	0.0	3.6	4.1
Total	5.1	7.6	14.2	25.7	0.2	47.3	100.0
Men 15-60:							
Farming/livestock/fishing	2.9	10.2	9.4	2.9	0.1	37.3	62.7
Employee - government	0.9	0.3	0.1	0.1	0.0	1.4	2.8
Employee – parastatal	0.1	0.1	0.1	0.0	0.0	0.9	1.1
Employee – other	0.8	0.4	0.3	0.1	0.0	4.4	6.0
Self-employed with employees	0.3	0.1	0.1	0.0	0.0	2.2	2.7
Self-employed without employees	1.2	0.2	0.5	0.1	0.0	5.7	7.7
Unpaid family helper in business	0.1	0.1	0.1	0.0	0.0	2.6	2.8
Housewife/household chores	0.0	0.0	0.0	0.0	0.0	0.6	0.6
Student	0.9	0.1	4.0	0.6	0.1	2.9	8.6
Not active	0.1	0.0	0.3	0.1	0.0	4.3	4.9
Total	7.3	11.4	14.9	3.9	0.2	62.3	100.0
Women 15-60:							
Farming/livestock/fishing	0.3	3.1	7.7	38.7	0.0	11.1	61.0
Employee - government	0.1	0.1	0.1	0.5	0.1	0.3	1.2
Employee – parastatal	0.0	0.0	0.0	0.1	0.0	0.1	0.2
Employee – other	0.1	0.0	0.2	0.9	0.0	1.1	2.3
Self-employed with employees	0.1	0.0	0.1	0.4	0.0	0.5	1.0
Self-employed without employees	0.3	0.1	0.4	2.0	0.0	1.2	4.0
Unpaid family helper in business	0.3	0.2	0.1	0.4	0.0	4.1	5.1
Housewife/household chores	1.5	0.7	0.8	0.4	0.0	11.6	15.0
Student	0.4	0.0	4.0	1.0	0.1	1.2	6.7
Not active	0.0	0.0	0.2	0.3	0.0	2.9	3.4
Total	3.1	4.3	13.6	44.6	0.2	34.2	100.0

Note: Within each panel, the table shows individuals in the cell as a percentage of all individuals in the panel e.g. 38.7 per cent of all adult women reported farming/livestock/fishing as a primary activity and housewife/household chores as a secondary activity.

TABLE B5.2 ECONOMIC ACTIVITY OF THE HOUSEHOLD HEAD BY SEX, AREA AND YEAR OF SURVEY

	Dar es Salaam		Other urban areas		Rural areas		Mainland Tanzania	
	91/92	00/01	91/92	00/01	91/92	00/01	91/92	00/01
Men 15-60:								
Farming/livestock/fishing	3.4	5.3	39.8	30.1	86.4	83.1	74.6	70.2
Employee - government	19.6	7.1	21.6	10.5	5.4	2.8	8.5	4.2
Employee - parastatal	26.6	7.9	8.7	3.9	1.5	0.6	4.1	1.6
Employee - other	19.5	29.6	6.7	17.2	1.2	3.3	3.2	7.1
Self-employed with employees	28.0	12.2	19.3	7.2	3.4	1.4	7.1	3.0
Self-employed without employees	1.3	31.0	1.3	26.2	0.2	4.2	0.4	9.2
Unpaid family helper in business	0.1	0.0	0.1	0.4	0.0	0.8	0.0	0.7
Housewife/housemaker /household chores	0.3	0.4	1.1	0.2	0.0	0.2	0.2	0.2
Student	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Not active	1.1	6.5	1.5	4.1	1.9	3.6	1.8	3.9
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Women 15-60:								
Farming/livestock/fishing	3.8	5.6	48.8	33.4	90.6	83.6	77.9	69.6
Employee - government	17.6	6.4	10.8	6.2	2.8	2.3	5.1	3.3
Employee - parastatal	20.8	4.4	1.8	1.1	0.2	0.1	1.6	0.6
Employee - other	12.3	23.2	5.3	8.9	0.2	1.2	1.9	3.9
Self-employed with employees	30.6	8.9	25.9	4.2	2.1	1.6	8.3	2.5
Self-employed without employees	0.0	24.5	0.1	29.2	0.1	3.1	0.1	9.2
Unpaid family helper in business	0.0	0.7	0.3	0.7	0.0	0.7	0.1	0.7
Housewife/housemaker /household chores	13.2	20.6	4.9	8.2	0.3	2.7	1.9	4.8
Student	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Not active	1.8	5.6	2.1	8.1	3.6	4.7	3.2	5.4
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Chapter 6

TABLE B6.1 MEDIAN CONSUMPTION EXPENDITURE PER CAPITA BY CATEGORY (NOMINAL PRICES, TSHS)

	1991/92				2000/01			
	Dar es Salaam	Other Urban	Rural	Mainland Tanzania	Dar es Salaam	Other Urban	Rural	Mainland Tanzania
Food -monetary	3,216	2,033	634	805	8,234	5,927	2,202	2,688
Food - non monetary	0	113	1,011	845	0	234	1,953	1,641
Total food	3,230	2,400	1,847	1,949	8,651	6,876	4,659	5,021
Durables	236	183	119	130	723	596	365	400
Other non-durables	988	923	416	481	4,928	2,742	1,352	1,553
Medical expenditure	0	4	3	3	347	167	63	83
Education expenditure	0	7	3	3	208	104	49	56
Total consumption expenditure	4,862	3,864	2,530	2,137	16,349	11,561	6,860	7,523

TABLE B6.2 MEAN EXPENDITURE PER CAPITA FOR MAIN EXPENDITURE CATEGORIES AND KEY FOOD ITEMS (NOMINAL PRICES, TSHS)

	1991/92				2000/01			
	DSM	Urban	Rural	Total	DSM	Urban	Rural	Total
Paddy	4	14	12	11	3	30	33	31
Rice	605	386	151	205	1,272	912	406	526
Maize Cob	5	14	31	28	7	23	57	49
Maize Grain	74	267	160	169	38	295	230	228
Maize Flour	373	240	319	312	796	805	898	879
Millet Grain	1	4	8	7	5	13	9	9
Millet Flour	0	1	3	3	14	10	12	12
Sorghum Grain	0	5	25	21	1	12	33	28
Sorghum Flour	0	2	60	50	0	5	105	85
Wheat Grain	1	1	0	0	2	3	3	3
Wheat Flour	25	45	8	14	89	80	33	42
Barley	1	3	24	20	3	4	6	6
Cereal Products	390	169	19	58	892	395	104	190
Starches	148	186	257	242	397	460	612	578
Sugar and Sweets	237	224	91	115	615	575	292	350
Pulses	213	154	149	153	425	363	340	348
Nuts	188	74	49	59	298	166	118	135
Seeds	1	2	3	2	3	2	5	4
Vegetables	341	253	131	157	916	656	408	472
Fruits	66	74	31	39	271	183	94	116
Meat and Meat Products	479	376	223	256	1,200	999	559	657
Fish and Shellfish	269	242	145	164	649	550	375	415
Dairy Products	85	77	89	87	228	213	200	204
Oils and Fats	151	197	57	80	438	434	189	237
Spices	43	56	51	51	90	91	84	85
Raw Materials for Drink	41	32	12	16	92	72	33	42
Non-alcoholic Drinks	51	50	28	32	462	201	63	105
Consumed Outside	115	55	31	39	1,451	380	121	234
Cost of Grinding	1	20	19	18	5	57	72	66
Total Food Expenditure	3,910	3,223	2,186	2,409	10,668	7,989	5,492	6,137
Household Equipment	63	75	49	53	157	168	129	136
Furniture	183	125	44	62	381	307	129	168
Curtain/pillow/mattress	42	33	14	18	123	78	44	53
Soap	90	91	64	69	260	226	150	167
Cigarettes	23	35	29	30	109	101	66	73
Household Durables	74	47	7	16	154	83	14	31
Jewellery	9	3	1	1	40	21	3	8
Radio/TV/etc	26	17	8	10	160	125	45	63
Other Transport	69	107	44	53	876	319	120	191
Total Durables	577	541	262	314	2,565	1,501	706	923
Medical	52	65	26	32	569	338	190	232
Education	66	47	19	25	974	431	138	227
Alcoholic Drinks	47	71	69	68	379	281	195	217
Personal Effects	23	21	7	10	75	79	36	44
Personal Care	199	126	30	51	720	407	139	210
Recreation	13	14	7	9	281	98	29	53
Fuel	393	343	171	204	1,353	1,009	551	661
Petrol	5	8	2	3	393	145	84	110
Linen	57	59	34	39	144	152	89	101
Transport Fares	78	88	24	35	1,496	391	125	241
Other Services	0	8	1	2	64	39	7	14
Domestic Services	3	5	3	3	85	64	19	29

Telephone and Postage	1	8	1	2	304	74	6	33
Water Bill	15	10	3	5	230	119	76	91
Clothes	527	445	218	263	1,347	1,090	579	694
Cleaning Materials	8	11	2	3	102	45	9	19
Contributions	7	21	9	11	197	125	69	84
Total Non-durables	1,377	1,237	583	708	7,172	4,118	2,012	2,602
Total Expenditure	5,982	5,114	3,077	3,489	21,949	14,377	8,538	10,120
Financial Transactions	207	393	129	166	4,439	2,306	666	1,111
Production Costs	9	79	78	75	1,365	547	341	429

Chapter 7

TABLE B7.1 MEAN EXPENDITURE PER ADULT EQUIVALENT FOR 28 DAYS, POVERTY ANALYSIS CONSUMPTION AGGREGATE (TSHS, 2000/01 PRICES)

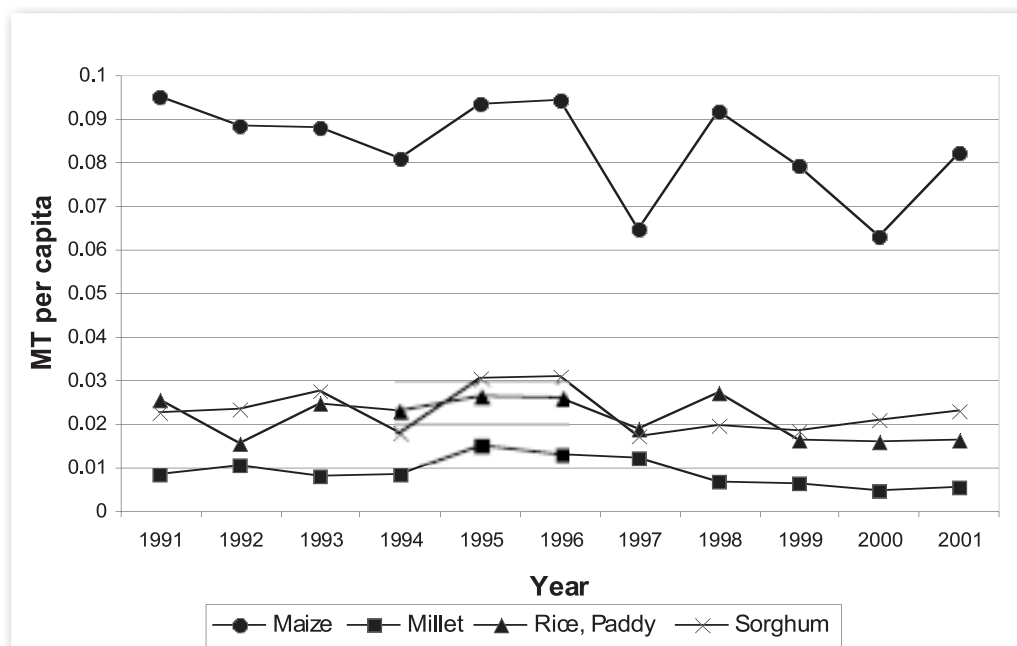
	Dar es Salaam	Other urban areas	Rural areas	Mainland Tanzania
2000/01	15,944	13,533	10,064	10,884
1991/92	10,640	11,865	9,362	9,746
Ratio (00/01) / (91/92)	1.50	1.14	1.07	1.12

TABLE B7.2 PERCENTAGE OF THE POPULATION BELOW THE POVERTY LINE USING THREE PRICE INDEXES

	Dar es Salaam		Other urban areas		Rural areas		Mainland Tanzania	
	91/92	2000	91/92	2000	91/92	2000	91/92	2000
Food Poverty	13.6	7.5	15.0	12.3	23.1	21.6	21.6	19.5
Basic Needs	28.1	17.6	28.7	25.3	40.8	40.5	38.6	37.1

Note: Poverty estimates calculated for 2000/01 data using price adjustments for the three areas: Dar es Salaam, other urban and rural areas, as is done in the 1991/92 data.

