



# **H**OUSEHOLD **B**UDGET **S**URVEY

**2009/10**



## **FINAL REPORT**

**May 2012**

## **FOREWORD**

This report presents the findings of the 2009/10 Zanzibar Household Budget Survey (HBS) that was conducted from June 2009 through May 2010. The survey is the latest conducted by the Office of Chief Government Statistician. A nationally representative sample of 4,296 households was interviewed in the 2009/10 HBS. This sample is sufficiently large to allow many indicators to be reported at the district level.

The main objective of the survey was to obtain information on consumption and expenditure at household level that provided the indicators defined in the Zanzibar Strategy for Growth and Reduction of Poverty (MKUZA), Millennium Development Goals (MDGs) and will be used extensively in revising various data series of the OCGS, apart from policy making.

The 2009/10 Household Budget Survey used a similar design and format of the 2004/05 HBS, the analysis would afford a reasonable comparison of trends and dynamics of socioeconomic and poverty situation in Zanzibar. This survey also includes analytical information on gender and youth which are essential for evidence based advocacy, policy reviews and planning at different levels.

It is expected that, the tables, text and figures presented in this report are related to the most indicators consistent with the objective of the survey. We hope that, the report will be a useful source of information to policy makers, academicians and other stakeholders.

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## LIST OF ABBREVIATIONS

COICOP	Classification of Individual Consumption by Purpose
CPI	Consumer Price Index
EAs	Enumeration Areas
GER	Gross Enrolment Ratio
HBS	Household Budget Survey
ICT	Information and Communication Technology
MDGs	Millennium Development Goals
NCDs	Non Communicable Diseases
NER	Net Enrolment Ratio
OCGS	Office of Chief Government Statistician
OPML	Oxford Policy Management limited
OTC	Over the Counter Medicine
PHCC	Primary Health Care Centre
PHCUs	Primary Health Care Unit
PSUs	Primary Sampling Units
SACCOS	Savings and Credit Cooperatives
TDHS	Tanzania Demographic and Health Survey
TFR	Total Fertility Rate
THMIS	Tanzania HIV&AIDS and Malaria Indicator Survey
TPHC	Tanzania Population and Housing Census
UNDP	United Nation Development Fund
UNFPA	United Nation Fund Population Agency
ZSGRP	Zanzibar Strategies for Growth and Reduction of Poverty
TAS	Tanzania Shillings

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## EXECUTIVE SUMMARY

### Overview

The 2009/10 Household Budget Survey (2009/10 HBS) is the fourth in a series of such surveys conducted by the Office of Chief Government Statistician (OCGS), Zanzibar. The last in the series of those surveys was conducted in 2004/05. This publication presents the findings of 2009/10 HBS; and whenever possible compares the results with those of the 2004/05 HBS.'

The 2009/10 HBS is based of a nationally representative sample of 4,296 households, selected from 179 enumeration areas. While this sample is sufficiently large to allow many indicators to be reported at the district level, the 2004/05 HBS used about twice the sample size opted in 2009/10 HBS, the former may be said to have collected more precise estimates. The smaller sample and some possible differences in the composition of the samples call for caution in the interpretation of some of the trends between the two surveys.

### Demographic Characteristics

The 2009/10HBS suggests that the population structure and most household characteristics : the proportion of females in the population population has marginally increased to 51.4 percent, while the age dependency ratio and average household size have remained static at 0.99, and 5.5 members, respectively. One-fifth of households are female headed. The proportion of heads of households with no education has declined from one-third to one quarter between the two surveys, although great disparities still remain between sexes and administrative districts. There appears to have been a substantial increase in the proportion of heads who are self-employed outside of agriculture, from 21 to 27 percent (including those with and without employees).

### Education

About 18 percent of adults population in Zanzibar have no education neither read no write compared to 24 percent reported in 2004/05 HBS. Rural areas reported higher declining in the proportion of adults with no education from 33.7 percent in 2004/05 HBS to 24.6 percent in 2009/10. There is a declining trend in proportions of adults illiterate to both sexes between two surveys.

There has been an overall increase in the proportion of adults who have attained both, primary and secondary education. Large changes in the levels of education attained between the two surveys are observed, with a substantial fall in the proportion reporting having no education.

At least eight in every ten (80.3 percent) of the school age children were reported enrolled in schools (the net enrolment ratio for basic education); this marks a slight improvement compared to the previous survey. Enrolment is higher in urban areas compared to rural areas, possibly reflecting relatively low accesses in schooling in rural areas. No differences in enrolment between sexes are earmarked, reflecting equal access of education between boys and girls.

Net enrolment in primary school (Std – VII) is 81.4 percent, this is slightly higher ratios compared to those of the basic education. Net enrolment in primary schools within rural areas, increased for males from 69.3 percent in 2004/05 to 78.5 percent in 2009/10. On the female side, net enrolment also increased from 72.2 percent to 77.7 percent in the period covered.

Secondary school net enrolment stands for 46.1 this is much higher compared to the previous survey. The access of facilities in urban areas makes its secondary enrolment likely higher compared to rural. It is of interest to note that in recent times female secondary enrolment ratios exceed those of males; net enrolment for female increased from 26.3 percent to 42.8 percent between the surveys period.

The mean walking distance to the nearest primary and secondary school is less than one kilometre.

Only 1.7 percent of pupils among those attending schools were reported to be with disability. The proportion is higher at primary level (2.1 percent) compared to secondary school (0.9 percent). Minor differences are observed between sexes. Twice the number of pupils with disability is attending schools in rural areas compared to urban

## **Health**

Some 10 percent of the population reports being sick in the four weeks before the survey. Fever and malaria are the main types of illness accounting for 56 percent of the total. This result represents a notable decline with respect to the 2004/05 results where 69.8 percent of the respondents reported having fever/malaria. However 'other diseases' (believed to comprise non communicable) are on the rise. Access to health facilities has marginally improved, with 84 percent of the respondents reporting illness having consulted a health care provider. Overall, access has improved in both urban and rural areas and most households are within 5km of a health centre even in rural areas. Almost three-quarters of patients expressed satisfaction with health services, a similar proportion to 2004/05.

## **Economic Activity**

On socio-economic conditions, the respondents are asked about the main economic activity they were engaged in during the week preceding the survey. When looking at the working age population (15-64 years old), agriculture (22 percent) and self employed (16 percent) are the most important activities. Some 19 percent of the population is engaged in housekeeping with non-economic activities and 19 percent of the population is studying.

When looking at children, the survey shows that only 29 percent of children between 5 and 14 are engaged in full time study without any other activity while 15 percent of them report no activity at all. Some 56 percent of the children are engaged in some sort of working activity: 10 percent of children are engaged in household or home business and do not study, while 45 percent combine household or home business with study.

## **Housing Characteristics**

On housing characteristics, most of the households live in dwellings where walls and floors are constructed with concrete or cement products and roofed with metal sheets; four-fifths of all dwellings are owner-occupied, males are more likely (82.0 percent) to be the sole owners. The mean number of persons per sleeping room stands at 2.2. Only two-fifths of all households have electricity connection, but with great disparities between geographical areas. Firewood and charcoal are the main fuel sources for cooking, while paraffin and electricity are the sources for lighting. The mean household consumption of firewood/charcoal is 7.4 kilograms per day.

With respect to toilet facilities, 18.9 percent of the households have no toilet compared to 33.2 percent reported in 2004/05 HBS. One in every 5 households (19.6 percent) has a flush toilet, while the majorities (54.1 percent) use traditional pit latrine. Urban households are three times likely to have a modern flush toilet than rural areas (32.6 percent and 10.4 percent, respectively). The main form of garbage disposal is throwing it outside the household compound (44 percent).

Tap water is the source of drinking water to four-fifths of all households; 9 in every 10 members of households walk less than a kilometre to fetch water while the time spent to fetch water for three-quarters of the population is less than 15 minutes. The daily average water consumption by a household is estimated at 121 litres.

With respect to consumer goods, productive assets and households economic activities, the report shows that house, farming tools (including hoes), poultry, and land are the most common productive assets, owned by respectively 81.4, 68.7, 43.9 and 42.9 percent of the households. While most of the households own beds and mosquito nets, household utensils, and lanterns. At least half of all households possess a radio, a telephone, and a bicycle. 30 percent of the households own a television and 22.8 percent only own a refrigerator. Less than 5 percent of the households have either a motor vehicles, a washing machines, or a computers/printer.

One-third of households run a formal or informal business. When asked about the main source of income, respondents report wages/salaries being the most important source (30.2 percent), especially in urban areas (47.5 percent) followed by casual income (24.5 percent), sales of crops (11.9 percent) and fishing (10.6). Notably remittances represent the main source of income for 10.6 percent of the households.

Regarding savings, 11 percent of households have at least one member with a saving or current account. 5 percent participate in formal savings outside of a bank, while 18 percent participate in informal savings mechanisms. 68.9 percent of households report men alone being the person who makes final decision on spending household's income.

### **Household Consumption and Expenditure**

The households' per capita consumption expenditure (adjusted for prices) has changed by only a small amount in the period between the two surveys: the mean for 28 days rose from TAS 42,276 to TAS 44,238, with similar small increases in the median. Urban households have higher consumption than rural households and most of the increase in real consumption levels has taken place in urban areas. The structure of consumption suggests that food and non-alcoholic drinks share 52.2 percent of the total households' expenditure. These ratios are lower compared to those in the previous survey. Generally, higher expenditure groups spend proportionately less on food compared to the middle and lower groups.

On food security, it is reported that 98.8 percent of households have at least two meals per day; two-thirds of households have ever had fewer meals than usual in the last 30 days. Rice and fish are the most common consumption goods of Zanzibar's households while meat and milk are seldom used.

### **Income Poverty and Inequality**

There is significant decline in the incidence of basic need poverty since 2004/05. However, the decline in the incidence of food poverty is not significant. There is also a modest increase in inequality. The incidence of poverty measured against the food poverty line has only marginally declined in the period between two surveys: 13.0 percent of the population were observed not to meet food needs in 2009/10 HBS compared to 13.2 percent observed in 2004/05 HBS. However the population that falls below the higher 'basic needs' poverty line declined from 49.1 to 44.4 percent in the inter-survey period, an appreciable decline. The limited declines in poverty might be partly due to global increases in costs of food items, whence Zanzibar is a net food importer. In the same way, the food poverty gap has not changed while the basic needs poverty gap has declined from 13.1 to 11.4 percent.

Poverty incidence is consistently higher in rural compared to urban areas in both surveys. The decline in poverty against the basic needs poverty line seems to have benefitted more privileged groups – those with heads in formal employment and with more education. Households with heads who have no education do not show a decline in poverty levels between the two surveys.

Inequality in the distribution of per capita expenditure increased significantly, with the Gini coefficient rising from 0.28 to 0.30 in the inter-survey period; with modest increases in most districts. The lowest quintile also shared slightly less of the total consumption expenditure compared to previous survey.

### **Poverty Profile**

The analysis compared very poor, poor and non-poor households to develop a poverty profile. This relationship confirms once again that larger households suffer more poverty than smaller households, and that this holds true even if the poverty line is altered over a very wide range. Large households are more likely to have higher dependency ratio than a small households. It was also observed that poverty is highest among farmers and is closely followed by fishing and then other self-employed.

There is a general trend for poverty incidence to decline as education level of the head of the household increase ie the higher the level of education attained by the head of household the lower the risk of poverty. A higher poverty risk is observed in rural areas compared to urban centres in all education categories

The proportion of children aged from 7-16 who go to school is related to the welfare level of the household. The percentage of children aged from 7-16 from the very poor households who go to school increased from 71 in 2004/05 to 74 in 2009/10. In general, attendance to school for children aged 7-16 increased from 80.4 percent to 83.9 percent, and better off households benefitted slightly more than the poorest.

The relationship between self reported illness and level of household welfare is rather weak. It is however notable that self reported illness went down in all groups in 2009/10 as compared to 2004/05. Non-poor households that reported illness and sought health care actually went down from 84.5 percent in 2004/05 to 83.3 percent in 2009/10. They were more likely to use a higher level source of care (hospital) than poorer households, however, in both surveys.

The percentage of households with private piped water in the house has increased from 27.8 in 2004/05 to 32.8 in 2009/10. This increase however is accounted for by the increase in the non-poor and the moderately poor households; the very poor households suffered a modest decrease in the percentage of households with connection to private piped water in the house.. There has also been a very significant increase in the households that are connected to the electricity from 2004/05, an increase that cuts across all levels of welfare, but still the well to do households enjoy the highest percentage with a connection. There is no strong relationship between households' welfare and the mean distance to drinking water, health care and primary schools.

## **Household Income**

The mean annual per capita household income was TAS 483,520; it is higher (1.4 times) in urban compared to rural, as it is higher (3 times) among males compared to females. Employment for cash and non-farm self employment are the main sources of households' income and are important even in rural areas. Higher incomes are strongly associated with higher educational levels of earners. The survey shows gains as well as losses in regards to achievement of gender parity between the survey years. What is clear is the fact that, gender gaps still abound, and especially when considering such indicators like the life cycle. Pockets of gender based discrimination still persist in regards to mainly economic opportunities. Not only do imbalances between males and females persist, but also show noticeable positive and negative trends in inequalities between males and females in rural and urban areas, as well as between the very poor and the non-poor.

The HBS data shows signs of a double disadvantage as regards poverty and gender for the very poor. This is especially the case where one is female and located in areas such as Micheweni or Wete districts. Furthermore, there are signs of compound disadvantage as well. These is especially evident in regards to the disproportionate numbers of girls who are excessively deprived beyond their share in nearly all aspects of income based poverty indicators such as education beyond Form 3 as well as material based poverty indicators in regards to main activities that provide economic benefits. There is certainly good evidence of multi-dimensional aspects of gender disadvantage in Zanzibar, such as women's lack of power to control important decisions that affect their life at the household level.

## **Gender**

The 2009/10 HBS shows that there are gains in regards to achievement of gender parity between the survey years, although gender gaps still abound.

The distribution of household members suggests marginal increase of women (to 51.4 percent) to total population - influenced by excess females after age 35 years, compared to previous survey. The proportion women married (52.3 percent) and ever married has marginally declined by about one percent. One-fifth of households are female headed, but with slight increases in urban areas. This interprets stability of marriages and women in urban centres are likely to be more empowered over time. It is, however, evidenced that most women lack power to control important decisions that affect their life at the household level.

There are marked improvements in education attainment; 44 percent of women have at least more than 5 years of education compared to 35.8 percent of women observed in the previous survey, although these ratios are lower compared to males. Enrolment ratios at primary level show no gender bias; suggesting equal access to education by gender. In the same way illiteracy rate among women has declined from 30.2 percent to 22.8 percent between the two surveys, although this is comparatively higher compared to that of males. These statistics suggests reduced non-income poverty levels to women, although it needs more patience before gender differences are completely resolved.

Poverty incidence has been ranked to be more of rural phenomena. However, on gender perspective the survey findings suggest that in 2004/05 female-headed households suffered higher poverty incidence than the male-headed households for the whole of Zanzibar. This ranking is however reversed in 2009/10, when male-headed households had higher incidence of poverty than female-headed households for the whole of Zanzibar. For female headed households are only a small fraction, this should not be interpreted that women are better off than men, but it points to the reduced gender differences in poverty.

## Key Indicators from the Household Budget Surveys

Indicator	2004/05			2009/10		
	Rural	Urban	Total	Rural	Urban	Total
<b>Demographic Characteristics</b>						
Average household size	5.3	5.9	5.5	5.4	5.7	5.5
Mean Age Dependency dependants	1.08	0.84	0.99	1.08	0.83	0.98
Percentage of female-headed households	20.9	22.4	21.4	19.4	24	21.3
Percentage of Children age 0-4 with birth certificate	-	-	-	76.2	87.4	80.2
Percentage of population 15 years and above using mobile phones	-	-	-	27	48.3	36.7
<b>Education and Health</b>						
Percentage of adult 15 years and Above with 5 or more year of education	55.2	82.0	66.3	64.7	85.2	74.1
Percentage of adult females 15 years and Above with 5 years or more education	50.2	78.0	61.9	61.1	81.2	70.2
Percentage of adults literate	65.9	89.5	75.8	75.7	90.3	82.3
Percentage of adults female literate	58.5	85.2	69.8	69.9	85.8	77.2
Primary School Net Enrolment Ratio	71	86	77	78	87	81
Secondary School Net Enrolment Ratio	27	42	33	40	56	46
Percentage of households within 2 km of a Primary School	65.7	91.8	75.4	84	98.2	89.9
Percentage of households within 5 km a primary health facility	93.4	99.4	95.5	96.6	98.7	97.3
Percentage of ill individuals who consulted any health provider	82.4	84.2	82.9	83.5	85.7	84.4
Percentage of Children Age 0-4 reported illness in the past four weeks	31.2	19.8	27.2	16.1	13.8	15.2
<b>Socio-Economic Status</b>						
Percentage of adults whose primary activity is agriculture/fishing/livestock	45.1	5.7	28.6	43.4	5.5	26.1
Percentage of males employed in a government Sector	9.3	18.4	13.1	9.2	19.3	13.9
Percentage of females employed in a government Sectors	2.1	9.0	5.0	2.6	8.3	5.2
Percentage of males employed in Private Sector	4.1	10.7	6.8	4.2	11.8	7.7
Percentage of females employed in private Sector	0.9	4.5	2.6	1.0	4	2.4
Unemployment Rate(%)	4.5	12.6	7.3	1.5	9.1	4.4
Youth Unemployment Rate(%)	8.0	23.8	14.6	6.4	31.2	17.1
Percentage of households with a modern roof	52.4	87	65.1	63.7	92.4	75.6
Percentage of households with modern walls	25.1	72	42.3	40.4	76.3	55.3
Percentage of Households living in their own dwellings	90.6	72.6	84	92.1	69.2	82.6
Average number of persons per sleeping room	2.29	2.24	2.27	2.3	2.1	2.24
Percentage of households with electricity connection	7	57	25.3	16	70	38.4
Percentage of households using Charcoal and Firewood for cooking.	97.8	93.4	96.2	98.4	95.1	97
Percentage of households using a toilet	50	95.7	66.8	66.7	97.9	79.6
Proportion of Households using piped or Protected water as their source for drinking.	80.5	95.9	86.2	85.9	94.4	89.5
Percentage of households within 1 km of drinking water	73.2	85.5	77.7	81.9	90.4	85.4
<b>Household Assets and Source of Income</b>						
Percentage of household owning radio	75.9	87.2	80.1	71.7	85.1	77.3
Percentage of household owning Television	5.0	42.0	18.6	11.5	58.0	30.8
Percentage of household owning telephones	7.2	27.9	14.8	47	75.9	59
Percentage of households with a member with a bank account	3.5	10.8	6.2	5.9	17.6	10.7
<b>Household Consumption and Expenditure</b>						
Average consumption expenditure per capita ( Tshs.28 days)	35,976	51,974	42,276	36,297	54,826	44,238
Percentage of consumption expenditure on food	59.8	50.1	55.1	58.0	47.0.	52.2
Percentage of total consumption by the poorest 20 percent of Population	9.8	8.9	9.3	9.4	8.9	8.8
Percentage of households by usually number of meals per day	45.0	78.0	57.0	56.0	81.0	66.0
<b>Poverty and Inequality</b>						
(Head count ratio) Percentage of population below the food poverty line	16	8.9	13.2	17	8.1	13
(Head count ratio)Percentage of population below the basic needs poverty line	54.6	40.5	49.1	50.7	35.9	44.4
Gini Coefficient	0.26	0.3	0.28	0.28	0.31	0.3
<b>Household Income</b>						
Mean per capita Household annually income	330,8	500,13	397,4	409,8	581,77	483,5
Percentage of agricultural/fishing share of income	14	7	94	26	3	20
	20.3	2.8	11.6	21.4	2.8	13.2

## **CHAPTER ONE: INTRODUCTION**

### **1.1. Introduction**

This chapter summarizes the contents of the 2009/10 Zanzibar Household Budget Survey (2009/10 HBS). It explains the background, objectives, survey design and coverage, questionnaires used, sampling design, data processing, analysis performed and data quality.

The 2009/10 Household survey is a fourth post revolutionary survey of its kind to be conducted in Zanzibar. The previous surveys conducted were 2004/05 HBS, 1991/92 HBS and 1981/82 HBS. The Survey provides poverty-monitoring indicators which will be used to track changes over time. The survey compared the indicators to those derived in the 2004/05 HBS. The survey studied income, expenditure, consumption patterns and other socio-economic characteristics of private households.

A nationally representative sample of 4,296 households was interviewed in the 2009/10 HBS. This sample allows a number of the indicators to be presented at district level. However, since the sample is much smaller than the 2004/05 HBS, care is needed in interpreting some of the district-level estimates.

### **1.2. The Objectives 2009/10 Household Budget Survey**

The following are the objectives of the 2009/10 Household Budget Survey:-

- To monitor poverty and the effects of development policies, programs and projects on living standards and proportion of households living below poverty line;
- To obtain data on key indicators disaggregated at national, and district levels urban and rural areas for facilitating actions and plans in implementing the Zanzibar Strategies for Growth and Reduction of Poverty (ZSGRP), in particular for monitoring and evaluation of social and economic status;
- To obtain base line information for other related households surveys;
- To determine weights for use in computation of Consumer Price Index (CPI) and to supply data for computing national accounts aggregates and for national accounts analysis

### **1.3. Survey design and Coverage**

The fieldwork for the 2009/10 Household Budget Survey was undertaken for 12 month by the Office of Chief Government Statistician. The fieldwork commenced in June 2009 and completed in May 2010. The sample covered a total of 4,296 households. This sample is much smaller than the previous 2004/05 Household Budget Surveys (12,744 households) mainly due limited financial resources. The sample drawn was based on the 2002 Population and Housing Census. This includes a total of 179 primary sampling units (PSUs) – that is, Enumeration Areas (EAs).

The 2009/10 HBS preparations started in November 2008 and continued up to April 2009; including a pilot exercise and the training of field staff which took place in May 2009. The field work for the main survey began in June 2009 and took 12 calendar months up to May 2010.

Two households are enumerated each month in each Enumeration Area (EA), giving a total of 24 households per EA by the end of the survey. Field enumerators, who are resident in or near the Enumeration Area, conduct an initial interview with the two households in each EA at the beginning of the survey month. They then visit the households during that month on a regular basis to record household transactions, covering expenditure, consumption and income. These visits

are scheduled to take place every day for households without a literate member and every two to three days for others. Enumerators are supervised closely by field supervisors who are resident nearby EAs; they checked the data quality in the questionnaires in the field on a regular basis, with an average of five EAs supervised by one supervisor. The supervisors working out by the Office of Chief Government Statistician (OCGS) provided an additional check on the questionnaires before sending for office editing and data entry. All filled questionnaires were sent to the OCGS head office, where manual editing, data entry and data processing took place.

Data entry was done by using CPro 4.0 application programme. It started in August 2009, went in parallel with fieldwork and was terminated in July 2010. An automated data consistency checking procedure using CPro and SPSS 13 packages was run on the entered data during field work. A data validation team was informed of the errors and corrected them where possible. Initially data validation was terminated in August 2010. Further consistency checks, validation and the analysis started in September 2010 and were completed in November 2010.

#### **1.4 Areas Covered by the Survey**

The 2009/10 Household Budget Survey measures changes in a number of important indicators for poverty monitoring and evaluation. It collected information on:-

- Basic information on household members including age, sex and marital status, education, economic activity and health
- Housing Particulars
- Distances to Socio- Economic and other facilities
- Household Assets
- Food security
- Annual household income
- Household expenditure consumption and income
- Household business income and expenditure

#### **1.5 Questionnaires**

The 2009/10 HBS collected information using one main household questionnaire, together with two types of diary similar to that used in the 2004/05 Household Budget Survey. Information on consumption / expenditure is collected in two formats. The first is a diary that records all transactions and consumption for that household for one calendar month. This is completed on a regular basis by the interviewers. The second is recall of larger items of expenditure over the twelve months preceding the survey.

**HBSQF1** asks questions on demographic and socio-economic topics such as age, sex marital status, economic activities, health and education. It also asks questions on possession of assets as well as purchases of consumer durable items and the income of the household members for the last 12 months.

**HBSQF2** is a summary of all income and consumption expenditure of the household members transferred from the diaries in a particular month.

**Diary for household expenditure and income** is an individual record book. Everyday each member of the household who may be able to spend is supposed to record income and expenditure in cash or in kind, quantity and value. The task takes a period of one month for each household. This diary is the main source of data on income and expenditure for this survey.

**Diary for household Business** is a special book for households which have business activity. They are supposed to record daily expenditure and receipt of the business.

Some improvements in the 2009/10 questionnaire were done in order to capture current situation and add information that needed in MKUZA indicators. For example, information ownership of mobile phones for the individuals age 10 years

and above was added; possession of a birth certificate for the individuals less than 18 years and payment in any health service. Other changes included additional questions to capture other dimensions of household conditions and facilities, such as the time spent collecting water and the amount of water used by the households per day. Other questions on food security were added.

In addition, the questionnaire had some questions to support gender analysis includes persons normally used to fetch water in a household; decision making on household income; and on what happens to the receipts from the sales of production obtained from agriculture and livestock.

## 1.6 Sampling Design

The sample for 2009/10 HBS was selected in two stages. The Primary Sampling Units (PSUs) are Enumeration Areas (EAs); based on the district sample designed from 2002 Population and Housing Census. This is a sample of 179 PSUs, designed to allow estimates of household level variables to be made with reasonable precision for each of ten districts. The sample was stratified by district and urban-rural location.

The second stage sample selection was households. Before the start of 2009/10 HBS enumeration, field staff listed all households 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. To ensure that the analysis was representative, analytical weights were used which were the inverse of each household's selection probability.

**Table 1.1: Number of Primary Sampling Units and Households Included in the Analysis, 2004/05 and 2009/10**

	Rural		Urban		Total	
	2004/05	2009/10	2004/05	2009/10	2004/05	2009/10
Number of PSUs	317	127	214	52	531	179
Number of households	7,566	3,045	5,051	1,248	12,617	4,293

More than 99 percent of the original target sample size was interviewed; this is a high proportion for this type of survey. Households that could not be found were replaced; there were about 12 percent replacements. Households that refused were not replaced. Households with at least one household member and at least ten consumption records were included in the analysis.

Confidence intervals around some key estimates are given in Appendix E, while more details on the sampling are given in Appendix A.

Two important caveats should be borne in mind regarding the sampling. The first is that there appear to have been some differences in the composition of the samples between the 2004/05 and 2009/10 surveys. Amongst other things, in some districts there are differences in the proportion of the sample that is rural. This may affect some of the apparent changes between the two surveys.

The second is that the sampling errors around district level estimates are large for some estimates, and measures of change between the the two surveys at the district level will be affected by this. All sample surveys have sampling errors, which are reflect the uncertainty caused by the fact that statistics are estimated on a sample rather than the whole population. However, small samples make these sampling errors larger and confidence intervals smaller. Some large apparent changes between the two surveys at district level might reflect changes in sample composition and sampling errors.

## 1.7 Data Quality

Using the experience learned from the previous survey including the sample size used, the 2009/10 HBS was smaller than the 2004/05 HBS. This allowed having a reasonable proportion of enumerators to one supervisor. Apart from district supervisors who oversee the whole process of enumeration within respective district and make correction where necessary in the field, a team of quality control supervisors was also established. All questionnaires are then sent to OCGS for further checking by manual editing team who received extensive training on how to make accurate corrections. Data are then typed into a computer. The data entered are subject to a series of range checks. For instance, if a variable takes a code that is not permitted on the questionnaire, then it is likely that there is an error, which needs to be corrected.

An improvement in data quality was also observed in this survey, including increase in the number of transactions than the previous survey. The COICOP codes were used in the survey, the codes was also successfully merged with Consumer Price Index (CPI) codes.

## CHAPTER TWO : HOUSEHOLD DEMOGRAPHIC CHARACTERISTICS

### 2.1 Introduction

This chapter provides a descriptive summary of the demographic structure of households; it includes spatial distribution of household members and their composition by sex, age, and marital status. The chapter also discusses the status of heads of households by gender, education attainment and main economic activities. Orphanhood, status of birth registration, and possession of mobile phones by members of households are also discussed at the end of the chapter.

Tables 2.1 and 2.2 below shows that the composition of members in households has, on the average, not changed in the decade; except for slight variations between geographical and administrative areas. The average household size has remained 5.5 members; variations between rural and urban has slightly declined between the two surveys; while Magharibi district and all districts in Pemba have larger size households today compared to 2004/05 HBS. (It remains questionable whether the stagnant high fertility in Pemba Island and in-migration in West district contributes to their increasing household size)

**Table 2.1: Average Household Size by Area**

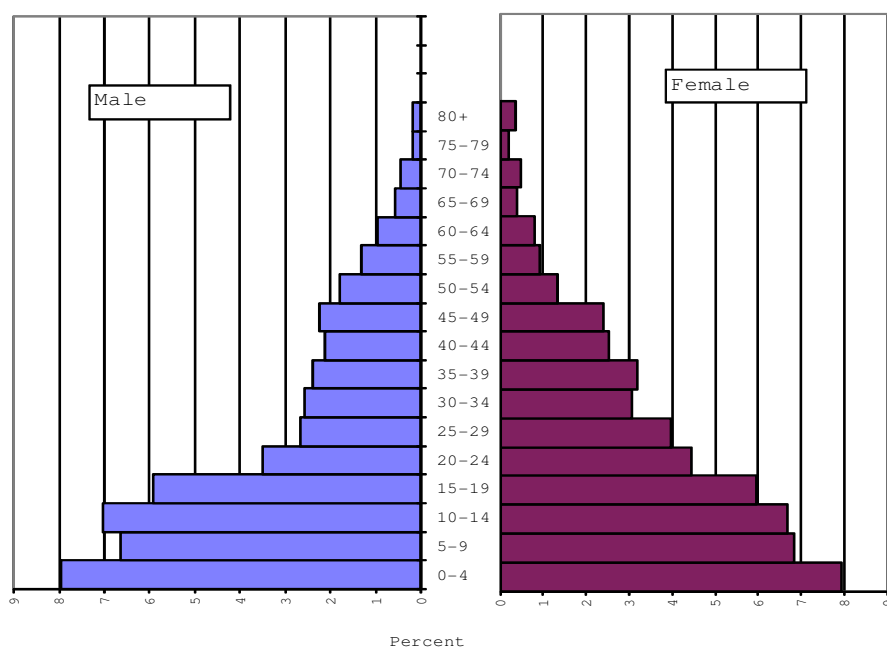
Year	Rural	Urban	Total
2004/05	5.3	5.9	5.5
2009/10	5.4	5.7	5.5

**Table 2.2: Average Household Size by Districts**

District	2004/05	2009/10
Kaskazini "A"	5.3	5.1
Kaskazini "B"	5.0	4.6
Kati	5.2	4.8
Kusini	4.7	4.1
Magharibi	5.4	5.9
Mjini	6.1	5.3
Wete	5.7	5.9
Micheweni	5.3	5.8
Chake Chake	6.1	6.2
Mkoani	5.5	5.7
<b>Total</b>	<b>5.5</b>	<b>5.5</b>

The household members' age and sex structures for the two previous surveys are shown in tables 2.3 and 2.4 below. An estimated survey population for Zanzibar of 1.27 million is a slightly higher estimate of the projected population for Zanzibar of 1.23 million (TPHC; 2012). The percentage urban of 42.8 percent is in with the population census projection. The tri-angular age structure (See Figure 2.1) depicts a young population, with at least two-fifths (in this case 43 percent) of its population under 15 years of age. This is partly a reflection of an ongoing demographic transition – a constant fertility rate of five (TFR = 5.1) children per woman (TDHS, 2010) with a continuous declining mortality that stands at 57 deaths per thousand live births in a year (THMIS; 2007). This structure results to a high age dependency ratio (or low supporting ratio) whence each active person has to produce for him and for additional person(s) to support..

**Figure 2.1: Population Pyramid for Zanzibar**



Source: 2009/10 Zanzibar Household Budget Survey

The age structures are similar between the two surveys, with slight indication of increasing proportion of active population group in the later survey. The composition between sexes suggests excess females compared to males, especially in the recent survey (51.4 percent), although this case is not supported in young ages. It remains questionable if the low sex ratio is a result of high male mortality or might result from cultural values that detain females at home once they complete school until married. Males on the other hand might be given more freedom or encouraged to migrate away from home. This situation therefore might require the government and other stakeholders introduce alternative opportunities for advancing females nearer their home areas, such as vocational education training facilities, micro credit entrepreneurship training facilities, and promotion of rural financing institutions such as SACCOS.

The Table 2.3., also shows that in the 15-19 age groups, is larger compared to other age groups of youth and young adult. Also, higher age groups from 15-19 to 30-34 have less household members and perhaps less members who are dependent.

The 2009/10 survey shows that the proportion of males in most households increased slightly to 48.5percent while that of females dropped slightly to 51.4 percent. According to age groups, 30.2 percent of the 15-34 age range is male, while 33.9 percent are females. More closely, male youth are 19.41percent of the male population, and female youth constitute 20.2 percent of the female population. Male young adults constitute 10.8percent of the male population, and the female young adults constitute 13.6 percent of the female population in Zanzibar.

**Table 2.3: Distribution of Household Members by Five Years Age Group and Area**

Age Group	Rural		Urban		Total	
	2004/05	2009/10	2004/05	2009/10	2004/05	2009/10
0 - 4	17.4	17.8	14.2	13.4	16.1	15.9
5-9	15.1	14.3	13.9	12.4	14.6	13.5
10-14	13.8	13.8	12.3	13.7	13.3	13.7
15-19	11.6	11.6	12.1	12.2	11.8	11.9
20-24	7.2	7.1	10.3	9.1	8.4	8.0
25-29	6.4	6.3	8.0	7.1	7.0	6.7
30-34	5.8	5.1	6.9	6.3	6.2	5.6
35-39	5.1	5.2	5.2	6.1	5.2	5.6
40-44	4.8	4.5	5.1	4.9	4.9	4.7
45-49	3.2	4.6	3.6	4.7	3.4	4.6
50-54	3	3.1	2.8	3.2	2.9	3.1
55-59	1.8	1.8	1.7	2.8	1.8	2.2
60-64	1.9	1.8	1.5	1.6	1.7	1.7
65-69	1.0	1.0	0.8	0.9	0.9	1.0
70-74	1.1	1.0	0.7	0.9	1.0	0.9
75-79	0.4	0.5	0.4	0.3	0.4	0.4
80+	0.6	0.6	0.5	0.5	0.6	0.5
<b>Total Percent</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>
<b>Total Population</b>	<b>640,098</b>	<b>727,594</b>	<b>415,827</b>	<b>545,729</b>	<b>1,055,925</b>	<b>1,273,323</b>

**Table 2.4: Distribution of Household Members by Five Years Age Group and Sex**

Age Group	2004/05			2009/10		
	Male	Female	Total	Male	Female	Total
0 - 4	8.2	7.9	16.1	8.0	7.9	15.9
5-9	7.5	7.1	14.6	6.6	6.8	13.5
10-14	6.8	6.4	13.3	7.0	6.7	13.7
15-19	5.6	6.1	11.8	5.9	6.0	11.9
20-24	3.7	4.7	8.4	3.5	4.5	8.0
25-29	3.0	4.0	7.0	2.7	4.0	6.7
30-34	2.7	3.5	6.2	2.6	3.1	5.6
35-39	2.4	2.8	5.2	2.4	3.2	5.6
40-44	2.5	2.4	4.9	2.1	2.5	4.7
45-49	1.9	1.5	3.4	2.2	2.4	4.6
50-54	1.5	1.4	2.9	1.8	1.3	3.1
55-59	1.0	0.8	1.8	1.3	0.9	2.2
60-64	0.9	0.8	1.7	1.0	0.8	1.7
65-69	0.5	0.4	0.9	0.6	0.4	1.0
70-74	0.5	0.5	1.0	0.5	0.5	0.9
75-79	0.2	0.2	0.4	0.2	0.2	0.4
80+	0.2	0.3	0.6	0.2	0.4	0.5
<b>Total percent</b>	<b>49.2</b>	<b>50.8</b>	<b>100.0</b>	<b>48.6</b>	<b>51.4</b>	<b>100.0</b>
<b>Total Population</b>	<b>519,114</b>	<b>536,811</b>	<b>1,055,925</b>	<b>618,516</b>	<b>654,807</b>	<b>1,273,323</b>

Further analysis of age structure (Table 2.5) suggests that about half of the male population (44.5 percent) are below age 15 years; and proportionately most youth within the 15 to 24 years age group are female (20.2 percent) compared to males (19.4 percent). As regards young adults in the 25 to 34 age group, most household members are also female, (13.7 percent) compared to male (10.8 percent). This female composition is slightly biased to youths and young adults compared to males, a feature not uncommon to age structures, believed to be caused by age shifts in age reporting

among women. These shifts are more pronounced in urban and in earlier surveys compared to rural, example 39.6 percent of female-youth (15-34 years) population is observed in 2004/05 HBS.

As of the 15-29 age range, 22 percent are male and 24 percent are female. In this case, males outnumber females in the lower age ranges, and females outnumber males in the youth age range.

On the other hand, the proportion of females who are in the youth age group, for instance age 15-24 years, has decline between the two surveys from 21.3 percent to 20.2 percent, as did that of young adults females from 14.8 percent to 13.7 percent. Overall the proportion of females between 0-34 years has dropped, and consequently that above 35 years has increased.

**Table 2.5: Distribution of Household Members by Broad Age Group, Area and Sex.**

Age Group	Rural		Urban		Zanzibar	
	2004/05	2009/10	2004/05	2009/10	2004/05	2009/10
<b>Male</b>						
0-14	48.5	48.1	41.8	39.7	45.9	44.5
15-24	17.5	17.7	21.4	21.7	19.0	19.4
25-34	10.3	9.7	13.4	12.4	11.5	10.8
35-44	9.6	9.0	10.4	9.7	9.9	9.3
45-64	10.7	12.3	10.6	14.0	10.7	13.0
65+	3.3	3.2	2.3	2.5	2.9	2.9
<b>Total percent</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>
<b>Number of Individuals</b>	<b>317,884</b>	<b>358,026</b>	<b>201,230</b>	<b>260,490</b>	<b>519,114</b>	<b>618,516</b>
<b>Female</b>						
0-14	44.3	43.6	39.0	39.1	42.2	41.7
15-24	20.0	19.8	23.3	20.8	21.3	20.2
25-34	13.9	13.1	16.3	14.4	14.8	13.7
35-44	10.2	10.3	10.2	12.2	10.2	11.1
45-64	8.9	10.3	8.8	10.7	8.8	10.5
65+	2.8	2.9	2.4	2.7	2.6	2.8
<b>Total percent</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>
<b>Number of Individuals</b>	<b>322,214</b>	<b>369,568</b>	<b>214,597</b>	<b>285,239</b>	<b>536,811</b>	<b>654,807</b>
<b>Total population</b>	<b>640,098</b>	<b>727,594</b>	<b>415,827</b>	<b>545,729</b>	<b>1,055,925</b>	<b>1,273,323</b>

The age dependency ratio –is the ratio of combined population aged less than 15 years and those aged 65 years or more compared to population in the age range 15 - 64 years. The high ratio that approximates one or more (Tables 2.6) suggests that an individual in the society has to produce not only for himself but also to cater for the needs (an economic burden) of additional person(s). Economically, this interprets into an investment diversion, whereby the already limited resources are committed to support the less direct investment expenditures, like health.

The dependency ratio has not change substantially between the two surveys. It is substantially higher in rural areas (1.08) than in urban areas (0.83).

**Table 2.6: Mean Age Dependency Ratio by Area**

Year	Rural	Urban	Total
2004/05	1.08	0.84	0.99
2009/10	1.08	0.83	0.98

The dependency ratio is higher in Micheweni and other districts of Pemba, as well as Kaskazini 'A' districts; it is low at Mjini district (Table 2.7).

**Table 2.7: Mean Age Dependency Ratio by Districts**

District	2004/05	2009/10
Kaskazini "A"	1.06	1.13
Kaskazini "B"	1.09	0.9
Kati	0.91	0.88
Kusini	0.92	0.84
Magharibi	0.93	1.03
Mjini	0.72	0.68
Wete	1.15	1.13
Micheweni	1.16	1.2
Chake Chake	1.18	1.1
Mkoani	1.21	1.14
<b>Total</b>	<b>0.99</b>	<b>0.98</b>

Marriage is a cultural norm of life, although in recent times the age at first marriage has been increasing. The distribution of population 15 years and above by marital status (Tables 2.8 and Figure 2.2) suggests that around one third of the population (36.2 percent) is never married and more than half (53.4 percent) is currently married. A higher proportion of men are married in rural areas (59.1 percent) than in urban areas (49.2 percent), which is the same case also for women - 55.9 percent in rural areas were married compared to 47.9 percent in urban areas. This means being married is more common place in rural areas among both men and women than urban areas, possibly due to an earlier age at marriage in rural areas.

The prevalence of never married is higher among males (42.4 percent) compared to females (30.7 percent). The divorced, separated, and widowed are more common among women compared to men, for example 6.8 percent of women are reported to be widowed compared to only 0.7 percent of men. This is partly attributed by cultural factors where remarriages and co-wives are common among men. More women divorced in urban areas (10.5 percent) than rural areas (8.8 percent). Widows are a large population among women in rural (6.7 percent) and urban areas (6.9 percent), while on the male side fewer men are widowed in both rural (0.5 percent) and urban areas (0.9 percent).

Females who have never married have increased slightly between the surveys, by 0.7 percent, while that of males has increased by 0.3 percent. Proportion of married females and those divorced has dropped by 0.9 percent and 0.2 percent respectively. Proportion of separated females has decreased by 0.3 percent between the surveys, while the proportion of widows has increased by 0.9 percent. On the male side, the proportion of married men has increased (0.4 percent), as has that of divorced men (0.1 percent). On the other hand the proportion of widowed men has increased by 0.1 percent. Overall there aren't any deeply significant changes between the surveys, which might imply the prevalence of stable marital patterns in Zanzibar in the period between the two surveys.

**Figure 2.2: Percentage Distribution of Population 15 Years and Above by Marital Status**



**Table 2.8: Distribution of Population 15 Years and Above by Marital Status and Area**

Marital Status	Rural		Urban		Total	
	2004/05	2009/10	2004/05	2009/10	2004/05	2009/10
<b>Both Sexes</b>						
Never married	32.5	33.1	41.0	40.0	36.0	36.2
Married	57.5	57.4	48.5	48.5	53.7	53.4
Divorced	5.8	5.4	6.7	6.7	6.1	6.0
Separated	0.6	0.2	0.5	0.5	0.5	0.3
Widowed	3.6	3.7	3.1	4.1	3.4	3.9
Living together	0.2	0.1	0.2	0.3	0.2	0.2
<b>Total percent</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>
<b>Number of Individuals</b>	<b>343,329</b>	<b>394,137</b>	<b>247,909</b>	<b>330,789</b>	<b>591,238</b>	<b>724,926</b>
<b>Male</b>						
Never Married	39.2	38.5	47.7	47.0	42.7	42.4
Married	57.6	59.1	49.5	49.2	54.2	54.6
Divorced	2.1	1.7	2.0	2.5	2.0	2.1
Separated	0.3	0.1	0.1	0.1	0.2	0.1
Widowed	0.6	0.5	0.5	0.9	0.6	0.7
Leaving together	0.2	0.1	0.2	0.3	0.2	0.2
<b>Total percent</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>
<b>Number of Individuals</b>	<b>163,694</b>	<b>185,878</b>	<b>117,042</b>	<b>157,185</b>	<b>280,737</b>	<b>343,063</b>
<b>Female</b>						
Never Married	26.3	28.2	35.0	33.7	30.0	30.7
Married	57.3	55.9	47.6	47.9	53.2	52.3
Divorced	9.1	8.8	10.8	10.5	9.8	9.6
Separated	0.8	0.3	0.9	0.7	0.8	0.5
Widowed	6.2	6.7	5.5	6.9	5.9	6.8
Leaving together	0.2	0.1	0.2	0.3	0.2	0.2
<b>Total percent</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>
<b>Number of Individuals</b>	<b>179,634</b>	<b>208,259</b>	<b>130,867</b>	<b>173,604</b>	<b>310,502</b>	<b>381,863</b>

Differentials by district are apparent (Table 2.9). Kusini shares both, the high prevalence among the currently married (61.1 percent) as well as the divorced (9.7 percent); Mjini has the lowest proportion of currently married (45.7 percent); while Micheweni are likely to have more stable marriages, with the lowest proportion divorced at

4.3 percent. However, all districts in Unguja island show an increase in proportion of those currently married in the later survey compared to the former; contrary, all Pemba districts mark declines in the proportions married between the two surveys. Delayed marriages (resulting from the increase in age at first marriage) might be one reason for these declines.

**Table 2.9: Percentage Distribution of Population 15 Years and Above by District and Marital Status**

District	Never married		Married		Divorced		Separated		Windowed		Living together	
	2004/05	2009/10	2004/05	2009/10	2004/05	2009/10	2004/05	2009/10	2004/05	2009/10	2004/05	2009/10
Kaskazini "A"	32.5	32.4	57.6	57.6	4.1	5.0	0.3	0.1	4.6	4.9	0.1	0.0
Kaskazini "B"	32.3	29.2	56.9	59.7	6.5	6.4	0.6	0.3	3.8	3.8	0.3	0.6
Kati	36.4	34.5	51.3	54.7	7.4	6.8	1.6	0.5	2.9	3.3	0.5	0.2
Kusini	31.9	26.1	54.8	61.1	9.1	9.7	0.1	0.0	4.0	3.1	0.2	0.0
Magharibi	34.5	36.0	55.7	55.6	5.8	5.3	0.8	0.2	2.7	2.7	0.5	0.1
Mjini	44.4	41.0	44.1	45.7	7.8	7.6	0.6	0.7	3.1	4.6	0.1	0.4
Wete	36.1	39.6	54.2	50.0	4.9	5.1	0.3	0.1	4.4	5.3	0.0	0.0
Micheweni	29.4	32.6	62.6	60.5	4.0	4.3	0.4	0.3	3.5	2.4	0.0	0.0
Chake Chake	34.4	38.6	56.0	51.1	5.9	5.4	0.2	0.1	3.5	4.8	0.0	0.0
Mkoani	31.7	33.3	59.1	59.0	5.5	4.7	0.2	0.3	3.4	2.7	0.0	0.1
<b>Total</b>	<b>36.0</b>	<b>36.2</b>	<b>53.7</b>	<b>53.4</b>	<b>6.1</b>	<b>6.0</b>	<b>0.5</b>	<b>0.3</b>	<b>3.4</b>	<b>3.9</b>	<b>0.2</b>	<b>0.2</b>

Headship of households by sex, district, and age of the head is given in tables 2.10, 2.11, and 2.12. One-fifth of the households (21.3 percent) are headed by females; the same proportion was observed in the previous survey.

**Table 2.10: Distribution of Household Head by Sex and Area**

Sex	Rural		Urban		Total	
	2004/05	2009/10	2004/05	2009/10	2004/05	2009/10
Male	79.1	80.6	77.6	76.0	78.6	78.7
Female	20.9	19.4	22.4	24.0	21.4	21.3
<b>Total percent</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>
<b>Total Households</b>	<b>120,626</b>	<b>136,059</b>	<b>70,053</b>	<b>96,452</b>	<b>190,679</b>	<b>232,511</b>

With administrative areas, three in every ten households at Wete district and one-quarter of Mjini district (25.2 percent) are female headed compared to only 16.8 percent at Magharibi district (Table 2.11 and Map 2.1). Other increases in female-headed households are observed at Chake Chake, Mjini, and Kaskazini 'A' districts, while Kusini district appears closer to the national average than it did in the previous survey.

Wete district has the highest proportion of female headed households (30 percent), followed by Mjini (25 percent) and Magharibi (23 percent) Districts. Fourth in terms of women headed households is Kati District (21 percent). The proportion of women headed households in the remaining districts is below the national average.

The single largest change in the districts between the surveys is the huge decrease of 9.3 percent in female headed households in Kusini District, counteracted by an increase of 5.7 percent in Wete district. Another noticeable change is a drop by 4.7 percent in the proportion of women headed households in Kaskazini "B" district. The proportion of women headed households have decreased in 6 districts out of 10. This is perceptibly a positive change from a gender relations point of view. Since it might imply that more marriages are staying together, and more partners are braving the world in unity. Moreover, a household where both parents exist usually provides a more conducive environment for nurturing children.

**Table 2.11: Distribution of Household Head by Sex and District**

District	Male		Female		Total Households	
	2004/05	2009/10	2004/05	2009/10	2004/05	2009/10
Kaskazini "A"	81.2	80.9	18.8	19.1	16,737	20,531
Kaskazini "B"	77.7	82.4	22.3	17.6	10,958	15,736
Kati	77.4	78.6	22.6	21.4	12,586	15,465
Kusini	68.2	77.5	31.8	22.5	7,521	9,333
Magharibi	81.9	83.2	18.1	16.8	41,064	35,064
Mjini	75.7	74.8	24.3	25.2	35,080	51,444
Wete	75.7	70	24.3	30.0	18,710	23,406
Micheweni	79.2	81.7	20.8	18.3	16,335	19,821
Chakechake	80.5	79.5	19.5	20.5	14,215	19,636
Mkoani	80.7	82.5	19.3	17.5	17,474	22,074
<b>Total percent</b>	<b>78.6</b>	<b>78.7</b>	<b>21.4</b>	<b>21.3</b>	<b>190,679</b>	<b>232,511</b>

The survey revealed that, 2 percent of households are headed by youth (15-24) and 18 percent are headed by young adults (25-34 years); while more than three-fifths (68.7 percent) of households are headed by adults in the age range 35 – 64 years. Youths and young adults in rural areas are more likely to head households than those living in urban areas, the situation also observed in the previous survey. More households are headed by male youth and young adults than by females.

The cultural aspect of headship and the way the question of head is framed leaves a room of doubt of who clearly the head is! In the same way, the gender perspective of household head needs more analysis than provided in this text.

**Table 2.12: Percentage Distribution of Household Head by Age Group and Area**

Age group	Rural		Urban		Total	
	2004/05	2009/10	2004/05	2009/10	2004/05	2009/10
<b>Male</b>						
15-24	2.7	2.3	2.4	1.8	2.5	2.1
25-34	24.3	22.0	22.4	16.6	23.6	19.8
35-44	29.4	28.1	32.3	29.6	30.4	28.7
45-64	33.5	37.8	35.7	43.9	34.3	40.3
65+	10.1	9.8	7.2	8.1	9.1	9.1
<b>Total</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>
<b>Number of Households</b>	<b>95,412</b>	<b>109,702</b>	<b>54,385</b>	<b>73,346</b>	<b>149,797</b>	<b>183,048</b>
<b>Female</b>						
15-24	2.1	1.7	0.7	1.6	1.6	1.7
25-34	12.4	8.4	16.0	14.4	13.8	11.2
35-44	21.8	16.9	22.9	20.7	22.2	18.7
45-64	42.9	48.4	47.3	49.3	44.6	48.8
65+	20.7	24.6	13.1	14.0	17.8	19.6
<b>Total</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>
<b>Number of Households</b>	<b>25,215</b>	<b>26,358</b>	<b>15,668</b>	<b>23,106</b>	<b>40,882</b>	<b>49,463</b>
<b>Both sexes</b>						
15-24	2.5	2.2	2.0	1.8	2.3	2.0
25-34	21.8	19.3	21.0	16.1	21.5	18.0
35-44	27.8	25.9	30.2	27.5	28.7	26.6
45-64	35.5	39.9	38.3	45.2	36.5	42.1
65+	12.4	12.7	8.5	9.5	11.0	11.4
<b>Total</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>
<b>Number of Households</b>	<b>120,626</b>	<b>136,059</b>	<b>70,053</b>	<b>96,452</b>	<b>190,679</b>	<b>232,511</b>

Table 2.13 portrays the distribution of heads of households by their highest levels of education. One quarter (24.4 percent) of the heads of households have no education at all; three in every ten (30.2 percent) have primary education, and two-fifths (39.2 percent) have attained secondary education. This marks improvements compared to one-third with no education and the same ratio with secondary education, observed in the previous survey.

There are great differentials in the educational attainment between sexes and between geographical areas: almost half (45.5 percent) of females have no education compared to one fifth (18.8 percent) of males; more than two-fifths (42.8 percent) of males have attained secondary education compared to only one quarter (26.0 percent) of females; and similar differentials are observed between rural and urban areas. For example the proportion with no education among rural females is more than twice (60.1 percent) that of urban (28.8 percent) and that of rural males (25.8 percent) is thrice that of urban (8.3 percent). Spatial differentials (see appendix B2.1) are also large: about three-fifths (58.1 percent) of heads of household in Kusini district have at least secondary education compared to only one fifth (21.5 percent and 23.7 percent) in Kaskazini 'A' and Micheweni districts, respectively.

The proportion of heads of households with tertiary education (degrees and related titles) remains low, but still with gender differences; it stands at 0.5 percent among males compared to 0.1 percent for females. On the other hand, a higher proportion of male heads of household in rural areas (3.8 percent) have undertaken adult education than female household heads (2.7 percent). However in urban areas more female household heads (2.3 percent) have undertaken adult education than male heads of household (0.9 percent). None of the women heads of household in rural areas have attained University level education, compared to 0.3 percent of those in urban areas.

**Table 2.13: Percentage Distribution of Household Head by Highest Level of Education Achieved, Sex and Area.**

Highest level of education achieved	Rural		Urban		Total	
	2004/05	2009/10	2004/05	2009/10	2004/05	2009/10
<b>Both Sexes</b>						
No Education	42.9	32.4	16.1	13.2	33.1	24.4
Adult Education	4.4	3.6	1.7	1.2	3.4	2.6
Pre-school	0.1	0.8	0	0.5	0.6	0.6
Standard 1 – 4	7.8	8.7	6.0	5.2	7.2	7.3
Standard 5 – 8	19.8	22.3	26	23.7	22.1	22.9
OSC-Form 4	22.9	29.9	43.1	49.3	30.3	37.9
Form 5 – 6	0.7	0.5	3.1	2.4	1.5	1.3
Course after primary education	0.1	0	0.2	0	0.1	0
Course after Secondary Education	0.3	0.4	0.6	2.4	0.5	1.2
Diploma course	0.6	0.7	1.0	1.0	0.8	0.8
Other Certificates	0.3	0.3	0.8	0.5	0.5	0.4
Universities degree/related titles	0.1	0.3	1.4	0.7	0.6	0.4
<b>Total percent</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>
<b>Number of Households</b>	<b>120,626</b>	<b>136,059</b>	<b>70,053</b>	<b>96,452</b>	<b>190,679</b>	<b>232,511</b>
<b>Male</b>						
No Education	35.3	25.8	9.6	8.3	26	18.8
Adult Education	4.7	3.8	1.4	0.9	3.5	2.6
P re-school	0.1	0.8	0	0.3	0.1	0.6
Standard 1 – 4	8.2	9.1	5.6	4.4	7.2	7.3
Standard 5 – 8	19.0	24.1	20.5	25.4	19.6	24.6
OSC-Form 4	32	33.8	61.2	52.3	42.6	41.2
Form 5 – 6	0.3	0.6	1.0	3.2	0.6	1.6
Course after primary education	0.1	0.1	0.1	0	0.1	0
Course after Secondary Education	0	0.5	0.2	2.6	0.1	1.3
Diploma course	0.1	0.8	0.2	1.2	0.2	1
Other Certificates	0.1	0.4	0	0.6	0.1	0.5
Universities degree/related titles	0.1	0.3	1.6	0.8	0.7	0.5
<b>Total percent</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>
<b>Number of Households</b>	<b>95,412</b>	<b>109,702</b>	<b>54,385</b>	<b>73,346</b>	<b>149,797</b>	<b>183,048</b>
<b>Female</b>						
No Education	67.9	60.1	36.6	28.8	55.9	45.5
Adult Education	2.4	2.7	2.6	2.3	2.4	2.5
Pre-school	0.2	0.8	0	0.9	0.2	0.8
Standard 1 – 4	5.7	7	5.5	7.7	5.6	7.3
Standard 5 – 8	10.2	14.8	18.9	18.5	13.6	16.5
OSC-Form 4	13.5	13.7	35.5	39.6	21.9	25.8
Form 5 – 6	0.1	0.3	0.4	0.1	0.2	0.2
Diploma course	0	0.2	0.1	1.4	0	0.8
Other Certificates	0	0.5	0.1	0.4	0	0.5
Universities degree/related titles	0	0	0.3	0.3	0.1	0.1
<b>Total percent</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>
<b>Number of Households</b>	<b>25,215</b>	<b>26,358</b>	<b>15,668</b>	<b>23,106</b>	<b>40,882</b>	<b>49,463</b>

Table 2.14 shows the distribution of heads of households by their participation in economic activity. Employees (by government, parastatals, and private) accounts to 28.3 percent of the workforce of heads of households; the self employed, including those engaged in agricultural activities comprise two-thirds (64.2 percent) of all heads of households. The group of heads who are not in the labour force, who include heads of households who are sick, the students, and housewives, comprises 7.4 percent. These statistics are comparable to those of the previous survey, which are 25.7 and

65.9 percent for the employed and self employees, respectively. However, within the self-employed as a whole, there appears to have been a substantial increase in the proportion of heads who are self-employed outside of agriculture, from 21 to 27 percent (including those with and without employees).

Heads of households in rural areas are more likely to be self employed (55.9 percent) especially in agricultural activities, while those in urban are more likely to be employed (77.7 percent), including their own self employment. Other than farming, self employment (without an employee) is the main form of employment of heads of households (26.6 percent). A gradual shift in employment from agriculture to this form of employment is realized in rural areas, while a concentration of the same (32.8 percent) is observed in urban areas.

Heads of households (see B2.2) at the districts of Micheweni (66.1 percent), Kaskazini 'B' (62.5 percent), and Kati (58.1 percent) are more likely to be engaged in agricultural employment; while those at the districts of Magharibi (32.7 percent), Kaskazini 'A' (30.9 percent), and Mjini (29.0 percent) are more likely to be engaged in self employment.

**Table 2.14: Distribution of Households Head by Main Economic Activity and Area.**

Economic Activity	Rural		Urban		Total	
	2004/05	2009/10	2004/05	2009/10	2004/05	2009/10
Farming / Livestock keeping	50.2	44.2	9.8	8.8	35.4	29.5
Fishing	11.3	11.0	1.9	0.8	7.9	6.8
Mining	0.5	0.2	0	0	0.3	0.1
Tourism	0.4	0.5	0.7	0.2	0.5	0.4
Paid employee government	11.4	12.8	28.2	30.3	17.6	20
Paid employee parastatal	0.6	0.2	0.9	0.5	0.7	0.3
Paid employee NGO or Religious Organization	0.8	0.6	3.5	2.4	1.8	1.3
Other include Private or Missions	3	3.4	8.6	11.2	5.1	6.7
Self employed with employee	1.6	0.6	3.2	0.5	2.2	0.6
Self employed without employee	13.5	22.2	28.3	32.8	18.9	26.6
Unpaid family helper in business	0.1	0	0.3	0	0.2	0
Not working but available for work	0.2	0.1	1.3	0.1	0.6	0.1
Not working: Not seeking for work	0	0	0	0.1	0	0
Housekeeping with economic activity	0	0.2	0.1	0.1	1.4	0.2
Housekeeping with non economic activity	1.0	1.4	2.0	8.7	3.1	4.4
Student	1.3	0.1	6.2	0	0.1	0.1
Not active: too old/too young	0	1.5	0.2	2.9	2.6	2.1
Not active: sick	2.2	0.8	3.2	0.6	1.3	0.7
Not active: disable	1.3	0.1	1.2	0	0.2	0.1
Not active: other	0.2	0.1	0.1	0	0.2	0
Not Stated	0.2	0	0.1	0.1	0.1	0
<b>Total percent</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>
<b>Number of Households</b>	<b>120,626</b>	<b>136,059</b>	<b>70,053</b>	<b>96,452</b>	<b>190,679</b>	<b>232,511</b>

Information on children by the survival status of their parents provided data on orphanhood. About five percent (Table 2.15) of all children below 18 years of age (or about 32,000 children) were reported to be orphans; 0.3 percent had both of their parents dead (double orphans); and the proportion of children with their mother live but father dead (3.1 percent) is twice that with their father live but mother dead (1.6 percent); these are the single orphans.

A lower proportion of orphans is reported in recent survey compared to the previous one. The proportion of orphans reported to live in urban (0.4 percent) is twice that of rural (0.2 percent); and slightly more female orphans are reported compared to males. The proportion of parents who have died, to either sex, confirms their smooth declining proportion with the age of the children. That is, the observed prevalence in orphanhood is not a result of any natural calamities or pandemic diseases but the prevailing mortality.

As well as for smaller children, the survival of parents is crucial for boys and girls in their adolescent years, which are the 10-17 year range. It is in this case important for boys to have a role model in their household, as well as girls, in the respective formative age range. Data shows that 1.3 percent of females have their mothers dead, and thus might be devoid of a crucial role model, compared to 2.7 percent of males having their father dead.

The proportion of children who have lost one or both parents has declined between the two surveys, particularly for the older age groups, so proportionately fewer children are orphaned. One possible cause of this would be a decline in adult mortality.

The prevalence of orphanhood (see Appendix B 2.3) is higher at Kusini (8.9 percent) and Chake Chake (6.4 percent) districts.

