Tanzania-Netherlands

SNV

KARATU DISTRICT CWIQ
Baseline Survey on Poverty, Welfare and Services in Karatu District

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Foreword

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This research was funded by the Royal Netherlands Embassy through SNV and implemented by EDI (Economic Development Initiatives). The sampling design, listing of households, organisation of the field work and data entry were managed by Sonya Krutikov, Respichius D. Mitti, Henry A. Lugakingira and James Mitchener. The analysis and report writing were carried out by Sonya Krutikov, Zavuga Cosmus, Joachim De Weerdt and James Mitchener. Overall budgetary, financial and administrative aspects were supervised by Louise Barnett.

ABBREVIATIONS

CDC	Centres for Disease Control and Prevention
CWIQ	Core Welfare Indicator Questionnaire
DRDP	District Rural Development Project
EA	Enumeration Area
EDI	Economic Development Initiatives
GER	Gross Enrolment Rate
HBS	Household Budget Survey
NCHS	National Centre for Health Statistics
NER	Net Enrolment Rate
PEDP	Primary Education Development Plan
TZS	Tanzanian Shilling
VDP	Village Development Plan
VHW	Village Health Worker
WHO	World Health Organisation

Definitions

General

Peri-urban	Semi-urban areas in rural districts e.g. district capital
Village Isolation	Distance of the village from the district capital
Household Isolation	Distance of the household from the centre of the sub-village (Enumeration Area)
Ethnic Fractionalisation	The probability that 2 randomly selected individuals from the same village are from different tribes

Poverty

Poverty Predictors	Variables that can be used to determine household consumption expenditure levels in non-expenditure surveys.
Basic Needs Poverty Line	Defined as what a household, using the food basket of the poorest 50 percent of the population, needs to consume to satisfy its basic food needs to attain 2,200 Kcal/day per adult equivalent. The share of non-food expenditures of the poorest 25 percent of households is then added. The Basic Needs Poverty Line is set at TZS 7,253 per 28 days per adult equivalent unit in 2000/1 prices; households consuming less than this are assumed to be unable to satisfy their basic food and non-food needs.

Education

Literacy Rate	The proportion of respondents aged 15 years or older, who identify themselves as being able to read and write in at least one language.
Primary School Age	7 to 13 years of age
Secondary School Age	14 to 19 years of age
Access to Primary School	A household is considered to have access to a primary school if it is located within 30 minutes of travel from the nearest primary school.

Access to Secondary School	A household is considered to have access to a secondary school if it is located within 30 minutes of travel from the nearest secondary school.
Satisfaction with Education	No problems cited with school attended.
Gross Enrolment Rate	The ratio of all individuals attending school, irrespective of their age, to the population of children of school age.
Net Enrolment Rate	The ratio of children of school age currently enrolled at school to the population of children of school age.
Non Attendance Rate	The percentage of individuals of secondary school age who had attended school at some point and were not attending school at the time of the survey.

Health

Access to Health Facilities	A household is considered to have access to a health facility if it is located within 30 minutes of travel from the nearest health facility.
Need for Health Facilities	An individual is classed as having experienced need for a health facility if he/she had suffered from a self-diagnosed illness in the four weeks preceding the survey.
Use of Health Facilities	An individual is classed as having used a health facility if he/she had consulted a health professional in the four weeks preceding the survey.
Satisfaction with Health Facilities	No problems cited with health facility used in the four weeks preceding the survey.
Equipped Health Facility	A health facility is considered equipped if it has the capacity to conduct malaria tests.
Village Health Worker	An individual with no or little formal health training appointed by the village to provide basic medical assistance to the villagers.

Child Nutrition

Stunting	Occurs when an individual's height is substantially below the average height in his/her age-group.
Wasting	Occurs when an individual's weight is substantially below the average weight for his/her height category.
Chronic Malnutrition	Long-term malnutrition characterised by stunting.

Employment

Working Individual	An individual who had been engaged in any type of work in the 4 weeks preceding the survey.
Underemployed Individual	An individual who was ready to take on more work at the time of the survey.
Non-working Individual	An individual who had not been involved in any type of work in the 4 weeks preceding the survey.
Unemployed Individual	An individual who had not been engaged in any type of work in the 4 weeks prior to the survey due to lack of work.
Economically Inactive Individual	An individual who had not been engaged in any type of work in the 4 weeks prior to the survey due to reasons unrelated to availability of work (e.g. Illness, old age, disability).
Regular Employee	An individual who is paid a wage/salary.
Casual Employee	An individual who is paid an hourly/daily wage.
Subsistence Farmer	An individual who claims that his agricultural activities are aimed solely at provision of food for the household.
Commercial Farmer	An individual who claims that some or all of his agricultural activities are intended for commercial purposes.

Local Governance

Communal Works	Work carried out by the community often involving the construction or rehabilitation of public goods, like roads, bridges, schools or health facilities.
Indigenous Insurance Group	A clearly defined group of people from a community who have entered into an explicit agreement to help each other in a specified way in case certain events occur (often funerals or hospitalisation).

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1 INTRODUCTION

1.1 The Karatu District CWIQ

This report presents district level analysis of data collected in the Karatu District Core Welfare Indicators Survey using the Core Welfare Indicators Questionnaire instrument (CWIQ). CWIQ is an off-the-shelf survey package developed by the World Bank to produce standardised monitoring indicators of welfare. The questionnaire is purposively concise and is designed to collect information on household demographics, employment, education, health and nutrition, as well as utilisation of and satisfaction with social services.

The standardised nature of the questionnaire allows comparison between districts and regions within and across countries, as well as monitoring change in a district or region over time. Karatu District CWIQ was the first survey of its kind to be administered in Karatu. Although beyond the purpose of this study, the results of Karatu District CWIQ could also be set against those of other CWIQ surveys that have been implemented in other districts and regions of Tanzania: Mbeya Urban District, Singida Urban District, Mtwara Urban District, Monduli District, Rural Kagera Region and Rural Shinyanga Region. African countries that have implemented nationally representative CWIQ surveys include Malawi and Ghana.

The survey was implemented by EDI (Economic Development Initiatives), a Tanzanian registered research, consultancy and training group on behalf of SNV of the Netherlands Embassy. The report is aimed at national, regional and district level policy makers, as well as the research and policy community at large.

The Karatu District CWIQ was sampled to be representative at district level. 450 households were chosen in the district to represent its population. Households were clustered in 30 Enumeration Areas and stratified in rural and peri-urban areas.[1]

The survey started with the listing of the households in March 2005. Every one of the 450 sampled households was visited and administered a questionnaire between March and April 2005.

This report begins with a description of the survey methodology, including the sampling frame. The following chapters focus on poverty trends and population characteristics. Education, health, child delivery and employment are examined next. Analysis of village level governance processes concludes the report.

[1] Although Karatu is generally classed as rural, it still contains some areas which are semi-urban (e.g. Karatu Mjini – district capital). Throughout this report such areas shall be referred to as 'peri-urban'.

In, perhaps, one or two years time it would be advisable to repeat the survey, as it will give an indication of the direction in which the welfare of households is changing and how this is influenced by the policies implemented.

1.2 Survey Methodology

The survey started with listing and sampling of households. Once the households had been identified, household interviews were administered. Weight and height measurements were taken of every household member under the age of 5. Global Positioning Systems (GPS)[2] were used to record the exact location of each surveyed household at the end of the visit to each household.

In addition to household level interviews, a community level questionnaire was administered in every village visited. Before leaving each village, the GPS co-ordinates of the nearest health facility with the capacity to test for malaria, nearest primary school and nearest location of regular transport were taken. Each part of the survey process is discussed below.

1.2.1 Sampling

Data from the 2002 Census was used to put together a list of all sub-villages in Karatu district. In the first stage of the sampling process sub-villages (also referred to as Enumeration Areas or clusters) were selected in 2 strata, rural and peri-urban. While 26 rural sub-villages were selected randomly from a list of all rural sub-villages in the district, 4 peri-urban sub-villages were selected randomly from a list of all peri-urban sub-villages. Listing of households was then administered by the Lead Supervisors in each of the selected Enumeration Areas (EA's). Two visits were made to each EA. In the first visit chairmen of the village and the sub-village were asked to compile a list of all residents of the sampled sub-village or prepare the Village Register if one existed. In the second visit, the list prepared, or Village Register, were verified by the Lead Supervisors. Upon completion of the listing process, 15 households were randomly selected from the list of each of the sampled sub-villages.

In total, 450 households were surveyed; 390 of these were located in rural areas and 60 in peri-urban areas (Table 1). All households were given statistical weights reflecting the number of households that they represent.

[2] GPS is a system that uses satellites to locate a geographic position in terms of degrees of longitude and latitude.

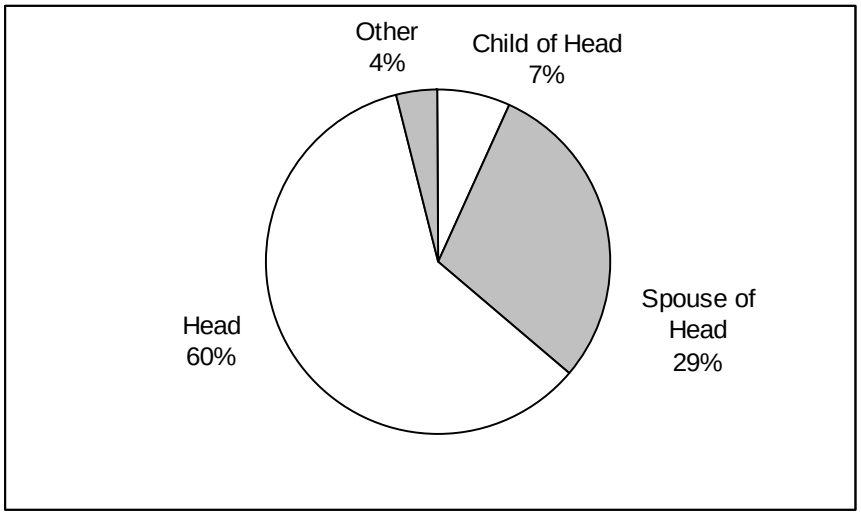
Table 1: Sample Stratification

	Rural		*Peri-urban*		*Total*
	No. of selected Enumeration Areas	No. of selected households	No. of selected Enumeration Areas	No. of selected households	
Karatu District	**26**	**390**	**4**	**60**	**450**

1.2.2 Interviews

A 15 page interview was conducted in each of the sampled households by an experienced interviewer trained by EDI. The respondent was the most informed person in the household, as identified by the members of the household. In many cases this person was also the head of the household (Figure 1).

Figure 1: Distribution of Household Interview Respondents by Relation to the Head of Household



Further, a community questionnaire was administered in every village visited. In total, 23 community questionnaires were administered in Karatu district[3]. There are 3 main parts to the community questionnaire. The first is an interview with the village chairman and/or Village Executive Officer (VEO). The second part is an interview with the chairman of the village council Finance and Planning Committee. An interview with the chairman of the village council Security Committee concludes the questionnaire.

[3] The survey was conducted at sub-village level. In Karatu district, the 30 sub-villages that had been randomly selected were located in 23 villages. The community questionnaire was administered at village level; therefore, in total 23 community level interviews were conducted.

1.2.3 Anthropometric Measurements

A weight and height measurement was taken by the interviewers for each individual under the age of 5 (60 months) in the surveyed households. All interviewers had been trained to take accurate anthropometric measurements of young children by faculty of the Bukoba Regional Hospital.

1.2.4 Distance Measurements

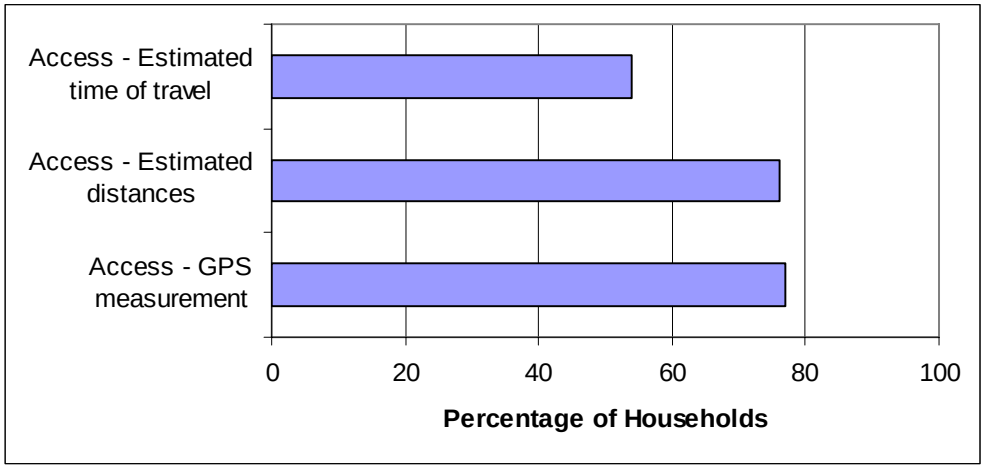
Global Positioning Systems were used to record the position of every interviewed household. In addition, the coordinates of the nearest health facility with the capacity to conduct malaria tests, the nearest primary school and the nearest regular public transport were recorded in every village. These measurements allow calculation of distances between households and these facilities. In addition, they allow calculation of distances from the household to the centre of the sub-village and from the village to the district capital.

In addition to this distance data, household questionnaire respondents were asked to estimate the distance to the nearest source of water, food market, health facility, primary school, secondary school and public transport. As the result, distances to primary school, health facilities and public transport can be expressed in 3 ways. Firstly, as a distance estimated by the respondent. Secondly, as the respondent's estimate of the time it takes to travel to the facility. Thirdly, using the GPS coordinates of the location of the facility and the respondent's residence.

This report will incorporate all 3 measurements to inform on levels of access to facilities in the district. It is, therefore, necessary to be aware of the specific features of each measurement. Measurements based on the estimates of the respondent take account of the local terrain, but are based on the respondent's perception. Figures based on the GPS coordinates are more objective measures of distance, but do not take account of the terrain as they are taken as the bird flies. Figures based on estimates of time have the advantage of taking the mode of transport used into account.

As can be seen from Figure 2, the results acquired using these different measurements are noticeably different. It is standard in CWIQ surveys to define households as having access to a facility if they report living within 30 minutes or 2 kilometres of travel from it. Figure 2 demonstrates levels of access to primary school in Karatu calculated using the 3 measurements discussed above. Access levels are lowest when using estimated time of travel and highest when the GPS measurement is used. In fact, the access rate calculated using the former method is 23 percentage points lower than that calculated using the latter method, at 54 and 77 percent respectively. Access rate calculated using distance estimation is roughly equal to that derived using the GPS method.

Figure 2: Access Rates Using Different Measurements



1.3 Key Findings

This section discusses the key findings of the survey. Table 2 gives an overview of the core indicators collected in the Karatu District CWIQ survey.

1. Karatu district has a population of just under 188,000 individuals who live in nearly 34,000 households. About 32,000, or 94 percent, of these households are located in rural areas; the remaining 6 percent (roughly 2,000 households) are found in areas classified as peri-urban.
2. Results show that the district poverty rate is 44 percent; in other words, over two fifths of the households have a consumption level below the Basic Needs Poverty Line[4]. Poverty rate is significantly higher in rural than in peri-urban areas; while in rural areas the residents of 46 percent of households live under the Basic Needs Poverty Line, in peri-urban areas this proportion is only 17 percent.
3. Overall, the literacy rate in Karatu is 73 percent. There are noticeable differences across poverty groups, gender and area of residence. Literacy rate is lower among individuals from poor households than those from non-poor households, at 70 and 78 percent respectively. Women are less likely to be literate than men, with respective literacy rates of 68 and 78 percent. Finally, the literacy rate is lower in rural areas than peri-urban ones, at 73 and 85 percent respectively.
4. Access to a facility is defined as living within 30 minutes of travel from the facility. Over half (56 percent) of the primary school age children in the district have access to a primary school. In contrast, less than a fifth (17 percent) of secondary school age children live equally close to the nearest secondary school. While proportions of children of primary school age with access to primary school are almost equal in rural and peri-urban areas, at secondary school level,

[4] Basic Needs Poverty Line is explained in the next chapter

individuals living in peri-urban areas are over 3 times more likely to have access to a secondary school than those living in rural areas.

5. The proportion of children of secondary school age with access to secondary school is significantly higher among those living in non-poor households compared to those living in poor households, at 29 and 11 percent respectively.
6. At the time of the survey, the primary school Gross Enrolment Rate (GER) in Karatu district was 125 percent. The great majority (91 percent) of primary school age children were found to be attending school.
7. Secondary school Net Enrolment Rate (NER) was 12 percent. This means that only 12 out of every 100 individuals of secondary school age was attending secondary school at the time of the survey.
8. Breakdown by age further shows that a number of children start school late and, therefore, lag behind at school throughout their schooling career. For instance, 44 percent of Standard I children were older than the correct age for this grade (7 years).
9. Just under a third (32 percent) of individuals in Karatu have access to health facilities. Health facility access rate is more than twice as high in peri-urban than rural areas, at 70 and 30 percent respectively.
10. Results of the survey show that approximately 37,000 individuals, or 20 percent, had been ill in the 4 weeks preceding the survey.
11. The proportions of the population using health facilities differ slightly between rural and peri-urban areas, at 14 and 20 percent respectively.
12. Nearly three quarters (73 percent) of all individuals who had consulted a health provider in the 4 weeks preceding the survey, were satisfied with the services they received. Satisfaction rates were significantly lower in peri-urban than rural areas, at 49 and 75 percent respectively.
13. The most common reasons for dissatisfaction with health services in Karatu relate to low levels of hygiene and long waiting times in health facilities; these problems were cited by two fifths of dissatisfied health facility users. Lack of qualified staff and unsuccessful treatment, were also mentioned by a substantial proportion of health service users (32 percent).
14. Nearly all women who gave birth in the 12 months preceding the survey received prenatal care (98 percent). Further, the majority (58 percent) of births from the last 5 years had been conducted in a hospital or maternity ward.
15. Nearly one quarter (24 percent) of children under the age of 5 years (60 months) in Karatu district suffer from chronic malnutrition (stunting); in other words these children are too short for their age. Further, 5 percent of children in this age-group were acutely malnourished (wasted) at the time of the survey; these children were too thin for their height.

Table 2: Karatu at a Glance

	Rural	Peri-Urban	Total
POPULATION			
Total No. of Individuals	**178,956**	**8,728**	**187,684**
Total No. of Households	**31,664**	**2,192**	**33,856**
POVERTY			
% Households Living Under the Basic Needs Poverty Line	**46**	**17**	**44**
LITERACY			
Literacy Rate (for individuals over the age of 14)	**73**	**85**	**73**
non-poor	76	90	78
Poor	70	72	70
Male	78	85	78
Female	67	86	68
PRIMARY SCHOOL			
Access	**56**	**58**	**56**
Satisfaction	**68**	**65**	**68**
Gross Enrolment Ratio	**126**	**111**	**125**
non-poor	113	106	113
Poor	132	118	132
Male	129	97	128
Female	122	123	122
Net Enrolment Ratio	**91**	**91**	**91**
Non-poor	90	87	90
Poor	92	96	92
Male	91	82	90
Female	92	98	92
SECONDARY SCHOOL			
Access	**15**	**50**	**17**
Satisfaction	**60**	**52**	**59**
Gross Enrolment Ratio	**17**	**39**	**18**
Non-poor	27	40	28
Poor	12	37	12
Male	15	37	15
Female	19	40	21
Net Enrolment Ratio	**11**	**32**	**12**
non-poor	20	40	22
Poor	7	16	7
Male	9	24	9
Female	19	35	15
HEALTH			
Access	**30**	**70**	**32**
Need	**19**	**33**	**20**
Use	**14**	**20**	**15**
Satisfaction	**75**	**49**	**73**
NUTRITION			
% of stunted children	**25**	**5**	**24**
Boys	19	0	19
Girls	32	9	31
% of wasted children	**5**	**6**	**5**
Boys	4	0	4
Girls	6	10	6

2 POVERTY PREDICTORS

2.1 Introduction

This chapter discusses the poverty measurements used throughout the report. The scope of the Karatu District CWIQ did not include collection of household expenditure data. However, using other variables, household consumption expenditure has been predicted to allow a more in-depth analysis of the data. The first part of this chapter explains how predicted consumption was calculated and demonstrates the reliability of this variable. An overview of the distribution of poverty across the district and levels of inequality are examined in the section that follows. A brief discussion of household poverty and characteristics of household heads concludes the chapter.

2.2 Predicting Household Consumption Expenditure

2.2.1 Background Information

It is difficult, expensive and time consuming to collect reliable household consumption expenditure data. One reason for this is that consumption modules are typically very lengthy. In addition, household consumption patterns differ across districts, regions and seasons; hence multiple visits have to be made to the household for consumption data to be reliable.

However, household consumption expenditure data allows more extensive and useful analysis of patterns observed in survey data and renders survey outcomes more useful in policy determination. Because of this, the Tanzanian government has become increasingly interested in developing ways of using non-expenditure data to predict household consumption and, from this, poverty measures.

2.2.2 Methodology

There is a core set of variables that are incorporated in the majority of surveys. These variables inform on household assets and amenities, education level of the head of household, amount of land owned by the household and others. By observing the impact these have on the consumption expenditure of the household in an expenditure survey, a relationship can be calculated. These variables are called poverty predictors and can be used to determine household expenditure levels in non-expenditure surveys such as the CWIQ. This means that, for instance, a household that is headed by an individual who has post secondary school education, with every member in a separate bedroom and that has a flush toilet, is more likely to belong to a higher income quintile than one where the

household head has no education, a pit latrine is used and there are four people per bedroom. This is, of course, a very simplified example; however, these are some of the variables used to calculate the relationship between such information and the consumption expenditure of the household.

In the case of the Karatu District CWIQ, the data collected in the *Household Budget Survey* 2000/01 (HBS) was used to select the poverty predictors and determine the quantitative relationship between these and household consumption. Work was then done to investigate the specific characteristics of Karatu in order to ensure that the model developed accurately represents this particular district.

Some caveats are in order when tabulating variables used as poverty predictors on poverty status. Poverty status is defined as a weighted average of the poverty predictors, hence it should come as no surprise that poverty predictors are correlated to them. For instance, education of the household head is one of the variables included in the equation used to calculate household consumption. The relationship is set as a positive one, consequently when observing the patterns in the data this relationship may be positive by construction. Table 3 lists the variables that have been used to calculate predicted household consumption expenditure. The actual quantitative relationship between these and consumption expenditure is presented in Table B 1 in Annex 2.

Table 3: Variables Used to Predict Consumption Expenditure

Basic Variables	***Food Security***
Age of household head	Problems satisfying food needs
Household size	Number of meals per day
Education of household head	Number of days meat was consumed
Activity of household head	
Household Assets	***Household Amenities***
Farm land owned	Source of water
Roof material	Toilet (yes/no)
Wall material	
Radio, radio cassette, music system	
Iron, electric or charcoal	
Saving/current bank account	

2.2.3 Poverty Lines and Poverty Rates

Once the consumption level of a household has been predicted, it is compared to the Basic Needs Poverty Line set by National Bureau of Statistics (NBS) on the basis of the 2000/01 HBS. The exact procedure by which this line has been set is described in detail in 2000/01 HBS report. In short, the Basic Needs Poverty Line is defined by what a household, using the food basket of the poorest 50 percent of the population, needs to consume to satisfy its basic food needs to attain 2,200 Kcal/day per adult equivalent. The share of non-food expenditures of the poorest 25 percent of households is then added. The Basic Needs Poverty Line is set at TZS 7,253 per 28 days per adult equivalent unit in

2000/1 prices; households consuming less than this are assumed to be unable to satisfy their basic food and non-food needs.

2.2.4 Accuracy

The Karatu District CWIQ uses poverty predictors to classify households as poor or non-poor, i.e. to determine whether a household's monthly consumption per adult equivalent unit is below or above the Basic Needs Poverty Line. This binary approach allows two types of mistakes associated with the prediction:

1. A poor household is predicted to be non-poor
2. A non-poor household is predicted to be poor

One way of determining the accuracy of the poverty predictors is to see how many mistakes of each type the model makes. To do this the poverty predictor model is applied to the actual consumption expenditure data – the HBS data. Results of this exercise are presented in Table 4 and show that the first type of mistake happens relatively frequently. The model wrongly predicts a poor household to be non-poor in 11 percent of the cases. The second type of mistake is made slightly less often; 9.6 percent of the households that were predicted to be poor were actually non-poor.

Table 4: Accuracy of Poverty Predictors in Categorising Poor and Non-Poor Households

	Actually Poor	Actually Non-poor
Predicted Poor	24.3	9.6
Predicted Non-poor	11.0	55.0

Predicting the poverty rate is not the purpose of CWIQ. Expenditure surveys, such as the 2000/2001 Household Budget Survey, are much better suited for informing on this variable. However, such large scale surveys have insufficient number of observations to inform on district level trends. The Karatu District CWIQ, on the other hand, is sufficiently large to allow detailed district level analysis. The accuracy with which households can be classified by poverty status using the CWIQ gives credence to the use of predicted poverty level as a variable throughout this report.

2.3 Poverty and Inequality in Karatu District

Where feasible, statistics in each chapter will be disaggregated by poverty status. This allows more in-depth analysis of the data and formulation of more poverty focussed interventions. The remainder of this chapter presents an overview of prevalence of

poverty in Karatu, the level of consumption inequality in the district, and some household level poverty trends.

2.3.1 Distribution of Poverty by Area of Residence

Overall, 44 percent of households in Karatu have a consumption level below that required to satisfy basic needs; the majority of these households are located in rural areas. Figure 3 shows the distribution of poverty levels by area of residence. As can be seen, nearly half of the households in the rural areas of Karatu are poor (46 percent); in peri-urban areas this is the case for less than a fifth (17 percent) of households.

Figure 3: Poverty Levels by Area of Residence

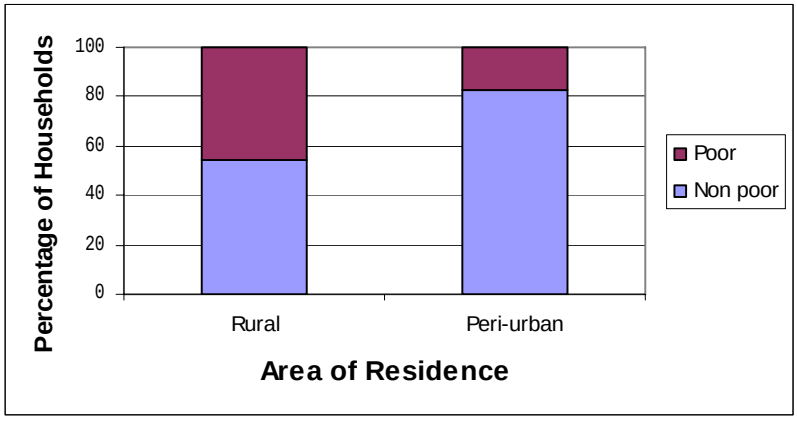
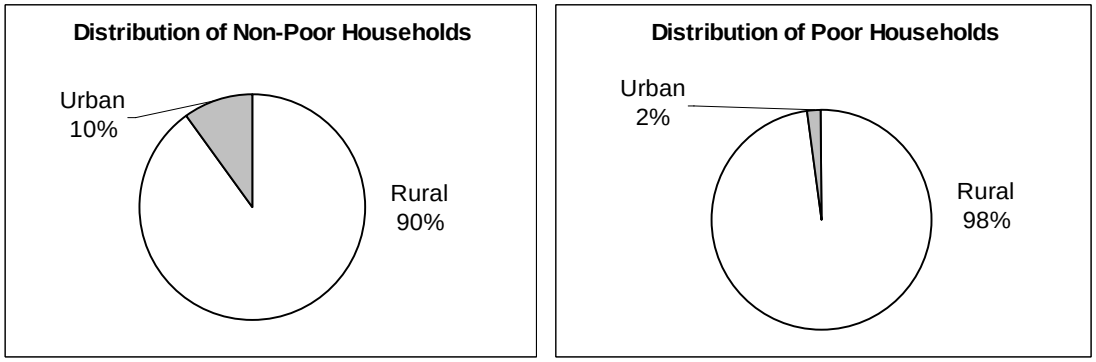


Figure 4 further shows that only 2 percent of all poor households in the district are located in peri-urban areas. The proportion of non-poor households located in peri-urban areas is 5 times greater.