FIGURE B7.1 PER CAPITA PRODUCTION OF MAJOR CEREALS BY YEAR, 1991 TO 2001



Source: Economic Survey 2000, Planning Commission.

FIGURE: B7.2 POVERTY AND FOOD SHARE ESTIMATES BY REGION (HBS 2000/01)

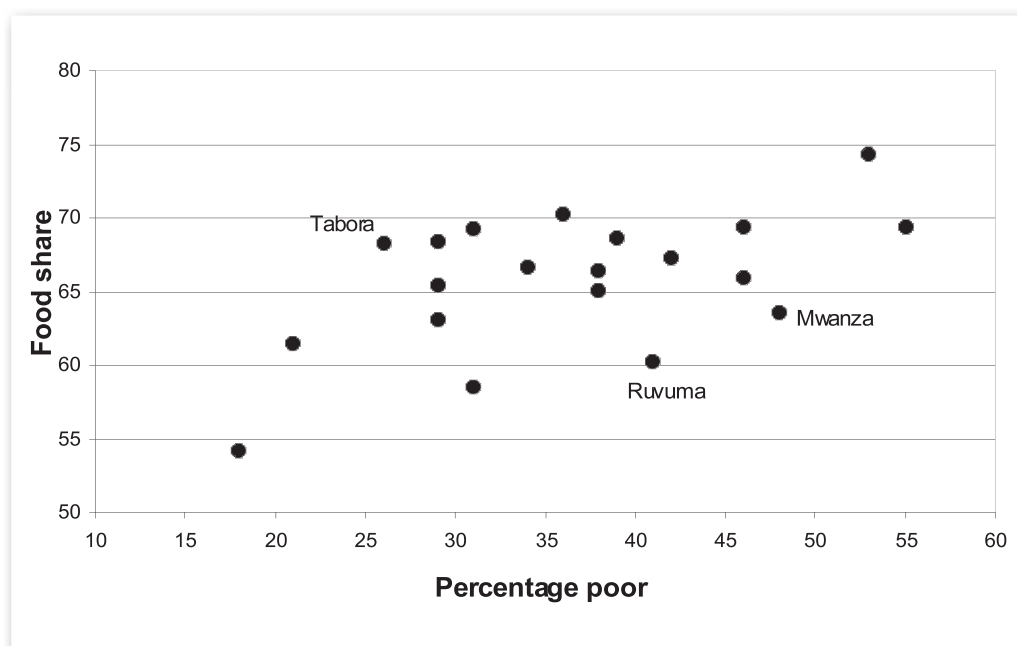


TABLE B7.3 MEAN EXPENDITURE PER CAPITA BY QUINTILE (NOMINAL PRICES, 28 DAYS, TSHS)

	Dar es Salaam		Other urban areas		Rural areas		Mainland Tanzania	
	91/92	2000	91/92	2000	91/92	2000	91/92	2000
Q1	1,321	3,279	1,191	3,009	1,116	3,014	1,121	3,015
Q2	2,024	5,116	1,904	5,004	1,918	5,001	1,918	5,003
Q3	2,571	7,108	2,568	6,900	2,548	6,799	2,551	6,819
Q4	3,716	9,796	3,517	9,855	3,511	9,593	3,528	9,649
Q5	7,351	23,717	7,609	19,867	6,480	17,795	6,870	19,359

TABLE B7.4 REPORTED FREQUENCY OF PROBLEMS SATISFYING HOUSEHOLD FOOD NEEDS IN THE PRECEDING YEAR

	Dar es Salaam	Other Urban	Rural	Mainland Tanzania
Never	30.4	34.0	30.5	31.0
Seldom	43.3	41.5	45.1	44.5
Sometimes	7.7	10.0	6.2	6.9
Often	18.3	13.8	16.8	16.4
Always	0.2	0.6	1.4	1.2
Total	100.0	100.	100.0	100.0

Chapter 8

TABLE B8.1 MEAN DISTANCE TO SELECTED FACILITIES BY POVERTY STATUS (KM)

Facility	Very poor		Poor		Non poor		Total	
	91/92	00/01	91/92	00/01	91/92	00/01	91/92	00/01
Firewood	3.4	3.0	3.2	4.4	3.1	2.3	3.2	2.7
Market	4.3	3.7	5.1	3.1	4.2	2.7	4.3	2.9
Shop	2.2	2.2	1.9	2.0	1.6	1.3	1.7	1.5
Public transport	4.6	5.4	6.3	5.9	4.8	3.9	5.0	4.4
Bank	N/A	31.7	N/A	36.4	N/A	29.1	N/A	30.4

TABLE B8.2 PERCENTAGE OF CHILDREN AGED 7-13 YEARS REPORTING STUDYING BY POVERTY STATUS AND SEX

	Very poor		Poor		Non poor		Non-poor/ very poor	
	91/92	00/01	91/92	00/01	91/92	00/01	91/92	00/01
Male	52.3	48.8	51.5	58.2	57.7	66.0	1.10	1.35
Female	56.5	51.4	63.1	60.2	59.7	67.1	1.06	1.30

TABLE B8.3 PERCENTAGE OF CHILDREN AGED 7-13 YEARS REPORTING STUDYING BY EDUCATION OF THE HOUSEHOLD HEAD

None		Adult Education		Primary only		Above primary	
91/92	00/01	91/92	00/01	91/92	00/01	91/92	00/01
56.0	46.9	48.4	56.8	57.9	65.1	71.1	83.1

TABLE B8.4 HOUSEHOLD FACILITIES BY POVERTY STATUS AND AREA

	1991/92			2000/01		
	Very poor	Poor	Non- poor	Very poor	Poor	Non- poor
Per cent with Water supply:						
Dar es Salaam						
Piped	90.3	93.1	93.2	75.4	69.0	87.6
Other protected	3.7	3.2	3.9	18.8	11.7	6.9
Unprotected	2.6	1.3	1.8	5.2	17.6	2.4
Other	3.3	2.3	1.1	0.6	1.7	3.0
Total	100.0	100.0	100.0	100.0	100.0	100.0
Other urban						
Piped	43.1	61.6	78.4	60.1	68.7	78.1
Other protected	42.4	14.3	5.9	15.4	14.6	11.8
Unprotected	7.1	12.8	10.3	24.1	15.3	9.4
Other	7.4	11.3	5.4	0.4	1.3	0.8
Total	100.0	100.0	100.0	100.0	100.0	100.0
Rural						
Piped	35.0	25.9	21.6	23.4	24.0	30.3
Other protected	10.1	11.4	10.2	17.0	18.8	17.5
Unprotected	54.3	62.6	66.6	59.5	56.4	51.2
Other	0.6	0.2	1.6	0.1	0.8	1.0
Total	100.0	100.0	100.0	100.0	100.0	100.0
Per cent with any toilet:						
Dar es Salaam	98.3	99.6	98.7	89.3	91.3	94.8
Other urban	96.5	97.7	98.5	95.5	98.0	97.9
Rural	90.7	89.5	91.9	87.7	90.1	93.1
Per cent with electricity:						
Dar es Salaam	39.1	49.0	52.8	49.7	44.4	60.5
Other urban	7.7	12.2	24.9	10.0	14.4	33.6
Rural	2.3	1.5	2.9	0.7	2.9	2.1

Chapter 9

TABLE B9.1 MEAN MONTHLY INCOME PER HOUSEHOLD BY SOURCE
(TSHS, HBS 2000/01)

Source	Dar es Salaam	Other Urban	Rural	Mainland Tanzania
Wages & salaries	41,931	22,291	3,956	8,657
Allowances	5,240	463	71	407
Director fees	7	10	11	10
Bonuses	2,267	1,093	120	376
Taxes and social security	9	55	30	33
Other cash income	849	1,250	562	677
In kind payment in the form of food	365	758	231	314
In kind payment in other forms	16	49	37	38
Cash from services	7,366	6,800	1,140	2,294
Cash from sales of purchased goods	44,371	32,969	5,365	11,461
Cash from sales of homemade goods	3,483	4,545	1,919	2,383
Cash from sales of gathering,hunting,fishing activities	707	3,217	3,921	3,645
Revenue in form of goods and services	546	269	243	263
Value of domestic consumption of output	105	634	1,594	1,375
Cash income used for domestic consumption	44	603	46	127
Cash from sale of grains,field and cash crops	334	5,138	8,737	7,763
Cash from sale of roots,fruit and vegetables	728	1,529	3,005	2,669
Cash from sale of processed own products	10	328	523	467
Cash from sale of livestock	611	2,793	3,735	3,430
Value of consumption of own produce	475	6,663	15,459	13,379
Cash from non-farm cooperatives	201	669	32	133
In-kind payment from non-farm cooperatives	282	154	36	66
Cash from producer cooperatives	0	32	49	44
In kind payment from producer cooperatives	14	22	49	44
Imputed rent	13	84	7	18
Interest on accounts	184	24	5	18
Other interest	2	31	1	6
Dividends	6	143	14	32
Cash from renting house	982	650	65	199
Cash from renting land	0	69	23	28
Cash from renting animals	0	5	15	13
Cash from renting agricultural tools	0	24	21	20
Cash from renting assets	35	193	30	54
In-kind value of goods and services	167	329	94	132
Employer sickness benefits	3	66	22	28
Employer family allowance	54	81	3	17
Social assistance grants	19	68	15	23
Pension and insurance annuity	0	15	2	3
Other transfers	16	357	9	60
Remittances	3,664	3,165	2,719	2,835
Gifts in cash	3,792	4,243	1,338	1,890
Cash from sale of possessions	188	474	228	261
Withdrawal of savings	389	1,049	77	234
Lottery prizes	44	34	3	9
Loans obtained	2,308	2,866	1,288	1,571
Loans repaid	1,123	559	228	324
Compensation received	9	24	9	11
Lump-sum inheritances	0	5	2	3
Maturity payment of life insurance	0	25	0	4
Other lump-sum payments	64	57	45	47
Total	123,027	106,978	57,134	67,896

TABLE B9.2 MEAN MONTHLY INCOME PER EARNER BY SEX AND LEVEL OF EDUCATION (TSHS, HBS 2000/01)

Educational level	Dar es Salaam	Other Urban	Rural	Mainland Tanzania
Men				
None	20,145	21,422	18,159	18,382
Primary (including adult ed)	81,920	61,442	32,436	37,529
Secondary	105,657	149,576	61,741	95,510
Tertiary	225,929	147,202	42,490	83,701
Total	97,211	73,963	29,949	37,593
Women				
None	16,539	20,517	15,955	16,261
Primary (including adult ed)	30,227	31,774	17,758	19,990
Secondary	61,450	55,351	31,871	44,676
Tertiary	116,310	71,878	22,165	42,722
Total	40,565	32,678	17,343	19,798

TABLE B9.3 MEAN NUMBER OF TYPES OF INCOME SOURCE REPORTED PER HOUSEHOLD

Dar es Salaam		Other urban areas		Rural areas		Mainland Tanzania	
91/92	2000	91/92	2000	91/92	2000	91/92	2000
1.3	2.5	1.9	3.5	1.8	4.6	1.8	4.3

Appendix

C

TABLES OF KEY
INDICATORS BY REGION

Note that the 'urban' total in these tables includes Dar es Salaam and so will not be equal to the 'other urban' estimates in the main body of the report.