**Table 2.15: Percentage Distribution of Population Less than 18 Years by Survival of Parents and Area.**

Survival of parents	Rural		Urban		Total	
	2004/05	2009/10	2004/05	2009/10	2004/05	2009/10
<b>Both Sexes</b>						
Both Parents Alive	93.5	94.6	92.3	94.9	93.1	94.7
Father Alive Mother Dead	1.6	1.6	1.7	1.7	1.6	1.6
Mother Alive father dead	4.6	3.3	5.5	2.8	4.9	3.1
Both Parents Dead	0.3	0.2	0.5	0.4	0.4	0.3
Don't know	0	0.3	0	0.3	0	0.3
<b>Total percent</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>
<b>Number of Individuals</b>	<b>340,923</b>	<b>381,877</b>	<b>196,423</b>	<b>254,036</b>	<b>537,346</b>	<b>635,914</b>
<b>Male</b>						
Both Parents Alive	93.6	94.9	92.3	95.2	92.8	95
Father Alive Mother Dead	1.5	1.9	1.4	2.0	1.5	1.9
Mother Alive father dead	4.6	2.8	5.6	2.4	5	2.7
Both Parents Dead	0.2	0.2	0.4	0.1	0.3	0.2
Don't know	0	0.2	0	0.3	0	0.2
<b>Total percent</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>
<b>Number of Individuals</b>	<b>175,399</b>	<b>195,608</b>	<b>97,634</b>	<b>121,853</b>	<b>273,033</b>	<b>317,461</b>
<b>Female</b>						
Both Parents Alive	93.4	94.4	91.8	94.6	92.5	94.5
Father Alive Mother Dead	1.7	1.3	2	1.4	1.8	1.3
Mother Alive father dead	4.5	3.8	5.5	3.1	4.9	3.5
Both Parents Dead	0.4	0.3	0.5	0.7	0.4	0.4
Don't know	0	0.3	0	0.3	0	0.3
<b>Total percent</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>
<b>Number of Individuals</b>	<b>165,524</b>	<b>186,269</b>	<b>98,789</b>	<b>132,183</b>	<b>264,313</b>	<b>318,452</b>

**Table 2.16: Percentage Distribution of Population Less than 18 Years by Survival of Parents and Age Group.**

Survival of parents	2004/05					2009/10				
	0-4	5-9	10-14	15-17	Total	0-4	5-9	10-14	15-17	Total
<b>Both Sexes</b>										
Both Parents Alive	97.9	94	89.1	84.5	92.7	98.0	95.5	92.5	90.0	94.7
Father Alive Mother Dead	0.5	1.6	2.3	3.0	1.6	0.7	1.5	2.5	2.3	1.6
Mother Alive father dead	1.2	3.7	7.5	11.1	4.9	1.0	2.3	4.3	7.2	3.1
Both Parents Dead	0.1	0.3	0.6	0.8	0.4	0	0.4	0.5	0.3	0.3
Don't know	0	0	0	0	0	0.2	0.3	0.3	0.2	0.3
<b>Total percent</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>
<b>Number of Individuals</b>	<b>170,471</b>	<b>154,275</b>	<b>139,940</b>	<b>72,659</b>	<b>537,346</b>	<b>202,197</b>	<b>171,572</b>	<b>174,587</b>	<b>87,558</b>	<b>635,914</b>
<b>Male</b>										
Both Parents Alive	98.2	93.9	89	84.6	92.8	98.3	95.4	92.9	90.8	95.0
Father Alive Mother Dead	0.4	1.6	2.0	2.7	1.5	0.7	2.1	3.2	1.7	1.9
Mother Alive father dead	1.1	3.8	7.8	11.4	5.0	0.6	2.0	3.5	7.2	2.7
Both Parents Dead	0	0.2	0.6	0.6	0.3	0	0.3	0.3	0	0.2
Don't know	0	0	0	0	0	0.4	0.2	0.2	0.3	0.2
<b>Total percent</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>
<b>Number of Individuals</b>	<b>87,073</b>	<b>79,169</b>	<b>72,135</b>	<b>34,656</b>	<b>273,033</b>	<b>101,302</b>	<b>84,404</b>	<b>89,706</b>	<b>42,050</b>	<b>317,461</b>
<b>Female</b>										
Both Parents Alive	97.6	94.1	89.1	84.5	92.5	97.8	95.7	92.0	89.1	94.5
Father Alive Mother Dead	0.7	1.5	2.7	3.2	1.8	0.7	0.9	1.7	2.9	1.3
Mother Alive father dead	1.3	3.6	7.1	10.9	4.9	1.4	2.5	5	7.3	3.5
Both Parents Dead	0.2	0.4	0.6	0.9	0.4	0.1	0.5	0.8	0.5	0.4
Don't know	0	0	0	0	0	0.1	0.4	0.5	0.1	0.3
<b>Total percent</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>
<b>Number of Individuals</b>	<b>83,398</b>	<b>75,106</b>	<b>67,805</b>	<b>38,003</b>	<b>264,313</b>	<b>100,895</b>	<b>87,168</b>	<b>84,881</b>	<b>45,508</b>	<b>318,452</b>

Reporting of vital events to health facilities (during the occurrence of an event) or to local leader is compulsory. The reported event is then registered with the Registrar's office. Table 2.17, 2.18, and 2.19 show the distribution of birth events observed in the survey by their status of registration, district, and age groups. For the purpose of this report, only those never registered (i.e. not reported the event) and the 'don't know' will be considered as having not reported the birth event, otherwise they will be considered to have been registered.

The total registration coverage – that is, all births that have been registered at some point - is reported at 93.6 percent of all children below 18 years of age for the survey year. More than four-fifths (82.1 percent) of the children had received their registration (birth) certificates during the time of the survey. The urban population is more likely to be registered (96.7 percent) compared to rural population (91.5 percent). There is an equal access in registration between the two sexes.

More males (89.7 percent) and females (90.4 percent) in urban areas are registered than males (76.6 percent) and females (76.8 percent) in rural areas. Near equal proportions of males (7.4 percent) and females (7.6 percent) have never registered in the rural areas. Somewhat more males (3.5 percent) than females (2.4 percent) have never registered in urban areas.

**Table 2.17: Distribution of Population Less than 18 Years by Birth Registration and Area, 2009/10**

Registration Status	Rural			Urban			Total		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
Have Birth Certificate	76.6	76.8	76.7	89.9	90.3	90.1	81.7	82.4	82.1
Have lost Birth Certificate	6.9	5.4	6.2	2.3	2.8	2.5	5.1	4.3	4.7
Never Registered	7.4	7.6	7.5	3.5	2.4	2.9	5.9	5.4	5.6
Have Registered	8.4	8.9	8.6	4.1	4.1	4.1	6.7	6.9	6.8
Don't know	0.7	1.3	1.0	0.3	0.4	0.4	0.6	0.9	0.8
<b>Total percent</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>
<b>Total Population</b>	<b>195,608</b>	<b>186,269</b>	<b>381,877</b>	<b>121,853</b>	<b>132,183</b>	<b>254,036</b>	<b>317,461</b>	<b>318,452</b>	<b>635,914</b>

Registration coverage is still lowest in Micheweni district, by a long way, with 21 percent of girls and 24 percent of boys below 18 years never registered. Registration of birth events is highest at Kusini district (97.9 percent). Awareness of the importance of registration may be a reason for this disparity in registration. It is also worth noting that even in the current registration systems a reasonable proportion of more than six percent remain unregistered nationally.

The other districts of Pemba and Kaskazini "A" also have high relatively high proportions of births that have never been registered, for both males and females. The proportion of children who have never had their birth registered is broadly constant at five to six percent for all age groups (Table 2.19), suggesting that there have not been any substantial improvements in recent years in reaching the minority who do not register.

Since most official entitlements are increasingly being linked to being registered, it is becoming critical proper and formalised recognition.

**Table 2.18: Distribution of Population Less than 18 Years by Birth Registration, District and Sex, 2009/10**

District	Have Birth Certificate		Have lost Birth Certificate		Never registered		Have Registered		Don't know		Total Population	
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
Kaskazini "A"	75.8	76.0	8.4	6.3	5.7	6.2	8.8	9.0	1.2	2.5	28,294	25,512
Kaskazini "B"	85.0	80.9	11.4	11.5	0.8	1.5	2.1	4.2	0.8	1.9	18,225	15,979
Kati	85.8	85.0	6.8	4.6	2.1	2.6	5.0	6.9	0.2	0.9	17,704	18,183
Kusini	96.3	95.8	1.1	2.1	0.2	0.7	1.4	1.0	0.9	0.3	9,365	7,954
Magharibi	88.1	87.8	3.6	2.0	1.8	1.7	5.9	7.4	0.6	1.0	52,465	55,773
Mjini	90.9	94.4	1.6	2.7	4.7	2.7	2.8	0.1	0.0	0.1	54,656	60,648
Wete	81.7	82.5	6.7	4.1	4.0	4.8	6.7	7.7	0.9	0.9	37,417	37,058
Micheweni	57.4	58.1	5.0	6.8	23.8	20.8	13.4	13.7	0.5	0.7	32,343	32,261
Chake Chake	84.0	83.7	2.0	2.5	5.7	4.3	7.9	9.0	0.4	0.6	31,029	32,253
Mkoani	75.2	74.7	8.4	6.4	5.5	7.5	10.1	9.8	0.8	1.6	35,965	32,831
<b>Total percent</b>	<b>81.7</b>	<b>82.4</b>	<b>5.1</b>	<b>4.3</b>	<b>5.9</b>	<b>5.4</b>	<b>6.7</b>	<b>6.9</b>	<b>0.6</b>	<b>0.9</b>	<b>317,461</b>	<b>318,452</b>

**Table 2.19: Distribution of Population Less than 18 Years by Birth Registration Status and Age Group, 2009/10.**

Registration Status	Age group				Total
	0-4	5-9	10-14	15-17	
Have Birth Certificate	77.2	84.1	84.7	84.0	82.1
Have lost Birth Certificate	3.0	4.4	6.1	6.6	4.7
Never Registered	5.9	5.4	5.4	5.8	5.6
Have Registered	13.4	5.2	2.9	2.6	6.8
Don't know	0.5	0.8	1.0	1.0	0.8
<b>Total percent</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>
<b>Total Population</b>	<b>202,197</b>	<b>171,572</b>	<b>174,587</b>	<b>87,558</b>	<b>635,914</b>

Tables 2.20 and 2.21 below explore the use of mobile phones by the population in the age range 15 years and above. One third, (36.7 percent), of people in the age range claimed to use mobile phones. Use of mobiles is more common in urban areas (48.3 percent) compared to rural (27.0 percent); it is more common among males (46.0 percent) compared to females (28.4 percent). More than half the males in urban areas (56.4 percent) use mobile phones.

The distribution in use of mobile phone by age suggests that the young adults in the age group 30 – 34 are more likely to use of mobile phones; this is true to both, rural and urban areas. About four-fifths of mobile phone users are in the age range 20 – 49 years.

Data shows that the use of mobile phones, is less common on the female side than the male side. More than four fifths of females in the rural areas, and three fifths of females in urban areas do not use mobile phones. For the male population, two thirds in rural areas and half in urban areas do not use mobile phones.

**Table 2.20: Distribution of Population 15 Years and Above by Use of Mobile Phone, Area and Sex, 2009/10.**

Use of Mobile Phone	Rural			Urban			Total		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
Yes	37.3	17.8	27.0	56.4	41.1	48.3	46.0	28.4	36.7
No	62.7	82.2	73.0	43.6	58.9	51.7	54.0	71.6	63.3
<b>Total percent</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>
<b>Number of Individuals</b>	<b>185,878</b>	<b>208,259</b>	<b>394,137</b>	<b>157,185</b>	<b>173,604</b>	<b>330,789</b>	<b>343,063</b>	<b>381,863</b>	<b>724,926</b>

Mature adults, between about 30 and 60 years of age, are most likely to use mobile phones. Useage is lower for younger adults and youth, and for older adults. The age groups with the highest use of mobile phones are those in the 30-34 age groups (55.6 percent), followed by those in the 35-39 (53.9 percent, and 45-49 age groups (50.7 percent). On the male side, men within the 30-34 age group [68.4 percent] lead in use of mobile phones, followed by those in the 55-59 age group (67.9 percent), and 35-39 age group (67.4 percent). As for females, largest users are those in the 30-34 age groups (44.8 percent), followed by those in the 35-39 age groups (43.7 percent), and lastly the 45-49 age groups (39.2 percent).

As stated above, the proportion of people using mobile phones in urban areas is larger (48.3 percent) compared to those in the rural areas (27.0 percent). This situation might be a product of the fact that the populations in urban areas engage more ventures whereby mobile phone usage is an integral part of their businesses. In rural areas, usage of mobile phones might be reduced by coverage, access to power sources, access to after sales services, and costs of buying hand phones. More males in rural areas use mobile phones than females.

**Table 2.22: Distribution of Population 15 Years and Above Use of Mobile Phone by Age Group, Area and Sex, 2009/10.**

Age Group	Rural			Urban			Total		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
15-19	13.1	6.8	9.8	14.2	8.2	11.3	13.6	7.4	10.5
20-24	32.3	15.8	22.8	44.4	41.1	42.6	38.4	27.8	32.4
25-29	46.5	20.6	31.1	66.3	50.6	56.9	55.5	34.4	42.9
30-34	52.8	37.3	44.1	83.7	53.4	68.0	68.4	44.8	55.6
35-39	58.6	27.2	41.2	78.2	61.1	68.1	67.4	43.7	53.9
40-44	49.2	23.2	35.5	80.5	56.5	67.0	62.7	38.7	49.7
45-49	53.5	21.6	36.8	74.8	62.5	68.5	63.0	39.2	50.7
50-54	39.6	15.1	29.3	79.0	42.8	63.8	56.9	27.2	44.4
55-59	54.1	12.3	36.6	79.8	36.4	62.2	67.9	24.9	50.2
60-64	25.3	3.2	15.5	52.5	38.6	46.0	35.9	17.7	27.7
65-69	22.6	6.7	16.1	46.2	20.0	35.4	32.2	12.2	24.0
70-74	26.1	3.5	14.8	23.3	3.5	12.9	25.0	3.5	14.0
75-79	21.6	0.0	12.2	33.6	7.9	15.3	23.7	3.2	13.1
80+	7.0	2.0	3.9	23.3	0.0	6.7	12.0	1.2	5.0
<b>Total percent</b>	<b>37.3</b>	<b>17.8</b>	<b>27.0</b>	<b>56.4</b>	<b>41.1</b>	<b>48.3</b>	<b>46.0</b>	<b>28.4</b>	<b>36.7</b>

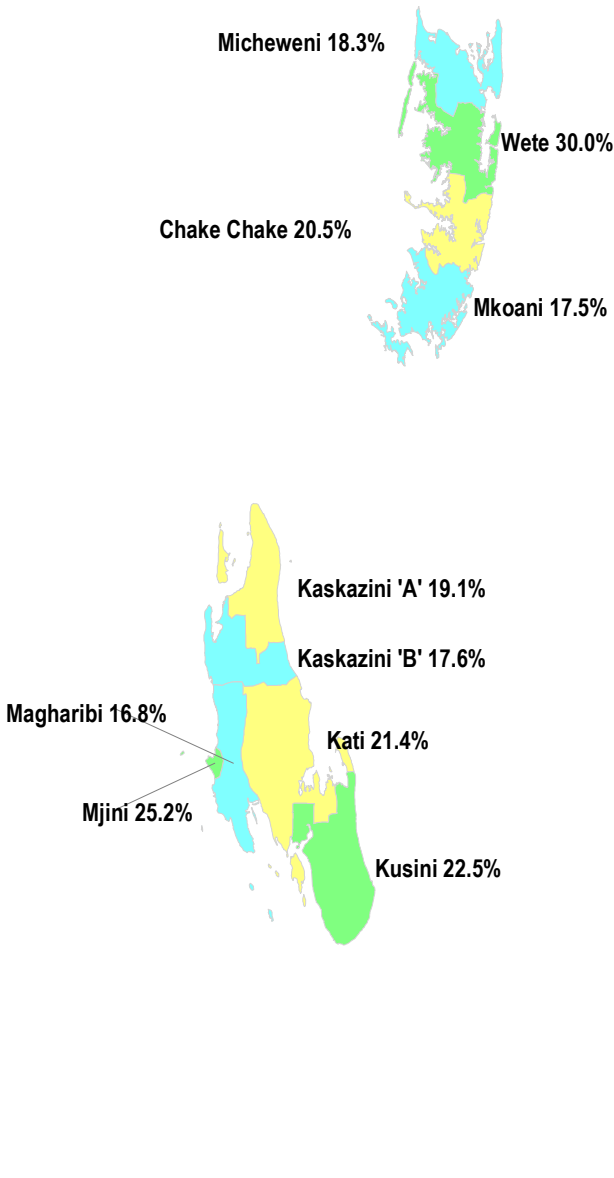
## Conclusion

The chapter has described heads of households' demographic characteristics. Findings have revealed constant average household size of five members, with a small different between urban and rural areas; a young population resulting in a high dependency ratio, and a one-fifth unchanged proportion of female headed households. Levels of education are observed to be low, with great disparities between sexes and administrative areas. The education of household heads has improved between the two surveys.

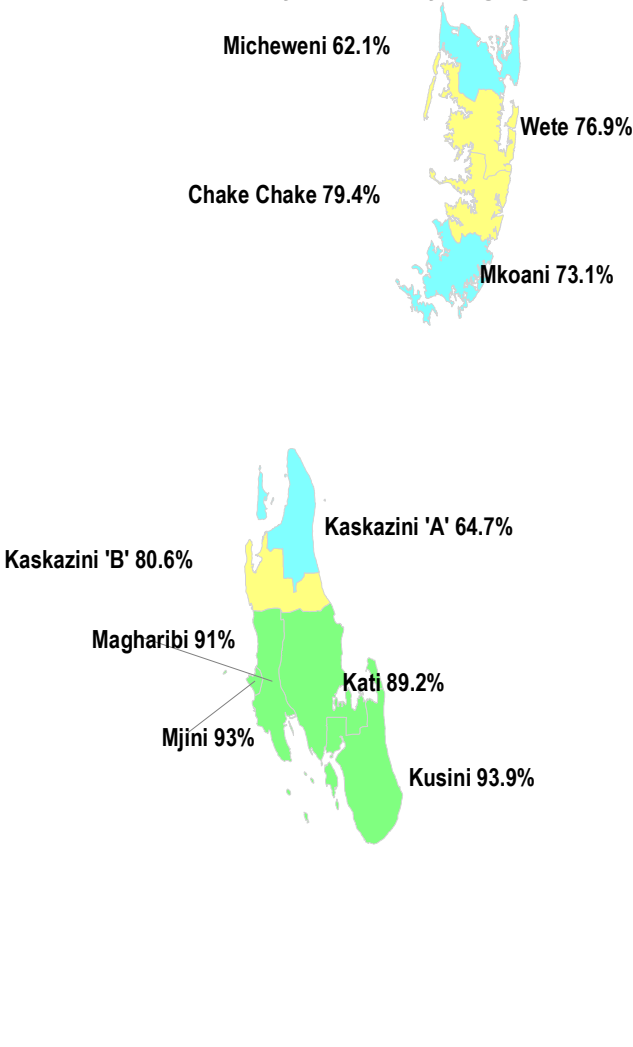
On economic activities, heads of households are more likely to be engaged in agricultural and other forms of self employment. Some six percent of children have been orphaned, with only 0.3 percent double orphans, and the proportion who are orphaned has declined between the two surveys. Birth registration activities suggest high coverage of registration, except in a few districts. Some 37 percent of adults report using a mobile phone, with higher levels of useage in urban areas, and for males.

2.1 Maps

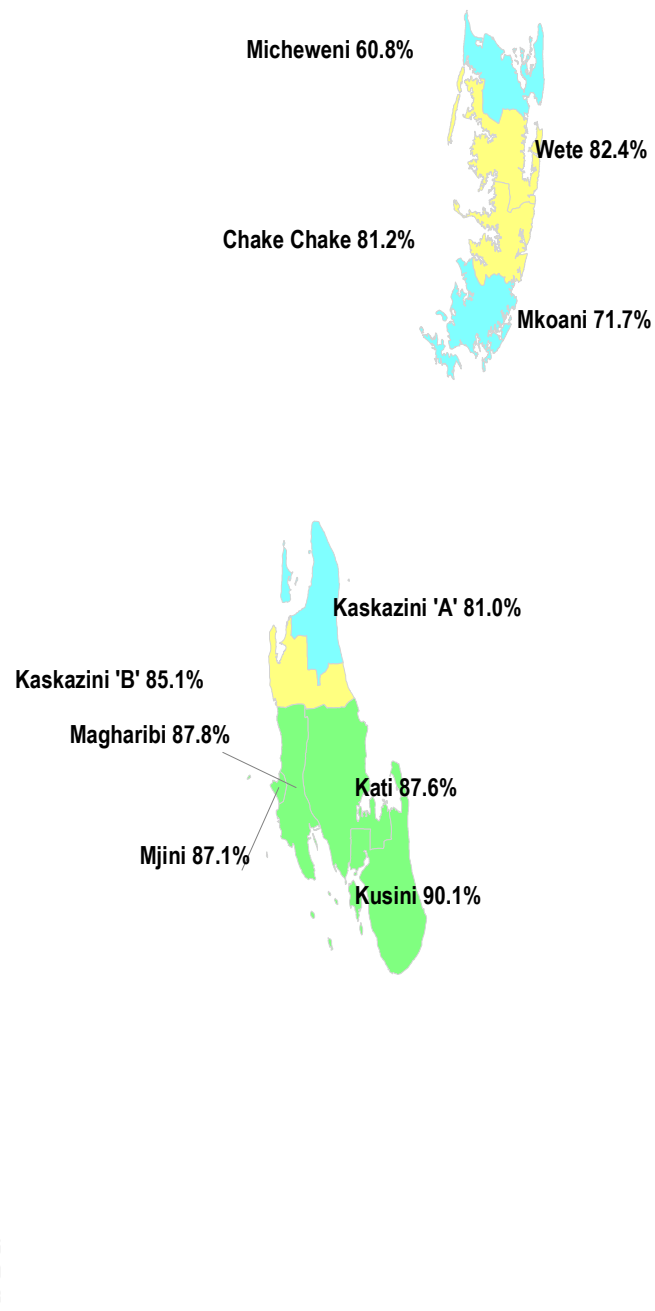
Map 2.1: Female Headed Households



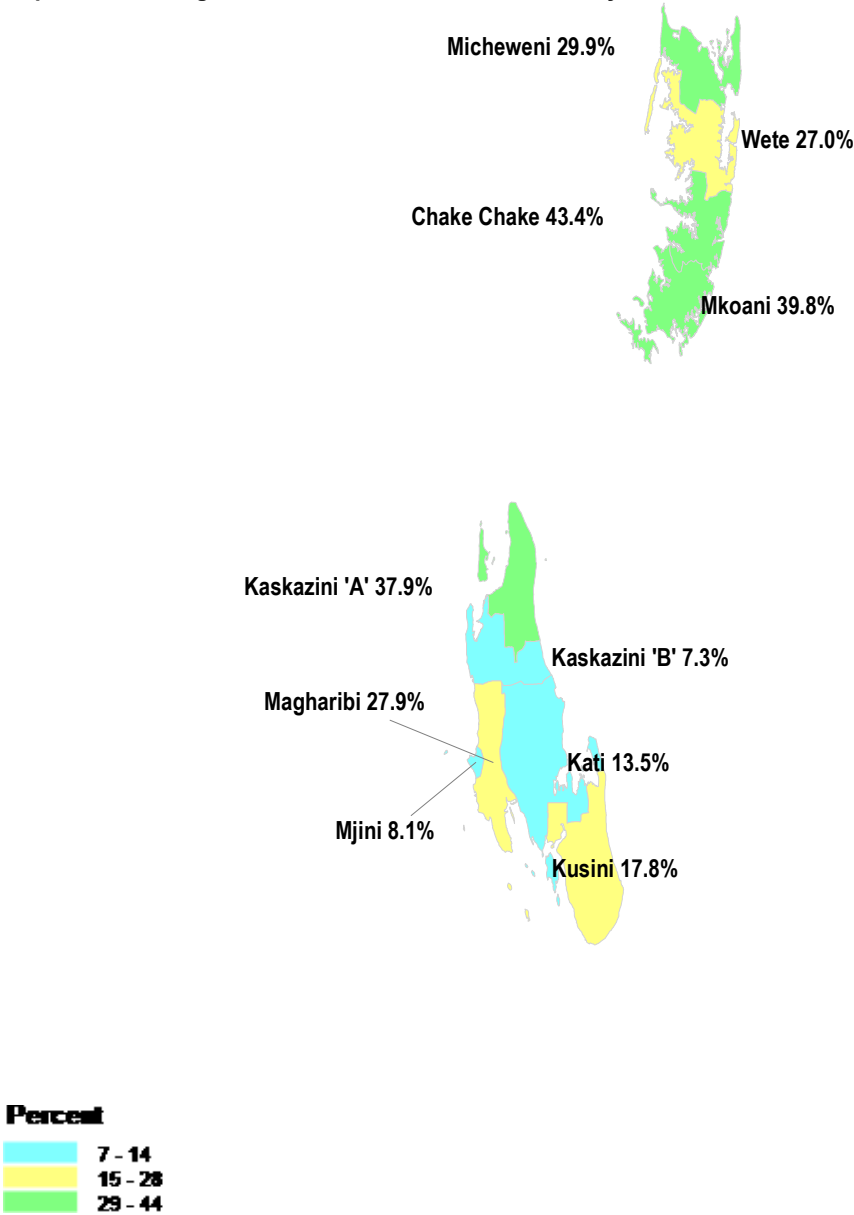
Map 3.1: Percentage of Adult 15 Years and Above by Literate in any Language



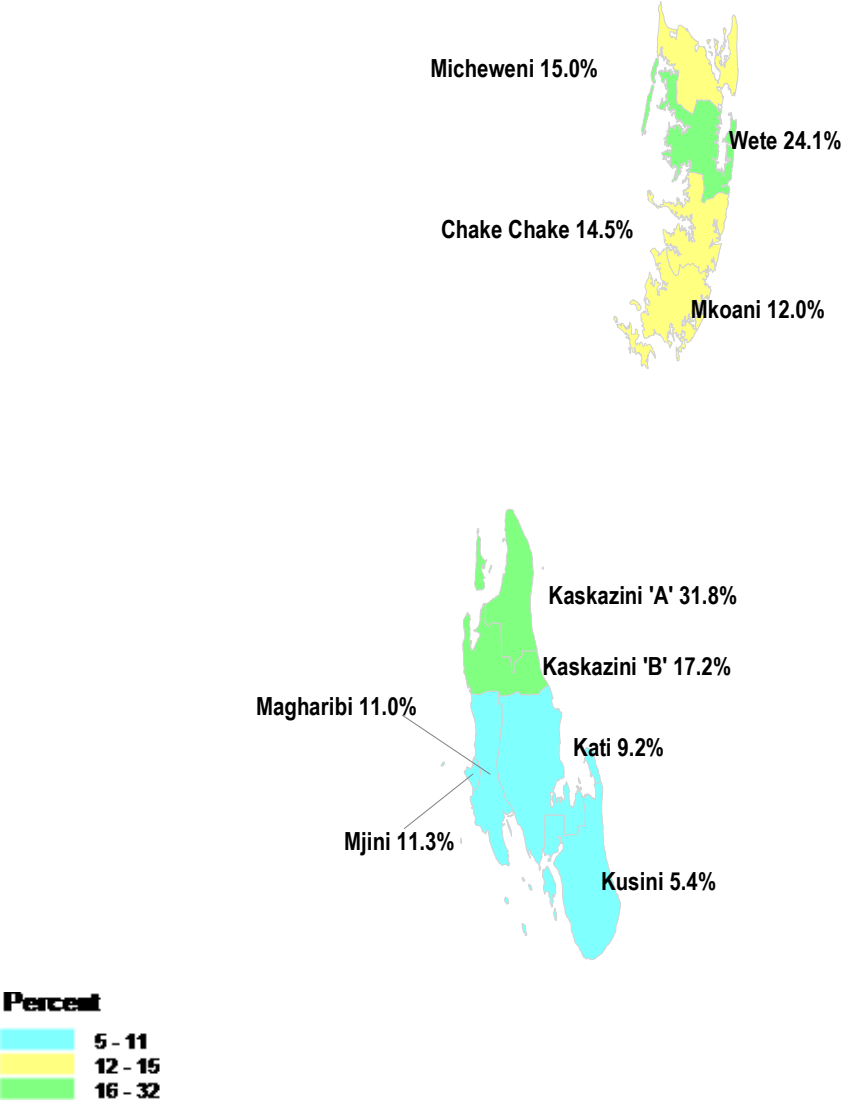
Map 3.2: Primary Education Net Enrolment Ratio



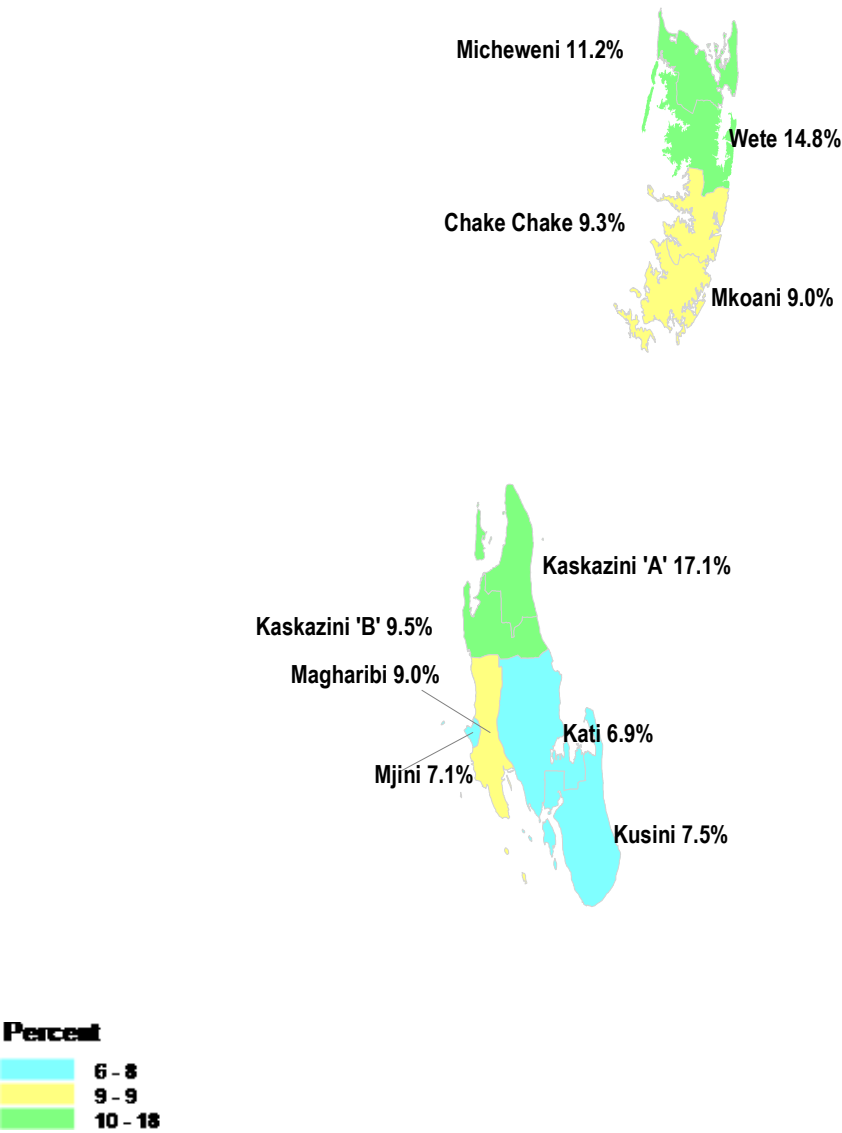
Map 3.3: Percentage of Household within 2 km of Primary School



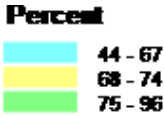
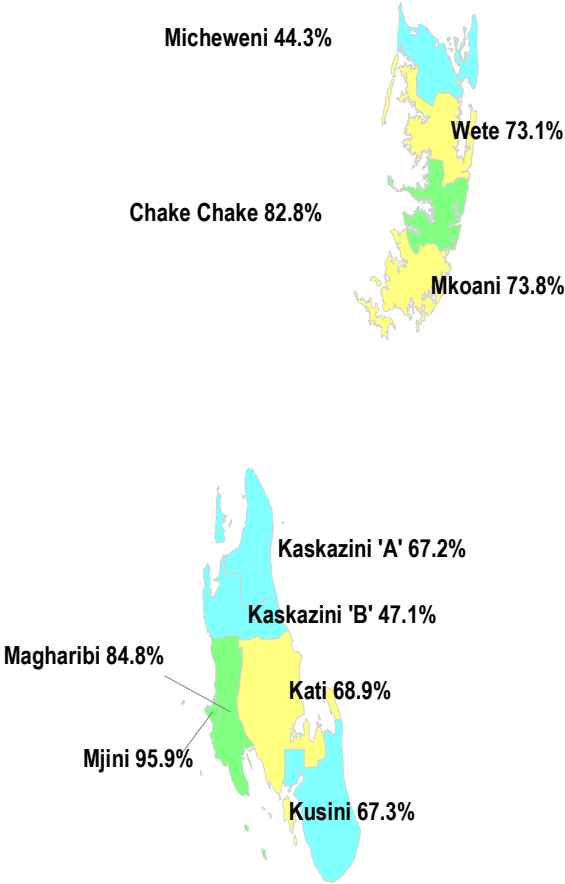
Map 3.4: Percentage of Individual (Age 0-4 Years) Reporting Illness or Injury in Previous Four Weeks.



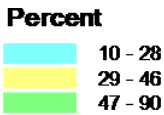
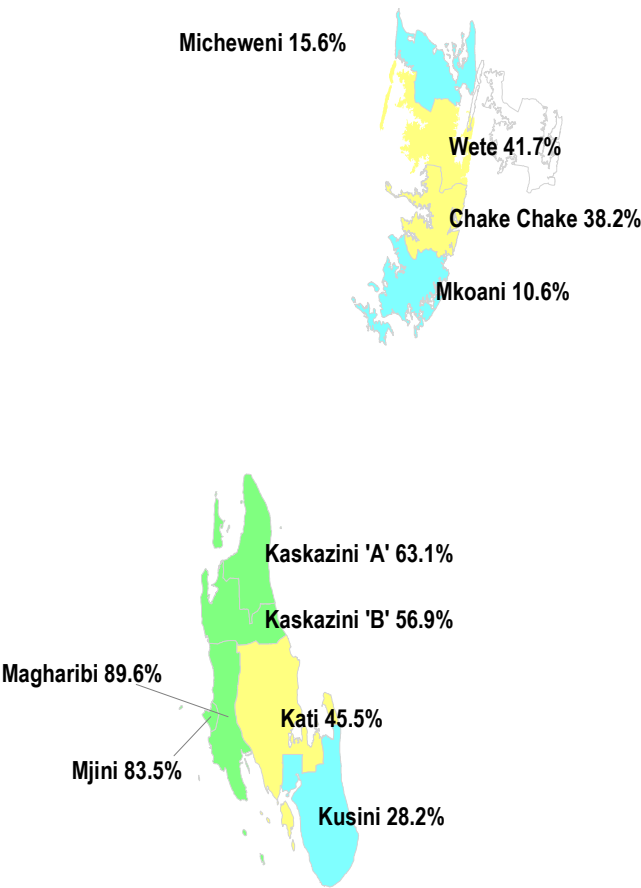
Map 3.5: Percentage of Individual Reporting Illness or Injury in Past Four Weeks (All Ages)



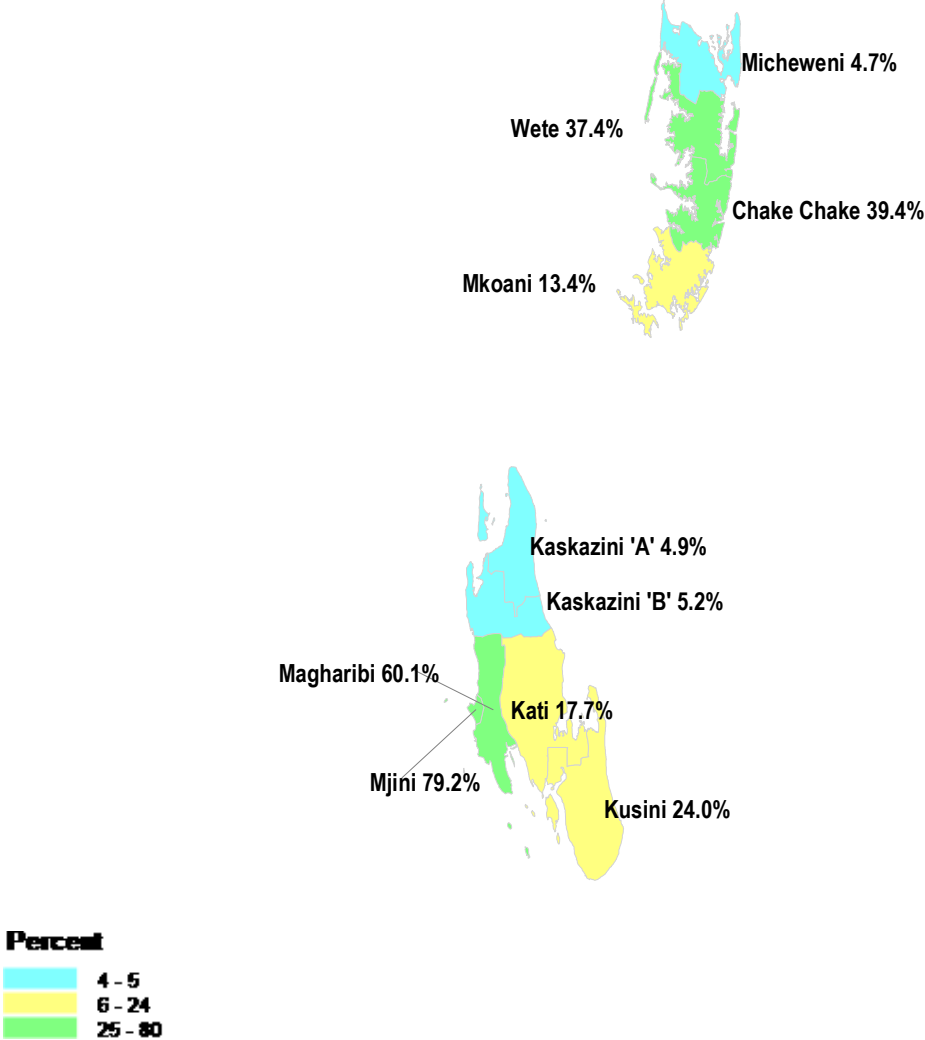
Map 4.1: Percentage of Households Dwelling with Modern Roof of Materials.



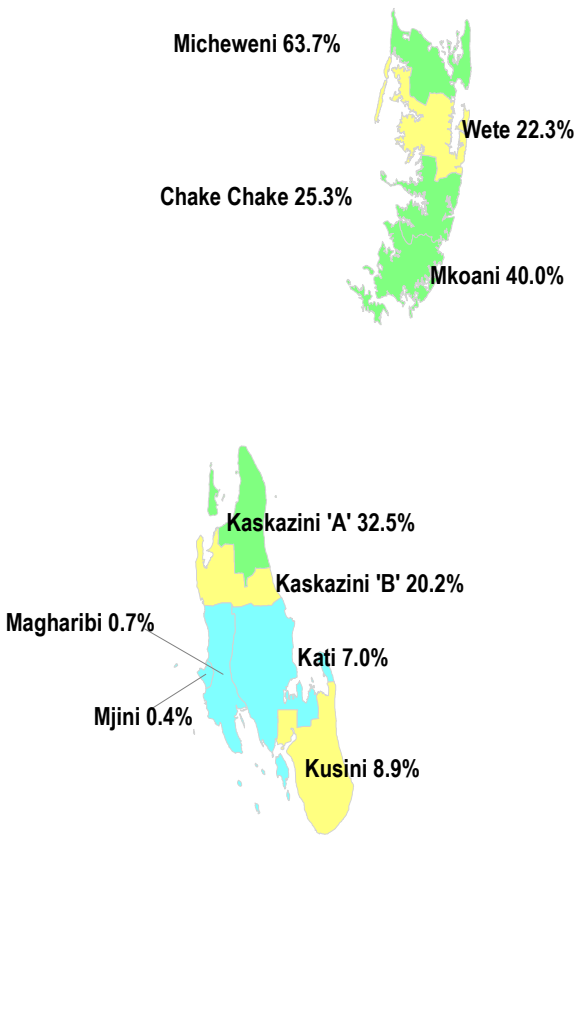
Map 4.2: Percentage of Households Dwelling with Modern Wall



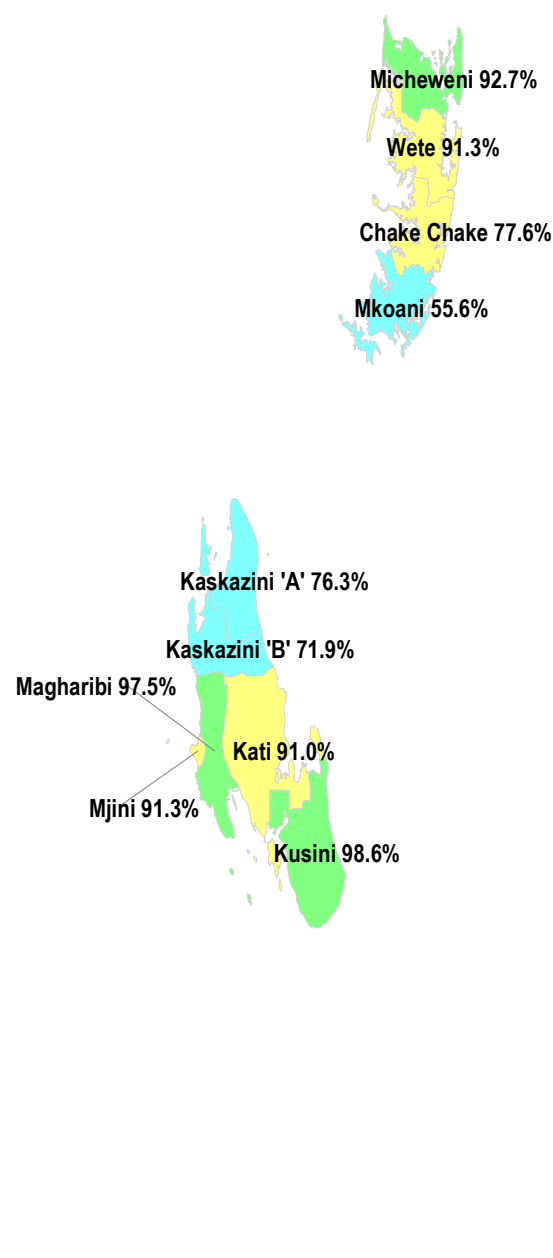
Map 4.3: Percentages of Household with Electricity Connection



Map 4.4: Percentage of Households whose Members Do Not Use Toilet Facilities



Map 4.5: Percentage of Household within 1km of drinking water



## CHAPTER 3: EDUCATION AND HEALTH

### 3.1 Introduction

This chapter presents the main findings on two important service sectors of education and health. It gives the status of education and health services in Zanzibar as reported in 2004/05 and 2009/10 Household Budget Surveys. Response on education are analysed with respect to aspects of literacy, school attendance, education attainment and the distance to the nearest school. The chapter also examines the enrolments and distribution of students with disabilities attending school.

In the health sector it provides information on the type of health provider consulted, the source of care, and whether individuals had been ill or injured in the preceding four weeks. Also information on the distance to the nearest health facilities was captured.

### 3.2: Education

Education is one of the most important factors in social development. Education improve capabilities and has been found to be highly associated with various socio- economic variables such as life-styles, incomes and fertility for both individuals and societies.

Table 3.1 shows the results on literacy - the proportion of responses aged 15 years and above who can read and write in a native language (Kiswahili) and other foreign languages, such as English. The literacy rate of persons aged 15 years and above stands at 82.3 percent. It is higher in 2009/10 HBS compared to that observed in 2004/05 HBS of 75.8 percent. Illiteracy rate decreased from 24.2 percent observed in 2004/05 HBS to 17.7 percent in 2009/10 HBS. This is a very large increase in literacy over five years and it must be considered whether some part of the change is due to the changes in sample composition that were discussed in Chapter 1, or to changes in the way that individuals reported in each survey.

Illiteracy is generally higher in rural areas compared to urban. In terms of gender, women are more likely to have higher illiteracy compared to men, with proportions of 22.8 and 12 percent, respectively. In district level (Map 3.1), Micheweni and Kaskazini A district has the lowest level of literacy (62.1 percent and 64.7 percent respectively) compared to other district.

For persons aged 15 years and above, the proportion of literacy is observed to be higher in urban areas compared to rural. Gender disaggregation also indicate that females are more illiterate compared to males, irrespective of the area of residence. Most of the population (82.2 percent) know how to read and write in a native language (Kiswahili), while at least half of the population is literate in English language.

Overall, it is females who have made some of the highest improvements in literacy between the surveys, especially in regards to reduction in those incapable of reading and writing (e.g., a 7.4 percent reduction for females, compared to a 5.5 percent for males), and an increase in regards to those who can read and write in both Kiswahili and English (e.g, 22.7 percent increase compared to 21.8 for males). Still however, the proportion of females who are unable to read is still nearly twice compared to males (e.g., 12 percent for males compared to 22.8 for females).

**Table 3.1: Percentage of Population 15 Years and Above by Literacy, Area and Sex.**

Read and write	Rural		Urban		Total	
	2004/05	2009/10	2004/05	2009/10	2004/05	2009/10
<b>Both Sexes</b>						
Swahili	44.5	38.2	51.2	23.8	47.3	31.6
Swahili and English	21.2	37.3	38.1	66.4	28.3	50.6
Other language	0.2	0.2	0.2	0.1	0.2	0.1
Not able	34.1	24.4	10.5	9.7	24.2	17.7
<b>Total percent</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>
<b>Number of Individuals</b>	<b>343,329</b>	<b>394,137</b>	<b>247,909</b>	<b>330,789</b>	<b>591,238</b>	<b>724,926</b>
<b>Male</b>						
Swahili	48.2	41.1	49.9	23.0	48.9	32.8
Swahili and English	25.5	40.6	44.2	72.1	33.3	55.1
Other language	0.3	0.2	0.1	0.1	0.2	0.2
Not able	26	18.1	5.7	4.8	17.5	12
<b>Total percent</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>
<b>Number of Individuals</b>	<b>163,694</b>	<b>185,878</b>	<b>117,042</b>	<b>157,185</b>	<b>280,737</b>	<b>343,063</b>
<b>Female</b>						
Swahili	41.1	35.5	52.3	24.5	45.8	30.5
Swahili and English	17.3	34.2	32.7	61.3	23.8	46.5
Other language	0.2	0.2	0.2	0	0.2	0.1
Not able	41.5	30.1	14.8	14.2	30.2	22.8
<b>Total percent</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>
<b>Number of Individuals</b>	<b>163,694</b>	<b>185,878</b>	<b>117,042</b>	<b>157,185</b>	<b>280,737</b>	<b>343,063</b>

Tables 3.2 and 3.3 show the distribution of illiterate population by age group. The proportion illiterate is observed to increase with age – low among the youth population, increases with young adults, and is more than one half among the aged population. The differences in proportions illiterate between the two areas are clearly marked in all age groups; the proportion are consistently higher in rural. This may have been attributed by low access in schooling in rural areas. The proportions illiterate by age are low in 2009/10 HBS compared to 2004/05 HBS.

There is a declining trend in proportions illiterate to both sexes over time, from 24.2 to 17.7 percent between the two surveys. The proportion illiterate has declined more for women in absolute terms - from 30.2 to 22.8 percent., although males have gained proportionately more. Gender disparities to illiteracy are more pronounced within older age groups: proportion illiterate is higher among females in all age groups, but The gap is narrower among the youth and young adults. This reflects the increasing participation of girls in education in younger cohorts.

The proportion of illiterate among the 15-19 youthful ages has declined by 6 percentage points (. from 13.7 percent to 7.7 percent) in rural areas and by 1.5 percentage points in urban areas (e.g. from 3.1percent to 1.6 percent). This decline is more significant in the next later youth age range, the 20-24 age range, with the decline being by 8.7 percentage points in rural areas (e.g., from 19.9 percent to 11.2 percent), and by 2.1 percentage points in urban areas (e.g., from 4.2 percent to 2.1 percent).

Overall, illiteracy among the adult population has declined by 9.7 percentage points in the rural areas but only 0.8 percentage points in urban areas. This shows that the literacy gap between rural and urban populations is closing between the surveys.

**Table 3.2: Proportion of Adult Population Illiterate by Age Group and Area.**

Age Group	Rural		Urban		Total	
	2004/05	2009/10	2004/05	2009/10	2004/05	2009/10
15-19	13.7	7.7	3.1	1.6	9.4	5.0
20-24	19.9	11.2	4.2	2.1	12.3	6.8
25-29	28.9	16.3	6.1	2.9	18.6	10.2
30-34	30.3	19.5	7.4	5.2	20.3	12.6
35-39	34.1	25.0	9.4	8.0	24.3	17.0
40-44	41.3	30.7	11.0	10.1	29.0	21.4
45-49	44.2	34.5	13.8	12.6	31.3	24.9
50-54	57.8	43.9	21.5	16.5	43.8	31.9
55-59	61.4	41.6	26.4	27.1	47.7	33.9
60-64	69.1	57.4	38.1	35.2	58.5	48.6
65-69	74.0	61.0	44.7	41.4	63.7	52.9
70-74	83.4	78.3	57.0	67.8	75.3	73.9
75-79	81.9	64.3	55.7	71.3	72.0	66.3
80+	87.8	72.0	60.0	72.9	78.3	72.3
<b>Total percent</b>	<b>34.1</b>	<b>24.4</b>	<b>10.5</b>	<b>9.7</b>	<b>24.2</b>	<b>17.7</b>

Overall, proportion of illiteracy among the adult male and female population has declined by 4.4 percentage points among males, and 9.9 percentage points among females. As in the previous Table above, this shows that the literacy gap between male and female populations is also closing over the survey years, with the females making tremendous gains.

**Table 3.3: Proportion of Adult Population Illiterate by Age Group and Sex.**

Age Group	2004/05			2009/10		
	Male	Female	Total	Male	Female	Total
15-19	8.4	10.4	9.4	4.8	5.3	5.0
20-24	8.7	15.2	12.3	6.2	7.3	6.8
25-29	13.7	22.3	18.6	7.7	11.9	10.2
30-34	14.0	25.1	20.3	9.6	15.2	12.6
35-39	15.7	31.8	24.3	9.2	22.8	17.0
40-44	17.5	40.6	29.0	14.9	26.9	21.4
45-49	18.7	46.7	31.3	12.3	36.8	24.9
50-54	25.9	64.1	43.8	20.7	47.2	31.9
55-59	31.1	67.9	47.7	14.9	61.0	33.9
60-64	40.6	78.2	58.5	27.5	74.3	48.6
65-69	49.7	82.1	63.7	33.7	80.6	52.9
70-74	64.4	86.4	75.3	55.9	90.9	73.9
75-79	59.7	87.6	72.0	45.4	86.0	66.3
80+	72.4	82.9	78.3	48.7	85.3	72.3
<b>Total percent</b>	<b>17.5</b>	<b>30.2</b>	<b>24.2</b>	<b>12.0</b>	<b>22.8</b>	<b>17.7</b>

Table 3.4 and 3.5 show the distribution of population aged five years and above by highest levels of education achieved, Area, sex and age groups. The results reveal that 57.1 percent of population in the age group 5 - 14 years has attended primary education while 13.7 percent have attained only pre-school education. One quarter (27.4 percent) of this population have no education, although all of this group are still of (or prior to) schooling age and for most of them their education will be continuing.

For the population 15 years and above, there has been an overall increase in the proportion of adults who have attained both, primary and secondary education. Large changes in the levels of education attained between the two surveys are observed, with a substantial fall in the proportion reporting having no education. This decline is much larger in rural areas and mirrors the changes in literacy shown in previous tables. The proportions with completed secondary education also increases substantially, in urban and particularly rural areas.

**Table 3.4: Percentage Distribution Population 5 years and above by Highest Level of Education Achieved and Sex**

Level of education Achieved	Male		Female		Total	
	2004/05	2009/10	2004/05	2009/10	2004/05	2009/10
Population 5-14 years						
No Education	41.7	26.8	40.6	28	41.2	27.4
Pre-School	-	14.3	-	13.2	-	13.7
Adult Education	0	0	0	0	0	0
Standard 1-4	46.9	44.9	45.9	43.1	46.4	44
Standard 5-8	10.9	12.4	12.8	13.8	11.8	13.1
Course after Primary Education	0	0.1	0	0	0	0.1
Orientation Secondary Course	0.3	1.3	0.5	1.6	0.4	1.5
Form 1-4	0.1	0.2	0.1	0.2	0.1	0.2
<b>Total Percent</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>
<b>Number of Individuals</b>	<b>135,784</b>	<b>174,151</b>	<b>129,093</b>	<b>172,049</b>	<b>264,877</b>	<b>346,200</b>
<b>Population 15 years and Above</b>						
No Education	18.1	12.3	30.2	23	24.4	17.9
Pre-School	-	0.5	-	0.4	-	0.5
Adult Education	2.2	1.4	1.5	0.9	1.8	1.1
Standard 1-4	8.4	7.4	6.4	5.5	7.3	6.4
Standard 5-8	26.3	24.9	23.3	19.9	24.8	22.2
Orientation Secondary Course	-	0.2	-	0.1	-	0.2
Form 1-4	-	47.8	-	46.9	-	47.4
OSC-Form4	41.0	-	36.8	-	38.8	-
Form 5-6	2.1	2.4	1.2	1.3	1.6	1.8
Course after Primary Education	0.1	0.5	0.1	0.2	0.1	0.3
Course after Secondary Education	0.4	1.0	0.1	0.6	0.3	0.8
Diploma Course	0.5	0.8	0.2	0.5	0.3	0.6
Other Certificates	0.4	0.5	0.1	0.5	0.2	0.5
Universities degree/related titles	0.4	0.3	0.1	0.2	0.2	0.3
<b>Total Percent</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>
<b>Number of Individuals</b>	<b>280,419</b>	<b>343,063</b>	<b>309,684</b>	<b>381,863</b>	<b>590,103</b>	<b>724,926</b>

**Table 3.5: Percentage Distribution Population 5 Years and Above by Highest Level of Education Achieved and Area.**

Level of education Achieved	Rural		Urban		Total	
	2004/05	2009/10	2004/05	2009/10	2004/05	2009/10
<b>Population 5-14 years</b>						
No Education	46.4	31.4	31.9	21.5	41.2	27.4
Pre-School	-	12.8	-	15.1	-	13.7
Adult Education	0.1	0.0	0.0	0.0	0.0	0.0
Standard 1-4	43.6	43.6	51.5	44.6	46.4	44.0
Standard 5-8	9.6	10.8	15.8	16.3	11.8	13.1
Course after Primary Education	0.0	0.1	0.0	0.0	0.0	0.0
Orientation Secondary Course	0.3	1.0	0.6	2.1	0.4	1.5
Form 1-4	0.1	0.2	0.1	0.3	0.1	0.2
<b>Total Percent</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>
<b>Number of Individuals</b>	<b>170,279</b>	<b>204,220</b>	<b>94,598</b>	<b>141,980</b>	<b>264,877</b>	<b>346,200</b>
<b>Population 15 years and Above</b>						
No Education	33.7	24.6	11.7	9.9	24.4	17.9
Pre-School	-	0.6	-	0.3	-	0.5
Adult Education	2.5	1.7	0.9	0.5	1.8	1.1
Standard 1-4	8.6	8.3	5.5	4.1	7.3	6.4
Standard 5-8	24.5	23.7	25.2	20.6	24.8	22.2
Orientation Secondary Course	-	0.2	-	0.1	-	0.2
Form 1-4	-	38.8	-	57.5	-	47.4
OSC-Form 4	29.4	-	51.8	-	38.8	-
Form 5-6	0.6	0.7	3.1	3.2	1.6	1.8
Course after Primary Education	0.1	0.3	0.1	0.4	0.1	0.3
Course after Secondary Education	0.2	0.3	0.4	1.4	0.3	0.8
Diploma Course	0.2	0.4	0.5	0.9	0.3	0.6
Other Certificates	0.2	0.3	0.4	0.7	0.2	0.5
Universities degree/related titles	0.0	0.1	0.5	0.4	0.2	0.3
<b>Total Percent</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>
<b>Number of Individuals</b>	<b>342,705</b>	<b>394,137</b>	<b>247,399</b>	<b>330,789</b>	<b>590,103</b>	<b>724,926</b>

Enrolment ratios depict the proportions of children currently attending school. It is net (NER) if specific ages of the enrolled and that of the school age are considered; otherwise it is gross (GER). Enrolment ratios are important in assessing access to education among the population.

NER and GER for basic education are shown table 3.6. At least eight in every ten (80.3 percent) of the school age children were reported enrolled in schools (the net enrolment ratio for basic education); this marks a slight improvement compared to the previous survey. The gross ratio (i.e. irrespective of the ages of the enrolled children) declined by 10.4 percent from 2004/05 HBS to 89.8 percent. Enrolment is higher in urban areas compared to rural areas, possibly reflecting relatively low accesses in schooling in rural areas. No differences in enrolment between sexes are earmarked, reflecting equal access of education between boys and girls.

Net enrolment ratio in rural has increased from 72.5 to 77.9 for males, as compared to 73.9 to 76.1 for females. This implies that there is a marginal increase in the proportion of males and females who remain in school after enrolment.

As for the gross enrolment ratio in urban areas, it dropped for both males and females from 104.6 to 96.3 for males, and 104.4 to 95.6 for females, between 2004/05 and 2009/10. Net enrolment ratio for males in urban areas, decreased from 87.5 to 84.8 for males in urban areas, and it increased from 86.6 to 88.2 for females.

The data in Table 3.7 shows that the proportion of females staying in school is growing steadily in urban areas, than in rural areas. This trend promises immediate and future benefits to Zanzibar as regards reduction of fertility rates, improved maternal and infant health, as well as improved income earning levels at both household and community levels.

**Table 3.6: Basic Education Net and Gross Enrolment Ratio by Sex and Area.**

	Rural		Urban		Total	
	2004/05	2009/10	2004/05	2009/10	2004/05	2009/10
<b>Male</b>						
Net Enrolment Ratio	72.5	77.9	87.5	84.8	78.0	80.1
Gross Enrolment Ratio	88.8	88.1	104.6	96.3	100.5	90.7
<b>Female</b>						
Net Enrolment Ratio	73.9	76.1	86.6	88.2	78.7	80.4
Gross Enrolment Ratio	88.1	85.2	104.4	95.6	96.8	89.0
<b>Total</b>						
Net Enrolment Ratio	73.2	77.3	87.1	86.7	78.4	80.3
Gross Enrolment Ratio	88.4	87.4	104.4	95.7	100.2	89.8

Table 3.7 depict the enrolment ratios by district. NER has slightly increased from 78.4 to 80.3 percent between the two surveys while the GER has declined. This possibly reflects that pupils are enrolled at their school ages (with less under or over enrolments). Micheweni district is reported to have low ratios of both, net and gross enrolment for basic education, while Kusini and Kati have the highest enrolment ratios.

**Table 3.7: Basic Education Net and Gross Enrolment Ratio by District.**

District	Net Enrolment Ratio		Gross Enrolment Ratio	
	2004/05	2009/10	2004/05	2009/10
Kaskazini 'A'	68.5	79.6	97.6	93.9
Kaskazini 'B'	79.2	82.9	99.8	93.1
Kati	86.9	88.5	108.2	99.4
Kusini	91.4	90.2	106.6	103.8
Magharibi	83.9	82.6	96.1	90.3
Mjini	88.5	88.3	106.7	97.4
Wete	72.7	79.6	96.0	86.0
Micheweni	55.6	60.8	80.5	70.5
Chake Chake	76.0	79.9	91.8	91.2
Mkoani	74.8	71.6	90.6	81.5
<b>Total</b>	<b>78.4</b>	<b>80.3</b>	<b>100.2</b>	<b>89.8</b>

Tables 3.8 and 3.9 present NER and GER for primary education by sex, geographical area and district. The results suggest slightly higher ratios compared to those of the basic education, suggesting more access to primary enrolment. Net enrolment in primary school is 81.4 percent. The gross ratio exceeds a hundred percent, possibly due to over and under-age enrolment of children at this level. The low NER suggests that one in every five children of primary school age is out of education system, although there is more than expected number of children in schools. In terms of gender, male have higher (104.4 percent) gross enrolment ratio compared to female 100.6 percent; but all these ratios suggests an almost complete enrolment of children in schools.

More gains in NER are observed in primary compared to basic education system while primary GER has declined between two surveys. Net enrolment in primary schools within rural areas, increased for males from 69.3 percent in 2004/05 to 78.5 percent in 2009/10. On the female side, net enrolment also increased from 72.2 percent to 77.7 percent in the period covered.

Results for urban based primary schools shows that gross enrolment for males has dropped from 119.1 percent to 105.3 percent, and that for females also dropped from 115.5 percent to 104.1 percent between the 2004/05 and 2009/10. Net enrolment for males also dropped from 86.5 percent to 83.5 percent, while increased for females from 86.4 percent to 88.1 percent in the 2004/05 and 2009/10 years.

Differentials in enrolment between districts demonstrate that Kusini district has a relatively high rate of primary net enrolment of 90.8 percent. In turn, Micheweni has the least primary enrolment ratio of 60.8 percent (see Map 3.2).

**Table 3.8: Primary Education Net and Gross Enrolment Ratio by Sex and Area.**

	Rural		Urban		Total	
	2004/05	2009/10	2004/05	2009/10	2004/05	2009/10
<b>Male</b>						
Net Enrolment Ratio	69.3	78.5	86.5	83.5	75.6	80.5
Gross Enrolment Ratio	102.3	103.7	119.1	105.3	111.5	104.4
<b>Female</b>						
Net Enrolment Ratio	72.2	77.7	86.4	88.1	77.6	82.2
Gross Enrolment Ratio	101.5	97.9	115.5	104.1	111.9	100.6
<b>Total</b>						
Net Enrolment Ratio	70.7	70.1	86.5	85.8	76.6	81.4
Gross Enrolment Ratio	102	100.9	118	104.7	111.7	102.5

**Table 3.9: Primary Education Net and Gross Enrolment Ratios by District.**

District	Net Enrolment Ratio		Gross Enrolment Ratio	
	2004/05	2009/10	2004/05	2009/10
Kaskazini 'A'	65.0	80.9	110.4	107.8
Kaskazini 'B'	77.8	85.1	115.1	111.1
Kati	86.5	87.6	134.6	115.5
Kusini	90.0	90.8	121.5	116.1
Magharibi	83.6	87.8	107.9	102.6
Mjini	87.9	87.1	115.5	104.6
Wete	70.6	82.4	110.0	101.9
Micheweni	51.4	60.8	94.5	80.0
Chake Chake	73.4	81.2	104.9	107.9
Mkoani	72.1	71.7	106.9	97.8
<b>Total</b>	<b>76.6</b>	<b>81.4</b>	<b>111.7</b>	<b>102.5</b>

Table 3.10 shows the low net and gross enrolment ratios at the secondary level of education of 46.1 and 53.8 percent, respectively. This, however is an improvement compared to the findings of the previous survey. The access of facilities in urban areas makes its secondary enrolment likely higher compared to rural. It is of interest to note that in recent times female secondary enrolment ratios exceed those of males.

Net enrolment in secondary schools within rural areas, increased for males from 27.4 percent in 2004/05 to 36.7 percent in 2009/10. On the female side, net enrolment also increased from 26.3 percent to 42.8 percent in the period covered. Data for urban based secondary schools shows that gross enrolment for males has increased strongly from 49.0 percent to 64.2 percent, and that for females also increased greatly from 48.8 percent to 69.4 percent between the 2004/05 and 2009/10. Net enrolment for males also increased significantly from 43.4 percent to 53.4 percent, and for females 41.1 percent to 58.7 percent in the 2004/05 and 2009/10 years.

**Table 3.10: Secondary Education Net and Gross Enrolment Ratios by Sex and Area.**

Enrolment Ratio	Rural		Urban		Total	
	2004/05	2009/10	2004/05	2009/10	2004/05	2009/10
<b>Male</b>						
Net Enrolment Ratio	27.4	36.7	43.4	53.4	33.8	43.3
Gross Enrolment Ratio	31.4	44.1	49.0	64.2	43.0	52.1
<b>Female</b>						
Net Enrolment Ratio	26.3	42.8	41.1	58.7	32.6	48.8
Gross Enrolment Ratio	29.9	47.3	48.8	69.4	38.0	55.4
<b>Total</b>						
Net Enrolment Ratio	26.8	39.8	42.2	55.6	33.2	46.1
Gross Enrolment Ratio	30.0	45.7	48.8	67.0	41.7	53.8

Mjini district (table 3.11) has more than half (56.2 percent) of secondary school students enrolled; while Kaskazini 'B' and Micheweni have more than one third (35.0 and 36.2 percent respectively) in secondary NER Earlier noted, disparities in enrolment are partly a reflection of unequal accesses in facilities among districts.

**Table 3.11: Secondary Education Net and Gross Enrolment Ratio by District.**

District	Net Enrolment Ratio		Gross Enrolment Ratio	
	2004/05	2009/10	2004/05	2009/10
Kaskazini 'A'	23.0	37.9	28.8	41.6
Kaskazini 'B'	26.6	35.0	36.7	40.9
Kati	35.3	47.2	43.8	51.9
Kusini	39.6	47.5	48.1	51.3
Magharibi	35.2	47.9	43.9	61.2
Mjini	44.3	56.2	55.8	63.7
Wete	32.1	44.2	42.2	49.5
Micheweni	20.9	36.2	29.2	40.4
Chake Chake	26.1	46.1	34.8	56.0
Mkoani	27.8	39.9	36.5	50.4
<b>Total</b>	<b>33.2</b>	<b>46.1</b>	<b>41.7</b>	<b>53.8</b>

Table 3.12 shows the distribution of children attending school by sex and area. The age range (7 – 16 years) is expected to cover the basic education cycle. It is revealed that more children (especially the girls) are attending school. Children residing in urban areas are more likely to attend school compared to those residing in rural areas.