Figure 4: Distribution of Non-Poor and Poor Households by Area of Residence

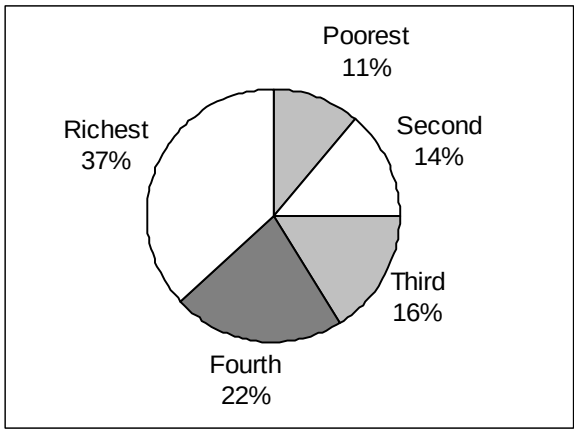


2.3.2 Consumption Inequality

A commonly used measure of consumption inequality is the share of consumption accounted for by households in different expenditure classes. For this purpose households are divided into five groups of equal size according to their consumption expenditure. Figure 5 demonstrates that in Karatu District the consumption of the richest

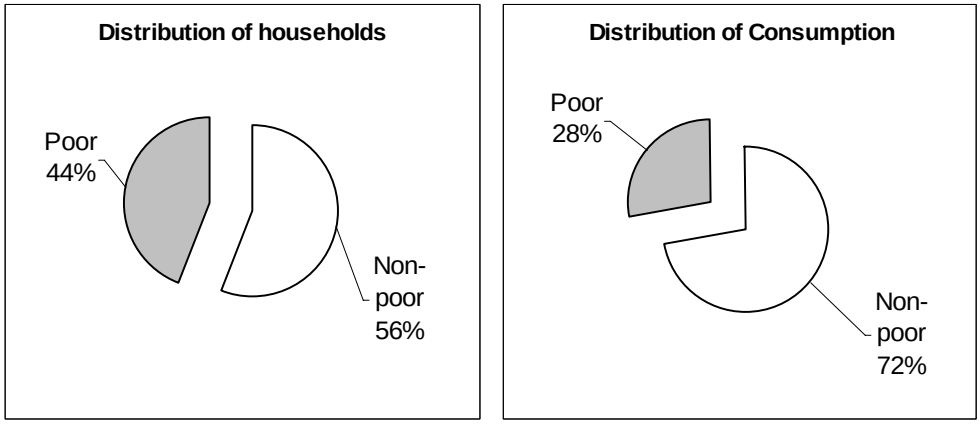
group (the group with the highest consumption expenditure) accounts for 37 percent of total consumption. In contrast, the consumption expenditure of the poorest group accounts for only 11 percent of the total.

Figure 5: Consumption Inequality



Inequality can also be examined by comparing the proportion of poor households in the district to the proportion of total consumption expenditure accounted for by these households. Figure 6 shows that while poor household constitute 44 percent of households in the district, their consumption expenditure only accounts for 28 percent of the total.

Figure 6: Consumption Inequality in Karatu District



2.4 Poverty and Characteristics of Household Heads

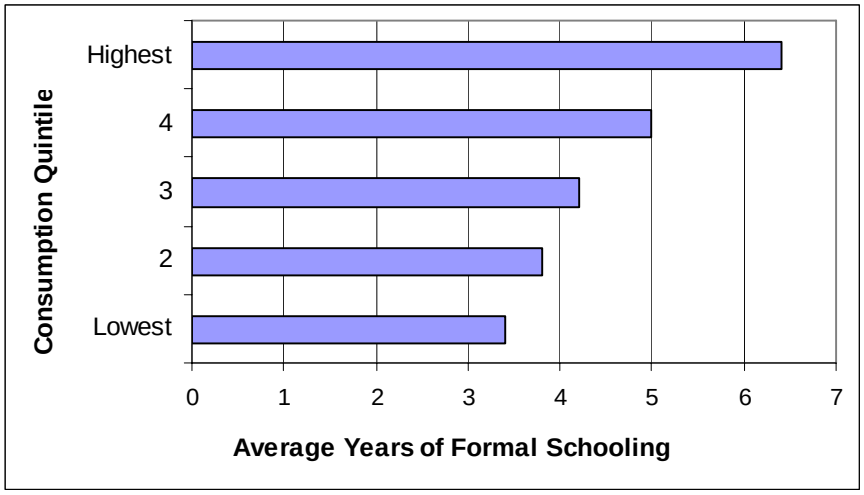
This section examines the differences and similarities in the main characteristics of poor and non-poor households[5] in Karatu district. Household characteristics, and more specifically characteristics of the household head, are disaggregated by poverty status for this purpose. Characteristics of the household head are the focus of this section as they

[5] The analysis in this section should be treated with a degree of caution as some of the household characteristics compared across the two groups have also been used to predict poverty. As mentioned before, this means that there may be some inherent correlation between these variables and poverty.

often affect the whole household. For instance, in Karatu the head of household is the main contributor of income in 79 percent of all households. Further decomposition by poverty status is presented in each of the relevant sections.

Results of the survey suggest that education of the household head is correlated with the household poverty status. Figure 7 shows that while households in the lowest consumption quintile are headed by individuals with an average of just over 3 year of formal schooling, heads of households in the highest quintile have had, on average, nearly twice as much education. Although education of the household head is one of the variables used to predict consumption expenditure, the validity of the observed correlation between poverty and education of household head should not be underestimated as this relationship is statistically significant.

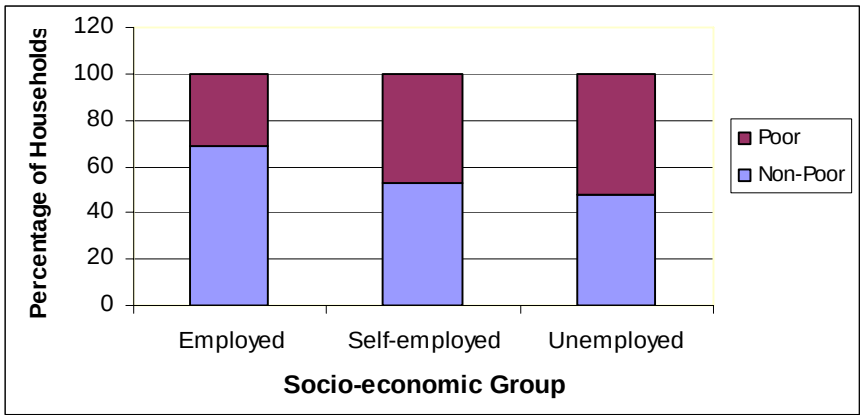
Figure 7: Average Years of Schooling Received by Household Head by Consumption Quintile



The socio-economic group that a household belongs to depends on the employment of the household head. Throughout the report heads employed in the private sectors, formally or informally, as well as Government and Parastatal employees are categorised as 'Employed'. Self-employed individuals, working in the agricultural, trade or professional sectors are combined into the 'Self-employed' category, while those who had not been working for the 4 weeks preceding the survey are classed as 'Unemployed'.

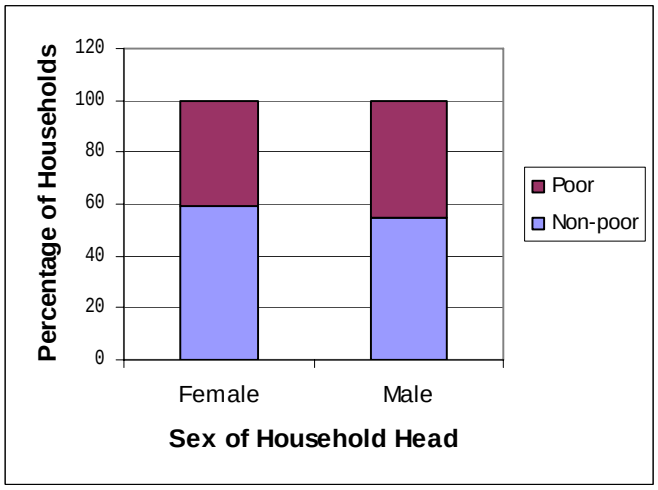
Analysis of poor and non-poor households by socio-economic group shows that there is a significant correlation between household poverty status and employment of the household head. Poor households are least likely to be headed by employed individuals and are most likely to be headed by unemployed individuals. In fact, poor households constitute more than half (52 percent) of unemployed households, compared to 31 percent of employed households.

Figure 8: Distribution of Poor and Non-poor Households by Socio-economic Status



Finally, contrary to popular belief that female headed households are worse off than male headed households, poverty is equally widespread in female and male headed households in Karatu district. In fact, the poverty rate in female headed households is 4 percentage points lower than that in male headed households. This difference is not, however, statistically significant.

Figure 9: Distribution of Poor and Non-poor Households by Gender of Household Head



3 VILLAGE, POPULATION AND HOUSEHOLD CHARACTERISTICS

3.1 Introduction

This chapter provides an overview of Karatu's village, household and population characteristics. To begin with, the tribal and religious make up of the villages in this district are examined. This is followed by analysis of the levels of ethnic and religious diversity in Karatu's villages. Isolation is then looked at in terms of the distribution of households by distance to the district capital and to the centre of the sub-village in which they are located. The next part of the chapter discusses main characteristics of the population in Karatu, such as area of residence, gender and poverty. The same analysis is then conducted at household level. An examination of the main characteristics of household heads in Karatu concludes the chapter.

3.2 Village Characteristics

3.2.1 Ethnicity and Religion in Karatu

The tribal and religious make-up of the villages in Karatu are shown in Table 5. The most commonly found tribe are the Wairaqwi. Members of this tribe live in the majority of the villages (97 percent) in the district. The second largest group is "Other"; this groups contains tribes that were only found in 1 village. This category is so large because most villages in Karatu will typically have a tribe from the "Other" category. Among these tribes are the Warangi, for instance. The Wachaga and Wanyiramba inhabit roughly a quarter of the villages, while the Wanyaturu and Wameru were least common, found in no more than 5 percent of the villages.

The Wairaqwi also make up the majority of the population in the villages where they live. On average, the members of this tribe constitute 94 percent of the residents of the villages where they live. In contrast, while the Wachaga and Wanyiramba live in roughly 1 out of 4 villages, they constitute on average only, respectively, 3 and 6 percent of the village population.

Roman Catholics as well as Pagans were found in every surveyed village. However, while Roman Catholics constitute, on average, over a third of the population, Pagans make up, an average of only 15 percent. Lutherans and other Protestants were also found in the great majority of the villages in Karatu; less than 5 percent of the villages do not contain this group. Muslims are least widespread in this district; they are found in 70 percent of the villages and constitute, on average, only 6 percent of the population of the villages where they live.

Table 5: Distribution of the Population by Tribe and Religion at Village Level

	Proportion of Villages That Contain the Group	Average Proportion of Population Constituted by Group in Villages Where it is Present
Karatu District Tribes		
Wachaga	25	3
Wairaqw	97	94
Wabarbeig	17	7
Wanyaturu	3	3
Wanyiramba	23	6
Wapare	17	1
Wasambaa	2	3
Wameru	5	1
Other	49	11
Karatu District Religions		
Muslim	70	6
Roman Catholic	100	36
Lutheran	98	30
Protestant (other)	96	16
Pagan	100	15

3.2.2 Ethnic Fractionalisation

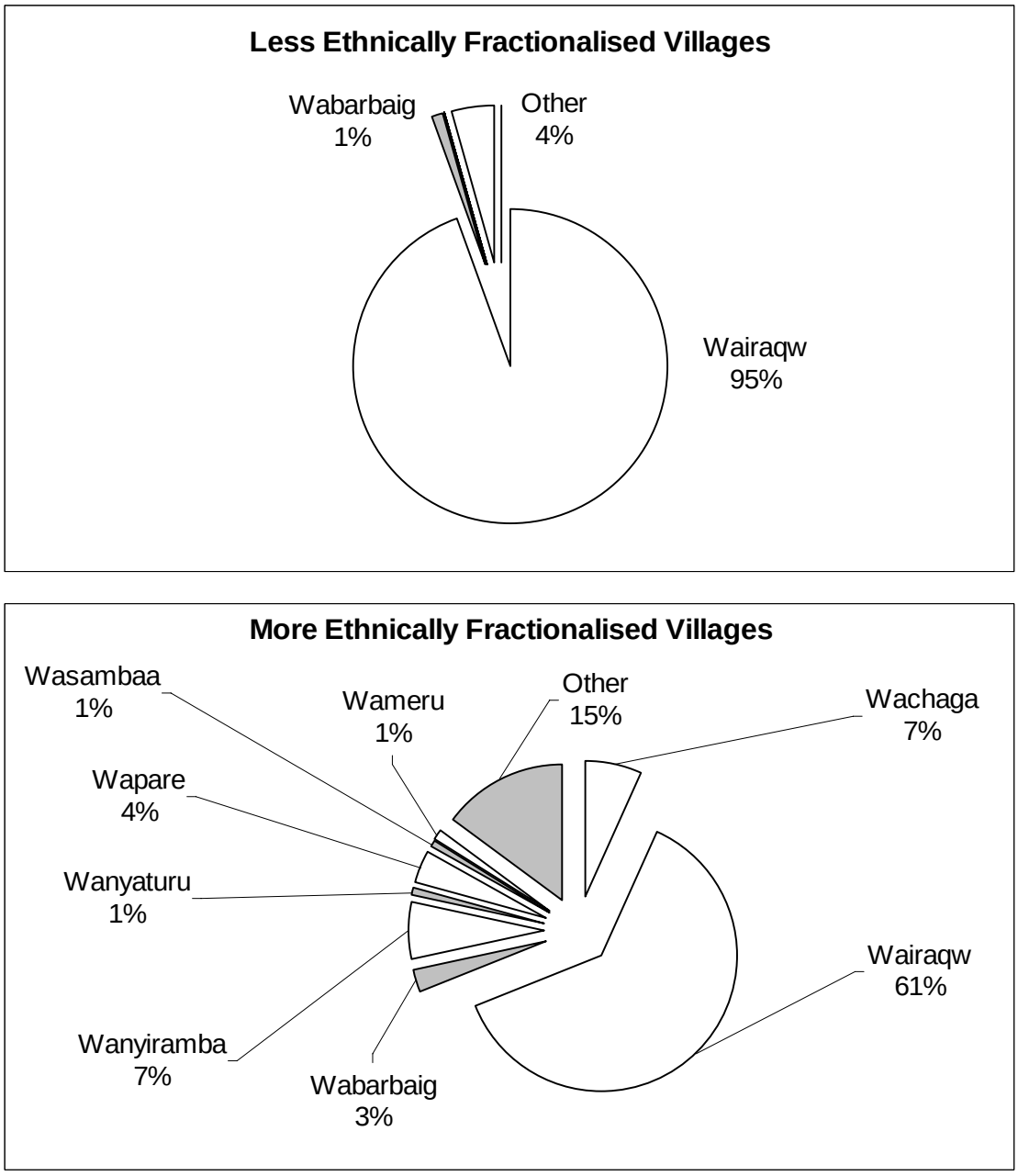
The level of ethnic fractionalisation is a variable that is used throughout this report. Villages are split into those with high ethnic fractionalisation and those with low ethnic fractionalisation. Ethnic fractionalisation is commonly measured as the probability that 2 randomly selected individuals from the same village are from different tribes. If a village is homogeneous this probability is closer to 0. In the extreme case of everyone in the village being from a different tribe, the probability would be 100 percent.

Throughout the report, 2 fractionalisation categories are used: 'Low' and 'High'. The 'Low' category contains 50 percent of villages that have lower levels of fractionalisation. The ethnic fractionalisation index in these areas does not exceed .03, indicating that in these villages there is a maximum of 3 percent chance of randomly selecting 2 individuals belonging to different tribes. The 'High' category contains 50 percent of the villages that have a higher level of ethnic fractionalisation. The ethnic fractionalisation index in these areas ranges from .04 to .38.

Figure 10 shows the typical make-up of villages in the 'Low' and the 'High' ethnic fractionalisation categories. Less ethnically diverse villages tend to be made up of, predominantly, members of the Wairaqw tribe. On average, 95 percent of the population in these villages are from the Iraqw tribe, 1 percent are from the Barbaig tribe and 4 percent are from other, rarely encountered tribes. In contrast, more ethnically diverse villages are made up of, on average more than 8 tribes. The Wairaqwi still constitute the majority of the population in these villages, but a much smaller majority than in less fractionalised villages, at 61 percent. The Wachaga and the Wanyiramba constitute the second largest group in these villages, at 7 percent. The least widespread tribes,

categorised as 'Other' make up 15 percent of these villages. While the Wabarbaig, Wanyaturu, Wapare, Wasambaa and Wameru tend to live in these villages as well, they do not constitute more than 4 percent of the village populations.

Figure 10: Average Make up of More and Less Ethnically Fractionalised Villages

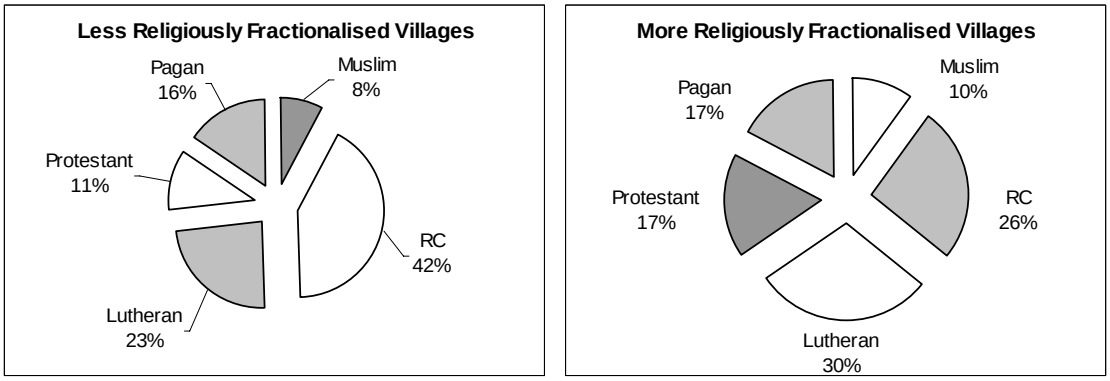


3.2.3 Religious Fractionalisation

Religious fractionalisation is a measure of the level of religious diversity. The fractionalisation index in less religiously diverse villages does not exceed .42, while that

in more diverse areas ranges from .42 to .5. As can be seen, Karatu is a more religiously than ethnically diverse district. This trend is demonstrated in Figure 11. Villages categorised as having low levels of religious fractionalisation, nevertheless are likely to contain all the religious groups in the district. However, the different religious groups tend to be less evenly represented in less religiously diverse areas. In these areas 2 out of 5 individuals are Roman Catholic; Lutherans constitute the second largest group, while pagans are in third place. In more fractionalised villages, the distribution is more even with Lutherans constituting, on average, 30 percent, Roman Catholics 26 percent and Pagans and Protestants 17 percent.

Figure 11: Average Make up of Less and More Religiously Fractionalised Villages



3.2.4 Isolation

Isolation is another indicator that will be used throughout this report; this variable incorporates trends in household and village isolation. While village isolation is determined by the distance of the village from the district capital, the level of household isolation is determined by the distance of the household from the centre of the sub-village (or Enumeration Area). Two isolation categories are used: “Closer to district capital / centre of EA” and “Further from district capital / centre of EA”. These refer, respectively, to 50 percent of the closer villages / households and 50 percent of the further villages / households.

Table 6 shows the mean distance to district capital from villages located closer to and further from it, as well as the distance from the closest and the furthest villages in each category to the district capital. There is a noticeable difference between the mean distances to the capital from villages located closer to further from it, at 2 and 21 kilometres respectively. Villages in the closer category are located no further than 5 kilometres from the district capital. In contrast, the distance from the further villages to the district capital ranges from 5 to 56 kilometres.

Table 6: Village Isolation

	Closer to district capital	Further from district capital
Mean Distance	2.1	20.8
Closest	0.9	5.3
Furthest	5.2	55.8

Figure 12 further shows that less isolated villages contain a smaller proportion of poor households and are more ethnically diverse than more isolated villages. For instance, while nearly 3 out of 5 households in more isolated villages are also located in less ethnically fractionalised areas, this proportion is only 28 percent of households in less isolated areas.

Figure 12: Selected Characteristics of Less and More Isolated Villages

Table 7 shows the mean distance of households in the 'Closer' and 'Further' categories to the centre of the sub-village. While none of the households in the 'Closer' category are located more than 0.6 kilometres from the centre of the sub-village, in the 'Further' category some households are as far as 9 kilometres away from the centre

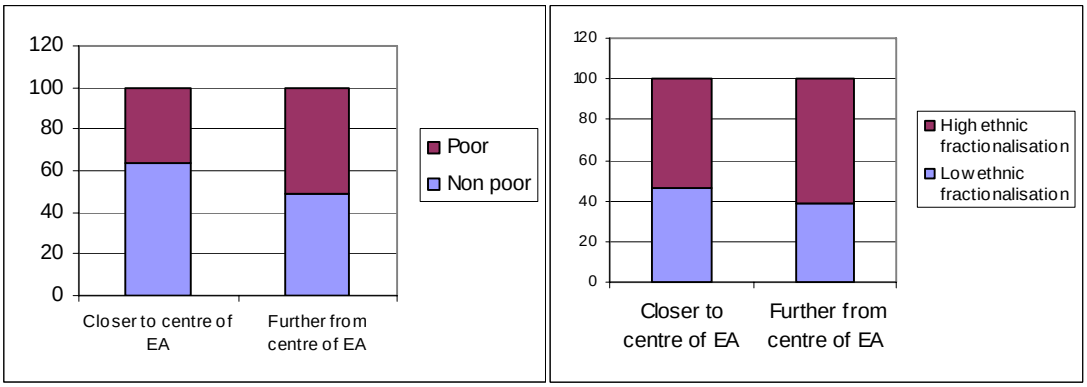
Table 7: Household Isolation

	Closer to centre of EA	Further from centre of EA
Mean Distance	0.3	1.6
Closest	0	0.6
Furthest	0.6	8.7

Figure 13 shows that poor households are more widespread among more isolated households, constituting half of all households located further from the sub-village centre, compared to just over a third (36 percent) of the households located closer to the

sub-village centre. Proportions of more and less isolated households located in more and less ethnically diverse areas do not differ as much; nevertheless the proportion of households located in fractionalised areas is slightly higher among households that are more isolated within the sub-village. This trend suggests that more fractionalised villages may also be slightly more geographically spread out than more homogeneous ones.

Figure 13: Selected Characteristics of Less and More Isolated Households



3.3 Population Characteristics

Overall, just under 188,000 people populate Karatu District. Only about 9,000 of these people, or 5 percent, live in Karatu Mjini – the peri-urban area (Table 8).

Nearly 3 out of 5 individuals (59 percent) live in households characterised by consumption levels below those necessary to satisfy Basic Needs. As discussed in Chapter 2, these households are defined as poor. Men constitute a slightly higher proportion of the district's population than women, at 52 and 48 percent respectively. The results further show that 18 percent of the population over the age of 15 had lost one (17 percent) or both (1 percent) of their parents before the age of 16. At the time of the survey 6 percent of individuals under the age of 16 had lost one or both parents.

A higher proportion of the population live in villages located an average distance of 2 kilometres from the district capital, than those living an average of 21 kilometres away. The majority (57 percent) of the population also live at least 0.6 kilometres from the centre of the sub-village. Finally, nearly equal proportions of individuals live in more and less ethnically diverse areas.

Table 8: Population Characteristics

	Weighted population Total	Share of population
Karatu District	187,684	100
Rural	178,956	95
Peri-urban	8,728	5
Poverty		
Non-poor	76,458	41
Poor	111,226	59
Gender		
Male	96,980	52
Female	90,704	48
Retrospective Orphan Status (individuals over the age of 15 who had been orphaned before the age of 16)		
Non-orphan	78,778	82
Paternal Orphan	11,408	12
Maternal Orphan	4,804	5
Double Orphan	1,203	1
Current Orphan Status (individuals under the age of 16 who have lost one or both parents)		
Non-orphan	86,372	94
Paternal Orphan	3,019	3
Maternal Orphan	1,430	2
Double Orphan	670	1
Village Isolation		
Closer to district capital	103,247	55
Further from district capital	84,437	45
Household Isolation		
Closer to centre of EA	81,573	43
Further from centre of EA	106,111	57
Ethnic Fractionalisation		
Low	85,918	46
High	101,766	54

Karatu's population is predominantly young; nearly half (46 percent) of the residents in this district are under the age of 15 and 95 percent are under the age of 65. While this is the age distribution found in rural areas, the proportion of individuals between the ages of 15 and 64 is 10 percentage points higher in peri-urban than in rural areas and the district as a whole. The proportion of older people, on the other hand, is 3 percentage points lower in peri-urban than rural areas. In consistency with this trend, the median age is slightly higher in peri-urban than rural areas or the district as a whole, at 19 and 16 years respectively.

Table 9 further shows that there are 94 dependents (people under the age of 15 or over 65) to every 100 economically active individuals. This ratio is slightly higher in rural areas and substantially lower in peri-urban areas, where there are 66 dependents to every 100 economically active individuals.

Table 9: Distribution by Age, Median Age and Dependency Ratios

	<15	15 to 64	65+	Median Age	Dependency Ratio
Karatu District	46	49	5	16	94
Rural	46	49	5	16	96
Peri-urban	40	58	2	19	66

3.4 Household Characteristics

3.4.1 Households by Area of Residence and Household Size

Out of 34,000 households located in Karatu district, only 2,000 (6 percent) are found in peri-urban areas. Poor households make up 44 percent of all households in the district (Table 10).

While 19,000 households are located in villages that are, on average, 2 kilometres away and within 5 kilometres from the district capital, 15,000 households (44 percent) are located in villages that are an average of 21 kilometres away from the district capital. Households located further from the sub-village centre are slightly more widespread than those located closer, at 54 and 46 percent respectively.

The majority (57 percent) of households in the district are located in more ethnically diverse villages where the average probability of randomly selecting 2 individuals from different tribes is 13 percent. The probability of this occurring in less diverse villages, where 43 percent of Karatu's households are located, is, on average, only 1 percent[6].