TABLE C1 URBANISATION, HOUSEHOLD SIZE AND HOUSEHOLD STRUCTURE

	DODOMA	ARUSHA	KILIMANJARO	TANGA	MOROGORO	PWANI	DSM	LINDI	MTWARA	RUVUMA	IRINGA	MBEYA	SINGIDA	TABORA	RUKWA	KIGOMA	SHINYANGA	KAGERA	MWANZA	MARA	Tanzania Mainland
Weighted sample % urban	13	18	12	7	22	20	92	18	19	15	8	28	10	15	13	13	6	6	16	14	19
1988 Census % urban	11	12	15	18	21	15	89	15	14	12	10	18	9	14	14	13	7	6	19	10	18
Mean households size	4.4	5.3	4.4	5.6	4.8	4.9	4.3	3.9	3.8	4.6	3.9	4.2	5.0	4.7	5.4	5.5	6.7	5.1	6.2	5.9	4.9
Number of household members per sleeping room																					
0 - 1.99	27	20	39	25	36	39	32	49	47	46	52	33	31	34	18	25	21	23	20	28	31
2 - 2.99	39	26	39	34	34	42	29	40	36	35	34	33	34	33	28	35	37	37	37	31	35
3 - 3.99	22	27	14	20	19	11	22	8	12	14	9	21	21	16	34	19	23	22	24	22	20
4+	12	26	7	21	10	8	17	4	4	5	5	13	13	17	20	21	19	18	19	19	14
Percentage of female-headed households																					
Urban	27	21	33	32	20	28	n/a	29	32	28	31	28	32	36	28	28	26	31	26	30	26
Rural	26	21	25	23	20	16	n/a	18	17	11	32	29	28	21	14	8	21	23	21	29	22
Total	27	21	26	24	20	18	21	20	20	14	31	29	29	23	15	11	21	23	22	29	23

TABLE C2 PERCENTAGE OF HOUSEHOLDS LIVING IN DWELLINGS WITH MODERN MATERIALS (FIRST BUILDING)

	DODOMA	ARUSHA	KILIMANJARO	TANGA	MOROGORO	PWANI	DSM	LINDI	MTWARA	RUVUMA	IRINGA	MBEYA	SINGIDA	TABORA	RUKWA	KIGOMA	SHINYANGA	KAGERA	MWANZA	MARA	Tanzania Mainland
% Modern floor																					
Urban	70	66	67	70	65	51	n/a	37	54	66	79	66	52	60	52	39	64	65	54	66	71
Rural	7	11	38	12	7	10	n/a	7	8	25	15	19	7	5	3	4	9	15	13	20	13
Total	16	23	42	17	21	18	92	12	17	32	20	33	11	14	10	9	15	18	22	27	25
% Modern walls																					
Urban	54	43	57	44	61	26	n/a	20	40	76	62	20	26	24	38	27	41	54	25	47	54
Rural	18	11	36	3	18	1	n/a	1	5	65	26	37	5	3	31	41	2	10	6	19	17
Total	23	18	39	6	28	6	88	4	11	67	28	32	7	6	32	39	6	13	10	23	25
% Modern Roof																					
Urban	89	96	93	86	88	70	n/a	56	75	81	88	90	84	85	64	73	75	89	79	89	88
Rural	24	41	84	36	31	24	n/a	8	17	34	44	37	15	11	8	13	18	51	31	34	31
Total	33	53	85	41	45	33	98	16	28	42	48	53	21	24	16	21	24	53	42	43	44

Note: Modern floor materials include cement, tiles etc and exclude earth floor; modern walls include baked/burnt bricks and concrete/cement/stone; modern roof materials include metal sheets, tiles, concrete, cement and asbestos sheets.

TABLE C3 PERCENTAGE OF HOUSEHOLDS REPORTING CONNECTION TO THE ELECTRICITY GRID

	DODOMA	ARUSHA	KILIMANJARO	TANGA	MOROGORO	PWANI	DSM	LINDI	MTWARA	RUVUMA	IRINGA	MBEYA	SINGIDA	TABORA	RUKWA	KIGOMA	SHINYANGA	KAGERA	MWANZA	MARA	Tanzania Mainland
Urban	38	42	42	45	41	27	n/a	22	24	23	40	25	31	20	22	19	26	33	19	38	39
Rural	1	2	13	3	0	1	n/a	2	1	1	3	1	3	0	1	4	0	0	1	4	2
TOTAL	6	11	18	7	10	6	59	5	5	5	6	9	5	4	4	6	3	2	5	10	10

TABLE C4 DISTRIBUTION OF HOUSEHOLDS BY MAIN ENERGY SOURCE FOR COOKING (%)

	DODOMA	ARUSHA	KILIMANJARO	TANGA	MOROGORO	PWANI	DSM	LINDI	MTWARA	RUVUMA	IRINGA	MBEYA	SINGIDA	TABORA	RUKWA	KIGOMA	SHINYANGA	KAGERA	MWANZA	MARA	Tanzania Mainland
Firewood	85	75	86	86	76	80	5	90	88	87	86	77	82	82	85	89	89	92	80	83	79
Charcoal	11	10	7	11	20	12	46	6	9	11	11	17	14	15	13	10	9	5	18	13	14
Paraffin	1	11	5	2	2	7	43	1	1	1	1	3	1	1	0	1	1	1	1	2	5
All others	3	3	2	2	1	1	6	4	2	1	2	3	3	3	1	0	1	2	1	2	2

TABLE C5 DISTRIBUTION OF HOUSEHOLDS BY MAIN ENERGY SOURCE FOR LIGHTING (%)

	DODOMA	ARUSHA	KILIMANJARO	TANGA	MOROGORO	PWANI	DSM	LINDI	MTWARA	RUVUMA	IRINGA	MBEYA	SINGIDA	TABORA	RUKWA	KIGOMA	SHINYANGA	KAGERA	MWANZA	MARA	Tanzania Mainland
Urban																					
Electricity	37	42	41	43	38	26	n/a	21	22	20	38	27	31	19	21	17	24	29	17	37	37
Paraffin	62	57	57	56	59	72	n/a	77	75	76	59	72	68	79	77	81	74	69	81	60	61
Firewood	0	0	0	1	0	0	n/a	2	0	1	1	0	0	0	1	0	1	0	0	0	0
All others	1	0	1	0	2	2	n/a	0	2	2	2	1	1	2	2	2	1	1	1	3	2
Rural																					
Electricity	0	4	13	2	0	0	n/a	0	0	0	2	1	3	0		0	0	0	0	2	1
Paraffin	81	72	85	88	96	96	n/a	96	90	98	88	92	81	97	89	88	94	96	99	95	90
Firewood	19	24	1	8	3	1	n/a	3	9	1	4	4	13	2	8	9	5	4	1	2	7
All others	0	0	1	2	1	3	n/a	0	1	0	5	3	3	1	3	3	1	0	0	1	1
Total																					
Electricity	5	12	17	6	9	5	56	4	4	4	5	9	5	3	3	3	3	2	4	8	9
Paraffin	78	69	81	85	87	91	40	93	87	94	86	86	79	94	87	87	92	94	95	89	84
Firewood	16	19	1	7	2	1	0	3	8	1	4	3	12	2	7	8	5	4	1	2	5
All others	0	0	1	2	2	3	3	0	1	1	5	2	3	1	3	3	1	0	1	1	2

TABLE C6 PERCENTAGE OF HOUSEHOLDS USING A TOILET OF ANY TYPE

	DODOMA	ARUSHA	KILIMANJARO	TANGA	MOROGORO	PWANI	DSM	LINDI	MTWARA	RUVUMA	IRINGA	MBEYA	SINGIDA	TABORA	RUKWA	KIGOMA	SHINYANGA	KAGERA	MWANZA	MARA	Tanzania Mainland
Urban	98	99	98	97	99	98	n/a	97	98	100	98	99	97	99	97	99	93	98	95	94	97
Rural	91	80	97	79	93	98	n/a	98	92	99	99	95	89	96	86	99	90	95	91	84	92
Total	92	84	97	81	94	98	94	98	93	99	99	96	90	97	88	99	90	95	92	86	93

TABLE C7 MEAN DISTANCES TO SELECTED FACILITIES (KM)

	DODOMA	ARUSHA	KILIMANJARO	TANGA	MOROGORO	PWANI	DSM	LINDI	MTWARA	RUVUMA	IRINGA	MBEYA	SINGIDA	TABORA	RUKWA	KIGOMA	SHINYANGA	KAGERA	MWANZA	MARA	Tanzania Mainland
Mean distance to a bank:																					
Urban	4.6	1.7	11.0	7.2	6.1	14.7	n/a	16.0	7.4	2.6	1.6	6.4	9.8	6.8	2.0	7.9	22.5	13.8	17.9	2.5	6.7
Rural	54.1	21.4	13.2	40.9	67.4	31.3	n/a	37.5	37.1	31.0	39.2	31.8	25.5	29.3	89.5	33.0	36.5	34.2	41.8	25.4	37.5
Total	47.3	16.7	12.9	37.8	52.0	28.1	3.0	33.3	31.5	25.8	36.1	23.6	24.0	25.1	76.7	29.6	34.8	32.9	36.2	20.8	30.5
Mean distance to firewood - rural households only:																					
	2.7	2.8	1.5	3.2	2.8	1.7	n/a	1.6	3.2	2.0	3.6	1.9	10.4	2.5	5.0	6.2	4.2	1.9	1.9	2.9	3.1
Mean distance to a shop - rural households only:																					
	1.8	2.8	0.2	1.8	2.3	1.0	n/a	1.1	0.6	0.8	0.9	3.9	1.6	2.1	2.6	1.6	2.7	2.1	1.3	1.6	1.8

TABLE C8 DISTRIBUTION OF EDUCATIONAL LEVEL OF ADULTS (AGED 15+; %)

	DODOMA	ARUSHA	KILIMANJARO	TANGA	MOROGORO	PWANI	DSM	LINDI	MTWARA	RUVUMA	IRINGA	MBEYA	SINGIDA	TABORA	RUKWA	KIGOMA	SHINYANGA	KAGERA	MWANZA	MARA	Tanzania Mainland
No education/pre-school	31	20	12	31	26	39	8	44	28	15	16	16	27	31	30	28	40	25	27	24	25
Adult education only	3	2	1	3	1	4	1	3	3	1	3	2	1	2	3	2	2	2	2	0	2
Primary 1 - 4	9	10	20	16	15	9	6	15	13	13	12	14	16	11	11	9	10	16	10	10	12
Primary 5 - 8	53	60	56	46	50	43	61	36	52	66	63	59	51	51	51	58	45	52	56	59	54
Form 1 - 6	3	7	10	3	5	4	17	2	3	3	3	7	2	4	2	1	2	4	4	6	5
Course after primary/ secondary	1	2	1	1	3	1	5	1	1	2	2	2	1	1	1	1	1	1	1	1	2
Diploma / university degree	0	0	0	0	0	0	3	0	0	0	0	0	2	0	0	0	0	0	0	0	0

TABLE C9 DISTRIBUTION OF EDUCATIONAL LEVEL OF ADULTS BY URBAN / RURAL RESIDENCE (AGED 15+; %)

	DODOMA	ARUSHA	KILIMANJARO	TANGA	MOROGORO	PWANI	DSM	LINDI	MTWARA	RUVUMA	IRINGA	MBEYA	SINGIDA	TABORA	RUKWA	KIGOMA	SHINYANGA	KAGERA	MWANZA	MARA	Tanzania Mainland
Urban																					
No education/pre-school	14	4	5	10	11	27	n/a	21	18	9	6	12	12	18	15	18	15	12	16	11	11
Adult education only	1	1	1	1	2	2	n/a	1	2	1	1	0	1	2	1	2	1	1	1	0	1
Primary 1 – 4	8	3	13	10	11	10	n/a	16	12	9	8	11	10	9	12	10	9	11	9	8	9
Primary 5 – 8	57	67	58	60	55	48	n/a	50	55	62	55	60	59	57	57	54	55	54	57	60	59
Form 1 – 6	13	21	17	13	14	9	n/a	10	10	14	22	13	13	11	10	9	14	14	12	15	15
Course after primary/ secondary	6	4	5	5	6	3	n/a	2	3	4	8	4	4	3	4	5	3	6	4	3	4
Diploma / university degree	0	0	1	1	1	1	n/a	0	1	1	1	0	1	1	1	1	1	1	1	2	1
Rural																					
No education/Pre-school	33	24	13	33	31	42	n/a	48	30	16	17	19	29	33	33	29	42	26	29	26	29
Adult education only	3	3	1	3	1	4	n/a	4	3	1	3	3	1	2	4	2	2	2	2	0	2
Primary 1 – 4	9	11	21	17	16	9	n/a	14	13	13	12	15	16	11	11	9	10	17	11	10	13
Primary 5 – 8	52	58	55	45	49	42	n/a	33	51	67	64	58	50	50	50	59	45	52	55	59	53
Form 1 – 6	1	3	8	2	2	3	n/a	1	2	1	2	4	1	2	1	0	1	3	2	4	2
Course after primary/ secondary	1	1	1	1	2	1	n/a	0	1	1	2	1	1	1	1	0	1	0	0	1	1
Diploma / university degree	0	0	0	0	0	0	n/a	0	0	0	0	0	2	0	0	0	0	0	0	0	0