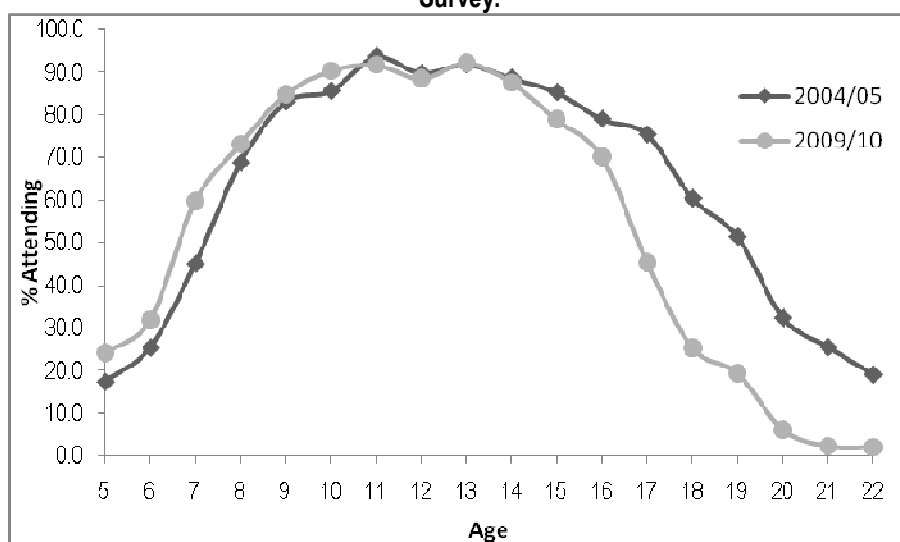
Girls in the 7-16 years range attending school are slightly more than boys in rural based schools during the 2004/05 survey, while the advantage was for boys in urban based schools. As of the 2009/10 survey, still slightly less boys (78.5 percent) in the 7-16 years range were attending schools in rural areas, than girls (78.9 percent). In urban based schools, more girls (90.2 percent) in the 7-16 year age range were attending school than boys (88.1 percent). This trend of boys falling behind girls in school attendance requires immediate attention. Boys being out of school might imply more boys becoming potential delinquents.

**Table 3.12: Distribution of Children 7-16 Years Attending School by Area and Sex.**

Area	2004/05			2009/10		
	Male	Female	Total	Male	Female	Total
Rural	73.8	74.9	74.3	78.5	78.9	78.7
Urban	90.4	89.7	90.0	88.1	90.2	89.2
<b>Total</b>	<b>79.8</b>	<b>80.6</b>	<b>80.2</b>	<b>82.4</b>	<b>83.9</b>	<b>83.1</b>

The distribution of children attending school by single year is shows in appendix B3.1 and figures 3.1-and 3.2 whereby, a greater proportion of children aged 7 -16 years are attending school. As age of respondent increases, the proportion of pupils attending school decreases and the variation between the results of two surveys is very high especial from ages 17-22 years.

**Figure 3.1: Percentage of Children Attending School by Single Years and Year of Survey.**



**Figure 3.2: Percentage of Children Attending School by Single and Sex, 2009/10**

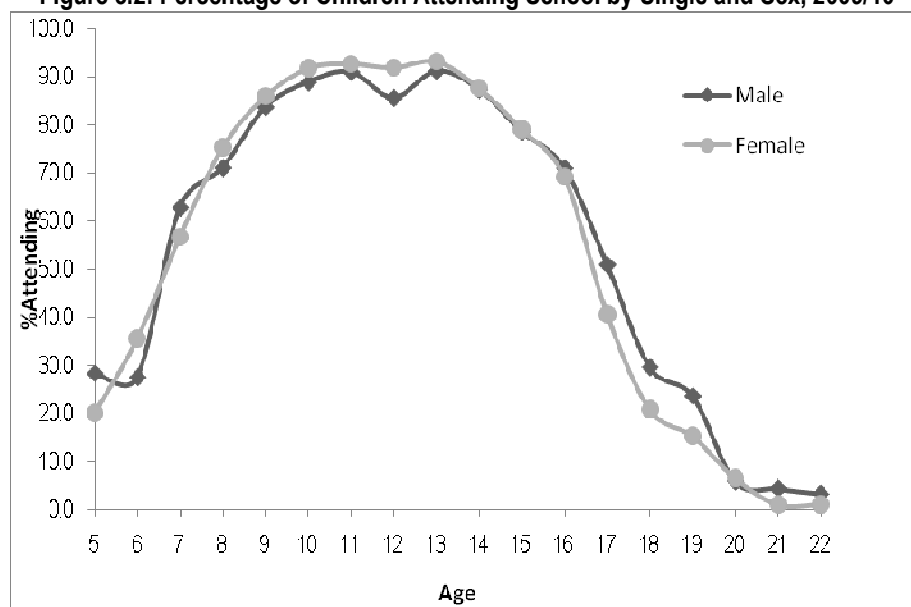


Table 3.13 elaborates the distribution of pupils attending school by grade (class). Great variations in attendance (and consequently enrolment) are observed in different grades. For example, while the official age at enrolment (intake at grade I) is seven years. Only two-thirds of attendants are of that age. The situation is even worse for other grades. Only 34.4 percent of children aged 8 years are attending grade II; 33.1 percent of children aged 9 years are attending grade III; and only one-quarter (26.9 percent) of those aged 16 years are attending the last grade. The echelons of class pupils attained do not correspond with the age of students. It pays delaying enrolment for one year, if the ages of the students are properly reported.

In the same way, students of a particular age are spread over several grades, for example students aged 14 years are spread in almost all grades. This demonstrates that pupils are enrolled late and possibly repetition in children's education can be observed for all ages and grades.

**Table 3.13: Distribution of Pupils Attending School by Class Attended and Age**

Current Class	Age (Years) 2004/05										Age (Years) 2009/10									
	7	8	9	10	11	12	13	14	15	16	7	8	9	10	11	12	13	14	15	16
Pre-School	22.7	5									24.7	3.5								
Standard I	69.1	52	25.8	12.6	5.3	4.2	1.1	0.4			63.9	55.4	19.7	8.5	3.1	0.8	0.7	0.5		
Standard II	8.2	36.4	39.6	27.9	14	10.3	4.2	2.4			11.4	34.4	44.6	25.4	9.1	5.9	2.5	0.7		
Standard III		6.6	28.5	34	27.9	19.5	10.1	4.3	2.1	1.1		6.7	33.1	38.2	21.1	14.4	4.7	3.3	1.8	1.1
Standard IV			6	21.1	32.8	27.4	19.3	10.3	4.2	2.3			2.6	23.3	37.1	25.3	10.1	4.4	1.9	1.8
Standard V				4.4	17.2	23.9	27.4	20.8	11.3	5.4				4.7	28	35	27.4	13.9	4.7	3.9
Standard V I					2.9	11.9	25.3	26.7	19.9	14.5					1.7	16.3	30.7	25.8	12.9	7.3
Standard VII						2.9	12.6	24.7	29.3	21.6						2.3	23.9	33.4	25	20.9
Form 1								3.8	14.1	25.6								18	36.5	38.3
Form 2									5.3	12									17.2	26.9
<b>Total Percent</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>
<b>Number of Student</b>	<b>13,723</b>	<b>21,873</b>	<b>24,612</b>	<b>26,047</b>	<b>18,357</b>	<b>28,517</b>	<b>25,303</b>	<b>26,885</b>	<b>21,797</b>	<b>19,567</b>	<b>21,880</b>	<b>23,066</b>	<b>29,534</b>	<b>38,515</b>	<b>23,198</b>	<b>35,428</b>	<b>32,591</b>	<b>28,135</b>	<b>26,575</b>	<b>19,064</b>

The drop-out rate is the proportion of children dropping out of education system. These are students who left school in different classes before completing their basic education for various reasons. The distribution of dropout of students by geographical area, gender and level of class is given by tables 3.14 and 3.15.

The survey findings show that, children in rural areas who drop out are more likely to do so in lower classes than the children who drop out in urban areas. The distribution of dropouts has remained similar between the two surveys, although with a slightly higher proportion dropping out in higher classes. The estimated total number of children dropping out has increased substantially between the two surveys, particularly in rural areas.

**Table 3.14: Distribution of Dropout 7-16 Years by Class and Area.**

Class	Rural		Urban		Total	
	2004/05	2009/10	2004/05	2009/10	2004/05	2009/10
Standard 1	10.2	7.0	6.3	9.4	9.1	7.7
Standard 2	18.6	12.6	10.5	7.7	16.2	11.2
Standard 3	17.1	18.2	13	13.1	15.9	16.7
Standard 4	15.5	17.5	13.7	18.3	15	17.8
Standard 5	14.3	14.1	15.2	8.9	13.4	12.6
Standard 6	10.4	9.3	10.8	7.7	11.1	8.8
Standard 7	8.3	10.6	9.5	11.3	12.2	10.8
Form 1	1.9	3.6	6.1	11.5	3.2	6.0
Form 2	3.1	7.0	5	12.0	3.7	8.5
<b>Total Percent</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100.0</b>
<b>Number of Individuals</b>	<b>6,683</b>	<b>12,692</b>	<b>2,815</b>	<b>5,340</b>	<b>9,497</b>	<b>18,032</b>

A similar feature is observed between sexes (Table 3.15), with a higher proportion of the boys who drop out doing so in lower grades compared to girls.

A higher proportion of boys dropped out of school in Standard 1 to Standard 3 in the 2004/05 survey, with a peak in Standard 2. This changed in the 2009/10 survey, whereby boys dropped out mainly in between Standard 3 and Standard 5, with a peak in Standard 4. The proportion of males dropping out dipped below 10 percent after Standard 7 in the 2004/05 survey, and dropped below 10 percent after Standard 6 in the 2009/10 survey. A higher proportion of boys drop out than girls, and the total number appears to have increased substantially – and particularly for boys - since the previous survey.

The number of individual males aged between 7-16 years who dropped out of school doubled from 5,312 to 11,175 between 2004/05 and 2009/10. Females dropped out in a steady proportion from Standard 2 to Standard 7, with a peak in Standard 4 during the 2004/05 period. The proportion of females dropping out stays under 10 percent in form 11 and increased up to 13.3 percent after Standard 7 in both periods in form 2 during the 2009/10 period. The number of females who dropped out of school increased, but less alarmingly, from 4,175 to 6,857 between the 2004/05 and 2009/10 surveys.

**Table 3.15: Distribution of Dropout 7-16 Years by Class and Sex.**

Class	Male		Female		Total	
	2004/05	2009/10	2004/05	2009/10	2004/05	2009/10
Standard 1	10.5	8.7	7.2	6.1	9.1	7.7
Standard 2	17.9	13.0	14.0	8.1	16.2	11.2
Standard 3	17.0	18.1	14.5	14.3	15.9	16.7
Standard 4	13.7	20.8	16.6	12.9	15.0	17.8
Standard 5	15.2	14.8	11.1	9.0	13.4	12.6
Standard 6	10.8	7.1	11.5	11.8	11.1	8.8
Standard 7	9.5	7.8	15.6	15.7	12.2	10.8
Form 1	1.3	4.2	5.6	8.9	3.2	6.0
Form 2	3.7	5.5	3.6	13.3	3.7	8.5
<b>Total Percent</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>
<b>Number of Individuals</b>	<b>5,312</b>	<b>11,175</b>	<b>4,185</b>	<b>6,857</b>	<b>9,497</b>	<b>18,032</b>

Information on drop-outs of student by main reasons given by student is shown in table 3.16. In 2009/10 survey, the most frequent reason for not attending school was that pupils are less interested (61.1 percent); this is much lower as compared to its previous survey which recorded 60.9 percent.

Dropping out due to being uninterested is higher among male pupils (71.2 percent) compared to 44.7 percent of female. These percentages are much lower for female compared to the previous survey. Reason being too old or completed school (9.2 percent) more female reported (14.7 percent) than male (5.8 percent); and failing to pay contributions (3.5 percent).

Pregnancy as a reason for girls dropping out has gained slight increase between 2004/05 and 2009/10, from 1.2 percent to 2.2 percent; married or engaged reported among the reasons for dropping out for girls (3.2 percent) but these remains a very small fraction of the reasons for dropping out.

There is cause to address the disinterest among school children. Questions should be tendered and research performed as to what makes boys and girls lose interest for education. Supply side issues need be researched further so as to reduce this drop out pattern.

**Table 3.16: Distribution of Dropout 7-16 Years by Reasons and Sex.**

Reason	Male		Female		Total	
	2004/05	2009/10	2004/05	2009/10	2004/05	2009/10
Too young	0.0	3.3	0.0	9.6	0.0	5.7
Too old or completed school	8.8	5.8	18.2	14.7	13.0	9.2
Too far away	0.6	1.9	3.4	1.8	1.8	1.8
Failed to pay contribution	6.9	4.0	7.9	2.8	7.3	3.5
Working at home	0.9	2.8	2.5	4.2	1.6	3.3
Working for payment	0.8	0.0	2.4	2.8	1.5	1.1
uninterested	71.2	71.2	47.8	44.7	60.9	61.1
Illness	-	1.1	-	4.9	-	2.6
Disable	-	0.8	-	0.2	-	0.6
Pregnant	0.0	0.0	1.2	2.2	0.5	0.8
Undisciplined	1.6	1.5	1.1	3.4	1.4	2.2
Divorced or separation of parents	0.0	1.0	1.4	0.2	0.6	0.7
Married or engaged		0.0		3.2		1.2
Scared of teachers	1.0	2.3	0.8	0.0	0.9	1.4
Not willing to send children to school	0.0	0.0	2.1	1.0	0.9	0.4
Others	4.0	4.5	4.9	4.2	4.4	4.4
<b>Total percent</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>
<b>Number of Individuals</b>	<b>5,312</b>	<b>11,175</b>	<b>4,185</b>	<b>6,857</b>	<b>9,497</b>	<b>18,032</b>

Information on the distance to nearest school facility was also considered in the survey (Table 3.17). The mean distance to the nearest primary school was only half a kilometre and that of the secondary school was not more than one kilometre. The average distance to a secondary school in rural areas has decreased from two and half kilometres observed in 2004/05 HBS to one kilometre in 2009/10 HBS; and in general, children of primary school in recent survey are more likely to walk shorter distances compared to that observed in the previous survey.

**Table 3.17: Mean Distance to Nearest School by Area.**

	Rural		Urban		Total	
	2004/05	2009/10	2004/05	2009/10	2004/05	2009/10
Primary School (km)	1.3	0.7	0.4	0.2	1.0	0.5
Secondary School(km)	2.5	1.1	0.6	0.5	1.8	0.8

Table 3.18 shows that the mean distances to both primary and secondary school have reduced in almost all districts. This possibly reflects the effort paid in contracting new education facilities in the recent past. It is only Mkoani district where the mean distance to primary schools is more than one kilometre and the mean distance to secondary schools is about two kilometres.

**Table 3.18: Mean Distance to Nearest School by District.**

District	Primary School (km)		Secondary School (km)	
	2004/05	2009/10	2004/05	2009/10
Kaskazini "A"	1.0	0.5	2.0	1.2
Kaskazini "B"	1.0	0.4	1.9	0.8
Kati	0.6	0.5	2.7	1.1
Kusini	0.2	0.2	0.8	0.9
Magharibi	0.8	0.3	1.4	0.4
Mjini	0.1	0.1	0.2	0.1
Wete	1.3	0.7	2.9	0.9
Micheweni	2.0	0.8	2.9	1.4
Chake Chake	1.9	0.6	3.2	0.8
Mkoani	1.6	1.4	2.0	1.9
<b>Total</b>	<b>1.0</b>	<b>0.5</b>	<b>1.8</b>	<b>0.8</b>

Table 3.19 below examine the distances of households to their nearest school. It is recorded that about two thirds (65.7 percent) of household are within the walking distance (less than 1 km) to primary school. Majority of households (61.1 percent) are also at short walking distances to their nearest secondary school. Only 0.3 and 1.2 percent of households are at 5 kilometres or more from their primary and secondary schools, respectively.

**Table 3.19: Distribution of Household by Distance to the Nearest School**

Distance (Km)	Primary School		Secondary School	
	2004/05	2009/10	2004/05	2009/10
Less than 1	53.2	65.7	41.6	61.1
1.0-1.9	22.2	24.2	20.6	24.7
2.0-2.9	12.8	7.2	14.6	10.1
3.0-3.9	7.4	2.1	10.6	2.4
4.0- 4.9	1.9	0.5	3.9	0.4
5.0-5.9	1.1	0.1	1.6	0.1
6 +	1.5	0.2	7.0	1.1
<b>Total percent</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>
<b>Number of Household</b>	<b>190,670</b>	<b>232,511</b>	<b>190,679</b>	<b>232,511</b>

Differentials by administrative area in distance of households to the nearest primary school (table 3.20 and Map 3.3), suggest that Mjini and Magharibi districts are the most privileged - with almost all households being located within two kilometres from a primary school. Mkoani, on the other hand, remain the least privileged district few households located within two kilometer. Micheweni also has some households with long distances to primary school. This possibly is one of the basic reasons for low enrolment in these two districts.

**Table 3.20: Distribution of Household by Distance to the Nearest Primary School by Districts**

District	Distance to the Nearest Primary School							Number of Households
	Less than 1	1.0-1.9	2.0-2.9	3.0-3.9	4.0-4.9	5.0-5.9	6 +	
Kaskazini "A"	58.2	37.9	3.8	0	0	0	0.1	20,531
Kaskazini "B"	79.8	7.3	7.8	4.6	0	0	0.4	15,736
Kati	74.2	13.5	9.7	2.1	0	0	0.5	15,465
Kusini	79.4	17.8	2.5	0.3	0	0	0	9,333
Magharibi	71.9	27.9	0	0	0	0	0.1	35,064
Mjini	91.9	8.1	0	0	0	0	0	51,444
Wete	59.3	27.0	6.9	5.1	1.5	0	0.2	23,406
Micheweni	48.7	29.9	15.9	5.5	0	0	0	19,821
Chake Chake	48.4	43.4	7	0.7	0	0	0.4	19,636
Mkoani	17.3	39.8	31.5	6.8	3.7	0.6	0.3	22,074
<b>Total</b>	<b>65.7</b>	<b>24.2</b>	<b>7.2</b>	<b>2.1</b>	<b>0.5</b>	<b>0.1</b>	<b>0.2</b>	<b>232,511</b>

Disability is the condition of being unable to perform a task or function because of a physical or mental impairment. The education system pays special consideration to pupils with disability.

Only 1.7 percent of pupils among those attending schools were reported to be with disability. The proportion is higher at primary level (2.1 percent) compared to secondary school (0.9 percent). Minor differences are observed between sexes. Twice the number of pupils with disability is attending schools in rural areas compared to urban (Table 3.21).

Proportion of male and female pupils with disability attending primary school is the same, while that in secondary school is slightly in favour of males by 0.2 percent. In rural areas, more females than males attend primary school while the Overall, it appears that the proportion of male and female pupils attending secondary school with a disability, is half that which attended primary school.

**Table 3.21: Percentage Distribution of Pupils with Disability Attending School by Area, Level of Education and Sex.**

	Primary School	Secondary school	Total
<b>Rural</b>			
Male	2.6	1.6	2.4
Female	2.8	0.5	2.1
<b>Total</b>	<b>2.7</b>	<b>1.0</b>	<b>2.3</b>
<b>Urban</b>			
Male	1.4	0.5	1.1
Female	1.2	1.1	1.2
<b>Total</b>	<b>1.3</b>	<b>0.8</b>	<b>1.1</b>
<b>Total</b>			
Male	2.1	1.0	1.8
Female	2.1	0.8	1.7
<b>Total</b>	<b>2.1</b>	<b>0.9</b>	<b>1.7</b>

### 3.3 Health

During the course of 2009/10 HBS, all members of households were requested to report on their health condition during the four weeks preceding the survey (Table 3.22). Some 10 percent reported to be sick or having injuries four weeks prior the survey. The results from two consecutive surveys show that, the total number of person who reported sick in 2009/10 HBS was less by 9 percent as compared to that of 2004/05 HBS (19.0 percent).<sup>1</sup>

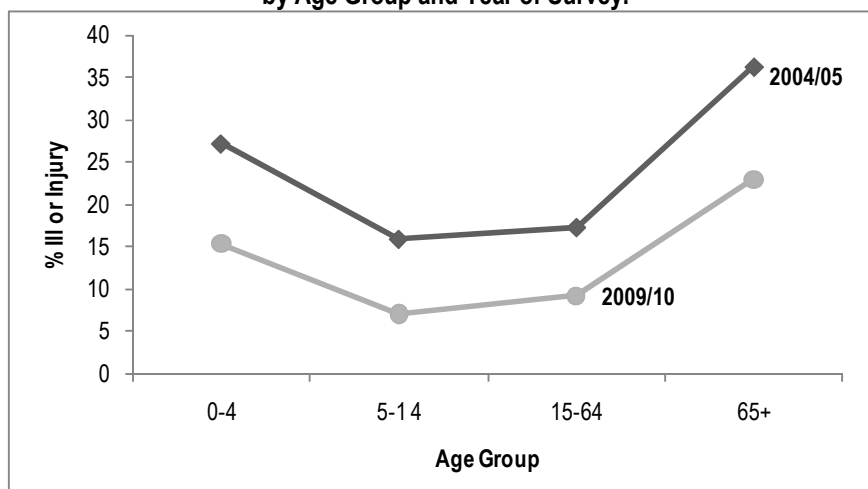
The recent survey (2009/10 HBS) revealed that there was slight difference in proportion of persons reporting illness between rural (11.0 percent) and urban (8.6 percent) residents as compared to previous survey (2004/05 HBS) where some discrepancies had been observed; almost, 23 percent of respondents residing in rural areas and 13 percent in urban were reported to be sick.

**Table 3.22: Percentage Distribution of Individuals Reported their Health Status the Last Four Weeks by Area.**

Area	Sick		Not sick	
	2004/05	2009/10	2004/05	2009/10
Rural	22.9	11.0	77.1	89.0
Urban	13.1	8.6	86.9	91.4
<b>Total Percent</b>	<b>19.0</b>	<b>10.0</b>	<b>81.0</b>	<b>90.0</b>
<b>Total of Individual</b>	<b>200,963</b>	<b>126,980</b>	<b>854,904</b>	<b>1,146,343</b>

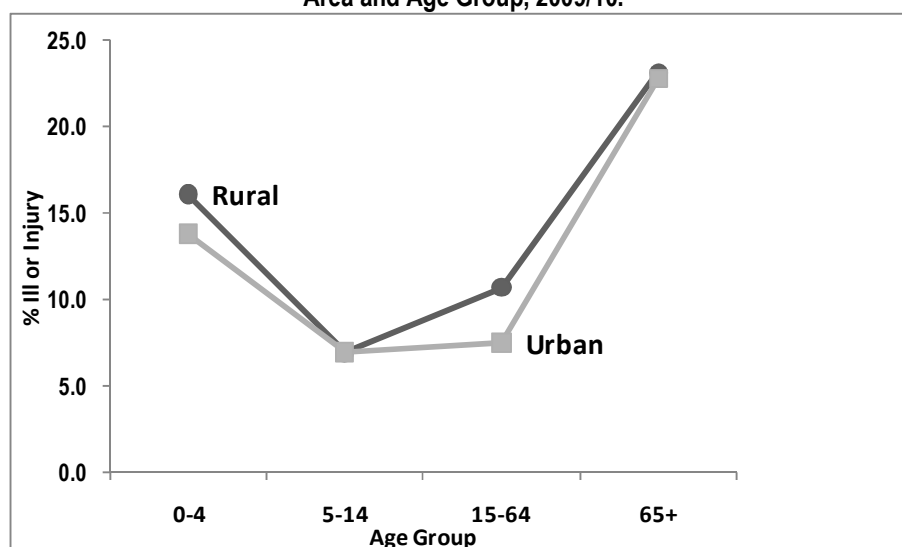
Elderly persons (65 years and above) and children under five years of age are the most likely to report having illness or injury (Figure 3.3); the people in these age groups are said to be most vulnerable to diseases. Both surveys show that people in old ages and children under five years report illness and injuries at higher rates than other age groups (5-14 years and 15-64 years). The rates of 23 percent and 15.3 percent for elderly and children respectively, which are lower, compared to the last survey (Table 3.23).

**Figure 3.3: Percentage of Individuals Reported Ill or Injury in the Past Four Weeks by Age Group and Year of Survey.**

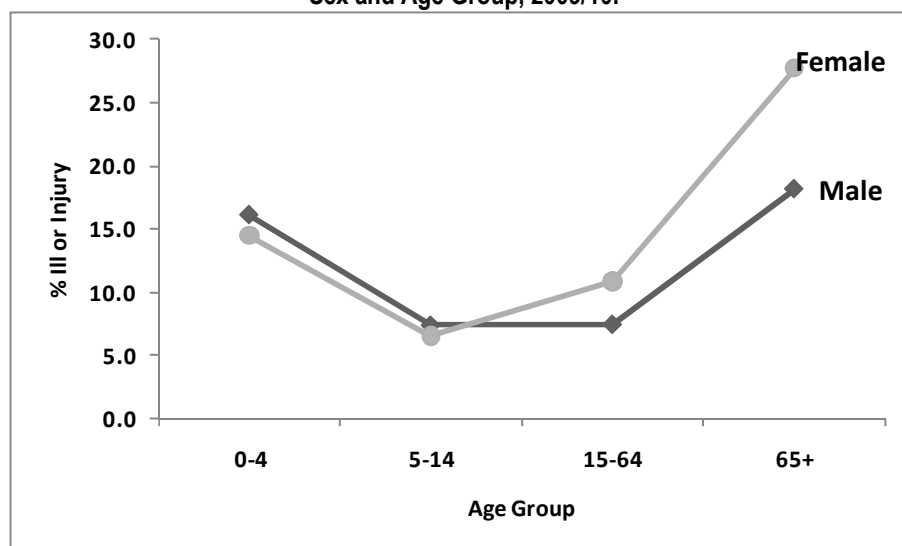


<sup>1</sup> This is such a large difference that it raises the question of whether respondents understood the question in the same way in the two surveys.

**Figure 3.4: Percentage of Individuals Reported Ill or Injury in the Past Four Weeks by Area and Age Group, 2009/10.**



**Figure 3.5: Percentage of Individuals Reported Ill or Injury in the Past Four Weeks by Sex and Age Group, 2009/10.**



Unlike the 2004/05 HBS where Kaskazini “A” ranked at the fifth position, the 2009/10 HBS recorded it at the highest of 17 percent of their individuals reporting ill or injured; ( See Map 3.4 and Map 3.5). The rates for those reporting illness in Pemba districts have been reduced to less than 15 percent from that of more than 25 percent in 2004/05 HBS (Table 3.23).

**Table 3.23: Percentage of Individuals Reporting Illness or Injury for the Last Four Weeks by District and Broad Age Group.**

District	2004/05					2009/10				
	0-4	5-14	15-64	65+	Total	0-4	5-14	15-64	65+	Total
Kaskazini "A"	27.2	16.2	23.5	55.4	<b>23.3</b>	31.8	9.1	15.1	27.8	<b>17.1</b>
Kaskazini "B"	32.8	12.9	17.6	33.6	<b>19.3</b>	17.2	5.8	7.8	21.6	<b>9.5</b>
Kati	18.0	15.7	18.6	37.6	<b>18.3</b>	9.2	4.1	7.2	11.4	<b>6.9</b>
Kusini	18.2	11.2	13.9	29.2	<b>14.5</b>	5.4	7.6	8.1	9.2	<b>7.5</b>
Magharibi	19.6	12.2	12.8	28.2	<b>14.0</b>	11.0	5.6	9.5	41.3	<b>9.0</b>
Mjini	15.2	7.8	8.3	14.7	<b>9.2</b>	11.3	5.2	6.3	21.9	<b>7.1</b>
Wete	38.1	23.9	26.8	47.4	<b>28.6</b>	24.1	11.4	13.6	24.8	<b>14.8</b>
Micheweni	34.0	22.4	23.9	41.3	<b>25.8</b>	15.0	8.0	10.9	34.5	<b>11.2</b>
Chakechake	38.6	23.2	26.8	50.2	<b>28.4</b>	14.5	6.1	9.5	12.2	<b>9.3</b>
Mkoani	36.9	19.8	22.8	47.2	<b>25.5</b>	12.0	7.4	8.0	28.6	<b>9.0</b>
<b>Total</b>	<b>27.2</b>	<b>15.9</b>	<b>17.3</b>	<b>36.3</b>	<b>19.0</b>	<b>15.3</b>	<b>7.0</b>	<b>9.2</b>	<b>23.0</b>	<b>10.0</b>

Contrary to 2004/05 HBS where fever and malaria were considered as the same disease, the 2009/10 HBS separated the two as each disease has its own standard definition. Fever was the most reported disease; more than 33 percent of respondents of all ages have such complaint. There were no large variations of reported fever among those under the age of fifteen years and those in older age groups, as a share of all complaints reported. However, discrepancies has been observed between localities where rural areas reported to have more individual experiencing fever for all ages (Table 3.24).

In recent years, Zanzibar has remarkably recorded a significance improvement in reducing malaria. The prevalence has been reduced to less than one percent for children under-five years of age (2007/08 THMIS). The proportion of individual reporting illness due to malaria is low (22.9 percent) compared to those reported to have fever (33.2 percent)<sup>2</sup>; one third of individuals in urban areas reported to be affected with malaria, higher than their rural counterparts (16.6 percent).

Diarrhoeal diseases that were recorded the second complaint in 2004/05 HBS are the third most commonly reported illness in children under 15 (excluding 'other') in 2009/10. Both Surveys reveal that the disease affects more individuals in rural areas than urban.

Accidents are an important element. Persons in the age range 15 – 64 years and above are more likely to report encountering accidents; almost 6 percent and 3.2 percent of reported condition in urban areas in 2009/10 and 2004/05 HBS surveys respectively, whereas children under fifteen years are the most reported having accidents in rural areas. Likewise accidents and diabetes are most common to urban areas.

<sup>2</sup> Availability of malaria diagnostic test (microscope and RDT) in most of the public health facilities could be among the factor that contributed to distinguish between fever and malaria.

**Table 3.24: Percentage Distribution of Type of Illness or Injury Reported by Area.**

Type of Illness/ Injury	2004/05			2009/10		
	Rural	Urban	Total	Rural	Urban	Total
<b>Less than 15 years</b>						
Fever/Malaria	71.8	79	73.6	-	-	-
Fever	-	-	-	43	26.9	37.1
Malaria	-	-	-	18.3	38.1	25.5
Diarrhea	9.5	7.1	8.9	12	10.6	11.5
Accident	2.1	1.9	2	3.3	1.5	2.6
Anemia	1.2	0.4	1	0.7	0.3	0.6
Skin Disease	1.9	1.9	1.9	2.1	2.4	2.2
Conjunctivitis	4.1	1.7	3.5	2.6	2.7	2.6
Diabetes	2.5	4.3	3	0.6	3.6	1.7
Intestinal Worm	1.3	0.9	1.2	1	0.5	0.8
Pneumonia	3.1	3.1	3.1	3.1	8.7	5.1
Other Disease	9.1	7.2	8.6	21.4	18.6	20.4
Multiple Diseases	9.8	9.4	9.7	7.3	10.3	8.4
<b>15 years and above</b>						
Fever/Malaria	66.3	67.3	66.6	-	-	-
Fever	-	-	-	35.5	21.3	30.2
Malaria	-	-	-	15.3	30.3	20.9
Diarrhea	5.4	3.8	4.9	5.8	3.8	5
Accident	2.4	3.2	2.6	4	5.9	4.7
Anemia	3	1.6	2.6	2.8	3.4	3.1
Skin Disease	1	1.5	1.2	0.5	0.2	0.4
Conjunctivitis	2.4	1.8	2.2	3.2	2.1	2.8
Diabetes	2.2	3.8	2.7	4.1	5.9	4.8
Intestinal Worm	0.2	0.4	0.3	0.2	0	0.1
Pneumonia	2.7	1.8	2.4	0.8	1.1	0.9
Other Disease	22.5	21.1	22.1	37.7	32	35.5
Multiple Diseases	9.7	8.3	9.3	8.5	5.6	7.4
<b>All Ages</b>						
Fever/Malaria	68.9	72.5	69.8	-	-	-
Fever	-	-	-	38.8	23.7	33.2
Malaria	-	-	-	16.6	33.6	22.9
Diarrhea	7.3	5.2	6.8	8.5	6.7	7.8
Accident	2.2	2.6	2.3	3.7	4.1	3.8
Anemia	2.2	1.1	1.9	1.9	2.1	2
Skin Disease	1.4	1.7	1.5	1.2	1.1	1.1
Conjunctivitis	3.2	1.8	2.8	3	2.4	2.7
Diabetes	2.3	4	2.8	2.6	4.9	3.4
Intestinal Worm	0.7	0.6	0.7	0.5	0.2	0.4
Pneumonia	2.9	2.3	2.7	1.8	4.3	2.7
Other Disease	16.2	15	15.9	30.5	26.3	29
Multiple Diseases	9.8	8.8	9.5	8	7.6	7.8

With respect to gender, more females reported having illness than males in 2009/10 HBS; accounting more than 55 percent. Generally, males reported accidents as higher proportion of conditions; almost three times compared to than females. On the other hand, females reported to suffer more with anaemia than males except at the age range of less than fifteen years (Table 3.25).

In the population less than 15 years, the most reported illnesses by males in the 2004/05 period are fever/malaria (73.8 percent), and diarrhea (9.0 percent). As of the 2009/10 period, the most reported illness by males was fever (36.5 percent), followed by malaria (22.0 percent). In a way incidents of fever/malaria dropped by 15.3 percent for males and 6 percent for females between the survey years. For females less than 15 years,

the most reported disease during the 2004/05 period is fever/malaria (73.4 percent), followed by diarrhea (8.8 percent). However during the 2009/10 period, the most reported diseases were fever (37.9 percent), and malaria (29.5 percent). Between the survey years, incidents of diarrhea (increased by 3.6 percent for males and 1.5 percent for females), pneumonia (increased by 2.9 percent for males and 1.1 percent for females) and other diseases (increased by 11 percent for males and 12.4 percent for females) increased for both males and females.

As of the population 15 years and above, fever and malaria is the main illness for males (65.4 percent) as well as females (67.4 percent). In the 2009/10 period, fever was the main illness for males (33.8 percent) and females (30.2 percent), followed by malaria (21.6 percent for males and 18.6 percent for females). Moreover, incidents of fever/malaria dropped by 10.2 percent for males and 18.9 percent for females between the survey years. Between 2004/05 and 2009/10, the incidents of diarrhea (increased by 0.4 percent for males and dropped by 0.1 percent for females), pneumonia (decreased by 1.9 percent for males and 1.4 percent for females) and other diseases (increased by 8.9 percent for males and 16.1 percent for females) increased for both males and females.

Accidents are a problem afflicting 4.7 percent of males and 1.2 percent of females in 2004/05, compared to 7.8 percent of males and 2.2 percent of females in 2009/10. The proportion of conditions that are accidents reported by males increased by 4 percent between the surveys in the 15 years and above ages, while the increase for females reporting accidents was a slight 1 percent.

**Table 3.25: Percentage Distribution of Type of Illness or Injury Reported by Sex.**

Type of Illness/ Injury	2004/05			2009/10		
	Male	Female	Total	Male	Female	Total
<b>Less than 15 years</b>						
Fever / Malaria	73.8	73.4	73.6	-	-	-
Fever	-	-	-	36.5	37.9	37.1
Malaria	-	-	-	22.0	29.5	25.5
Diarrhea	9.0	8.8	8.9	12.6	10.3	11.5
Accident	2.4	1.6	2.0	3.4	1.8	2.6
Anemia	1.1	0.9	1.0	0.7	0.4	0.6
Skin Disease	2.0	1.8	1.9	2.3	2.0	2.2
Conjunctivitis	3.0	4.0	3.5	3.6	1.5	2.6
Diabetes	2.7	3.2	3.0	2.6	0.6	1.7
Intestinal Worm	1.1	1.2	1.2	0.6	1.0	0.8
Pneumonia	2.8	3.4	3.1	5.7	4.5	5.1
Other Disease	9.4	7.9	8.6	20.4	20.3	20.4
Multiple Diseases	10.0	9.3	9.7	9.0	7.6	8.4
<b>15 years and above</b>						
Fever / Malaria	65.4	67.4	66.6	-	-	-
Fever	-	-	-	32.5	28.7	30.2
Malaria	-	-	-	22.7	19.8	20.9
Diarrhea	4.1	5.5	4.9	4.5	5.4	5.0
Accident	4.7	1.2	2.6	8.7	2.2	4.7
Anemia	1.7	3.3	2.6	0.5	4.6	3.1
Skin Disease	1.1	1.2	1.2	0.3	0.4	0.4
Conjunctivitis	2.7	1.9	2.2	3.4	2.5	2.8
Diabetes	2.5	2.7	2.7	5.6	4.4	4.8
Intestinal Worm	0.2	0.3	0.3	0.3	0.0	0.1
Pneumonia	2.4	2.5	2.4	0.5	1.1	0.9
Other Disease	21.7	22.4	22.1	30.6	38.5	35.5
Multiple Diseases	8.1	10.1	9.3	8.9	6.5	7.4
<b>All Ages</b>						
Fever / Malaria	69.7	69.9	69.8	-	-	-
Fever	-	-	-	34.5	32.1	33.2
Malaria	-	-	-	22.3	23.4	22.9
Diarrhea	6.7	6.8	6.8	8.6	7.2	7.8
Accident	3.5	1.4	2.3	6.0	2.1	3.8
Anemia	1.4	2.3	1.9	0.6	3.1	2.0
Skin Disease	1.6	1.4	1.5	1.3	1.0	1.1
Conjunctivitis	2.9	2.8	2.8	3.5	2.1	2.7
Diabetes	2.6	2.9	2.8	4.0	3.0	3.4
Intestinal Worm	0.7	0.7	0.7	0.5	0.4	0.4
Pneumonia	2.6	2.9	2.7	3.2	2.4	2.7
Other Disease	15.3	16.3	15.9	25.4	31.8	29.0
Multiple Diseases	9.1	9.8	9.5	8.9	7.0	7.8

During the survey individuals who reported to suffer any type of disease were asked whether they had any kind of consultation. For the purpose of this survey consultation is not only limited to the prescription by health care provider but also services from traditional healers or buying medicine. Information portrayed in Table 3.26 shows that among those reported to have illness more than 84 percent had consultation from a health care provider. As concerns the percentage of ill or injured individuals who consult a health care provider, the proportions of males and females who consulted a provider are similar to one another in each of the surveys; in the 2009/10 period (84.1 percent of the females and 84.7 percent of males consulted a provider). The observed high proportion is encouraging; it gives an indication that people are well sensitized on use of medical treatment.

There are small differences observed between rural and urban respondents. More males than females in rural areas consulted a health care provider in the 2009/10 period, while in urban areas; more females consulted a health care provider in both periods (e.g., 85.0 percent for females consulted a health care provider compared to 83.1 percent for males in 2004/05, and 82.4 percent for females consulted a health care provider compared to 84.9 percent for males in the 2009/10 period). It seems between the surveys there is a slight increase in the proportion of both males and females who consult health care providers.

**Table 3.26: Percentage of Ill or Injured Individuals who consulted any Health-Care Provider by Sex and Area.**

Sex	2004/05			2009/10		
	Rural	Urban	Total	Rural	Urban	Total
Both Sexes	82.4	84.2	82.9	83.5	85.7	84.4
Male	82.6	83.1	82.7	84.9	84.4	84.7
Female	82.3	85.0	83.0	82.4	86.7	84.1
<b>Total of Individual</b>	<b>120,631</b>	<b>45,982</b>	<b>166,613</b>	<b>66,836</b>	<b>40,282</b>	<b>107,118</b>

For the provision of health care services, Zanzibar has an extensive network system that covers public and private sector. Public health care services are offered three levels; primary (PHCCs and PHCUs), secondary (districts hospitals) and tertiary (referral). Information from 2004/05 and 2009/10 HBS show that large proportion of persons who experienced illness utilised services from PHCUs (Table 3.27). Almost 44 percent of persons reporting illness or injured in 2009/10 HBS received treatment from PHCUs. When PHC Centres are included (a new category for 2009/10), then the proportion of individuals consulting at primary facilities in rural areas appears to have increased substantially, with substantially less use of district hospitals in rural areas.

Referral hospital ranked at the third position of being used by urban inhabitants; 24 percent reported in 2004/05 and 19 percent in 2009/10 HBS. The urban population also makes much more use of district hospitals than does the rural population. Despite the increase of private facilities, the proportion of persons seeking care at private health facilities have no much difference compared with the previous survey. There are still some people who seek their treatment at Over the Counter medicine (OTC) or pharmacies when they are sick. The 2009/10 HBS reveals that almost 13.8 percent of all person who reported having illness or injured for the period of survey use these facilities as their source of having treatment<sup>3</sup>. Traditional healers are most common in rural areas. The proportion of person received traditional treatment increased from 1.6 percent in 2004/05 to 5.6 percent in recent survey. The information suggests the need for further analysis to factors contributing to the phenomena.

<sup>3</sup> Notably, may either receive advice for prescription or bought some medicine

**Table 3.27: Percentage Distribution of Persons Reporting Illness or Injury by Source of Consultation and Area.**

Source of Consultation	2004/05			2009/10		
	Rural	Urban	Total	Rural	Urban	Total
Referral hospital	6.6	24	11.4	9.3	18.9	12.9
District hospital	18.4	23	19.6	11.9	22.4	15.8
Primary Health care Centre	-	-	-	7.7	0.6	5
Special hospital	1.3	3.7	1.9	0.7	0.1	0.5
Primary Health Care Unit	55.7	20.4	46	56.9	22	43.8
Private hospital	7.6	22.4	11.7	7.9	16.1	11
Private clinic	3.1	8.7	4.7	5.6	5.5	5.6
Pharmacy	8.7	5	7.7	4.1	14.8	8.2
Over the Counter Medicine (OTC)	-	-	-	4.9	6.7	5.6
Consulted Private doctor	1.6	1.4	1.6	1.9	0.8	1.5
Consulted Traditional healer	1.7	1.3	1.6	6.8	2.8	5.3
Missionary care centre	0.3	0.1	0.3	0.1	0	0
Consulted Others	1.3	0.5	1	0.4	1.5	0.8
Multiple Health Care	6.3	9.7	7.3	14.9	10.5	13.2
<b>Number of Individuals</b>	<b>120,631</b>	<b>45,982</b>	<b>166,613</b>	<b>66,836</b>	<b>40,282</b>	<b>107,118</b>

Among those who reported experiencing illness or injured (in 2009/10 almost 15.6 percent did not use any medical care for different reasons (Table 3.28). The major reason given was no need of using medical care, where about half (49.3 percent) have not used medical services for that reason.

**Table 3.28: Distribution of Person Reported Illness and not Using Medical Care by Reasons and Area.**

Reason	2004/05			2009/10		
	Rural	Urban	Total	Rural	Urban	Total
No need	60.3	62.4	60.8	48.7	50.4	49.3
Too expensive	28.7	23.9	27.5	4.3	8.4	5.7
Too far	4.2	1.5	3.5	0.1	0.0	0.1
Have drugs at home	-	-	-	45.5	38.1	43.0
Others	6.4	11.7	7.7	2.9	4.0	3.3
<b>Total of Individual</b>	<b>25,705</b>	<b>8,615</b>	<b>34,320</b>	<b>13,160</b>	<b>6,702</b>	<b>19,862</b>

Reporting 'no need' was most common in Kaskazini 'A' district (85.5 percent) and least common in Chake Chake district (Table 3.29)

**Table 3.29: Distribution of Individuals Reported Illness by Reason for Not Using Medical Care by District**

District	No need		Too expensive		Too far		Have drugs at home		Others	
	2004/05	2009/10	2004/05	2009/10	2004/05	2009/10	2004/05	2009/10	2004/05	2009/10
Kaskazini "A"	69.0	85.5	22.5	0.3	2.2	0.0	-	14.7	6.9	3.2
Kaskazini "B"	73.8	33.6	14.7	22.1	2.0	0.0	-	64.2	9.5	2.2
Kati	61.5	40.8	4.4	9.8	5.0	0.0	-	40.1	28.9	9.3
Kusini	79.9	71.8	9.8	0.0	1.8	0.0	-	28.2	6.9	1.1
Magharibi	67.0	46.9	18.1	13.0	2.8	0.0	-	39.2	12.0	3.9
Mjini	70.0	76.0	28.2	5.8	0.7	0.0	-	18.2	2.0	0.0
Wete	54.5	36.5	36.7	4.2	2.4	0.0	-	56.0	6.4	3.3
Micheweni	36.2	39.0	58.0	7.0	4.0	0.0	-	53.9	1.5	0.0
Chake Chake	59.5	30.2	23.3	5.4	9.9	0.0	-	62.9	5.6	2.0
Mkoani	69.0	58.1	22.5	3.2	1.5	0.6	-	32.2	4.9	6.5
<b>Total</b>	<b>60.8</b>	<b>49.3</b>	<b>27.5</b>	<b>5.7</b>	<b>3.5</b>	<b>0.1</b>	<b>-</b>	<b>43.0</b>	<b>7.7</b>	<b>3.3</b>

The Ministry of Health acknowledged its strategy of providing health services closer to its customers, not more than 5 km from their home. This has been proved in the 2009/10 HBS, whereby, with the exception of Mkoani district with 0.6 percent, no other district claims of not using medical care for the reason of too far (Table 3.30). The information from table 3.28 also shows that 58 percent of the respondent living nearby health of less than 1 km walking distance Overall, access has improved in both urban and rural areas and most households are within 5km of a health centre even in rural areas.

**Table 3.30: Distribution of the Distance from Households to Health Centre by Area**

Distance	Rural		Urban		Total	
	2004/05	2009/10	2004/05	2009/10	2004/05	2009/10
Less than 1	34.0	41.3	76.8	82.3	49.7	58.3
1.0-1.9	23.6	27.5	13.7	11.5	19.9	20.8
2.0-2.9	17.6	16.5	5	4.3	13	11.4
3.0-3.9	13.4	6.5	1.6	0.6	9.1	4
4.0-4.9	4.8	4.8	2.3	0	3.8	2.8
5.0-5.9	1.9	0.4	0.2	1.2	1.3	0.7
6 +	4.7	2.8	0.5	0.2	3.1	1.7
<b>Number of Households</b>	<b>120,626</b>	<b>136,059</b>	<b>70,053</b>	<b>96,452</b>	<b>190,679</b>	<b>232,511</b>

**Table 3.31: Distribution of the Distance to Hospital by Area.**

Distance to nearest Hospital	Rural		Urban		Total	
	2004/05	2009/10	2004/05	2009/10	2004/05	2009/10
Less than 1	8.7	13.0	34.2	49.3	18.1	28.1
1.0-1.9	9.4	13.5	44.2	42.8	22.2	25.6
2.0-2.9	12.7	12.4	15.6	1.6	13.7	7.9
3.0-3.9	18.8	17.9	3.1	4.8	13.1	12.4
4.0-4.9	16.6	11.6	1.2	0.1	10.9	6.8
5.0-5.9	14.3	7.6	0.6	1.0	9.3	4.8
6 +	19.5	24.0	1.2	0.5	12.7	14.2
<b>Number of Households</b>	<b>120,626</b>	<b>136,059</b>	<b>70,053</b>	<b>96,452</b>	<b>190,679</b>	<b>232,511</b>

Distance is an important variable to be looked upon when delivering any kind of services, thus why government made an effort of providing important services, including health services closer to the community. As would be expected, the mean distance to hospitals is greater than that of health centres (Table 3.32), since hospitals provide more specialised services and have larger catchment populations.

The mean distance to primary health facility is less than 1 kilometre compared to 1.2 kilometre observed in 2004/05 HBS. Both populations in rural and urban) were reported to have a reduction on average walking distance to health facilities.

**Table 3.32: Mean Distance to Health Facilities**

	2004/05			2009/10		
	Rural	Urban	Total	Rural	Urban	Total
Health Centre	1.7	0.4	1.2	1.3	0.3	0.9
Hospital	12.8	3.1	9.3	12.5	2.3	8.3

Good health services are those which deliver effective, safe and quality personal to those that need them with minimum wastage of resources (time and financial) and ultimately, the patients receive what they expect (Table 3.33). In 2009/10 HBS, most of the respondents reported that they are satisfied with the services during their visit. About 72 percent reported that there were no problems faced during the visit, although this is a smaller proportion that reported no problem in the previous survey.

The most common problem faced to some of households' respondents during their visit was unavailability of drugs at the health delivery point (9.0 percent). This contrasts with what was reported in the previous survey where problem was too much time spent waiting to get the services. Problems of availability of drugs was commonly claimed in rural areas, urban areas faced the problem of long waiting time. Cleanliness is among the factors that can attract individuals to utilise the available services. Although few people reported that facilities were not clean in 2004/05 HBS, the rate has increased in the recent survey where around with about 7 percent of those who visited health facilities showing dissatisfaction with cleanness condition.

**Table 3.33: Percentage Distribution of Persons by Problem Faced during Visiting Time (Consultation & Service) and Area**

Problem faced	2004/05			2009/10		
	Rural	Urban	Total	Rural	Urban	Total
No problem (Satisfied)	71.8	74.5	72.6	68.9	77.8	72.3
Facilities were not clean	1.3	1.5	1.3	7.7	5.9	7.0
Long waiting time	8.0	7.7	7.9	7.8	10.1	8.6
No Trained Professional	1.4	1.0	1.3	0.6	2.6	1.3
Too expensive	7.2	8.4	7.5	7.9	6.4	7.3
No Drugs Available	6.8	8.6	7.3	9.6	8.1	9.0
Treatment Unsuccessful	4.5	3.0	4.1	6.0	3.2	4.9
Others	0.7	0.5	0.6	0.5	0.0	0.3
Multiple problem	3.5	6.1	4.2	7.5	11.0	8.8
<b>Total Number of Individuals</b>	<b>120,631</b>	<b>45,982</b>	<b>166,613</b>	<b>66,836</b>	<b>40,281</b>	<b>107,118</b>

The 2009/10 HBS asked for which health services individuals incurred costs when seeking treatment (Table 3.34). The result shows that only 23 percent of respondent did not pay for the service they required. It was found, the most sick persons paid for drugs. About 61.2 percent of respondents reported to pay for medicine. The higher rates were observed in urban areas (73.2 percent) compared to rural (53.9 percent). In addition to Mjini and Magharibi districts, all Pemba districts reported to have higher proportion of sick people who paid for drugs (Appendix B3.6). This is probably influenced by shortage of some medicines in public health facilities.

Other services which were reported to be paid for ( by more than 20 percent of injured or sick people) was the diagnostic test, particularly laboratory services. The proportion paying for these two services vary between rural and urban. Some people had reported to pay for more than one service (16.3 percent), obviously those who reported to use private health services have to incur these costs. Few individuals reported to make payment for surgical services (operative therapy); twice the number of individuals in urban areas reported to pay for service compared to their rural counterparts.

**Table 3.34: Distribution of Persons by Payment of Service and Area**

Services	2009/10		
	Rural	Urban	Total
Consultation/Advice	14.9	13.5	14.4
Examination/Medical test	17.3	25.5	20.4
Drugs	53.9	73.2	61.2
Operation/Therapy	1.0	2.1	1.4
Not paid	30.2	11.3	23.1
Multiple payment	14.4	19.5	16.3
<b>Total Number of Individuals</b>	<b>66,836</b>	<b>40,282</b>	<b>107,118</b>

## **CHAPTER FOUR: SOCIO-ECONOMIC STATUS**

### **4.1 Introduction**

This chapter provides information on the economic activities of the household members, housing characteristics and other information related to human settlements. This information was collected by asking about the main and secondary activity of each household member, the quality of housing and access to related social amenities and infrastructure such as water and sanitation.

Gathering information at household levels for the household members especially on economic activities, housing characteristics and social amenities has become a central part of the effort to monitor progress on the implementation of the Zanzibar Strategy for Growth and Reduction of Poverty (ZSGRP). In that context, socio-economic status is an area of focus for analysis, and the discussion in this chapter will examine to what extent socio-economic status changed overtime.

### **Economic Activity**

The information on economic activity was related to the reference week — that is, the calendar week preceding the date on which the respondents were interviewed by enumerators. This week was not the same for all respondents since the data collection was not completed in one week. The 2009/10 HBS gathered information on the population aged 15 years and above related to economic activities for both main and secondary activities.

The main activities of the population aged 15 years and above, in the seven days (one week) preceding the survey, are presented in table 4.1 below. The most common single activity was farming/livestock keeping (22.9 percent), followed by self employed without employees (15.7 percent). In addition, 37.8 percent of rural population was engaged in agriculture while in urban areas only 5.1 percent were engaged in this industry. The urban population (18.1 percent) was more likely to be engaged in self employment without employees than rural population (13.8 percent). Overall there has a decline in proportion of individuals who are employed in farming/livestock (24.8 2004/05 HBS to 22.9 percent 2009/10 HBS ).

The results also show a rise in self employed without employees between the current and previous survey. The proportion rises from 11.2 percent 2004/05 HBS to 15.7 HBS 2009/10, possibly reflecting a movement out of agriculture and into other small business activities.

**Table 4.1: Distribution of Population 15 Years and Above by Main Activity in the Previous Seven Days and Area.**

Main Activity	Rural		Urban		Total	
	2004/05	2009/10	2004/05	2009/10	2004/05	2009/10
Farming / Livestock keeping	39.3	37.9	4.8	5.1	24.8	22.9
Fishing	5.8	5.5	0.9	0.4	3.8	3.2
Mining and Quarrying	0.3	0.1	0.1	0.0	0.2	0.0
Tourism	0.3	0.3	0.4	0.1	0.4	0.2
Paid Employee: Government	5.6	5.7	13.5	13.6	8.9	9.3
Paid Employee: Parastatal	0.4	0.1	0.6	0.2	0.4	0.2
Paid Employee: NGO or Religious organization	0.5	0.3	1.9	1.3	1.1	0.8
Other including Private or Mission	1.7	2.0	5	6.2	3.1	3.9
Self Employed: With employee	0.9	0.3	1.6	0.3	1.2	0.3
Self Employed; Without employee	8.4	13.8	15.1	18.1	11.2	15.7
Unpaid family helper in business	1.9	0.6	2	0.4	2	0.5
Not working: Available for work	1.9	1.0	6.8	4.4	4	2.6
Not working: Not seeking for work	0.1	0.0	0.2	0.2	0.2	0.1
Housekeeping with economic activity	4.7	1.0	3.6	0.8	4.3	0.9
Housekeeping with non-economic activity	7.9	13.2	19.8	25.3	12.9	18.7
Student	16.7	16.1	19.7	21.1	17.9	18.4
Not active: Sick	1.3	0.9	1.2	1.9	1.3	1.4
Not active: Disable	0.3	0.8	0.2	0.4	0.2	0.6
Other	0.1	0.3	0.1	0.2	0.1	0.3
<b>Total Percent</b>	<b>100</b>	<b>0.0</b>	<b>100</b>	<b>0.07</b>	<b>100</b>	<b>0.1</b>
<b>Number of Individuals</b>	<b>342,332</b>	<b>394,137</b>	<b>246,945</b>	<b>330,789</b>	<b>589,276</b>	<b>724,926</b>

Table 4.2 present the percentage distribution of the population 15 years and above by main activity in the previous seven days and sex. The results revealed that females were more likely to be engaged in farming/livestock than males, while males were more likely to be engaged in other self employment.

The proportion of males and females engaged in farming declined from 22.1 percent to 19.1 percent for males and 27.3 percent to 26.4 percent for females (2004/05 HBS and 2009/10 HBS respectively). In self employment without employees the case is opposite while there is a rise of persons engaged in this activity for both males and females. Males increased from 17.3 percent to 22.4 percent while females increased from 5.7 percent to 9.8 percent (2004/05 HBS and 2009/10 HBS respectively)

Overall, the biggest change between the surveys is the 5.8 percent increase in population 15 years and above whose main activity is a housekeeping without non-economic activity. These have increased from 12.9 percent to 18.9 percent. The increase is especially significant for females, who have gone from 24.6 percent to 31.8 percent (7.2 percent increase). Surprisingly, 4.2 percent of males also reported household with non-economic activity as their main activity in the 2009/10 survey, none had done so in the previous survey.

The proportion of females, whose main activity is a housekeeper (housewife) with economic activity has dropped by a significant 6.6 percent between the surveys (e.g from 8.1 percent to 1.5 percent). This indicates that a sizeable number of females have lost their sources of livelihoods, and instead have been pushed into becoming housekeepers - without economic activities (where they increased by 7.2 percent).

**Table 4.2: Population 15 Years and Above by Main Activity in the Previous Seven Days and Sex**

Main Activity	Male		Female		Total	
	2004/05	2009/10	2004/05	2009/10	2004/05	2009/10
Farming / Livestock keeping	22.1	19.1	27.3	26.4	24.8	22.9
Fishing	7.6	6.3	0.4	0.3	3.8	3.2
Mining and Quarrying	0.4	0.1	0.1	0.0	0.2	0.0
Tourism	0.5	0.3	0.2	0.1	0.4	0.2
Paid Employee: Government	13.1	13.9	5.0	5.2	8.9	9.3
Paid Employee: Parastatal	0.7	0.3	0.2	0.1	0.4	0.2
Paid Employee: NGO or Religious organization	1.6	1.2	0.7	0.4	1.1	0.8
Other including Private or Mission	4.6	6.2	1.7	1.9	3.1	3.9
Self Employed: With employee	2.1	0.4	0.4	0.1	1.2	0.3
Self Employed; Without employee	17.3	22.4	5.7	9.8	11.2	15.7
Unpaid family helper in business	1.6	0.5	2.4	0.5	2	0.5
Not working: Available for work	5.6	3.7	2.5	1.5	4	2.6
Not working: Not seeking for work	0.3	0.2	0.1	0.0	0.2	0.1
Housekeeping with economic activity	-	0.2	8.1	1.5	4.3	0.9
Housekeeping with non-economic activity	-	4.2	24.6	31.8	12.9	18.7
Student	19.5	19.2	16.6	17.7	18	18.4
Not active: Too old/too young	1.5	0.9	2.6	1.8	2.1	1.4
Not active: Sick	1.3	0.6	1.2	0.7	1.3	0.6
Not active: Disable	0.3	0.3	0.2	0.2	0.2	0.3
Other	0.1	0.0	0.1	0.1	0.1	0.1
Not stated	0	0.0	0	0.1	0	0.0
<b>Total Percent</b>	<b>100</b>	<b>100.0</b>	<b>100</b>	<b>100.0</b>	<b>100</b>	<b>100.0</b>
<b>Number of Individuals</b>	<b>279,842</b>	<b>343,063</b>	<b>309,434</b>	<b>381,863</b>	<b>589,276</b>	<b>724,926</b>

Table 4.3 presents the percentage distribution of the population aged 15-64 years by their main activity in the previous seven days, this cluster of the population known as working age population. With regard to the main activities for persons aged 15-64 (i.e. 688,930 persons).

By geographical area, the same trend was observed where as farming/livestock leads in rural areas and self employment without employees leads in urban areas. In rural areas the proportion of persons engaged in farming/livestock dropped from 38.4 percent to 36.5 percent , suggesting a move to other economic activities even in the rural population (2004/05 HBS and 2009/10 HBS respectively).

**Table 4.3: Percentage of Population (15-64 Years) by Main Activity in the Previous Seven Days by Area**

Main Activity	Rural		Urban		Total	
	2004/05	2009/10	2004/05	2009/10	2004/05	2009/10
Farming / Livestock keeping	38.4	36.5	4.5	4.8	24.1	21.9
Fishing	6.0	5.6	0.9	0.4	3.9	3.2
Mining and Quarrying	0.4	0.1	0.1	0.0	0.2	0.0
Tourism	0.3	0.3	0.5	0.1	0.4	0.2
Paid Employee: Government	5.8	6.0	13.8	13.9	9.2	9.6
Paid Employee: Parastatal	0.4	0.1	0.6	0.3	0.5	0.2
Paid Employee: NGO or Religious organization	0.5	0.3	2.0	1.3	1.1	0.8
Other including Private or Mission	1.8	2.1	5.1	6.3	3.2	4.1
Self Employed: With employee	0.9	0.3	1.6	0.2	1.2	0.3
Self Employed; Without employee	8.6	13.9	15.2	18.3	11.4	15.9
Unpaid family helper in business	2	0.6	2.1	0.5	2.1	0.5
Not working: Available for work	2	1.1	7	4.6	4.1	2.7
Not working: Not seeking for work	0.1	0.0	0.2	0.2	0.2	0.1
Housekeeping with economic activity	4.9	1.0	3.7	0.8	4.4	0.9
Housekeeping with non-economic activity	8.1	13.7	20.1	25.5	13.2	19.1
Student	17.7	17.0	20.5	22.0	18.9	19.3
Not active: Too old/too young	0.5	0.1	1.0	0.4	0.7	0.3
Not active: Sick	1.1	0.8	1.0	0.2	1.1	0.5
Not active: Disable	0.2	0.3	0.1	0.1	0.2	0.2
Other	0.1	0.0	0.1	0.1	0.1	0.1
Not Stated		0.0		0.1		0.0
<b>Total Percent</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>
<b>Number of Individuals</b>	<b>323,075</b>	<b>372,178</b>	<b>237,070</b>	<b>316,751</b>	<b>560,144</b>	<b>688,930</b>

Table 4.3 shows the same distribution for adults age 15-64 years. A similar picture is observed where as the most of the population engaged in farming and self employment (21.9 percent and 15.9 percent respectively). Also there is a peak point in government sector ( 9.6 percent). Furthermore, females were more likely to be engaged in farming/livestock than males while males were more likely to be engaged in self employment. There is a slight decrease in the proportion of population engaged in farming/livestock and increase in self employment between current and previous survey for both males and females.

Generally, the biggest change is the increase of proportion of population that identified household with non-economic activity as their main activity (e.g., by 5.9 percent). The increase is mainly significantly among females, who increased by 7.4percent. On the male side the shift is similarly remarkable due to the fact that in the previous survey no males identified household with non-economic activity as their main activity, but 4.3 percent did so in the 2009/10 survey. This might imply that more men have been knocked out of other categories into becoming non-economic households, although it might also be due to men being more willing to report this activity, since there is no increase in unemployment which would be expected if this were the explanation, and in fact there is a decline. This is certainly a reduction in the proportion of housekeepers who also undertake economic activity.

Lastly among other noticeable changes is in the proportion of population that identified itself as self-employed without employee. This grew by 4.5percent, mostly with a 5 percent among males, and 4.1percent increase among females.