[6] While in the sample each of the isolation and fractionalisation categories contain 50 percent of the households, once the data is weighted the categories become slightly less equal.

Table 10: Households by Area of Residence

	Weighted households	
	Total	Share of population
Karatu District	33,856	100
Rural	31,664	94
Peri-urban	2,192	6
Poverty		
Non-poor	18,849	56
Poor	15,007	44
Village Isolation		
Closer to district capital	18,956	56
Further from district capital	14,900	44
Household Isolation		
Closer to centre of EA	15,489	46
Further from centre of EA	18,367	54
Ethnic Fractionalisation		
Low	14,397	43
High	19,459	57

Households in Karatu district are, on average, made up of 5.4 individuals. While half of the households are made up of between 3 and 6 people, a third contain more than 6 members.

Rural households tend to be larger than peri-urban households, with respective average household sizes of 5.5 and 3.6 members. The proportion of small households (1 to 2) is more than twice as high in peri-urban than rural areas. In contrast, while only 13 percent of peri-urban households contain more than 6 members, this is the case in over a third of rural households.

Poor households are significantly larger than non-poor households, containing, on average, over three or more member. While the majority (58 percent) of poor households have more than 6 members, only 14 percent of non-poor households are this large.

Households headed by females tend to be smaller than those headed by men. Further, households headed by employed individuals are the smallest in the district, containing, on average 4.7 members. Location of the household within the village, as well as in relation to the district capital does not have a significant impact on household size. Larger households are, however, slightly more common in less ethnically diverse areas, where 38 percent contain more than 6 members, compared to 30 percent of households in more ethnically fractionalised villages.

Table 11: Household Size: Percentage Distribution of Households by Household Size and Average Household Size

	1 - 2 people	3 - 4 people	5 - 6 people	7+ people	Share of population	Average household size
Karatu District	17	24	26	33	100	5.4
Rural	16	23	26	35	94	5.5
Peri-urban	39	27	21	13	6	3.6
Poverty						
Non-poor	31	36	19	14	56	3.8
Poor	0	8	34	58	44	7.2
Gender of household head						
Male	14	21	27	38	82	5.6
Female	29	35	22	14	18	4.0
Socio-economic group						
Employed	21	27	24	28	21	4.7
Self-employed	16	22	26	36	69	5.6
Unemployed	14	30	26	30	10	5.2
Village Isolation						
Closer to district capital	18	25	24	33	56	5.2
Further from district capital	16	22	28	34	44	5.6
Household Isolation						
Closer to centre of EA	22	25	23	30	46	5.1
Further from centre of EA	13	22	28	36	54	5.6
Ethnic Fractionalisation						
Low	14	23	26	38	43	5.9
High	19	25	26	30	57	5.0

3.4.2 Land Holdings

Roughly half of landowners in Karatu have less than 4 acres of land. While a quarter of the households are landless, nearly a tenth have more than 6 acres of land.

Landless households are significantly more widespread in peri-urban than rural areas, constituting 78 percent of all household in the former areas and only 22 percent of the households in the latter. Further, none of the peri-urban households have more than 6 acres of land, compared to 10 percent of rural households.

Landless households constitute a significantly higher proportion of non-poor than poor households, at 31 and 19 percent respectively. Trends in amount of land owned are similar between poor and non-poor landowners.

Nearly 2 out of 3 landless households use land they do not own. The rate of use of land that is not owned by the household decreases with increasing size of owned land. Only 11 percent of households that have over 6 acres of land also rent or use communal land.

Table 12: Land Holdings

	Acres of land owned by the household					
	None	< 1	1 - 2	2 – 4	4 - 6	6+
Karatu District	26	8	18	25	15	9
Rural	22	8	19	26	15	10
Peri-urban	78	1	7	9	5	0
Poverty						
Non-poor	31	9	17	22	14	8
Poor	19	7	20	29	15	10
Land used but not owned						
None	37	58	70	85	88	89
Paid	48	35	23	13	10	9
Free	15	7	6	2	1	2

1. The proportions in the first two categories – area of residence and poverty status – add up to 100 percent as a row total while the proportions in the last category – land used but not owned – add up to 100 percent as a column total.

3.4.3 Livestock Holdings

Table 13 shows that over two fifths of households in Karatu district have no livestock. A third of the households have both large and medium livestock, while 23 percent hold *either* large *or* medium livestock. While this trend is consistent with that found in rural areas, trends in livestock ownership are noticeably different in peri-urban areas. Here the great majority of households (89 percent) have no livestock, only 1 percent have both medium and large livestock and only 10 percent hold one of these two types. While ownership of large livestock only is equally widespread in rural and peri-urban areas, the proportion of households in rural areas holding medium livestock only is 4 times higher than that in peri-urban areas.

Households with no livestock are almost twice as widespread among non-poor than poor households. In contrast, proportions of poor households holding large livestock only, medium livestock only, or both types of livestock are roughly twice as high as those of non-poor households.

Table 13: Livestock Holdings

	Ownership of Livestock			
	None	Medium only	Large only	Both
Karatu District	43	16	7	33
Rural	40	17	7	36
Peri-urban	89	4	6	1
Poverty				
Non-poor	55	5	13	27
Poor	29	10	20	42

3.5 Characteristics of Household Heads

3.5.1 Gender and Marital Status of Heads of Household

Table 14 shows that less than a fifth (18 percent) of households in Karatu are headed by a female. The proportion of households headed by a female is nearly twice as high in peri-urban than rural areas, at 31 and 17 percent respectively.

The majority (70 percent) of households are headed by an individual in a monogamous marriage. The second largest group of household heads are widowers, at 11 percent. Households headed by unmarried individuals are significantly more widespread in peri-urban than rural areas, while widowers make up roughly half the proportion of household heads in peri-urban areas as that in rural areas, at 7 and 12 percent respectively.

Table 14: Gender and Marital Status of Household Heads

	Gender		*Marital Status*					
	Male	Female	Single	Monogamous	Polygamous	Widowed	Divorced	Separated
Karatu District	27,655	6,201	2,225	23,530	1,462	3,883	1,447	1,308
	82	18	7	70	4	11	4	4
Rural	26,146	5,518	1,814	22,178	1,382	3,724	1,332	1,235
	83	17	6	70	4	12	4	4
Peri-urban	1,509	683	414	1,352	80	159	116	73
	69	31	19	62	4	7	5	3

3.5.2 Household Heads by Socio-Economic Group

The majority of household heads (69 percent) are in the self-employed group. Employees of the private and government sectors constitute the second largest group, at 21 percent. Only 10 percent of household heads were unemployed at the time of the survey. While this trend is representative of rural areas, in peri-urban areas employment in private and government sectors is more widespread than self-employment, at 50 and 40 percent of household heads respectively.

Table 15: Household Heads by Socio-Economic Group

	Socio-economic group		
	Employed	Self-employed	Unemployed
Karatu District	7,071	23,450	3,335
	21	69	10
Rural	5,981	22,564	3,119
	19	71	10
Peri-urban	1,091	886	216
	50	40	10

3.5.3 Household Heads by Education

Table 16 shows that nearly half of the household heads in the district had completed primary education. Household heads with no formal education constitute the second largest sub-group, at 31 percent. Only 5 percent of household heads have some secondary education and only 1 percent had completed secondary education.

The average education level of household heads in peri-urban areas is higher than that of household heads in rural areas. The proportion of heads with some secondary education, for instance, is nearly 3 times as high in peri-urban than rural areas, at 11 and 4 percent respectively.

Table 16: Household Heads by Education

	Level of formal education				
	None	Some primary	Complete primary	Some secondary	Complete secondary
Karatu District	10,408	5,866	15,651	1,608	323
	31	17	47	5	1
Rural	10,154	5,616	14,246	1,375	274
	32	18	45	4	1
Peri-urban	254	250	1,405	233	50
	12	11	64	11	2

4 EDUCATION

4.1 Introduction

This chapter examines education indicators. The first part focuses on some adult[7] education indicators. These include literacy rate, rate of participation in formal education and average number of years spent in school. The second part of the chapter discusses selected education indicators for the primary school age population (7 to 13 years). Data presented in this section includes primary school access and enrolment rates, as well as levels of and reasons for dissatisfaction with primary school. The following section analyses some secondary education indicators. These include secondary school access, enrolment, satisfaction and non-attendance rates. A comparison of core education indicators in Karatu to those of other rural districts in Tanzania concludes the chapter.

4.2 Selected Adult Education Indicators

4.2.1 Literacy

Literacy is one of the main adult education indicators informed on by the Karatu District CWIQ. Literacy is defined as the ability to read and write in any language, as reported by respondent[8]. Individuals who are able to read but cannot write are considered illiterate.

Overall, roughly three quarters (73 percent) of the adults in Karatu district were literate at the time of the survey. While this result is representative of rural areas, literacy rate in peri-urban areas is higher, at 85 percent (Table 17).

The results of the survey further indicate that out of the examined characteristics, household poverty, socio-economic group, gender and the level of isolation from the district capital have the most noticeable impact on literacy rates. Poverty is negatively correlated with literacy; the proportion of literate adults from poor households is significantly lower than that of adults from non-poor households, at 70 and 78 percent respectively. Adults from households headed by unemployed individuals are least literate; only 2 out of 3 adults in this group are able to read and write, compared to 4 out of 5 adults from households headed by employed individuals. The proportion of literate men exceeds that of literate women by 10 percentage points. This difference is only slightly greater than that between proportions of literate adults in households located closer and further from the district capital.

[7] All individuals over the age of 14 are classed as adults in this chapter.
[8] Note that this result is based solely on the respondents' assertions. Independent tests were not conducted to determine literacy rates.

While distance of the household from the centre of the sub-village does not appear to have any impact on literacy rates, the proportion of literate adults in more ethnically fractionalised villages is slightly higher than that in more homogeneous areas; the 5 percentage point difference is not, however, statistically significant.

4.2.2 Formal Schooling rate

Formal schooling rate is another useful indicator of the adult education level. It informs on the proportion of adults in the district who have received formal schooling at some point in their life. Roughly 78,000 out of 102,000 adults in the district (77 percent) had attended school at some point. Overall, the formal schooling rate tends to be up to 7 percentage points higher than the literacy rate. The trends in this indicator are similar to those in literacy rates (Table 17).

4.2.3 Average Years of Schooling

Results of the survey further show that those adults who had gone to school, had on average, spent 5 years in formal education (Table 17). Individuals from rural areas spend an average of a year and a half less in formal education than those from peri-urban areas.

The most substantial difference in average time spent at school was observed between individuals from different socio-economic groups. While, on average, those adults who had attended school from households headed by employed individuals spent 5.7 years in formal education, those from households headed by unemployed individuals did so for only 4.3 years. Further, adults from non-poor households spend an average of nearly 1 year longer in formal education than those from poor households. There is also some difference in the average number of years of schooling received by individuals living further from and closer to the district capital; adults in the former group spend an average of half a year less in school than those in the latter group. A similar difference was observed in average amount of years spent in formal education between women and men.

As in the instances of literacy and formal schooling rates, household isolation and ethnic diversity have little impact on amount of time spent in formal education.

Table 17: Selected Adult Education Indicators (age 15+)

	Literacy Rate[1]	Formal Schooling Rate [2]	Average Years of Schooling[3]	Share of Population
Karatu District	74,693	78,343	5.0	102,025
	73	77		100
Rural	70,227	73,654	4.9	96,798
	73	76		95
Peri-urban	4,465	4,688	6.3	5,227
	85	90		5

	Literacy Rate[1]	Formal Schooling Rate [2]	Average Years of Schooling[3]	Share of Population
Poverty				
Non-poor	36,009	37,334	5.5	46,442
	78	80		46
Poor	38,684	41,009	4.6	55,583
	70	74		54
Socio-economic group				
Employed	15,940	16,421	5.7	19,983
	80	82		20
Self-employed	52,092	54,702	4.9	71,989
	72	76		71
Unemployed	6,661	7,219	4.3	10,052
	66	72		10
Gender				
Male	39,974	41,495	5.2	51,299
	78	81		50
Female	34,718	36,848	4.8	50,726
	68	73		50
Village Isolation				
Closer to district capital	44,344	45,064	5.2	58,053
	76	78		57
Further from district capital	30,349	33,279	4.7	43,972
	69	76		43
Household Isolation				
Closer to EA centre	32,611	34,827	5.1	44,059
	74	79		43
Further from EA centre	42,082	43,516	4.9	57,966
	73	75		57
Ethnic Fractionalisation				
Low	31,771	34,473	4.8	45,098
	70	76		44
High	42,921	43,870	5.1	56,927
	75	77		56

[1] Proportion of population over the age of 14 who are able to read and write
[2] Proportion of population over the age of 14 who attended school at some point
[3] Years of formal schooling received, on average, by individuals over the age of 14

4.3 Selected Primary Education Indicators

4.3.1 Access to Primary School

Distance

The cumulative distribution of the population of Karatu by distance from their households to the nearest primary school is shown in Table 18. The distance is calculated using household and primary school GPS coordinates[9].

Over half of Karatu's population live in households located less than 1 kilometre away from a primary school. While nearly everyone in the district (90 percent) lives within 4 kilometres from a primary school, there are some individuals (8 percent) who live more than 6 kilometres away. Peri-urban households tend to be located substantially closer to primary schools than rural households. In fact, no-one in peri-urban areas lives further than 2 kilometres from a primary school, compared to nearly a quarter of individuals in rural areas.

While the difference in proximity to primary school of rural and peri-urban residents is the most substantial, other characteristics, such as poverty status, socio-economic group, household size, as well as the level of village and household isolation also have an impact. The proportion of individuals from poor households who live less than 1 kilometre away from a primary school is 10 percentage points lower than that of individuals from non-poor households. Individuals from households headed by unemployed individuals tend to live closer to primary schools than those from households headed by self-employed or employed individuals. In fact, while everyone from the unemployed group lives within 4 kilometres from a primary school, this is the case for 92 percent of the self-employed group and 79 percent of the employed group. Proportions of individuals living within 2 kilometres from a primary school are lower among individuals from households consisting of 3 to 6 members, at roughly 74 percent, than those form households with 1 to 2 members. Proximity to primary schools increases with proximity to district capital as well as proximity to the sub-village centre.

As can be seen from Table 18, individuals in more and less ethnically diverse areas live equally close to primary schools.

[9] See Chapter 1 for a more detailed explanation of this measurement.

Table 18: Cumulative Distribution of Population by Distance From Their Household to the Nearest Primary School (in kilometres of travel) – GPS Measurement

	Less than 1 km	Less than 2km	Less than 3 km	Less than 4 km	Less than 6 km	Share of population
Karatu District	56	77	87	90	92	100
Rural	54	76	87	90	93	95
Peri-urban	99	100	100	100	100	5
Poverty						
Non-poor	62	79	87	89	93	41
Poor	52	76	87	91	93	59
Socio-economic group						
Employed	58	77	79	79	84	19
Self-employed	53	76	88	92	94	71
Unemployed	77	89	99	100	100	10
Household size						
1 to 2	66	87	90	93	98	5
3 to 4	59	74	86	90	92	15
5 to 6	51	73	86	91	92	26
7+	57	80	89	91	94	53
Village Isolation						
Closer to district capital	63	80	89	90	94	55
Further from district capital	47	73	84	89	90	45
Household Isolation						
Closer to EA centre	73	85	94	94	94	43
Further from EA centre	43	71	82	88	92	57
Ethnic Fractionalisation						
Low	59	77	89	91	91	46
High	54	78	86	90	94	54

Access

Primary school access rate is defined as the proportion of primary school age children (7 to 13 years) reporting to live within 30 minutes of travel from the nearest primary school. In other words, a primary school access rate informs on the proportional of primary school age children who are able to reach a primary school within 30 minutes of travel.

Over half (56 percent) of primary school age children in Karatu are able to get to a primary school within 30 minutes of travel.

Disaggregation of the data by selected characteristics shows that socio-economic group and village isolation have the most noticeable impact on this indicator. Primary school

age children from households headed by employed and self-employed individuals have noticeably lower access than those from households headed by unemployed individuals. It should be noted, however, that this difference is not statistically significant. A much more significant difference was found between access rates in areas closer and further away from the capital. While less than half of 7 to 13 year olds living in households located further from the district capital are able to get to a primary school within 30 minutes of travel, this is the case for nearly two thirds of the children from the same age group living in less isolated areas.

Other characteristics, such as household poverty status and ethnic fractionalisation have less impact on access to primary school. Nevertheless, access rates are higher among children from poor households and less ethnically diverse areas. The differences between the groups do not, however, exceed 10 percentage points and are not statistically significant. Finally, gender and the location of the household within the sub-village have even less impact on access rates.

4.3.2 Enrolment

There are two main measurements of enrolment: the Gross Enrolment Rate (GER) and the Net Enrolment Rate (NER). Both of these measurements are examined in this section.

Gross Enrolment Rate (GER) is defined as the ratio of all individuals attending school, irrespective of their age, to the population of children of school age. If there are a large proportion of non-school age individuals attending school, the GER may exceed 100 percent. Primary school GER informs on the ratio of all individuals in primary school to the population of individuals of primary school age (7 to 13 years).

Net Enrolment Rate (NER) is defined as the ratio of children of school age currently enrolled at school to the population of children of school age. Therefore, primary school NER is the ratio of children between the ages of 7 and 13 years currently in primary school to the population of children in this age-group.

The NER provides more information for analysis than the GER. While trends in the actual participation of school age children in formal education are in part captured by the NER, the GER, at best, provides a broad indication of general participation in education and of the capacity of the schools. The GER gives no precise information regarding the proportions of individuals of school and non-school age at school, nor does it convey any information on the capacity of the schools in terms of quality of education provided.

At the time of the survey, the primary school GER in Karatu was 125 percent. This figure indicates that all individuals attending primary school constitute 125 percent of all children of primary school age in the district. The Net Enrolment Rate, further shows that 91 percent of all primary school age children were attending primary school at the

time of the survey. While the GER is higher in rural than peri-urban areas, the NER remains constant (Table 19).

Variation in the primary school NER across different sub-groups in the population is minimal. The most substantial difference was found in NER among children living closer to and further from the district capital. The NER is positively correlated with proximity to district capital; while in less isolated areas it is 93 percent, in more isolated areas it is 88 percent. The impact of other characteristics, such as household poverty, socio-economic group and gender was minimal; differences in rates between the groups did not exceed 3 percentage points.

In contrast, variation in Gross Enrolment Rates across the sub-groups discussed above is more substantial. Household poverty status and socio-economic group were found to have the most substantial impact on primary school GER. Primary school pupils from poor households constitute a substantially larger proportion of primary school age children from poor households compared to primary school pupils from non-poor households, at 132 and 113 percent respectively. A similar disparity was found in GER of individuals from households headed by employed and unemployed individuals; primary school pupils from the former group constituted a smaller proportion of primary school age individuals in the group compared to those in the latter group. Variation in GER across the other sub-groups does not exceed 6 percentage points.

4.3.3 Satisfaction

Data on satisfaction with primary school was collected by asking primary school pupils if there were any problems with the school they were attending. The satisfaction rate informs on the proportion of primary school pupils who cited no problems with their schools[10].

At the time of the survey, more than 2 out of 3 primary school pupils (68 percent) expressed satisfaction with the schools they were attending. The most substantial variation in satisfaction rates was found across poverty groups. Pupils from poor households were significantly more satisfied with the schools they were attending than those from non-poor households. Similarly, the proportion of satisfied primary school pupils from households headed by unemployed individuals was 17 percentage points higher than that of pupils from the employed group. The data also show that satisfaction is slightly higher among primary school students from more ethnically diverse areas and non-poor households; the differences are not, however, statistically significant. Gender as well as village and household isolation were not found to have an impact of any significance on satisfaction.

[10] As the interview was conducted with the most informed person in household, often school going individuals were not asked directly about satisfaction with schools.

Table 19: Selected Primary Education Indicators

	Access[1]	Gross Enrolment	Net Enrolment	Satisfaction[2]
Karatu District	56	125	91	68
Rural	56	126	91	68
Peri-urban	58	111	91	65
Poverty				
Non-poor	61	113	90	54
Poor	53	132	92	74
Socio-economic group				
Employed	54	122	91	64
Self-employed	55	125	91	67
Unemployed	69	134	94	81
Gender				
Male	58	128	90	66
Female	54	122	92	70
Village Isolation				
Closer to district capital	63	124	93	70
Further from district capital	46	127	88	66
Household Isolation				
Closer to EA centre	57	125	92	69
Further from EA centre	55	125	91	67
Ethnic Fractionalisation				
Low	59	128	93	64
High	53	122	90	72

1. Reporting to live within 30 minutes travel to the nearest school
2. Proportion of children at school who cited no problem with the school

4.3.4 A Closer Look at Some of the Indicators

Education data collected in the Karatu District CWIQ allows more in-depth analysis of the indicators discussed above. In conclusion of the primary education indicators section, reasons for dissatisfaction as well as enrolment trends are examined in more detail.

Dissatisfaction

One of the aims of the CWIQ instrument is to inform on perceptions of quality of services received among individuals for whom these services are provided. To obtain this information, primary school students who were not satisfied with the schools they were attending at the time of the survey were asked to provide reasons for their dissatisfaction. Complaints regarding lack of books and other resources were allocated

into the 'Books/Supplies' category, while those relating to quality of teaching and teacher shortages were grouped into the 'Teaching' category. The 'Facilities' category incorporates complaints regarding overcrowding and bad condition of facilities.

Overall, roughly a third (32 percent) of primary school students in the district were not content with the schools they were attending. The satisfaction rate (Table 19) and the dissatisfaction rate (Table 20) add up to 100 percent; trends in dissatisfaction rates are, therefore, the reverse of trends in satisfaction rates described above.

The two most prominent complaints among primary school students in Karatu were lack of materials, such as books, as well as low quality of teaching and teacher shortages. Both complaints were cited by over half of the dissatisfied pupils. Moreover, these are the main complaints in both rural and peri-urban areas. Complaints relating to the condition of school facilities, on the other hand, were cited by nearly twice as high a proportion of pupils in rural than peri-urban areas.

While complaints among male and female students were very similar, disaggregation of the dissatisfied pupils by other characteristics, such as household poverty, socio-economic group, isolation and fractionalisation shows some variation in reasons for dissatisfaction.

Dissatisfaction with overcrowding and bad condition of facilities is a more widespread complaint among pupils from households headed by self-employed and unemployed individuals, than those from households headed by employed individuals. Facilities are also more of an issue among pupils living further away from the district capital, as well as those living in more ethnically homogeneous areas.

Quality of teaching and teacher shortages were cited by the majority of pupils in most groups. This complaint is particularly prominent among students who live further away from the district capital as well, as those living in ethnically homogeneous areas. For instance, the proportion of pupils citing quality of teaching in more isolated villages is 31 percentage points higher than that in villages located closer to the district capital. Teaching is also a more widespread complaint among pupils from poor households, female students, as well as students from households located closer to the sub-village centre.

Students from households headed by employed and unemployed individuals, however, are significantly more concerned about the lack of necessary supplies than teaching issues. Over three quarters of the students in these groups complained about lack of supplies, compared to only half of the students throughout the whole district. Further, the proportion of students from non-poor households citing this problem is 20 percentage points greater than that of students from poor households. Books and supplies were also cited by a significantly higher proportion of individuals from less isolated and more ethnically diverse villages, as well as households located further from the sub-village centre.

Table 20: Children Currently at School and Dissatisfied with it; Reasons for Dissatisfaction

		Reasons for Dissatisfaction			
	Dissatis–faction	Books/ Supplies	Teaching[1]	Facilities[2]	Other
Karatu District	16,601	8,431	10,479	4,788	1,862
	32	51	63	29	11
Rural	15,931	8,073	10,092	4,684	1,762
	32	51	63	29	11
Peri-urban	670	358	387	104	99
	35	53	58	16	15
Poverty					
Non-poor	7,420	4,586	4,369	2,091	164
	46	62	59	28	2
Poor	9,181	3,844	6,110	2,697	1,698
	26	42	67	29	18
Socio-economic group					
Employed	3,524	2,811	1,374	154	64
	36	80	39	4	2
Self-employed	12,129	4,905	8,692	4,248	1,740
	33	40	72	35	14
Unemployed	948	715	412	386	57
	19	75	43	41	6
Gender					
Male	9,257	5,032	5,443	2,628	1,130
	34	54	59	28	12
Female	7,343	3,399	5,036	2,160	732
	30	46	69	29	10
Village Isolation					
Closer to district capital	8,912	5,717	4,345	1,821	1,168
	30	64	49	20	13
Further from district capital	7,688	2,714	6,134	2,966	694
	34	35	80	39	9
Household Isolation					
Closer to EA centre	7,206	2,969	5,206	2,412	221
	31	41	72	33	3
Further from EA centre	9,395	5,462	5,272	2,376	1,641
	33	58	56	25	17

		Reasons for Dissatisfaction			
	Dissatis–faction	Books/ Supplies	Teaching[1]	Facilities[2]	Other
Ethnic Fractionalisation					
Low	9,167	4,100	7,088	3,301	1,608
	36	45	77	36	18
High	7,434	4,331	3,391	1,487	254
	28	58	46	20	3

1 Teaching includes: Quality of teaching and teacher shortage
2 Facilities includes: Overcrowding and bad condition of facilities

Lagging Behind at School

Enrolment rates can be analysed in terms of two types of trends:

- Incidence of school attendance by children who, for whatever reasons, were unable to go to school at the correct age and are too old for the grade they are in.
- Incidence of children being able to begin schooling at the appropriate age (at the age of 7 in Tanzania) and have the opportunity to continue their educational career with no lag.

The analysis of the results presented in Table 21 and Table 22 help to investigate enrolment rates in Karatu in terms of both types of trends.

Enrolment by Age

Disaggregation of enrolment rates by age and grade is presented in Table 21. If a child incurs no lag, he/she is expected to enter Standard 1 at the age of 7 and continue through to Standard 7 by the age of 13. The results show that at the age when children are supposed to begin school (7 years), 3 out of 4 actually attend school. Fewer that 3 out of 5 seven year olds, however, are in the correct grade, as indicated by the Standard 1 NER of 56 percent. This is the highest NER at primary school level. In contrast, the GER in Standard 1 is the lowest at primary level.

Trends in the Gross Enrolment Rate throughout primary school show that the intake of pupils as a proportion of all children in the age-group is highest in Standards 3 and 5. The GER in Standard 3 is particularly high; for every 100 children who are 9 years old, there are 180 pupils in Standard 3. In contrast, to every 100 children who are 13, there are 51 children in Standard 7.

The trend in the Net Enrolment Rate throughout primary school is noticeably different from that in the GER. Overall, there is a steady decline in the NER throughout primary

school. While 56 percent of 7 year-olds were in Standard 1 at the time of the survey, only 2 percent of 13 year olds were in Standard 7.

Finally, the attendance rate shows the proportion of children in each age-group who are at school, irrespective of the grade. Unlike the NER, the attendance rate steadily increases between the ages of 7 and 13. In fact, while 75 percent of 7 year olds were receiving some formal education at the time of the survey, by the age of 13, this category incorporated nearly everyone in the age-group, at 97 percent. The largest increase in attendance rates occurs between the ages of 7 and 8, when the attendance rate rises from 75 to 92 percent.