TABLE C10 DISTRIBUTION OF EDUCATIONAL LEVEL OF ADULTS BY SEX (AGED 15+; %)

	DODOMA	ARUSHA	KILIMANJARO	TANGA	MOROGORO	PWANI	DSM	LINDI	MTWARA	RUVUMA	IRINGA	MBEYA	SINGIDA	TABORA	RUKWA	KIGOMA	SHINYANGA	KAGERA	MWANZA	MARA	Tanzania Mainland
Men																					
No education/pre-school	22	15	7	23	16	24	5	34	19	9	9	9	18	23	19	21	29	13	20	12	17
Adult education only	4	2	1	4	1	5	0	6	4	1	4	3	1	3	4	2	3	1	1	0	2
Primary 1 - 4	11	12	16	20	17	11	7	20	16	13	13	15	18	15	15	10	13	20	13	11	14
Primary 5 - 8	58	62	60	48	53	53	60	36	55	70	70	57	56	54	57	64	51	59	59	66	57
Form 1 - 6	3	7	13	4	7	5	19	3	4	4	3	12	3	4	3	2	3	5	5	8	6
Course after primary/ secondary	0	0	1	0	0	0	4	0	0	0	0	0	4	0	0	0	0	0	0	1	1
Diploma / university degree	2	2	2	2	5	2	5	1	2	3	2	3	1	1	2	1	1	1	1	2	2
Women																					
No education/Pre-school	38	24	15	38	35	52	11	52	36	20	24	23	35	39	40	33	49	35	33	34	32
Adult education only	2	3	1	3	1	2	1	1	1	1	3	1	1	1	3	2	2	2	3	0	2
Primary 1 - 4	7	7	23	13	12	8	5	9	11	12	11	12	14	7	8	9	7	13	8	8	10
Primary 5 - 8	49	57	53	44	48	34	62	35	49	63	56	60	47	49	46	55	41	47	53	52	51
Form 1 - 6	3	7	7	2	3	3	15	2	3	3	3	3	2	3	2	1	1	3	3	3	4
Course after primary/ secondary	0	0	0	0	0	0	2	0	0	0	0		0	0	0	0	0	0	0	0	0
Diploma / university degree	1	1	1	1	1	1	5	1	1	1	3	1	2	1	1	0	0	0	1	1	1

TABLE C11 DISTRIBUTION OF EDUCATIONAL LEVEL OF ADULT MEN BY PLACE OF RESIDENCE (AGED 15+; %)

	DODOMA	ARUSHA	KILIMANJARO	TANGA	MOROGORO	PWANI	DSM	LINDI	MTWARA	RUVUMA	IRINGA	MBEYA	SINGIDA	TABORA	RUKWA	KIGOMA	SHINYANGA	KAGERA	MWANZA	MARA	Tanzania Mainland
Urban																					
No education/pre-school	9	2	4	4	6	17	n/a	16	13	4	2	6	8	10	8	11	8	8	9	6	7
Adult education only	1	1	0	1	2	2	n/a	1	2	1	1	0	1	1	0	3	1	0	1	0	1
Primary 1 – 4	11	3	12	10	14	13	n/a	18	13	11	8	13	9	10	13	13	11	13	12	9	10
Primary 5 – 8	55	61	57	64	53	50	n/a	51	58	61	51	52	57	58	62	52	57	52	57	61	57
Form 1 – 6	16	27	21	14	17	10	n/a	12	10	15	27	21	19	15	10	11	17	17	16	19	18
Course after primary/ secondary	0	1	1	1	1	2	n/a	0	1	1	1	1	1	1	2	2	1	2	1	3	2
Diploma / university degree	8	6	4	6	7	5	n/a	2	4	6	11	6	6	4	5	8	5	7	4	2	5
Rural																					
No education/Pre-school	24	18	8	24	20	25	n/a	38	20	10	9	10	19	25	21	22	31	13	23	13	20
Adult education only	4	2	2	4	1	6	n/a	7	5	1	4	4	1	3	4	2	3	1	1	0	3
Primary 1 – 4	11	14	17	21	19	10	n/a	21	16	13	13	16	19	16	15	10	14	21	13	12	15
Primary 5 – 8	59	62	60	47	53	54	n/a	33	54	71	72	60	56	53	56	65	50	59	59	68	58
Form 1 – 6	1	2	11	3	3	4	n/a	1	3	2	1	8	1	2	2	0	1	5	3	6	3
Course after primary/ secondary	0	0	0	0		0	n/a			0	0	0	4		0	0	0	0	0	0	0
Diploma / university degree	1	1	1	1	4	1	n/a	0	2	2	1	2	0	1	2	0	1	1	0	2	1

TABLE C12 DISTRIBUTION OF EDUCATIONAL LEVEL OF ADULT WOMEN BY PLACE OF RESIDENCE (AGED 15+; %)

	DODOMA	ARUSHA	KILIMANJARO	TANGA	MOROGORO	PWANI	DSM	LINDI	MTWARA	RUVUMA	IRINGA	MBEYA	SINGIDA	TABORA	RUKWA	KIGOMA	SHINYANGA	KAGERA	MWANZA	MARA	Tanzania Mainland
Urban																					
No education/pre-school	19	5	7	15	16	35	n/a	26	22	14	9	15	16	24	22	25	23	16	22	15	15
Adult education only	2	1	1	2	1	1	n/a	1	1	1	1	0	1	2	2	2	2	2	1	1	1
Primary 1 – 4	6	4	14	9	9	8	n/a	14	11	8	8	9	10	8	12	9	8	9	7	7	7
Primary 5 – 8	58	72	59	56	57	45	n/a	49	53	62	59	66	61	56	53	56	53	56	56	60	60
Form 1 – 6	11	16	14	13	12	8	n/a	9	10	12	17	7	9	8	10	6	11	12	9	12	12
Course after primary/ secondary	0	0	1	1	0	0	n/a		0	0	0		0	0	0		1	0	0	0	1
Diploma / university degree	4	2	5	4	4	2	n/a	1	3	3	5	2	3	2	3	3	2	5	3	4	3
Rural																					
No education/Pre-school	42	30	16	40	40	56	n/a	59	39	21	25	26	37	42	43	34	51	36	35	38	37
Adult education only	2	4	1	3	1	2	n/a	0	1	1	3	1	1	1	4	2	2	2	4	0	2
Primary 1 – 4	7	8	25	13	13	8	n/a	8	11	13	11	14	14	7	7	9	7	13	8	8	11
Primary 5 – 8	47	54	52	42	45	31	n/a	32	48	63	56	57	45	47	45	54	40	46	52	51	48
Form 1 – 6	2	4	6	1	1	1	n/a	0	1	1	2	1	1	3	0	0	1	2	2	2	2
Course after primary/ secondary		0	0	0		0	n/a				0					0			0	0	0
Diploma / university degree	0	1	1	0	0	1	n/a	0	0	1	3	0	2	1	0	0	0	0	0	1	1

TABLE C13 PERCENTAGE OF ADULTS LITERATE IN ANY LANGUAGE BY PLACE OF RESIDENCE

	Tanzania Mainland		
	MARA		
	MWANZA		
	KAGERA		
	SHINYANGA		
	KIGOMA		
	RUKWA		
	TABORA		
	SINGIDA		
	MBEYA		
	IRINGA		
	RUVUMA		
	MTWARA		
	LINDI		
	DSM		
	PWANI		
	MOROGORO		
	TANGA		
	KILIMANJARO		
	ARUSHA		
	DODOMA		
Urban	86	96	88
Rural	63	74	67
Total	66	78	71

TABLE C14 PRIMARY NET ENROLMENT RATIO

	Tanzania Mainland	
	MARA	
	MWANZA	
	KAGERA	
	SHINYANGA	
	KIGOMA	
	RUKWA	
	TABORA	
	SINGIDA	
	MBEYA	
	IRINGA	
	RUVUMA	
	MTWARA	
	LINDI	
	DSM	
	PWANI	
	MOROGORO	
	TANGA	
	KILIMANJARO	
	ARUSHA	
	DODOMA	
Total	58	59

TABLE C15 MEAN DISTANCE TO PRIMARY AND SECONDARY SCHOOLS BY PLACE OF RESIDENCE (KM)

	DODOMA	ARUSHA	KILIMANJARO	TANGA	MOROGORO	PWANI	DSM	LINDI	MTWARA	RUVUMA	IRINGA	MBEYA	SINGIDA	TABORA	RUKWA	KIGOMA	SHINYANGA	KAGERA	MWANZA	MARA	Tanzania Mainland
Primary school																					
Urban	0.8	0.7	0.7	0.2	0.5	0.5	n/a	0.6	0.6	0.4	0.7	0.9	0.8	0.4	0.8	1.1	1.0	1.0	0.8	1.3	0.7
Rural	3.1	2.2	0.9	2.5	2.1	2.0	n/a	1.3	1.2	1.0	1.5	1.5	2.0	3.6	1.4	1.7	2.9	2.6	1.9	1.8	2.1
Total	2.8	1.9	0.9	2.3	1.7	1.7	0.8	1.2	1.1	0.9	1.5	1.3	1.9	3.0	1.3	1.7	2.7	2.5	1.7	1.8	1.8
Secondary school																					
Urban	2.3	1.3	3.2	1.7	3.0	5.5	n/a	6.0	1.6	1.7	3.6	1.7	2.6	2.3	1.7	5.2	11.1	2.5	4.0	1.5	2.7
Rural	22.1	7.8	5.3	20.5	20.1	14.9	n/a	29.0	20.1	11.0	13.4	12.0	10.2	17.6	24.6	15.7	21.7	12.6	11.0	8.0	15.4
Total	19.4	6.4	5.0	18.8	16.0	13.1	2.5	25.1	16.6	9.2	12.7	8.7	9.5	15.0	21.3	14.3	20.5	12.0	9.4	6.9	12.6

TABLE C16 MEASURES OF ILLNESS AND TREATMENT

	DODOMA	ARUSHA	KILIMANJARO	TANGA	MOROGORO	PWANI	DSM	LINDI	MTWARA	RUVUMA	IRINGA	MBEYA	SINGIDA	TABORA	RUKWA	KIGOMA	SHINYANGA	KAGERA	MWANZA	MARA	Tanzania Mainland
Percentage of individuals reporting illness/injury in the four weeks before the survey																					
	34	23	23	23	32	34	19	20	28	22	25	24	29	27	24	21	32	34	30	29	27
Percentage of individuals who were ill in the previous 4 weeks who consulted any health provider																					
	69	62	74	87	70	83	80	61	63	76	79	61	65	69	47	69	68	64	65	72	69
Percentage of individuals who consulted a government provider, of those who consulted anyone																					
	58	48	40	64	55	69	49	68	71	52	46	47	45	79	59	67	41	59	48	46	54