**Table 4.4: Percentage of Population (15-64 Years) by Main Activity in the Previous Seven Days by Sex.**

Main Activity	Male		Female		Total	
	2004/05	2009/10	2004/05	2009/10	2004/05	2009/10
Farming / Livestock keeping	20.7	17.5	27.1	25.9	24.1	21.9
Fishing	7.8	6.5	0.4	0.3	3.9	3.2
Mining and Quarrying	0.4	0.1	0.1	0.0	0.2	0.0
Tourism	0.6	0.3	0.2	0.1	0.4	0.2
Paid Employee: Government	13.5	14.4	5.2	5.4	9.2	9.6
Paid Employee: Parastatal	0.7	0.3	0.3	0.1	0.5	0.2
Paid Employee: NGO or Religious organization	1.6	1.2	0.7	0.4	1.1	0.8
Other including Private or Mission	4.8	6.4	1.8	2.0	3.2	4.1
Self Employed: With employee	2.1	0.4	0.4	0.1	1.2	0.3
Self Employed; Without employee	17.7	22.7	5.8	9.9	11.4	15.9
Unpaid family helper in business	1.6	0.5	2.4	0.5	2.1	0.5
Not working: Available for work	5.8	3.9	2.6	1.6	4.1	2.7
Not working: Not seeking for work	0.3	0.2	0.1	0.0	0.2	0.1
Housekeeping with economic activity	-	0.2	8.3	1.5	4.4	0.9
Housekeeping with non economic activity	-	4.3	25.0	32.4	13.2	19.1
Student	20.6	20.2	17.3	18.5	18.9	19.3
Not active: Too old/too young	0.5	0.1	1.0	0.4	0.7	0.3
Not active: Sick	1.0	0.3	1.1	0.6	1.1	0.5
Not active: Disable	0.2	0.3	0.1	0.2	0.2	0.2
Other	0.1	0.0	0.1	0.1	0.1	0.1
Not Stated		0.0		0.1		0.0
<b>Total Percent</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>
<b>Number of Individuals</b>	<b>264,679</b>	<b>325,203</b>	<b>295,465</b>	<b>363,727</b>	<b>560,144</b>	<b>688,930</b>

Table B 4.1(see appendix) shows that Kaskazini “B” has the highest percentage of persons engaged in farming/livestock keeping (47.0 percent) followed by Micheweni (43.9 percent) and the lowest proportion reported in Mjini district which is only 1.1 percent. Persons engaged as a paid employee: Government dominated in Mjini district (14.3 percent), Magharibi (13. 6 percent) and Chake chake district (11.9 percent) the rest of the districts reported less than 10 percent.

The 2009/10 HBS also collected information on individual’s secondary activity for all persons aged 15-64 years, where they had one. The activity that took more time was considered as the main activity and the other as the secondary activity.

Table B 4.2 (see appendix) shows the percentage distribution of the population by secondary activity and district as reported during the HBS 200/10. The analysis revealed that most of the persons (38.1 percent) are engaged in household non-economic activities as their secondary activity in almost all districts. Same patterns reported in all districts except for Kusini district the highest proportion for the secondary activities reported to be engaged in farming/livestock keeping.

Table 4.5 shows the activity of children of aged 5 to 14 years. Normally this age a child is supposed to attend school; either child should be in nursery or primary class. The result shows that 24.9 percent of children do not study. The proportion is higher in rural areas (30.3 percent) compared to urban (16.6 percent). Most of the children who do not study do not have other activities (14.3 percent) although 10.5 percent of children do housework, household business or they are employed.

The proportion of children attending school is 75.3 percent. The proportion is low in rural areas (69.7) compared to their counterpart of urban areas (83.4). Most of the children are studying and doing housework or household business (45.8 percent). To some extent the fraction is a bit high in rural compared to urban. (48.9 percent and 41.5 percent respectively).

There is an improvement of children attending school between these two surveys. In 2004 HBS the survey shows that 34.6 percent of children did not attend school while 2009/10 the amount decreased up to 24.8 (2008/09 HBS). The trend also observed to children who attend school where as the proportion increased from 65.4 percent (2004/05 HBS) to 75.3 percent (2009/10 HBS).

**Table 4.5: Percentage of Children Age (5-14) by Activities in the previous Seven Days and Area**

Activity	Rural		Urban		Total	
	2004/05	2009/10	2004/05	2009/10	2004/05	2009/10
Agriculture, fish or employed & do not study	1.4	1.2	0.8	0.1	1.2	0.8
Housework or household business & do not study	6.8	13.7	2.8	3.9	5.3	9.7
Agriculture, fish or employed & study	1.5	1.5	0.4	0.1	1.1	0.9
Housework or household business & study	18.2	47.4	18.1	41.4	18.1	44.9
Study only	39.0	20.8	58.4	41.9	46.2	29.5
No activity	33.1	15.4	19.6	12.6	28.1	14.3
<b>Total Percent</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>
<b>Number of Individuals</b>	<b>183,317</b>	<b>171,926</b>	<b>108,569</b>	<b>133,583</b>	<b>291,886</b>	<b>305,509</b>

Table 4.6 shows the distribution of children aged 5-14 by their activities. The data shows that majority of children aged 5-9 they seems to give attention to study only (28.3 percent), the same amount is approximated in age group 10-14 years (29 percent).

The number of children who are studying aged 10- 14 years is not bad where as 91.7 percent of kids attending school. Only 8.3 percent did not study which is much better compared to the earlier survey of HBS (12 percent). More than half (58.5 percent) of children aged 5-9 years are also studying. The proportion of children who are doing housework and other activities with study increases rapidly. The children aged 5-9 years increased from 9.9 percent to 28.6 percent. The gap is high to children aged 10-14 years. The percentage increased from 29.7 percent to 62.7 percent which is more than two times of previous survey

**Table 4.6: Percentage of Children Activities in the previous Seven Days by Age Group**

Activity	2004/05			2009/10		
	5-9	10-14	Total	5-9	10-14	Total
Agriculture, fish or employed & do not study	0.8	1.6	1.2	0.3	1.3	0.8
Housework or household business & do not study	5.7	4.9	5.3	14.1	5.4	9.7
Agriculture, fish or employed & study	0.4	1.9	1.1	0.3	1.5	0.9
Housework or household business & study	9.5	27.8	18.1	28.3	61.2	44.9
Study only	35.3	58.4	46.2	29.9	29.0	29.5
No activity	48.4	5.5	28.1	27.2	1.6	14.3
<b>Total Percent</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>
<b>Number of Individuals</b>	<b>153,969</b>	<b>137,916</b>	<b>291,886</b>	<b>144,165</b>	<b>161,344</b>	<b>305,509</b>

Males have a rest time compared to females. Thirty one percent of males attending school without additional activity while their counterpart females is 27 percent. The opposite is true for those who are studying and doing additional work. The percentage of female is higher compared to males. This shows that females are more likely to be engaged in housework or doing household businesses compared to males. However the trend becoming worse for both male and females but still the variation between these two surveys is high for females compared for males (Table 4.7).

Most significant changes on the female side between the surveys is in the decrease by 17.6 percent in proportions that identified studying as their only preoccupation, followed by 11.5 percent less who identified themselves as having no activity, and lastly the 27.2 percent increase in those who identified housework or household business and study as their main activity.

Interestingly, the proportions of males who identify housework or household business and do not study, has increased by 6.5 percent between the surveys, while that of females has increased by a modest 2 percent. As an impact from this change, there are now 0.3 percent more males who identify themselves in this category than females, which has completely reversed the situation whereby 4.2 percent more females were identified in this category in the 2004/05 survey.

**Table 4.7: Percentage of Children Age (5-14) by Activities in the previous Seven Days and Sex**

Activity	Male		Female		Total	
	2004/05	2009/10	2004/05	2009/10	2004/05	2009/10
Agriculture, fish or employed & do not study	1.5	0.9	0.8	0.7	1.2	0.8
Housework or household business & do not study	3.3	9.8	7.5	9.5	5.3	9.7
Agriculture, fish or employed & study	1.4	1.0	0.8	0.8	1.1	0.9
Housework or household business & study	16.1	42.3	20.3	47.5	18.1	44.9
Study only	47.4	31.6	44.9	27.3	46.2	29.5
No activity	30.3	14.4	25.7	14.2	28.1	14.3
<b>Total Percent</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>
<b>Number of Individuals</b>	<b>150,642</b>	<b>149,016</b>	<b>141,244</b>	<b>153,643</b>	<b>291,886</b>	<b>305,509</b>

## Housing Characteristics

Monitoring housing characteristics over time is a vital input for the implementation of the ZSGRP where the target was everyone living in high-quality house. Intentionally, the HBS was designed to capture the information related to housing status aimed at providing comprehensive data on housing conditions that will monitor the above objective and enables comparisons with 2004/05 HBS.

The analysis of the housing characteristics discussed in this part provides an overview of the construction material of the main dwelling units, type of tenure, ownership of dwelling, sleeping rooms, electricity connectivity, sources of main fuel for both cooking and lighting, consumption of fire wood and charcoal, toilet facilities, garbage disposal and drinking water. A distinction is made between urban and rural settings as well as males and females. Table 4.8 presents the overall picture of the quality of the materials used for building of the main dwelling unit as reported.

## Foundation Material

The 2009/10 HBS collected data on type of material used for the foundation of the main dwelling. The HBS classified each dwelling unit according to the type of material mostly used in its foundation. The categories employed were "No

*foundation*", *"Stones in mud mortar"*, *"Stones loosely laid"*, *"Concrete / soil / burnt bricks / cement / lime stone"* and *"others"*, those households used fourth category considered has used a better quality of material used for foundation of their dwelling unit.

Thirty-one percent of the households used concrete / soil / burnt bricks / cement / lime stone as materials for foundation of the main dwelling unit. However, there are a significant proportion of the households living in the dwelling unit which has no foundation. The proportions of the households living in the dwelling units with no foundation are much higher in rural areas (41.7 percent) compared to eight percent reported in urban areas (Table 4.8).

There has been a very large improvement over the past five years in the proportion of households living in the dwelling units which has no foundation, declining from 37.9 percent in 2004/05 HBS to 27.9 percent reported in 2009/10 HBS. Almost all the decline in households without foundations is observed in rural areas. Since it implies the construction of new dwellings, this decline is so large that it might partly reflect concerns about changes in the sample composition raised in Chapter 1.

### **Floor Finishing Material**

The majority of households in Zanzibar are living in dwelling units where the floor material used either concrete, cement, tiles or timber (64.6 percent). There is also a significant proportion of the household living in the dwelling unit which has an earth floor (35.1 percent). Urban households live in the dwelling units with better floor materials (86.2 percent) compared to rural households which is 49.3 percent. It should be noted that in rural areas half of the households living in the dwelling which has an earth floor (50.6 percent).

### **Wall Materials**

The results presented in Table 4.8 shows that, a significant proportion of households in Zanzibar (36.2 percent) live in the dwelling units constructed with either poles, mud or stone as wall building materials. A substantial percentage of households lived in dwelling units using building materials of concrete, cement or stone (52.5 percent). Thus, the 2009/10 HBS results reflected some improvement in the quality of wall materials used by households for example, the dwelling units used poles and branches / grass decline from 12. 2 percent in 2004/05 HBS to 6.3 percent reported in 2009/10 HBS. Similar pattern were reported for the households living in the dwelling units used poles, mud or stone.

### **Roof Frame Materials**

The results revealed that more than 90 percent of the households live in houses with roofing frame material of poles. Almost the same pattern was found in rural and urban areas, which are 94.1 and 89.7 percents respectively. These results revealed that there is no significant change in terms of roof frame materials used for main dwelling.

### **Roofing Materials**

The HBS results revealed that over the past five years, metal sheets were the most common roofing materials used for construction of the main dwelling units for the majority of households in Zanzibar both in the rural and urban areas which is 62.6 percent and 89.1 percent respectively. At the national level, 73.6 percent of households had used metal sheets as roofing materials, which reflects a significant improvement compared to 61.8 percent reported in 2004/05 HBS. The use of modern housing materials is highest in Mjini and Magharibi districts (Maps 4.1 and 4.2)

**Table 4.8: Distribution of Household by Construction Materials of Main Dwelling Unit by Area**

Material	Rural		Urban		Total	
	2004/05	2009/10	2004/05	2009/10	2004/05	2009/10
<b>Foundation</b>						
No foundation	54.9	41.7	8.8	8.4	37.9	27.9
Stones in mud mortar	32.3	33.5	55.6	42.6	40.8	37.3
Stones loosely laid	1.9	3.3	9.3	4.6	4.6	3.8
Concrete / soil / burnt bricks / cement / lime stone	10.9	21.5	26.1	44.0	16.5	30.8
Others	0.1	0.1	0.2	0.5	0.1	0.2
<b>Total Percent</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>
<b>Number of Households</b>	<b>120,626</b>	<b>136,059</b>	<b>70,053</b>	<b>96,452</b>	<b>190,679</b>	<b>232,511</b>
<b>Floor</b>						
Earth	60.2	50.6	14.2	13.2	43.3	35.1
Concrete / cement / tiles / timber	39.4	49.3	85.2	86.2	56.2	64.6
Other	0.4	0.2	0.6	0.6	0.5	0.3
<b>Total Percent</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>
<b>Number of Households</b>	<b>120,626</b>	<b>136,059</b>	<b>70,053</b>	<b>96,452</b>	<b>190,679</b>	<b>232,511</b>
<b>Wall</b>						
Poles + branches / grass	17.3	8.9	3.5	2.6	12.2	6.3
Poles / mud / stone	50.6	47.8	22.3	19.9	40.2	36.2
Mud + poles	6.8	2.6	2.3	0.9	5.1	1.9
Mud bricks	3.6	3.0	6.9	0.8	4.8	2.1
Baked / burnt bricks	0.4	0.3	0.9	1.2	0.6	0.7
Concrete / cement / stone	21.1	37.1	64.1	74.3	36.9	52.5
Others	0.3	0.4	0	0.2	0.2	0.3
<b>Total Percent</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>
<b>Number of Households</b>	<b>120,626</b>	<b>136,059</b>	<b>70,053</b>	<b>96,452</b>	<b>190,679</b>	<b>232,511</b>
<b>Roof Frame</b>						
Poles	94.4	94.1	81.8	89.7	89.8	92.3
Sawn timber	4.6	5.8	11.9	8.2	7.3	6.8
Iron bars	0.3	0.0	5.6	2.0	2.3	0.9
Others	0.7	0.1	0.7	0.0	0.7	0.1
<b>Total Percent</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>
<b>Number of Households</b>	<b>120,626</b>	<b>136,059</b>	<b>70,053</b>	<b>96,452</b>	<b>190,679</b>	<b>232,511</b>
<b>Roof</b>						
Grass / leaves	47.4	36.3	12.9	7.7	34.7	24.4
Concrete	0.8	0.0	4.5	2.4	2.1	1.0
Metal sheets	50.6	62.6	81.1	89.1	61.8	73.6
Asbestos sheets	0.2	0.4	0.4	0.7	0.3	0.5
Metal tiles	0.3	0.3	0.4	0.0	0.3	0.2
Cement / clay tiles	0.5	0.4	0.6	0.1	0.6	0.3
Others	0.1	0.0	0.1	0.1	0.1	0.0
<b>Total Percent</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>
<b>Number of Households</b>	<b>120,626</b>	<b>136,059</b>	<b>70,053</b>	<b>96,452</b>	<b>190,679</b>	<b>232,511</b>

The results of the 2009/10 HBS shows that owner occupancy was more prevalent in the rural areas (92.1 percent) than the urban areas (69.2 percent) where, there is a significant proportion of the households mainly rented from private owners (13.3 percent). At national level, the results show that 82.6 percent of households own dwellings while 9.1 percent live without paying rent and 6.3 percent rent from private owners (Table 4.9). There has been a small decline over the past five years in the proportion of households living in owner-occupied dwelling units, declined from 84 percent reported in 2004/05 HBS to 82.6 percent captured in 2009/10 HBS.

**Table 4.9: Distribution of Households by Type of Tenure and Area**

Tenure	Rural		Urban		Total	
	2004/05	2009/10	2004/05	2009/10	2004/05	2009/10
Owned by household	90.6	92.1	72.6	69.2	84.0	82.6
Live without paying any rent	7.9	6.3	13.5	12.9	10.0	9.1
Rented : Private	0.8	1.3	9.6	13.3	4.0	6.3
Rented; Public real estate company	0.2	0.0	1.0	0.3	0.5	0.1
Rented: Employer	0.2	0.1	0.9	1.3	0.4	0.6
Rented: Employer subsidized rent	0.1	0.0	1.8	1.8	0.7	0.7
Rent : Relative at subsidized rent	0.2	0.1	0.4	0.4	0.3	0.2
Others	0	0.0	0.2	0.7	0.1	0.3
<b>Total Percent</b>	<b>100</b>	<b>100.0</b>	<b>100</b>	<b>100.0</b>	<b>100</b>	<b>100.0</b>
<b>Number of Households</b>	<b>120,626</b>	<b>136,059</b>	<b>70,053</b>	<b>96,452</b>	<b>190,679</b>	<b>232,511</b>

The results presented in table 4.10 further reveal notable variations in ownership of dwelling units, higher proportion owned by male (82.0 percent) compared to 16.3 percent by female. The same pattern reported for both rural and urban areas; in rural areas revealed that 84.1 percent of males own dwelling units compared to 14.8 percent of females. While in urban areas, 78.9 percent of males own the dwelling units compared to 18.3 percent of female. It should be noted that 1.6 percent of the dwelling units are owned by both male and female. Joint ownership by both males and females is more common in urban areas (2.4 percent) than rural areas (1 percent). The data imply that women are more likely to own a dwelling singly in urban areas, as well as being more likely to be joint owners. Men in urban areas own slightly less dwellings than those in rural areas, by a 5.2 percent margin. While 3.5percent more women in urban areas own dwellings, compared to those in rural areas.

**Table 4.10: Percentage Distribution of Households by Persons who Own the Dwelling and Area, 2009/10.**

Person own	Rural	Urban	Total
Male	84.1	78.9	82.0
Female	14.8	18.3	16.3
Both, male and female	1.0	2.4	1.6
Don't know	0.1	0.4	0.2
<b>Total percent</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>
<b>Number of Households</b>	<b>136,059</b>	<b>96,452</b>	<b>232,511</b>

Table 4.11 shows that there is no much difference in ownership of dwelling unit for males among the districts, the lowest proportion of males who own dwellings were reported in Wete district (73.1 percent) followed by Mjini district (78.6 percent). The rest of the districts indicated that the percentage of the males own dwelling range between 80 percent and 88 percent. In general, 82.0 percent of males own dwelling unit compare with 16.3 percent of females. Males in Kaskazini A district have the highest ownership of dwellings (88.2 percent compared to 10.8 for females), followed by those in Micheweni (87.8 percent compared to 11.6 for females) and Kusini districts (80.9 percent compared to 18.0 for females). Ownership of dwellings by women is highest in Wete district (24.6 percent contrasted to 73.1 for males), followed by Chake Chake district (18.2 percent contrasted to 80.2 for males) and Kusini district (18.0 percent contrasted to 80.9 for males). Joint ownership is most common in Mjini (3.4 percent), Mkoani districts (2.0 percent) and Kaskazini "B" district.

The result shows that in all districts females ownership of dwelling is less than 20.0 percent except for Wete district which is 26.6 percent.

**Table 4.11: Percentage Distribution of Households by Persons Own Dwelling and District, 2009/10**

District	Person own				Total percent
	Male	Female	Both, male and female	Don't know	
Kaskazini "A"	88.2	10.8	0.5	0.5	100.0
Kaskazini "B"	86.2	12.0	1.8	0.0	100.0
Kati	87.0	12.0	1.0	0.0	100.0
Kusini	80.9	18.0	1.1	0.0	100.0
Magharibi	83.4	16.6	0.0	0.0	100.0
Mjini	78.6	17.5	3.4	0.5	100.0
Wete	73.1	24.6	1.7	0.6	100.0
Micheweni	87.8	11.8	0.4	0.0	100.0
Chake Chake	80.2	18.2	1.6	0.0	100.0
Mkoani	81.4	16.6	2.0	0.0	100.0
<b>Total</b>	<b>82.0</b>	<b>16.3</b>	<b>1.6</b>	<b>0.2</b>	<b>100.0</b>

A sleeping room is defined as a part of a dwelling unit enclosed by four walls, floor and roof, which is used by at least one member of the household for sleeping. A dwelling unit with no partition is considered as having one room. Table 4.12 below presents the mean number of persons per sleeping room by area. It was reported that mean number of persons per sleeping room is 2.2. Rural areas registered almost the same mean number of persons per sleeping room vis-à-vis the urban areas which is 2.3 percent and 2.1 percent for rural and urban respectively.

In comparison with previous HBS, it is revealed that the average occupancy for each sleeping room was 2.2 persons, which is similar to the 2004/05 HBS. Similar pattern were experienced for both rural and urban areas.

**Table 4.12: Mean Number of Persons per Sleeping Room by Area.**

Mean	2004/05	2009/10
Rural	2.3	2.3
Urban	2.3	2.1
<b>Total</b>	<b>2.3</b>	<b>2.2</b>

Table 4.13 presents percentage distribution of the households connected with electricity grid for 2004/05 and 2009/10 HBS classified by residential areas (rural and urban). In fact, increased use of electricity is essential for balanced development for both rural and urban areas at the same time is a catalyst of sustainable development. The results show that households connected with electricity is substantially higher for 2009/10 HBS (38.3 percent) compared to the last five years (25.2 percent) reported in 2004/05 HBS. The survey suggests a major increase in the coverage of mains electricity which has benefitted both urban and rural areas.

For example in rural areas, household with no electricity connection declined from 93.1 percent to 83.9 percent.

The use of solar energy was not significant in Zanzibar, both in rural and urban areas. Less than one percent of households connected to solar energy. This segment of households using solar energy is reported in rural areas only. The limited use of solar energy may be attributed to the relatively high costs of initial installation.

**Table 4.13: Distribution of Households by Electricity Connection and Area.**

Connection	Rural		Urban		Total	
	2004/05	2009/10	2004/05	2009/10	2004/05	2009/10
Electricity	6.8	15.7	56.9	70.1	25.2	38.3
Solar	0.1	0.1	0.1	0.0	0.1	0.1
No	93.1	83.9	43.0	29.1	74.7	61.1
<b>Total Percent</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>
<b>Total Households</b>	<b>120,626</b>	<b>136,059</b>	<b>70,053</b>	<b>96,452</b>	<b>190,679</b>	<b>232,511</b>

Looking at districts differential for the households connected to electricity grid revealed that proportion of household with no electricity connection is 40 percent and above except for Mjini which is 19.6 percent (table 4.14). It should be noted that almost all districts, none of the households connected by solar energy except for Kaskazini "A" (0.5 percent), Kusini (0.4 percent) and Micheweni district (0.2 percent).

Micheweni and Kaskazini have the lowest proportion of households connected with electricity (see Map 4.3).

**Table 4.14: Distribution of Households by Electricity Connection and District**

District	Electricity		Solar		No	
	2004/05	2009/10	2004/05	2009/10	2004/05	2009/10
Kaskazini "A"	4.1	4.9	0.0	0.5	95.8	94.6
Kaskazini "B"	7.9	5.2	0.0	0.0	92.1	94.3
Kati	6.4	17.7	0.1	0.0	93.5	81.5
Kusini	19.5	24.0	0.0	0.4	80.5	75.4
Magharibi	34.1	60.1	0.1	0.0	65.8	39.6
Mjini	67.6	79.2	0.1	0.0	32.3	19.6
Wete	11.9	37.4	0.1	0.0	88.1	62.3
Micheweni	2.4	4.7	0.1	0.2	97.5	95.1
Chake Chake	19.3	39.4	0.1	0.0	80.6	59.8
Mkoani	6.2	13.4	0.1	0.0	93.7	86.5
<b>Total percent</b>	<b>25.2</b>	<b>38.3</b>	<b>0.1</b>	<b>0.1</b>	<b>74.7</b>	<b>61.1</b>

Electrification has long been a sign of modern development throughout the Zanzibar in general and at household level in particular. Once the household access to electricity, this facility can be used either as a source of fuel for cooking, lighting or both (Table 4.15). However, It should be noted that electricity is not a common source of fuel for cooking in Zanzibar where the results shows that only 0.9 percent of the households use the electricity for cooking. This proportion has declined over the past five years from 1.3 percent reported in 2004/05 HBS.

The main sources of fuel for cooking and lighting are presented in table 4.15. Of the seven sources of energy for cooking, firewood is far most commonly used in Zanzibar, which indicated that in every 10 households, seven households use firewood as source of energy for cooking followed by charcoal (26.2 percent).

Nine in every ten households in rural areas (90.7 percent) used firewood as their source of fuel for cooking compared to 42.7 percent reported in urban areas. While households use charcoal in rural areas as source of energy for cooking is 7.7 percent compared to 52.4 percent reported in urban areas. There has been a decline in the proportion of households using firewood and an increase in the proportion using charcoal between the two surveys.

Paraffin is the most common fuel used for lighting, reported by 61.0 percent of the households. Rural areas reported to have higher proportion (83.7 percent) compared to 29.1 percent reported in urban areas. The second most common source of light is electricity (38.3 percent). The households in rural areas are less likely to use electricity compared to urban households which is 15.4 percent and 70.5 percent for rural and urban respectively.

38 percent of households use electricity as a source of light in 2009/10 HBS, compared to 25.1 percent reported in 2004/05 HBS. On other hand the use of paraffin for lighting dropped over the last five years from 72.5 percent reported in 2004/05 HBS to 61.0 percent in 2009/10 HBS (Table 4.15).

**Table 4.15: Distribution of Households by Source of Fuel for Cooking and Lighting by Area.**

Source of Fuel	Rural		Urban		Total	
	2004/05	2009/10	2004/05	2009/10	2004/05	2009/10
Major fuel for cooking:						
Electricity	0.4	0.4	2.8	1.5	1.3	0.9
Gas	0.0	0.1	0.0	0.3	0.0	0.2
Bio gas	0.0	0.2	0.0	0.0	0.0	0.1
Paraffin	1.5	0.8	3	2.4	2	1.5
Charcoal	5.0	7.7	49.1	52.4	21.2	26.2
Firewood	92.8	90.7	44.3	42.7	75	70.8
Others	0.1	0.1	0.4	0.7	0.2	0.3
<b>Total</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>
<b>Total Households</b>	<b>120,626</b>	<b>136,059</b>	<b>70,053</b>	<b>96,452</b>	<b>190,679</b>	<b>232,511</b>
Major fuel for lighting:						
Electricity	6.7	15.4	56.8	70.5	25.1	38.3
Solar	0.0	0.1	0.0	0.0	0.0	0.0
Paraffin	90.4	83.7	41.7	29.1	72.5	61.0
Candles	0.8	0.2	0.8	0.4	0.8	0.3
Firewood	1.8	0.4	0.4	0.0	1.3	0.2
Others	0.1	0.2	0.1	0.1	0.1	0.2
<b>Total percent</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>
<b>Total Households</b>	<b>120,626</b>	<b>136,059</b>	<b>70,053</b>	<b>96,452</b>	<b>190,679</b>	<b>232,511</b>

Household's dependence on firewood and charcoal as a primary source of energy is causing serious deforestation problems in many developing countries including Zanzibar in particular. Reliable information on firewood consumption rates is needed to develop a forestation plans and to control deforestation. The 2009/10 HBS examined daily consumption of both firewood and charcoal.

Table 4.16 shows the daily consumption of firewood and charcoal for those households using that source of energy for cooking. The results shows that, average daily consumption of firewood per household is 7 kilograms; the highest average daily consumption of firewood per household reported in rural areas is 7.3 kilograms compared to 6.1 kilograms reported in urban areas. The mean daily consumption of charcoal is 4.2 kilograms per household. Rural households have consumed 8 kilograms and while urban households consumed 3.6 kilograms per household.

**Table 4.16: Mean Daily Consumption of Firewood and Charcoal for the Households Using that source by Area, 2009/10**

Consumption (kg)	Area		
	Rural	Urban	Total
Daily consumption of firewood	7.3	6.1	7.0
Daily consumption of charcoal	8.0	3.6	4.2

## Toilet Facilities

Poor sanitation coupled with unsafe water sources increase the risk of water-borne diseases and illnesses due to poor hygiene. This has contributed immensely to the disease burden in the society. Households without proper toilet facilities

are more exposed to the risk of diseases such as dysentery, diarrhea, and typhoid fever than those with improved sanitation facilities.

The table 4.17 shows that 18.9 percent of the households have no toilet and an additional 1.4 percent report using the seashore. One in every 5 households (19.6 percent) has a flush toilet, while the majorities (54.1 percent) use traditional pit latrine. There are differences in the type of toilet facilities by residence (rural and urban). Urban households are three times likely to have a modern flush toilet than rural areas (32.6 percent and 10.4 percent, respectively).

Over the last five years (2004/05 HBS), there has been a large improvement of toilet facilities compared to 2009/10 HBS. For example the result reflects an increase in proportion of household use flush toilets from 12.1 percent reported in 2004/05 HBS to 19.6 percent in 2009/10 HBS. In addition the households with no toilets have reduced to 18.9 percent from 27.6 percent. There was no much change in the proportion of households use traditional pit latrine which stood at about 50 percent of the household in both two survey periods.

**Table 4.17: Distribution of Households by Toilet Facility and Area**

Toilet Facility	Rural		Urban		Total	
	2004/05	2009/10	2004/05	2009/10	2004/05	2009/10
No toilet	41.4	30.7	3.8	2.1	27.6	18.9
Flush toilet	3.9	10.4	26.1	32.6	12.1	19.6
Pit latrine	44.4	51.6	67	57.8	52.7	54.1
VIP	1.7	4.7	2.6	7.5	2.0	5.9
Sea shore	5.6	2.4	0.2	0	3.6	1.4
Other	0	0.2	0	0.1	0	0.1
<b>Total percent</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>
<b>Number of households</b>	<b>120,626</b>	<b>136,059</b>	<b>70,053</b>	<b>96,452</b>	<b>190,679</b>	<b>232,511</b>

Looking at the results of toilet facility across the districts presented in table 4.18 revealed that there are differences in the type of toilet facilities among the districts. The highest proportion of the household living in the dwelling unit with no toilet was reported in Micheweni District (63.7 percent) followed by Mkoani (40.0percent), see **Map 4.4**.

The flush toilets were much commonly used in only three districts namely Magharibi (43.8 percent), Mjini (36.1 percent) and Wete (20.6 percent). The households in the Micheweni district are the least likely to have a flush toilet (0.8 percent).

**Table 4.18: Distribution of Households by Toilet Facility and District**

District	No toilet		Flush toilet		Pit latrine		VIP		Sea shore	
	2004/05	2009/10	2004/05	2009/10	2004/05	2009/10	2004/05	2009/10	2004/05	2009/10
Kaskazini "A"	39.8	32.5	2.8	2.4	50.0	64.4	0.8	0	5.9	0.7
Kaskazini "B"	24.9	20.2	6.6	11.6	50.8	63.2	1.4	0.7	5.1	3.8
Kati	16.4	7.0	3.8	11.6	76.5	79.8	0.6	0.6	2.1	1.0
Kusini	16	8.9	3.1	5.2	79	85.3	0	0	0.5	0.4
Magharibi	7.0	0.7	22.4	43.8	66.5	50.1	3.4	5.1	0	0.0
Mjini	1.3	0.4	25.3	36.1	72.2	63.2	1.1	0.3	0	0.0
Wete	44.0	22.3	6.1	20.6	32.7	45.0	0.7	6.7	11.7	5.4
Micheweni	74.1	63.7	3.1	0.8	12.6	27.5	0.5	5.6	6.5	2.4
Chake	45.2	25.3	7.1	8.5	39.5	41.0	2.7	25.2	3.6	0.0
Mkoani	56.6	40.0	2.1	1.7	25.7	37.7	6.4	17.7	7.4	2.7
<b>Total</b>	<b>27.6</b>	<b>18.9</b>	<b>12.1</b>	<b>19.6</b>	<b>52.7</b>	<b>54.1</b>	<b>2.0</b>	<b>5.9</b>	<b>3.6</b>	<b>1.4</b>

## Garbage Disposal

The garbage disposal system in any human settlement has direct impact on environmental and health conditions. The HBS captured the information related to garbage disposal, the topic referred to the collection and disposal of solid waste generated by the households from the housing unit. The response categories were designed to take account of most possible methods which are used known to exist in Zanzibar.

Table 4.19 below presents the distribution of households by means of garbage disposal by area. Most households dispose of their garbage by throwing it outside the compound (44.0 percent). Thrown inside the compound was the second most utilized method being used by the household (15.6 percent), followed by Rubbish pit outside the compound and Rubbish bin which is 13.3 percent and 12.5 percent respectively. The rest of the methods of garbage disposal reported were below 10 percent.

In urban areas, the most method commonly used for garbage disposal is Rubbish bin (29.3 percent). The second most garbage disposal is thrown outside the compound which accounts for 25.0 percent. While in rural areas, shows that most of the households thrown outside the compound (57.5 percent) followed by thrown inside the compound (20.9 percent).

In comparison with the last five years (2004/05 HBS) revealed that the pattern on methods of garbage disposal remained almost the same.

**Table 4.19: Distribution of Households by Means of Garbage Disposal by Area**

Garbage disposal	Rural		Urban		Total	
	2004/05	2009/10	2004/05	2009/10	2004/05	2009/10
Rubbish pit inside of compound	5.3	3.0	12.3	4.1	7.9	3.5
Rubbish pit outside the compound	9.1	10.9	26.7	16.7	15.6	13.3
Rubbish bin	0.3	0.6	23.6	29.3	8.9	12.5
Thrown inside the compound	22.7	20.9	6.7	8.1	16.8	15.6
Thrown outside the compound	58.5	57.5	25.1	25.0	46.2	44.0
Burning	3.5	6.1	5.1	8.4	4.1	7.0
Private collect Garbage	0	0.5		6.0	0	2.8
Others	0.5	0.5	0.4	2.5	0.5	1.3
<b>Total percent</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>
<b>Number of households</b>	<b>120,626</b>	<b>136,059</b>	<b>70,053</b>	<b>96,452</b>	<b>190,679</b>	<b>232,511</b>

## Access to Drinking Water

Increased access to safe drinking water results in improved health outcomes in the form of reducing cases of water-borne diseases such as dysentery and cholera. Information was collected in the 2009/10 HBS about certain characteristics of household drinking water, including source of drinking water, distance to drinking water, time taken to fetching drinking water, persons who usually fetching drinking water and household water consumption.

The household is classified as having access to safe drinking water if and only if it uses private piped water in housing, private piped water outside housing unit, piped water on neighbor's housing unit, piped water on community supply, protected public well and protected private well. In detail, the useful indicators related to source of drinking water required for monitoring and evaluation are presented from table 4.20 to 4.25, additional indicators are presented in Table B4.3

Table 4.20 shows that 89.5 percent of households use improved water sources (access to safe drinking water). Private piped water in housing is still a major source of drinking water (32.1 percent), while pipe water in community supply is the second most important source (24.1 percent). The combination of these two sources contributes more than half (56.2 percent) of the total households. In urban areas, nine in every 10 (94.3 percent) households have access to safe drinking water while rural households have 86.1 percent, .

These results complement the results of the 2004/05 HBS in the sense that almost the same pattern are experienced in 2009/10 HBS, however, there is some improvement over the period where the households access to safe drinking water increased from 72.7 percent reported in 2004/05 HBS compare with 86.1 percent in 2009/10 HBS.

**Table 4.20: Distribution of Households by Source of Drinking Water and Area**

Source of Drinking Water	Rural		Urban		Total	
	2004/05	2009/10	2004/05	2009/10	2004/05	2009/10
Private piped water in housing	11.8	19.3	47.5	50.1	24.9	32.1
Private piped water outside housing unit	15.6	16.3	26.5	10.7	19.6	14.0
Piped water on neighbor's housing unit	3.4	5.8	7.2	14.5	4.8	9.4
Piped water on community supply	27.9	34.7	10.5	9.2	21.5	24.1
Water sellers	0.3	0.4	1.6	1.2	0.8	0.7
Water tanks	0	0.0	1.1	1.2	0.4	0.5
Public well: Protected	18.8	8.8	2.5	6.1	0	7.7
Public well: Unprotected	17.4	12.7	1.2	2.8	11.4	8.6
Private well: Protected	2	1.0	1.6	3.8	1.9	2.2
Private well: Unprotected	0.7	0.6	0.2	0.4	0.5	0.5
Spring: Protected	1	0.0	0.1	0.0	0.7	0.0
Spring: Unprotected	0.7	0.2	0	0.1	0.5	0.1
Others	0.1	0.0	0	0.0	0.1	0.0
<b>Total percent</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>
<b>Number of Households</b>	<b>120,626</b>	<b>136,059</b>	<b>70,053</b>	<b>96,452</b>	<b>190,679</b>	<b>232,511</b>

The overall goal of the government is to ensure that all households in Zanzibar have access to safe drinking water within reasonable distance. Accessibility of drinking water in minimum distance from the settlement, the households will enable to use least amount of time for fetching water, as results household members mostly women will have enough time to participate in economic activity and generating income. On the other hand, the distance to drinking water, particularly in dry seasons, is a proxy indicator for poverty.

Table 4.21 presents the distribution of households by distance to drinking water and locality in dry seasons. Eighty-five percent of the households walk less than one kilometer for fetching water in the dry season. In urban areas a higher proportion of the households walk less than one kilometer (90.4 percent) compared to 81.9 percent reported in rural areas.

The households walk less than one kilometer for fetching water in dry season has increased from 77.7 percent reported in 2004/05 HBS to 85.4 percent in 2009/10 HBS. Similarly, the same pattern was observed in rural and urban areas.

**Table 4.21: Distribution of the Distance to Drinking Water in Dry Season by Area.**

Distance in km	Rural		Urban		Total	
	2004/05	2009/10	2004/05	2009/10	2004/05	2009/10
Less than 1	73.2	81.9	85.5	90.4	77.7	85.4
1.0-1.9	15.9	11.5	9.9	6.6	13.7	9.5
2.0-2.9	5.2	2.0	2.6	1.8	4.3	1.9
3+	5.7	4.4	2	1.1	4.4	3.1
<b>Total percent</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>
<b>Number of Households</b>	<b>120,626</b>	<b>136,059</b>	<b>70,053</b>	<b>96,452</b>	<b>190,679</b>	<b>232,511</b>

Looking at the differential among the districts show that more than 70 percent of the households from each districts walk less than one kilometer for fetching water in dry season except for Mkoani districts reported 55.6 percent of the households (Table 4.22 and Map 4.5 ).

There is a significant number of households in Mkoani and Kaskazini “A” walking three or more kilometers for fetching water in the dry season which is 9.2 percent and 7.7 percent respectively (Table 4.22). However, none of the household in Mjini district walking three or more kilometer for fetching water in dry season.

**Table 4.22: Distribution of Households by District and Distance to Drinking Water in Dry Season**

District	Less than 1		1.0-1.9		2.0-2.9		3+		Number of Households	
	2004/05	2009/10	2004/05	2009/10	2004/05	2009/10	2004/05	2009/10	2004/05	2009/10
Kaskazini A	64.7	76.3	19	15.0	7.3	1.0	9.1	7.7	16,737	20,531
Kaskazini B	85.1	71.9	8.3	19.7	5	4.9	1.6	3.5	10,958	15,736
Kati	95.8	91.0	3.4	2.2	0.5	0.9	0.4	5.9	12,586	15,465
Kusini	99.2	98.6	0.4	0.0	0.3	0.2	0	1.2	7,521	9,333
Magharibi	82.9	97.5	12	0.9	2.7	0.0	2.4	1.2	41,064	35,064
Mjini	92	91.3	5	6.0	1.7	2.8	1.3	0.0	35,080	51,444
Wete	56	91.3	16.5	2.7	13	0.3	14.5	5.7	18,710	23,406
Micheweni	75.9	92.7	18	6.6	1.7	0.0	4.4	0.7	16,335	19,821
Chakechake	61.6	77.6	25.4	19.2	7.2	2.9	5.8	0.2	14,215	19,636
Mkoani	60.4	55.6	29.7	29.3	4.6	6.0	5.3	9.2	17,474	22,074
<b>Total</b>	<b>77.7</b>	<b>85.4</b>	<b>13.7</b>	<b>9.5</b>	<b>4.3</b>	<b>1.9</b>	<b>4.4</b>	<b>3.1</b>	<b>190,679</b>	<b>232,511</b>

The time spent for fetching drinking water has an impact on households member's participation in economic activity and hence on generating income for their households. The Table 4.23 presents the time spent for fetching drinking water whereby it shows that majority of households (77.5 percent) spent less than 15 minutes for fetching drinking water.. While the mean time taken for fetching drinking water is 8.4 minutes.

Regarding usual time taken for fetching drinking water, findings show that major differences between urban and rural. Those households taken less than one minute for fetching drinking water is 53.7 percent reported in urban areas compared to 21.6 percent found in rural areas. The mean time spent to and from the source of drinking water are 6.0 minutes for the urban and 10.1 minutes for the rural households.

**Table 4.23: Distribution of Households Usual Time Spent for Fetching Drinking Water by Area, 2009/10.**

Time in Minutes	Area		
	Rural	Urban	Total
Zero	21.6	53.7	34.9
1-14	51.4	30.2	42.6
15-29	17.7	8.9	14.1
30-59	8.4	6.5	7.6
More than 1 hour	0.9	0.6	0.8
<b>Total Percent</b>	<b>100</b>	<b>100</b>	<b>100</b>
<b>Mean Time spent for fetching Water</b>	<b>10.09</b>	<b>6.02</b>	<b>8.4</b>
<b>Number of Households</b>	<b>136,059</b>	<b>96,452</b>	<b>232,511</b>

One third of all households have water available at home;more than half(52.5 percent)of urban households have water available at home compared to only one-fifth of rural households. The 2009/10 HBS findings show that most of the burden of fetching drinking water is on women which account for 23.1 percent compared to men which account for 5.6 percent. Water fetching is still predominant among women. One third of women in rural households are fetching drinking water (32.7 percent) compared to urban 9.7 percent of urban women and 5.6 percent of men.

To some extent most boys and girls are also involved in fetching drinking water which is 1.8 percent and 5.1 percent respectively. As a matter of fact, boys assist sparingly in fetching water in both rural (2.2 percent ) and urban areas (1.1 percent).

**Table 4.24: Percentage of Households by People who Fetching Drinking Water and Area, 2009/10**

Persons fetching water	Area		Total
	Rural	Urban	
Mostly boys	2.2	1.1	1.8
Mostly girls	7.8	1.4	5.1
Equally (boys and girls)	5.9	4.9	5.5
Mostly women	32.7	9.7	23.1
Mostly men	6.3	4.7	5.6
Equally (men and women)	10.4	16	12.7
Mostly women and children	15.1	9.7	12.8
Available at home	19.7	52.5	33.3
Total percent	100	100	100
<b>Number of Households</b>	<b>136,059</b>	<b>96,452</b>	<b>232,511</b>

The 2009/10 HBS captured the information on the household's daily water consumption; this information is useful input for policy makers on consumption that will provides insight or guidance in developing new related policies. It is recommended that for water to be sufficient every person need at least 20 liters per day.

The data confirm that the average household daily water consumption in 120.7 litres which align with average household size which is 5.5 (Table 2.1). The household daily water consumption was higher in rural areas (122.0 litres per households per day) compared to 118.9 litres per household per day reported in urban areas.

**Table 4.25: Average Households Daily Water Consumption (litre) by Area, 2009/10**

Water Consumption (litre)	Area		Total
	Rural	Urban	
Daily water consumption	122.0	118.9	120.7

## CHAPTER FIVE: HOUSEHOLD CONSUMER GOODS, PRODUCTIVE ASSETS AND ACTIVITIES

### 5.1 Introduction

This chapter presents information on household ownership of consumer goods, productive assets, ownership of land and livestock, household businesses, and main source of income. It also presents the utilization of banking and saving facilities.

Asset ownership is likely to be based at least partially on economic status, and household assets are unlikely to change in response to short-term economic shocks. Assets ownership could therefore be considered a measure of long-term economic status related to, but different from, consumption expenditure.

### Ownership of Consumer Goods

The proportion of households owning selected consumer goods by area is presented in Table 5.1 below. The result revealed that 77 percent of households own radio/radio cassette. Other consumer goods owned by more than 70 percent of the households are lanterns (86.2 percent), beds (95.5 percent), wooden boxes for keeping clothes (77.1 percent), cooking pots, cups and other kitchen utensil (93.1 percent),

The ownership of electrical items is more likely in urban areas than in rural areas. For example proportion of households own television is higher in urban areas (58.0 percent) compared to 12 percent reported in rural areas. This is due to a higher coverage of the electricity in urban areas compared to rural areas.

In general, the status of households' ownership for almost all items has increased from 2004/05 HBS to 2009/10 HBS except for such some consumer goods, particularly Radio/radio cassette. There has been a small decrease in households owned radio while there is significant increased households own video, television and DVD particularly in urban areas, as households move to higher quality media. In 2004/05 HBS the ownership of radio was 76 percent while in 2009/10 HBS it declined to 72 percent for rural areas, where as for urban areas it declined from 86 percent to 80 percent in the same period.

On the average there has been a large increase in the proportion of households owning mosquito nets which was 70.8 percent reported in 2004/05 HBS compared to 87.5 percent 2009/10 HBS. 89 percent of rural households reported owning mosquito nets in 2009/10 HBS compared to 67 percent reported in 2004/05 HBS.

**Table 5.1: Distribution of Household Assets by Area**

Consumer Goods	Rural		Urban		Total	
	2004/05	2009/10	2004/05	2009/10	2004/05	2009/10
Radio/radio cassette	75.9	71.7	87.2	85.1	80.1	77.3
Complete music system	0.5	0.5	4.2	4.5	1.9	2.2
Video	2.1	6.5	26.4	35.5	11.0	18.6
Television	5.0	11.5	42.0	58.0	18.6	30.8
DVD	0.2	4.7	2.7	28.7	1.1	14.6
TV antenna or decoder	3.3	8.5	31.3	41.4	13.6	22.1
Satellite dish	0.3	1.5	2.3	4.5	1.0	2.7
Telephone or fax	7.2	47.0	27.9	75.9	14.8	59.0
Computer, photocopy machine, printer etc	0.2	1.2	1.3	3.7	0.6	2.3
Sewing machine	14.9	18.3	36.9	38.0	23.0	26.5
Refrigerator, freezer	3.4	9.1	32.8	42.2	14.2	22.8
Iron	12.8	16.2	52.8	66.5	27.5	37.1
Electric or gas stove	0.9	2.3	11.7	14.2	4.8	7.3
Other stove	12.7	14.1	53.5	51.6	27.7	29.7
Lanterns	42.7	87.0	55.5	85.1	47.4	86.2
Watches	40.7	42.9	63.8	63.0	49.2	51.2
Mosquito net	67.2	89.5	77.1	84.6	70.8	87.5
Water heater	5.4	5.0	9.4	31.6	6.9	16.0
Chairs	36.4	38.7	58.8	64.9	44.7	49.5
Sofas	4.1	6.1	24.7	31.7	11.6	16.7
Tables	52.1	61.0	61.7	75.8	55.6	67.1
Beds	94.7	95.3	94.8	95.7	94.7	95.5
Wooden boxes for keeping clothes	81.4	82.5	62.5	69.4	74.5	77.1
Cupboards, wardrobes, bookcases, chest of drawer	19.1	31.3	61.1	77.0	34.5	50.3
Cooking pots, cups, other kitchen utensil	92.8	93.9	89.9	92.1	91.7	93.1
Non school books	54.0	64.7	40.2	46.4	48.9	57.1
Motor cycle	3.8	6.1	12.8	11.9	7.1	8.5
Motor vehicle	1.0	2.6	3.2	4.1	1.8	3.2
Bicycle	48.0	53.5	48.6	54.6	48.3	53.9
Out boat engine	0.6	0.4	0.2	0.3	0.4	0.3
Wheel barrow	0.9	1.8	1.9	4.0	1.3	2.7
Water pumping set	0.6	1.0	7.2	6.9	3.0	3.4
Spraying machine	0.1	0.2	0.2	0.1	0.1	0.1
Reapers	0.0	0.1	0.0	0.0	0.0	0.0
Harvesting and threshing machine	0.0	0.0	0.1	0.3	0.0	0.1
Hand milling machine	0.8	0.1	2.2	0.0	1.3	0.1
Fertilizer distributor	0.0	0.0	0.0	0.0	0.0	0.0
Wooden machine	0.0	0.3	0.1	0.2	0.0	0.2
Sugarcane crushing machine	0.0	0.0	0.0	0.0	0.0	0.0
Blocks machine	0.1	0.0	0.1	0.1	0.1	0.1
Washing machine	0.1	0.2	0.9	2.4	0.4	1.1
Wells	0.2	0.5	0.3	0.5	0.3	0.5
Generators	0.2	0.3	0.3	1.0	0.2	0.6
Others	0.7	1.3	1.8	1.3	1.1	1.3
<b>Total Households</b>	<b>120,626</b>	<b>136,059</b>	<b>70,053</b>	<b>96,452</b>	<b>190,679</b>	<b>232,511</b>

## Ownership of Productive Assets

The 2009/10 HBS also collected information on household ownership of productive assets such as items used in agricultural production, information on the ownership of animals, the ownership land and other items used in farming such as carts for cows or donkeys.

Table 5.2 presents the percentage of households by ownership of productive assets and area. Eighty-one percent of households own houses and 69 percent of the households own hoes and other farming tools. Ownership of these items is most widespread in rural areas than in urban areas. The survey revealed that, proportion of households own hoes and other farming tool is 82 percent in rural areas compared to 50 percent in urban areas.

The proportion of households owning field or land decreased from 61 percent to 57 percent in rural areas where as in urban areas it increased from 21 percent to 23 percent from 2004/05 HBS to 2009/10 HBS respectively. In the same way, households ownership of animals generally decreased between the two periods. In rural areas, the proportion of households reported owning cattle has declined from 25 percent to 22 percent and 67 percent to 61 percent for poultry, whereas goat/sheep decreased from 9 percent to 8 percent. A slightly decrease in proportion of hoes and other farming tools in rural area are also realized a decrease from 84 percent in 2004/05 HBS to 82 percent in 2009/10 HBS. On the average ownership of animals and agricultural equipment is higher in rural areas compared to urban areas.

**Table 5.2: Percentage of Households by Ownership of Productive Assets and Area.**

Productive Assets	Rural		Urban		Total	
	2004/05	2009/10	2004/05	2009/10	2004/05	2009/10
Cart (cow or donkey)	3.4	4.5	1.2	1.8	2.6	3.4
Boat or canoe	4.3	3.1	0.4	0.4	2.9	2.0
Cattle	24.8	22.5	3.9	3.8	17.1	14.7
Goats or sheep	9.4	8.0	1.7	2.0	6.6	5.6
Poultry	67.1	61.1	23.1	19.5	50.9	43.9
Donkeys	0.7	0.8	0.2	0.0	0.5	0.5
Field or land	61.0	56.7	21.3	23.3	46.4	42.9
House(s)	90.4	89.6	73.3	69.9	84.1	81.4
Business premises, container	1.9	2.6	2.2	3.9	2.0	3.1
Hoes and other farming tool	84.5	81.9	42.3	50.1	69.0	68.7
Toolkit	4.9	5.0	4.3	3.4	4.7	4.4
Fishing equipment	7.5	6.6	0.4	0.3	4.9	4.0
Harrows	2.0	2.2	0.8	2.4	1.6	2.3
Beehives	0.9	0.9	0.0	0.0	0.6	0.5
Wheel barrow	0.9	1.8	1.9	4.0	1.3	2.7
<b>Total Households</b>	<b>120,626</b>	<b>136,059</b>	<b>70,053</b>	<b>96,452</b>	<b>190,679</b>	<b>232,511</b>

## Ownership of Land

Table 5.3 shows that 43 percent of households own land for agriculture. The highest proportion of the households owning land for Agriculture is in rural area which is 57 percent compared to 23 percent reported in urban areas.

Apparently, there is a marginal decrease in number of household owning land for agriculture in rural areas for 2009/10 HBS compared to 2004/05 HBS, where as land ownership increased in urban areas.

The proportion of households owning land decreased from 59 percent to 57 percent in rural areas, and it increased from 20 percent to 23 percent in urban areas, for the period between two surveys.

**Table 5.3: Distribution of Households Owning/Not Own Land for Agriculture**

Ownership of Land	Rural		Urban		Total	
	2004/05	2009/10	2004/05	2009/10	2004/05	2009/10
Owning land for Agriculture	59.5	57.2	20.5	23.4	45.2	43.2
Use Land for Agriculture but not own	42.6	43.7	11.8	11.1	31.3	30.2
Both use land that owned and not owned	18.6	17.0	4.8	2.5	13.5	11.0

Six percent of the households that own land own four or more acres (Table 5.4 and figure 5.1) while 15 percent of the households own less than 1 acre. Further more the result revealed that three-quarters of households (78 percent) own less than three acres of land for agriculture and grazing while 22 percent of households own more than three acres.

The proportion of households that own four or more acres declines slightly in 2009/10 HBS which is 6 percent compared to 8 percent reported in 2004/05 HBS. In rural areas, the proportion of households reported owning less than three acres increased from 78 percent in 2004/05 HBS to 80 percent households in 2009/10 HBS, whereas in urban areas the proportion declined from 79 percent to 70 percent.. In rural areas the mean size of household holding) increased from 1.9 acres in 2004/05 HBS to 2.4 acres in 2009/10 HBS. The same trend is observed in urban where the mean size increased from 1.7 to 2.0 from 2004/05 HBS to 2009/10 HBS.

**Table 5.4: Distribution of Land Owned for Agriculture and Grazing by Size and Area**

Amount of Land Owned in Acres	Rural		Urban		Total	
	2004/05	2009/10	2004/05	2009/10	2004/05	2009/10
Less than 1	19.0	14.6	21.8	18.3	19.5	15.4
1.0-1.9	35.9	37.7	37.4	33.2	36.1	36.7
2.0-2.9	23.3	28.0	20.2	18.9	22.8	26.0
3.0-3.9	13.4	14.4	13.9	20.3	13.5	15.8
4+	8.4	5.3	6.8	9.3	8.2	6.2
<b>Total percent</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>
<b>Mean size of Holding Land (acres)</b>	<b>1.9</b>	<b>2.4</b>	<b>1.7</b>	<b>2.0</b>	<b>1.8</b>	<b>2.3</b>
<b>Size of holding land per Capita (acres)</b>	<b>0.4</b>	<b>0.7</b>	<b>0.3</b>	<b>0.4</b>	<b>0.4</b>	<b>0.6</b>
<b>Total Households With Holding Land</b>	<b>71,821</b>	<b>77,851</b>	<b>14,332</b>	<b>22,542</b>	<b>86,153</b>	<b>100,393</b>

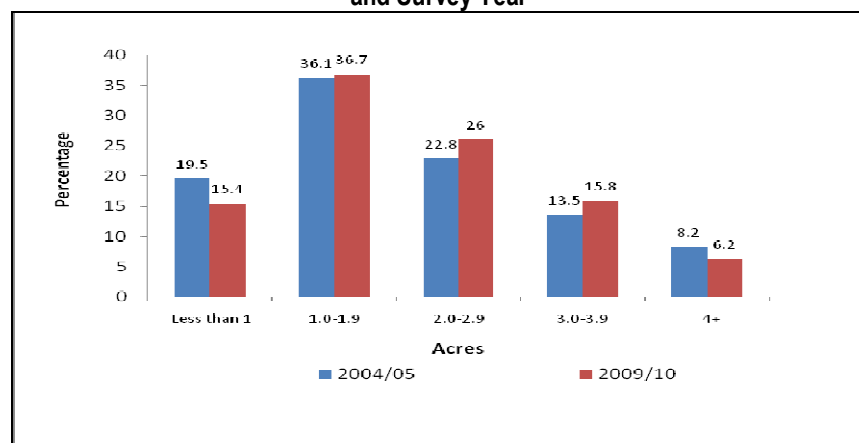
**Figure 5.1: Total Distribution of Land Owned for Agriculture and Grazing by Size and Survey Year**

Table 5.5 presents that 18 percent of households in Mjini district that own land, own four or more acres, which is high proportion compared to other districts. In Magharibi, 30 percent of households that own land own less than one acre.

**Table 5.5: Distribution of Households Owning Land for Agriculture and Grazing by Size of Land and District**

District	Less than 1		1.0-1.9		2.0-2.9		3.0-3.9		4+	
	2004/05	2009/10	2004/05	2009/10	2004/05	2009/10	2004/05	2009/10	2004/05	2009/10
Kaskazini "A"	17.3	13.8	44.9	45.9	23.8	27.9	9.7	6.8	4.4	5.7
Kaskazini "B"	19.2	8.4	33.1	27.3	18.4	34.0	21.5	28.7	7.8	1.6
Kati	14.1	22.9	43.5	28.8	19.9	20.8	13.4	18.3	9.1	9.2
Kusini	34.1	25.6	32.3	47.1	18.6	14.9	7.4	8.8	7.7	3.6
Magharibi	23.6	30.6	35.2	15.5	12.4	5.5	16.3	34.2	12.6	14.1
Mjini	14.9	9.9	30.8	22.7	22.5	13.5	25.6	35.5	6.2	18.4
Wete	17.7	14.4	37.6	41.4	27.0	27.4	11.1	13.3	6.5	3.6
Micheweni	19.3	6.1	38.9	40.1	25.2	36.7	11.9	10.7	4.6	6.4
Chake Chake	21.9	20.7	39.7	45.2	25.4	24.1	8.9	8.9	4.0	1.2
Mkoani	19.5	11.4	24.1	35.5	25.8	32.3	14.8	14.7	15.8	6.1
<b>Total</b>	<b>19.5</b>	<b>15.4</b>	<b>36.1</b>	<b>36.7</b>	<b>22.8</b>	<b>26.0</b>	<b>13.5</b>	<b>15.8</b>	<b>8.2</b>	<b>6.2</b>
<b>Total Individuals</b>	<b>16,827</b>	<b>15,485</b>	<b>31,218</b>	<b>36,818</b>	<b>19,671</b>	<b>26,079</b>	<b>11,635</b>	<b>15,817</b>	<b>7,052</b>	<b>6,194</b>

## Livestock

Table 5.6 shows the mean and medium number of livestock owned by area. For households that own animals, it was revealed that the average number of cattle and other large livestock is only three, while the average number of goat/sheep and poultry are five and nine respectively. The mean number of cattle and other large livestock for rural and urban area are the same.

The average number of cattle and other large livestock owned by households are the same between 2004/05 HBS and 2009/10 HBS, similar pattern reported for the average number of poultry own by households. In urban areas the average number of goats/sheep increased from 4 in 2004/05 HBS to 8 in 2009/10 HBS.

**Table 5.6: Mean and Median Number of Livestock Owned by Area.**

	Rural				Urban				Total			
	Mean		Median		Mean		Median		Mean		Median	
	2004/05	2009/10	2004/05	2009/10	2004/05	2009/10	2004/05	2009/10	2004/05	2009/10	2004/05	2009/10
Cattle and other large Livestock	3	3	2	2	3	3	2	2	3	3	2	2
Goat and Sheep	4	4	3	4	4	8	4	4	4	5	3	4
Poultry	10	10	7	7	8	7	5	5	9	9	7	7

**Table 5.7: Distribution of Households by Ownership of Livestock by District**

District	Large livestock		Medium Livestock		Small livestock	
	2004/05	2009/10	2004/05	2009/10	2004/05	2009/10
Kaskazini "A"	4.1	6.2	9.5	5.3	9.4	11.3
Kaskazini "B"	7.8	8.4	8.0	14.5	7.8	10.5
Kati	10.2	15.8	14.4	16.6	8.2	10.4
Kusini	2.6	3.5	6.3	12.0	3.7	4.8
Magharibi	10.0	4.2	12.2	3.4	15.9	10.1
Mjini	0.9	0.9	1.0	2.0	3.7	2.6
Wete	15.1	19.0	4.2	10.3	12.8	12.1
Micheweni	18.2	17.8	17.1	13.6	12.5	12.3
Chakechake	12.7	8.0	9.6	7.4	11.2	10.1
Mkoani	18.4	16.2	17.5	15.0	14.5	15.8
<b>Total</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>

Table 5.7 presents the households ownership of livestock by district. It was observed that Wete has proportion of large number of livestock (19.0 percent) compared to other districts followed by Michweni which has 17.8 percent. Higher proportion of medium livestock observed at Kati district (16.6 percent) followed by Mkoani. Mkoani has shown to have higher proportion (15 percent) of small livestock compared to other districts.

Magharibi reported a large decrease in its share of all types of animals between these two surveys. Large livestock decreases from 10 percent to 4.2 percent, medium livestock decreases from 12.2percent to 3.4 percent where as small livestock decreases from 15.9 percent to 10.1percent

## Household Sources of Income

The survey collected information on household's main sources of income. Table 5.8 shows the distribution of households by main source of cash income by area. It reveals that wages or salary in cash and other casual cash earning takes high proportion of 28.6 percent and 24.6 percent respectively then other source of income followed by sales of food crops (12.4 percent), cash remittance (11.5 percent). The proportions of households for the remaining sources of income are less than 10 percent.

The most commonly main source of income for the households in urban areas is wages or salaries in cash which is 48 percent compared to 18 percent of the households reported in the rural areas. The proportion of the households for other casual earning are almost the same between rural and urban areas. Further more the result observed that for 12 percent of the rural households their main sources of income is casual remittance compared to 9 percent reported in urban areas.

The proportion of households reporting wages or salaries as their main source of cash income has increased between the two surveys in both urban and rural areas.

**Table 5.8: Percentage Distribution of Households by Main Source of Cash Income by Area.**

Main source of income	Rural	Urban	Total
Wages or salaries in cash	18.0	48.0	33.0
Other casual cash earning	24.6	24.6	24.3
Sales of food crops	12.4	12.4	12.4
Cash remittance	11.5	11.5	11.5
Other sources of income	33.5	13.5	23.5

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### **Household s' Businesses**

Household business refers to formal and informal business that household were engaged during the survey period. The highest proportion of households engaged in business reported in rural areas is 34 percent compared to 29 percent in urban areas.

Survey findings show that 32 percent of the households reported having businesses in 2009/10 HBS compared to 30 percent observed in 2004/05 HBS. In rural areas,

households reported having businesses increased from 32.2 percent in 2004/05 HBS to 34.4 percent 2009/10 HBS; while in urban areas it increased from 25.4 percent to 28.9 percent. At district level, Kusini marks the highest percentage of households reporting businesses while Wete has the least number of households operating businesses (figure 5.2).

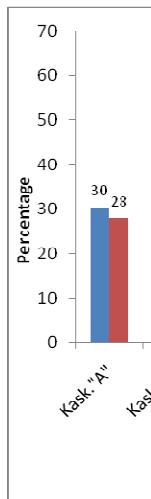
**Table 5.9:  
Percentage  
of  
Households  
Reporting  
Business  
by Area.**

Rural	Urban	Total
2004/05	2004/05	2004/05
2009/10	2009/10	2009/10
2004/05	2004/05	2004/05
2009/10	2009/10	2009/10
2004/05	2004/05	2004/05
2009/10	2009/10	2009/10
2004/05	2004/05	2004/05
2009/10	2009/10	2009/10

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Figure 5.2:  
 Proportion  
 of  
 Households  
 Reporting  
 Business  
 by Districts  
 and  
 Year of  
 Survey



### **Savings and Banking Services**

The distribution of household participation in saving/banking by area is presented in Table 5.10 and figure 5.3. Some 11 percent of households have at least one member with a saving or current account. Five percent participate in formal savings outside of a bank, while 18 percent participate in informal savings mechanisms.

The proportion of households participated in informal savings increased from 10 percent in 2004/05 HBS to 18 percent in 2009/10 HBS. Similar pattern of increase were reported for the remaining types of saving. The proportion of households participating in different - types of savings has increased in all areas., though they are all still more common in urban areas.

An access to bank loan remains limited. In the preceding twelve months of the survey; the proportion of households who took a bank loan is 2.7 percent in 2009/10 HBS, this marks an

increase  
compared to  
1.6 percent  
of  
households  
who took  
loan in  
2004/05.