Table 21: Enrolment by Age

	Age in Years	Corresponding Grade	Gross Enrolment Rate[1]	Attendance Rate[2]	Net Enrolment Rate[3]
Primary School	7	Standard 1	113	75	56
	8	Standard 2	116	92	36
	9	Standard 3	180	93	31
	10	Standard 4	134	97	42
	11	Standard 5	153	98	13
	12	Standard 6	128	94	17
	13	Standard 7	51	97	02

1. The number of children in each grade, as a percentage of the number of children in the corresponding age category
2. The percentage of children in the age category who are at school (excluding nursery school)
3. The percentage of children in the age category who are in the corresponding grade

Age Distribution by Grade

Table 22 further shows the age distribution of children in each grade of primary school, as well as the average lag incurred between the ages of 7 and 19. This table provides further insight into the trends observed in Table 21.

There is a distinct downward trend in the proportion of children of the right age in each grade of primary school. While 56 percent of children in Standard 1 are in the correct age-group, this proportion declines to 4 percent in Standard 7 which is the grade with the lowest proportion of children of the correct age. The other 96 percent of children in Standard 7 are older than the correct age of 13. On average, by the age of 13, school-going children in Karatu lag behind by 2.4 years; by the age of 16 this lag increases to 4.3 years for children who are still in primary school.

Table 22: Age Distribution Per Grade in Primary School (in percentage of total number of children attending that grade)

Age in years	Average No. of Years School Going Children Lag Behind	Grade of Primary School						
		1	2	3	4	5	6	7
7	0.0	56	14	3	0	0	0	0
8	0.3	26	31	15	1	0	0	0
9	0.5	3	34	17	9	0	0	0
10	1.0	9	16	19	31	2	0	0
11	1.3	0	3	13	22	8	0	0
12	1.7	1	2	13	12	25	13	0
13	2.4	1	0	10	11	22	15	4
14	2.8	1	0	6	7	17	24	18
15	3.1	1	0	0	5	17	28	25
16	4.3	1	0	2	2	2	4	12
17-19	4.6	1	0	2	0	7	16	41
Total	1.8	100	100	100	100	100	100	100

4.4 Selected Secondary Education Indicators

The sample of individuals who were attending secondary school at the time of the survey is too small to conduct equally in-depth analysis of secondary education indicators as that of primary. However, the main indicators such as access to secondary school, enrolment rates and non-attendance rates are discussed below. All of these indicators include the non school going population and can, therefore, be meaningfully analysed using the available data.

4.4.1 Distance

Table 23The cumulative distribution of all households in the district by distance to the nearest secondary school are shown in Table 23. Information about the distance was obtained by asking respondents to estimate how far the nearest secondary school is to their household in kilometres.

Overall, less than 1 out of 5 individuals (16 percent) in the district live within 2 kilometres from a secondary school. In fact, over half, 54 percent, of the district's population live more than 6 kilometres from the nearest secondary school. While this is the overall situation, in peri-urban areas households are located significantly closer to secondary schools than in rural areas. Nearly 2 out of 3 peri-urban residents live within 2 kilometres form the nearest secondary school. No one here lives more than 6 kilometres away.

While the household poverty status, household size and proximity to the centre of the sub-village have little impact on location of the household in relation to the nearest secondary school, socio-economic group is more correlated with this variable.

Individuals living in households headed by self-employed individuals appear to live further from secondary school than those from households headed by employed or unemployed individuals. In fact, the proportion of individuals from households headed by self-employed individuals living more than 6 kilometres from the nearest secondary school is almost 2 times greater than that of members of households headed by employed individuals and more than 1.5 times greater than that of members of households headed by the unemployed.

The results further suggest a positive correlation between proximity to the district capital and distance to the nearest secondary school. The majority of residents of villages located closer to the district capital live less than 4 kilometres from the nearest secondary schools, while in more remote areas, this is the case for only 11 percent of the population. In addition to village isolation, ethnic fractionalisation is also a village characteristic that has an impact on distance to secondary schools. Residents of more ethnically diverse villages live closer to secondary schools than those of more homogeneous areas. The proportion of individuals living more than 6 kilometres from the nearest secondary school in more homogeneous areas is 1.5 times greater than that in more diverse villages.

Table 23: Cumulative Distribution of Individuals by Distance From Their Houses to the Nearest Secondary School (in kilometres of travel) – Respondents' Estimates

	Less than 1 km	Less than 2km	Less than 3 km	Less than 4 km	Less than 6 km	Share of population
Karatu District	6	16	26	33	46	100
Rural	4	13	22	29	42	95
Peri-urban	35	64	86	94	100	5
Poverty						
Non-poor	3	16	30	39	49	41
Poor	8	16	23	29	44	59
Socio-economic group						
Employed	7	31	40	52	72	19
Self-employed	5	12	21	27	37	71
Unemployed	5	14	34	41	59	10
Household size						
1 to 2	3	11	22	39	47	5
3 to 4	6	16	26	32	46	15
5 to 6	5	12	22	29	39	26
7+	6	18	28	35	50	53
Village Isolation						
Closer to district capital	10	28	42	52	63	55
further from district capital	1	2	7	11	27	45

	Less than 1 km	Less than 2km	Less than 3 km	Less than 4 km	Less than 6 km	Share of population
Household Isolation						
Closer to EA centre	5	14	27	32	42	43
further from EA centre	6	18	26	35	51	57
Tribal Fractionalisation						
Low	1	5	16	20	34	46
High	10	25	34	44	57	54

4.4.2 Access

As mentioned previously, access is defined in the CWIQ as the proportion of individuals of, in this instance, secondary school age (14 to 19 years) who live in households located within 30 minutes of travel from, in this case, the nearest secondary school.

Only 17 percent of secondary school age individuals in Karatu district have access to secondary school (Table 24). In peri-urban areas a significantly higher proportion of secondary school age individuals are in this position; every other individuals between the ages of 14 and 19 is able to get to a secondary school within 30 minutes of travel here.

Disaggregation of access data by selected characteristics reveals a number of other variables that appear to have an impact on secondary school access rates. Access to secondary schools is positively correlated with wealth; individuals from non-poor households have a higher access rate than those from poor households, at 29 and 11 percent respectively. There is also a small, but still noticeable difference between the level of access among individuals of secondary school age in households headed by the self-employed and the unemployed compared to those headed by employed individuals; access is higher in the latter group.

Proximity to district capital is another characteristic that has a very significant impact on access levels. The access rate in areas closer to the district capital is more than 9 times as high as that in more remote areas. Within the village, individuals who live closer to the centre of the sub-village centre also appear to have better access than those living in more isolated areas. This trend is not, however, statistically significant. Another significant relationship was found between ethnic fractionalisation and access. The access rate among individuals of secondary school age living in more ethnically diverse areas is significantly higher than that in more homogeneous areas, at 24 and 9 percent respectively.

4.4.3 Enrolment

As discussed above, the two main measurements of enrolment are the Gross and Net Enrolment Rates. The results of the survey show that 12 percent of the district's population of secondary school age were attending secondary school at the time of the survey. In peri-urban areas, specifically, however, this proportion was significantly higher, at 32 percent. The secondary school GER is close to the NER in Karatu, at 18 percent.

Household poverty status, socio-economic group, gender, and village isolation appear to have the most substantial impact on secondary school enrolment. Both Gross and Net Enrolment Rates are more than twice as high among individuals of secondary school age from non-poor households, compared to those from poor households. While only 7 percent of 14 to 19 year olds from poor households were in secondary school at the time of the survey, this was the case for more than two fifths (22 percent) of individuals of the same age from non-poor households. Further, the Net Enrolment is noticeably higher among members of households headed by employed and self-employed individuals, compared to those of households headed by the unemployed. The proportion of girls of secondary school age in secondary school is 6 percentage points higher than that of boys in the same age-group. Both the Gross and Net Enrolment Rates among the population of secondary school age in areas closer to the district capital are more than twice as high as those in more isolated areas.

In contrast, location of the household within the sub-village and the level of ethnic fractionalisation in the village do not appear to have an impact on secondary school enrolment.

Table 24: Secondary School Access and Enrolment Rates

	Access	Gross Enrolment	Net Enrolment
Karatu District	17	18	12
Rural	15	17	11
Peri-urban	50	39	32
Poverty			
Non-poor	29	28	22
Poor	11	12	7
Socio-economic group			
Employed	27	24	19
Self-employed	13	18	11
Unemployed	16	6	6
Gender			
Male	16	15	9
Female	18	21	15

	Access	Gross Enrolment	Net Enrolment
Village Isolation			
Closer to district capital	28	24	17
Further from district capital	3	10	6
Household Isolation			
Closer to EA centre	12	15	12
Further from EA centre	21	20	12
Ethnic Fractionalisation			
Low	9	20	13
High	24	16	12

4.4.4 Reasons for Non-Attendance

Table 25 gives the reasons for non-attendance among individuals of secondary school age. The non-attendance rate is defined as the proportion of individuals of secondary school age who had previously participated in formal education and had stopped attending school by the time of the survey; 34 percent individuals of secondary school age fall into this category in Karatu.

The most common reasons for non-attendance include age, cost and failing exams. Lack of interest and illness were also mentioned, but by substantially smaller proportions of non-attendees. Overall, 2 out of 5 non-attendees consider themselves too old to attend school, nearly a third find education too costly and over a quarter (28 percent) had not passed the exams necessary to continue formal education.

Table 25: Reasons for Non-Attendance by Children of Secondary School Age

		Non-attendance
	Reference Population[1]	8,193 34
Reasons not currently attending	Too old	3,286 40
	Too far	0 0
	Too expensive	2,547 31
	Working (home/job)	0 0
	Not interested/useless/no need	466 6
	Illness	210 3
	Pregnancy	0 0
	Failed exam	2,304 28
	Got married	0 0
	Beaten	0 0
	Other	838 10

1. Children who have attended school at some point but were not attending any school regularly at the time of the survey.

4.5 Karatu's Education Indicators in Context

It is difficult to evaluate education trends without a context. A comparison of the trends found in Karatu to similar areas is intended to provide this context. Table 26 shows the trends in main education indicators found in recent surveys. The indicators examined include adult literacy rate, proportion of adults who have had at least one year of formal schooling and primary and secondary school Net Enrolment Rates. The surveys used for comparison include the *Household Budget Survey 2000/01,* and CWIQ Surveys conducted in the rural districts of Kagera and Shinyanga regions. These particular surveys were selected as they contain similar statistics on similar areas in Tanzania.

The results show that Karatu leads in all of the selected education indicators compared to rural Tanzania as a whole (HBS) and Shinyanga and Kagera regions in particular. For instance, the formal schooling rate in Karatu exceeds that in Rural Shinyanga by 10 percentage points.

Net Enrolment Rates in Karatu are significantly higher than those found in the HBS and the other two CWIQ's. At the time of the HBS Survey (2000/01) 56 percent of primary school aged children were in primary school across the rural areas of Tanzania. At the time of the Karatu CWIQ (2005), this proportion was 91 percent in the district. Trends in other rural areas that have been surveyed recently show that the increase in primary school NER there has been less substantial. In rural parts of both Shinyanga and Kagera regions, Net Enrolment Rates were found to have increased to roughly 76 percent. This change is explained by the introduction of the Primary Education Development Plan (2002-2006), as part of which all primary schools are obligated to prioritise 7 year-olds for acceptance into Standard I. The PEDP also introduced other managed growth strategies that are aimed at enrolling every child between the ages of 7 and 12 years into Standard 1 by 2005. It appears, therefore, that the impact of implementation of the PEDP in Karatu is even more substantial than in other rural areas such as Shinyanga and Kagera.

Finally, the proportion of secondary school children attending secondary school in Karatu is 6 times greater than that found in rural Tanzania (HBS). Secondary school enrolment rates in Kagera and Shinyanga regions specifically are also substantially lower than those in Karatu.

Table 26: Karatu's Education Indicators in Context of Rural Tanzania

	HBS – Rural Areas (2000/01)	Shinyanga Rural CWIQ (2004)	Kagera Rural CWIQ (2004)	Karatu CWIQ (2005)
Adult Literacy	67	66	70	73
Adults with at least one year of formal education	69	67	68	77
Primary NER	56	76	77	91
Secondary NER	2	7	4	12

5 HEALTH

5.1 Introduction

This chapter examines health indicators for the whole of the population in Karatu district. First, selected health indicators are examined for the whole population. This section is followed by analysis of the ill population by specific type of illness. A subgroup of those who had consulted a health provider is then taken from the ill population. This group is disaggregated by the type of health provider used and reasons for the dissatisfaction with the service received. The set of ill individuals who had not consulted a health provider is focused on next. Lastly, this chapter examines some data on village health workers and bed net use in Karatu district.

5.2 Selected Health Indicators

5.2.1 Distance to Equipped Health Facilities

The results in Table 27 show the cumulative distribution of individuals by how close they live to the nearest equipped[11] health facility. The distance is calculated using household and equipped health facility GPS coordinates[12].

Overall, roughly half (53 percent) of the population in the district live within 3 kilometres of the nearest equipped health facility. Nearly a third of the district's population, however, live more than 6 kilometres away from the nearest equipped health facility. Residents of peri-urban areas tend to live closer to health facilities than residents of rural areas. In fact, almost everyone (95 percent) in peri-urban areas live less than 1 kilometre from an equipped health facility, compared to only a quarter of rural residents.

Household poverty status, size and socio-economic group all have some impact on proximity to equipped health facilities. The proportion of individuals from non-poor households living within 2 kilometres from the nearest health facility is 13 percentage points higher than that on individuals from poor households. Small households, consisting of 1 to 2 people, tend to be located slightly closer to equipped health facilities than larger households. Similarly, the proportion of individuals from the employed group who live more than 6 kilometres from the nearest health facility is 13 percentage points higher than that among individuals in the self-employed and the unemployed groups. The great majority of individuals living closer to the sub-village centre are less than 6 kilometres away from the nearest equipped health facility, at 87 percent; this proportion is only just over half (54 percent), among individuals living in more remote parts of the sub-village.

[11] As mentioned before, a health facility is considered to be equipped if it has the capacity to test for malaria.
[12] See Chapter 1 for a more detailed explanation of this measurement.

The proportion of individuals who live more than 6 kilometres from the nearest equipped health facility is 17 percentage points higher in villages located closer to the district capital, than those located further. The level of ethnic diversity is another village characteristic that was found to have significant impact on proximity to health facilities. While 4 out of 5 individuals in less fractionalised villages live within 6 kilometres from the nearest health facility, fewer than 3 out of 5 individuals are in the same position in more ethnically diverse areas.

Table 27: Distribution of Individuals by Distance from their Houses to the Nearest Equipped Health Facility

	Less than 1 km	Less than 2km	Less than 3 km	Less than 4 km	Less than 6 km	Share of population
Karatu District	27	45	53	58	68	100
Rural	24	42	50	55	66	95
Peri-urban	95	100	100	100	100	5
Poverty						
Non-poor	28	52	57	61	70	41
Poor	26	39	49	54	65	59
Household size						
1 to 2	36	58	63	68	80	5
3 to 4	26	49	55	61	67	15
5 to 6	31	45	48	54	68	26
7+	25	42	53	56	66	53
Socio-economic group						
Employed	31	42	45	47	56	19
Self-employed	25	43	53	59	70	71
Unemployed	31	59	60	61	69	10
Village Isolation						
Closer to district capital	25	43	49	54	59	55
Further from district capital	30	47	56	60	76	45
Household Isolation						
Closer to centre of EA	31	59	64	69	87	43
Further from centre of EA	24	34	44	49	54	57
Ethnic Fractionalisation						
Low	32	47	57	62	80	46
High	23	43	49	53	57	54

5.2.2 Access to Health Services

Health facility access rate is defined as the proportion of individuals living within 30 minutes of travel from the nearest health facility. Judgment of the time it takes to travel to the facility as well as what is classed as a health facility is left to the discretion of the respondent.

Overall, roughly a third of individuals in the district live within 30 minutes of travel from the nearest health facility (Table 28). In peri-urban areas, however, this access rate is more than twice as high, at 70 percent. Disaggregation of access data by age shows some fluctuation. However, the differences do not exceed 10 percentage points and are not statistically significant.

Household characteristics that were found to have an impact on the access rate include socio-economic group and gender of the household head. The proportion of individuals with access to health facilities is significantly higher in households headed by unemployed individuals than those headed by the self-employed, at 51 and 29 percent respectively. A similarly significant difference was found between access rates in female and male headed households; individuals from female headed households have a significantly higher level of access to health facilities. In contrast, the access rate among individuals living in poor and non-poor households are almost equal.

In addition to the household characteristics discussed above, some village characteristics also appear to have an impact on the variable of interest. The rate of health facility access among individuals living further from the district capital is significantly lower than that among residents of less isolated areas in the district. Similarly, within the village, those living further from the centre of the sub-village are more likely to also not have access to a health facility than those living more centrally.

5.2.3 Need for Health Services

An individual is classed as having experienced need for medical assistance if he/she reports incidence of illness in the 4 weeks preceding the survey. It must be noted that need is based on self-reported occurrence of illness, rather than a diagnosis by a health professional.

A fifth of all individuals in Karatu district had been ill in the 4 weeks preceding the survey (Table 28). In peri-urban areas, however, the rate of need is significantly higher; here a third of the population reported having been ill in the 4 weeks preceding the survey.

Age was found to have the most impact on rate of need out of the examined characteristics. Incidence of illness was highest among toddlers (under the age of 5) and elders (over the age of 50). The rates of need in these groups exceed the district average by at least 10 percentage points. In contrast, the proportion of individuals between the ages of 10 and 30 who had been ill in the 4 weeks preceding the survey was roughly half that in the under 5's group and consistently lower than the district average, ranging from 11 to 16 percent.

Disaggregation of the data by household characteristics shows some variation in rates of need across poverty and socio-economic groups, as well as gender of the household head. Reported incidence of illness is significantly lower among individuals from poor

households than from non-poor households, at 17 and 24 percent respectively. In contrast, it is higher in households headed by employed individuals, compared to those headed by the self-employed, at 28 and 17 percent respectively. Need is also higher in female than male headed households by a similar margin. The proximity of the household to the sub-village centre, on the other hand, was not found to have any impact on incidence of illness in the district.

In addition to individual and household characteristics, some village features also have an impact on reported incidence of illness. The rate of need was found to be higher among individuals living in villages located closer to the district capital, as well as those living in more ethnically diverse areas. Although in both instances the difference in rates of need does not exceed 7 percentage points, it is statistically significant.

5.2.4 Use of Health Services

The rate of health facility use is defined as the proportion of individuals who had consulted a health service provider in the 4 weeks preceding the survey regardless of their health status.

The results show that 15 percent of Karatu's residents had consulted a health provider in the 4 weeks preceding the survey (Table 28). This rate of use is 5 percentage points below that of need. In consistency with the trend in the rate of need, the rate of use is higher in peri-urban than in rural areas. The difference between the rates of need and use is substantially greater in peri-urban than rural areas.

Variation in proportions of individuals consulting health providers in the 4 weeks preceding the survey across selected characteristics is noticeably smaller than that of need. Greatest variation in rates of use was observed among individuals from different age-groups, those from male and female headed households, as well as those from different socio-economic groups. For instance, only 6 percent of individuals between the ages of 10 and 14 had consulted a health provider, compared to the district average of 15 percent. This is also the group with the lowest incidence of illness in the district. In contrast, nearly 30 percent of toddlers and individuals over the age of 65 had consulted a health provider in the specified time-period. Further, in consistency with trends in rates of need, use was lower among individuals from poor households and households headed by self-employed individuals compared to non-poor households and those headed by employed or unemployed individuals. Similarly, the consultation rate in female headed households is slightly higher than that in male headed households, at 20 and 14 percent respectively.

Variation in rates of use between residents of more and less isolated and fractionalised villages, as well as those living further and closer to the centre of the sub-village was slight and not statistically significant.

5.2.5 Satisfaction

The rate of satisfaction with health services is represented by the proportion of people that had consulted a health provider in the 4 weeks preceding the survey and cited no problems with the service received.

Overall, almost three quarters (73 percent) of those who had used health services were satisfied (Table 28). Patients from rural areas were significantly more satisfied with health services received than those from peri-urban areas, at 75 and 49 percent of the respective health facility users.

Individuals between the ages of 5 and 15 were least satisfied. Less than 65 percent of these younger health facility users cited no problems with the services received, compares to 80 percent of the elder users (65+).

Socio-economic group and sex of household head were also found to have some impact on satisfaction levels. Health facility users from households headed by self-employed individuals were significantly more satisfied with the services received than those from the employed group. A smaller, but also statistically significant difference in satisfaction rates was found between individuals from male and female headed households; users in the former group were more satisfied than those in the latter group. Health facility users from poor and non-poor households, on the other hand were equally satisfied.

Among village characteristics, the level of ethnic fractionalisation was found to have the most significant impact on satisfaction. Health facility users from more ethnically diverse areas were significantly less satisfied with the services received than those from more homogeneous villages, with respective satisfaction rates of 68 and 81 percent.

Table 28: Selected Health Indicators

	Access[1]	Need[1]	Use[1]	Satisfaction[2]
	lives within 30 minutes from health facility	Has been sick in past four weeks	has used a health facility in past 4 weeks	has used a health facility and was satisfied with it
Karatu District	59,659	37,021	27,397	20,125
	32	20	15	73
Rural	53,586	34,123	25,674	19,278
	30	19	14	75
Peri-urban	6,073	2,898	1,723	847
	70	33	20	49
Poverty				
Non-poor	26,273	18,355	13,857	10,317
	34	24	18	74
Poor	33,386	18,666	13,540	9,808
	30	17	12	72
Socio-economic group				
Employed	10,961	9,826	6,401	4,013
	31	28	18	63
Self-employed	39,473	23,109	17,674	13,742
	29	17	13	78
Unemployed	9,225	4,087	3,322	2,369
	51	22	18	71
Gender of household head				
Male	47,644	29,721	22,425	16,982
	29	18	14	76
Female	12,015	7,300	4,972	3,143
	47	29	20	63
Age				
0 to 4	8,120	8,196	7,355	5,755
	29	30	27	78
5 to 9	9,728	4,762	3,117	2,009
	32	16	10	64
10 to 14	10,064	3,070	1,581	998
	36	11	6	63
15 to 29	13,899	5,879	4,806	3,460
	30	13	10	72
30 to 49	11,403	7,844	5,520	3,919
	32	22	15	71
50 to 64	3,121	3,598	2,346	1,858
	30	35	23	79
65+	3,325	3,672	2,672	2,127
	36	40	29	80

	Access[1]	Need[1]	Use[1]	Satisfaction[2]
	lives within 30 minutes from health facility	Has been sick in past four weeks	has used a health facility in past 4 weeks	has used a health facility and was satisfied with it
Village Isolation				
Closer to district capital	39,592	23,908	15,928	11,295
	38	23	15	71
Further from district capital	20,067	13,113	11,469	8,830
	24	16	14	77
Household Isolation				
Closer to centre of EA	31,816	16,538	13,447	9,489
	39	20	16	71
Further from centre of EA	27,843	20,483	13,950	10,635
	26	19	13	76
Ethnic Fractionalisation				
Low	25,366	14,053	11,658	9,432
	30	16	14	81
High	34,293	22,968	15,739	10,693
	34	23	15	68

1. Percentages taken out of the whole population
2. Percentages taken out of the population who used health services (indicated in previous column)

5.3 Type of Illness

Table 29 shows the disaggregation of the health data by illness. Types of illness reported have been divided into 3 groups. The first of these groups contains those who had suffered from fever, malaria or diarrhoea. The second is made up of sufferers of chronic disorders, while the third contains those complaining of more common and often less serious health problems such as accidents, injuries, dental problems, skin conditions, eye, ear, nose and throat problems.

The majority of individuals who had been ill in the 4 weeks preceding the survey had suffered from fever, malaria or diarrhoea. This category contains nearly two thirds of the ill population, at 64 percent. Chronic disorders were least widespread; this was the cause of illness for only 14 percent of all those who had been ill in the 4 weeks preceding the survey. Other disorders, such as dental problems, ear, nose and throat problems and injuries were reported by just over a third of individuals from the reference population. While fever, malaria and diarrhoea are equally widespread in rural and peri-urban areas, chronic conditions are more common in peri-urban areas, and other disorders, such as injuries and infections are more common in rural areas.

Disaggregation of the data by selected characteristics shows that incidence of fever, malaria and diarrhoea is most affected by age. As can be seen from Table 29, there is a steady decline in the proportion of individuals suffering from this illness with age. While 78 percent of toddlers (under 5 years) who had been ill in the 4 weeks preceding the

survey had been afflicted with symptoms of malaria, only about half of the elders (65+ years) suffered from the same disorders. Household poverty status was also found to have some impact on the incidence of this illness. The proportion of ill individuals from poor households who cited fever malaria or diarrhoea is 6 percentage points higher than that from non-poor households.

Age was also found to have the most substantial impact on incidence of chronic conditions. The trend in occurrence of this illness is the reverse of that of fever, malaria and diarrhoea. Among the youngest group only 3 percent are suffering from chronic disorders; in the oldest group (65+) this proportion constitutes 30 percent of those who had been ill in the specified time-period. Incidence of such disorders increases most drastically between the ages of 30 and 49 and 50 and 64. Although less substantial, some difference was also observed between proportions of women and men suffering from chronic disorders; women are afflicted by these significantly more than men.

Other disorders, such as ear, nose and throat infections and injuries were most common among toddlers and least common among 5 to 9 year olds and individuals over the age of 49. These illnesses were also found to be significantly more widespread in ethnically homogeneous areas.

As can be seen, many of the selected characteristics were not found to have a substantial impact on types of illnesses suffered by those who had been sick in the 4 weeks preceding the survey. Among these are household characteristics, such as household poverty status and level of isolation within the sub-village, as well as village characteristics, such as proximity of the village to the district capital.

Table 29: Type of Illness

	Fever/Malaria/ Diarrhoea	Chronic Condition	Other[1]	Share of Population
Karatu District	23,548	5,365	12,782	37,021
	64	14	35	100
Rural	21,663	4,751	12,289	34,123
	63	14	36	92
Peri-urban	1,885	613	492	2,898
	65	21	17	8
Poverty				
Non poor	11,132	2,380	7,076	18,355
	61	13	39	50
Poor	12,416	2,985	5,706	18,666
	67	16	31	50
Gender				
Male	11,211	1,778	6,652	17,749
	63	10	37	48
Female	12,337	3,587	6,129	19,272
	64	19	32	52

	Fever/Malaria/ Diarrhoea	Chronic Condition	Other[1]	Share of Population
Age				
0 to 4	6,360	221	2,854	8,196
	78	3	35	22
5 to 9	3,196	281	2,029	4,762
	67	6	43	13
10 to 14	1,879	260	1,216	3,070
	61	8	40	8
15 to 29	3,828	887	1,403	5,879
	65	15	24	16
30 to 49	4,557	1,472	2,453	7,844
	58	19	31	21
50 to 64	1,942	1,146	1,388	3,598
	54	32	39	10
65+	1,785	1,098	1,438	3,672
	49	30	39	10
Village Isolation				
Closer to district capital	14,835	2,144	8,166	23,908
	62	13	34	65
Further from district capital	8,713	3,220	4,616	13,113
	66	16	35	35
Household Isolation				
Closer to centre of EA	10,626	3,222	5,878	16,538
	64	13	36	45
Further from centre of EA	12,922	2,143	6,904	20,483
	63	16	34	55
Ethnic Fractionalisation				
Low	8,520	1,882	6,652	14,053
	61	13	47	38
High	15,028	3,483	6,130	22,968
	65	15	27	62

1 Other category includes: Accident, dental problem, skin condition, eye problems, and ear nose and throat problems. Disaggregation of the non-use data by each of these is impossible due to sample size constraints

5.4 Type of Health Care Provider

Health data collected as part of the survey also informs on the types of health facilities used in the month preceding the survey. As shown in Table 30, half of the health service users in the district use private health facilities, such as private hospitals and private doctors. Nearly a third of the users chose public health facilities, such as government hospitals and dispensaries. Pharmacies were the third most popular type of health service, accessed by 17 percent of patients, while traditional healers had only been

consulted by 1 percent of the reference population. Use of public hospitals was more widespread in rural areas, while pharmacies were consulted by a slightly higher proportion of peri-urban residents.