TABLE C17 DISTANCE TO HEALTH FACILITIES BY PLACE OF RESIDENCE

	DODOMA	ARUSHA	KILIMANJARO	TANGA	MOROGORO	PWANI	DSM	LINDI	MTWARA	RUVUMA	IRINGA	MBEYA	SINGIDA	TABORA	RUKWA	KIGOMA	SHINYANGA	KAGERA	MWANZA	MARA	Tanzania Mainland
Percentage of households within 6km of a dispensary / health centre																					
Urban	94	100	98	100	99	98	n/a	93	100	100	100	99	95	100	96	95	97	95	96	99	98
Rural	41	65	94	59	67	69	n/a	63	84	83	60	86	80	50	80	92	61	72	69	66	69
Total	49	73	95	62	75	74	98	67	87	85	63	90	82	58	82	93	65	74	75	71	75
Mean distance to a dispensary / health centre (km)																					
Urban	1.3	0.8	0.9	0.9	1.2	0.9	n/a	1.9	0.9	1.1	0.7	1.5	1.9	0.6	1.4	1.7	1.7	1.6	1.8	2.1	1.1
Rural	6.5	4.7	2.0	5.7	4.4	3.5	n/a	5.2	5.6	4.1	5.1	3.1	3.5	5.6	4.5	3.1	6.4	4.5	4.7	4.6	4.7
Total	5.8	3.8	1.9	5.3	3.7	3.0	0.7	4.7	4.7	3.6	4.8	2.6	3.4	4.7	4.1	2.9	5.9	4.3	4.1	4.2	3.9
Mean distance to a hospital (km)																					
Urban	3.0	1.7	6.8	14.1	3.3	18.9	n/a	5.2	7.4	2.3	8.0	7.6	2.8	6.0	1.8	5.6	13.3	13.6	16.4	2.9	5.9
Rural	40.5	14.5	9.9	30.4	30.7	25.9	n/a	26.2	21.8	25.2	19.8	26.7	13.9	15.5	76.8	22.5	19.7	25.8	34.1	15.5	25.6
Total	35.3	11.8	9.5	29.0	24.0	24.5	2.8	22.7	19.2	21.0	18.9	20.7	12.8	13.7	66.0	20.2	18.9	25.1	30.1	13.4	21.3

TABLE C18 DISTRIBUTION OF HOUSEHOLDS BY SOURCE OF DRINKING WATER AND PLACE OF RESIDENCE (%)

	DODOMA	ARUSHA	KILIMANJARO	TANGA	MOROGORO	PWANI	DSM	LINDI	MTWARA	RUVUMA	IRINGA	MBEYA	SINGIDA	TABORA	RUKWA	KIGOMA	SHINYANGA	KAGERA	MWANZA	MARA	Tanzania Mainland
Urban																					
Piped	95	92	92	84	97	50	n/a	52	77	60	91	85	62	63	29	69	49	51	69	82	79
Other Protected	2	5	4	7	3	31	n/a	9	10	25	5	9	17	18	66	19	15	14	13	13	11
Unprotected	2	3	4	9	1	19	n/a	39	13	14	5	6	19	19	4	12	30	35	18	4	9
Other	1	0	0	0	0	0	n/a	0	0	0	0	1	2	0	0	0	6	0	0	0	1
Rural																					
Piped	54	35	60	16	27	10	n/a	8	10	36	44	50	31	9	36	41	22	8	20	13	28
Other Protected	6	13	15	25	35	13	n/a	3	34	10	7	16	28	4	12	33	15	21	25	17	18
Unprotected	40	50	25	59	38	76	n/a	89	55	54	49	31	41	86	52	26	63	67	55	70	53
Other	0	2	1	0	1	0	n/a	0	0	0	0	2	0	1	0	0	0	3	0	0	1
Total																					
Piped	59	47	64	22	43	18	86	15	22	41	47	61	34	18	35	45	24	11	30	24	39
Other Protected	6	11	13	24	27	17	8	4	30	12	7	14	27	7	20	31	15	21	23	16	16
Unprotected	34	40	22	54	29	65	4	80	48	47	46	23	39	75	46	24	59	66	47	60	44
Other	0	1	0	0	0	0	3	0	0	0	0	2	0	0	0	0	1	3	0	0	1

TABLE C19 PERCENTAGE OF HOUSEHOLDS WITHIN 1KM OF DRINKING WATER IN THE DRY SEASON

	DODOMA	ARUSHA	KILIMANJARO	TANGA	MOROGORO	PWANI	DSM	LINDI	MTWARA	RUVUMA	IRINGA	MBEYA	SINGIDA	TABORA	RUKWA	KIGOMA	SHINYANGA	KAGERA	MWANZA	MARA	Tanzania Mainland
Urban	63	86	73	71	71	80	n/a	60	74	93	73	85	54	77	74	51	40	59	71	79	76
Rural	47	39	56	38	58	51	n/a	45	33	89	72	71	51	49	61	56	32	44	32	22	49
Total	49	49	58	41	61	56	84	47	41	90	72	75	51	54	63	55	33	45	40	31	55

TABLE C20 DISTRIBUTION OF MAIN ACTIVITIES OF ADULTS IN LAST SEVEN DAYS (AGE 15-60, %)

	DODOMA	ARUSHA	KILIMANJARO	TANGA	MOROGORO	PWANI	DSM	LINDI	MTWARA	RUVUMA	IRINGA	MBEYA	SINGIDA	TABORA	RUKWA	KIGOMA	SHINYANGA	KAGERA	MWANZA	MARA	Tanzania Mainland
Farming/livestock/fishing	67	42	56	67	63	62	3	72	69	77	67	55	60	69	76	76	68	81	71	70	62
Employee - government	2	2	2	2	2	3	4	2	3	2	2	2	2	3	2	1	1	1	1	2	2
Employee – parastatal	0	0	1	1	1	0	3	0	0	0	1	1	0	1	0	0	0	0	0	0	1
Employee – other	2	9	4	2	3	3	16	2	2	2	4	6	4	2	1	2	2	2	2	3	4
Self-employed with employees	1	3	2	2	1	1	6	1	2	1	3	3	2	1	1	1	1	0	2	2	2
Self-employed w/out employees	4	6	6	3	6	6	17	3	7	4	6	9	4	4	5	3	4	3	5	4	6
Unpaid family helper in business	3	7	4	4	4	4	8	2	3	3	1	4	6	4	1	3	6	1	4	4	4
Housewife//household chores	10	17	9	9	7	8	20	7	6	4	4	8	8	9	5	3	10	2	6	4	8
Student	8	10	9	10	7	8	11	6	5	5	9	9	9	4	6	8	4	6	7	7	8
Not active	2	4	6	1	4	4	12	5	3	3	4	3	5	3	3	2	4	4	4	3	4

TABLE C21 DISTRIBUTION OF MAIN ACTIVITIES OF HOUSEHOLD HEADS IN LAST SEVEN DAYS (%)

	DODOMA	ARUSHA	KILIMANJARO	TANGA	MOROGORO	PWANI	DSM	LINDI	MTWARA	RUVUMA	IRINGA	MBEYA	SINGIDA	TABORA	RUKWA	KIGOMA	SHINYANGA	KAGERA	MWANZA	MARA	Tanzania Mainland
Farming/livestock/fishing	79	57	74	82	73	71	5	79	76	81	74	65	75	77	79	82	67	85	75	75	70
Employee - government	4	4	3	3	4	5	7	3	5	3	3	2	5	6	3	4	4	2	3	5	4
Employee – parastatal	1	1	2	1	2	0	7	0	0	1	1	2	0	2	0	1	0	0	1	1	1
Employee – other	2	17	5	3	5	7	28	2	3	3	3	8	6	3	2	3	4	3	3	3	6
Self-employed with employees	1	4	3	2	1	2	11	1	2	1	5	4	3	1	1	2	2	0	3	2	3
Self-employed w/out employees	7	11	8	4	9	8	30	4	10	7	8	13	4	6	8	4	9	4	8	6	9
Unpaid family helper in business	2	0	2	0	1	0	0	0	0	1	0	1	0	0	0	0	1	0	1	1	1
Housewife//household chores	3	4	1	1	1	1	5	1	1	1	1	2	3	2	1	1	3	0	1	1	2
Student	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Not active	2	2	2	4	2	6	6	9	3	3	4	3	4	2	5	2	9	4	4	7	4

TABLE C22 DISTRIBUTION OF MAIN ACTIVITIES OF ADULTS IN LAST SEVEN DAYS BY PLACE OF RESIDENCE (AGE 15-60, %)

	DODOMA	ARUSHA	KILIMANJARO	TANGA	MOROGORO	PWANI	DSM	LINDI	MTWARA	RUVUMA	IRINGA	MBEYA	SINGIDA	TABORA	RUKWA	KIGOMA	SHINYANGA	KAGERA	MWANZA	MARA	Tanzania Mainland
Urban																					
Farming/livestock/fishing	26	7	30	28	26	30	n/a	44	35	24	25	23	23	28	31	25	27	27	36	20	19
Employee - government	6	2	7	7	4	6	n/a	9	7	5	5	5	7	6	6	4	6	5	4	6	5
Employee - parastatal	3	1	2	1	4	0	n/a	0	1	2	1	1	1	0	0	2	2	2	2	3	2
Employee - other	8	26	11	9	7	6	n/a	3	8	8	10	11	7	6	4	9	8	14	6	6	12
Self-employed with employees	3	4	6	6	2	4	n/a	4	6	3	4	5	5	2	4	6	4	2	6	6	5
Self-employed w/out employees	17	14	13	11	16	16	n/a	9	11	18	19	19	14	22	13	17	15	19	12	18	16
Unpaid family helper in business	7	9	4	9	8	7	n/a	5	7	4	5	7	10	6	3	11	9	6	7	12	7
Housewife/household chores	18	21	12	14	15	14	n/a	11	13	17	15	13	15	17	14	12	14	13	14	12	16
Student	9	8	9	12	11	9	n/a	8	8	11	9	11	12	6	14	9	10	9	10	11	10
Not active	4	7	5	3	7	8	n/a	6	5	8	7	6	7	7	11	5	5	4	3	6	8
Rural																					
Farming/livestock/fishing	75	52	60	70	77	72	n/a	78	77	88	71	71	64	76	84	84	71	85	79	80	74
Employee - government	1	2	1	1	2	2	n/a	0	2	1	1	0	1	2	1	1	1	1	1	2	1
Employee - parastatal	0	0	1	0	0	0	n/a	0	0	0	1	1	0	1	0	0	0	0	0	0	0
Employee - other	1	5	3	2	2	2	n/a	1	0	1	3	3	3	2	0	1	1	2	0	2	2
Self-employed with employees	0	2	1	1	0	1	n/a	0	0	0	2	2	1	1	0	0	1	0	0	1	1
Self-employed w/out employees	2	3	5	2	3	4	n/a	2	7	1	5	4	3	1	3	1	3	2	3	1	3
Unpaid family helper in business	2	6	4	3	3	3	n/a	1	3	2	1	2	6	3	1	2	6	1	3	3	3
Housewife/household chores	9	16	9	9	4	6	n/a	6	4	1	3	6	7	8	3	2	9	2	3	2	6
Student	8	11	9	9	6	7	n/a	6	4	4	9	9	9	4	5	8	4	5	6	7	7
Not active	2	3	6	1	3	3	n/a	5	3	1	4	2	5	2	2	1	4	4	4	3	3

TABLE C23 DISTRIBUTION OF MAIN ACTIVITIES OF ADULTS IN LAST SEVEN DAYS BY SEX (AGE 15-60, %)

	DODOMA	ARUSHA	KILIMANJARO	TANGA	MOROGORO	PWANI	DSM	LINDI	MTWARA	RUVUMA	IRINGA	MBEYA	SINGIDA	TABORA	RUKWA	KIGOMA	SHINYANGA	KAGERA	MWANZA	MARA	Tanzania Mainland
Men																					
Farming/livestock/fishing	71	49	58	72	60	62	3	72	67	76	69	55	65	70	76	75	73	81	73	67	63
Employee - government	3	3	3	2	4	4	4	3	5	2	3	2	3	3	3	3	2	1	2	4	3
Employee – parastatal	1	0	2	1	2	0	5	0	1	0	1	2	0	2	0	0	0	0	1	1	1
Employee – other	2	14	8	3	5	4	23	2	2	3	3	9	7	4	2	3	3	4	2	4	6
Self-employed with employees	1	3	3	3	1	3	9	2	3	1	3	5	1	2	1	2	2	0	2	2	3
Self-employed w/out employees	4	8	8	4	10	10	24	5	12	6	6	9	4	5	7	4	6	4	6	5	8
Unpaid family helper in business	4	4	3	2	4	2	5	2	3	3	2	2	3	3	1	2	4	1	2	3	3
Housewife//household chores	1	3	0	1	1	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	1
Student	10	11	8	12	9	9	13	8	3	5	10	9	10	5	6	9	5	7	8	10	9
Not active	3	6	6	1	4	6	15	6	4	3	3	5	6	4	4	2	5	2	4	4	5
Women																					
Farming/livestock/fishing	65	36	55	63	67	63	3	72	71	78	65	55	57	68	77	77	63	81	69	72	61
Employee - government	1	2	2	2	1	2	3	1	1	1	1	2	1	3	1	1	0	1	0	1	1
Employee – parastatal	0	0	0	0	0	0	2	0	0	0	0	0	0	0		0	0	0	0	0	0
Employee – other	1	5	2	2	2	2	10	1	1	2	5	3	1	1	0	1	1	1	1	1	2
Self-employed with employees	0	3	1	1	0	1	3	1	1	0	2	1	2	0	0	1	1	0	1	2	1
Self-employed w/out employees	3	3	5	2	3	4	11	2	4	2	5	8	4	3	3	2	2	2	4	3	4
Unpaid family helper in business	3	10	4	6	5	6	10	2	4	2	1	5	9	4	2	4	8	1	6	5	5
Housewife//household chores	18	31	15	17	12	14	40	13	10	7	7	15	14	15	9	5	18	4	10	7	15
Student	7	9	10	7	5	7	10	5	6	5	9	9	9	3	7	8	3	4	5	6	7
Not active	1	2	6	2	4	3	8	3	3	3	5	2	5	2	2	2	3	5	3	2	3