**Table 5.10:  
Distribution  
of  
Households  
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n in  
Saving/Ban  
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Area.**

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Rural Urban  
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Urban total  
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by member of  
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account for  
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household  
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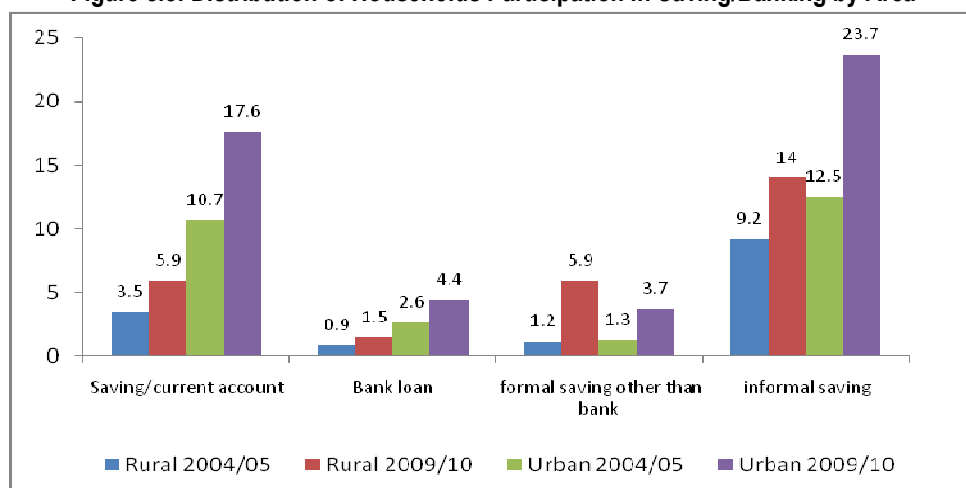
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**Figure 5.3: Distribution of Households Participation in Saving/Banking by Area**



Analysis of savings by district (Table 5.11) shows that Kusini has a higher proportion of households with members participating in an informal savings group system for both surveys (42.3 percent, 2004/5 HBS and 44.3 percent 2009/10 HBS); Magharibi has the largest proportion of households with members participating in bank saving or current accounts (23.3 percent); while in 2004/05 Mjini was the leading district to participate in bank savings.

**Table 5.11: Distribution of Households by Participation in Banking and District**

District	Saving or current account for member of household.		Bank loan taken by member of household during last 12 month.		Member of HH participate in a formal saving group systems.		Member of HH participate in an informal saving group systems.	
	2004/05	2009/10	2004/05	2009/10	2004/05	2009/10	2004/05	2009/10
Kaskazini "A"	2.2	2.2	1.2	0.6	0.5	5.9	6.8	5.5
Kaskazini "B"	2.9	3.4	0.6	1.1	1.2	5.9	5.9	11.3
Kati	5.1	4.6	1.5	1.9	3.8	12.8	19.7	20.1
Kusini	3.9	1.9	1.7	2.2	2.3	14.0	42.3	44.3
Magharibi	9.0	23.3	2.1	2.4	1.1	4.8	17.2	26.1
Mjini	12.7	19.2	2.9	2.9	1.6	3.5	10.4	24.3
Wete	1.8	8.6	0.9	6.0	0.6	3.1	1.9	12.4
Micheweni	0.9	2.0	0.1	2.1	0.7	3.6	0.5	8.3
Chake Chake	7.2	8.2	1.5	2.6	0.8	3.3	6.1	15.1
Mkoani	2.6	4.4	0.9	4.1	0.7	2.6	2.8	10.9
<b>Total</b>	<b>6.2</b>	<b>10.7</b>	<b>1.6</b>	<b>2.7</b>	<b>1.2</b>	<b>5.0</b>	<b>10.4</b>	<b>18.0</b>

## Decision Making

Decision making can be regarded as the mental processes resulting in the selection of a course of action among several alternatives. Every decision made produce a final choice. Women are vital for economic and social development. They are culturally responsible for health and wellbeing of society in their roles as wives and mothers.

Tables 5.12 to 5.14 show the participation of women and men in ownership of land and on decision making of households' income. The survey revealed that few women make decision on spending households' income: Only 23 percent of women make the final decision on spending compared to men (69.5 percent) while 7 percent make joint decision between women and men on spending households' income. Differences in decision making between rural and urban shows that, more men in rural areas (70.7 percent) making decision on spending their income than men in urban areas (67.7 percent).

**Table 5.12: Percentages of Households Own Land by People who Make Final Decision on Spending Household Income by Area.**

	Area		
	Rural	Urban	Total
Men	70.7	67.7	69.5
Women	22.4	24.9	23.4
Both	6.9	7.4	7.1
<b>Total</b>	<b>100</b>	<b>100</b>	<b>100</b>

Table 5.13 shows the ownership of land for agriculture by men and women. Only 22.3 percent of that land for agriculture owned by women while men own 55.5 percent and 22.2 percent are jointly own by both men and women. Ownership of land for agriculture is higher in rural areas than for women while in urban areas for men.

On households own land for livestock keeping, 34.7 percent of land for livestock owned by women, and 21 percent are jointly owned by both women and men. The results shows, urban households are more likely to own land for livestock keeping compared to rural households. Males are more likely to own land for livestock keeping than women.

**Table 5.13: Percentage of Households Own Land by Area and Gender**

		Area		
		Rural	Urban	Total
Owner of land for agriculture	Women	23.2	18.9	22.3
	Men	51.2	70.5	55.5
	Both	25.6	10.6	22.2
<b>Total percent</b>		<b>100</b>	<b>100</b>	<b>100</b>
Owner of land for livestock	Women	33.6	39.2	34.7
	Men	44.3	44.4	44.3
	Both	22.1	16.4	21.0
<b>Total Percent</b>		<b>100</b>	<b>100</b>	<b>100</b>

Income might be in cash, in kind, or services. Table 5.14 shows percentages of women and men who make decision on agricultural and livestock incomes. Only 18.8 percent of the household's women make decision on spending the incomes from agriculture compared to 48.5 percent of men. 32.7 percent of the households own land for agriculture both men and women decided on how to spent their income . More men in rural areas make decision (58 percent) compared to 46.9 percent of men in rural areas; while more women in rural areas make decision(19.7 percent) than women in urban areas (13.2 percent).

In the same way, 29.5 percent of the household's women have decision on incomes from livestock compared to men (44.6 percent). This confirmed that even in agricultural and livestock activities, where women fully participating, men has final decision on spending the household's income.

**Table 5.14: Percentage of Households own Land and Livestock by People who make final Decision on Spending Household Income from Agriculture by Area.**

		Rural	Urban	Total
Person who has decision on income from agriculture	Women	19.7	13.2	18.8
	Men	46.9	58.0	48.5
	Both	33.4	28.8	32.7
	<b>Total percent</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>
Person who has decision on income from livestock	Women	30.1	24.2	29.5
	Men	43.6	52.3	44.6
	Both	26.3	23.5	25.9
	<b>Total percent</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>

## Conclusion

This chapter examined the information on ownership of consumer goods and productive assets, ownership of land for agriculture and for livestock, household business and source of income. Renting a house is uncommon to the residence

of Zanzibar Island. The 2004/05 HBS shows that 84 percent of households own their own houses, nevertheless the proportion dropped to 81 percent in 2009/10 HBS. The proportion of household owned hoes and other farming tool decreased in rural this is due to people shifting from agriculture to other sectors.

Wages or salaries in cash dominated in urban areas whereas in rural areas other casual cash earnings are the main source of income. The proportion of households reporting wages or salaries as their main source of cash income has increased between the two surveys in both urban and rural areas. There has also been an increase in the proportion of households reporting a business in urban and rural areas.

There has also been an increase in households' participation in savings mechanisms and in the use of financial services. Informal savings mechanisms remain the most common and they more frequent in urban areas, but have increased in both urban and rural areas. Nevertheless still only 11 percent of households have a member with a bank account.

More than 80 percent of households own mosquito nets; this is due to the malaria campaign. The ownership is higher in rural than urban (2009/10 HBS) while the previous survey the ownership is higher in urban areas than in rural areas. The 2009/10 HBS shows that 77percent of households own a radio, 30 percent own television and 59 percent own telephones; all have increased compared with the previous survey apart from the ownership of radios. Urban households are more likely to own electronic items while rural households are more likely to own hoes and other farming tools. The ownership of bicycles increased from 48 percent to 54 percent of households.

In addition more rural households reported to own agriculture land than urban households. However, possession declined from 60 percent to 57 percent in rural areas and increased from 21 percent to 23 percent in urban areas.

## CHAPTER SIX: HOUSEHOLD CONSUMPTION AND EXPENDITURE

### 6.1 Introduction

This chapter presents summary of consumption and expenditure aggregate and pattern for the 2009/10 and draws the comparisons against the 2004/05 data. The information gathered includes the items consumed, how they were acquired and the costs involved. The chapter examines the levels of households' per capita expenditure and consumption. The structure of consumption provided in this chapter is useful for the construction of the Consumer Price Index. Information on food security is also provided in this chapter.

### Measuring Consumption and Expenditure

Similar to the previous survey, this survey collected consumption data using two main approaches - the diary and the twelve month recall schedules. In both cases, the type and the cost of the items consumed by households are recorded. Household consumption is obtained by summing up the values of each consumption items, which includes items purchased and those that were received from other sources, such as the own produced goods and services as well as, gifts and transfers in kind or otherwise from other households and items gathered from forests. For items that were not purchased, their quantities and local market prices were recorded.

The survey took place for 12 months, but each household was interviewed for one month only. Each month was used to cover specific sample of households. As a result of this arrangement, some households were interviewed in July, others in August, others in September and so on. Since months have different total number of days, ranging from 28 for February in lean year to 31 in others, a decision was made to standardize consumption for each household into 28 days to allow comparability across months. This standardization was also done in the 2004/05 survey. Further, inflation rate for each month was calculated and used to deflate household consumption into real comparable values. Adjustment for price variation was done across districts to ensure that all consumption are reported in the same price level to allow comparability. This approach is similar to the approach adopted for the 2004/05 survey.

### Average Consumption Expenditure Levels

Table 6.1 reports the mean and median household total expenditure and per capita expenditure over 28 days in 2009/10 prices. There is marginal improvement in both mean and median total household expenditures. The mean total household expenditure increased from TAS 234,114 in 2004/05 to TAS 242,260 in 2009/10. The median total household expenditure over this period also increased from TAS 190,487 to TAS 201,991. Both the mean and median per capita expenditure also increased over this period. Urban households enjoyed higher consumption in both survey periods. In either case, the mean values are higher than the corresponding median values, which indicates that there is inequality in the society.

**Table 6.1: Average Household Expenditure (28 Days) by Area (in 2009/10 Prices)**

Area	Total Household Expenditure for 28 Days (TShs.)				Total Per Capita Expenditure for 28 Days (TShs.)			
	2004/05	2009/10	2004/05	2009/10	2004/05	2009/10	2004/05	2009/10
	Mean		Median		Mean		Median	
Rural	190,906	194,104	166,725	170,303	35,976	36,297	30,800	30,860
Urban	308,516	310,206	252,248	263,573	51,974	54,826	41,790	44,440
Total	234,114	242,266	190,487	201,991	42,276	44,238	34,297	35,838

Table 6.2 reports the average household expenditures per district in the 2009/10 values. There is notable variation in both total household expenditure and per capita expenditure across districts. Mjini district had the highest per capital expenditure both in 2004/5 and 2009/10; Micheweni had the lowest for both period and the range has slightly increased. As a matter of fact, the per capita expenditure for Micheweni has declined from TAS 28,551 in 2004/5 to TAS 26,589 in 2009/10..The districts that enjoyed the largest increase in the per capita expenditure are Mjini and Kusini..

**Table 6.2: Average Household Expenditures (28 Days) by District (in 2009/10 Prices)**

District	Total Household Expenditure for 28 Days (TShs.)				Total Per Capita Expenditure for 28 Days (TShs.)			
	2004/05	2009/10	2004/05	2009/10	2004/05	2009/10	2004/05	2009/10
	Mean	Median	Mean	Median	Mean	Median	Mean	Median
Kaskazini "A"	190,781	188,451	166,480	188,536	36,169	36,667	30,406	32,537
Kaskazini "B"	167,396	171,983	147,219	158,847	33,306	37,644	29,183	33,329
Kati	206,427	194,298	181,240	169,881	39,770	40,469	33,204	34,540
Kusini	168,607	177,903	153,085	162,430	36,239	43,309	31,591	37,329
Magharibi	248,960	294,516	208,741	235,891	46,172	49,553	38,662	42,408
Mjini	350,219	344,740	290,763	298,861	57,451	64,536	45,874	52,909
Wete	185,561	204,475	160,576	187,155	32,618	34,576	28,208	29,806
Micheweni	152,083	154,391	141,192	144,998	28,551	26,589	24,966	23,575
Chake Chake	234,999	240,871	199,950	206,447	38,437	39,157	32,590	33,529
Mkoani	225,577	201,655	202,579	182,649	40,791	35,381	35,577	30,836
<b>Total</b>	<b>234,114</b>	<b>242,266</b>	<b>190,487</b>	<b>201,991</b>	<b>42,276</b>	<b>44,238</b>	<b>34,297</b>	<b>35,838</b>

## Structure of Consumption

Table 6.3 presents the distribution of mean per capita expenditure by category of item and by area. The consumption share is obtained in the plutocratic way. Consumption items are categorized in terms of the UN system of Classification of Individual Consumption by Purpose (COICOP) for the purpose of the CPI. Food share has declined from 55.1percent in 2004/05 to 52.2 percent in 2009/10. The decline in food share in urban area is relatively larger increase that that in the rural area, which could also imply faster increase in welfare in urban area. Share of clothing and foodware as well as that of communication have increased.

**Table 6.3: Distribution of Mean Per Capita Expenditure (28 Days) by Category of Item by Area**

Item	2004/05			2009/10		
	Rural	Urban	Total	Rural	Urban	Total
Food & Non Alcoholic Beverages	59.8	50.1	55.1	58.0	47.0	52.2
Alcoholic Beverages & Tobacco	0.4	0.4	0.4	0.3	0.2	0.2
Clothing & Footwear	6.5	7.4	6.9	6.8	11.1	9.0
Housing, Water, Fuel & Power	15.4	18.1	16.7	16.9	18.7	17.9
Furniture, Household Equipment & Household Maintenance	5.4	6.0	5.7	4.4	4.8	4.6
Health	2.2	2.0	2.1	1.3	1.8	1.6
Transportation	3.7	5.1	4.4	4.6	5.7	5.2
Communication	0.5	1.5	1.0	2.3	3.0	2.7
Recreation & Entertainment	0.5	0.6	0.5	0.3	0.7	0.5
Education	1.1	1.8	1.4	1.5	2.5	2.0
Restaurants & Hotels	2.3	3.7	3.0	1.2	1.4	1.3
Miscellaneous Goods & Services	2.2	3.4	2.8	2.3	3.2	2.8
<b>Total</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>
<b>Mean Per Capita Expenditure (28 Days) – Tshs (nominal values)</b>	<b>18,003</b>	<b>26,008</b>	<b>21,155</b>	<b>36,297</b>	<b>54,826</b>	<b>44,238</b>

Households have been classified as low, middle or high based on their levels of expenditure. Table 6.4 and Map 6.1 show the structure of consumption patterns by these levels and district. Mjini, Magharibi and Kati were revealed to have the highest average per capita expenditure in 2004/05 HBS while in 2009/10 HBS Mjini, Magharibi and Kusini are observed to have the highest average per capita expenditure. In either case, the levels of per capita expenditure in these richer districts are about two or three times those of the middle and lower incomes, respectively.

**Table 6.4: Average per Capita Expenditures (28 Days) by District and Expenditure Level.**

District	Total Per Capita Expenditure for 28 Days (TShs.)							
	Expenditure Level							
	Low		Middle		High		Total	
	Mean (TShs.)	Median (TShs.)	Mean (TShs.)	Median (TShs.)	Mean (TShs.)	Median (TShs.)	Mean (TShs.)	Median (TShs.)
<b>2004/05</b>								
Kaskazini "A"	23,221	23,626	38,436	37,907	71,886	62,539	36,169	30,406
Kaskazini "B"	22,995	23,672	38,568	38,449	70,083	62,708	33,306	29,183
Kati	23,986	24,540	38,147	37,453	79,209	70,163	39,770	33,204
Kusini	24,305	24,617	38,959	38,234	69,394	61,350	36,239	31,591
Magharibi	23,395	24,197	38,863	38,176	75,138	64,661	46,172	38,662
Mjini	24,503	25,576	39,570	39,173	87,130	72,193	57,451	45,874
Wete	22,338	22,669	38,054	37,460	71,790	63,378	32,618	28,208
Micheweni	21,120	21,077	37,889	37,279	66,665	61,655	28,551	24,966
Chake Chake	23,598	23,984	38,417	37,980	73,750	62,054	38,437	32,590
Mkoani	24,407	24,901	38,905	38,336	70,222	60,967	40,791	35,577
<b>Total</b>	<b>23,188</b>	<b>23,779</b>	<b>38,743</b>	<b>38,201</b>	<b>78,369</b>	<b>66,357</b>	<b>42,276</b>	<b>34,297</b>
<b>2009/10</b>								
Kaskazini "A"	23,855	24,420	38,857	37,618	70,645	64,557	36,667	32,537
Kaskazini "B"	23,783	24,481	39,842	39,116	69,808	64,203	37,644	33,329
Kati	24,280	24,677	39,619	38,966	77,484	66,946	40,469	34,540
Kusini	26,065	26,490	39,391	38,415	73,961	65,237	43,309	37,329
Magharibi	25,782	25,425	40,860	40,144	76,643	64,069	49,553	42,408
Mjini	27,048	27,714	40,940	41,840	89,379	74,685	64,536	52,909
Wete	22,541	22,917	39,567	39,189	72,053	60,650	34,576	29,806
Micheweni	21,956	21,689	37,344	36,494	63,766	60,524	26,589	23,575
Chake Chake	22,630	25,025	39,443	38,463	75,235	67,818	39,157	33,529
Mkoani	22,045	22,408	39,957	39,450	71,908	66,632	35,381	30,836
<b>Total</b>	<b>23,560</b>	<b>24,020</b>	<b>39,932</b>	<b>39,384</b>	<b>80,635</b>	<b>67,560</b>	<b>44,238</b>	<b>35,838</b>

Table 6.5 shows the distribution of expenditure shares by three consumption groups – low, middle and upper (based on the 33<sup>rd</sup> percentile and the 66<sup>th</sup> percentile). As expected, food share declines by income groups. Inter-survey comparison of changes in shares shows the food shares for the lower and middle income groups declined marginally by about 0.4 percentage points between 2004/05 and 2009/10. However, the upper income group recorded substantial decline in food share – by about 6 percentage points. The increase in the share of clothing and foodware is also proportional to income groups where as the increase in share of communication accounted by the middle consumption groups.

**Table 6.5: Distribution of Mean Per Capita Expenditure (28 Days) by Category of Item and Expenditure Level**

Item	Expenditure Level, 2004/05				Expenditure Level, 2009/10			
	Low TShs.	Middle TShs.	High TShs.	Total TShs.	Low TShs.	Middle TShs.	High TShs.	Total TShs.
Food & Non Alcoholic Beverages	62.60	58.40	50.40	55.10	62.2	58.0	44.5	52.2
Alcoholic Beverages & Tobacco	0.30	0.30	0.50	0.40	0.2	0.2	0.3	0.2
Clothing & Footwear	6.70	6.90	7.10	6.90	6.9	7.7	10.7	9.0
Housing, Water, Fuel & Power	15.90	16.90	16.90	16.70	17.8	17.8	17.9	17.9
Furniture, Household Equipment & Household Maintenance	4.10	4.90	6.70	5.70	3.5	4.3	5.3	4.6
Health	2.20	2.20	2.00	2.10	1.3	1.4	1.8	1.6
Transportation	2.60	3.10	5.80	4.40	2.4	2.8	7.8	5.2
Communication	0.20	0.50	1.60	1.00	1.5	2.4	3.3	2.7
Recreation & Entertainment	0.30	0.30	0.70	0.50	0.2	0.3	0.8	0.5
Education	1.40	1.50	1.40	1.40	1.5	1.7	2.5	2.0
Restaurants & Hotels	1.90	2.50	3.70	3.00	0.8	1.0	1.7	1.3
Miscellaneous Goods & Services	2.00	2.50	3.30	2.80	1.7	2.5	3.4	2.8
<b>Total</b>	<b>100.00</b>	<b>100.00</b>	<b>100.00</b>	<b>100.00</b>	<b>100.00</b>	<b>100.00</b>	<b>100.00</b>	<b>100.00</b>

## 6.2 Food Security

Household insecurity on food is another dimension of poverty. Tables 6.6 and 6.7 below outlines the distribution of households by usual number of meals consumed per day. The table shows that almost all households have at least two meals per day; two-thirds (66.2 percent) consume three meals per day. In urban areas, at least four in every five households have three or more meals per day compared to half of households in rural.

A similar feature (of having at least two meals) was observed in the 2004/05 HBS, but with two-fifths of households having two meals and 56.5 percent with three meals per day. Half of rural households had two meals per day and 77.6 percent of urban households had at least three meals per day. These statistics reveal that there is more food security today than that observed in the previous survey.

More than four-fifths of households at Magharibi, Mjini, and Kusini districts had three or more meals per day compared to less than two-fifths of households at Kaskazini 'A' and Micheweni. This reflects a similar feature to that observed in 2004/05 HBS.

**Table 6.6: Percentage of Households by Usual Number of meal Consumed per Day and Area**

Number of meals consumed	Rural		Urban		Total	
	2004/05	2009/10	2004/05	2009/10	2004/05	2009/10
1	1.4	0.5	0.3	0.1	1.0	0.4
2	53.6	42.9	21.5	18.1	41.8	32.6
3+	44.3	55.7	77.6	80.9	56.5	66.2
Not Stated	0.0	0.8	0.0	0.9	0.0	0.9
<b>Total Percent</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>
<b>Number of Households</b>	<b>120,626</b>	<b>136,059</b>	<b>70,053</b>	<b>96,452</b>	<b>190,679</b>	<b>232,511</b>

**Table 6.7: Percentage of Households by Usual Number of meal Consumed Per Day and District**

District	2004/05				2009/10				
	Number of meals consumed per day				Number of meals consumed per day				
	1	2	3+	Total	1	2	3+	Not stated	Total
Kaskazini "A"	2.5	60.4	37.1	100	0.2	66.7	31.6	1.5	100.0
Kaskazini "B"	0.1	61.6	38.3	100	1.5	54.2	44.2	0.0	100.0
Kati	0.4	60.5	39.2	100	0.8	43.6	55.5	0.1	100.0
Kusini	0.1	28.3	71.7	100	0.2	15.9	82.6	1.2	100.0
Magharibi	0.2	25.7	74.1	100	0.1	13.2	86.6	0.1	100.0
Mjini	0.3	21	78.7	100	0.2	19.3	80.5	0.0	100.0
Wete	2.5	47.2	50.3	100	0.2	29.2	67.7	2.9	100.0
Micheweni	4.2	68.7	27.2	100	0.7	59.4	37.4	2.4	100.0
Chake Chake	0.1	37.7	62.2	100	0.0	27.5	72.2	0.4	100.0
Mkoani	0.4	59.4	40.2	100	0.5	30.7	67.3	1.4	100.0
<b>Total</b>	<b>1.0</b>	<b>42.1</b>	<b>56.9</b>	<b>100</b>	<b>0.4</b>	<b>32.6</b>	<b>66.2</b>	<b>0.9</b>	<b>100.0</b>

Tables 6.8 and 6.9 show the distribution of households which ever had few meals by number of days. Two-thirds of households (67.6 percent), with more than half of rural households, reported that they never had any problem in meeting their meals. One quarter of households reported to suffer fewer meals in not exceeding 7 days in the 30 days preceding the survey. Only few households (7.5 percent) experienced the problem in more than 7 days in the month. The problem of shortage of meals is less common in urban. More than four-fifths (83.6 percent) had never experienced the problem.

Differentials between districts suggests that less than one-fifth (18.6 percent) of households in Kaskazini 'A' and half of households in Micheweni districts reported to never had experience in meeting their meals. In turn, two-thirds of Kaskazini 'A' district, one-third of Kaskazini 'B' district, and one-third of Micheweni district reported to face food shortages (meals) between 1-7 days in a month. The same three districts have more than 10 percent of its households reported to ever had few meals in between 8-14 days.

**Table 6.8 : Percentage Distribution of Household ever had fewer Meals than the Usual number in the Past 30 days by the Number of days and Area.**

Days	Rural	Urban	Total
0	56.2	83.6	67.6
1-7	32.9	13.7	24.9
8-14	8.7	2.5	6.1
15-21	1.6	0.3	1.1
22-30	0.6	0	0.3
<b>Total percent</b>	<b>100</b>	<b>100</b>	<b>100</b>
<b>Number of Households</b>	<b>136,059</b>	<b>96,452</b>	<b>232,511</b>

**Table 6.9 : Percentage Distribution of Household ever had fewer meals than the usual number in the Past 30 days by the Number of days and District**

District	Days					Total
	0	1-7	8-14	15-21	22-30	
Kaskazini "A"	18.6	67.9	11.5	2.0	0.0	100.0
Kaskazini "B"	45.9	33.5	12.2	6.1	2.3	100.0
Kati	66.9	27.9	4.5	0.7	0.0	100.0
Kusini	64.9	31.4	3.8	0.0	0.0	100.0
Magharibi	70.1	26.3	2.9	0.1	0.6	100.0
Mjini	85.1	11.6	3.2	0.1	0.0	100.0
Wete	78.8	14.2	5.3	1.6	0.0	100.0
Micheweni	54.8	34.2	10.3	0.6	0.0	100.0
Chake Chake	75.6	13.9	8.8	1.6	0.1	100.0
Mkoani	77.6	15.6	5.7	0.3	0.9	100.0
<b>Total</b>	<b>67.6</b>	<b>24.9</b>	<b>6.1</b>	<b>1.1</b>	<b>0.3</b>	<b>100.0</b>

In assessing food security, households were asked if in the preceding work they consumed specified food items. The specified foods included those with proteins, vitamins, carbohydrates, fats and oils. The distribution, in mean number of days households consume specified food is given in tables 10 and 11 below.

About five days (4.8) in a week households consumed rice and in 4.5 days households consumed fish. Meat and milk was consumed only in few days in a week preceding the survey. These statistics tally with the findings of 2004/05 HBS for common items between the two surveys - that is rice, meat and milk. Fish has remained the main source of protein for Zanzibar households.

The same pattern of consumption is observed between rural and urban households, as well as between districts; except that the mean number of days households consume meat, milk, and fats and oils is higher in urban compared to rural.

**Table 6.10: Mean Number of Days of Consuming Specified Food in the Preceding Week by Area**

Type of Food	Rural		Urban		Total	
	2004/05	2009/10	2004/05	2009/10	2004/05	2009/10
Meat	0.3	0.4	0.9	0.9	0.5	0.6
Fish	4.5	4.5	4.6	4.5	4.6	4.5
Eggs	0.1	0.2	0.5	0.6	0.3	0.4
Milk	0.5	0.5	1.1	1.0	0.7	0.7
beans/legume types	1.4	1.5	1.7	1.7	1.5	1.6
Fruits	-	1.9	-	1.9	-	1.9
Cassava	-	2.3	-	1.4	-	1.9
Rice	-	4.8	-	4.9	-	4.8
Sweet potatoes	-	0.4	-	0.3	-	0.4
Vegetables	-	1.5	-	1.6	-	1.6
Oil/Oils types	-	1.8	-	2.7	-	2.2

**Table 6.11: Mean Number of Days of Consuming Specified Food in the Preceding Week by Districts.**

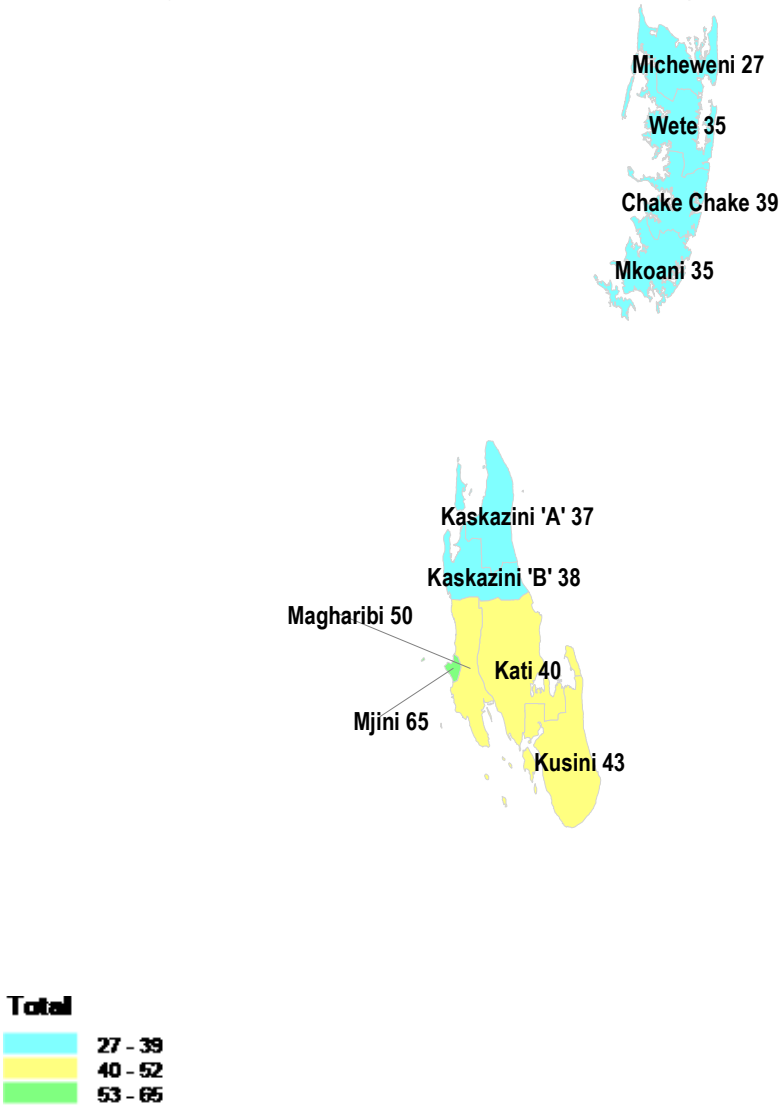
District	District										Total
	Kaskazini "A"	Kaskazini "B"	Kati	Kusini	Magharibi	Mjini	Wete	Micheweni	Chake Chake	Mkoani	
Meat	0.3	0.4	0.5	0.4	0.7	1.2	0.4	0.2	0.5	0.3	0.6
Fish	4.5	3.5	4.2	4.3	4.3	4.6	4.7	4.7	4.6	4.8	4.5
Eggs	0.2	0.2	0.3	0.3	0.4	0.8	0.3	0.1	0.2	0.1	0.4
Milk	0.2	0.5	0.8	0.6	0.8	1.1	0.8	0.6	0.6	0.4	0.7
Beans/legume types	1.5	1.6	1.8	1.8	1.9	1.7	1.5	1.7	1.1	1.2	1.6
Fruits	3.2	1.6	2.7	2.2	1.5	2.6	1.1	0.9	1.0	1.7	1.9
Cassava	1.2	2.4	1.6	2.7	1.1	1.2	2.7	2.9	2.1	3.2	1.9
Rice	5.5	5.0	5.3	5.6	5.2	5.1	4.3	4.3	4.3	4.0	4.8
Sweet potatoes	0.4	0.6	0.3	0.5	0.4	0.4	0.2	0.6	0.1	0.1	0.4
Vegetables	2.9	1.1	1.6	1.3	1.5	2.0	0.9	1.4	1.1	1.2	1.6
Oil/Oils types	2.7	0.9	2.4	1.6	3.3	3.3	0.8	0.7	1.4	1.3	2.2

## Conclusion

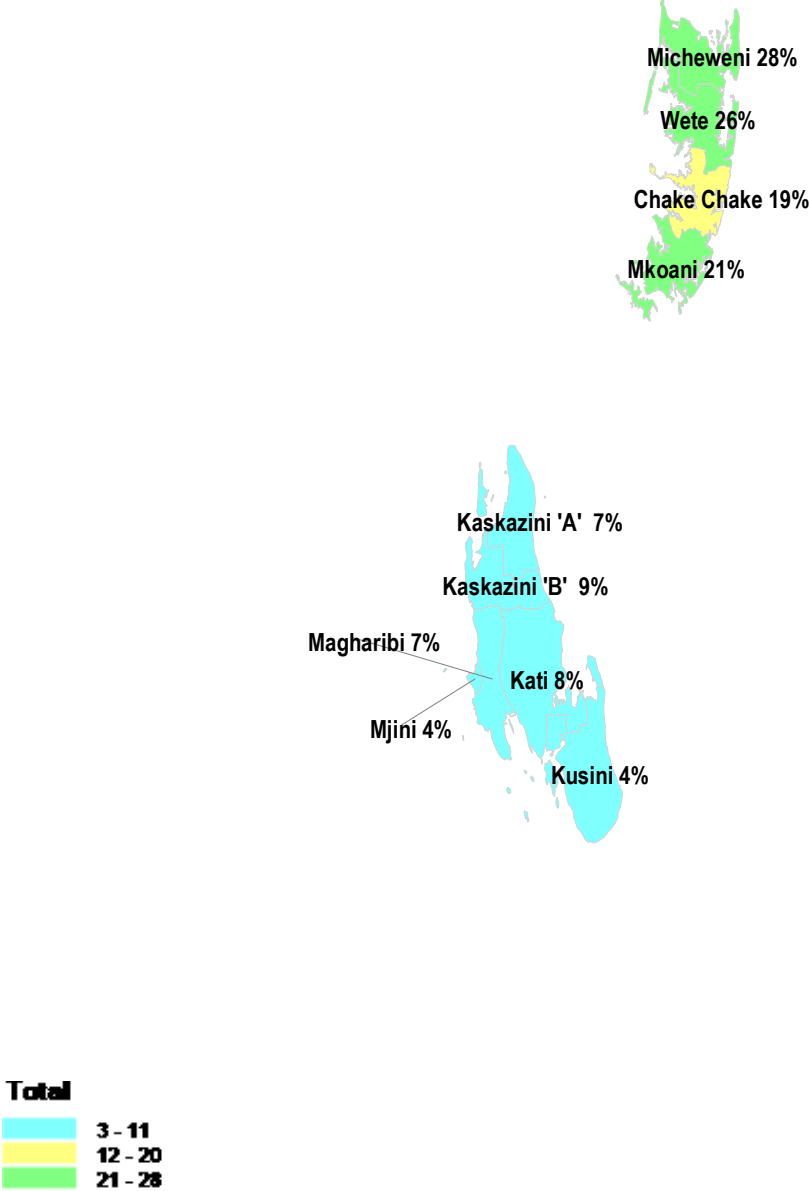
The observed 2009/10 HBS average total and per capita consumption estimates are close to the price adjusted 2004/05 HBS estimates. Levels of urban expenditures are one and a half fold the rural expenditures; in either case mean values exceed the median. While Mjini and Magharibi districts show higher expenditures, Micheweni and Kaskazini 'B' districts have the lowest. Both the mean and median measures ranks Micheweni and Wete districts as having the lowest average per capita consumption expenditures. The share of food in total expenditure has declined both that for clothing and footwear as well as communication have increased between 2004/05 and 2009/10. Furthermore, there is more food security in 2010 than in 2005. Two-thirds of households had two meals and one third had three or more meals per day. Magharibi, Mjini, and Kusini districts showed higher frequencies of meals per day. Two-thirds of households never had problems with meals; only one in ten households occasionally reported to have problems with meals. Food shortages were more reported at Kaskazini 'A', Kaskazini 'B', and Micheweni districts. Fish remain the main source of protein while rice is a source of carbohydrates to households in all districts. Mjini and Magharibi also consume more fats and oils, meat, and milk.

6.1 Maps

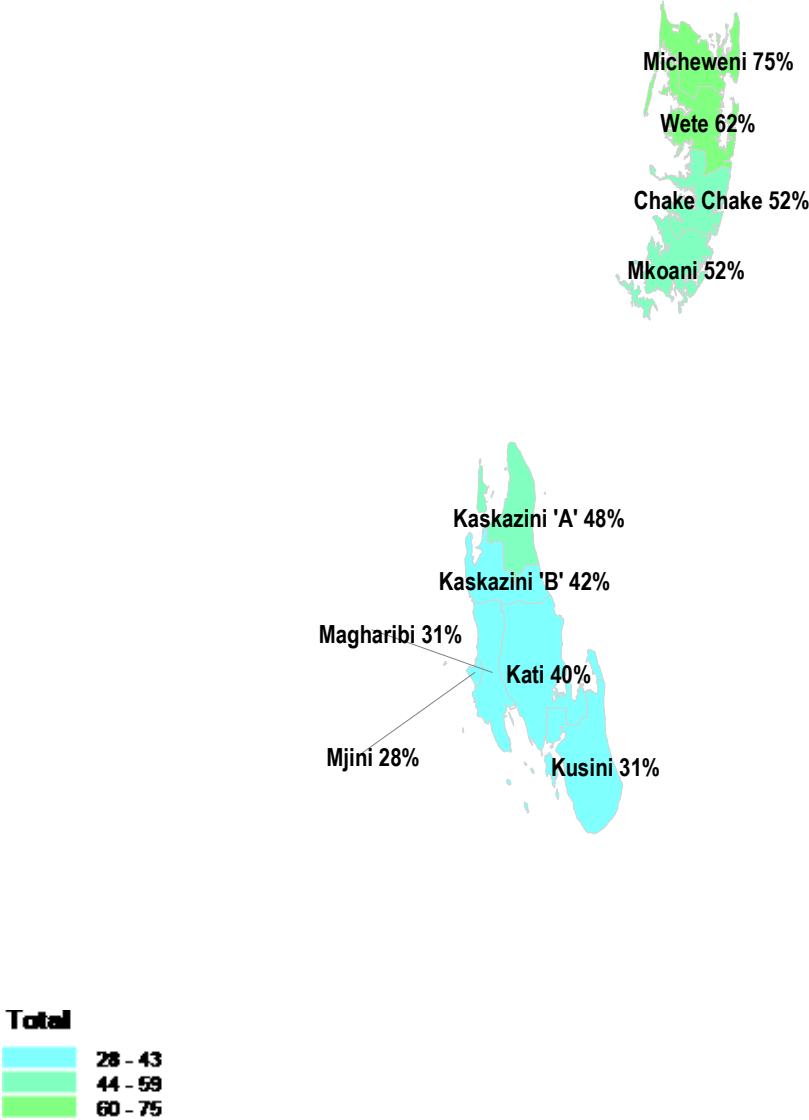
Map 6.1: Average Per Capital Consumption Expenditures (28 days) ('000' TShs)



Map 7.1: Percentage of Population Below Food Poverty Line



Map 7.2: Percentage of Population Below Basic Needs Poverty Line



## CHAPTER SEVEN: POVERTY AND INEQUALITY

### 7.1. Overview

This chapter presents findings on indicators of income poverty and inequality. Like in the 2005 HBS, consumption expenditure information is used to provide a monetary measure of poverty, since it is more reliable than income data. Besides, it is reasonable to assume that consumption represents household's average income that takes into account the expected lifetime income. As such, consumption is more likely to be stable over time, while income itself may fluctuate depending on the seasonal pattern of earning and also on unexpected windfall gain or sudden loss. Generally, there is significant decline in the incidence of basic need poverty since 2004/05. However, the decline in the incidence of food poverty is not significant. There is also a modest increase in inequality.

### 7.2. Poverty lines

The poverty lines for 2010 HBS were computed in a manner that allows comparison of poverty levels from 2004/05 survey and 2009/10 survey. Specifically, 2009/10 HBS uses food basket with exactly the same items as those used in the 2004/05 HBS. The costs of the food baskets of the bottom 50 percent (in per capita consumption) is first estimated by applying the median prices of the prices of the items as consumed in 2009/10. In order to allow comparison across survey months, the costs of consumption items were adjusted for inflation at the end of survey. Thus, the poverty lines refer to July 2009 prices.

The estimated food poverty line and the share of food expenditure of the bottom 25 percent are then used to estimate the basic need poverty line. The share of food expenditure of the bottom 25 percent is 0.6557616. The inverse of this share is used to inflate food poverty line to account for basic needs poverty line. More technical details on how the poverty lines were derived are presented in Appendix Table B 7.1.

Table 7.1 compared the poverty line in 2010 and 2005. It is apparent from Table 7.1 that poverty line increased 2 times in nominal terms during this period. Note however that during this period, the Consumer Price Index (CPI), which is based on the consumption basket in urban areas, increased by about 1.6 times. This partly implies the poor people in Zanzibar faced relatively rapid increase in prices compared to the general public.

According to these estimates (Table 7.1), a Zanzibar will be considered to be basic need poor if her/his consumption expenditure per day falls below TZS 1,465 (about a Dollar a day given the average exchange rate of that prevailed in 2010. Likewise, the subject is food poor if her/his expenditure per on food month is at least 26,904.

**Table 7.1: Food and Basic Need Poverty Lines for 28 days**

Food and Basic needs poverty line	2004/05	2009/10
	TShs.	TShs.
Food Poverty Line (28 days Adult) in TShs.	12,573	26,904
Basic Needs Poverty Line (28 days Adult) in TShs.	20,185	41,027

It has to be noted that the costs of the consumption basket were also adjusted for spatial price variations using the Fisher index. The Fisher Index was constructed for all districts based on food prices collected in the diary. These were used to adjust consumption expenditure levels for each district. Furthermore, in order to ensure comparability between 2010 HBS

and 2005 HBS, the Fisher index was estimated separately for urban and rural areas within the districts in the same districts where this was done in 2005.

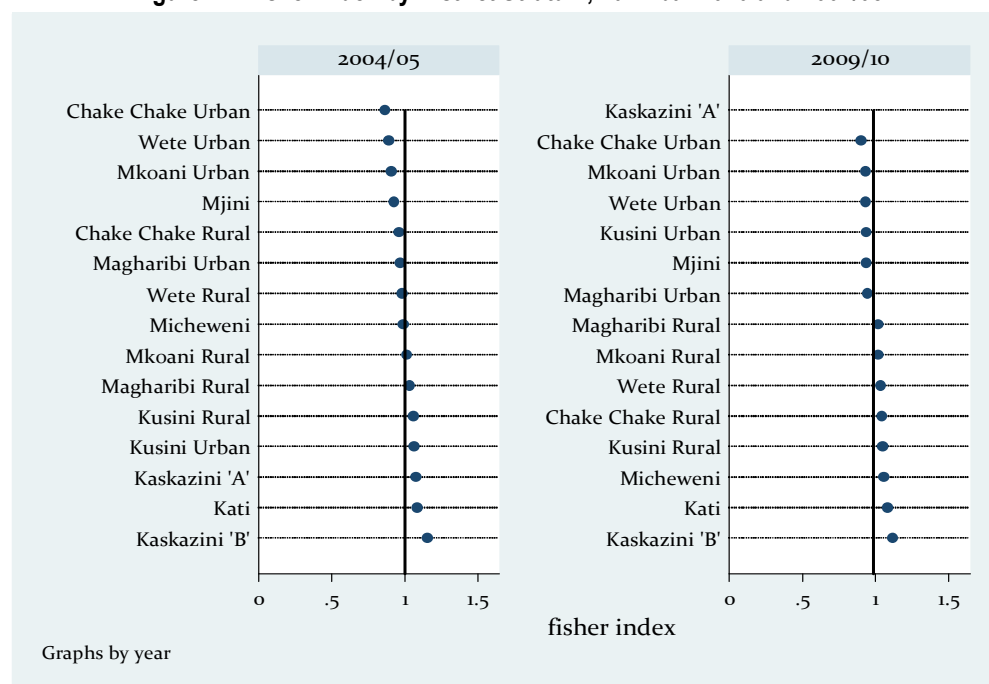
Table 7.2 shows Fisher indexes used in 2010 HBS. A value of the Fisher Index greater than 1 implies that prices were lower than average for the stratum, hence the need to adjust consumption expenditures upward relative to the overall index of Zanzibar (normalized to 1). Similarly, a value less than one imply higher prices and downward adjustment of expenditure levels relative to the overall index of Zanzibar.

**Table 7.2: Fisher Index by District Stratum**

District	Fisher Index	
	2004/05	2009/10
Kaskazini 'A'	1.07	1.08
Kaskazini 'B'	1.15	1.12
Kati	1.08	1.08
Kusini Rural	1.06	1.05
Kusini Urban	1.06	0.94
Magharibi Rural	1.03	1.02
Magharibi Urban	0.97	0.95
Mjini	0.92	0.94
Wete Rural	0.98	1.04
Wete Urban	0.89	0.93
Micheweni	0.99	1.06
Chake Chake Rural	0.96	1.04
Chake Chake Urban	0.86	0.9
Mkoani Rural	1.01	1.02
Mkoani Urban	0.91	0.93

Besides the inter-temporal dynamics in prices best summarized in the CPI movements (and the costs of the overall consumption basket discussed above), the spatial pattern of price variations is also important. These variations often times reflect other socio-economic differences, including changes in transportation costs, changes in supplies, test, etc. Figure 7.1 compares spatial price variations by district as measured by the Fisher index between 2004/05 and 2009/10. Apparently, some districts changed their status (relative expensive), e.g. Kaskazini 'A' changed from cheap to expensive relative to national average between 2004/05 and 2009/10.

**Figure 7.1 Fisher Index by District Stratum, Zanzibar 2010 and 2004/05**



### 7.3. Incidence of Income Poverty and Poverty Gap

Households are categorized as poor if their consumption per member, adjusted for the demographic composition of the household, falls below the poverty line. This report presents two indicators of income poverty. The first and most popular one is the incidence of poverty. The second one is the poverty gap. The incidence of poverty, also known as the headcount ratio, measures the percentage of population living below the poverty line. The poverty gap measures the percentage shortfall (depth) of total expenditure of households below the poverty line. Table 7.3 shows both the incidence of poverty and poverty gap in Zanzibar for 2005 and 2010.

The incidence of basic need poverty has declined since 2005. While 49 percent of the Zanzibaris did not meet their daily basic needs in 2005, only 44 percent could not in 2010. This is about 1 percentage point decline annually. Apparently, the percentage point decline in basic need poverty is evenly shared between urban and rural areas.

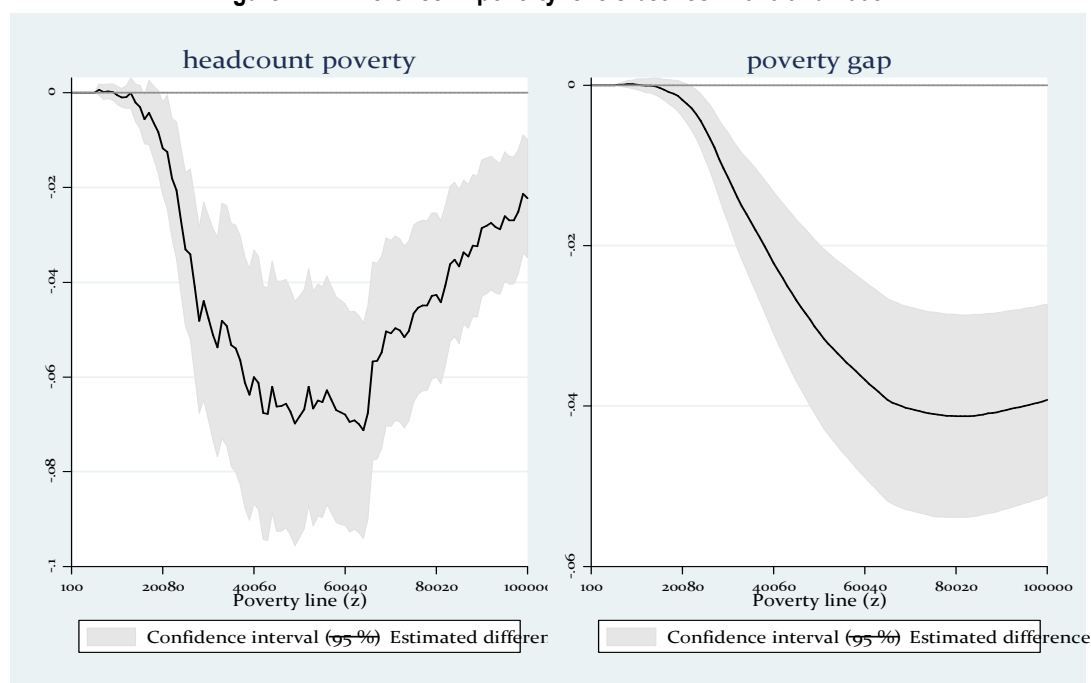
The decline in incidence of food poverty has only declined marginally from 13.18 percent in 2005 to 13.04 percent in 2010. The insignificant decline in food poverty is partly due to increases in costs of food items globally, a phenomenon observed towards the end of the 2000s. Zanzibar, being a net food importer, such phenomenal increased in food price could have substantial lose in welfare. The lack of a decline in food poverty is reflected in the modest increase in food share in the total expenditure. The share of food expenditure in total expenditure increased from 55 percent in 2004/06 to 57.percent in 2009/10.

**Table 7.3: Poverty Headcount Ratio and Poverty Gap by Area**

	2004/05			2009/10		
	Rural	Urban	Total	Rural	Urban	Total
Food Poverty Headcount	15.93	8.94	13.18	16.76	8.09	13.04
Food Poverty Gap	2.9	1.63	2.4	3.35	1.31	2.48
Basic Needs Poverty Headcount	54.61	40.54	49.07	50.74	35.97	44.41
Basic Needs Poverty Gap	15.07	10.05	13.09	13.87	8.11	11.41

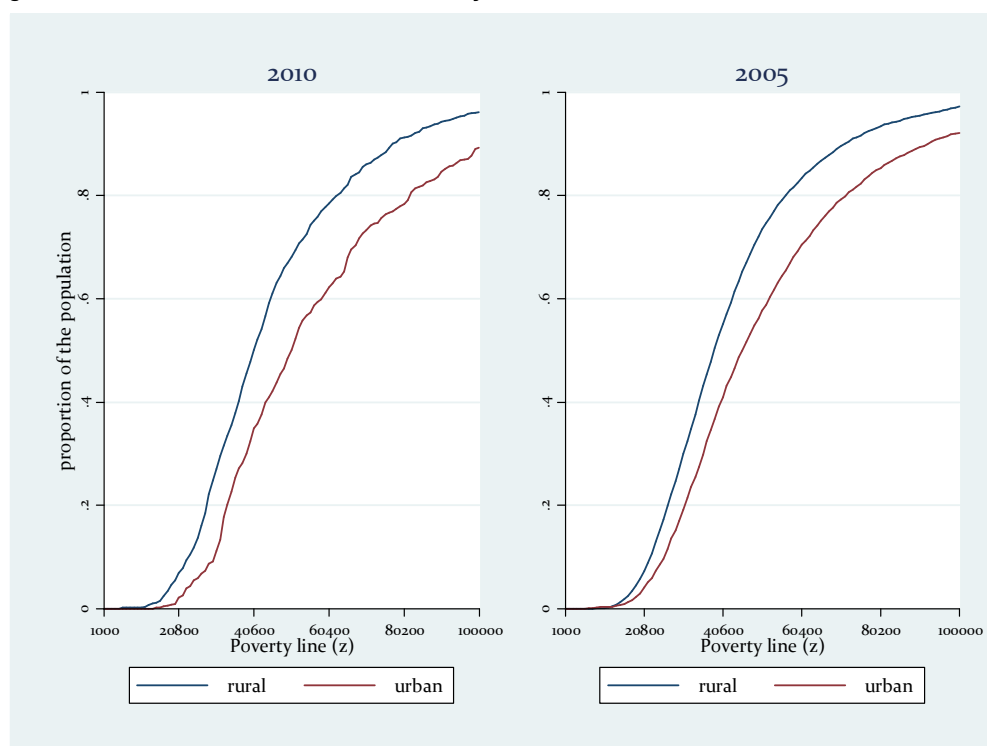
Table 7.3 further shows that basic need poverty has also decline when measured by the poverty gap. In 2004/05 poor Zanzibaris were a little far below the basic need poverty line as compared to 2009/10. Again, the decline is evenly shared between rural and urban areas. Note however that, the poverty gap shows that food poverty increased marginally. Again, the modest increase in food poverty, particularly in the rural areas, is mainly explained by rapid increase in food prices. Figure 7.2 shows that poverty level in 2010 has consistently lower than poverty level in 2005 (the curve is below zero), pointing to the modest decline in poverty during this period.

**Figure 7.2: Difference in poverty levels between 2010 and 2005**



Income poverty continues to be a rural phenomenon. This is portrayed in Figure 7.2. The vertical axis in Figure 7.2 shows the proportion of the population. The horizontal axis shows poverty lines. Picking any poverty line on the horizontal axis, the curves show what proportion of the population will be considered poor. Apparently, whatever reasonable poverty line, the proportion of the poor in rural areas is invariably higher than that for the urban area.

**Figure 7.3: Differences in Incidence of Poverty Between Rural and Urban areas in 2005 and 2010.**



There is substantial variation in poverty levels across district as shown in Table 7.4. In 2010, the proportions of the poor population ranged between 28.25 percent in Mjini district to 74.59 percent in Micheweni (the range of 46.34 percentage points). In 2004/05 HBS, the lowest incidence was 37.62 in Mjini and largest was 74.23 in Micheweni (the range of 36.61 percentage point). The increase in the range indicates divergence. As such, while poverty increased marginally in Micheweni it declined substantially in Mkoani from 42 percent in 2004/05 to 52 percent in 2009/10.

**Table 7.4: Poverty Headcount Ratio and Poverty Gap by District.**

District	2004/05				2009/10			
	Food Poverty Headcount	Food Poverty Gap	Basic Needs Poverty Headcount	Basic Needs Poverty Gap	Food Poverty Headcount	Food Poverty Gap	Basic Needs Poverty Headcount	Basic Needs Poverty Gap
Kaskazini "A"	12.18	2.01	53.3	13.28	7.23	1.57	48.43	10.03
Kaskazini "B"	12.06	2.15	48.28	11.99	8.78	1.46	42.25	9.4
Kati	8.35	1.17	45.66	10.65	8.47	1.5	39.85	9.21
Kusini	9.73	1.45	53.79	12.91	3.86	0.69	30.5	5.77
Magharibi	9.54	1.73	38.57	9.79	7.3	0.69	31.24	6.87
Mjini	7.75	1.48	37.62	9.28	4.21	0.66	28.25	5.38
Wete	23.83	4.73	70.79	21.27	25.74	5.49	61.83	19.08
Micheweni	33.35	6.88	74.23	25.25	27.7	4.76	74.59	21.64
Chake Chake	15.87	2.53	56.83	15.24	19.11	4.55	52.01	14.68
Mkoani	7.26	0.93	42.08	9.38	21.46	4.48	52.27	16.45
<b>Total</b>	<b>13.18</b>	<b>2.4</b>	<b>49.07</b>	<b>13.09</b>	<b>13.04</b>	<b>2.48</b>	<b>44.41</b>	<b>11.41</b>

The absolute number of poor people in an area or district depends on both the proportion that is below the poverty line and the population size. Table 7.5 shows that there are more poor people in rural than urban areas. It is also noted that the absolute number of the basic need poor has increased between 2005 and 2010. This is because the reduction in incidence of poverty is lower than the population growth during this period. Note also that Zanzibar is experiencing 'urbanization of poverty' as the percentage of basic need poor living in urban area increased from 32.5 percent in 2005 to 35.1 percent in 2010.

**Table 7.5: Distribution of Poor Persons by Type of Poverty and Area.**

	2004/05			2009/10		
	Rural	Urban	Total	Rural	Urban	Total
Total Population	640,098	415,827	1,055,925	727,594	545,729	1,273,323
Percent of Total Population	60.6	39.4	100.0	57.1	42.9	100.0
Number of Food Poor Persons	101,975	37,176	139,150	166,069	54,843	220,912
Percent of Food Poor Persons	73.3	26.7	100.0	73.4	26.6	100.0
Number of Basic Needs Poor Persons	349,563	168,556	518,119	418,474	226,251	644,724
Percent of Basic Needs Poor Persons	67.5	32.5	100.0	64.9	35.1	100.0

Table 7.6 presents the number of poor people by district. The following changes are noted. While Magharibi and Mjini have the highest number of people below the basic needs poverty line in 2005, Wete and Micheweni have turned out to have the highest number of basic need poor in 2010. As such, Wete and Micheweni, combined, have 30 percent of poor people in Zanzibar in 2010. However, they contribute only 20 percent of the total population in Zanzibar. Kusini continues to be the district with the smallest number of the poor in Zanzibar.

**Table 7.6: Distribution of Poor Persons by Type of Poverty and District.**

District	2004/05						2009/10					
	Total Population	% of Total Population	Number of Food Poor Persons	% of Food Poor Persons	Number of Basic Needs Poor Persons	% of Basic Needs Poor Persons	Total Population	% of Total Population	Number of Food Poor Persons	% of Food Poor Persons	Number of Basic Needs Poor Persons	% of Basic Needs Poor Persons
Kaskazini "A"	88,285	8.4	10,753	7.7	47,054	9.1	105,522	8.3	7,631	4.6	51,108	9.0
Kaskazini "B"	55,073	5.2	6,639	4.8	26,588	5.1	71,895	5.6	6,315	3.8	30,375	5.4
Kati	65,328	6.2	5,454	3.9	29,830	5.8	74,252	5.8	6,287	3.8	29,593	5.2
Kusini	34,992	3.3	3,406	2.4	18,823	3.6	38,338	3.0	1,480	0.9	11,694	2.1
Magharibi	221,416	21.0	21,131	15.2	85,389	16.5	208,403	16.4	15,206	9.2	65,095	11.5
Mjini	213,844	20.3	16,575	11.9	80,438	15.5	274,802	21.6	11,558	7.0	77,619	13.7
Wete	106,438	10.1	25,367	18.2	75,346	14.5	138,418	10.9	35,628	21.5	85,582	15.1
Micheweni	87,012	8.2	29,020	20.9	64,593	12.5	115,091	9.0	31,879	19.2	85,851	15.2
Chake												
Chake	86,905	8.2	13,792	9.9	49,391	9.5	120,789	9.5	23,084	13.9	62,816	11.1
Mkoani	96,633	9.2	7,015	5	40,667	7.8	125,812	9.9	27,001	16.3	65,761	11.6
<b>Total</b>	<b>1,055,925</b>	<b>100.0</b>	<b>139,150</b>	<b>100</b>	<b>518,119</b>	<b>100</b>	<b>1,273,323</b>	<b>100.0</b>	<b>166,068</b>	<b>100.0</b>	<b>565,494</b>	<b>100.0</b>

## 7.4. Inequality

The inequality in the distribution of per capita expenditure increased between 2004/05 and 2009/10. Table 7.7 shows that the Gini coefficient increased from 0.28 in 2004/05 to 0.30 in 2009/10. This increase is statistically significant at 5 percent. Inequality is increasing relatively faster in rural areas than in urban area.

The Gini index across districts ranged from 0.23 in Kusini to 0.31 in Mjini in 2004/05. It ranged from 0.21 in Micheweni to 0.31 in Mjini districts, which apparently shows some divergence when compared to 2004/05 HBS.

Table 7.7 reports also another measure of inequality in the distribution of per capita expenditure, commonly known as Generalized Entropy (GE) measure. Note that the values of GE measures vary from zero to infinity. Zero represents an equal distribution. Higher values represent higher levels of inequality. The GE measure used one parameter (chosen by the analyst), which represents the weight given to distances between different parts of the distribution of indicator of welfare (which in this case is the per capita expenditure adjusted for adult equivalent). Lower values of this parameter give more weights to lower tail of the distribution (more sensitive to changes in the lower tail of the distribution). Higher values of the parameter give more weights to upper tail of the distribution (more sensitive to changes that affect the upper tail). The commonest values of the GE parameter used are 0, 1 and 2. The generalized entropy (GE) at various levels of inequality aversion (when GE parameter equals -1, 0, 1, and 2) also shows modest increase in inequality in most districts.

**Table 7.7: Gini Coefficients and GE by Area and District, Zanzibar 2005 and 2010.**

	GE(-1)		GE(0)		GE(1)		GE(2)		Gini	
	2004/05	2009/10	2004/05	2009/10	2004/05	2009/10	2004/05	2009/10	2004/05	2009/10
Total	0.14	0.15	0.13	0.14	0.14	0.16	0.19	0.23	0.28	0.3
Rural	0.12	0.14	0.11	0.13	0.11	0.14	0.26	0.18	0.26	0.28
Urban	0.15	0.16	0.14	0.15	0.15	0.17	0.3	0.26	0.3	0.31
<b>District</b>										
Kaskazini "A"	0.12	0.1	0.11	0.1	0.13	0.1	0.2	0.13	0.26	0.24
Kaskazini "B"	0.1	0.12	0.1	0.11	0.1	0.12	0.13	0.15	0.24	0.25
Kati	0.11	0.12	0.11	0.12	0.12	0.13	0.16	0.19	0.26	0.27
Kusini	0.09	0.09	0.08	0.08	0.09	0.09	0.11	0.12	0.23	0.24
Magharibi	0.13	0.12	0.12	0.12	0.12	0.15	0.14	0.26	0.27	0.28
Mjini	0.18	0.16	0.16	0.15	0.17	0.16	0.23	0.21	0.31	0.31
Wete	0.1	0.16	0.1	0.14	0.11	0.15	0.16	0.21	0.25	0.27
Micheweni	0.1	0.07	0.1	0.07	0.1	0.07	0.12	0.09	0.25	0.21
Chake Chake	0.11	0.14	0.11	0.13	0.13	0.14	0.2	0.19	0.26	0.28
Mkoani	0.09	0.12	0.09	0.11	0.09	0.12	0.11	0.13	0.23	0.27

Table 7.8 shows another measure of income inequality, the share of total consumption accounted for by each expenditure quintile. It is apparent that 20 percent of the population consumed 8.9 percent of total consumption in 2010. This is a decline from 9.3 percent in 2004/05 and it implies an increase in inequality. The same pattern of increase in inequality is also evident in the rural and urban areas. As indicated in annexed Table B 7.1, inequality is highest in Mjini the share of the bottom 20 percent of the population is only 8.4 of total expenditure. It is the lowest in Micheweni, where the bottom 20 percent has a share of 11.8 percent in consumption.

**Table 7.8: Distribution of Consumption Expenditure (28 Days) by Quintile and Area.**

Quintile	2004/05			2009/10		
	Rural	Urban	Total	Rural	Urban	Total
Q1 - Poorest	9.8	8.9	9.3	9.4	8.8	8.9
Q2	13.9	12.9	13.3	13.4	12.3	12.7
Q3	17.3	16.5	16.8	17.1	16.3	16.5
Q4	22	22	21.9	22.2	21.8	21.8
Q5 - Richest	37	39.6	38.8	38	40.8	40.1
Total	100	100	100	100	100	100
<b>TShs. (million)</b>	<b>22,614</b>	<b>18,852</b>	<b>41,466</b>	<b>27,800</b>	<b>28,011</b>	<b>55,812</b>

## CHAPTER EIGHT: POVERTY PROFILE

### 8.1 Introduction

This chapter reports poverty in relation to various demographic and geographic characteristics in Zanzibar. First, poverty is examined in relation to household size and household dependency ratio. Next, poverty is related to the gender of the head of the household. Other important aspects such as sources of income, main economic activities, education of the head of the household, morbidity and mean distance to important facilities are also related to poverty. Poverty profile presents association of poverty with several important characteristics without necessarily implying causal relationship. Causal relationship between poverty and these characteristics can only be established once a more in-depth analysis is undertaken.

### 8.2 Poverty and Demographic Characteristics of Household

Table 8.1 relates poverty to household size. The Table shows that in general, as household size increases, the incidence of poverty also increases. This trend holds for both 2004/05 and 2009/10 years and also for both rural and urban areas. Figure 8.1 depicts the relationship between Head Count Index and household size over a very wide range of poverty line. In this Figure, households are groups into three; first is the group of households whose size is less than four, then a group of households whose size is between four and six and finally a group of households whose size is greater than six. The graph indicates that households whose size is more than six suffer higher Head Count Index than the rest of the households over a wide range of poverty lines. Households whose size is between four and six suffer less poverty than households whose size is above six. Households whose size is below four suffer less poverty than the rest of households.