The data further suggest that there is little difference in type of health facility used by individuals from poor and non-poor households. Individuals from households headed by employed individuals use private health facilities more than those from households headed by the self-employed or the unemployed. Proportion of individuals from households headed by the unemployed using public health facilities, in contrast, is nearly twice as high as that among users from households headed by employed individuals, at 40 and 23 percent respectively. Further, traditional healers are only used by individuals from households headed by the self-employed.

The results show that choice of health facility varies depending on how far individuals live from the district capital. Use of public health facilities, traditional healers and pharmacies is more widespread in more remote areas. Private health facilities, on the other hand, are used more by individuals living closer to the district capital than those living further, at 57 and 38 percent of the respective users. Further, while the level of ethnic diversity at village level does not have a noticeable impact on choice of health facility, the location of the household within the village appears to be of some significance. Nearly 2 out of 5 health facility users from households located closer to the sub-village centre had used a public service, compared to less than a quarter of individuals living in households located further. In contrast, a higher proportion of individuals from the latter group, however, used pharmacies compared to that in the former group.

Table 30: Type of Health Provider Used

	Private	Public	Traditional	Pharmacy	Other	Share of Population
Karatu District	12,133	7,443	205	4,028	519	24,328
	50	31	1	17	2	100
Rural	11,274	7,101	205	3,645	519	22,745
	50	31	1	16	2	93
Peri-urban	859	341	0	383	0	1,584
	54	22	0	24	0	7
Poverty						
Non-poor	5,850	4,016	79	1,686	429	12,060
	49	33	1	14	4	50
Poor	6,284	3,426	125	2,342	90	12,268
	51	28	1	19	1	50

	Private	Public	Traditional	Pharmacy	Other	Share of Population
Socio-economic group						
Employed	3,522	1,394	0	1,119	90	6,124
	58	23	0	18	1	25
Self-employed	7,138	4,740	205	2,455	429	14,967
	48	32	1	16	3	62
Unemployed	1,474	1,309	0	454	0	3,237
	46	40	0	14	0	13
Gender						
Male	6,026	3,572	97	2,099	390	12,186
	49	29	1	17	3	50
Female	6,105	3,870	108	1,929	129	12,142
	50	32	1	16	1	50
Village Isolation						
Closer to district capital	8,664	4,381	0	1,990	90	15,124
	57	29	0	13	1	62
Further from district capital	3,469	3,062	205	2,038	430	9,204
	38	33	2	22	5	38
Household Isolation						
Closer to centre of EA	5,445	4,507	125	1,422	90	11,590
	47	39	1	12	1	48
Further from centre of EA	6,688	2,935	79	2,606	430	12,738
	53	23	1	20	3	52
Ethnic Fractionalisation						
Low	5,160	2,602	125	1,872	90	9,849
	52	26	1	19	1	40
High	6,974	4,840	79	2,156	430	14,479
	48	33	1	15	3	60

5.5 Dissatisfaction with Health Providers

An individual is classed as being dissatisfied with health services he/she receives if having used the services, he/she cites one or more problems with them. These problems can be categorised into 4 groups. The first of these groups is 'Facilities'; it contains those who complain about long waits and/or low levels of hygiene. The second group is 'Cost'; this group is made up of those who complain about cost of health services. Those who mentioned shortages of trained professionals and unsuccessful treatment were allocated to the third group – 'Services'. Finally, complaints regarding lack of supplies and medication were combined into the fourth group – 'Lack of supplies'.

Trends in the dissatisfaction rate (Table 31) are the reverse of those in the satisfaction rate (Table 28) as the satisfaction and dissatisfaction rates add up to 100 percent. Overall, just over 1 in 4 (27 percent) of health facility users were not satisfied with the services received.

Most commonly cited complaints referred to the facilities; two fifths of the dissatisfied health facility users complained about long waits and/or low levels of hygiene in the facilities. This is more of a problem for individuals from rural areas, as well as those from non-poor households. The proportion of dissatisfied users from non-poor households complaining about facilities is more than twice as high as that of dissatisfied users from poor households, at 54 and 26 percent respectively. Further, users form the employed group were more concerned about the state of the facilities than any other problem. This was also by far the most widespread complaint among dissatisfied public health facility users. The proportion of individuals in this group concerned about long waits and overcrowding is nearly twice as high as that of dissatisfied pharmacy clients and 18 percentage points higher than that of dissatisfied users of private facilities. Similarly, individuals living further from the district capital appear to be more concerned about the state of the health facilities that they use that those living closer, as are individuals living in ethnically homogeneous areas compared to those living in more diverse villages.

The second most commonly cited complaint refers to shortages of trained professionals as well as unsuccessful treatment. This is also a slightly more common complaint in rural than peri-urban areas. In contrast to trend in complaints about facilities, complaints about service were more widespread among individuals from poor than non-poor households. Further, more substantial difference can be observed between proportions of dissatisfied users citing this issue from households headed by self-employed and employed individuals, at 52 and 10 percent respectively. Quality of service provision is a more widespread problem among users of pharmacies and traditional healers. In fact, this is the only complaint among dissatisfied patients of traditional healers. Service provision is also more of an issue among health facility users living further from the district capital compared to those living closer. This complaint was cited by half of the reference population in the former group, compared to 22 percent of the latter group. Finally, although less significant, there is also a disparity between proportions of individuals in less and more ethnically diverse areas complaining about services, at 41 and 29 percent respectively.

Finally, cost and lack of necessary supplies were cited by similar proportions of dissatisfied health facility users, at 23 and 18 percent respectively. However, while lack of supplies is an equally widespread problem in rural and peri-urban areas, cost is a significantly more commonly cited problem among dissatisfied users from peri-urban areas. In fact, this is, overall, the most commonly cited problem with health facilities among users from peri-urban areas, mentioned by 51 percent of the reference population.

Cost is a more widespread complaint among dissatisfied users from non-poor households. Further, both cost and lack of supplies were mentioned by higher proportions of dissatisfied users from households headed by employed and unemployed individuals. Health facility users living further from the centre of the sub-village were substantially more unhappy about the cost of services than those living closer, at 33 and 14 percent of

the dissatisfied users from the respective groups. Lack of supplies was mentioned by 3 times as high a proportion of public health facility users than private ones, at 32 and 11 percent respectively. Individuals in the latter group, on the other hand, complained about cost slightly more than those in the former group. Both cost and lack of supplies were significantly more problematic for dissatisfied users who live closer to the district capital, as well as those living in more ethnically diverse areas.

Table 31: Reasons for Dissatisfaction with Health Services

		Reasons for Dissatisfaction[1]			
	Dissatis-faction	Facilities	Cost	Service	Lack of supplies
Karatu District	7,272	2,901	1,659	2,363	1,304
	27	40	23	32	18
Rural	6,396	2,605	1,216	2,135	1,163
	25	41	19	33	18
Peri-urban	876	296	445	229	141
	51	34	51	26	16
Poverty					
Non-poor	3,540	1,922	901	948	450
	26	54	25	27	13
Poor	3,733	979	758	1,416	854
	28	26	20	38	23
Socio-Economic group					
Employed	2,388	1,095	707	243	727
	37	46	30	10	30
Self-employed	3,932	1,558	636	2,041	269
	22	40	16	52	7
Unemployed	953	248	316	80	309
	29	26	33	8	32
Gender					
Male	3,370	1,186	799	1,036	730
	25	35	24	31	22
Female	3,903	1,715	860	1,327	574
	28	44	22	34	15
Type of provider					
Private	3,717	1,195	967	1,404	417
	28	32	26	38	11
Public	2,748	1,371	562	586	887
	30	50	20	21	32
Traditional	57	0	0	57	0
	28	0	0	100	0
Pharmacy	456	121	130	236	0
	11	26	28	52	0
Other	79	0	0	79	0
	15	0	0	100	0

	Dissatis-faction	*Reasons for Dissatisfaction*[1]			
		Facilities	Cost	Service	Lack of supplies
Village Isolation					
Closer to district capital	5,036	1,589	1,506	1,037	1,117
	29	34	33	22	24
Further from district capital	2,236	1,312	153	1,326	187
	23	50	6	50	7
Household Isolation					
Closer to centre of EA	3,958	1,555	562	1,563	652
	29	39	14	39	16
Further from centre of EA	3,314	1,346	1,097	800	652
	24	41	33	24	20
Ethnic Fractionalisation					
Low	2,226	1,434	89	911	66
	19	64	4	41	3
High	5,047	1,467	1,570	1,452	1,238
	32	29	31	29	25

1. An individual can cite more than one reason for dissatisfaction, hence the proportions in this part of the table add up to more than 100%.

5.6 Reasons for Not Consulting a Health Provider When Ill

Table 32 shows the rate of non-use of health facilities among those who had been sick in the 4 weeks preceding the survey. Further it shows the distribution of non-users by reasons for non-use.

One in 3 individuals who had been ill in the month preceding the survey had not consulted a health provider. The rate of non-use is slightly higher in peri-urban than rural areas, at 41 and 33 percent respectively. While rates of non-use among individuals from poor and non-poor households are almost equal, ill individuals from households headed by unemployed individuals appear to be less likely to consult a health provider than those from households headed by employed and self-employed individuals. Further those afflicted with fever, malaria or diarrhoea were also found to consult health providers less than those suffering from chronic conditions, or other disorders, such as injuries and infections. Non-consultation rates are roughly 10 percentage points higher among individuals living closer to the district capital, those living further from the centre of the EA, as well as those living in more ethnically fractionalised villages.

According to the findings of the survey, the main reason for not consulting a health provider in time of illness in Karatu is lack of need. More than half (52 percent) of those who had been ill and had not consulted a health provider gave this reason. This is a significantly more widespread cause for non-use in rural than peri-urban areas. Similarly, while more than 3 out of 5 non-users from households headed by employed individuals cited this reason, fewer than 1 in 10 non-users from households headed by unemployed individuals used this explanation. Lack of need was a slightly more widespread

explanation for non-use among men than women, at 57 and 48 percent respectively. In contrast, the majority of non-users afflicted with chronic conditions cited reasons other than lack of need. The results also show that this was a more popular reason for non-use among those living closer to the district capital, as well as those living in more ethnically fractionalized areas. Finally, lack of need deterred a higher proportion of individuals living further from the centre of the EA than those living closer, at 57 and 43 percent respectively.

Cost of health services served as a deterred to 42 percent of those who had been ill and had not used a health facility. In peri-urban areas this proportion constitutes nearly two thirds of the reference population, at 63 percent. Nearly half (46 percent) of non-users from poor households were deterred by cost, compared to 37 percent of non-users form non-poor households. The majority (92 percent) of non-users from households headed by unemployed individuals cited this reason. This was also the main obstacle to health facility use among those afflicted with chronic conditions. The proportion of individuals living further from the district capital and citing cost as a deterrent to use of health services in time of illness is nearly 20 percentage points higher than that among individuals living closer. Finally, cost is a more widespread reason for non-use among those living in less fractionalised villages and closer to the centre of the sub-village.

Fewer than 1 in 10 non-users (9 percent) cited distance as the reason for not accessing a health professional in time of illness. It should be noted, however, that the 'Cost' category is likely to include those who live far from health facilities and, therefore, find them costly to use. Distance does not serve as a deterrent to health facility use for any of the peri-urban non-users. A significantly higher proportion of non-users from poor households cited distance as a reason, compared to those from non-poor households, at 11 and 6 percent respectively. Distance was also cited by 4 times as high a proportion of non-users from households headed by self-employed individuals, as those from households headed by the employed, at 12 and 3 percent respectively. The results also show that distance is more of a deterrent to men and those living further away from the district capital. Finally, while distance was not an obstacle to any of the non-users from ethnically diverse areas, this was the case for a quarter of non-users from more ethnically homogeneous areas.

Table 32: Reasons for Not Consulting a Health Provider When Ill

		Reasons for not consulting health professional when ill[2]		
	Reference population[1]	No Need	Cost	Distance
Karatu District	12,330	6,384	5,137	1,056
	33	52	42	9
Rural	11,132	5,949	4,381	1,056
	33	53	39	9
Peri-urban	1,198	435	756	0
	41	36	63	0

	Reference population[1]	*Reasons for not consulting health professional when ill*[2]		
		No Need	Cost	Distance
Poverty				
Non-poor	5,932	3,275	2,181	332
	32	55	37	6
Poor	6,398	3,109	2,956	724
	34	49	46	11
Socio-economic group				
Employed	3,425	2,130	1,206	90
	35	62	35	3
Self-employed	8,055	4,187	3,148	966
	35	52	39	12
Unemployed	850	67	783	0
	21	8	92	0
Gender				
Male	5,286	2,991	2,069	587
	30	57	39	11
Female	7,045	3,393	3,068	469
	37	48	44	7
Type of sickness/injury				
Fever/Malaria/Diarrhoea	7,922	4,320	3,333	671
	34	55	42	8
Chronic condition	1,367	157	812	179
	25	11	59	13
Other	3,758	2,060	1,251	429
	29	55	33	11
Village Isolation				
Closer to district capital	8,593	4,709	3,114	332
	36	55	36	4
Further from district capital	3,738	1,674	2,023	724
	29	45	54	19
Household Isolation				
Closer to centre of EA	4,661	1,994	2,248	526
	28	43	48	11
Further from centre of EA	7,670	4,389	2,889	530
	37	57	38	7
Ethnic Fractionalisation				
Low	4,032	1,511	1,907	1,016
	29	37	47	25
High	8,298	4,873	3,230	40
	36	59	39	0

1. Proportion of individuals who had been ill in the four weeks preceding the survey and had not consulted a formal health provider or traditional healer
2. An individual can cite more than one reason for not consulting a health professional, hence the proportions in this part of the table add up to more than 100%.

5.7 Village Health Workers

Karatu District CWIQ collected information on Village Health Workers (VHWs). VHWs are individuals appointed in some manner by the villagers to provide medical assistance. VHWs often have no formal medical training, although some initiatives have been implemented to provide basic training.

The results show that more than 2 out of 5 (42 percent) households are located in villages that have at least one VHW (Table 33). All of these households are located in rural areas. Similarly, the proportion of poor households located in villages that have a VHW is only 3 percentage points higher than that of non-poor households. It can further be seen that VHWs are more widespread in villages located further from the district capital. Finally, while half of the households located in ethnically homogeneous villages are also based in villages that have a VHW, this is only the case for 35 percent of households in more ethnically diverse areas.

As can be seen from Table 33, a small minority of households are aware of the presence of a VHW in their village. In fact, out of all households located in villages that have a VHW, only 1 in 5 know about his/her existence. Awareness is equally low in poor and non-poor households. Similarly, the proportion of households aware of the presence of a VHW is nearly 3 times higher in less ethnically fractionalised villages than more.

Table 33: Presence and Awareness of Village Health Workers

	Proportion of Households Located in Areas with a VHW	Proportion of Households Living in a village with a VHW that are aware of the VHWs presence
Karatu District	42	21
Rural	44	21
Peri-urban	0	0
Poverty		
Non-poor	40	21
Poor	43	21
Village Isolation		
Closer to district capital	35	21
Further from district capital	51	22
Ethnic Fractionalisation		
Low	50	30
High	35	11

5.8 Bed Net Use

Trends in bed net use are presented in Table 34 in conclusion of the health section. The data show that only 13 percent of individuals in Karatu had slept under a bed net the night preceding the survey. Use of bed nets is significantly more widespread in non-poor

than poor households. While literacy and socio-economic group have almost no impact on net use, elders (65+) in Karatu are less likely to use bed nets than younger individuals. The rate of bed net use is 7 percentage points higher in areas further from the district capital; this difference is not, however, statistically significant. In contrast, use of bed nets is 4 times more widespread in more ethnically diverse areas than in more homogeneous ones.

Table 34: Proportion of Individuals Sleeping Under Bed Nets

	Proportion of Individuals Using Bed Nets	Share of Population
Karatu District	13	95
Rural	13	5
Peri-urban	15	100
Poverty		
Non-poor	21	41
Poor	8	59
Socio-economic group		
Employed	13	30
Self-employed	13	69
Unemployed	12	1
Literacy		
Literate	13	68
Non-literate	10	32
Age		
0 to 4	14	46
5 to 9	13	49
10 to 14	8	5
Village Isolation		
Closer to district capital	10	55
Further from district capital	17	45
Household Isolation		
Closer to centre of EA	12	43
Further from centre of EA	14	57
Ethnic Fractionalisation		
Low	5	46
High	20	54

6 CHILD DELIVERY AND NUTRITION

6.1 Introduction

Several topics related to reproductive health and child nutrition are examined in this chapter. In the first part, women who had given birth in the year preceding the survey are focused on; birth rates in different age groups, as well as rates of prenatal care use are analysed by selected characteristics. The focus is then shifted onto type of facilities used in child delivery. The second part of the chapter concerns the nutritional status of children under the age of 5; various potentially related household and individual characteristics of these children are examined in relation to their nutritional status.

6.2 Reproductive Health

Table 35 presents the distribution of women who had a live birth in the year preceding the survey by age. Overall, two thirds of new mothers are under the age of 30. Over a third (35 percent) of all new mothers are between the ages of 20 and 24. Only 3 percent of women who had given birth in the year preceding the survey are over the age of 40. In peri-urban areas, the oldest new mothers are between the ages of 34 and 39. The majority of new mothers here are between the ages of 25 and 34.

The results further show that the proportion of new mothers under the age of 25 is higher among women from non-poor households than that among women from poor households, at 45 and 34 percent respectively. Further, the proportion of younger new mothers in male headed households is higher than that in female headed households. While the great majority (87 percent) of new mothers in male headed households are under the age of 35, this is the case for just over two thirds of new mothers in female headed households. A larger proportion of new mothers from households located closer to the centre of the sub-village are under the age of 35 than that of those living further. Finally, while in less fractionalized areas just over a quarter of women who had a live birth in the 12 months preceding the survey are under the age of 25, in more diverse areas this proportion is nearly twice as high, at 47 percent. Level of isolation from district capital does not appear to have an impact on the age distribution of new mothers.

Table 35: Cumulative Distribution of Women Who had a Live Birth in the Year Preceding the Survey by Age of the Mother; Proportion of Mothers Who had a Live Birth and had Received Pre-natal Care in the Year Preceding the Survey

	Percentage who had given birth in the last 12 months, before reaching the age of:					
	20	25	30	35	40	Pre-natal care
Karatu District	5	40	67	86	97	98
Rural	5	41	67	86	96	98
Peri-urban	0	19	62	83	100	100
Poverty						
Non-poor	8	45	79	97	100	100
Poor	1	34	55	75	92	96
Sex of household head						
Male	5	38	68	87	95	98
Female	0	43	48	68	100	100
Village Isolation						
Closer to district capital	5	38	66	87	95	97
Further from district capital	4	40	66	83	97	99
Household Isolation						
Closer to centre of EA	9	39	73	94	100	100
Further from centre of EA	0	40	60	76	92	96
Ethnic Fractionalisation						
Low	5	27	64	81	96	100
High	4	47	67	87	95	96

6.3 Child Delivery

6.3.1 Facilities Used to Give Birth

Outcomes presented in Table 36 show the distribution of live births from the last 5 years by facilities used for child delivery. The majority (58 percent) of babies born in Karatu over the last 5 years were delivered in a hospital or maternity ward. This is the case in both rural and peri-urban areas, although the proportion of hospital births in peri-urban areas is slightly higher, at 64 percent.

Use of hospitals and maternity wards is substantially more widespread among women from non-poor than poor households. While more than two thirds (69 percent) of children from non-poor households had been delivered at home, this was the case for exactly half of those from poor households. The results further show that children born

in male headed households are significantly more likely to be born in a hospital than those born in households headed by women. In fact, more than 2 out of 3 births that had taken place in female headed households over the 5 years preceding the survey had been conducted at home, compared to 37 percent of births in male headed households. Home births were also significantly more widespread in households headed by unemployed individuals compared to those headed by the employed, at 54 and 37 percent respectively.

Hospital use in child delivery is slightly less widespread in areas further from the district capital compared to the less remote ones. In contrast, the proportion of children born in hospitals or maternity wards over the last 5 years was slightly higher in areas more isolated from the sub-village centre compared to more central areas, at 62 and 54 percent respectively. Level of ethnic fractionalisation does not appear to have any impact on choice of facility in child delivery.

Table 36: Type of Facilities Used in Child Birth

	Hospital/Maternity ward	Home	Other	Share of population
Karatu District	14,792	10,348	298	25,439
	58	41	1	100
Rural	14,213	10,063	255	24,531
	58	41	1	96
Peri-urban	579	285	43	908
	64	31	5	4
Poverty				
Non poor	7,242	3,055	124	10,420
	69	29	1	41
Poor	7,550	7,293	175	15,018
	50	49	1	59
Gender of household head				
Male	13,901	8,493	298	22,692
	61	37	1	89
Female	891	1,855	0	2,747
	32	68	0	11
Socio-economic group				
Employed	2,839	1,702	43	4,584
	62	37	1	18
Self-employed	10,825	7,226	161	18,212
	59	40	1	72
Unemployed	1,128	1,420	94	2,642
	43	54	4	10
Village Isolation				
Closer to district capital	7,282	3,949	43	11,274
	65	35	0	44
Further from district capital	7,511	6,399	255	14,165
	53	45	2	56

	Hospital/Maternity ward	Home	Other	Share of population
Household Isolation				
Closer to centre of EA	6,303	5,156	298	11,757
	54	44	3	46
Further from centre of EA	8,489	5,192	0	13,682
	62	38	0	54
Ethnic Fractionalisation				
Low	7,185	4,835	255	12,276
	59	39	2	48
High	7,608	5,513	43	13,163
	58	42	0	52

6.3.2 Delivery Assistance

Table 37 presents information on the type of assistance used in child delivery over the 5 years preceding the survey. In consistency with the trend in types of facilities used for giving birth, the majority (60 percent) of children in Karatu had been delivered with the assistance of a formally trained health professional (doctor, nurse or midwife). Roughly 1 in 4 births had been conducted with the assistance of non-trained individuals, such as neighbours or family, as well as unassisted. Traditional Birth Assistants (TBA's) had been present at 12 percent of the births in the district. The proportion of children born with the help of a TBA in rural areas is 4 times greater than that in peri-urban areas, at 3 and 12 percent respectively. In contrast, the use of nurses and midwives in child delivery is more widespread in peri-urban than rural areas.

A third of deliveries among women from poor households had been conducted without assistance, or with the assistance of untrained individuals; this was the case for only a fifth of deliveries that had taken place in non-poor households over the last 5 years. Gender of the household head also has a noticeable impact on choice of assistance in child delivery. Assistance of a nurse is a more common choice among women from male headed households, as are TBA's. In fact, only 1 percent of deliveries in female headed households had been assisted by a TBA in the 5 years preceding the survey, compared to 13 percent of births in male headed households. In contrast, assistance of non-trained individuals and unassisted deliveries are more than twice as likely in female than male headed households. Unassisted births and those conducted by untrained individuals constitute the majority (56 percent) of births in female headed households over the 5 years preceding the survey, compared to roughly a quarter (24 percent) of births in male headed households. This type of assistance is also more widespread in households headed by unemployed individuals than those headed by the employed, at 35 and 25 percent respectively.

The results further show that use of nurses' assistance in child delivery is more common in villages located closer to the district capital, compared to the more isolated ones. On the other hand, a higher proportion of children in these more isolated areas were delivered by a TBA, than that in more central parts of the district, at 19 and 4 percent

respectively. Finally, trends in types of assistance used in child delivery were not found to vary substantially between more and less ethnically diverse areas, nor between households located more and less centrally within the sub-village.

Table 37: Distribution of Women who had Given Birth in the Five Years Preceding the Survey by Type of Delivery Assistance Used

	Doctor	Nurse	Midwife	T.B.A.	Other/ Self	Share of population
Karatu District	1,315	11,274	2,831	3,035	6,984	25,439
	5	44	11	12	27	100
Rural	1,315	10,786	2,960	3,004	6,736	24,531
	5	44	11	12	27	96
Peri-urban	0	488	141	30	248	908
	0	54	16	3	27	4
Poverty						
Non poor	661	5,576	1,205	961	2,018	10,420
	6	54	12	9	19	41
Poor	654	5,698	1,627	2,074	4,966	15,018
	4	38	11	14	33	59
Gender of household head						
Male	1,315	10,457	2,487	3,001	5,432	22,692
	6	46	11	13	24	89
Female	0	817	344	34	1,552	2,747
	0	30	13	1	56	11
Socio-economic group						
Employed	324	2,033	596	477	1,154	4,584
	7	44	13	10	25	18
Self-employed	990	8,181	1,932	2,197	4,912	18,212
	5	45	11	12	27	72
Unemployed	0	1,060	303	360	918	2,642
	0	40	11	14	35	10
Village Isolation						
Closer to district capital	295	6,010	1,309	412	3,248	11,274
	3	53	12	4	29	44
Further from district capital	1,020	5,263	1,522	2,623	3,736	14,165
	7	37	11	19	26	56
Household Isolation						
Closer to centre of EA	561	5,236	1,174	1,457	3,326	11,757
	5	45	10	12	28	46
Further from centre of EA	754	6,135	1,657	1,577	3,658	13,682
	6	44	12	12	27	54

	Doctor	Nurse	Midwife	T.B.A.	Other/ Self	Share of population
Ethnic Fractionalisation						
Low	519	5,171	1,597	1,660	3,328	12,276
	4	42	13	14	27	48
High	795	6,103	1,234	1,375	3,656	13,163
	6	46	9	10	28	52

6.4 Child Nutrition

Two standards of physical measurement of growth that describe the nutritional status of a child are presented in this chapter:

- Height-for-age (stunting)
- Weight-for-height (wasting)

The level of malnutrition in a population is determined by comparing the weight and height measurements within the population of interest to those of a well nourished population. Children are considered malnourished if their weight and/or height measurements fall outside the distribution of weight and height measurements of the well nourished population. The reference population used, as recommended by the World Health Organisation (WHO), is that of the United States National Centre for Health Statistics (NCHS).[13]

Height-for-age is a measure of linear growth. A child who is below minus two standard deviations from the median of the reference population is considered to be too short for his/her age – stunted. Stunting is a consequence of long term malnutrition; it is indicative of long term inadequacy of nutrient intake, and is commonly associated with poor economic conditions and chronic or repeated infections.