TABLE C24 PERCENTAGE OF CHILDREN AGE 5-14 YEARS REPORTED AS WORKING (AT ALL)

	DODOMA	ARUSHA	KILIMANJARO	TANGA	MOROGORO	PWANI	DSM	LINDI	MTWARA	RUVUMA	IRINGA	MBEYA	SINGIDA	TABORA	RUKWA	KIGOMA	SHINYANGA	KAGERA	MWANZA	MARA	Tanzania Mainland
	67	73	64	80	55	57	28	40	46	73	60	53	52	39	51	60	69	68	84	55	62

TABLE C25 DISTRIBUTION OF HOUSEHOLDS' MAIN SOURCE OF CASH INCOME (%)

	DODOMA	ARUSHA	KILIMANJARO	TANGA	MOROGORO	PWANI	DSM	LINDI	MTWARA	RUVUMA	IRINGA	MBEYA	SINGIDA	TABORA	RUKWA	KIGOMA	SHINYANGA	KAGERA	MWANZA	MARA	Tanzania Mainland
Sales of food crops	43	32	42	41	58	35	3	23	25	24	59	50	35	44	66	68	45	55	32	36	41
Sales of livestock	3	17	5	12	0	0	0	1	0	0	2	0	7	2	0	0	3	2	2	8	3
Sales of livestock products	2	1	1	2	0	3	0	2	0	1	0	0	2	8	0	0	0	0	0	2	1
Sales of cash crops	24	10	12	19	6	15	1	37	46	56	3	12	6	16	5	2	26	21	25	10	17
Business income	14	11	10	7	11	15	31	10	11	6	17	15	26	12	9	5	7	6	14	12	13
Wages or salaries in cash	6	16	6	8	8	9	41	6	6	6	6	6	7	8	5	7	7	5	6	7	9
Other casual cash earning	1	7	8	3	8	13	15	5	4	3	6	9	7	3	2	3	3	5	7	6	6
Cash remittances	3	1	11	3	5	6	5	3	3	2	4	3	8	2	2	3	1	2	1	8	4
Fishing	0	0	3	4	1	3	1	7	1	1	1	0	0	2	2	2	0	2	9	3	2
Other	3	5	2	2	3	2	4	6	3	2	3	4	3	3	9	9	7	2	4	8	4

TABLE C26 LAND OWNERSHIP BY RURAL HOUSEHOLDS

	DODOMA	ARUSHA	KILIMANJARO	TANGA	MOROGORO	PWANI	DSM	LINDI	MTWARA	RUVUMA	IRINGA	MBEYA	SINGIDA	TABORA	RUKWA	KIGOMA	SHINYANGA	KAGERA	MMWANZA	MARA	Tanzania Mainland
Mean area of land owned across all rural households (acres)	6.0	3.4	1.5	3.9	4.3	2.9	n/a	2.7	3.2	6.2	2.9	3.7	4.5	6.8	8.6	3.7	14.1	4.0	6.8	8.0	5.3
Percentage of rural households owning any land for farming/pastoralism	96	85	75	93	95	90	n/a	96	87	96	80	82	96	96	96	95	90	74	90	96	89
Mean area of land owned, for rural households that own any land (acres)	6.2	4.0	2.1	4.1	4.5	3.2	n/a	2.8	3.7	6.5	3.6	4.5	4.7	7.1	9.0	3.9	15.6	5.5	7.6	8.4	6.0

TABLE C27 MEAN AND MEDIAN MONTHLY CONSUMPTION EXPENDITURE PER CAPITA AND FISHER INDEX

	DODOMA	ARUSHA	KILIMANJARO	TANGA	MOROGORO	PWANI	DSM	LINDI	MTWARA	RUVUMA	IRINGA	MIBEYA	SINGIDA	TABORA	RUKWA	KIGOMA	SHINYANGA	KAGERA	MWANZA	MARA	Tanzania Mainland
Mean consumption expenditure per capita (TShs, nominal prices)																					
Urban	14,591	18,415	15,634	15,015	15,822	12,372	n/a	15,399	15,203	14,727	15,748	14,868	12,401	15,236	10,223	13,721	16,847	18,547	10,141	10,049	16,612
Rural	7,587	8,750	10,580	8,802	8,253	9,922	n/a	8,263	11,712	8,592	10,765	11,548	6,372	9,590	6,204	6,384	7,273	8,456	7,716	7,612	8,538
Total	8,535	10,323	11,173	9,261	9,981	10,454	21,949	9,452	12,374	9,563	11,178	12,625	6,927	10,386	6,731	7,322	7,990	9,006	8,149	7,952	10,120
Median consumption expenditure per capita (TShs, nominal prices)																					
Urban	11,960	14,146	11,137	12,052	11,805	9,514	n/a	12,143	13,227	11,660	12,490	13,311	9,672	12,555	8,312	9,396	13,326	12,453	7,713	8,629	12,699
Rural	6,162	7,431	9,218	7,450	7,385	7,684	n/a	6,274	8,913	6,744	7,772	9,777	5,354	8,450	5,847	5,558	6,057	7,308	5,532	6,577	6,860
Total	6,871	8,054	9,536	7,645	7,725	8,172	16,349	7,069	9,421	7,234	7,998	11,069	5,456	8,473	5,924	5,683	6,288	7,320	5,825	6,668	7,523
Fisher Index																					
Urban	0.89	0.79	0.87	0.95	0.98	0.88	n/a	0.73	0.75	0.93	0.92	1.00	0.97	0.97	1.14	0.98	0.94	0.93	0.94	0.91	n/a
Rural	1.15	0.94	0.95	1.02	1.10	0.89	n/a	0.87	0.78	1.06	1.00	1.02	1.11	0.99	1.40	1.25	1.06	1.17	1.17	1.03	n/a
Mean expenditure per adult equivalent (TShs, adjusted with regional price index)																					
Urban	13,675	14,016	13,265	14,036	14,737	11,106	n/a	11,726	11,569	13,689	15,328	16,047	11,874	15,839	11,833	14,328	15,722	16,110	9,994	9,276	14,245
Rural	10,176	9,417	11,060	9,903	10,344	9,537	n/a	8,399	10,105	9,718	11,527	13,167	7,911	10,437	9,590	9,243	8,886	11,068	10,252	8,927	10,064
Total	10,649	10,165	11,319	10,208	11,347	9,878	15,944	8,953	10,382	10,346	11,842	14,102	8,276	11,198	9,884	9,893	9,398	11,343	10,206	8,976	10,884

TABLE C28 PERCENTAGE OF HOUSEHOLDS BELOW THE FOOD AND BASIC NEEDS POVERTY LINES AND FOOD SHARE OF HOUSEHOLD EXPENDITURE

	DODOMA	ARUSHA	KILIMANJARO	TANGA	MOROGORO	PWANI	DSM	LINDI	MTWARA	RUVUMA	IRINGA	MBEYA	SINGIDA	TABORA	RUKWA	KIGOMA	SHINYANGA	KAGERA	MWANZA	MARA	Tanzania Mainland
Food poverty line	13	25	11	11	14	27	7	33	17	27	10	8	28	9	12	21	22	18	30	36	19
Basic needs poverty line	34	39	31	36	29	46	18	53	38	41	29	21	55	26	31	38	42	29	48	46	36
Percentage of consumption expenditure on food																					
Urban	62	56	64	60	60	63	n/a	62	62	56	63	59	62	63	60	62	59	55	65	63	59
Rural	67	71	70	71	71	71	n/a	77	68	61	66	63	70	69	58	65	68	64	63	66	67
Total	67	69	69	70	68	69	54	74	66	60	65	61	69	68	58	65	67	63	64	66	65

TABLE C29 PER CAPITA HOUSEHOLD MONTHLY INCOME

	DODOMA	ARUSHA	KILIMANJARO	TANGA	MOROGORO	PWANI	DSM	LINDI	MTWARA	RUVUMA	IRINGA	MBEYA	SINGIDA	TABORA	RUKWA	KIGOMA	SHINYANGA	KAGERA	MWANZA	MARA	Tanzania Mainland
Mean per capita household monthly income (Nominal TShs)																					
Urban	35,682	33,645	46,148	32,473	37,408	25,599	n/a	39,266	34,643	34,925	37,072	23,548	21,978	32,844	18,436	31,480	32,767	33,415	21,759	19,708	33,241
Rural	15,585	17,902	12,917	10,494	13,065	16,594	n/a	11,629	20,795	12,988	17,917	14,593	8,621	14,763	7,019	9,356	15,191	12,834	16,547	12,813	14,128
Total	18,334	20,596	17,544	12,210	18,406	18,210	40,767	16,268	23,252	16,848	19,187	17,311	9,853	17,766	8,572	12,334	16,944	14,057	17,566	13,721	17,922
Median per capita household monthly income (Nominal TShs)																					
Urban	21,117	15,222	15,875	14,000	16,328	9,700	n/a	13,560	13,960	15,200	12,103	12,365	9,692	17,800	7,740	12,817	13,750	14,125	11,400	9,632	14,404
Rural	10,367	7,793	7,942	6,988	7,668	7,925	n/a	7,804	10,992	6,830	7,705	9,669	4,031	9,582	3,422	5,196	6,606	9,533	5,131	7,250	7,513
Total	11,108	8,517	8,732	7,160	8,563	8,102	16,473	7,902	11,517	7,800	7,867	9,990	4,258	10,180	3,564	5,675	6,873	9,535	6,108	7,350	8,323

TABLE C30 CONFIDENCE INTERVALS AROUND KEY ESTIMATES AT THE REGIONAL LEVEL

Indicator and region	Total				Urban				Rural			
	Estimate	S.E.	95% Conf. Interval		Estimate	S.E.	95% Conf. Interval		Estimate	S.E.	95% Conf. Interval	
			Lower	Upper			Lower	Upper			Lower	Upper
Percentage of adults without any education												
Dodoma	0.305	0.036	0.235	0.375	0.141	0.016	0.110	0.172	0.334	0.041	0.254	0.415
Arusha	0.199	0.029	0.142	0.256	0.036	0.010	0.017	0.055	0.240	0.032	0.177	0.302
Kilimanjaro	0.116	0.023	0.071	0.161	0.055	0.014	0.027	0.082	0.125	0.026	0.075	0.176
Tanga	0.308	0.087	0.137	0.480	0.102	0.014	0.074	0.129	0.327	0.093	0.144	0.511
Morogoro	0.260	0.036	0.189	0.332	0.111	0.021	0.070	0.153	0.310	0.042	0.228	0.392
Pwani	0.387	0.033	0.323	0.451	0.270	0.033	0.206	0.334	0.418	0.036	0.349	0.488
Dar es Salaam	0.076	0.011	0.053	0.098	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Lindi	0.436	0.046	0.346	0.525	0.213	0.028	0.158	0.268	0.484	0.049	0.389	0.580
Mtwara	0.277	0.039	0.201	0.353	0.176	0.025	0.126	0.226	0.300	0.047	0.207	0.393
Ruvuma	0.147	0.031	0.085	0.209	0.092	0.009	0.074	0.110	0.158	0.038	0.084	0.233
Iringa	0.164	0.023	0.119	0.210	0.059	0.013	0.033	0.085	0.173	0.026	0.122	0.224
Mbeya	0.164	0.018	0.128	0.200	0.116	0.018	0.080	0.152	0.187	0.022	0.144	0.230
Singida	0.274	0.045	0.186	0.362	0.124	0.014	0.096	0.153	0.290	0.051	0.189	0.390
Tabora	0.312	0.045	0.224	0.400	0.182	0.032	0.120	0.245	0.335	0.053	0.232	0.438
Rukwa	0.304	0.027	0.252	0.356	0.151	0.025	0.102	0.199	0.328	0.022	0.285	0.371
Kigoma	0.277	0.054	0.172	0.382	0.183	0.024	0.137	0.230	0.291	0.062	0.170	0.412
Shinyanga	0.395	0.031	0.335	0.456	0.154	0.025	0.106	0.203	0.417	0.032	0.354	0.481
Kagera	0.247	0.035	0.179	0.315	0.122	0.019	0.085	0.158	0.255	0.037	0.183	0.328
Mwanza	0.266	0.024	0.218	0.314	0.159	0.027	0.106	0.212	0.293	0.029	0.236	0.350
Mara	0.237	0.045	0.150	0.325	0.111	0.015	0.081	0.141	0.261	0.051	0.161	0.361