**Table 8.1: Distribution of Poverty by Household Size and Area.**

Number of Persons	Rural				Urban				Total			
	2004/05		2009/10		2004/05		2009/10		2004/05		2009/10	
	Head Count Ratio	% Of Poor Persons	Head Count Ratio	% Of Poor Persons	Head Count Ratio	% Of Poor Persons	Head Count Ratio	% Of Poor Persons	Head Count Ratio	% Of Poor Persons	Head Count Ratio	% Of Poor Persons
1	5.6	0.1	6.5	0.1	3.8	0.1	3.5	0.1	4.9	0.1	5.3	0.1
2	10.7	0.7	10	0.6	7.1	0.4	4.3	0.3	9.6	0.6	7.7	0.5
3	18.8	2.4	12.2	1.8	14.8	1.9	5.3	1	17.5	2.3	9.5	1.5
4	31.9	6.2	18.4	4.4	18.8	3.8	12.2	3.2	27.5	5.4	16.1	3.9
5	40.5	10.3	38.6	9.6	22.4	6.1	12.8	4.2	34.4	9	27.9	7.7
6	58.7	15.8	46.9	11.8	37	11.8	30.4	10.8	50.8	14.5	39.8	11.4
7	64.0	17.0	59.6	18.3	43.2	12.9	40.3	14.7	56.7	15.7	52.1	17.1
8	73.3	15.4	74.1	18.6	49.1	12.9	40.1	14.7	64.2	14.6	59.3	17.2
9	74.3	12.1	68.5	12	48.5	12.5	55.3	16.1	63.2	12.3	62.3	13.5
10+	76.4	19.8	83.8	22.8	59	37.4	66	34.9	67	25.5	74.8	27
<b>Total</b>	<b>54.6</b>	<b>100</b>	<b>50.7</b>	<b>100</b>	<b>40.5</b>	<b>100</b>	<b>36.0</b>	<b>100</b>	<b>49.1</b>	<b>100</b>	<b>44.4</b>	<b>100</b>
<b>Number of Poor Persons</b>	<b>349,563</b>		<b>369,191</b>		<b>168,556</b>		<b>196,303</b>		<b>518,119</b>		<b>565,494</b>	

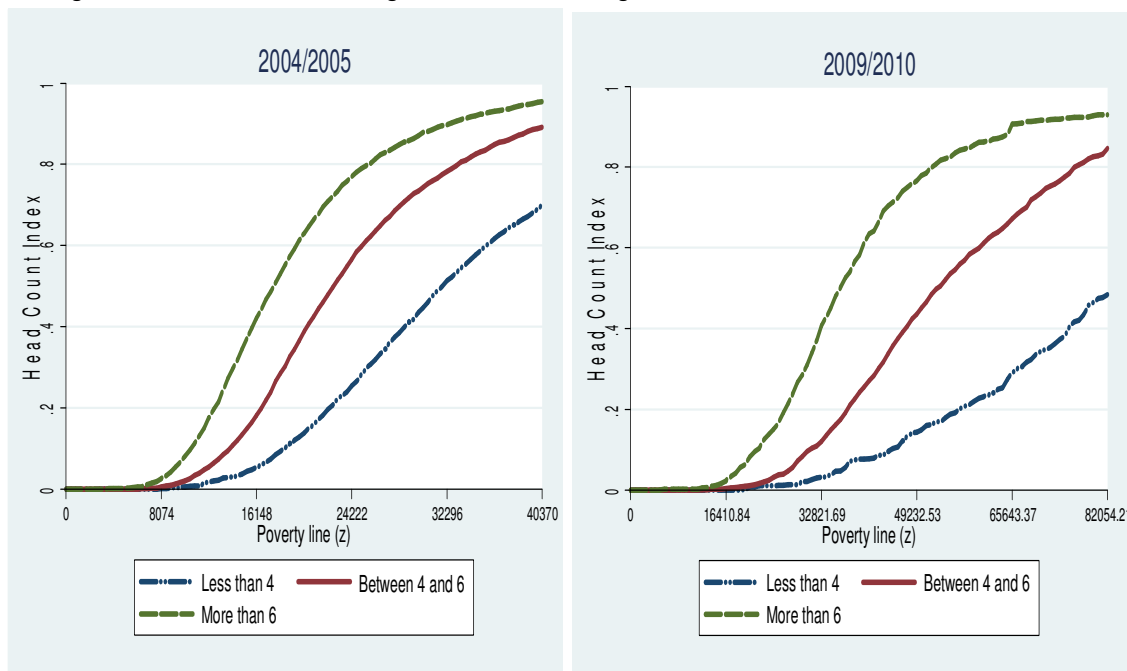
Figure 8.1 depicts the relationship between the Head Count Index and household size over a wide range of possible poverty lines for the year 2009/10. This relationship confirms once again that larger households suffer more poverty than smaller households, and that this holds true even as poverty line is altered over a very wide range.

The reported relationship between household size and poverty is an empirical regularity which does not necessarily imply causal relationship. However, there have been two contending views regarding this relationship. Some have used this empirical relationship to urge for population control as a way of reducing poverty. The argument is that if large household size is associated with higher poverty, then it is better to encourage people to have fewer children, so that they suffer less

poverty. This view however can be misleading because it assumes that it is the size of the household that determines the level of poverty. The fact of the matter is, poverty itself may actually determine the size of the household. This can happen as follows. A poor family would wish to have a lot of children precisely because of its poverty for the following reasons. First, children in poor households are useful for doing such chores as fetching water and firewood, tending to cattle, fishing and farming. Rich households have means to do all these without engaging children. Secondly, since child mortality tends to be higher in the poor households than in the rich households, there is more incentive for the poor to have more children just to guarantee that some would survive to adulthood. Thirdly, poor households have less economic security in the old age because of lack of assets and pension. As such, a poor person is more likely to seek to have more children who would support him/her in the old age. Further, as we shall see below, the poor are generally less educated, and therefore females in this group are less likely to be employed in the formal sector. Because of this, the opportunity cost of bearing a child is lower for the poor household than it is for the rich households. All these suggest that poverty itself may be the cause for bigger household size, rather than the other way round.

There is another important point regarding the relationship between poverty and household size that is worth highlighting here. Measurement of poverty in this report is confined to current status, not lifetime status. A household that is found to be poor today may not be poor if households were compared over the entire lifetime period. It is quite possible that a household may decide to have a big number of children and suffer poverty initially in the hope that in the future the household would enjoy such a high standard of living because of the support from the grown up children as to make the initial sacrifice worth a while. Household Budget Survey data does not afford an investigation of lifetime earning of a household and therefore does not make it possible to assess whether larger households are associated with lifetime poverty or not. This point is important for avoiding reading too much from the current relationship between poverty and household size in the absence of a more in-depth study with more informative data such as a panel data collected over a generation.

**Figure 8.1: FGT Curves Showing Head Count Index against Household Size, 2004/05 and 2009/10**



Another dimension of demography that is examined here is the dependency ratio, which is the total number of the dependents over the number of persons who are not dependent in the household. Dependents are all individuals whose age is either below 15 years or above 64 years. Individuals whose ages are between 15 years and 64 years inclusive are considered to be economically active and thus are not dependents. Table 8.2 reports the dependent ratio against the incidence of poverty for the years 2004/05 and 2009/10 for both the rural areas and urban areas. Dependent ratios are

grouped into the following; 0 to 0.5, 0.5 to 1, 1 to 1.5, 1.5 to 2, 2 and above. Generally poverty increases with the dependency ratio, meaning that as the dependent ratio in the household increases incidence of poverty also increases. There is a small exception to this. An increase of dependency ratio from 0.5-1 to 1-1.5 reduces poverty incidence in the urban area in 2009/10, as well as for the whole of Zanzibar in 2009/10.

The positive relationship between poverty incidence and dependency ratio gives an important dimension of the relationship between poverty and household size. Large households are more likely to have higher dependency ratio than a small households. For reasons explained above this association of poverty incidence and dependency ratio should not be considered to necessarily imply any causal relationship unless a more in-depth analysis is carried out.

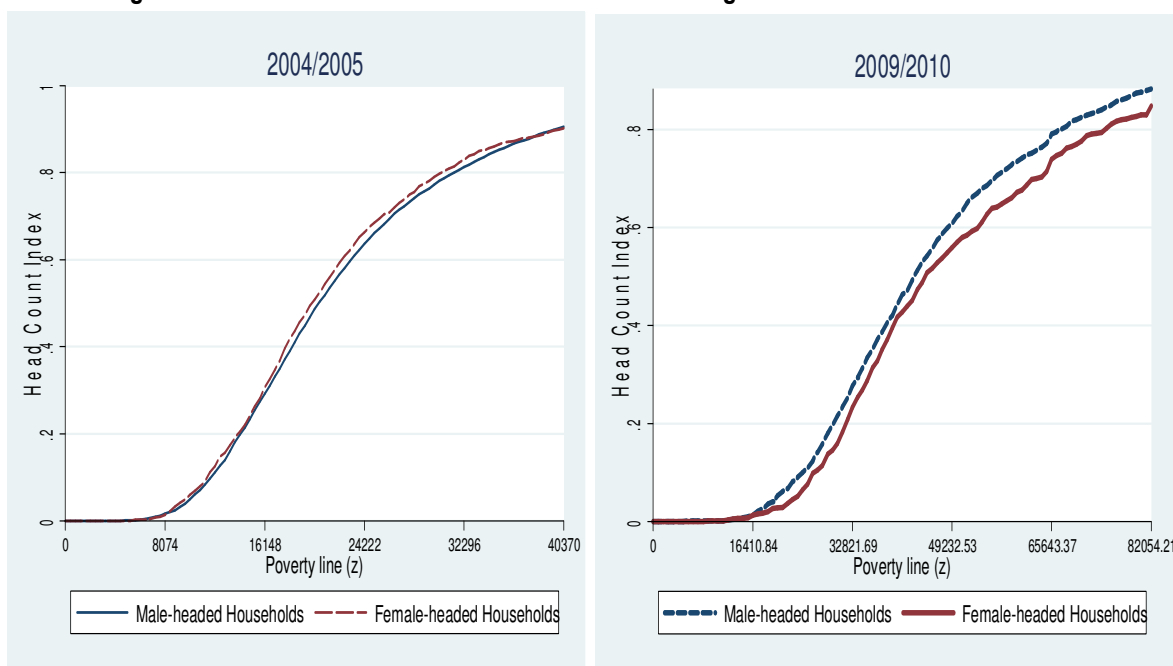
**Table 8.2: Distribution of Poverty by Proportion of Dependants and Area.**

Dependency Ratio	Rural				Urban				Total			
	2004/05		2009/10		2004/05		2009/10		2004/05		2009/10	
	Head count Ratio	% of Poor Persons	Head count Ratio	% of Poor Persons	Head count Ratio	% of Poor Persons	Head count Ratio	% of Poor Persons	Head count Ratio	% of Poor Persons	Head count Ratio	% of Poor Persons
0.00 to 0.50	42.7	11.5	35.9	10.9	30.7	18.6	24.2	17.1	36.5	13.8	29.4	13.0
0.50 to 1.00	53.8	21.4	47.7	21.9	39.2	27.7	45.2	36.6	47.1	23.5	46.5	27.0
1.00 to 1.50	56.0	27.1	49.9	26.1	45.4	27.2	34.9	24.0	52.0	27.1	43.7	25.4
1.50 to 2.00	54.4	14.0	53.6	12.7	46.0	10.9	36.8	8.5	51.8	13.0	47.9	11.2
2.00 +	61.5	25.9	63.4	28.4	49.2	15.7	40.1	13.9	58.2	22.6	56.6	23.4
<b>Total</b>	<b>54.6</b>	<b>100.0</b>	<b>50.7</b>	<b>100.0</b>	<b>40.5</b>	<b>100.0</b>	<b>36.0</b>	<b>100.0</b>	<b>49.1</b>	<b>100.0</b>	<b>44.4</b>	<b>100.0</b>
<b>Number of Poor Persons</b>	<b>349,563</b>		<b>369,191</b>		<b>168,556</b>		<b>196,303</b>		<b>518,119</b>		<b>565,494</b>	

Table 8.3 reports poverty incidence by the gender of the head of the household. In 2004/05 female-headed households suffered higher poverty incidence than the male-headed households for the whole of Zanzibar. This ranking is however reversed in 2009/10, when male-headed households had higher incidence of poverty than female-headed households for the whole of Zanzibar. This reverse of fortune needs to be analyzed in-depth for two reasons. First, we need to know whether the ranking by poverty incidence by the type of the household's head remains consistent over a wide but reasonable range of poverty lines. Specifically, it is important to assess whether the ranking that is reported in Table 8.3 holds even if poverty line is changed within a reasonable range. Secondly, it is important to ascertain whether the difference in poverty incidence by the gender of the household's head is statistically significant or is simply due to sampling variability.

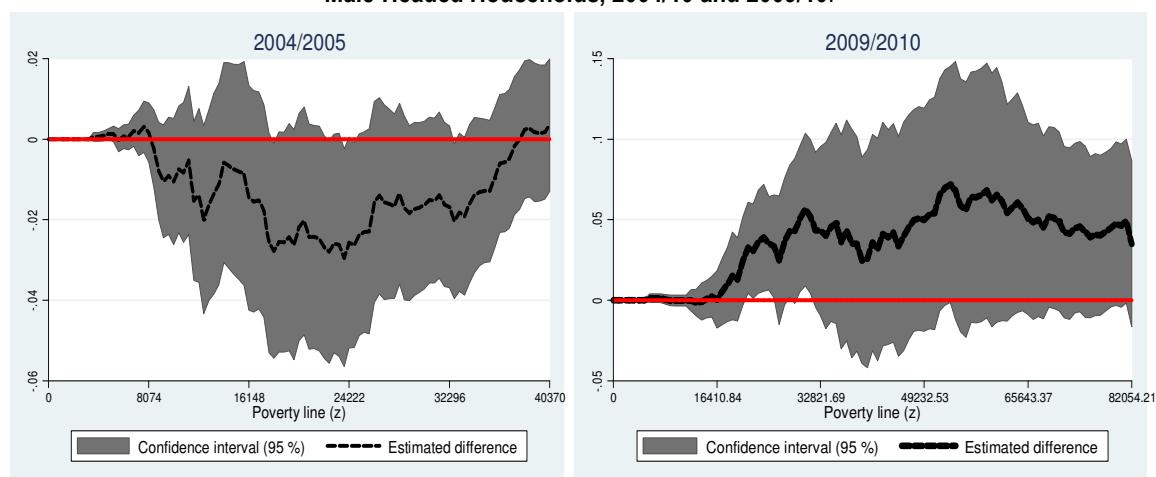
Figure 8.2 depicts two FGT curves for female-headed households and male-headed households for both 2004/05 and 2009/10. The FGT curve maps the relationship between poverty for a range of poverty lines. In the case of Figure 8.2, the curves relate the incidence of poverty (measured by the Head Count Index) for a range of poverty line that starts from zero to twice the value of the basic needs poverty line. The idea is to see whether the poverty ranking between female-headed households and male-headed households seen in Table 8.2 above is sensitive to the variation of poverty line. A curve that is above the other suggests that the group captured by such curve has more poverty than the group whose curve is below. The vertical distance captures the measure of Head Count Index for the value of poverty line along the horizontal axis.

**Figure 8.2: FGT Curves for Female-Headed Households against Male-Headed Households**



The FGT curves in Figure 8.2 reveal two key points. First, it appears that indeed female-headed households suffered more poverty incidence in 2004/05 while male-headed households suffered more poverty in 2009/10. The second point is that the curves are so close to each other as to suggest that the observed difference may actually be statistically insignificant. To explore the second point further confidence intervals for the difference in poverty incidences are constructed and reported in Figure 8.3. The differences in poverty incidences are obtained for a range of poverty lines which start from zero to two times the basic needs poverty line. In Figure 8.3 such differences in the poverty incidence are shown as curves which are surrounded by shades depicting the confidence interval at 95%. For both 2004/05 and 2009/10 the shades depicting confidence intervals encompass the value of zero. This indicates that the observed differences in the poverty incidence between female-headed households and male-headed households are not significantly different from zero. Therefore there is no difference in the incidence of poverty between female-headed and male-headed households for both period of time.

**Figure 8.3: Confidence Interval for the Difference in Head Count Index between Female-Headed and Male-Headed Households, 2004/10 and 2009/10.**



**Table 8.3: Distribution of Poverty by Sex of Household Head and Area.**

Sex	Rural				Urban				Total			
	2004/05		2009/10		2004/05		2009/10		2004/05		2009/10	
	Head Count Ratio	% Of Poor Persons	Head Count Ratio	% Of Poor Persons	Head Count Ratio	% Of Poor Persons	Head Count Ratio	% Of Poor Persons	Head Count Ratio	% Of Poor Persons	Head Count Ratio	% Of Poor Persons
Male	54.2	83.1	50.7	85.5	39.7	78.4	36.6	80.6	48.7	81.6	44.9	83.8
Female	56.5	16.9	50.9	14.5	43.8	21.6	33.7	19.4	50.9	18.4	42	16.2
<b>Total</b>	<b>54.6</b>	<b>100</b>	<b>50.7</b>	<b>100</b>	<b>40.5</b>	<b>100</b>	<b>36</b>	<b>100</b>	<b>49.1</b>	<b>100</b>	<b>44.4</b>	<b>100</b>
<b>Number of Poor Persons</b>	<b>349,563</b>		<b>369,191</b>		<b>168,556</b>		<b>196,303</b>		<b>518,119</b>		<b>565,494</b>	

Table 8.4 reports incidences of poverty by occupation. Invariably for the whole of Zanzibar incidence of poverty is highest among farmers. This is closely followed by fishing and then self employed. In the rural areas this pattern is largely repeated for 2004/05 but in 2009/10 the un-paid workers suffer the highest incidence of poverty, followed by the households without any economic activities, followed by the farmers and then the fishers. In 2009/10 fishermen suffered the highest incidence of poverty in the urban areas.

**Table 8.4: Distribution of Poverty by Main Activity of Household Head and Area**

Main activity	Rural				Urban				Total			
	2004/05		2009/10		2004/05		2009/10		2004/05		2009/10	
	Head Count Ratio	% Of Poor Persons	Head Count Ratio	% Of Poor Persons	Head Count Ratio	% Of Poor Persons	Head Count Ratio	% Of Poor Persons	Head Count Ratio	% Of Poor Persons	Head Count Ratio	% Of Poor Persons
Farming / Livestock keeping	61.0	55.6	59.9	51.8	56.1	14.6	47.7	11.5	60.4	42.3	58.3	37.9
Fishing	58.6	12.4	54.0	12.4	52.7	2.9	75.5	2.2	58.0	9.3	55.3	8.8
Paid Employee - Govt	39.5	9.7	26.9	7.5	30.3	21.6	23.2	20.2	34.1	13.6	24.6	11.9
Paid Employee - Parastatal	30.7	0.3	8.0	0.0	39.6	0.7	0.0	0.0	34.6	0.4	2.5	0.0
Paid Employee - Other	33.8	2.1	31.1	2.0	28.1	7.8	24.5	7.4	29.9	4.0	26.4	3.9
Self Employed	50.0	14.6	49.9	23.0	45.6	35.3	44.5	42.9	47.5	21.3	47.0	29.9
Unpaid Family Helper in Business	58.4	0.1	100.0	0.0	17.4	0.1	0.0	0.0	32.6	0.1	100.0	0.0
Housekeeping with non-economic activity	47.1	1.5	61.3	1.5	45.4	9.4	36.1	8.6	45.8	4.1	40.1	3.9
Not Active - All reasons	57.4	3.7	40.8	1.7	48.9	7.6	62.9	7.2	52.8	5.0	53.9	3.6
<b>Total</b>	<b>54.6</b>	<b>100.0</b>	<b>50.7</b>	<b>1.0</b>	<b>40.5</b>	<b>100.0</b>	<b>36.0</b>	<b>100.0</b>	<b>49.1</b>	<b>100.0</b>	<b>44.4</b>	<b>100.0</b>
<b>Number of Poor Persons</b>	<b>349,563</b>		<b>369,191</b>		<b>168,556</b>		<b>196,303</b>		<b>518,119</b>		<b>565,494</b>	

Table 8.5 shows the incidence of poverty by the main source of household income. In 2009/10 households whose main source of income is to sell charcoal had the highest incidence of poverty, followed closely by households whose main source of income is fishing. Households whose main source of income is wage or cash salaries had the lowest incidence of poverty. In contrast, households whose main source of income is selling firewood had the highest incidence of poverty in 2004/05, followed by households whose main source of income is fishing. Households whose main source of income is wage or salary had the lowest incidence of poverty in 2004/05 too. This shows that employment creation is one of the effective ways of alleviating poverty in Zanzibar.

**Table 8.5: Distribution of Poverty by Main Source of Household Income and Area.**

Household main source of Income	Rural				Urban				Total			
	2004/05		2009/10		2004/05		2009/10		2004/05		2009/10	
	Head	% Of	Head	% Of	Head	% Of	Head	% Of	Head	% Of	Head	% Of
	Count Ratio	Poor Persons	Count Ratio	Poor Persons	Count Ratio	Poor Persons	Count Ratio	Poor Persons	Count Ratio	Poor Persons	Count Ratio	Poor Persons
Sales of food crops	57.7	13.9	54.3	18.9	56.9	3.0	74.7	5.0	57.7	10.3	56.2	14.1
Sales of livestock	49.2	0.7	55.8	0.4	2.9	0.0	0.0	0.0	43.3	0.5	49.7	0.3
Sales of livestock product	42.1	0.6	49.8	1.7	48.2	0.1	0.0	0.0	42.7	0.5	46.7	1.1
Sales of cash crops	60.0	7.0	48.4	2.1	73.8	1.3	9.3	0.2	60.9	5.1	41.5	1.4
Business	46.7	7.2	60.3	7.3	36.6	12.1	36.0	13.2	41.6	8.8	45.2	9.3
Wages or salaries in cash	39.5	12.7	26.6	10.1	31.8	33.5	21.6	27.5	34.8	19.4	23.4	16.1
Other casual cash earnings	57.9	25.7	58.0	29.4	48.1	34.1	52.7	37.4	53.6	28.5	55.8	32.2
Cash remittances	58.7	10.3	56.1	9.6	53.6	9.7	46.1	11.0	57.0	10.1	51.8	10.1
Fishing	64.1	18.0	59.6	17.4	57.6	3.4	79.2	2.1	63.5	13.2	60.5	12.1
Selling charcoal	59.2	0.5	2.1	0.0	38.4	0.1	94.6	0.6	55.9	0.4	63.9	0.2
Selling firewood	67.4	1.2	34.3	0.4	71.5	0.7	33.4	0.1	68.3	1.0	34.2	0.3
Other	49.8	2.2	49.2	2.7	51.8	2.1	47.1	2.9	50.4	2.2	48.4	2.8
<b>Total</b>	<b>54.6</b>	<b>100.0</b>	<b>50.7</b>	<b>100.0</b>	<b>40.5</b>	<b>100.0</b>	<b>36.0</b>	<b>100.0</b>	<b>49.1</b>	<b>100.0</b>	<b>44.4</b>	<b>100.0</b>
<b>Number of Poor Persons</b>	<b>349,563</b>		<b>369,191</b>		<b>168,556</b>		<b>196,303</b>		<b>518,119</b>		<b>565,494</b>	

Table 8.6 shows incidence of poverty by the number of household member with employment. In both 2004/05 and 2009/10, households with no member who is employed generally suffer higher incidence of poverty than the rest. Exception to this however exists. In the rural areas households with four or more members who are employed suffer more incidence of poverty in 2009/10 than the rest of households. There is no consistent pattern of incidence of poverty going down as the number of employed members of the households increases. This perhaps is an indication that some employment do not pay sufficiently to lift household out of poverty.

**Table 8.6: Distribution of Poverty by Number of Member Employed/Working (15+ Years) in Household by Area.**

Number of Employees (15+ Years) in Hh	Rural				Urban				Total			
	2004/05		2009/10		2004/05		2009/10		2004/05		2009/10	
	Head	% Of	Head	% Of	Head	% Of	Head	% Of	Head	% Of	Head	% Of
	Count Ratio	Poor Persons	Count Ratio	Poor Persons	Count Ratio	Poor Persons	Count Ratio	Poor Persons	Count Ratio	Poor Persons	Count Ratio	Poor Persons
0	60.1	63.1	58.6	54.3	53.0	16.9	57.6	14.4	59.2	48.1	58.5	40.4
1	47.8	27.9	43.8	32.8	39.8	45.7	30.5	41.9	43.9	33.7	37.2	36.0
2	43.7	6.6	43.3	10.4	32.6	19.5	31.2	25.6	36.4	10.8	35.5	15.7
3	51.2	1.8	28.8	1.0	42.9	10.1	54.4	15.1	44.8	4.5	49.7	5.9
4 or more	52.5	0.6	70.6	1.6	46.9	7.8	51.1	2.9	47.6	2.9	59.5	2.1
<b>Total</b>	<b>54.6</b>	<b>100.0</b>	<b>50.7</b>	<b>100.0</b>	<b>40.5</b>	<b>100.0</b>	<b>36.0</b>	<b>100.0</b>	<b>49.1</b>	<b>100.0</b>	<b>44.4</b>	<b>100.0</b>
<b>Number of Poor Persons</b>	<b>349,563</b>		<b>369,191</b>		<b>168,556</b>		<b>196,303</b>		<b>518,119</b>		<b>565,494</b>	

There is a general trend for poverty incidence to decline as education level of the head of the household increases. This is reported in Table 8.7

**Table 8.7: Distribution of Poverty by Education of Household Head and Area.**

Education of Household Head	Rural				Urban				Total			
	2004/05		2009/10		2004/05		2009/10		2004/05		2009/10	
	Head Count Ratio	% Of Poor Persons	Headcount Ratio	% Of Poor Persons	Head count Ratio	% Of Poor Persons	Head count Ratio	% Of Poor Persons	Head Count Ratio	% Of Poor Persons	Head count Ratio	% Of Poor Persons
No Education	65.0	47.7	64.9	41.0	54.3	21.2	57.5	23.1	62.8	39.1	63.0	34.8
Adult Education	65.9	6.0	57.6	4.3	42.9	1.7	41.1	1.6	61.9	4.6	54.1	3.4
Basic Education	50.3	27.8	48.2	41.8	44.5	36.5	36.6	42.1	47.9	30.6	43.4	41.9
Above Basic Education	40.8	18.5	32.4	12.9	33.4	40.6	28.0	33.2	36.6	25.7	29.7	19.9
<b>Total</b>	<b>54.6</b>	<b>100.0</b>	<b>50.7</b>	<b>100.0</b>	<b>40.5</b>	<b>100.0</b>	<b>36.0</b>	<b>100.0</b>	<b>49.1</b>	<b>100.0</b>	<b>44.4</b>	<b>100.0</b>
<b>Number of Poor persons</b>	<b>349,563</b>		<b>369,191</b>		<b>168,556</b>		<b>196,303</b>		<b>518,119</b>		<b>565,494</b>	

### 8.3 Poverty and the Social Sector

Poverty is known to be multidimensional. Lack of sufficient income or insufficient consumption is the most popular way of defining poverty, but lack of education, high morbidity, and lack of access to key facilities are other dimensions of poverty. In this section an attempt is made to relate poverty or welfare measured in terms of consumption to other dimensions of welfare.

Table 8.8 depicts the means distance to key facilities by the level of household welfare. Households are divided into very poor, poor and non-poor, and the mean distance in kilometres to such facilities as banks, schools and hospital are worked out for each group. In 2004/05 mean distance to key facilities declined with the households' welfare. For example, very poor households were found to be far from hospital and schools than the households that are moderately poor. Households that were moderately poor were in turn located far from such key facilities as compared to the households that were non-poor. There were three exceptions to this pattern for the year 2004/05, namely households' mean distance to the main farm, households' mean distance to the untrained birth attendants and households' mean distance from the milling machine. In these three cases for the year 2004/05, there is no inverse relationship between mean distance to these three facilities and households' welfare. As for the year 2009/2010, the inverse relationship between the mean distance to key facilities and the level of households' welfare holds except for the following facilities; water supply in dry season, market, shop, main farm, trained and untrained birth attendants, milling machine, primary cooperative society and mosque or church.

Table 8.8 simply depicts the relationship between households' welfare to the mean distance to key facilities, where the mean distance proxies the access. However, access simply signals the capability, but it does not necessarily reflect the achievement, or functioning. For instance, being closer to a school makes it easier to attend school but does not necessarily mean that the household would send children to school. Access is very important because it enables members of households to enjoy the facility should they wish to. Utilization of such facility is even more important because it improves the achievement of the members of the households.

**Table 8.8: Mean Distance to Selected Facilities by Poverty Status (Kilometres)**

Facilities	Poverty Status							
	2004/05				2009/10			
	Very Poor	Poor	Non Poor	Total	Very Poor	Poor	Non Poor	Total
Water supply in dry season	0.6	0.5	0.3	0.4	0.5	0.2	0.3	0.3
Place for collecting firewood or charcoal	1.9	1.5	1.1	1.4	1.6	1.1	0.8	1.0
Market place	2.5	2.4	1.8	2.1	1.1	1.4	1.3	1.3
Shop	0.1	0.1	0.1	0.1	0.1	0.0	0.1	0.1
Health Center	1.4	1.4	1.1	1.2	1.2	1.0	0.8	0.9
Hospital	9.8	9.5	8.4	9.0	11.1	8.9	7.0	8.1
Primary school	1.2	1.1	0.8	1.0	2.2	0.9	0.6	0.9
Pre-school	2.9	2.2	1.5	1.9	0.9	0.6	0.5	0.6
Secondary school	2.0	2.0	1.5	1.7	1.3	0.8	0.7	0.8
Bank	19.8	18.0	13.8	16.1	21.2	19.1	14.1	16.6
Post Office	13.3	11.3	9.3	10.5	12.1	9.9	7.8	9.0
Police post	5.8	4.9	3.6	4.3	6.2	3.7	2.7	3.5
Main farm	2.6	2.7	2.8	2.7	2.1	1.9	2.3	2.1
Trained traditional birth attendant	0.7	0.5	0.3	0.5	0.2	0.2	0.3	0.2
Untrained traditional birth attendant	0.1	0.2	0.1	0.2	0.1	0.1	0.1	0.1
Public transport	0.8	0.7	0.5	0.6	0.4	0.3	0.2	0.3
Milling machine	4.8	5.3	4.0	4.6	3.1	3.2	2.3	2.7
Primary cooperative society	7.7	6.8	6.0	6.5	4.4	4.0	4.1	4.1
Community or social centre	1.0	0.9	0.6	0.8	0.5	0.5	0.4	0.4
Mosque or Church	0.2	0.2	0.1	0.2	0.3	0.3	0.2	0.2
Primary Court	8.3	7.1	5.7	6.6	8.1	6.1	4.6	5.5
Distance to Qur-an School (km)	-	-	-	-	0.5	0.3	0.3	0.3
Distance to Veterinary (km)	-	-	-	-	7.9	6.7	6.1	6.5
Distance to Vet doctor (km)	-	-	-	-	4.8	4.2	4.2	4.2
Distance to Electricity buying Center (km)	-	-	-	-	17.0	16.1	11.9	13.9

Table 8.9 depicts the utilization of schools, where the percentage of children aged from 7 to 16 who go to school is related to the welfare level of the household. The percentage of children aged from 7 to 16 from the very poor households who go to school increased from 71 in 2004/05 to 74 in 2009/10. In general, attendance to school for children aged 7 to 16 increased from 80.4percentto 83.9 percent.

**Table 8.9: Distribution of Children Aged 7-16 Years who are Studying by Area and Poverty Status(%)**

Area	Poverty Status							
	2004/05				2009/10			
	Very Poor	Poor	Non Poor	Total	Very Poor	Poor	Non Poor	Total
Rural	65.7	74.3	80.2	74.5	71.4	76.6	86.9	79.3
Urban	86.7	89.4	91.7	90.3	81.3	88.8	92.7	90.2
<b>Total</b>	<b>71.0</b>	<b>79.3</b>	<b>85.6</b>	<b>80.4</b>	<b>74.1</b>	<b>81.1</b>	<b>90.0</b>	<b>83.9</b>

Table 8.10 reports self reported illness by the welfare level of the households. The relationship between self reported illness and level of household welfare is rather weak. It is however notable that self reported illness went down in 2009/10 as compared to 2004/05.

**Table 8.10: Distribution of Individuals Reporting Illness or Injury by Area and Poverty Status**

Area	Poverty Status							
	2004/05				2009/10			
	Very Poor	Poor	Non Poor	Total	Very Poor	Poor	Non Poor	Total
Rural	23.7	22.8	22.6	22.9	9.8	11.8	10.8	11.0
Urban	13.0	13.0	13.2	13.1	13.4	9.1	7.8	8.6
<b>Total</b>	<b>20.9</b>	<b>19.4</b>	<b>18.3</b>	<b>19.0</b>	<b>10.7</b>	<b>10.8</b>	<b>9.3</b>	<b>10.0</b>

Table 8.11 the relationship between the behaviour of seeking health care and the welfare level of the households. The percentage of households that reported illness and sought health care increased from 82.9 in 2004/05 to 84.4 in 2009/10. This increase is accounted for mostly by the very poor and poor households; the percentage of non-poor households that reported illness and sought health care actually went down from 84.5 in 2004/05 to 83.3 in 2009/10.

**Table 8.11: Percentage Seeking Health Consultations by Source Attended and Poverty.**

Source	Poverty Status							
	2004/05				2009/10			
	Very Poor	Poor	Non Poor	Total	Very Poor	Poor	Non Poor	Total
Seeking Health Consultation(of those sick/injured)	80.8	81.7	84.5	82.9	82.9	86.5	83.3	84.4
<b>Source of Consultation for those who consult:</b>								
Attended Referral hospital	0.0	0.1	0.1	0.1	6.9	7.5	14.2	10.9
Attended District hospital	16.7	17.9	14.9	16.3	10.8	16.1	12.2	13.4
Cottage	-	-	-	-	5.8	5.3	3.1	4.2
Attended Special hospital	1.4	0.7	2.3	1.6	0.0	0.6	0.3	0.4
Attended Primary health care unit	44.5	40.0	34.8	38.1	40.1	41.2	33.4	37.0
Attended Private hospital	6.9	6.7	12.7	9.7	7.4	7.2	11.1	9.3
Attended Private clinic	2.2	3.7	4.5	3.9	3.0	2.6	6.6	4.7
Attended Pharmacy	4.0	6.4	7.1	6.4	3.9	6.2	8.1	6.9
Pharmacy (OTC)	-	-	-	-	7.1	4.6	4.1	4.7
Consulted Private doctor	0.5	1.0	1.7	1.3	0.6	1.6	1.3	1.3
Consulted Traditional healer	1.8	1.3	1.2	1.3	3.9	5.0	4.3	4.5
Attended Missionary care canter	0.0	0.3	0.2	0.2	0.0	0.0	0.0	0.0
Consulted Others	1.4	1.0	0.6	0.9	0.0	0.2	0.0	0.1
<b>Sick or injured in the Last four Week</b>	<b>29,022</b>	<b>73,514</b>	<b>98,427</b>	<b>200,963</b>	<b>23,282</b>	<b>46,675</b>	<b>57,023</b>	<b>126,980</b>

Table 8.12 reports the association of household's welfare and access to water. To start with, the table shows that the percentage of households with private piped water in the house has increased from 27.8 in 2004/05 to 32.8 in 2009/10. This increase however is accounted for by the increase in the non-poor and the moderately poor households; the very poor households suffered a decrease in the percentage of households with connection to private piped water in the house. The percentage of households with toilets has gone down from 68.9 to 62.7. In 2004/05 there was a clear trend of ownership of toilets to increase with the welfare of the households, but this trend is weak for 2009/10. There has also been a very significant increase in the households that are connected to the electricity from 2004/05, an increase that cut across all households, but still the well to do households enjoy the highest percentage of connection, followed by the moderately poor households with the very poor households coming last. Table 8.13 shows that there is no strong relationship between households' welfare and the mean distance to drinking water, health and primary school.

**Table 8.12: Household Facilities (Water, Toilet and Electricity) by Poverty Status.**

Facility	Poverty Status							
	2004/05				2009/10			
	Very Poor	Poor	Non Poor	Total	Very Poor	Poor	Non Poor	Total
<b>Water Supply</b>								
Private piped water in housing	15.7	22.0	34.9	27.8	13.8	25.0	41.6	32.8
Private piped water outside housing unit	15.0	20.1	18.9	18.8	12.3	13.5	12.2	12.6
Piped water on neighbour's housing unit	5.1	4.4	4.3	4.4	11.0	11.4	8.1	9.5
Piped water on community supply	22.0	21.1	19.5	20.4	30.9	29.3	18.6	23.5
Water sellers	0.4	0.5	1.0	0.7	0.0	0.2	1.0	0.6
Water tanks	0.3	0.4	0.5	0.5	0.0	0.1	0.7	0.4
Public well: Protected	19.2	14.7	9.6	12.7	10.6	7.3	8.1	8.2
Public well: Unprotected	18.5	12.6	7.8	10.9	18.8	10.0	6.2	9.0
Private well: Protected	1.9	1.4	2.1	1.8	2.3	2.9	2.6	2.7
Private well: Unprotected	0.4	0.6	0.3	0.4	0.0	0.4	0.7	0.5
Spring: Protected	0.5	1.3	0.4	0.7	0.0	0.0	0.0	0.0
Spring: Unprotected	0.4	0.7	0.3	0.5	0.2	0.1	0.1	0.1
Others	0.0	0.0	0.1	0.1	0.0	0.0	0.0	0.0
<b>Total</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>
Percentage with any toilet	45.6	63.1	79.0	68.9	51.7	67.2	62.7	62.7
Percentage with electricity	11.2	20.9	38.0	28.4	15.1	26.6	53.9	40.3
<b>Total Population</b>	<b>139,150</b>	<b>378,969</b>	<b>537,806</b>	<b>1,055,925</b>	<b>166,068</b>	<b>399,426</b>	<b>707,829</b>	<b>1,273,323</b>

**Table 8.13: Mean Distance to Key Social Services by Poverty Status and Area.**

Social Service	2004/05							
	Rural				Urban			
	Very Poor	Poor	Non Poor	Total	Very Poor	Poor	Non Poor	Total
Drinking Water	0.7	0.6	0.5	0.5	0.2	0.3	0.2	0.2
Health Centre	1.7	1.8	1.7	1.7	0.6	0.5	0.3	0.4
Primary School	1.5	1.4	1.2	1.3	0.5	0.4	0.3	0.4
	Poverty Status, 2009/10							
	Very Poor	Poor	Non Poor	Total	Very Poor	Poor	Non Poor	Total
	Very Poor	Poor	Non Poor	Total	Very Poor	Poor	Non Poor	Total
	Very Poor	Poor	Non Poor	Total	Very Poor	Poor	Non Poor	Total
Drinking Water	0.6	0.3	0.4	0.4	0	0.1	0.2	0.1
Health Centre	1.4	1.4	1.3	1.3	0.4	0.3	0.2	0.3
Primary School	2.9	1.3	1.1	1.5	0.1	0.2	0.1	0.1

## 8.4 Conclusion

This chapter has presented the poverty profile for Zanzibar for 2009/10 which is compared to the profile of 2004/05. Generally the pattern of poverty distribution observed in 2009/10 is broadly similar to what was observed in 2004/05.

## CHAPTER NINE: HOUSEHOLD INCOME

### 9.1 Introduction

Like the previous survey, the 2009/10 Zanzibar HBS collected information on income in addition to consumption and expenditure. The analysis of income and non-income poverty indicators in this report utilized mainly the consumption expenditure information. Information on household income is presented in this chapter.

### 9.2 Measuring Household Income

As for consumption, this survey collected income data using the diary and the twelve-month recall schedules. In both cases, the type, source and the value of income were recorded. The last section of household questionnaire (Form 1) included recall questions on various types of income earned by household members during the past 12 months. However, due to sensitivity of reporting income, these questions were reserved until the household has completed the monthly diary. Therefore, after initial interviews for Form 1, a diary was left at the household to record daily transactions in Form 2 for one month, distinguishing incomes from expenditures.

In the diary, income was recorded from all sources, including from sale of goods and services (cash) and income received in form of goods and services from sources such as own produced goods and services, subsidized items, items gathered from forest and sea, payment received in form of goods or services as well as transfers received (in-kind). For in-kind income, the local market value was recorded. Cash and in-kind earnings from employment, agricultural and non-agricultural activities were also recorded in this schedule.

At the end of the survey month, the enumerator re-interviewed the household to complete Form 1 by filling-in the recall income schedule for twelve months prior to the survey month. A household was probed and guided by the enumerator to recall different income items prescribed in the recall schedule. The interview for income was timed for the end of the survey month in order to gain confidence of the household before asking such sensitive questions. In this way, risks of total non-response at the beginning of the survey month were reduced even if a household refused to report income at the end of survey month.

Out of the 4,293 households analyzed, some 40 reported no income. After assessing the quality of both sources of income data, the ultimate income used in this analysis was drawn from the annual recall schedule. Income is often under-reported, but there was found to be a reasonable correlation between income and expenditure per capita (a correlation coefficient of 0.521). The ratios between per capita income and expenditure were found to be 0.71 (rural), 0.74 (urban) and 0.72 (Zanzibar). As for the consumption expenditure analysis, an adjusted figure was used for imputed rent.

The mean per capita annual incomes by source from annual recall schedule in 2004/05 and 2009/10 Zanzibar HBS are given in Table 9.1. The per capita income is derived by dividing the sum of annual incomes by the number of household members. The weighted per capita incomes are then averaged over all households.

The table reveals that per capita income is higher (1.4 times) in urban compared to rural areas. The main sources of income in terms of share contributed to the total income are employment for cash (27.4 percent) and non-farm self employment (26.3 percent). In urban areas, employment for cash accounts for 36.5 percent and non-farm self employment contributes 27.4 percent. In rural areas, non-farm self employment contributes 25.2 percent and agriculture accounts for 22.2 percent. As in the previous HBS, the main source of income in rural areas is not agriculture but non-farm self-employment. Another important source of income in rural areas is employment for cash (17.7 percent).

The income levels have doubled for some sources between 2004/05 and 2009/10. The agricultural and remittance incomes have increased by almost three times while income from employment for cash, non-farm self employment and rent have doubled during the period. The pattern of income distribution among the different sources is similar between 2004/05 and 2009/10 with slight changes. For example, in rural areas, the share for agriculture income has increased and for non-farm self employment has decreased. The proportion of income from other unspecified sources is high and

increasing. One would assume that these sources relate to informal sector activities which might fall to non farm self employment.

**Table 9.1: Mean Annual Per Capita Household Income (TShs.) by Source and Area.**

Source	Area				Total	
	Rural		Urban			
	2004/05	2009/10	2004/05	2009/10	2004/05	2009/10
Employment – cash	62,157	72,698	200,448	212,581	116,616	132,650
Employment – kind	3,544	5,317	5,643	10,983	4,371	7,745
Non Farm Self Employment	102,239	103,264	129,631	159,188	113,026	127,233
Agriculture	65,210	91,094	14,026	20,644	45,053	60,900
Cooperatives	649	347	1,554	0	1,005	198
Imputed Rent	34,884	35,663	69,830	63,163	48,646	47,449
Interest	123	663	1,314	354	592	530
Dividend	207	17	157	0	187	10
Rent	5,998	4,801	15,237	12,852	9,636	8,252
Remittances	20,410	27,274	28,527	45,643	23,606	35,146
Others	35,394	68,688	33,771	56,365	34,755	63,406
<b>Total Annual Income</b>	<b>330,814</b>	<b>409,826</b>	<b>500,137</b>	<b>581,773</b>	<b>397,494</b>	<b>483,520</b>

The mean annual household income by source and area are presented in Table 9.2 below. The main sources of earnings at household level are found to be cash employment (27.4 percent), non-farm self-employment (26.3 percent) and agriculture (12.6 percent). Urban incomes are generally higher than the rural ones with the exception of agriculture income. In rural areas, agriculture (22.2 percent) as a source of income comes second after non-farm self-employment (25.2 percent), while cash employment, contributing 17.7 percent comes third. There has been a slight decrease in proportion of income from cash employment and non- farm self employment with a slight increase in proportion of income from agriculture income between 2004/05 and 2009/10. The pattern in urban and rural does not differ very much with the overall picture.

**Table 9.2: Mean Annual Household Income (TShs.) by Type and Area.**

Source	Area					
	Rural		Urban		Total	
	2004/05	2009/10	2004/05	2009/10	2004/05	2009/10
Employment – cash	329,831	388,760	1,189,843	1,202,790	645,787	726,442
Employment – kind	18,805	28,431	33,496	62,144	24,203	42,416
Non Farm Self Employment	542,528	552,220	769,477	900,694	625,906	696,776
Agriculture	346,034	487,134	83,254	116,804	249,493	333,511
Cooperatives	3,443	1,857	9,227	0	5,568	1,087
Imputed Rent	185,108	190,713	414,503	357,377	269,385	259,850
Interest	651	3,544	7,801	2,003	3,278	2,905
Dividend	1,098	92	930	0	1,036	54
Rent	31,827	25,677	90,443	72,720	53,362	45,191
Remittances	108,304	145,850	169,331	258,248	130,724	192,476
Others	187,816	367,318	200,461	318,914	192,462	347,239
Total Annual Income	1,755,445	2,191,597	2,968,768	3,291,694	2,201,203	2,647,947

It is also possible to scrutinize the number and types of sources of income in a household. If individuals in a household receive income from similar sources, the type of source is counted only once. For example, if two individuals in a household are employed, then cash employment (wages and salaries) is recorded as type of source only once. If one household member is employed and the other is engaged in self-employment, then the household is considered to have

two sources of income. Nevertheless, having many sources of income does not imply more household income as the sources might not yield very much earnings.

Table 9.3 below reveals that most households in Zanzibar have more than one source of income; only about one percent has only one source. In all districts except Mjini, almost all households have more than three sources of income.

**Table 9.3: Percentage Distribution of Households by Number of Income Sources and District, , 2009/10.**

Sources of Income	Kaskazini "A"	Kaskazini "B"	Kati	Kusini	Magharibi	Mjini	Wete	Micheweni	Chake Chake	Mkoani	Total
	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
1	1.5	0	0.1	1.2	0.1	0	2.9	2.4	0.4	1.4	0.9
2	0.4	0.3	0	0.2	0.3	5.1	0	0	0.1	0	1.2
3	1.5	1.5	1.7	3.3	2.3	22	2.4	0	2	0.5	6.1
4	13.5	23.3	22.3	14	21.2	28.4	14	10.2	8.5	7.3	18
5	37.2	49.1	50	24	36.5	22.5	42.6	49.3	40.7	42.4	37.3
6	40.8	22.9	23.6	37.8	20.4	11	34	34.4	36.6	44.6	27.4
7	4.4	2.8	2.2	15.1	13.3	9.5	3.5	3.6	10.4	3.8	7.3
8	0.6	0	0.1	4.4	5.7	1.1	0.005	0	1.1	0.1	1.5
<b>Total</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>
<b>Households</b>	<b>20,531</b>	<b>15,736</b>	<b>15,465</b>	<b>9,333</b>	<b>35,064</b>	<b>51,444</b>	<b>23,406</b>	<b>19,821</b>	<b>19,636</b>	<b>22,074</b>	<b>232,511</b>

Nevertheless, at household level, more income sources might imply higher per capita income as revealed by Table 9.4 below. In urban areas, the per capita income for households with at least seven sources is higher than that of households with at most three income sources. The same pattern is revealed in rural areas. Compared to 2004/05, the ratios by number of sources have decreased slightly.

**Table 9.4: Mean Annual Per Capita Income (TShs.) by Sources and Area.**

Source of income	Rural		Urban		Total	
	2004/05	2009/10	2004/05	2009/10	2004/05	2009/10
1-3	285,166	417,699	450,166	589,106	396,077	531,849
4-6	338,058	402,487	567,684	577,062	392,744	465,478
7+	511,652	673,536	994,172	737,825	653,258	695,699
<b>Total</b>	<b>330,814</b>	<b>409,826</b>	<b>500,137</b>	<b>581,773</b>	<b>397,494</b>	<b>483,520</b>

The income data collected identify the household member responsible for the income earned. This information was then linked to the demographics of the individual earner such as education and sex. Like in other analysis, comparison is made between 2004/05 and 2010 surveys. Some data on the income per individual per year appeared extremely underreported. Therefore, analysis at individual level considers only those observations where income per earner per year is above TZS 10,000 in 2004/05 prices.

Table 9.5 reveals that income levels rise with education of the earner. The income levels are higher for urban earners compared to their rural counterparts with the same education level. Urban earners seem to have under reported their incomes consistently across education level in 2010 as compared to 2004/05. Otherwise, there have been increases in income levels between 2004/05 and 2009/10 for all education levels except secondary education holders.

**Table 9.5: Mean Annual Income Per Earner by Education of Earner and Area.**

Education of earner	Rural		Urban		Total	
	2004/05	2009/10	2004/05	2009/10	2004/05	2009/10
No Education	669,464	784,846	969,588	852,509	724,336	801,958
Adult Education	1,089,394	1,417,960	1,541,635	1,506,119	1,163,744	1,437,447
Primary / Basic Education	678,283	761,559	1,175,767	1,141,570	871,504	913,970
Secondary	1,579,787	1,436,290	2,105,699	1,814,038	1,892,332	1,670,505
Tertiary	1,643,000	4,127,765	3,398,381	2,140,374	2,708,673	2,872,893
<b>Total</b>	<b>850,041</b>	<b>917,853</b>	<b>1,551,150</b>	<b>1,339,714</b>	<b>1,120,390</b>	<b>1,097,544</b>

The mean annual incomes per earner by education and district are given in Table 9.6 where a similar rise of incomes as education level increases is observed. Apparently those with Primary / Basic Education have lower mean than those with Adult Education. This pattern of reporting is apparent in year 2004/05, and could be explained by relative sizes of the population in these education groups.

**Table 9.6: Mean Annual Income Per Earner (TShs.) by Education of Earner and District, 2009/10.**

District	Education of Earner					Total
	No Education	Adult Education	Primary / Basic Education	Secondary	Tertiary	
Kaskazini "A"	895,720	903,841	859,220	910,613	2,881,939	898,512
Kaskazini "B"	618,825	966,333	601,397	1,041,427	1,633,431	676,662
Kati	856,790	1,624,201	928,200	1,644,802	5,227,247	1,072,037
Kusini	989,605	808,699	940,866	1,561,440	1,824,401	1,082,762
Magharibi	814,803	1,386,328	795,491	1,823,145	3,920,994	1,145,780
Mjini	786,269	1,476,168	1,212,690	1,795,186	1,712,961	1,352,265
Wete	829,421	1,082,074	888,605	1,565,069	2,416,763	1,070,362
Micheweni	666,968	1,747,554	720,686	1,523,440	2,103,381	818,750
Chake Chake	766,456	1,942,938	967,762	1,720,002	3,798,119	1,225,804
Mkoani	933,020	1,693,662	806,252	1,300,968	2,224,159	960,784
<b>Total</b>	<b>801,958</b>	<b>1,437,447</b>	<b>913,970</b>	<b>1,670,505</b>	<b>2,872,893</b>	<b>1,097,544</b>

The gender pattern of income earners depicts that males earn about three times more income than females in both urban and rural as shown in Table 9.7 below. Income levels have increased between 2004/05 and 2009/10 but the gender disparity remains the same for the two survey periods.

**Table 9.7: Mean Annual Income Per Earner (TShs.) by Sex of Earner and Area.**

Sex	Rural		Urban		Total	
	2004/05	2009/10	2004/05	2009/10	2004/05	2009/10
Male	1,275,130	1,399,243	2,106,698	1,945,179	1,606,421	1,635,671
Female	392,804	463,016	882,009	733,901	574,429	576,532
<b>Total</b>	<b>850,041</b>	<b>917,853</b>	<b>1,551,150</b>	<b>1,339,714</b>	<b>1,120,390</b>	<b>1,097,544</b>

A similar gender disparity is also observed by district as depicted by Table 9.8 below.

**Table 9.8: Mean Annual Income Per Earner by Sex of Earner and District.**

District	Sex of Earner					
	Male		Female		Total	
	2004/05	2009/10	2004/05	2009/10	2004/05	2009/10
Kaskazini "A"	928,569	1,368,278	252,185	444,194	588,366	898,512
Kaskazini "B"	1,328,575	960,107	455,816	407,459	921,319	676,662
Kati	1,191,621	1,518,184	432,876	621,071	818,653	1,072,037
Kusini	1,041,840	1,639,763	323,672	531,554	652,208	1,082,762
Magharibi	1,954,062	1,883,628	744,259	484,071	1,429,716	1,145,780
Mjini	2,190,501	1,918,921	997,840	793,267	1,649,315	1,352,265
Wete	1,159,838	1,590,906	354,934	588,283	756,655	1,070,362
Micheweni	1,001,368	1,204,060	263,315	419,231	659,018	818,750
Chake Chake	1,785,685	1,785,755	617,262	704,102	1,236,415	1,225,804
Mkoani	1,806,485	1,447,703	539,248	425,582	1,205,775	960,784
<b>Total</b>	<b>1,606,421</b>	<b>1,635,671</b>	<b>574,429</b>	<b>576,532</b>	<b>1,120,390</b>	<b>1,097,544</b>

### 9.3 Conclusions

In this chapter it was found that income levels correlate with expenditure levels at household level and across geographical areas. For the population as a whole, employment and non-farm self employment are the two most important sources of income. Surprisingly, even in rural areas, nonfarm self employment provides more income than agriculture. Households with more income sources have a higher income. Income is strongly related to the educational levels of earners while males earn more than females in both urban and rural areas. There has also been a general increase of income levels between 2004/05 and 2009/10.

## CHAPTER TEN: HUMAN DEVELOPMENT INDEX AND BENEFIT INCIDENCE ANALYSIS

### 10.1 The Rationale for Human Development Index and Benefit Incidence Analysis

The preceding chapters have reviewed poverty, welfare and general living condition in Zanzibar using various indicators. Each indicator of welfare and poverty has been looked at singly. For instance, the report presents a table on literacy achievement separately from the table on net school enrolment. Also indicator of access to water is reported separately from the indicator of access to electricity. All these non-income indicators are reported separately from the indicators of consumption, poverty and income. While each indicator is important in its own right a general sense of whether Zanzibar is making progress or not can only be garnered by looking at all these indicators together. This approach would be even better if progress or lack of it can be quantified in its full multidimensional extent. This however is a very difficult task. Yet in order to avoid the general tendency of focusing only on one indicator, particularly the income poverty indicator, it is important to generate a composite indicator that will be used to evaluate the trend in the living condition in a more multidimensional way. Fortunately, human development index proposed and used extensively by the UNDP offers the possibility for evaluating trend in the living condition in a more encompassing way. The first task of this chapter therefore is to report a variant of the human development index to assess the progress in the living condition in Zanzibar from 2004 to 2010.

The second objective of this chapter is to report the relationship between the distribution of benefits from publicly provided services on one hand and the distribution of the living standard on the other. This is accomplished through the benefit incidence analysis of health and education. There are two reasons for reporting benefit incidence analysis as a complement to the poverty profile reported in chapter eight. The first reason has to do with the limitation of the consumption data used for poverty analysis. Ideally, household consumption data need to include full value of all items consumed by members of the households. This however is not possible because some items are subsidized and others are full funded by the government and therefore it is impossible to estimate the value consumed by the households. Education and health are two of the highly subsidized consumption items<sup>4</sup>. The value of the household consumption of education and health is therefore not fully captured in the consumption aggregate of households who utilized these two services. As a result of this, measurement of poverty may be overestimated if the poor are the ones who benefit more from these services. It is for this reason that it is important to conduct benefit incidence analysis to see how the poor benefit from the services as compared to the rest of the population.

Another reason for conducting benefit incidence analysis is to find out the way that public expenditure impinges on the distribution of the standard of living. If public expenditure is progressive, meaning that the poor benefit disproportionate more than the non- poor, then it means that such expenditure ameliorates the inequality. If however public expenditure is regressive, then it means that it reinforces inequality. The way public expenditure impinges on the distribution of the living standard is important because the general sentiment is that the state should minimize inequality as much as is economically feasible. The current global clamour for pro-poor policies is such that expenditure is judged as not good enough if it is found to be regressive.

### 10.2 Human Development Index

Human Development Index summarizes three dimensions of welfare into a single index. These are long and healthy life which is measured by life expectancy at birth, knowledge which is measured by adult literacy rate together with the gross enrolment rate, and the standard of living which is measured by per capita expenditure. Each component of the welfare is normalized to range from 0 to 1 by using the following formula;

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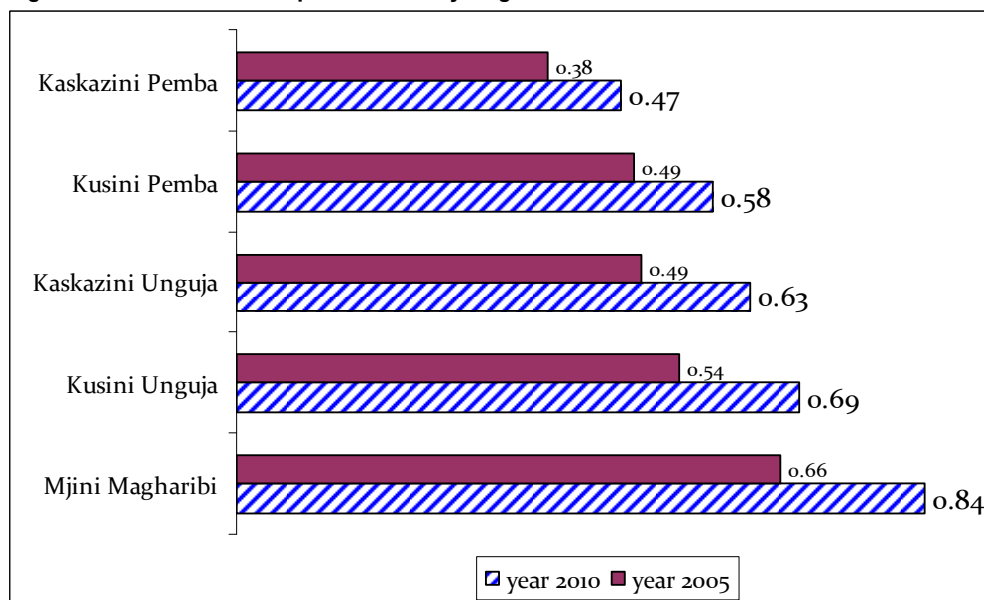
<sup>4</sup> It is not fully correct to view education as a purely consumption good. Education is also an investment, both to the individual and to the nation.

$$index = \frac{x - \min(x)}{\max(x) - \min(x)}$$

Where  $x$  is the measure of welfare such as life expectancy at birth,  $\min(x)$  is the minimum value of the welfare measure and  $\max(x)$  is the maximum value of the welfare measure. The first welfare measure that is used is the life expectancy at birth. The goal posts (that is, the minimum and the maximum values) are adopted from the UNDP report where 25 years is the minimum life expectancy and 85 is the maximum life expectancy. The second measure is knowledge, which is measured by combining the adult literacy rate and gross enrolment for primary school, secondary school and tertiary education. The maximum value is 100% while the minimum value is 0%. The last measure is income, which in this case is measured by household per capita expenditure from the household budget surveys of 2004/05 and 2009/10 converted to 2009/10 prices. The per capita expenditure is transformed into logarithm consistent with the UNDP approach, but the minimum and maximum values are determined by the minimum and maximum per capita expenditure in the survey data. The fact that goal posts for per capita expenditure is taken from the two survey data means that the HDI used here is a measure of relative performance between 2004/05 and 2009/10, and the actual values of the index is relevant only for the two surveys.

Figure 10.1 shows results of the HDI by regions for 2004/05 and 2009/10. Each region registered progress in terms of Human Development Index. There is notable variations in the levels of human development across regions and this variation persist from 2004/05 to 2009/10. It is noted that Mjini Magharibi has the highest HDI in 2010. The lowest HDI is that of Kaskazini Pemba. It is also evident the ordering of regions has not changes since 2005.

**Figure 10.1: Human Development Index by Regions of Zanzibar**



## 10.2 Benefit Incidence Analysis

Benefit incidence analysis was conducted by using the share of access and the participation rate by quintile groups where the quintiles are arranged in terms of households' consumption per adult equivalent. This is to say that quintile group 1 is the poorest, followed by quintile group 2, and so on.

The share of access to education is measured as the percentage of persons who are accessing a given level of education for a given quintile. This is obtained by taking the total number of persons who access education at a given quintile divided by total persons who access this level of education for all quintiles. The share of access to education by quintiles is reported in Table 10.1. The largest disparity in the share is with regards to preschool on one hand and form three to form six on the other, where the poorest quintiles have significantly less share of access than the richest quintiles. Nevertheless, there has been some improvement in the share of the poorest in the access to form three to form six level of education. No such progress is registered with respect to preschool education. The disparity in the share of access to basic education is not as large even though the richest quintile has slightly more share than the poorest quintile.

**Table 10.1: Share of Access in Education By Quintile Groups**

Quintile	Pre School		Basic		Form Three to Form Six	
	2004/05	2009/10	2004/05	2009/10	2004/05	2009/10
1	0.095	0.070	0.179	0.183	0.137	0.184
2	0.214	0.203	0.199	0.187	0.164	0.151
3	0.164	0.196	0.199	0.207	0.179	0.153
4	0.190	0.223	0.209	0.208	0.235	0.227
5	0.337	0.309	0.214	0.215	0.284	0.285

To obtain the participation rate to education first the eligible members of households are identified. Eligibility is identified by age range. For example, persons of the age range for attending pre-schools are identified and then percentage of these persons who actually attend preschool is taken as the participation rate. This is done for three levels; preschool, basic education and form three to form six education. Table 10.2 reports participation rate in education by quintiles. The participation rate is small for preschool, particularly with respect to the poorest quintiles. However, there is a marginal improvement in the preschool participation rate from 2004/05 to 2009/10. The participation rate for form three to form six has improved markedly, with the poorest registering a very big increase. Nevertheless, participation rate is generally higher for rich quintiles than the poor quintiles.

**Table 10.2: Rate of Participation in Education By Quintile Groups**

Quintile	Pre School		Basic		Form Three To Form Six	
	2004/05	2009/10	2004/05	2009/10	2004/05	2009/10
1	0.054	0.059	0.641	0.677	0.098	0.254
2	0.122	0.169	0.710	0.691	0.116	0.206
3	0.093	0.164	0.712	0.761	0.128	0.211
4	0.109	0.186	0.747	0.771	0.165	0.309
5	0.191	0.257	0.763	0.792	0.202	0.391

Table 10.3 reports the share of quintiles and the participation rate by quintiles in health services. As with the education, share of health utilization by quintile simply gives the share of persons who made use of health services by quintiles. The poorest quintiles are reported to have larger share of health service utilization than the richest quintiles, though the difference is not very large.

In order to obtain the rate of participation by quintile the eligible persons are first identifies. A person is considered eligible if he/she report to have been sick. Participation rate therefore obtained by dividing the total number of persons who made use of health services divided by the total number of persons who were sick. This is done by quintiles.

The poor have a higher participation rate than the rich although the participation rate of the poorest quintile has gone down from 2004/05 to 2009/10, while during this period the participation rate of the richest quintiles has increased marginally.

**Table 10.3: Benefit Incidence in Health Services**

Quintile	Share by Quintile Groups		Rate of Participation by Quintile Groups	
	2004/05	2009/10	2004/05	2009/10
1	0.216	0.198	0.718	0.675
2	0.201	0.208	0.667	0.696
3	0.197	0.205	0.654	0.695
4	0.198	0.198	0.660	0.655
5	0.189	0.190	0.627	0.639

### 10.3 Conclusion

The chapter has reported Human Development Index by regions from 2004/05 to 2009/10. Apparently, there is significant variation across regions but all regions have registered marked progress over this period of time. Findings from the benefit incidence analysis show that access to education remains unequal particularly at the level of preschool. However, the poor have increased the utilization of education at the level of form three to form six significantly. Furthermore, the poor have a higher participation rate to health benefits than the rich. However, the participation rate of the poorest quintile has gone down from 2004/05 to 2009/10.