Weight-for-height is a measure of body mass in relation to body height and is an indicator of immediate nutritional status. A child who is below minus two standard deviations from the median of the reference population is classed as too thin for his/her height – a condition called wasting. Wasting is an immediate indicator of acute malnutrition and reflects insufficiency in tissue and fat mass compared to the amount expected according to the child's height. Wasting occurs as a result of inadequate intake of nutrients immediately preceding the survey. Therefore, wasting is not necessarily the result of insufficient food intake, but could also be, for instance, the result of recent severe illness. Occurrence of wasting is subject to seasonal variations.

Another measurement commonly used is weight-for-age. A child who is below minus two standard deviations from the median of the reference population is considered to be underweight. However, a child may be underweight because he/she is stunted, wasted or

[13] More specifically, the anthropometric calculations were conducted using 2000 CDC growth curves

both. Interpretation of this indicator is complex and inconclusive; for this reason it is not incorporated into this report.

6.4.1 Malnutrition in Karatu District

Results presented in Table 38 show the rates of malnutrition among children under the age of 5 in Karatu district. Roughly 6,000 children in this age-group are too short for their age (stunted). These children constitute a quarter of all under 5's in the district. Wasting is much less widespread, affecting only 5 percent of the children in the same age-group. Both long and short-term malnutrition are more common among girls than boys. Stunting is lowest among new-born children from 0 to 12 months, at 14 percent. In contrast, more than 1 in 3 children in the 48 to 60 months age-group were stunted at the time of the survey. This is also the age when wasting is most widespread, affecting nearly a tenth of the children.

The proportion of stunted children in rural areas is 5 times as high as that in peri-urban areas, at 25 and 5 percent respectively. While household poverty status has little impact on wasting rates, stunting is significantly more widespread among children from poor households. This type of malnutrition is also most prevalent among children from households headed by unemployed individuals and least prevalent among those in the employed group, affecting 34 and 13 percent of under 5's respectively.

The rate of stunting decreases with increasing proximity to the district capital, as well as increasing level of ethnic diversity. The stunting rate among children living further from the district capital and those living in more ethnically homogeneous areas is twice as high as that among children living closer to the district capital and those living in ethnically diverse areas. The level of ethnic fractionalisation also has an impact on wasting rates, unlike the majority of the other examined household and village characteristics. The proportion of wasted children in less fractionalised areas is more than twice as high as that in more. Household location within the sub-village does not appear to be correlated with malnutrition.

Table 38: Stunting and Wasting Rates Among Children Under the Age of Five

	Stunted (-2 SD)	Wasted (-2 SD)	Share of Population
Karatu District	5,974	1,264	24,959
	24	5	100
Rural	5,932	1,214	24,082
	25	5	96
Peri-urban	43	50	877
	5	6	4

	Stunted (-2 SD)	Wasted (-2 SD)	Share of Population
Poor			
Non-Poor	1,881	384	10,128
	19	4	41
Poor	4,093	880	14,831
	28	6	59
Sex of household head			
Male	5,355	1,104	22,213
	24	5	89
Female	620	159	2,747
	23	6	11
Socio-economic group			
Employed	595	220	4,433
	13	5	18
Self-employed	4,474	907	17,884
	25	5	72
Unemployed	905	136	2,642
	34	5	11
Village Isolation			
Closer to district capital	1,779	449	10,921
	16	4	44
Further from district capital	4,195	815	14,039
	30	6	56
Household Isolation			
Closer to centre of EA	2,768	618	11,500
	24	5	46
Further from centre of EA	3,206	645	13,460
	24	5	54
Ethnic Fractionalisation			
Low	3,884	905	12,190
	32	7	49
High	2,091	358	12,769
	16	3	51
Gender			
Male	2,650	547	14,172
	19	4	57
Female	3,325	717	10,788
	31	7	43

	Stunted (-2 SD)	Wasted (-2 SD)	Share of Population
Age			
0	657	289	4,669
	14	6	19
1	1,429	307	5,598
	26	5	22
2	966	195	4,978
	19	4	20
3	1,582	134	5,989
	26	2	24
4	1,341	338	3,725
	36	9	15

6.4.2 Nutritional Status of Children by Selected Characteristics

Characteristics of the Parents

The decisions made concerning the welfare of a child are a crucial determinant of the health and nutritional status of the child. Such decisions are likely to be influenced by factors such as education and age of the decision makers. It is, therefore, important to look at selected characteristics of the parents of malnourished children.

Characteristics of the father are more strongly correlated with the nutritional status of the child than those of the mother. Table 39 shows that while the rate of stunting is slightly higher among children of older than younger mothers, it more than doubles among children of fathers aged 60+, compared to those whose fathers are in their 20's. Education of the father also appears to be more correlated with long term nutrition levels than that of the mother. Stunting rate among children whose fathers have had some formal schooling is 16 percentage points lower than that of children whose fathers have never been to school. Similarly, wasting is significantly more widespread among children whose fathers have had no formal education. Education of the mother is not significantly correlated with child stunting or wasting rates.

Table 39: Distribution of Malnourished Children by Characteristics of the Parents

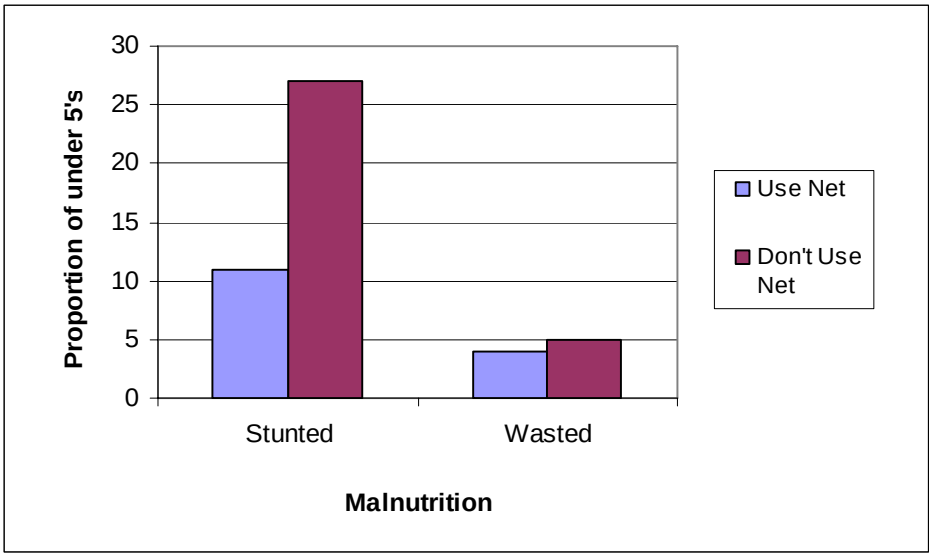
	Stunted (-2 SD)	Wasted (-2 SD)	Share of population
Karatu District	5,712	1,264	23,974
	24	5	100
Age of mother[1]			
20 – 29	2,342	563	11,672
	20	5	49
30 – 39	2,765	527	9,569
	29	6	40
40+	605	89	2,379
	25	4	
Formal Education of Mother			
None	736	197	3,945
	19	5	16
Some	4,975	1,067	20,028
	25	5	84
Age of father[2]			
20 – 29	876	219	4,689
	19	5	22
30 – 39	2,624	680	10,384
	25	7	49
40 – 59	1,490	259	5,742
	27	4	27
60+	242	40	556
	44	7	3
Formal Education of Father			
None	1,208	433	3,139
	38	14	15
Some	4,024	764	18,231
	22	4	85

1 This part of the table only includes children who live with their mother
2 This part of the table only includes children who live with their father

Use of Bed Nets

Figure 14 shows a correlation between the use of bed nets and better nutritional status of the children. Stunting is significantly lower among children who slept under a bed net the night preceding the survey. Wasting is also slightly less widespread among children in the former group. It is impossible to make any causal inferences based on these data. Bed nets could contribute to better nutritional outcomes by reduced risk of disease. Alternatively, the result may mean that the type of households that use bed nets are also likely to be the ones to take good care of their children's health in other areas (like nutritious food, adequate medical attention, etc.). These could, for example, be richer or more educated households.

Figure 14: The Relation Between Bed Net Use and Malnutrition



7 EMPLOYMENT

7.1 Introduction

This chapter examines employment indicators for the adult[14] population of the Karatu district. The first part analyses the employment status of the whole population over the age of 14. The next part focuses on the working adults; trends examined include type of employment, as well as employment sector and occupation of the working adults. The economically inactive subgroups of the adult population are examined in the concluding section of the chapter.

7.2 Employment Status

The adult population of Karatu is categorized into two main groups: working and non-working. The working population includes all adults who had engaged in any type of work in the 4 weeks preceding the survey. Within the working population, a distinction is made between those employed to capacity and those who are under-employed. The under-employed are those individuals who claim that they would be willing to take on additional work.

The non-working population consists of individuals who had not engaged in any type of work in the 4 weeks preceding the survey. This group is further subdivided into those who are unemployed and those who are economically inactive. While the economically inactive are individuals who had not engaged in any work in the 4 weeks preceding the survey due to illness, disability, age or school, unemployed individuals are those who were not working due to lack of employment opportunities.

7.2.1 Working Population

The results of the survey show that the great majority (85 percent) of Karatu's residents over the age of 14 were employed at the time of the survey (Table 40). Among the working adults, a higher proportion claimed to be underemployed than employed to capacity. In fact, more than half of all adults in the district were underemployed at the time of the survey, at 57 percent. The rate of employment is significantly higher in rural than peri-urban areas, at 86 and 59 percent respectively.

Table 40 further shows that while employment rates among adults from poor and non-poor households do not differ substantially, a larger proportion of adults from poor households are employed to capacity, compared to those from non-poor households, at 31 and 24 percent of the respective adult populations. Employment is higher among men

[14]In this chapter adult population includes all individuals over the age of 14

than women. Although proportions of men and women employed to capacity are equal, at 28 percent, the proportion of under-employed men is higher among male adults compared to the proportion of under-employed women among female adults. The employment rate is also slightly higher among individuals living in more isolated areas, both at village and household levels. Finally, the results suggest that the level of ethnic diversity has little impact on employment patterns

7.2.2 Non-Working Population

Over 15,000 adults in Karatu district claimed to not be working at the time of the survey. The non-working population is made up of, predominantly, economically inactive individuals. While 12 percent of individuals over the age of 14 were found to be economically inactive, only 3 percent were unemployed. In consistency with the observed trends in employment, non-working individuals are more widespread in peri-urban than rural areas, at 41 and 14 percent respectively (Table 40).

Overall, individuals from non-poor households are slightly more likely to not be working than those from poor households. Similarly, women are more likely to not be working than men. Further, a higher proportion of women were unemployed (unable to find work rather than deterred from working by other circumstances) at the time of the survey than men. While unemployed women constitute nearly a quarter (23 percent) of non-working women, unemployed men only constitute 12 percent of non-working men. Further, non-working men and women are slightly more widespread in less isolated areas. For instance, while a fifth of adults living closer to the centre of the sub-villages were not working at the time of the survey, only 12 percent of adults living in more isolated parts of the sub-village were in the same position.

Table 40: Distribution of the Population by Employment Status

	Working			*Not working*			*Share of population*
	Employed to capacity	Under-employed	Total	Economi-cally inactive	Un-employed	Total	
Karatu District	28,294	58,227	86,521	12,546	2,958	15,504	102,025
	28	57	85	12	3	15	100
Rural	26,991	56,432	83,423	11,199	2,176	13,375	96,798
	28	58	86	12	2	14	95
Peri-urban	1,303	1,795	3,098	1,347	783	2,130	5,227
	25	34	59	26	15	41	5
Poverty							
Non-poor	10,979	26,935	37,914	6,063	2,464	8,527	46,442
	24	58	82	13	5	18	46
Poor	17,315	31,292	48,607	6,482	494	6,976	55,583
	31	56	87	12	1	13	54
Gender							
Male	14,272	32,082	46,354	4,398	547	4,945	51,299
	28	63	91	9	1	10	50
Female	14,022	26,145	40,167	8,148	2,412	10,560	50,726
	28	52	80	16	5	21	50
Village Isolation							
Closer to district capital	15,077	32,395	47,472	7,998	2,583	10,581	58,053
	26	56	82	14	4	18	57
Further from district capital	13,217	25,832	39,049	4,548	375	4,923	43,972
	30	59	89	10	1	11	43
Household Isolation							
Closer to centre of EA	10,586	24,908	35,494	6,407	2,158	8,565	48,398
	24	57	81	15	5	20	47
Further from centre of EA	17,708	33,319	51,027	6,138	800	6,938	53,627
	31	57	88	11	1	12	53
Ethnic Fractionalisation							
Low	12,739	26,607	39,346	5,017	735	5,752	45,098
	28	59	87	11	2	13	44
High	15,555	31,620	47,175	7,529	2,223	9,752	56,927
	27	56	83	13	4	17	56

7.3 Type of Employment

Working individuals were asked to identify how they were being paid for their work. This information was used to identify the employment category they belong to. Among those working for someone or an organisation, those who receive a wage or salary are classed as regular employee, while those working for an hourly or a daily wage are classed as casual employees. There is also a self-employed category and a category containing unpaid workers.

As Karatu is a rural district, the majority of individuals here are self-employed. In fact, as can be seen from Table 41, less than a fifth of the working adults (17 percent) are not self-employed. Self-employment is significantly less widespread in peri-urban than rural areas, at 54 and 84 percent of the respective working populations. The working individuals in peri-urban areas are more likely to have casual or regular employment than those in rural areas. In fact, the proportion of regular employees among the working individuals from peri-urban areas is nearly 4 times as high as that in rural areas, at 19 and 5 percent.

The results of the survey further show that regular employment is more widespread among working adults from non-poor households compared to those from poor households. Self-employment is more common among women than men, occupying 89 and 78 percent of the respective working adults. In contrast, the proportion of casual employees among working men is almost twice as high as that among women.

Only 9 percent of working adults who live further from the district capital were non self-employed at the time of the survey. In contrast, nearly a quarter of individuals from less isolated areas had regular or casual employment. Similar differences in employment trends can also be observed in more and less ethnically diverse areas. While 92 percent of working adults in more ethnically homogeneous villages were self-employed at the time of the survey, this was the case for 77 percent of working adults from more diverse areas.

Table 41: Distribution of the Employed Population by Type of Employment

	Regular employee	Casual employee	Self-employed	Unpaid worker	Share of population
Karatu District	4,735	9,427	72,161	198	86,521
	5	11	83	0	100
Rural	4,150	8,675	70,474	124	83,423
	5	10	84	0	96
Peri-urban	586	753	1,686	73	3,098
	19	24	54	2	4

	Regular employee	Casual employee	Self-employed	Unpaid worker	Share of population
Poverty					
Non-poor	3,164	4,499	30,111	140	37,914
	8	12	79	0	44
Poor	1,572	4,928	42,049	57	48,607
	3	10	87	0	56
Gender					
Male	3,308	6,535	36,314	198	46,354
	7	14	78	0	54
Female	1,427	2,893	35,847	0	40,167
	4	7	89	0	46
Village Isolation					
Closer to district capital	3,337	7,478	36,584	73	47,472
	7	16	77	0	55
Further from district capital	1,398	1,950	35,577	124	39,049
	4	5	91	0	45
Household Isolation					
Closer to centre of EA	1,917	2,794	30,585	198	35,494
	5	8	86	1	41
Further from centre of EA	2,818	6,633	41,576	0	51,028
	6	13	81	0	59
Ethnic Fractionalisation					
Low	1,292	1,898	36,031	124	39,345
	3	5	92	0	45
High	3,443	7,529	36,129	73	47,176
	7	16	77	0	55

7.4 Employment Sector

Employment data collected as part of the Karatu District CWIQ further informs on the distribution of the working population by employment sector. Four relevant sectors were identified: Government, Private Formal (e.g. business), Private Informal (without contract) and Self-employed. As mentioned above, 83 percent of the working population are in the Self-employed sector. Eleven percent out of the remaining 17 percent are in the Private Informal sector, 3 percent in the Private Formal and only 2 percent in the Government sector. Employment in both the Government and the Private Formal sectors is significantly more widespread in peri-urban than rural areas (Table 42).

Results of the survey further show that working individuals from poor households do not tend to work in the Government sector. Further, employment in the Private Formal and Informal sectors is more widespread among men than women. For instance, the proportion of working men in the Private Informal sector is twice as high as that of

women, at 14 and 7 percent respectively. Employment in the Private Informal sector was also found to be significantly more widespread among working adults who live closer to the district capital, as well as those living in more ethnically diverse areas. These are also the areas with below average rates of self-employment.

Table 42: Distribution of the Working Population by Employment Sector

	Government	Private Formal	Private Informal	Self-employed	Share of population
Karatu District	2,133	2,485	9,390	72,161	86,521
	2	3	11	83	100
Rural	1,747	2,282	8,567	70,474	83,423
	2	3	10	84	96
Peri-urban	386	203	822	1,686	3,098
	12	7	27	54	4
Poverty					
Non-poor	1,918	1,437	4,153	30,111	37,914
	5	4	11	79	44
Poor	215	1,048	5,237	42,049	48,607
	0	2	11	87	56
Gender					
Male	1,400	1,964	6,552	36,314	46,354
	3	4	14	78	54
Female	733	521	2,838	35,847	40,167
	2	1	7	89	46
Village Isolation					
Closer to district capital	1,886	1,962	6,812	36,584	47,472
	4	4	14	77	55
Further from district capital	247	523	2,578	35,577	39,049
	1	1	7	91	45
Household Isolation					
Closer to centre of EA	785	740	3,259	30,585	35,494
	2	2	9	86	41
Further from centre of EA	1,348	1,745	6,131	41,576	51,028
	3	3	12	81	59
Ethnic Fractionalisation					
Low	626	403	2,072	36,031	39,345
	2	1	5	92	45
High	1,508	2,082	7,318	36,129	47,176
	3	4	16	77	55

7.5 Self-employment

As self-employment is the most widespread type of employment among the working adults of Karatu district, it is necessary to examine the distribution of the self-employed population by occupation in order to gain better understanding of the employment patterns in the district. Individuals who claimed to be self-employed were asked to specify their occupation for this purpose.

The results presented in Table 43 show that the great majority (89 percent) of self-employed adults classify themselves as subsistence farmers[15]. Trading is the second most common occupation among the self-employed; 6 percent of the reference population are in this category. While commercial farmers constitute 3 percent of the self-employed, only 1 percent classed themselves as professionals[16].

Self-employment trends are drastically different in peri-urban areas from those characteristic of the district as a whole and of rural areas. While in rural areas 91 percent of the self-employed are subsistence farmers, in peri-urban areas this proportion is only 15 percent. Here trading is by far the most common profession among the self-employed, occupying 70 percent of all self-employed adults. While none of the self-employed residents of peri-urban areas identified themselves as commercial farmers, 13 percent claimed to be professionals compared to 1 percent in rural areas.

The data further indicates that while subsistence farming is a more common occupation among self-employed individuals from poor households, trading is more widespread among the same group from non-poor households. In fact, the proportion of the self-employed involved in trade is nearly 4 times as high among individuals from non-poor as poor households, at 11 and 3 percent respectively. Traders also constitute more than 3 times as high a proportion of the self-employed from households located closer to the district capital compared to those living further, and more than 5 times as high a proportion of the self-employed from more ethnically diverse areas compared to more homogeneous parts of the district. More ethnically diverse areas are also characterised by the presence of commercial farmers, who were only found to operate in rural areas, more isolated from the district capital and in highly fractionalised villages.

[15] Please note that no independent assessment was made - the results presented are based solely on the information provided by the respondents. Subsistence farmers are those who had said that their agricultural activities are aimed solely at providing food for the household.
[16] For example Lawyer, Accountant, Consultant

Table 43: Distribution of the Self-Employed Population by Occupation

	Commercial Farming	Subsistence Farming	Trading	Professional	Other	Share of Population
Karatu District	2,172	64,224	4,580	574	669	72,299
	3	89	6	1	1	100
Rural	2,172	63,963	3,393	358	646	70,613
	3	91	5	1	1	98
Peri-urban	0	260	1,187	216	23	1,686
	0	15	70	13	1	2
Poverty						
Non-poor	1,369	24,211	3,427	354	669	30,111
	5	80	11	1	2	42
Poor	803	40,012	1,153	220	0	42,188
	2	95	3	1	0	58
Gender						
Male	1,365	31,668	2,364	499	516	36,452
	4	87	6	1	1	50
Female	807	32,556	2,216	75	153	35,847
	2	91	6	0	0	50
Village Isolation						
Closer to district capital	84	32,077	3,597	574	390	36,722
	0	87	10	2	1	51
Further from district capital	2,088	32,147	983	0	279	35,577
	6	90	3	0	1	49
Household Isolation						
Closer to centre of EA	812	26,526	2,407	329	431	30,585
	3	87	8	1	1	42
Further from centre of EA	1,359	37,697	2,174	245	238	41,714
	3	90	5	1	1	58
Ethnic Fractionalisation						
Low	0	34,907	704	113	226	36,031
	0	97	2	0	1	50
High	2,172	29,316	3,876	461	443	36,268
	6	81	11	1	1	50

7.6 Economic Inactivity

To conclude the overview of employment trends in Karatu district, it is necessary to examine the economically inactive population more closely. Table 44 presents the reasons given by economically inactive adults for not working and not seeking work. As

can be seen, school is the most commonly cited deterrent to employment; nearly two fifths (38 percent) of the economically inactive adults were unable to work because they were studying. Illness served as a deterrent to employment for a quarter of the economically inactive population, while age was the main obstacle in 16 percent of the cases. The latter is also roughly the proportion of individuals citing other reasons, including causes, such as pregnancy, child rearing and housekeeping responsibilities. Finally, 4 percent of the economically inactive adults could not work because of a disability. Overall, at the time of the survey, roughly 12,500 individuals over the age of 14 were not working due to reasons other than lack of employment opportunities.

While age, disability and illness explain the economic inactivity of a higher proportion of individuals in rural areas, schooling and other reasons were more common deterrents in peri-urban areas. Further, the proportion of economically inactive individuals deterred from work by age is more than twice as high among adults from poor than non-poor households, at 22 and 9 percent respectively. Illness stops a higher proportion of women working, compared to men. In contrast, men are more likely to not work due to schooling than women, at 49 and 33 percent of the respective economically inactive populations.

One of the main differences found in distributions of reasons for economic inactivity among residents of more and less isolated areas, at both village and households levels, was the impact of age. Proportions of individuals deterred from work by age in less isolated villages and households were lower than those in more isolated villages and households. Finally, while less than a quarter of individuals living further from the district capital cited schooling as the reason, this was the case among almost half of the economically inactive individuals living in more central parts of the district.

Table 44: Distribution of the Economically Inactive Population by Reason for not working

	Illness	Disability	Age	School	Other	Share of population
Karatu District	3,132	465	1,963	4,825	2,160	12,546
	25	4	16	38	17	100
Rural	2,862	465	1,874	4,164	1,833	11,199
	26	4	17	37	16	89
Peri-urban	270	0	89	661	327	1,347
	20	0	7	49	24	11
Poverty						
Non-poor	1,683	152	543	2,383	1,303	6,063
	28	3	9	39	21	48
Poor	1,449	313	1,421	2,442	857	6,482
	22	5	22	38	13	52
Gender						
Male	849	206	516	2,139	688	4,398
	19	5	12	49	16	35
Female	2,283	259	1,447	2,687	1,472	8,148
	28	3	18	33	18	65
Village Isolation						
Closer to district capital	1,861	138	936	3,832	1,230	7,998
	23	2	12	48	15	64
Further from district capital	1,271	327	1,027	993	929	4,548
	28	7	23	22	20	36
Household Isolation						
Closer to centre of EA	1,580	465	770	2,400	1,191	6,407
	25	7	12	37	19	51
Further from centre of EA	1,552	0	1,193	2,425	968	6,131
	25	0	19	40	16	49
Ethnic Fractionalisation						
Low	1,370	94	847	1,989	716	5,017
	27	2	17	40	14	40
High	1,763	371	1,116	2,836	1,443	7,529
	23	5	15	38	19	60

8 LOCAL GOVERNANCE

8.1 Introduction

This chapter analyses indicators of participatory governance in Karatu district. To begin with some basic aspects of village governance are examined. These include the characteristics of the members of 2 council committees and the population as a whole, as well as the frequency of elections and meetings and involvement of members of higher levels of government in the decision making process. The second part of the chapter focuses on the role of the community in village decision making. Analysis of indicators of awareness of local government is followed by a discussion of selected data on participation in local governance and decision making. A brief overview of participation in communal activities, such as communal works and indigenous insurance groups, concludes the chapter.

8.2 Village Government

8.2.1 Council Membership

Detailed personal data on members of 2 council committees was collected in every surveyed village. The Finance and Planning Committee and the Security Committee were selected as they are among the core committees of every village council irrespective of location. This was confirmed by the presence of both of these committees in every one of the 23 village visited as part of the Karatu District CWIQ. Comparison of the data collected on each member to individual level data[17] from the household survey gives an indication of how similar village decision makers are to the community.

Table 45 shows selected characteristics of committee members and the population. Out of the examined characteristics gender distribution, age and education level differ the most between committee members and the general public. The proportion of women in the population is more than twice as high as the proportions of women on both of the surveyed council committees. Further, committee members tend to be older than the public. Roughly two thirds of the members of both the Finance and Planning and the Security Committees are between the ages of 36 and 64 years, compared to only just over a third of the population of those over the age of 18. Committee members also tend to have attained a higher level of education than members of the public. In fact, only 1 percent of members of both, the Finance and Planning and the Security committees has no formal education compared to a quarter of the adults in the community.

Self-employment is a slightly more widespread occupation among committee members than the general public. In contrast, while none of the committee members are

[17] Only individuals over the age of 18 were included in this category for comparative purposes, as members of the council must be at least 18 years of age.

unemployed, 14 percent of adults in the district are in this situation. Finally, ownership of some assets, such as bicycles and medium size livestock appears to be more common among committee members than the general public.

Table 45: Basic Characteristics of Council Members and the Population as a Whole

	Finance & Planning Committee	Security Committee	Karatu Population[1]
Gender			
Male	79	77	51
Female	21	23	49
Age			
18 to 35	30	34	54
36 to 64	70	65	36
65+	1	2	10
Education level			
None	1	1	26
Primary	84	90	67
Secondary	16	9	8
Occupation			
Employed	11	7	15
Self-employed	89	93	72
Unemployed	0	0	14
Assets			
Bicycle	58	53	36
Motorcycle	2	0	1
Car / truck / tractor	11	3	4
Large livestock	52	46	51
Medium livestock	68	61	43

1 Excluding individuals under the age of 18.

8.2.2 Activities of the Council

A detailed overview of the activities of the council is beyond the scope of this study. However, some of the basic data on the functioning of the council are presented in Table 46. These data are disaggregated by how isolated the village is from the district capital.

The results show that the most recent village council elections had been held, on average, 3 months preceding the survey, irrespective of the isolation level. The level of village isolation is also not correlated with the average number of public village meetings held per year. An average of 4 meetings is constant throughout the district.