Net enrolment ratio

Dodoma	0.575	0.037	0.502	0.649	0.822	0.027	0.769	0.876	0.539	0.043	0.455	0.623
Arusha	0.534	0.033	0.468	0.599	0.716	0.054	0.610	0.822	0.508	0.035	0.439	0.577
Kilimanjaro	0.805	0.044	0.718	0.892	0.857	0.026	0.807	0.907	0.799	0.049	0.703	0.896
Tanga	0.501	0.072	0.359	0.643	0.717	0.029	0.660	0.775	0.488	0.075	0.339	0.636
Morogoro	0.605	0.026	0.554	0.656	0.698	0.050	0.599	0.797	0.581	0.033	0.516	0.646
Pwani	0.563	0.033	0.497	0.628	0.561	0.038	0.485	0.636	0.563	0.041	0.483	0.644
Dar es Salaam	0.710	0.025	0.661	0.759	0.705	0.026	0.655	0.755	0.806	0.089	0.631	0.981
Lindi	0.438	0.073	0.295	0.581	0.630	0.051	0.530	0.730	0.404	0.077	0.253	0.556
Mtwara	0.595	0.042	0.513	0.676	0.660	0.046	0.569	0.751	0.579	0.053	0.475	0.682
Ruvuma	0.630	0.077	0.479	0.782	0.708	0.034	0.641	0.774	0.620	0.086	0.450	0.790
Iringa	0.761	0.053	0.657	0.866	0.858	0.026	0.806	0.910	0.753	0.058	0.639	0.867
Mbeya	0.688	0.042	0.605	0.771	0.756	0.024	0.708	0.804	0.651	0.058	0.537	0.764
Singida	0.613	0.070	0.476	0.750	0.724	0.038	0.650	0.797	0.602	0.077	0.450	0.754
Tabora	0.554	0.078	0.401	0.708	0.604	0.064	0.478	0.729	0.548	0.090	0.372	0.723
Rukwa	0.613	0.020	0.574	0.652	0.710	0.046	0.620	0.799	0.598	0.023	0.553	0.643
Kigoma	0.480	0.053	0.376	0.583	0.697	0.038	0.623	0.772	0.443	0.054	0.337	0.549
Shinyanga	0.463	0.039	0.385	0.540	0.686	0.054	0.581	0.791	0.446	0.042	0.364	0.529
Kagera	0.589	0.041	0.509	0.668	0.613	0.045	0.526	0.701	0.588	0.042	0.504	0.671
Mwanza	0.522	0.036	0.451	0.592	0.650	0.056	0.541	0.760	0.497	0.042	0.415	0.580
Mara	0.620	0.051	0.520	0.721	0.846	0.021	0.805	0.887	0.584	0.057	0.472	0.695

Percentage of households using a piped or protected source of drinking water

Dodoma	0.654	0.063	0.531	0.778	0.972	0.014	0.945	1.000	0.604	0.073	0.460	0.748
Arusha	0.588	0.086	0.419	0.757	0.974	0.013	0.948	1.000	0.480	0.097	0.290	0.671
Kilimanjaro	0.773	0.096	0.584	0.961	0.962	0.022	0.918	1.006	0.742	0.111	0.524	0.959
Tanga	0.455	0.081	0.296	0.615	0.911	0.036	0.840	0.983	0.414	0.085	0.246	0.581
Morogoro	0.703	0.063	0.579	0.826	0.993	0.004	0.985	1.001	0.616	0.082	0.455	0.777

Pwani	0.346	0.078	0.193	0.499	0.812	0.074	0.667	0.958	0.234	0.070	0.096	0.372
Dar es Salaam	0.936	0.023	0.891	0.981	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Lindi	0.198	0.055	0.090	0.305	0.608	0.078	0.456	0.760	0.114	0.040	0.036	0.192
Mtwara	0.523	0.069	0.388	0.658	0.872	0.050	0.773	0.971	0.446	0.083	0.283	0.609
Ruvuma	0.531	0.120	0.295	0.767	0.855	0.035	0.787	0.923	0.461	0.143	0.181	0.741
Iringa	0.538	0.102	0.339	0.737	0.952	0.018	0.916	0.987	0.505	0.110	0.290	0.721
Mbeya	0.749	0.058	0.634	0.863	0.937	0.034	0.870	1.004	0.664	0.077	0.513	0.815
Singida	0.607	0.050	0.510	0.705	0.789	0.048	0.695	0.883	0.589	0.058	0.475	0.702
Tabora	0.246	0.072	0.106	0.387	0.807	0.050	0.709	0.904	0.132	0.066	0.003	0.261
Rukwa	0.545	0.129	0.291	0.799	0.955	0.018	0.920	0.990	0.479	0.139	0.206	0.752
Kigoma	0.758	0.053	0.655	0.862	0.884	0.039	0.807	0.961	0.739	0.064	0.614	0.864
Shinyanga	0.399	0.074	0.254	0.545	0.639	0.079	0.483	0.795	0.370	0.084	0.206	0.535
Kagera	0.314	0.069	0.179	0.449	0.647	0.055	0.539	0.754	0.292	0.073	0.149	0.436
Mwanza	0.531	0.076	0.382	0.679	0.821	0.081	0.663	0.979	0.449	0.093	0.265	0.632
Mara	0.401	0.075	0.253	0.549	0.955	0.017	0.922	0.989	0.295	0.079	0.140	0.450

Percentage of households within 1 km of drinking water in the dry season

Dodoma	0.488	0.043	0.403	0.573	0.628	0.060	0.510	0.747	0.466	0.048	0.371	0.561
Arusha	0.491	0.081	0.332	0.650	0.855	0.053	0.752	0.959	0.389	0.095	0.203	0.576
Kilimanjaro	0.585	0.074	0.440	0.730	0.728	0.073	0.584	0.872	0.562	0.084	0.397	0.726
Tanga	0.409	0.096	0.220	0.597	0.714	0.083	0.550	0.877	0.382	0.103	0.179	0.584
Morogoro	0.611	0.096	0.423	0.799	0.714	0.118	0.482	0.945	0.581	0.118	0.350	0.812
Pwani	0.562	0.057	0.449	0.675	0.797	0.069	0.661	0.933	0.506	0.066	0.377	0.635
Dar es Salaam	0.840	0.046	0.749	0.930	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Lindi	0.473	0.110	0.258	0.687	0.595	0.074	0.450	0.741	0.448	0.131	0.190	0.706
Mtwara	0.405	0.065	0.278	0.532	0.735	0.063	0.612	0.858	0.332	0.069	0.196	0.467
Ruvuma	0.898	0.040	0.819	0.976	0.926	0.020	0.887	0.964	0.892	0.049	0.795	0.988
Iringa	0.719	0.082	0.558	0.879	0.727	0.054	0.621	0.833	0.718	0.088	0.544	0.892

Mbeya	0.754	0.042	0.670	0.837	0.845	0.038	0.771	0.919	0.713	0.052	0.611	0.815
Singida	0.513	0.076	0.364	0.662	0.544	0.060	0.426	0.663	0.510	0.084	0.344	0.675
Tabora	0.541	0.075	0.395	0.687	0.772	0.061	0.653	0.891	0.493	0.087	0.321	0.665
Rukwa	0.631	0.082	0.470	0.792	0.744	0.047	0.651	0.837	0.613	0.092	0.433	0.794
Kigoma	0.553	0.063	0.430	0.676	0.513	0.079	0.359	0.668	0.560	0.071	0.420	0.699
Shinyanga	0.332	0.052	0.229	0.435	0.404	0.089	0.229	0.578	0.324	0.058	0.211	0.437
Kagera	0.445	0.056	0.336	0.554	0.594	0.099	0.400	0.788	0.436	0.059	0.320	0.551
Mwanza	0.404	0.060	0.287	0.521	0.708	0.080	0.551	0.865	0.320	0.064	0.194	0.446
Mara	0.314	0.052	0.211	0.416	0.786	0.088	0.613	0.959	0.223	0.044	0.137	0.309

Percentage of households within 2km of a primary school

Dodoma	0.493	0.045	0.405	0.581	0.816	0.063	0.692	0.941	0.442	0.047	0.349	0.535
Arusha	0.541	0.086	0.371	0.710	0.906	0.035	0.838	0.974	0.438	0.102	0.238	0.638
Kilimanjaro	0.793	0.067	0.663	0.924	0.836	0.054	0.729	0.943	0.786	0.077	0.635	0.937
Tanga	0.566	0.090	0.390	0.741	0.951	0.024	0.904	0.998	0.530	0.095	0.343	0.717
Morogoro	0.721	0.056	0.612	0.830	0.875	0.044	0.788	0.962	0.675	0.068	0.541	0.809
Pwani	0.664	0.062	0.542	0.787	0.901	0.028	0.846	0.956	0.607	0.075	0.459	0.755
Dar es Salaam	0.813	0.039	0.736	0.890	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Lindi	0.792	0.053	0.688	0.896	0.877	0.042	0.795	0.958	0.775	0.066	0.644	0.905
Mtwara	0.722	0.098	0.530	0.914	0.858	0.039	0.782	0.934	0.691	0.119	0.458	0.925
Ruvuma	0.830	0.043	0.746	0.914	0.894	0.042	0.812	0.975	0.816	0.054	0.710	0.923
Iringa	0.739	0.067	0.607	0.871	0.850	0.029	0.793	0.907	0.730	0.073	0.586	0.875
Mbeya	0.644	0.063	0.520	0.767	0.728	0.079	0.573	0.884	0.606	0.086	0.436	0.775
Singida	0.563	0.097	0.373	0.752	0.814	0.034	0.748	0.881	0.537	0.109	0.323	0.750
Tabora	0.551	0.083	0.388	0.715	0.930	0.026	0.879	0.980	0.474	0.088	0.301	0.647
Rukwa	0.749	0.059	0.634	0.865	0.836	0.047	0.745	0.928	0.736	0.066	0.606	0.865
Kigoma	0.585	0.078	0.432	0.739	0.724	0.051	0.624	0.824	0.564	0.089	0.390	0.738
Shinyanga	0.481	0.063	0.357	0.606	0.741	0.053	0.637	0.845	0.449	0.073	0.307	0.592