## Appendix A1: Sampling and Sampling Weights

### Introduction

Data collection for the Household Budget Survey (HBS) begun on the first week of June 2009 and was completed in May 2010. There were 2 data collecting teams, one was in Unguja and the other was in Pemba. Each team consisted of supervisors and enumerators. Supervisors were responsible for overall administrative work and for checking the quality of the questionnaires before sending them to head office for data editing and processing.

### Sample Design

The survey covered the whole of Zanzibar and the estimation level was districts. Information was collected from all selected households members. The primary sampling units for the survey were the census enumeration areas (EAs) and the ultimate sampling units were individual household members. Therefore, the survey utilized a three-stage systematic stratified random sampling design for clusters (EAs), households and individual household members.

The desired confidence level for the survey was 95 percent ( $z_{\alpha/2}$  is 1.96), with an error margin (E) of 2 percent for estimating the parameters. The expected prevalence (P) was the proportion of poor for 2004/05 household budget survey and the poverty assumed to be reduced by 5 in 2009/10 for each district .

The formula for determining the sample size (n) of population needed for estimating a population proportion in each district is given by the following expression:

$$n = \frac{(z_{\alpha/2})^2 PQ}{E^2} \bigg/ \left[ \frac{(z_{\alpha/2})^2 PQ}{NE^2} + 1 \right]$$

If we let:

$$n_0 = (z_{\alpha/2})^2 PQ / E^2$$

We have:

$$n = n_0 / (1 + n_0/N)$$

We first calculated  $n_0$  and if  $n_0/N$  was less than 0.05, then we let  $n = n_0$ . But if  $n_0/N$  was greater or equal to 0.05, then we adjusted the sample size n by the formula above. Substituting the values of  $z_{\alpha/2}$ , P and E, we get:

The minimum value of population to be interviewed found at Micheweni district as indicated below.

$$n_0 = (1.96)^2 (0.703 \times (1-0.703)) / (0.02)^2$$

$$n_0 = 2,005$$

Dividing  $n_0$  by  $N$  for each district, we got values less than 0.05 and thus the minimum number of people we needed to interview for each district was 2,005. For Kusini district the adjusted value was needed since the value was more than 0.05 and it was adjusted as indicated above by applying the formula  $n = n_0 / (1 + n_0/N)$ .

We then determined the number of EAs and households to be selected that would yield the minimum number of individuals to be interviewed. We assumed that cases were randomly distributed among the districts and EAs.

We computed the number of households to be selected in each district by dividing the minimum sample by average household size as found in the recent census. Due to homogeneity among EAs and cost considerations, we selected 24 households per EA.

The tables below depict the sample design assuming no change in poverty and a 5 percent reduction of poverty between 2004/05 and 2009/10.

Table 1: Sample design for HBS 2010 Znz  
HBS 2004/05

District	Popln 2008	Hhsize 2005	Hholds 2008	Z <sub>0.2</sub> (95% CI)	Expected Proportion of Poor (p)	Estimate proportion							
						Expected error margin for proportion (E)	Expected Sample Size pojn (n <sub>0</sub> )	Is (n <sub>0</sub> /popln > 0.05)?	Adjust: n = l/(1+J) If > 0.05	Minimum sample size hholds	Minimum sample size clusters	Recommened sample size hh (multiple of 24)	Recommened sample size clusters
Kaskazini A	99,186	5.3	18,714	1.96	0.53	0.02	2,392	0.0241	NO	451	19	456	19
Kaskazini B	66,687	5.0	13,337	1.96	0.48	0.02	2,397	0.0359	NO	479	20	480	20
Kati	71,035	5.2	13,661	1.96	0.46	0.02	2,386	0.0336	NO	459	19	480	20
Kusini	36,776	4.7	7,825	1.96	0.54	0.02	2,386	0.0649	YES	477	20	480	20
Magharibi	202,959	5.4	37,585	1.96	0.39	0.02	2,285	0.0113	NO	423	18	432	18
Mjini	256,543	6.1	42,056	1.96	0.38	0.02	2,263	0.0088	NO	371	15	384	16
Wete	127,923	5.7	22,443	1.96	0.71	0.02	1,977	0.0155	NO	347	14	360	15
Micheweni	106,219	5.3	20,041	1.96	0.74	0.02	1,848	0.0174	NO	349	15	360	15
Chake Chake	109,926	6.1	18,021	1.96	0.57	0.02	2,354	0.0214	NO	386	16	408	17
Mkoani	116,129	5.5	21,114	1.96	0.42	0.02	2,340	0.0201	NO	425	18	432	18
Zanzibar	1,193,383	5.5	214,797		0.49		22,627			4,167	167	4,272	178
National Estimate	1,193,383	5.5	214,797	1.96	0.49	0.02	2,400	0.0020	NO	436	18	456	19

Poverty reduced by 5% in 2009/10

District	Popln 2008	Hhsize 2005	Hholds 2008	Z <sub>0.2</sub> (95% CI)	Expected Proportion of Poor (p)	Estimate proportion							
						Expected error margin for proportion (E)	Expected Sample Size pojn (n <sub>0</sub> )	Is (n <sub>0</sub> /popln > 0.05)?	Adjust: n = l/(1+J) If > 0.05	Minimum sample size hholds	Minimum sample size clusters	Recommened sample size hh (multiple of 24)	Recommened sample size clusters
Kaskazini A	99,186	5.3	18,714	1.96	0.504	0.02	2,401	0.0242	NO	453	19	456	19
Kaskazini B	66,687	5.0	13,337	1.96	0.456	0.02	2,382	0.0357	NO	476	20	480	20
Kati	71,035	5.2	13,661	1.96	0.437	0.02	2,363	0.0333	NO	454	19	456	19
Kusini	36,776	4.7	7,825	1.96	0.513	0.02	2,399	0.0652	YES	479	20	480	20
Magharibi	202,959	5.4	37,585	1.96	0.371	0.02	2,240	0.0110	NO	415	17	432	18
Mjini	256,543	6.1	42,056	1.96	0.361	0.02	2,215	0.0086	NO	363	15	384	16
Wete	127,923	5.7	22,443	1.96	0.675	0.02	2,109	0.0165	NO	370	15	384	16
Micheweni	106,219	5.3	20,041	1.96	0.703	0.02	2,005	0.0189	NO	378	16	384	16
Chake Chake	109,926	6.1	18,021	1.96	0.542	0.02	2,384	0.0217	NO	391	16	408	17
Mkoani	116,129	5.5	21,114	1.96	0.399	0.02	2,303	0.0198	NO	419	17	432	18
Zanzibar	1,193,383	5.5	214,797		0.466		22,802			4,199	168	4,296	179
National Estimate	1,193,383	5.5	214,797	1.96	0.466	0.02	2,390	0.0020	NO	434	18	456	19

The **first stage** of sample selection involved selection of EAs using probability proportional to size (PPS) for each district as shown in the table above.

The **second stage** of sample selection was the selection of 24 households from each selected EA using systematic simple random sampling from the list of household heads. All selected households were to be interviewed for the household questionnaire. All household members were to be interviewed for a consumption diary.

### **Sampling Frame**

The sampling frame of **clusters** was the **list of all enumeration areas** (EAs) generated during the 2002 Population and Housing Census for each district. The census cartographic work was done in such a way that ensured a non-clustered spiral spread of EAs within each district. The districts within each region are also arranged in a similar pattern. Hence, the EAs in each district were listed following the census coding system and a target sample selected using PPS sampling. The EA maps and other administrative information were used to identify the boundaries and features of the selected EAs.

For **households**, the sampling frame was the **list of households (heads)** constructed for each selected EA. To ensure a random scattered sample, the listing of households should be done in a serpentine manner from one end of the EA to another end. The listing questionnaire included identification information of the EA and households.

### **Sample Size for EAs and Households**

The total number of clusters selected for this survey was 179 and the distribution for each district is shown in the table above. As indicated previously, the target sample was 24 households per cluster yielding a total of 4,296 households for all the districts as depicted in the table above. The number of individuals living in these households was expected to be around 1,193,383 as portrayed in the table above. The main respondents for household questionnaire were the household heads or any other responsible adults in the household.

### **Selection Procedure**

The selection of EAs followed the PPS sampling while the selection of households followed a simple random procedure. The random spread of households was necessary for achieving a non-clustered sample. The following steps were used to select the different sampling units.

#### **Selection of EAs:**

- List the EAs in a serial order according to their identification details based on census coding system with their corresponding cumulative population.

- Determine the sampling interval  $h$  by dividing the total number  $M$  of district population to the desired number of selected EAs  $s$ , that is,  $h = M/s$ .
- Find a random starting number (nearest integer) between 1 and  $h$  so that the EA whose cumulative population falls within the number is selected first.
- Select the consecutive EAs by adding the multiples of  $h$  to the random starting number until the desired number of EAs is achieved.

#### **Selection of Households in EA:**

- List the households in a serial order according to their identification details based on geographical spread.
- Determine the sampling interval  $k$  by dividing the total number  $N$  of households to the desired number of selected households, that is,  $k = N/24$ .
- Find a random starting number (nearest integer) between 1 and  $k$  so that the household with the same serial number is selected first.
- Select the nearest integer to the serial numbers of consecutive households by adding the multiples of  $k$  to the random starting number until the desired number of households (24) is achieved.
- A 50 percent sample of reserve households was also selected.

#### **Calculation of Sampling Weights**

There are two sets of sampling weights for the survey. The first set is the EA weights based on their selection from the 2002 Population and Housing Census EAs frame. The second set is household weights based on listing of households in all the selected EAs.

#### **Calculation of EA Weights**

The sampling weight  $W_{ij}$  for EA  $j$  in District  $i$  is calculated as follows:

$$W_{ij} = (1/s_i) * (M_i / m_{ij})$$

where:

$s_i$  is the number of EAs selected from District  $i$ .

$M_i$  is the projected population of District  $i$  in 2009.

$m_{ij}$  is the population of EA  $j$  in District  $i$  during the 2002 Census.

#### **Calculation of Household Weights**

The sampling weight  $W_{jk}$  for household  $k$  in EA  $j$  is calculated as follows:

$$W_{jk} = (N_{ij} / 24)$$

where:

$N_{ij}$  is the number of listed households in EA j of District i.

### Calculation and Adjustment of Overall Sampling Weights

The overall sampling weight  $W_{ijk}$  for household k in EA j in District I is the product of EA and household weight and is calculated as follows:

$$W_{ijk} = (W_{ij} * W_{jk})$$

The overall sampling weight has to be adjusted due to the variation between the selected and responded sampling units as well as between the 2002 census population and the 2009 projected population.

The household adjustment factor is calculated by dividing the actual listed EA population by the estimated EA population from the survey.

The EA adjustment factor is calculated by dividing the projected 2009 district population by the estimated district population from the survey.

### Basic Formulae for Estimation

Let  $y_{ijk}$  be the observation on variable Y for household k in village j of District i. Then, by applying the sampling weights described above, various survey estimates can be calculated as follows:

#### 1.8.1 District Estimates

##### (a) Estimate of total for the i<sup>th</sup> District

$$\hat{Y}_i = \sum_{j=1}^s \sum_{k=1}^{24} W_{ijk} y_{ijk}$$

where:

$W_{ijk}$  = sampling weight for k<sup>th</sup> household in j<sup>th</sup> village in i<sup>th</sup> District

##### (b) Estimate of average for the i-th village

$$\hat{\bar{Y}}_i = \frac{\sum_{j=1}^s \sum_{k=1}^{24} W_{ijk} y_{ijk}}{\sum_{j=1}^s \sum_{k=1}^{24} W_{ijk}}$$

where:

$W_{ijk}$  = sampling weight for kth household in jth village in ith District

### 1.8.2 National Estimates

#### (a) Estimate of national total

$$\hat{Y} = \sum_{i=1}^{10} \sum_{j=1}^s \sum_{k=1}^{24} W_{ijk} y_{ijk}$$

where:

$W_{ijk}$  = sampling weight for  $k^{\text{th}}$  household in  $j^{\text{th}}$  village in  $i^{\text{th}}$  District

#### (b) Estimate of national average

$$\hat{\bar{Y}} = \frac{\sum_{i=1}^{10} \sum_{j=1}^s \sum_{k=1}^{24} W_{ijk} y_{ijk}}{\sum_{i=1}^{26} \sum_{j=1}^s \sum_{k=1}^{25} W_{ijk}}$$

where:

$W_{ijk}$  = sampling weight for  $k^{\text{th}}$  household in  $j^{\text{th}}$  village in  $i^{\text{th}}$  District

### Listing Exercise

Before the listing exercise, the supervisors and enumerators were trained on map reading and the listing questionnaire. The listing of households in each selected EA was done comprehensively in order to get detailed, accurate and up-to-date information immediately before the survey. The supervisors ensured that all households in the EA were listed according to the given instructions and EA map. The selection of households was done by supervisors as per laid down procedures outlined above.

In order to achieve a representative sample, the HBS listing questionnaire included questions on household and individual characteristics. The combination of responses was used to stratify the households into high, middle and low income status. Ideally, the sample would comprise of eight households for each income status. However, high and sometimes middle income households from the lists were inadequate necessitating oversampling in middle and low income states respectively.

## **Appendix A2: Calculating the Consumption Aggregate and the Estimation of the Poverty Line**

This appendix reports the methodology used for cleaning the consumption data and the approach adopted to obtain the poverty lines

### **Cleaning the Consumption Data**

The consumption data was cleaned largely along the same approach that was used to clean the 2004/05 Household Budget Survey data. The cleaning protocol was largely maintained to ensure comparability of the two surveys. The first round of cleaning the data took place during the entry of data mostly to correct data that was wrongly entered. The second round took place just before the analysis of the consumption data and the idea was to weed off outliers and correct obvious errors such as miscoding of measurement of units.

The cleaning of food items involved the following key steps. First, where value of an item is available but the corresponding quantity is missing, or where the quantity of the item is available but the value is missing, imputation was made. In case of the missing values cash transactions for the data that has no missing component were used to obtain the median unit value. This median unit value together with the actual quantity are used to fill the missing value of the item. With regards to the missing quantity, median unit values is also used to get the quantity. Fortunately very few cases had to be replaced in this way. The second approach involved weeding off outliers. The prices that were found to be five times the median prices were replaced by the corresponding median prices. The quantities that were found to be ten times the median item's quantities were also replaced by the median item quantity. 2.5 percent of record was adjusted in this way. Further, the budget share of each item was used to assess any remaining outliers, where item's budget share that was in excess of the median budget share plus three times the standard deviation of the item's budget share was considered to be an outlier, and these were equally replaced by the median values. Per capita calorie consumption was also used to assess whether reported food consumption is an outlier.

The non-food items were cleaned in two steps. First regression analysis was used to impute rent on own occupied houses. The regression was first used to relate the quality of houses (type of walls, number of rooms etc) to the actual rent paid. Once this relationship was established, it was used to predict the rent of own occupied households based on the quality of houses. The second step was to remove outliers from non-food items. This involved flagging off record of item whose budget share is too high (in this case, if it is above the median budget share of the item plus three times the standard deviation of the item), and replace the outliers with the median values of the items.

### **Calculation of the Consumption Aggregate**

Consumption aggregate is key to poverty measurement. The procedure that was used to obtain the consumption aggregate was based on the procedure proposed by Deaton and Zaidi (2002)<sup>5</sup> and is similar to the approach used to arrive at consumption aggregate in the 2004/05 Zanzibar Household Budget Survey. Consumption aggregate is the sum of the values of goods and services consumed by the household, including own produced goods and gifts. Generally, consumption aggregate misses out on the consumption of public goods and does not capture fully the value of goods and services that are subsidized. For example, expenditure on public education is included, but not the full cost of such

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<sup>5</sup> Deaton A., and S. Zaidi (2002)., "Guidelines for Constructing Consumption Aggregates for Welfare Analysis". World Bank, Washington D.C.

education because government generally subsidizes education. The reason that these items miss in the consumption aggregate is because collection of data is insurmountable.

Information on consumption items was collected from a diary that was administered over a calendar months and questions asked on the basis on annual recall. For the purpose of estimating poverty however consumption over 28 days was used, which means standardization was made for all household consumption to be for 28 days. The standardization to 28 days is necessary to accommodate the month of February. Further, household consumption was adjusted on the basis of needs. This was done by using Adult Equivalent Scales that has been used in Tanzania since 1986 and are based on the estimated calorific needs by age and sex. These are reported on Table A2.1.

**Table A2.1: Adult Equivalent Scales**

Age Groups (Years)	Male	Female
0-2	0.4	0.4
3-4	0.48	0.48
5-6	0.56	0.56
7-8	0.64	0.64
9-10	0.76	0.76
11-12	0.8	0.88
13-14	1	1
15-18	1.2	1
19-59	1	0.88
Over 60	0.88	0.72

As reported in Chapter 7 Fisher Price Index was used to make it possible to assess real consumption across districts. Fisher Index is ideal as it allows substitutability across consumption items and it was also used in the 2004/05 Zanzibar Household Budget Survey. Fisher Price Index was calculated for each district and for the whole of Zanzibar, and consumptions at the district level were adjusted for price level. This is to make sure that no district appear to consume more (or less) on account of the price levels in the district, rather than on account of actual consumption. If for example an egg cost twice as much in Zanzibar town as in Chake Chake, and two households, one in Chake Chake and the other in Zanzibar town each consume one egg, the value of the consumed egg would be twice for the household in Zanzibar town as compared to the household in Chake Chake, but this would be purely accounted for by the price difference, not by the actual number of eggs consumed. It is for this reason that Fisher Price Index is used to adjust reported values of consumption.

#### **Deflating Aggregate Consumption for Comparing 2004/5 to 2009/10**

Since this report compares the findings from the 2004/05 to that of 2009/10, there is a need to also use the Fisher Ideal Index to ensure consumptions and incomes in the 2004/2005 HBS are comparable to their counterparts in the 2009/10 HBS. The CPI would have been ideal for this purpose if its coverage was wide enough. Unfortunately the CPI is based on

the sample collected from the urban areas only. The food component of the CPI has increased from 100 in 2005 to 169.3 in 2009, which is less than the increase observed when the Fisher Ideal Price Index was calculated from the consumption items of the two surveys, which changed from 100 to 213.979, an increase of 2.13979 folds. The Fisher Ideal Index from the two HBS is more attractive for converting the nominal values into real values because it is derived from a sample that is representative of the entire population of Zanzibar and the index itself is better at handling substitutions than the index used to calculate the CPI.

While it is relatively easier to obtain Fisher Ideal Price Index for food from the two indexes, the same is not true for non-food items because of the problems with the measurement units. For that matter, the Fisher Index for non-food items is obtained through projection using the CPI and the Fisher Index for food. It is assumed that the ratio of food to non food CPI holds for the Fisher Index from the sample too. Non food CPI changed from 100 in 2005 to 143.7, which makes the ratio between non-food and food to be equal to 0.848789. Using this ratio, the non-food Fisher Index is approximately equal to 181.623. The plutocratic weight of food in the consumption basket is 56.3. Thus the weighted Fisher Ideal Index for deflating the nominal value of consumption aggregate between 2004/05 and 2009/10 is 199.8394.

**Zanzibar Consumer Price Index (CPI) 2006-2009-Base, 2005**

Description	Weight	2006	2007	2008	2009
Food	57.4	107.0	124.2	154.4	169.3
Non Food	42.6	105.9	116.0	135.4	143.3
All Items	100	106.5	120.4	145.4	158.1

## Poverty Lines

No new poverty line was estimated from the 2009/10 Zanzibar Household Budget Survey data. Rather the approach used in Tanzania Mainland and in many other places of adjusting the previous poverty line by the changes in the price levels was used. This was done in the following steps. First, food basket of the bottom 50 percentile of the population was used for both the 2004/05 and the 2009/10 data to calculate the Fisher Price Index for food. It was notable that the basket of food hardly changed over this period, perhaps not surprising given that only five years separate the two periods. Fisher Price Index was found to be 2.139798974. This was thus used to adjust the food poverty line of 2004/05, which was Ths. 12,573 into the current value of Ths. 26,904.0034. The food share in the 2009/10 data was found to be 0.655762 and thus its inverse was used to obtain the Basic Needs Poverty line for 2009/10 which came to Ths. 41,027.10703. Table A2.2 gives more detail. Fisher is calculated as a square root of the product of the Paasche Price Index and Laspeyres Price Index. Paasche Price Index is given as follows;

$$Paasche = \frac{\sum Q_{05} P_{10}}{\sum Q_{05} P_{05}}$$

Laspeyre Price Index is given as follows

$$Laspeyres = \frac{\sum Q_{10} P_{10}}{\sum Q_{10} P_{05}}$$

The Fisher Ideal Price Index therefore is given as follows;

$$\sqrt{(Paasche) * (Laspeyres)}$$

Table A22: Food Items Used to Calculate Price Indices

Item Code	ITEM	Quantity consumed per adult equivalent 2004/05	Unit Value 2004/05	Quantity consumed per adult equivalent 2009/10	Unit Value 2009/10				
		Q05	P05	Q10	P10	Q05 x P10	Q05 x P05	Q10 x P10	Q10 x P05
10101	paddy	371.29	452.63			0	168056.99	5411886.4	0
10102	rice, husked	5571.81	459.69	5375.8741	1006.6989	5609134.8	2561305.3	64718.935	2471235.6
10103	green maize cob	119.05	479.07	60.036969	1077.9847	128334.08	57033.284	168548.76	28761.911
10104	maize, grain	150.6	487.94	187.96992	896.67942	135039.92	73483.764	764108.19	91718.045
10105	maize, flour	877.81	401.37	878.09917	870.18438	763856.55	352326.6	172553.11	352442.67
10106	millet, grain	214.99	442.83	158.22785	1090.5357	234454.26	95204.022	227551.2	70068.038
10107	millet, flour	157.23	675.93	236.96682	960.26606	150982.63	106276.47	142426.13	160172.99
10108	sorghum, grain	225.23	442.01	165.56291	860.25381	193754.96	99553.912	102227.64	73180.464
10109	sorghum, flour	189.87	483.68	106.38298	960.93983	182453.65	91836.322	135442.71	51455.319
10110	wheat, grain	189.39	471.69	121.6545	1113.3391	210855.29	89333.369	480114.48	57383.212
10111	wheat, flour	466.95	453.47	514.24051	933.63799	435962.26	211747.82	397916.51	233192.64
10112	barley & other c	590.55	363.72	389.27336	1022.2033	603662.16	214794.85	0	141586.51
10203	cost of grinding	0	356.35			0	0	816241.51	0
10204	bread	534.35	647.47	550.48199	1482.7761	792321.39	345975.59	0	356420.57
10205	baby food excl.	90.36	532.96	0	0	0	48158.266	54101.275	0
10206	biscuits	19.89	1655.3	19.649123	2753.3685	54764.499	32924.514	543247.25	32525.782
10301	buns, cakes, sma	226.45	835.75	351.06383	1547.4315	350415.87	189255.59	448137.89	293401.6
10305	macaroni, spaghe	316	645.48	327.86885	1366.8206	431915.3	203971.68	48894.998	211632.79
10401	cooking oats	66.99	784.18	25.575448	1911.7944	128071.11	52532.218	0	20055.754
10402	macaroni	77.7	697.43			0	54190.311	0	0
10403	cakes	18.12	1114.3			0	20191.297	0	0
10501	small breads	107.98	964.42			0	104138.07	1559391.2	0
10601	cassava fresh	6021.13	115	4947.9167	315.16117	1897626.4	692429.95	226532.91	569010.42
10602	cassava dry	657.89	152.56	359.83264	629.55076	414175.15	100367.7	300866.29	54896.067
10603	cassava flour	438.6	291.14	382.65306	786.2639	344855.35	127694	441201.51	111405.61
10605	seet potatoes	1063.83	137.16	1131.7034	389.85612	414740.63	145914.92	413794.73	155224.44
10802	yam, cocoyam	818.78	269.93	798.1756	518.42568	424476.58	221013.29	291255.84	215451.54
10803	potatoes	355.69	359.11	354.28089	822.10427	292414.27	127731.84	893695.85	127225.81
10804	cooking bananas,	2134.15	170.49	2060.0858	433.81486	925825.99	363851.23	317342.97	351224.04
10806	other starches	0	261.39	207.32035	1530.689	0	0	0	54191.466
10807	tania	609.76	252.29			0	153836.35	0	0
10809	cooking bananas,	571.51	246.64			0	140957.23	0	0
10810	bread fruit	1492.54	89.71			0	133895.76	1250228.6	0
10813	sugar	986.61	604.95	978.38241	1277.8527	1260742.3	596849.72	0	591872.44
10814	honey	53.45	583.22	0	0	0	31173.109	0	0
10815	syrup, jams marm	0	1071	0	0	0	0	0	0
10816	haluwa	38.61	1129.2			0	43599.184	65450.011	0
10817	cow peas, dry	217.35	596.1	88.252149	741.62513	161192.22	129562.34	474833.19	52607.106
10818	beans, dry	374.73	643.3	370.49122	1281.6314	480265.75	241063.81	255475.25	238337
10821	green gram	92.18	693.44	199.1654	1282.7291	118241.97	63921.299	50316.785	138109.26
10822	lentils & other	199.43	683.88	26.723386	1882.8746	375501.69	136386.19	0	18275.589
10823	pulse product	45.18	542.41			0	24506.084	0	0
10901	peas dry	228.66	582.29			0	133146.43	69111.076	0
10902	groudnuts in she	67.91	372.63	57.059015	1211.221	82254.017	25305.303	37079.341	21261.901
10903	groundnuts, shel	50.17	598.93	13.73896	2698.8463	135401.12	30048.318	2280643.7	8228.6752
10904	coconuts, mature	4464.29	199.11	3021.4724	754.81203	3369699.8	888884.78	85235.631	601605.37

Item Code	ITEM	Quantity consumed per adult equivalent 2004/05	Unit Value 2004/05	Quantity consumed per adult equivalent 2009/10	Unit Value 2009/10				
		Q05	P05	Q10	P10	Q05 x P10	Q05 x P05	Q10 x P10	Q10 x P05
10905	coconuts, immatu	292.62	129.1	221.51899	384.77799	112593.74	37777.242	26811.966	28598.101
10906	cashewnuts	68.9	317.68	10.341644	2592.6214	178631.61	21888.152	6655.2545	3285.3333
10907	almond & other n	80.08	561.04	12.259194	542.87862	43473.719	44928.083	0	6877.8984
10909	dates	73.24	1071			0	78442.97	171613.05	0
10910	sesame seeds	59.2	856.83	63.063063	2721.2927	161100.53	50724.336	13807.897	54034.324
10911	sunflower seeds	73.65	547.44	9.9170208	1392.3433	102546.08	40318.956	0	5428.9739
10912	products from nu	0	809.33	0	0	0	0	49276.488	0
10913	carrots	46.67	526.09	39.467749	1248.5254	58268.681	24552.62	23535.933	20763.588
10914	radishes, beets,	37.08	503.73	22.058824	1066.9623	39562.962	18678.308	54574.356	11111.691
10915	garlic	22.84	952.1	28.563656	1910.6222	43638.612	21745.964	200291.69	27195.457
10916	onion	130.87	589.47	152.17391	1316.2025	172251.42	77143.939	18668.398	89701.957
10917	leeks	42.37	533.95	14.606907	1278.0528	54151.096	22623.462	139139.01	7799.3578
11001	spinach	273.97	207.23	272.72728	510.17633	139773.01	56774.803	50425.781	56517.275
11002	lettuce	126.17	302.24	88.913043	567.13592	71555.539	38133.621	75651.468	26873.078
11004	cabbage	109.24	503.73	92.074975	821.62898	89754.75	55027.465	157529.61	46380.927
11005	other leafy vege	265.96	252.28	252.10084	624.86744	166189.74	67096.389	543405.17	63600
11006	tomatoes	463.28	494.2	500.67301	1085.3494	502820.69	228952.98	186088.2	247432.6
11007	bitter tomatoes	89.93	464.31	167.14422	1113.3391	100122.59	41755.398	66995.364	77606.734
11009	ladies finger	48.55	530.11	51.194539	1308.6428	63534.607	25736.841	129382.33	27138.737
11010	cauliflower	41.21	503.73	176.4706	733.1665	30213.792	20758.713	87566.552	88893.533
11011	cucumber	79.79	388.19	83.634123	1047.0194	83541.681	30973.68	144660.04	32465.93
11012	brinjals, eggpla	138.89	380.21	174.94245	826.9007	114848.24	52807.367	93536.46	66514.87
11201	green peas, shel	56.02	388.81	85.087719	1099.2945	61582.476	21781.136	119357.93	33082.956
11202	green beans, she	126.26	630.36	111.78862	1067.7109	134809.18	79589.254	0	70467.073
11203	fresh green pepe	21.58	661.79	0	0	0	14281.428	0	0
11204	cultivated	228.66	233.38			0	53364.671	0	0
11205	other wild veget	206.73	240.66	0	0	0	49751.642	102000.93	0
11206	dried vegetables	113.25	334.65	215.1256	474.14595	53697.028	37899.113	96812.406	71991.781
11209	canned vegetable	180.41	441.7	23.874488	4055.0568	731572.79	79687.097	280341.94	10545.362
11301	pumpkins	629.16	210.84	525.4777	533.49922	335656.37	132652.09	99337.999	110791.72
11305	sweet bananas, r	97.09	419.91	124.28977	799.24516	77598.713	40769.062	79693.411	52190.518
11306	orange, tangerin	200.93	232.76	142.20183	560.42463	112606.12	46768.467	56839.696	33098.899
11402	grapefruits, lem	107.04	225.17	102.73973	553.2397	59218.778	24102.197	141483.64	23133.904
11403	mangoes, avocado	198.86	245.15	252.52525	560.2752	111416.33	48750.529	105479.67	61906.566
11405	pawpaw	210.84	175.73	270.82385	389.47702	82117.335	37050.913	150402.75	47591.875
11406	pineapples	128.83	332.28	239.58333	627.76801	80875.353	42807.632	22419.473	79608.748
11407	melons	37.38	335.82	53.571429	418.49684	15643.412	12552.952	42681.408	17990.357
11411	sugar cane	90.58	252.43	75	569.08544	51547.759	22865.109	157597.41	18932.25
11501	jack fruit	227.96	213.83	297.87234	529.07701	120608.39	48744.687	34772.866	63694.043
11502	apples, pears	40.65	488.49	29.069767	1196.1866	48624.985	19857.119	0	14200.291
11505	other cultivated	108.43	245.26	0	0	0	26593.542	0	0
11506	other wild fruit	57.34	313.97	0	0	0	18003.04	107392.04	0
10913	dried fruits	45.29	415.4	240.38462	446.75087	20233.347	18813.466	42276.948	99855.769
10914	canned fruits	24.8	503.73	114.25462	370.02396	9176.5941	12492.504	48989.475	57553.482
10915	avacado, pears	35.18	376.91	45.425532	1078.4568	37940.111	13259.694	57504.35	17121.337
10916	tangarine	63.29	298.74	62.94964	913.49767	57815.268	18907.255	66664.72	18805.576
10917	limes	51.55	395.37	64.872277	1027.6303	52974.344	20381.324	316011.15	25648.552
11001	goat, sheep	113.12	2161.7	48.076923	6573.0318	743541.36	244525.85	784681.57	103925.48
11002	cattle meat, inc	163.4	2315.4	148.80952	5273.0602	861618.03	378341.26	247757.09	344558.04
11003	pork, incl sausa	0.55	4637	81.168831	3052.3673	1678.802	2550.361	530688.78	376381.49
11004	other domestic a	303.82	1342.3	289.9151	1830.4972	556141.67	407811.51	40151.361	389147.24
11005	wild animal	4.25	3879.7	37.593985	1068.0262	4539.1114	16488.768	248015.51	145853.76
11006	offal	109.65	1139.6	111.96417	2215.1328	242889.31	124954.95	111239.74	127592.13
11204	dried, salted	0	3298.4	22.727273	4894.5484	0	0	0	74963.864
11008	canned meat	40.06	2703.7			0	108311.02	275320.87	0
11009	other meat produ	133.69	1086.9	102.86554	2676.5122	357822.92	145313.01	865702.44	111808.67
11011	chicken & other	248.34	1661.6	223.21429	3878.3469	963148.68	412644.23	0	370895.09
11011	wild birds & ins	172.72	1746.4	0	0	0	301645.12	177536.63	0

Item Code	ITEM	Quantity consumed per adult equivalent 2004/05	Unit Value 2004/05	Quantity consumed per adult equivalent 2009/10	Unit Value 2009/10				
		Q05	P05	Q10	P10	Q05 x P10	Q05 x P05	Q10 x P10	Q10 x P05
11012	eggs	39.63	1998.6	46.875	3787.4482	150096.57	79206.103	0	93686.25
11002/ 11013	mince sausages	15.52	2136.1			0	33151.962	2188539.4	0
11201	fresh fish	1537.04	780.29	1562.5	1400.6652	2152878.4	1199336.9	164376.22	1219203.1
11206	shell fish	87.94	824.6	76.402532	2151.4499	189198.5	72515.324	110587.02	63001.528
10203	fresh dried fish	53.3	1102.2	45.385779	2436.6007	129870.82	58748.859	263452.21	50025.567
11204	dried or salted	74.7	1402.1	97.814208	2693.3941	201196.54	104739.11	168612.64	137148.23
11205	canned fish/shel	35.44	1190	79.787234	2113.2785	74894.589	42173.6	286194.41	94946.809
11206	octopus fresh	147.06	988.02	143.12977	1999.545	294053.08	145298.22	0	141415.08
11206	octopus dried	38.66	1342.3			0	51892.545	0	0
11202	crabs	156.82	580.79			0	91079.488	235032.29	0
11209	squid	88.24	968.22	116.66667	2014.5624	177764.99	85435.733	127121.85	112959
11301	fresh milk	239.3	417.61	141.78958	896.55283	214545.09	99934.073	0	59212.745
11302	cream	71.02	1195.6			0	84910.802	0	0
11303	cheese	24.41	1899.3			0	46361.913	59340.292	0
11304	yoghurt	79.36	584	40.983607	1447.9031	114905.59	46346.24	9722.0099	23934.426
11305	canned milk	74.25	1813.4	1.1503067	8451.6672	627536.29	134646.44	810314.55	2085.9893
11306	milk powder	56.31	527.18	79.485238	10194.529	574053.92	29685.506	0	41903.028
11401	cottonseed oil	48.72	686.93			0	33467.23	34234.978	0
11402	groundnuts oils	17.92	1490.9	10.454545	3274.65	58681.729	26716.57	180582.88	15586.473
11403	sesame/sunflower	31.74	1095	43.809524	4122.0006	130832.3	34756.252	92588.476	47972.743
11404	coconut cooking	33.94	1334.6	40.25	2300.3348	78073.363	45295.306	224143.34	53716.443
11405	other cooking oi	104.55	1179.6	112.53219	1991.8153	208244.29	123325.09	178109.67	132740.72
11406	butter, ghee	55.77	1369.8	67.204301	2650.2719	147805.66	76393.746	183505.42	92056.452
11407	margarines cooki	63.73	1228.7	74.404762	2466.3128	157178.12	78305.051	0	91421.131
11405	other oil & fat	64.1	1179.2			0	75588.002	0	0
11406	super ghee	78.79	1179.6			0	92939.108	0	0
11406	pride	57.5	1255.8			0	72207.35	150756.86	0
11411	tanbond	66.84	1508.4	59.40258	2537.8841	169632.17	100822.12	15693.631	89603.445
11501	red pepper/black	5.19	1542.1	7.5	2092.4842	10859.993	8003.3433	20092.441	11565.525
11502	black pepper	6.62	2138.3	3.4141137	5885.1118	38959.44	14155.612	37313.531	7300.4335
11503	curry powder	7.3	3076	7.9455165	4696.1744	34282.073	22455.019	30098.899	24440.647
11504	uzile	6.75	2332.9	4.4247788	6802.3511	45915.87	15746.873	50948.584	10322.434
11505	ginger	12.05	1657.6	30.780142	1655.242	19945.666	19973.719	28273.147	51020.24
11506	cinamon	7.27	1973.3	6.4814815	4362.1426	31712.777	14345.891	35621.067	12789.907
11507	cadamon	5	2655.4	4.0202703	8860.3663	44301.832	13276.95	0	10675.385
11508	other spices	45.45	388.19	0	0	0	17643.236	0	0
						35496479	17156462	32324597	14606452

## Appendix A3: Poverty Indices

This report follows the tradition of reporting poverty incidence and poverty depth by using the Head Count Ratio (also called the Head Count Index) and Poverty Gap Ratio (also referred to as an index, and sometimes referred to as Income Gap Ratio or Income Gap Index). This appendix outlines the meaning of these indices.

### Head Count Ratio

Head Count Ratio is also called Head Count Index and it gives the fraction of the population who are below the poverty line. Let  $q$  be the total number of people whose income (or consumption) is below the poverty line, and let  $n$  be the total population. The Head Count Ratio is given calculated as follows;

$$P_0 = \frac{q}{n}$$

Poverty measured by the Head Count Ratio is also referred to as Incidence of Poverty. Head Count Ratio is the most popular measure of poverty because it is simple and easy to grasp. This measure however does not indicate how poor the poor are. If the level of deprivation increases the Head Count Ratio will not change as long as the percentage of people who are poor remains the same. This characteristic of Head Count Ratio is not desirable; a good poverty index should show that poverty has increased if the income of the poor declines. In order to correct this weakness, another poverty measure called Poverty Gap Ratio (or Poverty Gap Index, or Income Gap Index) can be used. This index is also referred to as a Poverty Depth Index. Let the poverty line be denoted by  $z$ . The Poverty Gap Ratio is then calculated as follows;

$$P_1 = \frac{1}{n} \sum_{i=1}^q \left( \frac{z - x_i}{z} \right)$$

The measure captures the average income of the poor and therefore if income of the poor declines, Poverty Gap Ratio indicates that poverty has increased, and if the income of the poor increases, the Poverty Gap Ratio shows that poverty has declined. This is better than the Head Count Ratio which remains invariant to changes in the income of the poor whenever the percentage of the poor remains constant. However, even this measure is not free from shortcoming. The main shortcoming of this measure is that it is not sensitive to income inequality among the poor. If income is taken from the very poor to the next poorest person, Poverty Gap Ratio will give the same changes in poverty as if income is taken from the second least poor person to the least poor person. However a desirable property of a poverty measure is that it should be more sensitive to income transfer from the poorest than one from the least poor person because obviously such transfer affect the poorest person in a more profound way. A poverty index that is sensitive to the income inequality among the poor and one which is sensitive to the degree of poverty of a person is what is called FGT-Square Index (after the initials of the authors of this index, namely Foster, Greer and Thorbecke)<sup>6</sup>. This index captures the severity of poverty and thus it will be referred to here as a Poverty Severity Index. The index is given as follows;

$$P_2 = \frac{1}{n} \sum_{i=1}^q \left( \frac{z - x_i}{z} \right)^2$$

As can be seen, this measure is simply the Poverty Gap Squared. This index is not reported in the main body of this report mostly because it has not been commonly used as such and also because the results from Poverty Severity Index do not differ from the results based on Head Count Ratio in terms of poverty ranking. Appendix E of this report gives poverty measures in terms of Head Count Ratio, Poverty Gap Ratio and Poverty Severity Index for selected areas.

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<sup>6</sup> Foster J., Greer J., Thorbecke E (1984) "A Class of Decomposable Poverty Measures". *Econometrics* 52, 761-776.

## Appendix B: Additional Tables by Chapter

### Chapter 2

**Table B 2.1: Percentage Distribution of Household Head Highest Level of Education Achieved, Sex and Area, 2010**

Level of Education Achieved	Kaskazini "A"	Kaskazini "B"	Kati	Kusini	Maghari bi	Mjini	Wete	Micheweni	Chake Chake	Mkoani	Total
<b>Total</b>											
No Education	46.4	28.7	14.9	9.2	10.8	11.1	30.4	43.9	30.3	37.8	24.4
Adult Education	3.8	4.8	1.8	1.8	1.9	1.5	2.2	3.6	4.7	2.1	2.6
Standard 1-4	8.1	7.1	8.3	2.9	7.3	4.1	5.1	13.7	10.7	8.7	7.3
Standard 5-8	20.2	24.8	34.8	27.9	24.2	26.6	20.9	15.0	14.3	19.6	22.9
OSC-Form 4	18.7	32.2	37.5	56.9	49.9	50.8	34.2	21.6	33.2	26.0	37.9
Form 5-6	0.3	0.6	0.7	0.5	1.8	2.7	0.8	0.2	0.3	1.8	1.3
Course after Primary Education	0.0	0.0	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Course after Secondary Education	0.0	0.2	0.4	0.0	1.7	1.2	2.3	0.4	3.6	1.1	1.2
Diploma Course	1.1	0.2	0.5	0.0	1.4	0.2	2.0	0.3	0.9	1.4	0.8
Other Certificates	0.4	0.0	0.2	0.6	0.3	0.3	0.4	0.7	1.4	0.0	0.4
Universities degree/related titles	0.4	0.0	0.5	0.0	0.4	0.8	0.3	0.3	0.6	0.2	0.4
Pre-school	0.6	1.4	0.0	0.1	0.4	0.7	1.4	0.2	0.0	1.3	0.6
<b>Total</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>
<b>Male</b>											
No Education	37.3	22.2	8.0	3.6	9.0	7.0	20.5	40.5	21.3	30.1	18.8
Adult Education	3.3	5.6	1.4	1.8	1.4	0.9	3.2	4.0	5.5	2.6	2.6
Standard 1-4	9.6	7.6	7.7	2.4	6.0	3.2	5.2	13.3	12.4	9.3	7.3
Standard 5-8	24.7	27.2	35.9	27.3	23.7	28.6	24.3	16.7	15.9	21.7	24.6
OSC-Form 4	22.3	34.8	43.8	63.3	53.2	53.8	38.0	22.8	36.3	30.1	41.2
Form 5-6	0.3	0.7	0.5	0.6	2.2	3.5	1.1	0.2	0.4	2.2	1.6
Course after Primary Education	0.0	0.0	0.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Course after Secondary Education	0.0	0.0	0.5	0.0	2.0	1.0	2.4	0.4	4.6	1.3	1.3
Diploma Course	1.4	0.2	0.6	0.0	1.2	0.3	2.3	0.4	1.1	1.7	1.0
Other Certificates	0.4	0.0	0.3	0.8	0.3	0.4	0.6	0.9	1.7	0.0	0.5
Universities degree/related titles	0.5	0.0	0.7	0.0	0.5	0.9	0.4	0.4	0.8	0.3	0.5
Pre-school	0.2	1.7	0.0	0.0	0.5	0.4	1.9	0.2	0.0	0.9	0.6
<b>Total</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>
<b>Female</b>											
No Education	85.1	58.9	40.3	28.5	19.7	23.5	53.6	59.1	65.2	74.1	45.5
Adult Education	5.8	1.4	3.2	1.9	4.2	3.6	0.0	1.5	1.3	0.0	2.5
Standard 1-4	1.9	4.8	10.7	4.3	13.8	6.7	4.9	15.5	4.1	6.1	7.3
Standard 5-8	1.0	13.4	30.4	30.0	26.8	20.5	12.9	7.4	8.2	9.7	16.5
OSC-Form 4	3.7	20.0	14.1	34.7	33.3	42.1	25.3	16.0	21.0	6.7	25.8
Form 5-6	0.5	0.3	1.3	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.2
Course after Secondary Education	0.0	1.2	0.0	0.0	0.0	1.5	2.0	0.5	0.0	0.0	0.8
Diploma Course	0.0	0.0	0.0	0.0	2.2	0.0	1.3	0.0	0.0	0.0	0.5
Universities degree/related titles	0.0	0.0	0.0	0.0	0.0	0.5	0.0	0.0	0.0	0.0	0.1
Pre-school	2.0	0.0	0.0	0.6	0.0	1.5	0.0	0.0	0.0	3.4	0.8
<b>Total</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>

**Table B 2.2: Distribution of Household Head by Main Economic Activities and District, 2010**

Main Economic Activity	Kaskazini "A"	Kaskazini "B"	Kati	Kusini	Magharibi	Mjini	Wete	Micheweni	Chake Chake	Mkoani	Total
Farming / Livestock keeping	35.9	52.9	52.1	36.3	11.8	3.6	39.2	53.9	30.8	43.5	29.5
Fishing	18.1	9.6	6.0	20.4	2.5	0.3	4.2	12.2	2.5	12.8	6.8
Mining	0.0	0.1	0.1	0.0	0.0	0.0	0.0	0.0	1.0	0.0	0.1
Tourism	0.2	0.0	0.1	6.4	0.1	0.1	0.0	0.5	0.0	0.0	0.4
Paid Employee:											
Government	7.1	11.3	13.0	10.9	32.5	30.8	19.1	5.5	24.8	11.9	20.0
Paid Employee: Parastatal	0.1	0.3	0.2	0.1	0.4	0.8	0.0	0.0	0.1	0.4	0.3
Paid Employee: NGO or Religious organization	0.6	0.2	0.4	0.0	2.2	3.3	0.7	0.3	0.9	0.3	1.3
Other including Private or Mission	1.3	3.6	3.9	1.4	12.4	15.3	1.2	1.4	3.7	1.8	6.7
Self Employed: With employee	0.3	0.5	0.0	0.0	1.5	0.3	0.1	0.4	1.6	0.1	0.6
Self Employed; Without employee	30.9	18.0	20.2	21.0	32.7	29.0	26.0	22.3	26.8	24.7	26.6
Unpaid family helper in business	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Not working: Available for work	0.1	0.0	0.0	0.3	0.1	0.0	0.7	0.0	0.0	0.0	0.1
Not working: Not seeking for work	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0
Housekeeping economic activity	0.1	0.0	0.6	0.6	0.0	0.0	0.0	0.2	0.6	0.2	0.2
Housekeeping non- economic activity	0.6	0.7	0.9	0.9	2.6	10.9	6.4	1.9	4.8	2.2	4.4
Student	0.0	0.4	0.0	0.0	0.2	0.1	0.0	0.0	0.0	0.2	0.1
Not active: Too old/too young	2.4	0.9	2.3	1.4	0.9	4.6	1.3	0.8	1.0	1.4	2.1
Not active: Sick	2.2	1.1	0.0	0.3	0.1	0.7	1.1	0.5	0.8	0.6	0.7
Not active: Disable	0.2	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.6	0.0	0.1
Other	0.0	0.3	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Not applicable	0.0	0.1	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.0
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

**Table B 2.3: Distribution of Population Less than 18 years by Survival of parents and District**

District	Both Parents Alive	Father Alive Mother Dead	Mother Alive father Dead	Both Parents Dead	Don't know	Total
Kaskazini "A"	94.4	2.5	2.7	0.2	0.2	100.0
Kaskazini "B"	95.5	1.5	2.2	0.5	0.2	100.0
Kati	94.1	1.3	4.1	0.1	0.3	100.0
Kusini	90.1	1.1	7.6	0.2	1.0	100.0
Magharibi	94.6	2.1	3.1	0.0	0.1	100.0
Mjini	93.4	2.5	2.9	0.7	0.5	100.0
Wete	95.3	1.0	3.5	0.1	0.1	100.0
Micheweni	96.5	0.8	1.9	0.5	0.3	100.0
Chake Chake	93.3	1.5	4.8	0.1	0.3	100.0
Mkoani	97.4	0.5	1.7	0.3	0.1	100.0
Total	94.7	1.6	3.1	0.3	0.3	100.0

**Table B 2. 4: Distribution of Population 15 years and Above use of Mobile phone by District, Area and sex,2009/10**

District	Rural			Urban			Total		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
Kaskazini "A"	10.2	5.7	8.7	0	0	0	4.5	2	3.5
Kaskazini "B"	9.5	9.2	9.4	0	0	0	4.2	3.2	3.8
Kati	11	12.6	11.5	0	0	0	4.8	4.3	4.6
Kusini	6.6	8.5	7.3	1	0.8	0.9	3.5	3.4	3.5
Magharibi	23.6	30.9	26.2	17.6	16.9	17.3	20.3	21.7	20.9
Mjini	0	0	0	57	54.2	55.8	32	35.7	33.5
Wete	7.5	6.4	7.1	10.5	13.9	12	9.2	11.3	10
Micheweni	11.4	7.1	9.9	1.8	2.2	2	6	3.8	5.1
Chake Chake	9.1	12.5	10.3	8.2	8.8	8.5	8.6	10.1	9.2
Mkoani	11.1	7.1	9.7	3.8	3.2	3.5	7	4.5	6
<b>Total</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>

## Chapter 3

**Table B3.1: Distribution of Children Attending School by Single Years and Sex.**

Age	Male		Female		Total	
	2004/05	2009/10	2004/05	2009/10	2004/05	2009/10
5	17.0	28.3	17.9	20.0	17.4	24.2
6	25.9	27.5	24.9	35.5	25.4	31.9
7	45.7	62.8	44.4	56.7	45.1	59.8
8	67.1	71.1	70.5	75.3	68.8	73.2
9	82.3	83.7	83.7	85.9	83.0	84.9
10	83.6	88.9	87.9	91.8	85.6	90.4
11	93.4	91.0	93.7	92.7	93.6	91.8
12	88.9	85.6	90.8	91.9	89.8	88.6
13	91.7	91.2	91.9	93.2	91.8	92.2
14	89.5	87.4	87.6	87.7	88.6	87.6
15	85.6	78.6	85.1	79.1	85.3	78.9
16	79.9	71.0	78.2	69.2	79.0	70.2
17	77.7	50.9	73.4	40.6	75.4	45.4
18	65.4	29.6	55.5	20.8	60.4	25.4
19	60.5	23.6	43.9	15.3	51.4	19.5
20	41.4	5.8	25.0	6.5	32.4	6.2
21	33.4	4.3	20.4	1.0	25.5	2.4
22	23.8	3.2	15.1	1.1	19.1	2.1
<b>Total</b>	<b>65.1</b>	<b>58.4</b>	<b>61.6</b>	<b>56.2</b>	<b>63.3</b>	<b>57.3</b>

**Table B3.2: Type of Illness or Injury Reported by Broad Age Group**

Type of Illness or Injury	2004/05					2009/10				
	0-4	5-14	15-64	65+	Total	0-4	5-14	15-64	65+	Total
Fever / Malaria	75.3	71.9	67.4	59.1	69.8	-	-	-	-	-
Fever	-	-	-	-	-	40.0	33.5	30.7	26.1	33.2
Malaria	-	-	-	-	-	21.7	30.3	22.0	12.6	22.9
Diarrhea	12.2	5.6	5.1	3.2	6.8	14.7	7.4	4.9	5.7	7.8
Accident	1.2	2.9	2.7	1.6	2.3	2.0	3.4	4.9	2.9	3.8
Anemia	1.3	0.7	2.4	4.2	1.9	0.5	0.7	3.0	3.3	2.0
Skin Disease	1.6	2.2	1.1	2	1.5	1.9	2.6	0.4	0.0	1.1
Conjunctivitis	3.2	3.8	1.8	6.3	2.8	2.9	2.3	2.3	7.2	2.7
Diabetes	-	-	-	-	-	0.6	3.0	4.1	10.7	3.4
Intestinal Worm	1.6	0.7	0.3	0.2	0.7	1.2	0.2	0.1	0.0	0.4
Pneumonia	3.7	2.4	2.2	4.7	2.7	7.6	2.0	0.9	0.8	2.7
Other Disease	7.1	10.2	21.1	30.8	15.9	17.8	23.6	34.8	40.8	29.0
Multiple Diseases	12.7	6.7	8.7	14.8	9.5	9.1	7.4	7.3	8.7	7.8
<b>Number of Individual</b>	<b>46,428</b>	<b>46,638</b>	<b>97,234</b>	<b>10,663</b>	<b>200,963</b>	<b>30,904</b>	<b>24,101</b>	<b>63,700</b>	<b>8,275</b>	<b>126,980</b>

**Table B3.3: Distribution of Persons Reporting Illness or Injury by Source of Consultation and District**

<b>2004/05</b>											
<b>Source of Consultation</b>	<b>Kaskazini A</b>	<b>Kaskazini B</b>	<b>Kati</b>	<b>Kusini</b>	<b>Maghribi</b>	<b>Mjini</b>	<b>Wete</b>	<b>Micheweni</b>	<b>Chake Chake</b>	<b>Mkoani</b>	<b>Total</b>
Referral Hospital	7.8	10.5	7.1	6.7	29.6	37.0	3.0	2.0	3.1	2.6	11.4
District Hospital	20.1	1.7	1.3	47.1	4.3	3.6	30.1	23.6	37.0	27.8	19.6
Special Hospital	1.1	0.9	1.3	0.8	5.2	5.7	0.7	0.9	0.5	0.5	1.9
Primary Health Care Unit	50.2	65.6	67.8	43.6	25.9	28.7	48.6	63.2	33.8	54.7	46.0
Private Hospital	13.2	9.8	9.3	1.7	26.3	20.4	9.1	4.6	8.7	2.6	11.7
Private Clinics	3.4	2.4	7.2	0.3	6.8	13.4	3.2	2.2	3.8	1.8	4.7
Pharmacy	6.7	9.1	4.0	0.6	3.0	5.2	6.4	5.4	16.2	14.0	7.7
Consulted Private Doctor	1.7	0.6	1.1	0.9	2.6	1.3	1.4	0.5	1.4	2.5	1.6
Consulted Traditional Healer	1.5	1.0	2.0	1.2	1.2	1.4	2.4	1.0	2.4	1.0	1.6
Missionary care centre	0.4	1.1	1.3	0.0	0.2	0.2	0.1	0.0	0.1	0.0	0.3
Consulted Others	3.9	0.8	2.2	1.2	0.8	0.3	0.1	0.0	2.0	0.3	1.0
Multiple Health Care	9.3	4.0	6.2	4.1	6.7	14.7	4.5	3.5	8.6	8.2	7.3
<b>Total of Individual</b>	<b>17436.0</b>	<b>9595.0</b>	<b>9846.0</b>	<b>4509.0</b>	<b>24274.0</b>	<b>16756.0</b>	<b>25342.0</b>	<b>17918.0</b>	<b>20271.0</b>	<b>20665.0</b>	<b>166613.0</b>
<b>2009/10</b>											
Referral Hospital	6.3	4.2	11.3	0.3	28.1	29.1	3.9	7.6	1.6	8.6	12.9
District Hospital	11.3	2.0	0.0	15.5	1.0	7.7	37.5	16.8	38.4	25.6	15.8
Primary Health Care Centres	10.1	1.1	0.8	9.4	0.5	0.3	1.4	11.9	19.5	2.7	5.0
Special Hospital	0.8	0.9	1.7	0.0	1.4	0.0	0.0	0.0	0.0	0.0	0.5
Primary Health Care Unit	68.1	81.5	53.9	73.8	39.1	22.5	39.0	38.2	16.6	49.8	43.8
Private Hospital	17.3	2.2	11.0	1.3	23.6	17.3	3.4	5.4	5.2	0.1	11.0
Private Clinics	6.3	2.3	19.1	0.8	7.6	8.0	2.1	5.4	2.0	2.8	5.6
Pharmacy	8.2	2.8	5.9	0.2	0.0	19.1	12.3	3.8	12.1	3.2	8.2
Over the Counter medicine (OTC)	2.4	2.1	0.0	0.7	2.5	1.8	15.6	12.1	9.7	0.9	5.6
Private Doctor	1.0	1.2	0.9	0.2	0.2	0.9	3.0	0.7	0.5	5.9	1.5
Traditional healer	8.0	3.6	0.8	2.9	0.3	4.6	5.0	6.5	6.1	13.3	5.3
Missionary care centre	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Consulted Others	0.9	0.7	1.0	0.0	0.0	2.8	0.5	0.0	0.0	0.2	0.8
<b>Total of Individual</b>	<b>15,637</b>	<b>6,647</b>	<b>4,342</b>	<b>2,523</b>	<b>15,866</b>	<b>17,895</b>	<b>15,734</b>	<b>11,759</b>	<b>7,605</b>	<b>9,110</b>	<b>107,118</b>

**Table B3.4: Distribution of the Distance to Health Centre by District**

District	Less than 1		1.0-1.9		2.0-2.9		3.0-3.9		4.0-4.9		5.0-5.9		6+		Number of Household	
	2004/05	2009/10	2004/05	2009/10	2004/05	2009/10	2004/05	2009/10	2004/05	2009/10	2004/05	2009/10	2004/05	2009/10	2004/05	2009/10
Kaskazini A	44.9	47.1	25.4	26.6	10.8	20.7	3.0	3.5	6.3	0.0	2.7	0.7	6.9	1.5	16,737	20,531
Kaskazini B	44.2	73.2	22.0	11.4	21.5	10.6	8.2	4.3	2.5	0.0	0.5	0.0	1.1	0.6	10,958	15,736
Kati	52.0	39.7	15.1	25.5	12.5	26.0	11.1	3.8	7.3	1.6	0.2	1.7	1.7	1.8	12,586	15,465
Kusini	58.0	44.1	11.6	17.7	3.4	5.8	6.4	10.0	9.7	0.3	0.5	12.2	10.4	9.9	7,521	9,333
Magharibi	55.2	68.3	22.0	19.5	11.2	2.1	4.6	5.0	3.4	2.5	1.1	0.0	2.6	2.2	41,064	35,064
Mjini	91.7	86.2	6.6	12.8	1.4	1.1	0.1	0.0	0.1	0.0	0.0	0.0	0.1	0.0	35,080	51,444
Wete	37.0	56.7	25.7	31.5	12.8	5.1	16.4	6.0	3.6	0.3	2.0	0.0	2.6	0.4	18,710	23,406
Micheweni	26.3	46.7	25.9	25.4	26.0	15.0	15.9	7.1	4.0	0.9	0.4	0.0	1.6	4.9	16,335	19,821
Chake Chake	16.5	46.5	20.6	24.6	25.8	15.0	17.4	0.4	8.0	12.8	2.4	0.0	9.1	0.6	14,215	19,636
Mkoani	18.2	19.5	30.1	22.4	19.1	35.0	22.7	8.5	2.8	12.3	3.7	0.5	3.4	1.9	17,474	22,074
<b>Total</b>	<b>49.7</b>	<b>58.3</b>	<b>19.9</b>	<b>20.8</b>	<b>13</b>	<b>11.4</b>	<b>9.1</b>	<b>4.0</b>	<b>3.8</b>	<b>2.8</b>	<b>1.3</b>	<b>0.7</b>	<b>3.1</b>	<b>1.7</b>	<b>190,679</b>	<b>232,511</b>

**Table B3.5: Distribution of Persons by problem faced during visiting time and District**

<b>2004/05</b>											
<b>Source of Consultation</b>	<b>Kaskazini A</b>	<b>Kaskazini B</b>	<b>Kati</b>	<b>Kusini</b>	<b>Maghribi</b>	<b>Mjini</b>	<b>Wete</b>	<b>Micheweni</b>	<b>Chake Chake</b>	<b>Mkoani</b>	<b>Total</b>
No problem (Satisfied)	57.4	65.1	91.4	83.7	81.9	74.7	71.0	67.9	62.2	80.9	72.6
Facilities were not clean	1.5	0.5	0.3	0.9	1.5	0.7	2.2	2.6	0.5	1.0	1.3
Long waiting time	11.4	10.6	1.9	1.9	4.9	7.5	7.8	19.0	6.2	3.8	7.9
No Trained Professional	1.8	1.0	0.0	0.0	0.5	1.1	2.6	1.4	1.3	1.1	1.3
Too expensive	11.0	8.9	2.8	3.6	3.4	12.5	6.7	3.9	15.7	4.0	7.5
No Drugs Available	8.0	11.3	4.0	10.7	5.9	9.1	3.9	5.3	12.6	6.4	7.3
Treatment Unsuccessful	8.0	2.0	1.7	3.1	1.7	3.8	5.4	3.8	5.2	3.3	4.1
Others	3.5	0.3	0.2	0.6	0.1	0.9	0.1	0.0	0.8	0.0	0.6
Multiple problem	5.2	2.3	3.4	5.6	2.4	9.6	1.8	5.3	5.1	3.3	4.2
<b>Total number of Individual</b>	<b>17,436</b>	<b>9,595</b>	<b>9,846</b>	<b>4,509</b>	<b>24,274</b>	<b>16,756</b>	<b>25,342</b>	<b>17,918</b>	<b>20,271</b>	<b>20,665</b>	<b>166,613</b>
<b>2009/10</b>											
No problem (Satisfied)	71.2	70.2	72.7	88.2	79.0	77.5	60.5	79.4	53.3	75.9	72.3
Facilities were not clean	16.3	4.2	0.0	3.3	0.1	9.3	8.0	3.4	4.1	10.7	7.0
Long waiting time	3.1	6.3	4.1	5.2	11.6	10.2	16.4	3.6	12.3	4.7	8.6
No Trained Professional	0.5	0.0	0.0	0.0	0.0	2.8	3.8	1.5	0.5	0.0	1.3
Too expensive	7.9	7.1	6.9	0.9	1.7	7.4	7.8	4.7	23.5	7.2	7.3
No Drugs Available	11.4	7.6	16.4	2.8	9.5	6.7	13.0	4.6	9.8	6.3	9.0
Treatment Unsuccessful	10.0	5.9	1.0	1.4	1.0	0.0	12.7	4.7	1.6	4.8	4.9
Others	0.7	1.1	0.7	0.0	0.0	0.0	0.6	0.0	0.2	0.0	0.3
Multiple problem	18.0	2.4	1.8	1.8	2.9	11.1	17.8	1.4	4.2	7.0	8.8
<b>Total number of Individual</b>	<b>15,637</b>	<b>6,647</b>	<b>4,342</b>	<b>2,523</b>	<b>15,866</b>	<b>17,895</b>	<b>15,734</b>	<b>11,759</b>	<b>7,605</b>	<b>9,110</b>	<b>107,118</b>

**Table B3.6: Distribution of Persons by payment of Services and District**

<b>Services</b>	<b>Kaskazini A</b>	<b>Kaskazini B</b>	<b>Kati</b>	<b>Kusini</b>	<b>Magharibi</b>	<b>Mjini</b>	<b>Wete</b>	<b>Micheweni</b>	<b>Chake Chake</b>	<b>Mkoani</b>	<b>Total</b>
Consultation	21.0	17.7	25.4	7.8	15.3	19.4	13.0	6.3	3.4	7.6	14.4
Examination/Medical test	19.6	13.2	14.0	5.4	30.8	36.9	18.8	9.3	13.3	6.3	20.4
Medicines	39.6	21.6	49.9	19.8	78.6	71.7	61.9	69.5	73.9	70.5	61.2
Operation/Therapy	0.2	0.7	0.0	1.1	0.1	3.3	2.3	1.8	3.2	0.0	1.4
Not paid	40.5	48.6	28.1	67.3	10.9	12.0	21.0	17.8	10.3	24.1	23.1
Multiple payment	18.1	1.8	14.9	1.4	28.1	31.9	13.8	4.7	3.9	6.8	16.3
<b>Total Number of Individual</b>	<b>15,637</b>	<b>6,647</b>	<b>4,342</b>	<b>2,523</b>	<b>15,866</b>	<b>17,895</b>	<b>15,734</b>	<b>11,759</b>	<b>7,605</b>	<b>9,110</b>	<b>107,118</b>