In order to gain some indication of planning strategies in the district, village chairmen were asked whether they compiled a planning document containing the plans agreed on in public village meetings, accompanied by an implementation strategy, time frame and

budget information for each plan. This question was intended to inform on the proportion of villages with a Village Development Plan (VDP) as defined in *Making Local Governance a Reality: A Guide to District Facilitators Managing Participatory Planning for Development* released by The District Rural Development Programme (DRDP) in June 2004. The great majority (89 percent) of the village in Karatu use this planning strategy and have a VDP. This proportion is higher in more than less isolated villages, at 94 and 82 percent respectively.

Another important element of village governance is the communication of the village council with the next level of government – the district council. This communication is facilitated by the councillor, whose responsibilities include helping village government to compile effective planning strategies that are consistent with national targets and are likely to lead to successful implementation. To obtain an indication of the level of communication between village councils and the councillors, village chairmen were asked to estimate the number of weeks since the last visit of the councillor. Further, to account for abnormalities in communication trends between village and district authorities caused by upcoming elections, village chairmen were asked to comment on whether the usual level of contact with the district is below, above or the same as their expectations.

Overall, the majority of villages in Karatu had been visited by a councillor within 12 weeks preceding the survey. However, while in less isolated areas two thirds of the villages had been visited within 4 weeks preceding the survey, in more isolated areas this was the case in only 11 percent of the villages. In consistency with this trend, the proportion of village chairmen who were not satisfied with the level of communication with their councillor was higher in more than less isolated areas, at 38 and 22 percent respectively.

Table 46: Village Council Activities

	Karatu District	Closer to district capital	Further from district capital
Last Village Council election held (average number of months)	2.9	3.0	2.8
Mean number of public village meetings held per year	4	4	4
Proportion of Villages with a VDP	89	82	94
Last visit of the Councillor (diwani)			
0 to 4 weeks ago	32	66	11
5 to 12 weeks ago	40	11	58
12+ weeks ago	28	23	31
Proportion of Village Chairmen who find the usual level of communication with the Councillor insufficient	32	22	38

8.3 Awareness and Participation

According to the DRDP publication mentioned above, "Participation is the central and focal point of local governance."[18] This statement reflects the importance increasingly attached to participatory planning and governance over the last decade. This section examines some indicators of village level awareness of and participation in local governance.

8.3.1 Awareness

Effective participation of the community is impossible without a certain level of awareness. Individuals cannot be expected to be involved in something they know little or nothing about. Awareness figures may also give an indication of how active the village government itself is, as well as, how successful it is at involving the community. Results of the Karatu District CWIQ inform on a number of awareness measurements that will be discussed in this section.

Sub-Village and Village Meetings

The first of these awareness measures is the proportion of villagers who claimed to know the number of times sub-village and village meetings had occurred in the 12 months preceding the survey.

Table 47 shows that while 67 percent of households are aware of sub-village meetings, only 54 percent know about village meetings. Awareness of village and sub-village meetings is lower in peri-urban than rural areas. However, while the proportion of households aware of sub-village meetings is only 8 percentage points higher in rural than peri-urban areas, the proportion of households aware of village meetings is as much as 16 percentage points higher in rural than peri-urban areas.

Disaggregation of awareness data by selected characteristics shows that there is a noticeable correlation between levels of awareness and household poverty status, education of the household head, as well as the location of the household within the sub-village. Proportions of poor households aware of both village and sub-village meetings exceed those of non-poor households by roughly 10 percentage points. Levels of awareness of both sub-village and village meetings are also significantly higher among households headed by individuals with no formal education. For instance, while 64 percent of households headed by individuals with some education know about sub-village meetings, this is the case in 72 percent of households headed by individuals with no formal education. In addition, households located further from the sub-village centre are also more aware of both sub-village and village meetings. These differences are not, however, statistically significant.

[18] *Making Local Governance a Reality: A Guide to District Facilitators Managing Participatory Planning for Development;* DRDP, 2004; pg.1

The proportion of households headed by unemployed individuals who know about village meetings is higher than that of households headed by employed individuals, at 60 and 45 percent respectively. No such trend is observable in levels of awareness of sub-village meetings. Similarly, while awareness of village meetings is higher in villages located further from the district capital, that of sub-village meetings is roughly equal in both more and less isolated areas.

Outside Organisations

Another aspect of awareness is knowledge of what is happening in one's community. The results of the survey show that less than a fifth (17 percent) of the households in Karatu are aware of the presence of outside organisations, such as NGO's, in their villages (Table 47). This type of awareness is slightly higher in rural than peri-urban areas, at 18 and 10 percent respectively.

The proportion of households headed by self-employed individuals aware of outside organisations is less than half that of households headed by unemployed individuals. Further, while the level of awareness is lower in villages located closer to the district capital, it is higher among households located closer to the sub-village centre. Finally, characteristics such as household poverty status, gender of the household head and the level of ethnic diversity within the village were not found to have be correlated with this indicator.

Council & Council Activities

Another measure of awareness is the proportion of households that know about council activities. As mentioned above, the Finance and Planning Committee is a core part of village level government. Villagers' awareness of the existence and activities of their Finance and Planning Committee is, therefore, a good indicator of general awareness of council activities.

Just under two thirds (63 percent) of the households in the district were aware of the existence of a Finance and Planning Committee on their village council. While this was the case in both rural and peri-urban areas, a higher proportion of rural households that were aware of the existence of the committee also claimed to know a lot about it than that in peri-urban areas, at 7 and 4 percent respectively.

This measure of awareness appears to be most correlated with socio-economic group, education of the household head and the proximity of the district capital. Both awareness of the existence and activities of the Finance and Planning Committee were highest among households headed by self-employed individuals. This was also the case among households headed by individuals with some formal schooling. In fact, while none of the households headed by individuals with no education claimed to know a lot about the activities of the Finance and Planning Committee, nearly a tenth of the households headed by those with some education were aware of the Committee's existence, also knew a lot about its activities. Finally, village isolation was also found to have be

correlated with the rate of awareness of the committee's existence, but not on the depth of knowledge of its activities.

Household isolation within the sub-village, as well as the level of ethnic diversity in a village were also found to be slightly correlated with the variables of interest, but to a lesser extent than the characteristics described above. Nevertheless awareness of the Finance and Planning Committee was slightly higher among households located further from the sub-village centre, as well as among households located in less ethnically fractionalised villages.

Table 47: Distribution of Households by Levels of Awareness of Local Government Activities at Sub-village and Village Levels

	Know about sub-village meetings	Know about village meetings	Aware of presence of outside orgs in the village[1]	Aware of the existence of a Finance and Planning Committee on the Village Council	Know a lot about activities of Finance and Planning Committee (self-reported)[2]
Karatu District	67	54	17	63	7
Rural	67	55	18	63	7
Peri-urban	59	39	10	62	4
Poverty					
Non-poor	61	49	17	62	7
Poor	74	60	17	64	7
Socio-economic group					
Employed	61	45	22	53	6
Self-employed	69	56	14	68	8
Unemployed	61	60	34	53	0
Gender of head of household					
Male	67	54	18	64	8
Female	64	55	13	57	0
Education of head of household					
None	72	60	14	55	0
Some	64	51	19	66	9
Village Isolation					
Closer to district capital	66	51	14	58	7
Further from district capital	67	58	22	70	7
Household Isolation					
Closer to centre of EA	62	51	21	59	4
Further from centre of EA	71	57	13	67	8

	Know about sub-village meetings	Know about village meetings	Aware of presence of outside orgs in the village[1]	Aware of the existence of a Finance and Planning Committee on the Village Council	Know a lot about activities of Finance and Planning Committee (self-reported)[2]
Ethnic Fractionalisation					
Low	65	53	17	67	6
High	68	55	18	60	7

1 Proportion of households located in villages where outside organisations work, who are aware of the presence of outside organisations

2 Proportion of households aware of the existence of the Finance and Planning Committee on the Village Council that also claim to know a lot about the activities of the Committee.

8.3.2 Participation

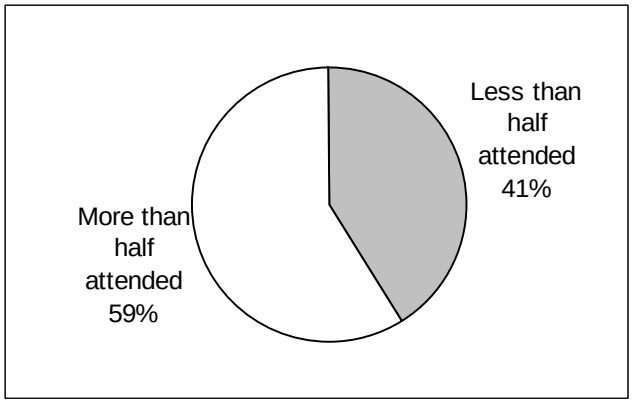
This section presents indicators of the degree to which households participate in decision making processes and how this differs across categories of households.

Attendance

This part discusses attendance at public village meetings and village council elections.

As shown in Figure 15, areas where attendance at public village meetings exceeds 50 percent of the voting age population constitute 59 percent of the villages in Karatu. Attendance at public village meetings is below 50 percent in roughly two fifths of the villages in the district.

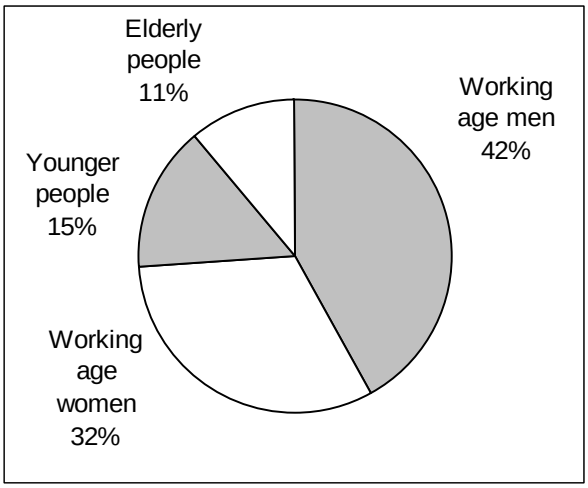
Figure 15: Attendance at Public Village Meetings



Village chairmen were asked to approximate the composition of village meetings in terms of 4 gender-age categories: working age men (20 to 65 years), working age women (20 to 65 years), younger people (less than 20 years), and elderly people (65 years and above). Figure 16 shows that while working age men constitute over two fifths (42 percent) of village meeting attendees, women make up less than a third (32 percent) of this group.

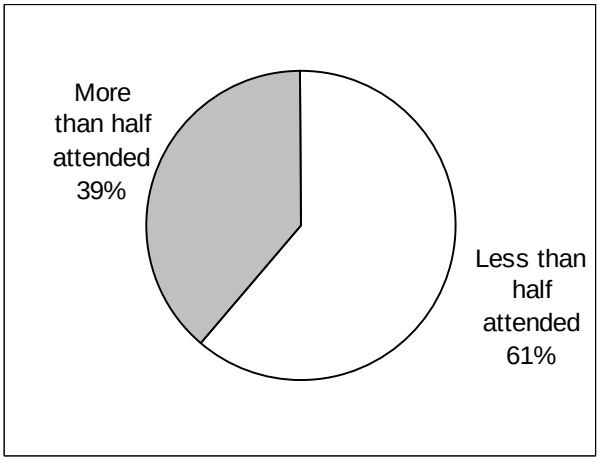
On average, only 11 percent of those present at village meetings are over the age of 64 and 15 percent are under the age of 20.

Figure 16: Age and Gender Composition of Public Village Meetings



Another indicator of participation is attendance at the most recent village council elections. This is a particularly relevant measurement as elections had taken place no more than 3 months preceding the survey. The results, presented in
, show that attendance was below 50 percent of those eligible to vote in roughly three fifths of the villages. Attendance exceeded 50 percent of this population in the minority (39 percent) of villages.

Figure 17: Distribution of Villages in Karatu by Rates of Attendance at Last Village Council Elections



Expressing Opinions at Meetings

The presence of an individual at a meeting does not necessarily imply active participation. This section focuses on expression of opinion at public meetings.

Table 48 shows that only about a third (35 percent) of sub-village meeting attendees and a fifth (19 percent) of villages meeting attendees had expressed their opinion in at least one of the meetings in the year preceding the survey. Participation is significantly lower in peri-urban than rural areas. In fact, only 2 percent of household representatives who had attended village meetings in peri-urban areas had spoken out at least once in the specified time period, compared to 21 percent of attendees in rural areas.

Analysis of these variables in several sub-groups shows most substantial differences across socio-economic groups and male and female headed households. Participation in both village and sub-village meetings is highest among individuals from households headed by the self-employed and lowest among those from households headed by the employed. Further, while nearly two fifths of sub-village meeting attendees from male headed households had expressed their opinion in at least one of the meetings in the year preceding the survey, only one fifth of attendees from female headed households did the same. The disparity in participation rates of the two groups is the same at village level.

The results also show that village isolation, household isolation and ethnic fractionalisation are correlated with participation at sub-village but not village levels. Overall, the proportion of individuals expressing their opinion at sub-village meetings is 10 percentage points higher in households located further from the district capital than those located closer. The same trend was found in participation rates of households located further from the sub-village centre, compared to, again, those located closer. Participation rate at sub-village level was also higher in households located in less ethnically diverse areas, compared to those located in more fractionalised villages, at 41 and 31 percent respectively.

Table 48: Speaking Out at Meetings

	Speak in sub-village meetings	Speak in village meetings
Karatu District	35	19
Rural	36	21
Peri-urban	18	2
Poverty		
Non poor	35	18
Poor	35	21
Socio-economic group		
Employed	23	9
Self-employed	39	24
Unemployed	28	11
Gender of head of household		
Male	39	21
Female	19	11
Education of head of household		
None	32	15
Some	37	21

	Speak in sub-village meetings	Speak in village meetings
Village Isolation		
Closer to district capital	31	18
Further from district capital	41	20
Household Isolation		
Closer to centre of EA	30	18
Further from centre of EA	40	21
Ethnic Fractionalisation		
Low	41	23
High	31	17

Communication with Local Leaders

Arguably, participation does not solely arise from active attendance at public village meetings, but could also be established by direct contact with local leaders. A supplementary measure of participation is, therefore, the level of communication between individual households and their representatives. In order to inform on this type of participation, households were asked whether in the 12 months preceding the survey they had had any communication with either, their 10-cell leader, their sub-village chairman, their village chairman or their councillor (diwani). Communication with these leaders outside of their official capacity, such as casual or friendly visits, is excluded here.[19]

The results, presented in Table 49, show that nearly two fifths of households had made an 'official' visit to their sub-village chairman in the 12 months preceding the survey. Further, while a third of households had 'officially' gone to see their 10-cell leaders, a fifth visited their village chairman. Councillors had been visited by only 6 percent of households.

Subsequent analysis of these variables in several sub-groups of the population shows no significant differences across poverty status, as well as gender and education of household heads. Area of residence, socio-economic group, village and household isolation, as well as ethnic fractionalisation, however, all are correlated with communication trends.

Overall, a higher proportion of peri-urban than rural households had been in contact with one or more of the local leaders, at 62 and 49 percent respectively. In particular, councillors had been contacted by nearly 5 times as high a proportion of peri-urban as rural households. Councillors and 10-cell leaders were also contacted by a noticeably higher proportion of households headed by employed individuals than those headed by the self-employed and the unemployed. In general, households from the formal group had had more contact with local officials than those in the latter groups. This was also

[19] This distinction was made in Swahili by specifying that the visit should have been '*rasmi*', which literally translates as 'official' and is commonly understood to be a visit to the leader in his official capacity; not simply a 'friendly' visits.

the case among households located closer to the district capital compared to those located further. Again largest disparity between the two groups was in the proportion of households contacting the councillor; in the former group it was 5 times as high as in the latter. The proportion of households making formal visits to local authorities was higher among those living further from the sub-village centre, as well as those living in more fractionalised villages. For instance, while only a quarter of households located closer to the centre of the sub-village had seen their 10-cell leader in an official capacity in the year preceding the survey, this was the case for over two fifths of more isolated households.

Table 49: Communication with Local Leaders in Their Official Capacity in the 12 Months Preceding the Survey

	10-cell leader	Sub-village chairman	Village chairman	Councillor (diwani)	At least one local leader
Karatu District	34	38	21	6	50
Rural	33	38	21	5	49
Peri-urban	39	48	21	23	62
Poverty					
Non-poor	32	36	21	6	47
Poor	36	42	20	6	54
Socio-economic group					
Employed	43	42	19	12	58
Self-employed	32	40	22	5	49
Unemployed	28	22	13	1	41
Gender of head of household					
Male	34	38	21	6	50
Female	34	38	19	9	49
Education of head of household					
None	37	42	18	7	53
Some	32	37	22	6	48
Village Isolation					
Closer to district capital	40	40	23	10	55
Further from district capital	26	36	18	2	44
Household Isolation					
Closer to centre of EA	25	34	21	6	43
Further from centre of EA	42	42	21	7	55
Ethnic Fractionalisation					
Low	27	32	17	4	45
High	38	43	23	8	54

Involvement in Communal Activities

The level of involvement/participation can also be measured by examining rates of household participation in communal activities and indigenous insurance groups.

Table 50 shows that the great majority (82 percent) of households in Karatu were participating in communal works at the time of the survey. Participation in communal works is significantly more widespread in rural than peri-urban areas. While less that three fifths (57 percent) of households in peri-urban areas were involved in such activities, this was the case for 84 percent of the household in rural areas.

Household characteristics were found to be more correlated with the rate of participation in communal works than village characteristics. Poor households are more likely to participate in communal works than non-poor households. Participation was highest among households headed by self-employed individuals and lowest among those headed by the unemployed, at 85 and 72 percent respectively. Similarly, while 84 percent of male headed households were participating in communal works at the time of the survey, this was the case for only 72 percent of female headed households. Finally, there is a positive correlation between education of the household head and the rate of participation in communal works.

Differences in participation rates across the rest of the examined sub-groups were under 10 percentage points. These sub-groups included poor and non-poor households, households located closer to and further from the district capital and the centre of the sub-villages, as well as those located in more and less ethnically diverse areas.

Rate of participation in indigenous insurance groups is very low in Karatu district. Only 2 percent of the households were involved in these at the time of the survey. Variation across sub-groups in the population did not exceed 2 percentage points with the exception of residents of poor and non-poor households and rural and peri-urban areas. While individuals from poor households do not participate in indigenous insurance groups at all, participation in peri-urban areas is by far the highest in the district, at 6 percent of the households, compared to only 1 percent of households in rural areas.

Table 50: Distribution of Household Rates of Participation by Household Characteristics

	Participation in Communal Works	Participation in Indigenous Insurance Groups
Karatu District	82	2
Rural	84	1
Peri-urban	57	6
Poverty		
Non poor	78	3
Poor	87	0
Socio-economic group		
Employed	78	1
Self-employed	85	2
Unemployed	72	0
Gender of head of household		
Male	84	2
Female	72	0
Education of head of household		
None	76	2
Some	85	2
Village Isolation		
Closer to district capital	79	1
Further from district capital	85	3
Household Isolation		
Closer to centre of EA	80	2
Further from centre of EA	83	1
Ethnic Fractionalisation		
Low	83	2
High	81	1

ANNEX A

Estimates of Sampling Errors

Table A 1 : Confidence Intervals Around Key Estimates

	Estimate	(Standard Error) S.E.	95% Confidence Interval	
Household characteristics			Lower	Upper
Mean Household size	5.35	0.17	5.002	5.698
Percentage of landless households	0.256	0.049	0.155	0.356
Percentage of households with no livestock	0.435	0.044	0.345	0.524
Proportion of self-employed household heads	0.692	0.040	0.610	0.775
Percentage of male headed households	0.817	0.019	0.777	0.856
Percentage of household heads with no formal education	0.307	0.024	0.259	0.356
Education				
Percentage of adults (15+) who have had any formal schooling	0.768	0.019	0.729	0.807
Average years of schooling among adults	5.006	0.195	4.607	5.405
Percentage of literate individuals in the 15+ age group	0.732	0.023	0.684	0.78
Primary education				
Primary school access rate	0.559	0.061	0.433	0.684
Primary school Net Enrolment Rate	0.913	0.013	0.885	0.94
Primary school satisfaction rate	0.681	0.037	0.605	0.757
Secondary education				
Secondary school access rate	0.17	0.0475	0.073	0.268
Secondary school Net Enrolment Rate	0.121	0.027	0.066	0.176
Health				
Access	0.318	0.041	0.235	0.401
Need	0.197	0.016	0.165	0.23
Use	0.146	0.008	0.13	0.162
Satisfaction	0.735	0.032	0.669	0.8

	Estimate	(Standard Error) S.E.	95% Confidence Interval	
Reproductive health				
Percentage of women who had given birth in the last 12 months and had used prenatal care	0.979	0.016	0.946	1.0
Percentage of hospital births from the last 5 years	0.525	0.039	0.445	0.604
Child nutrition				
Stunted	0.239	0.028	0.183	0.296
Wasted	0.051	0.014	0.022	0.079
Employment				
Percentage of working individuals in the 15+ age group	0.848	0.018	0.811	0.885
Local Governance				
Percentage of households aware of public village meetings	0.539	0.056	0.425	0.654
Percentage of households aware of the existence of a Finance and Planning Committee on their Village Council	0.630	0.05	0.527	0.733
Percentage of households aware of activity of outside organisations in their village	0.172	0.059	0.05	0.295
Percentage of households expressing opinions at public village meetings out of those aware of the meetings	0.194	0.025	0.143	0.244

ANNEX B

Poverty Predictors

ANNEX B

Table B 1 presents the results of the regression used to predict household consumption expenditure and poverty status.

Table B 1: Summary Statistics of Regression Results for Predicting Household Consumption Expenditure

Dependent Variables	Description	Coefficient	Standard Error	t-test
Age of household head		-0.002	0.001	-2.02**
Household size		-0.203	0.028	-7.16**
Household size squared		0.008	0.002	3.77**
Education of household head	Primary	-0.021	0.042	-0.5
Education of household head	Secondary +	0.037	0.068	0.55
Occupation of household head	Government/Parastatal/Other	0.105	0.058	1.83*
Occupation of household head	Unemployed	-0.056	0.075	-0.75
Quantity of land owned		0.020	0.003	6.81**
Radio	1 if household has a radio	0.105	0.040	2.66**
Iron	1 if household has an iron	0.177	0.059	3.03**
Bank Account	1 if household has a bank account	0.115	0.047	2.43**
Food Security	1 if food shortages are rarely or never experienced	0.046	0.062	0.74
Meals per day	1 if household has more than 2 meals a day	0.140	0.042	3.3**
Roof	1 if roof is made of metal or asbestos	0.120	0.049	2.42**
Walls	1 if walls are made of bricks or cement	0.106	0.046	2.29**
Weekly meat consumption	Number of times meat is consumed per weeks	0.107	0.015	7.21**
Source of water	Protected	-0.078	0.087	-0.89
Source of water	Piped	0.036	0.047	0.77
Toilet	1 if household has a toilet	0.150	0.073	2.05**

** = Significant at 95 percent level of confidence
* = Significant at 90 percent level of confidence

The following bootstrap procedure was followed to calculate the standard errors of the poverty predictors:

1. Take a random sample (with replacement) of the HBS data
2. In this sample regress log consumption and save the coefficients
3. Use the saved coefficients on the same independent variables in the CWIQ data set and predict log consumption for each household
4. Predicted poverty for this particular iteration is the number of households that are predicted to lie below the logarithmic of the poverty line

These steps are then repeated 100 times. Each time the predicted poverty figure is saved. The confidence interval is simply the 5^{th} and 95^{th} percentile of the dataset of 100 poverty predictions. The results of this procedure are summarised in Table B1 below. The poverty rate in the district is 44% and we can say with 95% certainty that it lies between 34% and 55%.

Table B 2: **Confidence Intervals for Poverty Predictors (Percentage of Households Living under the Basic Needs Poverty Line)**

		95% confidence interval	
	Poverty Rate (%)	Lower Limit	Upper Limit
Karatu District	44	34	55

One can use a similar procedure to test differences of poverty rates across different subsections of the population. For example, to make inferences about differential poverty rates among male headed versus female headed households the following bootstrap method can be followed:

1. Take a random sample (with replacement) of the HBS data
2. In this sample regress log consumption and save the coefficients
3. Use the saved coefficients on the same independent variables in the CWIQ data set and predict log consumption for each household
4. Calculate the percentage point difference between the poverty rates in the two categories (e.g. the poverty rate among males headed households minus the poverty rate among female headed households)
5. Save this difference in a data set

This is repeated 100 times. One can then construct a confidence interval over this difference. Table B2 shows, for example, that poverty among households with access to primary schools is 5 percentage points lower than poverty among households without access to primary school. With 95% certainty this difference lies between 1 and 9 percentage points. Poverty rates do not differ significantly according to the sex of the household head. On average the poverty rate among male headed households is found to be 4 percentage points higher than in female headed households, but within a 95%

confidence interval it may be 4 percentage points lower. Thus, we conclude that poverty rates do not differ significantly according to sex of the household head.

Table B 3: Significance Tests for Poverty Rates

Category 1	Category 2	mean difference*	95% confidence interval of the difference	
			lower limit	upper limit
household does not have access to a primary school	Household has access to primary school	5	01	09
Adult (age 15+) is not literate	Adult (age 15+) is literate	10	04	16
Household head is female	Household head is male	- 4	-13	04

* The poverty rate in category 1 minus the poverty rate in category 2

This procedure can be criticised when the variable under analysis is also part of the independent variables in the consumption regression. In this case at least some of the correlation between consumption and the variable in question is there by construction. To tackle this, bootstrap results in this report have been performed twice for poverty predictors. Once according to the method described above and a second time with the variable in question dropped from the regression. The results stay by and large the same; we can be confident that the constructed correlation is not driving the results.

Of course, it could still be true that the variable under study is picking up correlation from other correlates. This, however, is inherent to a bi-variate analysis.