Kagera	0.449	0.087	0.279	0.619	0.764	0.104	0.560	0.968	0.429	0.092	0.249	0.610
Mwanza	0.622	0.053	0.519	0.725	0.789	0.054	0.683	0.896	0.575	0.064	0.450	0.700
Mara	0.645	0.051	0.545	0.744	0.740	0.076	0.590	0.890	0.626	0.059	0.511	0.742
Percentage of households within 6km of dispensary / health centre												
Dodoma	0.485	0.079	0.330	0.641	0.943	0.028	0.889	0.998	0.412	0.081	0.253	0.572
Arusha	0.727	0.076	0.577	0.876	0.996	0.004	0.988	1.004	0.650	0.094	0.466	0.833
Kilimanjaro	0.947	0.017	0.913	0.981	0.982	0.010	0.962	1.002	0.942	0.021	0.901	0.982
Tanga	0.619	0.102	0.419	0.818	0.996	0.003	0.991	1.002	0.587	0.110	0.371	0.802
Morogoro	0.746	0.100	0.550	0.942	0.987	0.006	0.975	0.999	0.674	0.122	0.434	0.914
Pwani	0.741	0.107	0.531	0.952	0.980	0.010	0.962	0.999	0.685	0.126	0.438	0.932
Dar es Salaam	0.981	0.009	0.963	0.998	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Lindi	0.675	0.151	0.379	0.971	0.927	0.041	0.847	1.007	0.628	0.173	0.288	0.968
Mtwara	0.866	0.052	0.764	0.968	0.997	0.002	0.994	1.000	0.837	0.064	0.711	0.964
Ruvuma	0.854	0.049	0.759	0.950	1.000	0.000	0.999	1.000	0.826	0.057	0.715	0.937
Iringa	0.629	0.098	0.437	0.822	0.998	0.002	0.993	1.002	0.603	0.105	0.396	0.809
Mbeya	0.904	0.034	0.837	0.971	0.985	0.015	0.956	1.015	0.867	0.048	0.772	0.962
Singida	0.818	0.061	0.698	0.938	0.949	0.028	0.894	1.004	0.804	0.071	0.665	0.943
Tabora	0.583	0.131	0.325	0.840	1.000	0.000	1.000	1.000	0.496	0.145	0.211	0.781
Rukwa	0.821	0.047	0.728	0.914	0.958	0.021	0.917	0.998	0.799	0.053	0.695	0.903
Kigoma	0.927	0.028	0.872	0.982	0.953	0.024	0.906	1.000	0.923	0.033	0.858	0.987
Shinyanga	0.650	0.084	0.486	0.814	0.967	0.017	0.934	1.001	0.612	0.092	0.431	0.794
Kagera	0.737	0.063	0.614	0.861	0.951	0.031	0.890	1.012	0.724	0.067	0.592	0.855
Mwanza	0.750	0.064	0.624	0.877	0.960	0.028	0.905	1.015	0.692	0.078	0.540	0.845
Mara	0.712	0.063	0.588	0.836	0.990	0.008	0.974	1.007	0.658	0.074	0.512	0.803
Percentage of adults working in agriculture (main activity in the last seven days)												
Dodoma	0.674	0.044	0.587	0.761	0.257	0.071	0.118	0.396	0.749	0.033	0.684	0.814
Arusha	0.423	0.053	0.319	0.526	0.068	0.016	0.038	0.099	0.515	0.049	0.419	0.612

Kilimanjaro	0.563	0.044	0.476	0.649	0.301	0.051	0.201	0.400	0.604	0.046	0.513	0.695
Tanga	0.670	0.051	0.569	0.770	0.278	0.036	0.207	0.348	0.705	0.053	0.600	0.810
Morogoro	0.634	0.056	0.525	0.744	0.257	0.036	0.185	0.328	0.775	0.039	0.699	0.851
Pwani	0.625	0.052	0.523	0.727	0.303	0.033	0.238	0.367	0.720	0.042	0.637	0.803
Dar es Salaam	0.030	0.007	0.015	0.044	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Lindi	0.717	0.047	0.625	0.809	0.442	0.056	0.332	0.552	0.782	0.042	0.699	0.864
Mtwara	0.691	0.041	0.609	0.772	0.346	0.055	0.237	0.455	0.772	0.045	0.683	0.861
Ruvuma	0.773	0.062	0.651	0.896	0.236	0.041	0.155	0.317	0.882	0.039	0.805	0.959
Iringa	0.670	0.041	0.590	0.750	0.248	0.051	0.148	0.347	0.709	0.045	0.620	0.798
Mbeya	0.555	0.064	0.428	0.681	0.231	0.036	0.161	0.302	0.716	0.032	0.653	0.778
Singida	0.604	0.032	0.540	0.667	0.233	0.050	0.135	0.331	0.642	0.030	0.582	0.702
Tabora	0.691	0.053	0.587	0.795	0.277	0.046	0.187	0.367	0.760	0.053	0.657	0.864
Rukwa	0.764	0.065	0.636	0.893	0.309	0.048	0.214	0.404	0.838	0.050	0.741	0.936
Kigoma	0.761	0.039	0.686	0.837	0.252	0.033	0.186	0.317	0.835	0.025	0.786	0.885
Shinyanga	0.677	0.053	0.574	0.780	0.268	0.058	0.155	0.381	0.715	0.052	0.613	0.817
Kagera	0.809	0.027	0.756	0.862	0.267	0.051	0.167	0.366	0.848	0.025	0.799	0.898
Mwanza	0.707	0.030	0.648	0.765	0.363	0.083	0.200	0.527	0.794	0.022	0.751	0.836
Mara	0.700	0.043	0.615	0.784	0.202	0.043	0.116	0.287	0.798	0.024	0.751	0.845

Mean expenditure per adult equivalent (price-adjusted)

Dodoma	10,649	612	9,449	11,849	13,675	1,513	10,704	16,647	10,176	620	8,957	11,395
Arusha	10,165	915	8,370	11,960	14,016	1,064	11,926	16,105	9,417	965	7,521	11,312
Kilimanjaro	11,319	654	10,036	12,601	13,265	1,039	11,225	15,304	11,060	709	9,666	12,453
Tanga	10,208	672	8,890	11,527	14,036	586	12,885	15,188	9,903	696	8,536	11,270
Morogoro	11,347	587	10,195	12,499	14,737	1,540	11,712	17,762	10,344	486	9,389	11,299
Pwani	9,878	996	7,923	11,832	11,106	732	9,669	12,543	9,537	1,225	7,131	11,943
Dar es Salaam	15,944	779	14,415	17,472	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Lindi	8,953	1,275	6,451	11,455	11,726	1,066	9,631	13,820	8,399	1,403	5,643	11,154

Mtwara	10,382	638	9,130	11,635	11,569	607	10,377	12,761	10,105	786	8,561	11,649
Ruvuma	10,346	609	9,152	11,541	13,689	966	11,793	15,586	9,718	595	8,549	10,887
Iringa	11,842	1,242	9,406	14,279	15,328	893	13,574	17,082	11,527	1,360	8,854	14,199
Mbeya	14,102	1,140	11,865	16,339	16,047	1,412	13,273	18,821	13,167	1,340	10,534	15,800
Singida	8,276	595	7,109	9,443	11,874	672	10,554	13,194	7,911	613	6,708	9,115
Tabora	11,198	744	9,739	12,657	15,839	1,232	13,419	18,259	10,437	763	8,937	11,936
Rukwa	9,884	601	8,704	11,063	11,833	507	10,836	12,829	9,590	626	8,360	10,819
Kigoma	9,893	625	8,667	11,118	14,328	2,113	10,179	18,477	9,243	609	8,047	10,438
Shinyanga	9,398	706	8,012	10,784	15,722	1,107	13,548	17,896	8,886	709	7,492	10,280
Kagera	11,343	1,016	9,349	13,337	16,110	1,808	12,559	19,661	11,068	1,054	8,997	13,139
Mwanza	10,206	1,344	7,569	12,843	9,994	786	8,450	11,537	10,252	1,627	7,056	13,449
Mara	8,976	1,113	6,791	11,160	9,276	431	8,430	10,122	8,927	1,290	6,393	11,461
Percentage of individuals below the food poverty line												
Dodoma	0.131	0.025	0.081	0.180	0.074	0.017	0.040	0.107	0.139	0.029	0.082	0.197
Arusha	0.251	0.068	0.117	0.384	0.093	0.034	0.026	0.160	0.281	0.078	0.127	0.435
Kilimanjaro	0.111	0.029	0.055	0.167	0.087	0.021	0.046	0.127	0.114	0.032	0.051	0.177
Tanga	0.114	0.034	0.047	0.181	0.088	0.021	0.047	0.130	0.116	0.037	0.044	0.188
Morogoro	0.136	0.030	0.078	0.195	0.085	0.052	-0.018	0.188	0.151	0.036	0.080	0.223
Pwani	0.274	0.093	0.092	0.456	0.192	0.036	0.120	0.263	0.297	0.115	0.072	0.523
Dar es Salaam	0.075	0.017	0.042	0.108	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Lindi	0.333	0.123	0.092	0.574	0.192	0.048	0.097	0.287	0.361	0.141	0.084	0.638
Mtwara	0.168	0.036	0.098	0.239	0.161	0.037	0.089	0.233	0.170	0.043	0.085	0.256
Ruvuma	0.274	0.070	0.136	0.411	0.183	0.032	0.121	0.246	0.290	0.081	0.131	0.450
Iringa	0.103	0.024	0.056	0.149	0.069	0.019	0.032	0.106	0.106	0.026	0.054	0.157
Mbeya	0.078	0.024	0.031	0.125	0.050	0.024	0.003	0.097	0.092	0.031	0.030	0.153
Singida	0.279	0.044	0.192	0.366	0.160	0.023	0.115	0.205	0.291	0.048	0.197	0.385
Tabora	0.089	0.022	0.045	0.132	0.099	0.044	0.013	0.185	0.087	0.025	0.039	0.136

Rukwa	0.118	0.017	0.085	0.152	0.114	0.015	0.084	0.144	0.119	0.019	0.081	0.157
Kigoma	0.209	0.046	0.118	0.300	0.158	0.026	0.106	0.210	0.217	0.054	0.111	0.322
Shinyanga	0.220	0.066	0.091	0.349	0.040	0.010	0.020	0.060	0.234	0.070	0.097	0.372
Kagera	0.175	0.084	0.011	0.340	0.071	0.029	0.015	0.127	0.182	0.088	0.008	0.355
Mwanza	0.302	0.049	0.205	0.398	0.306	0.084	0.141	0.470	0.301	0.057	0.189	0.413
Mara	0.364	0.078	0.211	0.517	0.291	0.030	0.232	0.350	0.376	0.090	0.200	0.552

Percentage of individuals below the basic needs poverty line

Dodoma	0.343	0.055	0.235	0.451	0.215	0.050	0.118	0.313	0.363	0.062	0.240	0.485
Arusha	0.388	0.070	0.251	0.525	0.185	0.057	0.072	0.297	0.428	0.078	0.274	0.582
Kilimanjaro	0.313	0.063	0.189	0.437	0.263	0.040	0.184	0.343	0.319	0.071	0.180	0.459
Tanga	0.365	0.058	0.251	0.478	0.188	0.026	0.138	0.238	0.379	0.061	0.259	0.499
Morogoro	0.294	0.030	0.235	0.353	0.202	0.067	0.070	0.333	0.321	0.033	0.256	0.387
Pwani	0.462	0.083	0.301	0.624	0.392	0.050	0.294	0.490	0.482	0.103	0.281	0.683
Dar es Salaam	0.176	0.027	0.124	0.229	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Lindi	0.530	0.141	0.253	0.806	0.334	0.063	0.210	0.457	0.569	0.161	0.254	0.884
Mtwara	0.380	0.043	0.296	0.463	0.319	0.039	0.242	0.395	0.394	0.053	0.291	0.498
Ruvuma	0.413	0.083	0.251	0.575	0.286	0.049	0.191	0.382	0.436	0.096	0.248	0.625
Iringa	0.289	0.053	0.184	0.393	0.156	0.035	0.087	0.226	0.301	0.059	0.185	0.416
Mbeya	0.206	0.051	0.107	0.305	0.150	0.050	0.052	0.248	0.232	0.067	0.100	0.365
Singida	0.552	0.048	0.458	0.646	0.302	0.042	0.219	0.384	0.577	0.049	0.480	0.674
Tabora	0.260	0.037	0.188	0.331	0.173	0.052	0.071	0.274	0.274	0.042	0.192	0.356
Rukwa	0.310	0.039	0.234	0.386	0.257	0.033	0.193	0.321	0.318	0.045	0.229	0.406
Kigoma	0.375	0.037	0.303	0.447	0.310	0.046	0.219	0.400	0.385	0.043	0.300	0.469
Shinyanga	0.420	0.065	0.292	0.548	0.162	0.037	0.089	0.236	0.441	0.070	0.304	0.577
Kagera	0.286	0.089	0.111	0.461	0.165	0.038	0.091	0.239	0.293	0.094	0.108	0.478
Mwanza	0.479	0.063	0.355	0.603	0.463	0.061	0.343	0.583	0.483	0.076	0.334	0.632
Mara	0.456	0.084	0.292	0.621	0.445	0.027	0.392	0.497	0.458	0.097	0.267	0.649