## Chapter 4

**Table B4.1: Percentage of Population (15-64) Years by Main Activity and District, 2009/10**

Main Activity	District										
	Kaskazini "A"	Kaskazini "B"	Kati	Kusini	Magharibi	Mjini	Wete	Micheweni	Chake Chake	Mkoani	Total
Farming / Livestock keeping	37	47.0	38.5	26.7	5.4	1.1	26.1	43.9	21.8	43.1	21.9
Fishing	9.7	4.3	4	9.9	1.2	0.3	2.4	6.6	1.3	5.6	3.2
Mining	0	0.1	0	0	0	0	0	0	0.4	0	0
Tourism	0.1	0	0.2	3.3	0	0	0	0.2	0.2	0	0.2
Paid Employee: Government	3.4	5.7	6	6	13.6	14.3	9.5	2.9	11.9	5.3	9.6
Paid Employee: Parastatal	0	0.4	0.1	0	0.1	0.3	0.2	0	0	0.3	0.2
Paid Employee: NGO or Religious organisation	0.3	0.1	0.4	0	1.3	1.5	0.6	0.5	0.5	0.2	0.8
Other including Private or Mission	1.5	2.8	2.1	1.2	6.3	8.8	0.6	1	1.8	0.9	4.1
Self Employed: With employee	0.1	0.3	0.1	0	0.5	0.2	0.1	0.2	0.7	0.1	0.3
Self Employed; Without employee	14.6	11.7	17.8	23.1	19.4	17.4	13.7	13.4	14.6	11.9	15.9
Unpaid family helper in business	0.6	0.5	0.5	1.3	1	0.6	0.1	0	0.8	0	0.5
Not working: Available for work	2.2	0.1	0.8	1.4	2.3	7.3	0.4	0	1.4	0.8	2.7
Not working: Not seeking for work	0	0.1	0.1	0.2	0	0.4	0.1	0	0	0	0.1
Housekeeping with economic activity	0.9	0.6	1	2.3	1.1	0.6	0.3	2	1.3	0.3	0.9
Housekeeping with non economic activity	9.3	11.1	9.6	10.5	27.9	24.7	23.7	10.9	19.4	13	19.1
Student	17.9	14	17.6	13.5	19	21.6	21.3	17.9	22.5	17.5	19.3
Not active: Too old/too young	0	0.2	0.2	0	0.5	0.5	0.1	0	0	0.1	0.3
Not active: Sick	1.9	0.8	0.6	0.1	0.2	0.1	0.3	0.4	1	0.4	0.5
Not active: Disable	0.5	0.1	0.4	0.1	0	0	0.6	0.1	0.3	0.4	0.2
Other	0	0.1	0.1	0	0	0.1	0	0	0.1	0	0.1
Not stated	0	0	0	0.2	0	0.1	0	0	0.1	0.1	0
Total percent	100	100	100	100	100	100	100	100	100	100	100
Number of Individuals	53,007	39,140	41,414	21,876	110,679	171,049	71,371	56,053	62,214	62,127	688,930

**Table B4.2: Percentage of Population (15-64) Years by Secondary Activity and District, 2009/10**

Secondary Activity	District										Total
	Kaskazini "A"	Kaskazini "B"	Kati	Kusini	Magharibi	Mjini	Wete	Micheweni	Chake Chake	Mkoani	
Farming / Livestock keeping	15.8	16.5	19.9	23.8	8.1	2.2	14.6	19.2	16.5	20.9	12.4
Fishing	2.1	2.1	0.9	3.4	0.2	0.0	0.0	2.9	1.2	2.8	1.1
Tourism	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Paid Employee: Government	0.0	0.0	0.0	0.3	0.0	0.1	0.1	0.0	0.0	0.1	0.1
Paid Employee: Parastatal	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Paid Employee: NGO or Religious organisation	0.1	0.1	0.0	0.1	0.0	0.0	0.0	0.1	0.0	0.0	0.0
Other including Private or Mission	0.3	0.8	0.0	0.3	0.2	0.1	0.0	0.0	0.3	0.1	0.2
Self Employed: With employee	0.4	0.0	0.0	0.0	0.2	0.0	0.1	0.0	0.3	0.2	0.1
Self Employed; Without employee	5.0	8.5	10.2	13.8	3.9	1.0	3.6	10.2	3.3	1.8	4.4
Unpaid family helper in business	2.2	1.6	1.1	5.7	1.0	0.3	0.0	0.7	0.9	0.4	0.9
Not working: Available for work	1.4	0.1	0.2	0.3	0.0	0.1	0.0	0.0	0.1	0.2	0.2
Not working: Not seeking for work	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Housekeeping economic activity	4.3	3.6	1.8	5.5	0.8	0.1	0.8	3.6	1.3	0.7	1.5
Housekeeping non- economic activity	45.1	41.8	50.4	17.2	24.6	27.1	47.6	48.9	45.5	55.7	38.1
Student	0.0	0.0	0.0	0.0	0.2	0.1	0.0	0.3	0.2	0.1	0.1
Not active: Sick	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.1	0.1	0.0	0.0
Not active: Disable	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.2	0.1	0.0
Other	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0
Not applicable	23.1	24.8	15.4	29.7	60.8	68.6	33.1	14.0	30.1	16.7	40.7
Total percent	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
<b>Total</b>	<b>53,007</b>	<b>39,140</b>	<b>41,414</b>	<b>21,876</b>	<b>110,679</b>	<b>171,049</b>	<b>71,371</b>	<b>56,053</b>	<b>62,214</b>	<b>62,127</b>	<b>688,930</b>

**Table B4.3: Distribution of Households by Source of Drinking Water and District**

Source	District										Total
	Kaskazini "A"	Kaskazini "B"	Kati	Kusini	Magharibi	Mjini	Wete	Micheweni	Chake Chake	Mkoani	
Private piped water in housing	12.0	23.0	19.8	35.2	30.7	51.3	47.7	6.3	40.3	21.1	32.1
Private piped water outside housing unit	10.4	27.8	27.7	35.8	7.4	7.0	10.6	8.9	17.2	20.6	14.0
Piped water on neighbour's housing unit	4.9	5.5	5.8	6.4	7.6	20.3	9.4	5.7	8.7	1.7	9.4
Piped water on community supply	63.8	29.2	13.1	20.8	13.3	12.9	29.7	30.2	19.4	28.9	24.1
Water sellers	0.8	0.1	0.6	0.0	1.1	1.9	0.0	0.0	0.4	0.0	0.7
Water tanks	0.1	0.0	0.0	0.0	0.5	1.9	0.0	0.0	0.0	0.0	0.5
Public well: Protected	3.1	9.9	8.7	1.1	26.9	1.2	0.5	11.4	2.8	5.4	7.7
Public well: Unprotected	5.0	3.3	18.0	0.0	1.1	1.1	2.1	37.4	10.8	21.3	8.6
Private well: Protected	0.0	0.1	1.8	0.6	10.4	2.1	0.0	0.0	0.0	0.1	2.2
Private well: Unprotected	0.0	0.0	4.5	0.0	0.8	0.3	0.1	0.2	0.1	0.0	0.5
Spring: Protected	0.0	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0
Spring: Unprotected	0.0	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.8	0.1
Others	0.0	0.3	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0
Total Percent	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
<b>Total Households</b>	<b>20,531</b>	<b>15,736</b>	<b>15,465</b>	<b>9,333</b>	<b>35,064</b>	<b>51,444</b>	<b>23,406</b>	<b>19,821</b>	<b>19,636</b>	<b>22,074</b>	<b>232,511</b>

**Table B 6.1: Distribution of Mean Per Capita Expenditure (28 Days) by Category of Item by District (%).**

<b>2004/05</b>											
<b>Item</b>	<b>Kaskazini "A"</b>	<b>Kaskazini "B"</b>	<b>Kati</b>	<b>Kusini</b>	<b>Magharibi</b>	<b>Mjini</b>	<b>Wete</b>	<b>Micheweni</b>	<b>Chake Chake</b>	<b>Mkoani</b>	<b>Total</b>
Food & Non Alcoholic Beverages	60.0	59.6	61.2	61.4	51.5	47.7	64.3	65.3	59.8	56.6	55.1
Alcoholic Beverages & Tobacco	0.3	0.4	0.6	0.2	0.3	0.4	0.3	0.5	0.5	0.4	0.4
Clothing & Footwear	5.9	6.8	6.2	6.2	6.6	8.2	5.7	6.6	6.4	7.4	6.9
Housing, Water, Fuel & Power	16.6	16.1	12.8	16.0	18.4	17.9	13.9	12.2	16.4	17.2	16.7
Furniture, Household Equipment & Household Maintenance	4.2	4.6	6.2	6.3	5.0	6.8	5.2	5.5	4.8	6.5	5.7
Health	2.3	2.0	1.3	0.9	2.4	1.8	1.9	3.0	2.3	2.2	2.1
Transportation	3.7	3.4	4.3	2.5	6.1	4.7	2.9	3.1	3.9	3.3	4.4
Communication	0.4	0.4	0.3	0.5	1.4	1.6	0.7	0.2	0.7	0.5	1.0
Recreation & Entertainment	0.4	0.6	0.5	0.4	0.6	0.6	0.4	0.3	0.3	0.6	0.5
Education	1.0	1.2	1.0	0.8	1.7	1.8	1.3	1.0	1.2	1.3	1.4
Restaurants & Hotels	3.1	3.3	3.3	2.4	3.2	4.5	1.4	0.9	1.7	1.3	3.0
Miscellaneous Goods & Services	2.3	1.7	2.1	2.3	2.8	4.0	2.0	1.4	2.1	2.6	2.8
<b>Total</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>
<b>2009/10</b>											
Food & Non Alcoholic Beverages	59.9	62.0	56.4	62.1	45.8	42.9	61.1	66.1	58.6	59.0	52.2
Alcoholic Beverages & Tobacco	0.3	0.8	0.3	0.1	0.1	0.2	0.2	0.5	0.3	0.2	0.2
Clothing & Footwear	6.2	5.2	7.2	7.3	7.2	13.6	6.6	4.6	8.4	8.2	9.0
Housing, Water, Fuel & Power	18.4	17.2	17.1	14.5	18.8	19.7	17.6	16.5	15.1	14.2	17.9
Furniture, Household Equipment & Household Maintenance	3.7	4.2	4.1	5.1	4.7	5.0	3.9	4.2	3.8	6.0	4.6
Health	1.7	1.4	1.2	1.0	1.6	2.0	1.2	1.0	0.9	1.5	1.6
Transportation	2.6	2.7	6.3	2.8	9.4	5.3	3.3	2.5	4.1	3.7	5.2
Communication	2.1	1.7	2.1	1.4	4.2	2.9	1.6	1.6	2.8	1.7	2.7
Recreation & Entertainment	0.4	0.4	0.3	0.5	0.3	0.9	0.3	0.1	0.3	0.5	0.5
Education	1.0	0.8	1.5	0.5	3.0	2.6	1.3	0.9	2.1	1.4	2.0
Restaurants & Hotels	1.4	1.5	1.5	2.0	1.5	1.5	0.9	0.8	1.0	0.6	1.3
Miscellaneous Goods & Services	2.2	2.0	2.1	2.5	3.4	3.3	2.2	1.2	2.4	2.9	2.8
<b>Total</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>

**Table B6.2: Distribution of Mean Household Expenditure (28 Days) by Category of Item and District. - LOW EXPENDITURE LEVEL(%)**

Item	Kaskazini "A"	Kaskazini "B"	Kati	Kusini	Magharibi	Mjini	Wete	Micheweni	Chake Chake	Mkoani	Total
<b>2004/05</b>											
Food & Non Alcoholic Beverages	61.7	62.0	63.4	64.7	59.2	56.8	66.1	67.5	56.8	60.5	62.8
Alcoholic Beverages & Tobacco	0.2	0.2	0.8	0.2	0.3	0.2	0.3	0.4	0.7	0.4	0.3
Clothing & Footwear	6.3	6.7	6.3	6.8	6.7	6.7	5.9	6.7	6.1	7.0	6.5
Housing, Water, Fuel & Power	17.1	17.7	14.3	15.2	18.4	20.0	13.4	11.8	17.6	17.4	16.0
Furniture, Household Equipment & Household Maintenance	3.2	3.5	3.7	4.5	3.5	3.4	4.3	4.7	5.5	5.0	4.0
Health	2.5	2.1	1.4	0.9	2.0	1.9	2.1	2.8	2.2	1.9	2.2
Transportation	2.8	2.2	3.1	2.0	3.0	2.7	2.6	2.4	3.8	2.3	2.6
Communication	0.1	0.0	0.0	0.1	0.2	0.6	0.2	0.0	1.0	0.1	0.1
Recreation & Entertainment	0.3	0.4	0.2	0.2	0.3	0.1	0.3	0.2	0.4	0.4	0.2
Education	1.2	1.2	1.3	1.1	1.7	1.3	1.4	1.0	1.0	1.3	1.3
Restaurants & Hotels	2.6	2.7	3.7	2.3	2.2	3.1	1.9	1.2	2.5	1.6	2.1
Miscellaneous Goods & Services	2.0	1.3	1.8	2.1	2.4	3.3	1.7	1.3	2.4	1.8	1.9
<b>Total</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>
<b>2009/10</b>											
Food & Non Alcoholic Beverages	61.5	63.6	62.2	67.4	53.6	56.5	64.7	67.3	64.9	63.1	62.2
Alcoholic Beverages & Tobacco	0.5	0.2	0.2	0.1	0.0	0.1	0.1	0.5	0.2	0.2	0.2
Clothing & Footwear	6.7	5.7	7.0	6.9	8.5	8.0	6.5	4.8	7.0	8.1	6.9
Housing, Water, Fuel & Power	18.3	18.1	17.3	15.7	20.7	22.8	16.0	17.1	16.5	15.0	17.8
Furniture, Household Equipment & Household Maintenance	3.5	3.1	3.4	3.6	3.3	2.9	3.5	3.6	3.3	4.8	3.5
Health	1.8	1.8	1.0	1.0	1.5	1.3	1.2	1.0	0.9	1.1	1.3
Transportation	1.9	2.3	2.4	1.0	3.0	3.9	2.5	1.7	2.2	2.3	2.4
Communication	0.8	0.8	1.5	0.9	3.5	1.5	1.3	1.3	1.3	1.3	1.5
Recreation & Entertainment	0.4	0.2	0.2	0.1	0.2	0.1	0.2	0.1	0.1	0.3	0.2
Education	1.4	1.2	2.0	0.8	2.5	1.3	1.5	1.0	1.4	1.2	1.5
Restaurants & Hotels	1.5	1.5	1.3	0.3	0.8	0.7	0.6	0.6	0.6	0.5	0.8
Miscellaneous Goods & Services	1.8	1.4	1.5	2.3	2.4	1.1	1.9	1.1	1.7	2.1	1.7
<b>Total</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>

**Table B6.3: Distribution of Mean Household Expenditure (28 Days) by Category of Item and District, - MIDDLE EXPENDITURE LEVEL (%)**

Item	Kaskazini "A"	Kaskazini "B"	Kati	Kusini	Magharibi	Mjini	Wete	Micheweni	Chake Chake	Mkoani	Total
<b>2004/05</b>											
Food & Non Alcoholic Beverages	59.2	61.4	61.5	61.4	56.9	52.5	63.1	64.8	60.4	58.2	59
Alcoholic Beverages & Tobacco	0.3	0.5	0.6	0.1	0.3	0.2	0.2	0.4	0.5	0.4	0.3
Clothing & Footwear	6.2	6.1	5.9	6.5	7	7.4	5.9	6.3	6.1	7.4	6.6
Housing, Water, Fuel & Power	17.2	16.8	13.9	16.9	18.1	19.9	14.8	12.8	17.6	18.1	17
Furniture, Household Equipment & Household Maintenance	3.8	4	4.8	5.9	4.1	4.7	5.4	5.7	4.6	5.5	4.8
Health	2.3	1.9	1.4	1	2.5	2	2.1	3	2.4	2.2	2.2
Transportation	2.8	2.4	3.4	2.1	3.5	3	2.8	3.1	3	2.4	2.9
Communication	0.2	0.1	0.2	0.4	0.4	0.7	0.5	0.2	0.4	0.2	0.4
Recreation & Entertainment	0.3	0.4	0.4	0.2	0.3	0.3	0.3	0.3	0.3	0.5	0.3
Education	1	1.1	1	0.9	1.5	1.7	1.1	0.8	1.1	1.2	1.2
Restaurants & Hotels	4.4	3.4	4.6	2.3	2.7	4.1	1.9	1	1.8	1.7	2.8
Miscellaneous Goods & Services	2.4	1.7	2.2	2.3	2.7	3.6	2	1.4	1.9	2.3	2.4
<b>Total</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>
<b>2009/10</b>											
Food & Non Alcoholic Beverages	60.4	64.3	60.9	65.8	51.7	50.9	63.3	67.3	60.3	60.1	58.0
Alcoholic Beverages & Tobacco	0.1	0.7	0.3	0.1	0.1	0.2	0.2	0.5	0.2	0.3	0.2
Clothing & Footwear	6.5	5.2	7.0	6.5	7.5	9.6	6.8	4.5	9.5	8.5	7.7
Housing, Water, Fuel & Power	16.9	16.3	16.1	14.8	20.6	22.1	15.4	15.8	15.7	13.5	17.8
Furniture, Household Equipment & Household Maintenance	3.8	4.1	4.2	5.4	4.2	3.6	4.4	4.5	3.9	5.9	4.3
Health	1.8	1.4	1.1	1.1	1.7	1.8	1.1	0.9	0.9	1.6	1.4
Transportation	2.7	1.7	3.3	1.1	3.4	3.0	2.9	1.6	2.6	2.6	2.8
Communication	2.3	1.8	1.8	1.0	4.1	2.7	1.5	2.0	1.9	1.7	2.4
Recreation & Entertainment	0.5	0.4	0.2	0.3	0.4	0.2	0.1	0.1	0.2	0.6	0.3
Education	1.0	1.0	1.3	0.6	2.1	2.3	1.3	0.9	1.8	1.7	1.7
Restaurants & Hotels	1.4	1.3	1.6	0.8	1.0	1.1	0.8	0.8	0.8	0.6	1.0
Miscellaneous Goods & Services	2.4	2.0	2.1	2.5	3.2	2.6	2.2	1.0	2.3	3.0	2.5
<b>Total</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>

**Table B 6.4: Distribution of Mean Household Expenditure (28 Days) by Category of Item and District, Zanzibar 2005. - HIGH EXPENDITURE LEVEL(%)**

Item	Kaskazini "A"	Kaskazini "B"	Kati	Kusini	Magharibi	Mjini	Wete	Micheweni	Chake Chake	Mkoani	Total
<b>2004/05</b>											
<b>Food &amp; Non Alcoholic Beverages</b>	59.3	60.3	60.7	61.9	53.6	49.5	64.4	65.9	60.4	57.4	57.5
<b>Alcoholic Beverages &amp; Tobacco</b>	0.3	0.3	0.8	0.2	0.4	0.4	0.3	0.4	0.5	0.4	0.4
<b>Clothing &amp; Footwear</b>	5.8	6.2	6.2	6.3	6.6	7.5	5.6	6.3	6.1	7.1	6.5
<b>Housing, Water, Fuel &amp; Power</b>	17.1	17.2	13.7	16.2	18.6	18.8	14.3	12.5	17.6	17.9	16.9
<b>Furniture, Household Equipment &amp; Household Maintenance</b>	4.0	4.2	5.9	5.9	4.8	5.8	5.0	5.3	4.6	6.0	5.1
<b>Health</b>	2.4	2.0	1.3	0.9	2.5	1.9	2.0	2.9	2.4	2.2	2.2
<b>Transportation</b>	3.3	2.9	3.8	2.3	4.4	3.8	2.7	2.9	3.0	2.8	3.4
<b>Communication</b>	0.2	0.2	0.2	0.4	0.9	1.3	0.4	0.1	0.4	0.3	0.6
<b>Recreation &amp; Entertainment</b>	0.3	0.5	0.5	0.3	0.5	0.5	0.3	0.3	0.3	0.5	0.4
<b>Education</b>	0.9	1.0	0.9	0.8	1.4	1.4	1.2	0.9	1.1	1.1	1.2
<b>Restaurants &amp; Hotels</b>	3.9	3.6	3.9	2.6	3.6	5.2	1.9	1.2	1.8	1.8	3.2

<b>Miscellaneous Goods &amp; Services</b>	2.3	1.6	2.2	2.3	2.9	3.8	1.9	1.4	1.9	2.4	2.5
<b>Total</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>
<b>2009/10</b>											
Food & Non Alcoholic Beverages	57.7	58.1	48.0	55.5	40.8	39.5	54.3	57.0	53.0	53.4	44.5
Alcoholic Beverages & Tobacco	0.4	1.4	0.2	0.2	0.2	0.2	0.1	0.6	0.5	0.1	0.3
Clothing & Footwear	5.4	4.8	7.6	8.5	6.7	15.1	6.7	4.2	8.4	8.0	10.7
Housing, Water, Fuel & Power	20.2	17.3	17.8	13.7	17.4	18.8	22.1	15.3	13.8	14.2	17.9
Furniture, Household Equipment & Household Maintenance	3.8	5.3	4.5	5.5	5.2	5.6	3.7	6.7	4.2	7.5	5.3
Health	1.4	1.2	1.4	0.8	1.6	2.2	1.1	1.0	1.0	1.8	1.8
Transportation	3.2	4.2	11.8	5.8	14.0	6.0	4.7	8.5	6.8	6.6	7.8
Communication	3.1	2.4	2.7	2.0	4.5	3.1	2.1	2.4	4.6	2.1	3.3
Recreation & Entertainment	0.4	0.6	0.5	1.0	0.3	1.2	0.5	0.4	0.6	0.7	0.8
Education	0.5	0.4	1.4	0.4	3.5	2.8	0.9	0.5	2.9	1.3	2.5
Restaurants & Hotels	1.4	1.9	1.5	4.1	1.9	1.7	1.3	1.6	1.4	0.7	1.7
Miscellaneous Goods & Services	2.4	2.5	2.5	2.7	3.8	3.7	2.4	1.8	2.9	3.6	3.4
<b>Total</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>

### Appendix C: Summary of Key Indicators by District

Indicator	Kaskazini "A"	Kaskazini "B"	Kati	Kusini	Magharibi	Mjini	Wete	Micheweni	Chake Chake	Mkoani	Total
<b>Demographic Characteristic</b>											
Average household size	5.1	4.6	4.8	4.1	5.9	5.3	5.9	5.8	6.2	5.7	5.5
Mean Age Dependency Ratio	1.13	0.90	0.88	0.84	1.03	0.68	1.13	1.20	1.10	1.14	0.98
Percentage of child orphans (lost at least one parent)	5.4	4.2	5.5	8.9	5.2	6.1	4.6	3.2	6.4	2.5	5.0
Percentage of female-headed households	19.1	17.6	21.4	22.5	16.8	25.2	30.0	18.3	20.5	17.5	21.3
Percentage of children less than 18 years with birth certificate	92.2	97.5	97.0	98.9	97.4	96.3	94.6	77.1	94.5	92.3	93.6
Percentage of children age 0-4 with birth certificate	93.0	97.6	95.6	98.1	96.5	96.1	94.5	80.3	93.8	93.6	93.6
Percentage of population 15 and above use mobile phone	15.9	23.9	27.9	39.3	49.2	49.7	35.3	23.6	36.9	24.6	36.7
<b>Education and Health</b>											
Percentage of adult 15 years and Above with 5 or more year of education	63.8	78.9	89.6	94.0	91.2	92.0	76.9	62.7	80.0	73.5	82.1
Percentage of adult females 15 years and Above with 5 years or more education	54.8	74.3	85.2	91.4	89.1	87.8	68.9	54.6	73.8	68.5	76.9
Percentage of adults literate	64.7	80.6	89.2	93.9	91.0	93.0	76.8	62.1	79.4	73.2	82.3
Percentage of adults female literate	55.5	76.0	85.3	91.1	88.3	88.9	69.0	55.4	73.3	67.8	77.2
Literacy rate of Population 15-24 years	90.9	95.8	99.0	98.5	96.8	99.9	90.9	79.5	94.8	90.0	94.3
Literacy rate of male Population 15-24 years	92.4	96.6	98.5	98.4	97.0	100.0	91.1	80.4	95.9	90.0	94.7

Indicator	Kaskazini "A"	Kaskazini "B"	Kati	Kusini	Magharibi	Mjini	Wete	Micheweni	Chake Chake	Mkoani	Total
Literacy rate of female Population 15-24 years	89.9	95.0	99.4	98.5	96.6	99.9	90.7	78.7	93.8	90.0	93.9
Percentage of adult 15 Years and Above with no education	36.2	21.1	10.4	6.0	8.8	8.0	23.1	37.3	20.0	26.5	17.9
Percentage of children with disabilities attending primary school	0.6	3.3	2.7	5.3	3.1	0.8	2.0	2.9	2.7	1.4	2.1
Percentage of children with disabilities attending secondary school	0.2	0.2	1.5	9.7	2.0	0.0	0.0	1.0	0.9	0.6	0.9
Percentage of male students with disabilities attending primary school	0.9	3.0	4.4	6.6	2.2	0.2	2.4	2.2	3.3	1.7	2.1
Percentage of male students with disabilities attending secondary school	0.0	0.4	2.3	14.1	1.3	0.0	0.0	1.9	0.6	1.4	1.0
Percentage of female students with disabilities attending primary school	0.4	3.5	1.1	4.0	4.1	1.2	1.4	3.5	1.9	1.1	2.1
Percentage of female students with disabilities attending secondary school	0.4	0.0	1.0	5.5	2.7	0.0	0.0	0.0	1.2	0.0	0.8
Primary School Net Enrolment Ratio (STD I-VII)	79.5	84.0	89.6	91.8	86.6	87.4	81.6	58.3	79.6	70.6	80.9
Primary School Gross Enrolment Ratio (STD I-VII)	104.3	110.4	117.7	117.3	100.2	103.1	98.7	75.9	107.3	94.3	100.4
Secondary School Net Enrolment Ratio (Form I-VI)	37.9	35.0	47.2	47.5	47.9	56.2	44.2	36.2	46.1	39.9	46.1
Secondary School Gross Enrolment Ratio (Form I-VI)	41.6	40.9	51.9	51.3	61.2	63.7	49.5	40.4	56.0	50.4	53.8
Basic School Net Enrolment Ratio (STD I -Form II)	79.6	82.9	88.5	90.2	82.6	88.3	79.6	60.8	79.9	71.6	80.3
Basic School Gross Enrolment Ratio (STD I -Form II)	93.9	93.1	99.4	103.8	90.3	97.4	86.0	70.5	91.2	81.5	89.8

Indicator	Kaskazini "A"	Kaskazini "B"	Kati	Kusini	Magharibi	Mjini	Wete	Micheweni	Chake Chake	Mkoani	Total
Percentage of households within 2 km of a Primary School	96.1	87.2	87.7	97.2	99.9	100.0	86.3	78.6	91.8	57.1	89.9
Percentage of households within 5 km of a Primary School	99.9	99.6	99.5	100.0	99.9	100.0	99.8	100.0	99.6	99.1	99.8
Percentage of households within 5 km of a Secondary School	98.7	97.8	96.7	99.0	99.9	100.0	98.1	97.4	99.4	97.4	98.7
Percentage of households within 5 km a primary health facility	97.7	99.4	96.5	77.9	97.4	100.0	99.6	95.1	99.4	97.6	97.3
Percentage of ill individuals who consulted any health provider	86.5	97.0	84.6	87.4	84.9	92.1	76.7	91.5	68.0	80.1	84.4
Percentage of Children Age 0-4 reported Illness in the past four weeks	31.8	17.2	9.2	5.4	11.0	11.3	24.1	15.0	14.5	12.0	15.3
Percentage of Population reporting to be satisfied with health services	71.2	70.2	72.7	88.2	79.0	77.5	60.5	79.4	53.3	75.9	72.3
<b>Socio-Economic Status</b>											
Percentage of adults whose primary activity is agriculture/fishing/livestock	46.7	51.3	42.5	36.6	6.6	1.3	28.5	50.5	23.1	48.6	25.1
Percentage of Government Sector Males employed	5.6	8.6	9.9	9.1	21.2	20.3	12.3	3.9	15.1	8.2	13.9
Percentage of Government Sectors Females employed	1.0	2.5	1.9	2.6	6.8	8.1	6.1	1.7	7.8	2.4	5.2
Percentage of Private Sector Males employed	3.0	5.7	4.3	2.2	12.2	15.8	1.7	1.9	3.9	2.3	7.7
Percentage of Private Sector Females employed	0.5	0.9	0.8	0.3	3.8	5.2	1.0	1.1	1.1	0.4	2.4

Indicator	Kaskazini "A"	Kaskazini "B"	Kati	Kusini	Magharibi	Mjini	Wete	Micheweni	Chake Chake	Mkoani	Total
Percentage of Households own dwellings	96.8	93.0	95.0	84.2	85.2	62.5	77.9	93.8	81.8	91.3	82.6
Percentage of household (male) own dwelling	88.2	86.2	87.0	80.9	83.4	78.6	73.1	87.8	80.2	81.4	82.0
Percentage of household (female) own dwelling	10.8	12.0	12.0	18.0	16.6	17.5	24.6	11.8	18.2	16.6	16.3
Daily mean (kg) consumption of charcoal by household	2.4	1.9	7.1	0.8	2.4	2.3	2.1	0.9	1.0	1.4	2.2
Daily mean (kg) consumption of firewood by household	7.7	6.8	9.1	7.8	3.1	2.7	4.2	6.9	5.0	6.3	5.2
Mean time spent for fetching water (minutes)	9.7	15.2	10.8	5.7	9.5	7.0	5.2	10.6	5.9	7.2	8.4
Percentage of household spent more than 1 hour to fetching drinking water	0.0	5.9	0.1	0.3	0.2	1.1	0.0	0.3	0.3	0.5	0.8
Percentage of women who normally fetching drinking water	38.6	37.5	28.0	23.2	12.9	6.7	21.0	54.5	23.4	23.7	23.1
Average household daily water consumption (liters)	126.8	120.7	153.8	108.3	133.1	112.6	116.5	108.6	114.5	116.9	120.7
Percentage of households with a modern roof	67.2	47.0	68.9	67.2	84.8	95.9	73.2	44.3	82.8	73.8	75.5
Percentage of households with modern walls	63.1	56.9	45.5	28.2	89.6	83.6	41.7	15.5	38.2	10.5	55.3
Average number of persons per sleeping room	2.4	2.3	2.3	2.0	2.5	2.0	2.1	2.5	2.2	2.3	2.2
Percentage of households with electricity connection	4.9	5.2	17.7	24.0	60.1	79.2	37.4	4.7	39.4	13.4	38.3
Percentage of households using Charcoal and Firewood.	98.7	98.3	97.6	98.4	98.0	92.4	98.3	98.9	98.4	98.3	97.0
Percentage of households using a toilet	66.7	75.5	92.0	90.5	98.9	99.6	72.2	34.0	74.7	57.1	79.6
Proportion of Households using piped or Protected											
Water as their source for drinking.	94.1	95.6	76.9	100.0	96.3	94.8	97.8	62.4	88.4	77.9	89.4

Indicator	Kaskazini "A"	Kaskazini "B"	Kati	Kusini	Magharibi	Mjini	Wete	Micheweni	Chake Chake	Mkoani	Total
Percentage of households within 1 km of drinking water	91.3	91.6	93.2	98.6	98.4	97.2	94.0	99.3	96.8	84.8	94.9
<b>Household Assets and Source of Income</b>											
Percentage of Households owning radio	61.9	75.1	85.1	84.3	93.3	89.7	67.0	55.9	72.3	64.8	77.3
Percentage of Households owning television	2.7	2.7	12.6	15.2	53.7	70.1	22.7	1.6	24.0	9.0	30.8
Percentage of Households owning telephones	29.6	36.3	45.4	51.0	83.6	79.3	60.3	39.8	64.0	40.4	59.0
Percentage of households with a member with a bank account	2.2	3.4	4.6	1.9	23.3	19.2	8.6	2.0	8.2	4.4	10.7
Percentage of women who own land for agriculture	12.7	11.5	14.1	15.4	4.7	0.7	18.4	13.9	12.1	13.3	9.6
Percentage of Women who make final decision on spending household income	19.3	26.1	23.2	22.0	16.6	30.0	28.2	17.4	22.3	20.9	23.2
<b>Household Consumption and Expenditure</b>											
Average consumption expenditure per capita (Tshs.28 days)	36,667	37,644	40,469	43,309	49,553	64,536	34,576	26,589	39,157	35,381	44,238
Percentage of consumption expenditure on food	59.9	62.0	56.4	64.7	45.7	42.9	61.3	62.9	58.3	58.3	57.8
Percentage of total consumption by the poorest (20%) of the population	10.5	10.2	9.9	10.8	9.2	8.4	9.4	11.8	8.5	9.2	8.9
Distribution of households by usually number of meals per day	31.6	44.2	55.5	82.6	86.6	80.5	67.7	37.4	72.2	67.3	66.2
<b>Poverty and Inequality</b>											

Indicator	Kaskazini "A"	Kaskazini "B"	Kati	Kusini	Magharibi	Mjini	Wete	Micheweni	Chake Chake	Mkoani	Total
(Head count ratio) Percentage of population below the food poverty line	7.23	8.78	8.47	3.86	7.30	4.21	25.74	27.70	19.11	21.46	13.04
(Head count ratio)Percentage of population below the basic needs poverty line	48.43	42.25	39.85	30.50	31.24	28.25	61.83	74.59	52.01	52.27	44.41
Gini Coefficient	0.24	0.25	0.27	0.24	0.28	0.31	0.27	0.21	0.28	0.27	0.30
<b>Household Income</b>											
Mean per capita monthly income	443,247	371,523	572,912	530,275	569,066	681,064	363,175	308,621	386,653	326,506	483,520
Percentage of agricultural share of income	21.6	28.7	32.8	17.9	3.8	1.1	24.2	22.4	15.2	29.3	13.2

**CONFIDENTIAL**

The information contained in this schedule is strictly confidential and is not to be divulged to any one other than household who provided the information or sworn employee of OCGS

Tel no: of Head of household

\_\_\_\_\_

**HBSQF 1** Page 1

Questionnaire No ---- Out of ----

**ZANZIBAR REVOLUTIONARY GOVERNMENT**

**OFFICE OF CHIEF GOVERNMENT STATISTICIAN**

**HOUSEHOLD BUDGET SURVEY 2009/10**

This Information are collected under Statistics Act No. 9 of 2007

**HOUSEHOLD QUESTIONNAIRE FORM 1**

(For recording Social, Economic and Demographic features of the Household)





**SECTION 1: IDENTIFICATION PARTICULARS**

Region: \_\_\_\_\_

District: \_\_\_\_\_

Shehia: \_\_\_\_\_

Name & EA Number : \_\_\_\_\_

STRATUM{High(1), Middle(2), Low(3)}: \_\_\_\_\_

If the Household is selected code 1, reserve code 2: \_\_\_\_\_

Sampled/reserved Household Number in the EA: \_\_\_\_\_

Head of Household's name: \_\_\_\_\_

Household size: \_\_\_\_\_

Sheha's Name : \_\_\_\_\_

Survey month and year: \_\_\_\_\_

**Field Data Monitoring Operation:**

Contact No.	1	2	3	4	5	6	7	8	9	10
Date of Contact/Interviewer										
Informant's Member number										
Interviewer sign										
Enter code for response & reason for non-reponse*										
Field edit date										
Sign										

Office Coding and Encoding	and Signature	Code Translation
Data Coder (Date)		
Data Encoder (Date)		

\* Completed interview ..... 1

No one at home ..... 2

Responsible informant not at home ..... 3

Informant busy..... 4

Not-cooperative..... 5

Interview not completed ..... 6

Other(specify) ..... 7

Enumerator's name: \_\_\_\_\_ Enumerator's signature & date: \_\_\_\_\_

Supervisor's name: \_\_\_\_\_ Supervisor's signature & date: \_\_\_\_\_

Editor's name: \_\_\_\_\_ Editor's signature & date: \_\_\_\_\_

Comments: \_\_\_\_\_

**SECTION 2: HOUSEHOLD PARTICULARS**[illegible]

**IF YOU SUBSTITUTED THE HOUSEHOLD MARK (V) IN THE BOX PROVIDED**

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Identification										Page 5											
<b>SECTION 2: HOUSEHOLD PARTICULARS</b>																					
Line/ Mamber Number	12. Main/secondary Activities (SHOULD BE ASKED TO PERSON AGED 5 YEARS AND OVER)										13. Was (NAME) sick or injured in the last 4 weeks?					14. What sort of sickness/ injury did (NAME) suffer for the last four (4) weeks?					
	(Enter Activity Code)																				
Circle serial Number of main respo- ndent(s) during each contact																					
	Farming/Livestocks keeping.....01										(Enter Code)					(Enter Code)					
	Fishing.....02																				
	Mining.....03															Fever.....01					
	Tourism(self employment).....04										Yes.....1					Malaria.....02					
	Paid Employee:										No.....2					Diarrhoea.....03					
	-Government.....05															Accident.....04					
	-Parastatal.....06															Anaemia.....05					
	-(NGO)/Religious organisations, etc.....07										IF "NO" GO TO Q16					Skin condition.....06					
	-Others (Private, Missions etc).....08															Eye.....07					
	Self Employed( Not in agricultural, livestock keeping, fishing)															Pneumonia.....08					
	-With Employees.....09															Worms disease.....09					
	-Without Employees.....10															Chronic illnesses such as TB					
	Un paid family helper in the business (Non-agriculture).....11															diabetes cancer etc.....10					
	Not working but is available for working.....12															Other (specify).....11					
	Not working but not seeking for work.....13																				
	Housework with economic activity.....14																				
	Housework without economic activity.....15																				
	Student.....16																				
	No Activity: -Too old/retired/kids.....17															YOU MAY MARK MORE THAN ONE ANSWER					
	-Sick.....18																				
	-Disabled.....19																				
	-Other.....20																				
	Not applicable.....99																				
	During the last 7 days										Besides the activity you have										
	What was your main										mentioned what was your other										
	activity?										activity during the last 7 days										
	Code		Time spent		Code		Time spent														
	12a		12b		12c		12d		13		14										
	0	1									1	2	3	4	5	6	7	8	9	10	11
	0	2									1	2	3	4	5	6	7	8	9	10	11
	0	3									1	2	3	4	5	6	7	8	9	10	11
	0	4									1	2	3	4	5	6	7	8	9	10	11
	0	5									1	2	3	4	5	6	7	8	9	10	11
	0	6									1	2	3	4	5	6	7	8	9	10	11
	0	7									1	2	3	4	5	6	7	8	9	10	11
	0	8									1	2	3	4	5	6	7	8	9	10	11
	0	9									1	2	3	4	5	6	7	8	9	10	11
	1	0									1	2	3	4	5	6	7	8	9	10	11
	1	1									1	2	3	4	5	6	7	8	9	10	11
	1	2									1	2	3	4	5	6	7	8	9	10	11
	1	3									1	2	3	4	5	6	7	8	9	10	11
	1	4									1	2	3	4	5	6	7	8	9	10	11
	1	5									1	2	3	4	5	6	7	8	9	10	11
	1	6									1	2	3	4	5	6	7	8	9	10	11

[illegible]



Identification <span style="border: 1px solid black; display: inline-block; width: 20px; height: 15px;"></span> <span style="border: 1px solid black; display: inline-block; width: 20px; height: 15px;"></span> <span style="border: 1px solid black; display: inline-block; width: 20px; height: 15px;"></span> <span style="border: 1px solid black; display: inline-block; width: 20px; height: 15px;"></span> <span style="border: 1px solid black; display: inline-block; width: 20px; height: 15px;"></span> <span style="border: 1px solid black; display: inline-block; width: 20px; height: 15px;"></span> <span style="border: 1px solid black; display: inline-block; width: 20px; height: 15px;"></span> <span style="border: 1px solid black; display: inline-block; width: 20px; height: 15px;"></span> <span style="border: 1px solid black; display: inline-block; width: 20px; height: 15px;"></span> <span style="border: 1px solid black; display: inline-block; width: 20px; height: 15px;"></span>										Page 3	
<b>SECTION 3.2: Household facilities</b>											
<b>1(a). Main Source of Drinking Water Supply?</b>						<b>1(b). What is the approximate time taken to collect water for your household consumption?(going and returning)</b>					
Private piped water in housing.....01						Hours <span style="border: 1px solid black; display: inline-block; width: 20px; height: 15px;"></span> <span style="border: 1px solid black; display: inline-block; width: 20px; height: 15px;"></span>					
Private piped water outside housing unit.....02						Minutes <span style="border: 1px solid black; display: inline-block; width: 20px; height: 15px;"></span> <span style="border: 1px solid black; display: inline-block; width: 20px; height: 15px;"></span>					
Piped water on neighbour's housing unit.....03						Available at home write 99 <span style="border: 1px solid black; display: inline-block; width: 20px; height: 15px;"></span> <span style="border: 1px solid black; display: inline-block; width: 20px; height: 15px;"></span> → 1 (d)					
Piped water on Community Supply.....04											
Water sellers.....05 <span style="border: 1px solid black; display: inline-block; width: 20px; height: 15px;"></span> <span style="border: 1px solid black; display: inline-block; width: 20px; height: 15px;"></span>											
Water tankers.....06											
Mineral water.....07						<b>1(c). Who Normally collect water?</b>					
Raining catchment tank.....08						Mostly boys ..... 1					
Public well (protected).....09						Mostly girls ..... 2 <span style="border: 1px solid black; display: inline-block; width: 20px; height: 15px;"></span>					
Public well (un-protected).....10						Equally (boys and girls) ..... 3					
Private well (protected).....11						Mostly women ..... 4					
Private well (un-protected).....12						Mostly men ..... 5					
Spring (protected).....13						Equally (men and women) ..... 6					
Spring (un-protected).....14						Equally (women and children) ..... 7					
River, Dam, Lake etc.....15											
Other (specify).....16											
<b>1(d). How much is your daily water consumption for your household?</b>						<b>2. How much is your daily consumption of firewood/charcoal for cooking in your Household per day.</b>					
Water consumption <span style="border: 1px solid black; display: inline-block; width: 20px; height: 15px;"></span> <span style="border: 1px solid black; display: inline-block; width: 20px; height: 15px;"></span> <span style="border: 1px solid black; display: inline-block; width: 20px; height: 15px;"></span> <span style="border: 1px solid black; display: inline-block; width: 20px; height: 15px;"></span> Litres						Firewood <span style="border: 1px solid black; display: inline-block; width: 20px; height: 15px;"></span> <span style="border: 1px solid black; display: inline-block; width: 20px; height: 15px;"></span> <span style="border: 1px solid black; display: inline-block; width: 20px; height: 15px;"></span> <span style="border: 1px solid black; display: inline-block; width: 20px; height: 15px;"></span> KG					
						Charcoal <span style="border: 1px solid black; display: inline-block; width: 20px; height: 15px;"></span> <span style="border: 1px solid black; display: inline-block; width: 20px; height: 15px;"></span> <span style="border: 1px solid black; display: inline-block; width: 20px; height: 15px;"></span> <span style="border: 1px solid black; display: inline-block; width: 20px; height: 15px;"></span> KG					
<b>3(a). Does your household have Electricity?</b>						<b>3(b). Does your household have solar?</b>					
Yes .....1 <span style="border: 1px solid black; display: inline-block; width: 20px; height: 15px;"></span>						Yes .....1 <span style="border: 1px solid black; display: inline-block; width: 20px; height: 15px;"></span>					
No .....2						No .....2					
<b>5. Major fuel used for Lighting</b>						<b>4. Major fuel used for cooking?</b>					
Electricity.....1						Electricity..... 1					
Solar.....2						Solar..... 2					
Gas(Biogas).....3						Gas(Industrial)..... 3					
Generator .....4 <span style="border: 1px solid black; display: inline-block; width: 20px; height: 15px;"></span>						Gas(Biogas)..... 4					
Paraffin.....5						Paraffin..... 5					
Candles.....6						Coal..... 6					
Firewood.....7						Charcoal..... 7					
Other(specify).....8						Firewood..... 8					
						Pack/ Wood flour ..... 9					
						Other(specify)..... 10					
<b>6. Does your household have cooling Facility</b>											
None.....1											
Fan.....2											
Air condition.....3 <span style="border: 1px solid black; display: inline-block; width: 20px; height: 15px;"></span>											
Air Condition & fan....4											
Other(specify).....5											
<b>7(a). Does your household has toilet facilities?</b>						<b>7(b). How many other households do share toilet facility with your household?</b>					
Flush toilet....1						Yes .....1 <span style="border: 1px solid black; display: inline-block; width: 20px; height: 15px;"></span>					
Pit latrine....2						No .....2 <span style="border: 1px solid black; display: inline-block; width: 20px; height: 15px;"></span>					
VIP.....3 <span style="border: 1px solid black; display: inline-block; width: 20px; height: 15px;"></span> → 8											
sea shore .....4											
Other/bush....5											
No Toilet.....6 → 8											
<b>9. Where do you dispose your garbage?</b>						<b>8. Where do you discharge your waste water?</b>					
Rubbish pit inside compound.....1						Septic tank..... 1					
Rubbish pit outside compound.....2						Government drainage system..... 2 <span style="border: 1px solid black; display: inline-block; width: 20px; height: 15px;"></span>					
Rubbish bin.....3 <span style="border: 1px solid black; display: inline-block; width: 20px; height: 15px;"></span>						Any where..... 3					
Thrown inside compound.....4											
Thrown outside Compound.....5											
Burn.....6											
Paid garbage cleaner.....7											
Other(specify).....8											
<b>10. During the last 12 months did you improve your housing condition?</b>						<b>12. How much did you spend on improvement?</b>					
Yes .....1 <span style="border: 1px solid black; display: inline-block; width: 20px; height: 15px;"></span>						<span style="border: 1px solid black; display: inline-block; width: 20px; height: 15px;"></span> <span style="border: 1px solid black; display: inline-block; width: 20px; height: 15px;"></span> <span style="border: 1px solid black; display: inline-block; width: 20px; height: 15px;"></span> <span style="border: 1px solid black; display: inline-block; width: 20px; height: 15px;"></span> <span style="border: 1px solid black; display: inline-block; width: 20px; height: 15px;"></span> <span style="border: 1px solid black; display: inline-block; width: 20px; height: 15px;"></span> <span style="border: 1px solid black; display: inline-block; width: 20px; height: 15px;"></span> <span style="border: 1px solid black; display: inline-block; width: 20px; height: 15px;"></span> <span style="border: 1px solid black; display: inline-block; width: 20px; height: 15px;"></span> <span style="border: 1px solid black; display: inline-block; width: 20px; height: 15px;"></span> Amount (Tshs)					
(For example: proper floor, mosquito gauze, better toilets etc)											
<b>IF NO GO TO Q.12</b>											
<b>11. If you didn't improve state reason:</b>											
No need.....1											
No money.....2											
No time.....3 <span style="border: 1px solid black; display: inline-block; width: 20px; height: 15px;"></span>											
Other(specify).....4											
Not applicable.....9											
<b>GO TO SECTION FOUR 4</b>											













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SECTION 6: HOUSEHOLD ASSETS

Does your household own any of the following?				How many... (ITEM) .. does your household own?	If u can sell (ITEM) today how much it could cost
Items/Assets				Number	Tshs
(1)				(2)	(3)
1. Radio and Radio cassette					
2. Complet music sytem (set)					
3. Video					
4. Television					
5. DVD					
6. TV Antena					
7. Satelite dish					
8. Landline telephone/cell phone, Fax					
9. Computer, photocopy, printer etc.					
10. Sewing machine					
11. Refrigerator or freezer					
12. Iron (charcoal/electricity)					
13. Cooker (electricity/gas)					
14. Other cooking facility (such as stove)					
15. Lamp(Candle)					
16. Watches					
17. Mosquito net					
18. Water heaters.					
19. Chairs					
20. Sofas					
21. Tables					
22. Beds.					
23. Cup-boards/boxes Wardrobes.					
24. Wardrobes, droo, Other kitchen utencils					
25. Cooking pots, Cups, etc					
26. Books ( not school books)					
27. Moter cycle					
28. Moter Vehicle					
29. Bicycle					
30. Cart					
31. Boat/Canoe					
32. Outboat engine					
33. Wheel barrow					
34. Cow					
35. Donkey					
36. Goat/sheep					
37. Poultry					
38. Field/Land					
39. Dwelling					
40. Business house					
41. Present working capital of the buseness					
42. Water pumping set					
43. Tractor					
44. Trailer for tractor etc.					
45. Plough etc					
46. Hoes.					
47. Harvesting and threshing machine					
48. Capentry machine set					
49. Spraving machine					

[illegible]

Page 20	
<b>INTERVIEWER: ASK Q.67 IF HOUSEHOLD OPERATES A BUSINESS, OTHERWISE CODE 99</b>	
<b>67. What kind of Businesses do the household have? (SEE INSTRUCTION MANUAL IN THE SETION DESCRIBING Q.67 FOR CODES TO ENTER AND TYPE OF BUSINESS)</b>	
<b>[LIST IN ACCORDANCE WITH IMPORTANCE AS VIEWED BY HEAD OF HOUSEHOLD]</b>	
(1) _____	<div style="border: 1px solid black; width: 40px; height: 20px; display: inline-block;"></div>
(2) _____	<div style="border: 1px solid black; width: 40px; height: 20px; display: inline-block;"></div>
(3) _____	<div style="border: 1px solid black; width: 40px; height: 20px; display: inline-block;"></div>
<b>68 a . Which is the household's main source of each income?</b>	
(Enter code)	
Sales of fire wood.....	1
Sales of livestock.....	2
Sales of livestock products.....	3
Sales of cash crops.....	4
Business income.....	5
Wages or Salaries in cash.....	6
Other casual cash earning.....	7
Cash remittances.....	8
Fishing.....	9
Sales of charcoal.....	10
Sales of foods crops.....	11
Other (specify).....	12
<b>68b. Who has the final decision on how to spend your income?</b>	
Man.....	1
Woman.....	2
Both.....	3



[illegible]

Yes.....1	<input type="checkbox"/>
No.....2	

[illegible]


Yes.....1	<input type="checkbox"/>
No.....2	

[illegible][illegible][illegible][illegible]

Yes.....1	<input type="checkbox"/>								
-----------	--------------------------	--	--	--	--	--	--	--	--

No. 2

Women.....	1								
------------	---	--	--	--	--	--	--	--	--

Men.....	2	
Private land provided free..	3	
Open access land.....	4	

Rented.....	1							
-------------	---	--	--	--	--	--	--	--

Sharecropped.....	2	Agriculture
Both....	3	

[illegible]

--	--	--	--	--	--

[illegible]


[illegible]

Number					LIVESTOCK CODE "0000"	
--------	--	--	--	--	-----------------------	--

Identification		<div style="display: flex; justify-content: space-around;"> <div><div></div><div></div></div> <div><div></div><div></div></div> <div><div></div><div></div><div></div><div></div></div> <div><div></div><div></div><div></div><div></div></div> <div><div></div><div></div><div></div><div></div></div> <div><div></div><div></div><div></div><div></div></div> </div>												Page 23	
81. How many head of cattle and other large livestock are owned by the household last year?															
Number <div style="display: flex; justify-content: space-around;"> <div><div></div><div></div></div> <div><div></div><div></div></div> <div><div></div><div></div></div> <div><div></div><div></div></div> </div>												IF "NO" HEAD OF CATTLE AND OTHER LARGE LIVESTOCK CODE "0000"			
82. How many sheep, goat and other medium sized animals are owned by the household this year?															
Number <div style="display: flex; justify-content: space-around;"> <div><div></div><div></div></div> <div><div></div><div></div></div> <div><div></div><div></div></div> <div><div></div><div></div></div> </div>												IF "NO" SHEEP, GOAT AND OTHER MEDIUM SIZE ANIMALS CODE "0000"			
83. How many sheep, goat and other medium sized animals are owned by the household last year?															
Number <div style="display: flex; justify-content: space-around;"> <div><div></div><div></div></div> <div><div></div><div></div></div> <div><div></div><div></div></div> <div><div></div><div></div></div> </div>												IF "NO" SHEEP, GOAT AND OTHER MEDIUM SIZE ANIMALS CODE "0000"			
84. How many chicken and other small sized animals are owned by the household this year?															
Number <div style="display: flex; justify-content: space-around;"> <div><div></div><div></div></div> <div><div></div><div></div></div> <div><div></div><div></div></div> <div><div></div><div></div></div> </div>												IF "NO" CHICKENS, AND OTHER SMALL SIZE ANIMALS CODE "0000"			
85. How many chicken and other small sized animals are owned by the household last year? Number <div style="display: flex; justify-content: space-around;"> <div><div></div><div></div></div> <div><div></div><div></div></div> <div><div></div><div></div></div> <div><div></div><div></div></div> </div>															
86. If the household own acres for agriculture/livestock,(QN. 74,82and 84) Who is the owner of this acres? IF "NO" LAND/LIVESTOCK															
(QN. 74,82 and 84) GO TO SECTION 7															
Men .....1				Women .....2				Both.....3				a)Agriculture		b)Livestock	
												<div><div></div><div></div></div>		<div><div></div><div></div></div>	
87a. Does your household receive income from agriculture/livestock? who has the final decision on how to use her income?															
Yes.....1 <div><div></div><div></div></div>															
No.....2 <div><div></div><div></div></div> IF NO GO TO SECTION 7															
87b. Who has the final decision on how to spend your income?															
Men .....1				Women .....2				Both.....3				a)Agriculture		b)Livestock	
												<div><div></div><div></div></div>		<div><div></div><div></div></div>	

SECTION: 7				Page 24
<b>FOOD SECURITY</b>				
1. How many meals does your household usually have per day?				
Number	<input style="width: 40px;" type="text"/>			
2. In the past 30 days has your household ever had fewer meals than this usual number?				
Yes.....1	<i>If no go to Q. 4</i>			
No.....2	<input style="width: 40px;" type="text"/>			
3. If Yes, how many days?				
Number	<input style="width: 40px;" type="text"/>			
4. In the past week how many days did the household consume the following?				
Meat	<input style="width: 40px;" type="text"/>	Fruits	<input style="width: 40px;" type="text"/>	
Fish	<input style="width: 40px;" type="text"/>	Cassava	<input style="width: 40px;" type="text"/>	
Eggs	<input style="width: 40px;" type="text"/>	rice	<input style="width: 40px;" type="text"/>	
Milk/Dairyproducts	<input style="width: 40px;" type="text"/>	Sweet potatoes	<input style="width: 40px;" type="text"/>	
Beans/Legume types	<input style="width: 40px;" type="text"/>	Vegetable	<input style="width: 40px;" type="text"/>	
5. How often in the last year/month did you have problems of satisfying the food needs of the household?				
Never.....1				
Seldom.....2				
Sometimes.....3	a) Last month	b) Last year		
Often.....4	<input style="width: 40px;" type="text"/>	<input style="width: 40px;" type="text"/>		
Always.....5				
6. How often in the last year/month, were you or any household member not able to eat the kinds of foods you preferred because of a lack of resources?				
Never.....1	a) Last month      b) Last year			
Seldom.....2				
Sometimes.....3	<input style="width: 40px;" type="text"/>	<input style="width: 40px;" type="text"/>		
Often.....4				
Always.....5				
7. How often in the last month, did you or any household member go a whole day and night without eating anything because there was not enough food?				
a) Last month				
<input style="width: 40px;" type="text"/>				
Never.....1				
Seldom.....2				
Sometimes.....3				
Often.....4				
Always.....5				
8. How do you many compare the overall economic situation of the HOUSEHOLD with one year ago?				
Much worse now.....1				
A little worse now.....2				
Same.....3	<input style="width: 40px;" type="text"/>			
A little better now.....4				
Much better now.....5				
Don't know.....6				
9. How do you compare the overall economic situation of the COMMUNITY with one year ago?				
Much worse now.....1				
A little worse now.....2				
Same.....3	<input style="width: 40px;" type="text"/>			
A little better now.....4				
Much better now.....5				
Don't know.....6				
10. How does this household compare with the other in this COMMUNITY?				
Much worse now.....1				
A little worse now.....2				
Same.....3	<input style="width: 40px;" type="text"/>			
A little better now.....4				
Much better now.....5				
Don't know.....6				







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HBSQF-II

Habari zilizomondani ya dodoso hili nisiri  
na haipaswi kuonyeshwa kwa mtu yoyote  
isipokuwa mwanakaya aliyetoa taarifa hizi  
na mdadisi aliyeapishwa na Afisi ya  
Mtakwimu Mkuu wa Serikali.  
Simu na. (0777) 415764, (0777) 431549  
(0777) 499045



**REVOLUTIONARY GOVERNMENT OF ZANZIBAR  
OFFICE OF CHIEF GOVERNMENT STATISTICIAN**

**HOUSEHOLD BUDGET SURVEY 2009/10**

These information are collected under statistical Act of 2007

**HOUSEHOLD QUESTIONNAIRES FORM II**

(For daily Record of Household Consumption Expenditure and Report)

**SECTION 1: IDENTIFICATION**

Region: \_\_\_\_\_

District: \_\_\_\_\_

Shehia: \_\_\_\_\_

Name & (EA) Number: \_\_\_\_\_

Stratum, {High (1), Middle(2), Low(3) } : .....

If the Household selected codes '1', reserved '2': .....

Household number selected/ reserved in a EA: ..

Name of Head of Household \_\_\_\_\_

Shehas Name : \_\_\_\_\_

Survey months and year: \_\_\_\_\_

Enumerators nameE: \_\_\_\_\_

Supervisors name: \_\_\_\_\_

Editors Name: \_\_\_\_\_



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**HBSQF-III**



**ZANZIBAR REVOLUTIONARY GOVERNMENT  
OFFICE OF CHIEF GOVERNMENT STATISTICIAN**



**HOUSEHOLD BURGET SERVEY 2009/10**

This Information are collected under Statistics Act No. 9 of 2007

**HOUSEHOLD QUESTIONNAIRE FORM III**

**FORM III**

(For recording Social, Economic and Demographic features of the Household)

*DAILY RECORDS OF IDIVIDUAL*

*RECEIPTS AND CONSUPTION EXPENDIRURE*

**IDENTIFICATION PARTICULARS**

Region: \_\_\_\_\_

District: \_\_\_\_\_

Shehia: \_\_\_\_\_

Name and EA Number : \_\_\_\_\_

STRATUM{High(1), Middle(2), Low(3)}: \_\_\_\_\_

If the Household is selected code 1, reserve code 2: \_\_\_\_\_

Sampled/reserved Household Number in the EA: \_\_\_\_\_

Name of Household: \_\_\_\_\_

Name of Respondent : \_\_\_\_\_

Name of the Sheha : \_\_\_\_\_

Survey month and year: \_\_\_\_\_

Enumerator's name: \_\_\_\_\_

Supervisor's name: \_\_\_\_\_

Editor's name: \_\_\_\_\_

*Instruction: Please record all your daily consumption expenditure in this page*

Write each item on a SEPARATE line.

Transaction type:

Purchased

*Gift given away*

*Witdrawalls*

Own produce

*Loan given away*

Salary/Allowances received

## Gatherings

Received loan

Salary/Allowances given

*Gift received*

Sales

other consumption

From shop/business of the H/hold Savings

1	Savings
---	---------

[illegible]



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**HBSQF-IV**



**REVOLUTIONARY GOVERNMENT OF ZANZIBAR  
OFFICE OF CHIEF GOVERNMENT STATISTICIAN**



**HOUSEHOLD BUDGET SURVEY 2009/10**

These information are collected under statistical Act of 2007

**HOUSEHOLD QUESTIONNAIRES FORM IV**  
( For daily Record of Household Business)

**SECTION 1: IDENTIFICATION PARTICULAR**

Region: \_\_\_\_\_

District: \_\_\_\_\_

Shehia: \_\_\_\_\_

Name & (EA) Number: \_\_\_\_\_

Stratum, {High (1), Middle(2), Low(3) } : .....

If the Household selected codes '1', reserved '2': .....

Household number selected/ reserved in a EA: ..

Name of Head of Household \_\_\_\_\_

Sheha's Name : \_\_\_\_\_

Survey months and year: \_\_\_\_\_

Enumerator's nameE: \_\_\_\_\_

Supervisor's name: \_\_\_\_\_

Editor's Name: \_\_\_\_\_





## Appendix E: Confidence Interval Estimation of Selected Key Indicators

**Table E1: Head Count Index 2010, Food Poverty Line**

	Head Count Index	95% Confidence Interval	
		Lower Bound	Upper Bound
Kaskazini "A"	0.072312	0.032526	0.112098
Kaskazini "B"	0.087839	0.04477	0.130908
Kati	0.084665	0.042585	0.126745
Kusini	0.038604	-0.002641	0.079848
Magharibi	0.072963	0.012116	0.13381
Mjini	0.042059	0.004913	0.079206
Wete	0.257396	0.157489	0.357302
Micheweni	0.276991	0.20312	0.350862
Chake Chake	0.191113	0.075532	0.306693
Mkoani	0.214612	0.105861	0.323363
Zanzibar	0.130421	0.104928	0.155915

**Table E2: Poverty Gap Index 2010, Food Poverty Line**

	Poverty Gap Index	95% Confidence Interval	
		Lower Bound	Upper Bound
Kaskazini "A"	0.015691	0.006932	0.02445
Kaskazini "B"	0.014553	0.007415	0.02169
Kati	0.014951	0.002983	0.026919
Kusini	0.006865	-0.00062	0.014349
Magharibi	0.006864	0.000995	0.012733
Mjini	0.006589	-0.00014	0.013318
Wete	0.054876	0.017754	0.091998
Micheweni	0.047621	0.032897	0.062345
Chake Chake	0.045498	0.010848	0.080147
Mkoani	0.044801	0.014428	0.075173
Zanzibar	0.024758	0.018012	0.031504

**Table E3: Poverty Severity Index 2010, Food Poverty Line**

	Poverty Severity Index	95% Confidence Interval	
		Lower Bound	Upper Bound
Kaskazini "A"	0.005556	0.002008	0.009104
Kaskazini "B"	0.003765	0.001429	0.006101
Kati	0.004897	-0.000623	0.010417
Kusini	0.001878	-0.000437	0.004193
Magharibi	0.001029	0.000083	0.001976
Mjini	0.00125	-0.000188	0.002688
Wete	0.019891	0.00078	0.039003
Micheweni	0.012708	0.007146	0.018271
Chake Chake	0.014821	0.002336	0.027306
Mkoani	0.013099	0.00267	0.023528
Zanzibar	0.007465	0.00467	0.01026

**Table E4: Head Count Index 2010, Basic Needs Poverty Line**

	Head Count Index	95% Confidence Interval	
		Lower Bound	Upper Bound
Kaskazini "A"	0.48433	0.416621	0.55204
Kaskazini "B"	0.422496	0.314518	0.530475
Kati	0.398547	0.284308	0.512786
Kusini	0.305024	0.187863	0.422185
Magharibi	0.312351	0.218003	0.4067
Mjini	0.282456	0.175448	0.389463
Wete	0.618286	0.518866	0.717705
Micheweni	0.745935	0.687072	0.804798
Chake Chake	0.52005	0.406319	0.633782
Mkoani	0.522693	0.409961	0.635425
Zanzibar	0.444109	0.40685	0.481368

**Table E5: Poverty Gap Index 2010, Basic Needs Poverty Line**

	Poverty Gap Index	95% Confidence Interval	
		Lower Bound	Upper Bound
Kaskazini "A"	0.100255	0.078466	0.122044
Kaskazini "B"	0.093993	0.064451	0.123536
Kati	0.092099	0.055792	0.128407
Kusini	0.057719	0.025911	0.089528
Magharibi	0.068738	0.039253	0.098223
Mjini	0.0538	0.023603	0.083997
Wete	0.190757	0.135136	0.246379
Micheweni	0.216436	0.187939	0.244933
Chake Chake	0.146766	0.086921	0.206611
Mkoani	0.164493	0.108689	0.220297
Zanzibar	0.11406	0.099823	0.128297

**Table E6: Poverty Severity Index 2010, Basic Needs Poverty Line**

	Poverty Severity Index	95% Confidence Interval	
		Lower Bound	Upper Bound
Kaskazini "A"	0.033562	0.023611	0.043514
Kaskazini "B"	0.030683	0.019857	0.041509
Kati	0.031124	0.01581	0.046438
Kusini	0.016808	0.004503	0.029114
Magharibi	0.020399	0.009692	0.031107
Mjini	0.015292	0.004503	0.026081
Wete	0.079582	0.044629	0.114535
Micheweni	0.081158	0.06614	0.096177
Chake Chake	0.059872	0.026245	0.093499
Mkoani	0.066246	0.036011	0.096481
Zanzibar	0.041685	0.034566	0.048805