ANNEX C

Additional Tables by Chapter

CHAPTER 3

Table C3 1: Distribution of Individuals by Presence of Parents and Co-habitation with Parents

	Father Alive	Mother Alive	Father lives with individual	Mother lives with individual
Karatu District	75	85	66	66
Rural	75	85	66	67
Peri-Urban	76	90	52	52
Poverty				
Non-poor	71	82	56	55
Poor	78	87	71	74
Socio-economic Group				
Employed	80	86	62	64
Self-employed	75	86	68	66
Unemployed	66	77	54	71
Village Isolation				
Closer to district capital	73	84	63	64
Further from district capital	78	87	69	69
Household Isolation				
Closer to centre of EA	74	86	66	63
Further from centre of EA	76	85	66	69
Ethnic Fractionalisation				
Low	77	86	71	69
High	74	84	61	64

Table C3 2: Distribution of Households by Main Contributor of Household Income

	Household Head	Spouse	Other
Karatu District	79	17	3
Rural	78	18	4
Peri-Urban	93	6	1
Poverty			
Non-poor	84	14	2
Poor	74	22	5
Socio-economic Group			
Employed	88	12	0
Self-employed	84	12	4
Unemployed	25	65	10
Village Isolation			
Closer to district capital	78	18	4
Further from district capital	82	16	3
Household Isolation			
Closer to centre of EA	78	19	3
Further from centre of EA	81	15	4
Ethnic Fractionalisation			
Low	78	18	4
High	81	16	3

Table C3 3: Distribution of Households by Possession of Selected Assets

		Bicycle	Phone	Motor-	Radio	Watch	TV	Bed	Iron			Bank
Karatu District	3	32	12	1	52	57	2	70	22	81	36	9
Rural	3	33	11	1	51	57	2	68	21	80	35	8
Peri-Urban	1	13	29	1	64	59	5	100	32	85	41	23
Non-poor	5	32	15	1	59	61	4	79	32	86	41	14
Poor	1	32	7	0	42	52	0	59	9	74	29	2
Employed	2	28	18	2	61	62	3	83	32	83	42	20
Self-employed	4	34	11	1	49	58	1	68	20	82	34	5
Unemployed	0	24	5	0	49	42	4	55	13	67	33	11
Closer to district	4	33	16	1	60	59	3	83	29	86	40	13
Further from	2	31	7	1	41	55	0	53	12	74	30	3
Closer to centre of	3	30	13	1	52	57	3	74	24	82	35	9
Further from centre	3	34	11	1	51	58	1	67	20	79	36	8
Low	5	29	10	0	43	54	1	58	22	82	33	7
High	2	34	13	1	58	59	3	79	21	79	37	9

Table C3 4: Distribution of Households by Type of Toilet Used

	None	Flush to sewer	Covered Pit Latrine	Uncovered Pit Latrine
Karatu District	18	1	44	37
Rural	19	1	43	37
Peri-Urban	13	0	50	30
Poverty				
Non-poor	14	1	45	39
Poor	24	0	42	34
Socio-economic Group				
Employed	15	0	55	29
Self-employed	17	1	42	40
Unemployed	31	0	35	33
Village Isolation				
Closer to district capital	12	1	46	39
Further from district capital	26	0	40	34
Household Isolation				
Closer to centre of EA	17	1	50	31
Further from centre of EA	19	1	38	41
Ethnic Fractionalisation				
Low	17	0	41	41
High	19	1	46	33

Table C3 5: Distribution of Households by Type of Cooking Energy Used

	Firewood	Charcoal	Kerosene/Oil
Karatu District	91	8	1
Rural	95	5	0
Peri-Urban	32	58	10
Poverty			
Non-poor	84	14	2
Poor	99	1	0
Socio-economic Group			
Employed	79	17	4
Self-employed	94	6	0
Unemployed	94	6	0
Village Isolation			
Closer to district capital	85	13	2
Further from district capital	98	2	0
Household Isolation			
Closer to centre of EA	83	15	2
Further from centre of EA	97	2	1
Ethnic Fractionalisation			
Low	95	5	0
High	88	11	2

Table C3 6: Distribution of Households by Type of Light Energy Used

	Kerosene	Gas	Electricity	Candles	Firewood	Other
Karatu District	90	0	4	0	5	0
Rural	91	0	3	0	6	0
Peri-Urban	82	0	17	1	0	0
Poverty						
Non-poor	89	0	7	0	4	0
Poor	91	1	0	0	8	0
Socio-economic Group						
Employed	89	0	7	0	4	0
Self-employed	91	0	3	0	6	0
Unemployed	86	0	5	0	6	2
Village Isolation						
Closer to district capital	92	0	7	0	1	0
0Further from district capital	88	1	0	0	11	0
Household Isolation						
Closer to centre of EA	90	1	5	0	4	0
Further from centre of EA	90	0	3	0	7	0
Ethnic Fractionalisation						
Low	90	0	1	0	9	0
High	90	0	6	0	3	0

Table C3 7: Distribution of Households by Source of Water

	Piped into dwelling/ compound	Public outdoor tap/borehole	Protected Well	Unprotected Well	River, lake, pond	Vendor/ Truck	Other
Karatu District	4	7	58	4	25	1	2
Rural	4	7	56	4	26	1	2
Peri-Urban	4	11	82	0	0	2	0
Poverty							
Non-poor	7	11	56	3	21	1	1
Poor	0	3	60	5	29	0	3
Socio-economic Group							
Employed	7	18	64	2	7	1	0
Self-employed	2	4	58	4	29	1	2
Unemployed	10	9	47	1	29	1	2
Village Isolation							
Closer to district capital	6	12	73	1	8	0	0
Further from district capital	1	2	39	7	46	1	4
Household Isolation							
Closer to centre of EA	4	11	49	5	27	2	2
Further from centre of EA	4	5	66	3	22	0	1
Ethnic Fractionalisation							
Low	2	1	48	6	41	0	2
High	5	12	65	2	13	1	1

Table C3 8: Distribution of Households by Type of Roof Material

	Permanent[1]	Non permanent[2]
Karatu District	56	44
Rural	53	47
Peri-Urban	99	1
Poverty		
Non-poor	65	35
Poor	44	56
Socio-economic Group		
Employed	66	34
Self-employed	52	48
Unemployed	56	44
Village Isolation		
Closer to district capital	69	31
Further from district capital	39	61
Household Isolation		
Closer to centre of EA	62	38
Further from centre of EA	51	49
Ethnic Fractionalisation		
Low	50	50
High	60	40

[1] Iron sheets, cement, concrete, asbestos
[2] Mud, thatch, other

Table C3 9: Distribution of Households by Wall Material

	Permanent[1]	Non permanent[2]
Karatu District	18	82
Rural	16	84
Peri-Urban	52	48
Poverty		
Non-poor	25	75
Poor	9	91
Socio-economic Group		
Employed	37	63
Self-employed	13	87
Unemployed	13	87
Village Isolation		
Closer to district capital	27	73
Further from district capital	6	94
Household Isolation		
Closer to centre of EA	19	81
Further from centre of EA	17	83
Ethnic Fractionalisation		
Low	12	88
High	23	77

[1] Burnt bricks, cement, sand crete
[2] Mud, mud bricks, wood, bamboo, other

Table C3 10: Distribution of Household by Floor Type

	Cement	Mud
Karatu District	15	84
Rural	13	87
Peri-Urban	49	51
Poverty		
Non-poor	22	77
Poor	7	93
Socio-economic Group		
Employed	33	67
Self-employed	11	89
Unemployed	12	88
Village Isolation		
Closer to district capital	23	77
Further from district capital	6	94
Household Isolation		
Closer to centre of EA	18	82
Further from centre of EA	13	86
Ethnic Fractionalisation		
Low	11	89
High	18	81

Table C3 11: Distribution of Households by Mean Number of Rooms and Dwelling Ownership

	Mean Number of Rooms	Owns dwelling	Rents dwelling	Uses without paying rent	Nomadic/ Temporary dwelling
Karatu District	2.9	88	8	3	1
Rural	3.0	92	5	3	1
Peri-Urban	2.0	38	52	10	0
Poverty					
Non-poor	2.8	83	11	5	1
Poor	3.1	94	4	1	0
Socio-economic Group					
Employed	2.6	68	22	9	1
Self-employed	3.0	94	4	2	1
Unemployed	2.9	91	8	1	0
Village Isolation					
Closer to district capital	2.9	81	14	5	0
Further from district capital	3.0	97	1	2	1
Household Isolation					
Closer to centre of EA	2.7	83	12	4	1
Further from centre of EA	3.1	92	5	3	0
Ethnic Fractionalisation					
Low	3.1	97	2	1	0
High	2.8	82	12	5	1

Table C3 12: Distribution of Households by Time it Takes to Travel to the Nearest Source of Water (in minutes)

	0 to 14	15 to 29	30 to 44	45 to 59	60 +
Karatu District	59	16	10	6	9
Rural	56	16	11	7	10
Peri-Urban	93	7	0	0	0
Poverty					
Non-poor	66	12	9	5	8
Poor	50	19	11	8	11
Socio-economic Group					
Employed	67	16	9	1	8
Self-employed	58	15	10	8	10
Unemployed	56	18	10	7	8
Village Isolation					
Closer to district capital	66	15	8	5	8
Further from district capital	51	16	12	9	11
Household Isolation					
Closer to centre of EA	62	14	11	4	10
Further from centre of EA	57	16	9	9	9
Ethnic Fractionalisation					
Low	49	18	12	8	12
High	66	14	9	5	7

Table C3 13: Distribution of Households by Time it Takes to Travel to the Nearest Food Market (in minutes)

	10 to 14	15 to 29	30 to 44	45 to 59	60 +
Karatu District	22	15	15	9	40
Rural	20	13	14	9	43
Peri-Urban	41	37	20	0	2
Poverty					
Non-poor	27	16	14	7	36
Poor	13	14	15	11	47
Socio-economic Group					
Employed	24	14	14	6	42
Self-employed	19	16	14	10	41
Unemployed	27	13	17	7	36
Village Isolation					
Closer to district capital	23	17	18	7	36
Further from district capital	18	13	10	12	47
Household Isolation					
Closer to centre of EA	31	18	15	8	28
Further from centre of EA	12	12	14	9	52
Ethnic Fractionalisation					
Low	15	13	17	12	42
High	26	16	13	6	39

Table C3 14: Distribution of Households by Time it Takes to Travel to the Nearest Transport (in minutes)

	10 to 14	15 to 29	30 to 44	45 to 59	60 +
Karatu District	30	15	14	9	33
Rural	29	14	13	9	35
Peri-Urban	45	27	24	0	4
Poverty					
Non-poor	36	14	15	9	26
Poor	20	15	13	10	42
Socio-economic Group					
Employed	29	16	13	7	34
Self-employed	28	13	14	10	35
Unemployed	34	21	16	9	19
Village Isolation					
Closer to district capital	31	17	18	8	25
Further from district capital	27	11	8	10	44
Household Isolation					
Closer to centre of EA	38	15	15	5	28
Further from centre of EA	22	14	13	13	39
Ethnic Fractionalisation					
Low	14	11	18	12	45
High	41	17	10	6	25

Table C3 15: Mode of Transport Used to Travel to Facility

	Water	Market	Transport	Health Facility	Primary School	Secondary school
Car / dala dala	0	2	1	4	0	32
Bicycle	2	5	3	2	0	3
Motorbike	0	0	0	0	0	0
Foot	98	93	96	94	100	65

Table C3 16: Distribution of Households by Mean Number of Times Meat is Consumed per Week and Meat Consumption on a Weekly Basis

	Mean number of times meat is consumed	None	Some
Karatu District	0.8	59	41
Rural	0.7	60	40
Peri-Urban	1.4	42	58
Poverty			
Non-poor	1.1	44	56
Poor	0.3	78	22
Socio-economic Group			
Employed	0.9	57	43
Self-employed	0.8	60	40
Unemployed	0.7	60	40
Village Isolation			
Closer to district capital	0.9	52	48
Further from district capital	0.6	68	32
Household Isolation			
Closer to centre of EA	0.8	58	42
Further from centre of EA	0.7	59	41
Ethnic Fractionalisation			
Low	0.6	68	32
High	0.9	52	48

Table C3 17: Distribution of Households by Mean Number of Meals Consumed per Day and Incidence of Food Shortages in the 12 Months Preceding the Survey

	Mean number of meals	Never	Seldom	Sometimes	Often	Always
Karatu District	2.2	20	28	15	45	1
Rural	2.2	20	29	15	35	1
Peri-Urban	2.0	25	22	4	45	3
Poverty						
Non-poor	2.2	26	32	13	28	1
Poor	2.1	14	24	16	44	2
Socio-economic Group						
Employed	2.2	16	26	13	42	3
Self-employed	2.2	22	30	15	32	1
Unemployed	2.3	14	20	17	46	2
Village Isolation						
Closer to district capital	2.2	18	33	14	34	2
Further from district capital	2.2	23	23	16	37	1
Household Isolation						
Closer to centre of EA	2.2	18	28	21	32	1
Further from centre of EA	2.2	22	29	10	38	2
Ethnic Fractionalisation						
Low	2.3	21	31	21	26	0
High	2.1	20	27	10	42	2

Table C3 18: Distribution of Households by Assessment of Community Economic Situation Compared to the a Year Ago

	Much Worse	A Little Worse	Same	A Little Better	Much Better
Karatu District	45	35	13	7	0
Rural	46	33	13	8	0
Peri-Urban	31	54	13	1	0
Poverty					
Non-poor	42	32	16	9	0
Poor	49	38	9	5	0
Socio-economic Group					
Employed	41	32	17	8	0
Self-employed	43	38	12	7	0
Unemployed	68	20	9	3	0
Village Isolation					
Closer to district capital	38	41	16	5	0
Further from district capital	54	27	9	10	0
Household Isolation					
Closer to centre of EA	41	33	15	10	0
Further from centre of EA	48	36	11	5	0
Ethnic Fractionalisation					
Low	51	30	11	8	0
High	40	38	14	6	0

Table C3 19: Distribution of Households by Assessment of Household Economic Situation Compared to the a Year Ago

	Much Worse	A Little Worse	Same	A Little Better	Much Better
Karatu District	50	29	12	9	0
Rural	50	29	11	10	0
Peri-Urban	50	28	15	5	2
Poverty					
Non-poor	42	30	15	12	0
Poor	59	27	8	6	0
Socio-economic Group					
Employed	47	27	17	8	1
Self-employed	48	30	11	10	0
Unemployed	65	24	5	6	0
Village Isolation					
Closer to district capital	46	34	13	8	0
Further from district capital	55	23	11	12	0
Household Isolation					
Closer to centre of EA	48	28	14	11	0
Further from centre of EA	52	30	10	8	0
Ethnic Fractionalisation					
Low	50	27	11	11	0
High	49	30	12	8	0

Table C3 20: Distribution of Households by Change in Large Livestock Holding Compared to One Year Ago

	Less Now	Same	More Now
Karatu District	15	70	15
Rural	16	68	16
Peri-Urban	1	95	4
Poverty			
Non-poor	11	78	12
Poor	20	63	18
Socio-economic Group			
Employed	8	84	8
Self-employed	15	67	18
Unemployed	24	71	5
Village Isolation			
Closer to district capital	11	74	14
Further from district capital	19	67	14
Household Isolation			
Closer to centre of EA	12	74	14
Further from centre of EA	17	69	14
Ethnic Fractionalisation			
Low	16	63	21
High	14	75	11

Table C3 21: Distribution of Households by Change in Medium Livestock Holding Compared to One Year Ago

	Less Now	Same	More Now
Karatu District	22	57	21
Rural	23	55	22
Peri-Urban	3	97	0
Poverty			
Non-poor	14	67	19
Poor	32	47	21
Socio-economic Group			
Employed	14	75	11
Self-employed	24	54	23
Unemployed	27	55	18
Village Isolation			
Closer to district capital	13	66	22
Further from district capital	34	49	17
Household Isolation			
Closer to centre of EA	19	63	17
Further from centre of EA	24	54	22
Ethnic Fractionalisation			
Low	30	45	24
High	16	66	18

Table C3 22: Distribution of Households by Change in Land Holding Compared to One Year Ago

	Less Now	Same	More Now
Karatu District	1	98	1
Rural	1	98	1
Peri-Urban	0	100	0
Poverty			
Non-poor	2	97	1
Poor	0	99	1
Socio-economic Group			
Employed	1	99	0
Self-employed	1	98	1
Unemployed	0	100	0
Village Isolation			
Closer to district capital	0	100	0
Further from district capital	2	96	2
Household Isolation			
Closer to centre of EA	1	97	2
Further from centre of EA	1	99	1
Ethnic Fractionalisation			
Low	2	97	2
High	0	99	0

CHAPTER 4

Table C4 1: Distribution of Individuals Who had Some Formal Schooling by Additional Education Received

	None	Post Primary	Post Secondary	Vocational	Adult Education
Karatu District	95	2	1	2	0
Rural	95	1	1	1	0
Peri-Urban	87	5	1	7	0
Poverty					
Non-poor	92	2	2	3	0
Poor	97	1	1	1	0
Socio-economic Group					
Employed	89	3	3	5	1
Self-employed	97	1	1	1	0
Unemployed	96	2	1	0	0
Village Isolation					
Closer to district capital	93	2	2	3	1
Further from district capital	98	1	0	0	0
Household Isolation					
Closer to centre of EA	96	1	1	1	0
Further from centre of EA	94	2	1	2	0
Ethnic Fractionalisation					
Low	96	1	2	0	0
High	94	2	1	3	0

CHAPTER 5

Table C5 1: Distribution of Individuals by Disability; Distribution of Individuals Who Use Bed Nets by Percentage who use Treated Bed Nets

	Disabled	Treated Nets[1]
Karatu District	1	42
Rural	1	43
Peri-Urban	1	17
Poverty		
Non-poor	1	43
Poor	1	39
Socio-economic Group		
Employed	0	32
Self-employed	1	41
Unemployed	3	69
Village Isolation		
Closer to district capital	0	33
Further from district capital	1	47
Household Isolation		
Closer to centre of EA	1	44
Further from centre of EA	1	40
Ethnic Fractionalisation		
Low	1	43
High	1	41

[1] Those individuals who had slept under a mosquito net the night preceding the survey, were further asked if the net they sleep under had been treated with repellent in the 6 months preceding the survey

Table C5 2: Distribution of Individuals who had been Sick by Time Taken Off Work

	None	Less than 1 week	1 to 2 weeks	More than 2 weeks
Karatu District	35	39	11	13
Rural	35	39	11	13
Peri-Urban	41	41	5	13
Poverty				
Non-poor	37	41	10	9
Poor	43	38	11	16
Socio-economic Group				
Employed	45	45	5	5
Self-employed	36	37	13	11
Unemployed	12	43	9	36
Village Isolation				
Closer to district capital	41	38	8	10
Further from district capital	26	43	15	16
Household Isolation				
Closer to centre of EA	28	46	13	11
Further from centre of EA	42	34	9	14
Ethnic Fractionalisation				
Low	25	42	15	13
High	41	38	8	13

Table C5 3: Distribution of Households Aware of the Presence of a Village Health Worker in Their Village by Types of benefits Received from the VHW

	No benefit	Advice	Training	Materials
Karatu District	48	47	3	2
Rural	48	46	3	2
Peri-Urban	24	76	0	0
Poverty				
Non-poor	46	54	0	0
Poor	50	39	6	4
Socio-economic Group				
Employed	85	15	0	0
Self-employed	42	52	4	3
Unemployed	54	46	0	0
Village Isolation				
Closer to district capital	47	53	0	0
Further from district capital	48	42	5	4
Household Isolation				
Closer to centre of EA	26	52	13	9
Further from centre of EA	54	46	0	0
Ethnic Fractionalisation				
Low	44	48	5	3
High	54	46	0	0

ANNEX D
Household Questionnaire

Kumbukumbu Na ☐☐☐☐☐☐☐☐

CORE WELFARE INDICATORS QUESTIONNAIRE

SNV TANZANIA

A - INTERRVIEW INFORMATION

Q1 INTERVIEWER'S NAME	
Q2 NAME OF HEAD OF HOUSEHOLD	
Q3 DISTRICT NAME	
Q4 VILLAGE NAME	
Q5 KITONGOJI NAME	

A1 DISTRICT ☐

A2 CLUSTER ☐☐☐

A3 HOUSEHOLD ☐☐

A4 GPS Coordinates
☐ ☐☐☐ ° ☐☐☐ ☐☐☐
☐ ☐☐☐ ° ☐☐☐ ☐☐☐

A5 INTERVIEWER ☐☐

A6 RESPONDENT ID ☐☐

A7 DATE dd / mm / yy ☐☐/☐☐/☐☐

A8a TIME START Hr Min ☐☐/☐☐

A8b AM or PM ☐

A9a INTERVIEW END Hr Min ☐☐/☐☐

A9b AM or PM ☐

A10 Qestionnaire No. ☐☐

A11 STATUS ☐

A12 SUPERVISOR ☐☐

A13 INTERPRETER
1=YES
2=NO ☐

A11 STATUS
1=Complete with selected households
2=Complete with replacement - refusal
3=Complete with replacement - not found
4=Incomplete

IMPORTANT

Create a reference number by combining the district cluster, household and questionnaire number.
Write this number NOW on the top of all pages.

Kumbukumbu Na | | | | | | | | |

B – LIST OF HOUSHOLD MEMBERS

ID CODE	B1 Orodha ya majina ya wanakaya	B2 Je, [JINA] ni mwanaume au mwanamke? 1=Mwanaume 2=Mwanamke	B3 Je, [JINA] ana umri wa miaka mingapi? (IN YEARS ONLY)	B4 Je, katika kipindi cha miezi 12 iliyopita, ni kwa muda gani [JINA] amekuwa akiishi nje ya kaya hii? 1= Hajawahi kuishi nje ya kaya hii 2= Chini ya miezi 6 3= Miezi 6 na zaidi	B5 Je, [JINA] anachangia kwenye pato la kaya? 1=Ndiyo 2=Hapana	B6 Je, [JINA] ana uhusiano gani na mkuu wa kaya? 1= Mkuu wa Kaya 2= Mke/Mume 3= Mtoto 4= Mzazi 5= Ndugu wengine 6= Hakuna uhusiano
01						
02						
03						
04						
05						
06						
07						
08						
09						
10						

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B – LIST OF HOUSHOLD MEMBERS

ID CODE	B7 Nini hali ya ndoa ya [JINA]? 1= Hajaoa/hajaolewa (> B9) 2= Ameoa/ameolewa (>B9) 3= Ameoa mke zaidi ya mmoja 4= Wameachana (> B9) 5= Wametengana (> B9) 6= Mjane (> B9)	B8 Ni wanawake wangapi [JINA] anao kwa sasa?	B9 Baba mzazi wa [JINA] yuko hai? 1= Ndiyo 2=Hapana (> B12) 3=Sijui (> B13)	B10 Baba mzazi wa [JINA] anaishi katika kaya hii? 1=Ndiyo 2=Hapana (> B13)	B11 ENTER THE ID CODE OF (NAME'S) FATHER > B13	B12 Baba mzazi wa [JINA] alifariki wakati [JINA] akiwa na umri gani? (IN YEARS ONLY)	B13 Mama mzazi wa [JINA] yuko hai? 1=Ndiyo 2=Hapana (> B16) 3=Sijui (> NEXT PERSON)	B14 Mama mzazi wa [JINA] anaishi katika kaya hii? 1=Ndiyo 2=Hapana (>NEXT PERSON)	B15 ENTER THE ID CODE OF (NAME'S) MOTHER > NEXT PERSON	B16 Mama mzazi wa [JINA] alifariki wakati [JINA] akiwa na umri gani? > NEXT PERSON
01										
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Kumbukumbu Na. | | | | | | | | |

C – EDUCATION

ID CODE	C1 IS (NAME) 6 YEARS OR OLDER? 1=Yes 2=No (> NEXT PERSON)	C2 Je, [JINA] anaweza kusoma na kuandika? 1=Ndiyo 2=Hapana	C3 Je, [JINA] amewahi kwenda shule? 1=Ndiyo 2=Hapana (> NEXT PERSON)	C4 Je, ni kiwango gani cha juu kabisa cha elimu [JINA] alichomaliza? (CHOOSE FROM OPTIONS ON THE RIGHT)	C5 Ni mafunzo gani ya zaidi [JINA] ume wahi kupata? (CHOOSE FROM OPTIONS ON THE RIGHT)	C6 Je, [JINA] alikwenda shule mwaka jana? (LAST ACADEMIC YEAR) 1=Ndiyo 2=Hapana	C7 Je, [JINA] anahudhuria shule sasa? 1=Ndiyo 2=Hapana (> C11)	C4 CHOICES: 00=Nursery/none 01=P1 02=P2 03=P3 04=P4 05=P5 06=P6 07=P7 08=Form 1 09=Form 2 10=Form 3 11=Form 4 12=Form 5 13=Form 6 14=University: C5 CHOICES: 00=None 01=Post P/s 02=Post S/s 03=Vocational 04=Adult education
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Kumbukumbu Na | | | | | | | | |

C – EDUCATION

ID CODE	C8 Je, ni kiwango gani cha elimu [JINA] alichopo kwa sasa? (CHOOSE FROM OPTIONS ON THE RIGHT)	C9 Je, shule anayosoma [JINA] inaendeshwa na nani? 1=Serikali 2=Dini 3=Binafsi 4=Jumuiya 5=Nyingine	C10 Je, [JINA] aliona matatizo gani ya shule anakosomea? 1=Hakuna matatizo (inaridhisha) 2=Uhaba wa vitabu/vifaa 3=Ufundishaji mbaya 4=Ukosefu wa walimu 5=Ukosefu wa nafasi za wanafunzi 6=Hali mbaya ya vifaa 7=Matatizo mengine (YOU MAY MARK MORE THAN ONE OPTION) > NEXT PERSON				C11 Je, ni kwa nini [JINA] hasomi shule kwa sasa? 1=Mkubwa/amemaliza 2=Mbali 3=Ghali 4=Anafanya kazi (nyumbani au ajira) 5=Haina maana 6=Mgonjwa 7=Mjamzito 8=Amefeli 9=Ameolewa 10=Alipigwa 11=Nyingine (YOU MAY MARK MORE THAN ONE OPTION)				C8 CHOICES: 00. Nursery/none 01=P1 02=P2 03=P3 04=P4 05=P5 06=P6 07=P7 08=Form 1 09=Form 2 10=Form 3 11=Form 4 12=Form 5 13=Form 6 14=University: 15=Post P/s 16=Post S/s 17=Vocational 18=Adult education
01											
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Kumbukumbu Na. | | | | | | | | |

D - HEALTH

ID CODE	D1 IS [NAME] A FEMALE AGED 13 YRS OR OLDER? 1=Yes 2=No (> D4)	D2 Je, [JINA] alijifungua mtoto hai katika kipindi cha miezi 12 iliyopita? 1=Ndiyo 2=Hapana (> D4)	D3 Je, [JINA] alipata huduma ya kliniki alipokuwa mjamzito 1=Ndiyo 2=Hapana	D4 Je, [JINA] ana ulemavu wowote wa viungo au akili? 1=Ndiyo 2=Hapana	D5 Usiku wa kuamkia leo [JINA] alitumia chandarua kujikinga na mbu? 1=Ndiyo 2=Hapana (> D7) 3=Sijui (> D7)	D6 Je, chandarua alichotumia [JINA] kimewahi kunyunyiziwa dawa kafika kipindi cha miezi 6 iliyopita? 1=Ndiyo 2=Hapana	D7 Je, [JINA] amepata ugonjwa/kujeruhiwa katika wiki 4 zilizopita? 1=Ndiyo 2=Hapana (> D10) 3=Sijui (> D10)	COMMENTS ON D4: INCLUDE PERSON ONLY IF HANDICAP PREVENTS HIM OR HER FROM PARTICIPATING IN ACTIVITY OR SCHOOLING
01								
02								
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05								
06								
07								
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10								

Kumbukumbu Na | | | | | | | | |

D - HEALTH

ID CODE	D8 Je, [JINA] alipata jeraha au ugonjwa gani katika kipindi cha wiki 4 zilizopita? (CHOOSE FROM OPTIONS ON THE RIGHT) (YOU MAY MARK MORE THAN ONE ANSWER)	D9 Je, ni kwa siku ngapi [JINA] hakuweza kuhudhuria shule au kufanya kazi kutokana na ugonjwa au jeraha katika wiki 4 zilizopita? 1=Aliweza 2=Juma 1 au chini ya hapo 3=Juma 1 au 2 4=Zaidi ya majuma 2	D10 Je, [JINA] alipata ushauri/tiba kutoka kwenye huduma za afya au mganga wa tiba za jadi kwa sababu yoyote ile katika wiki 4 zilizopita? 1=Ndiyo 2=Hapana (> D13) 3=Sijui (> NEXT PERSON)	D11 Je, ni aina gani ya watoa huduma ya afya [JINA] aliwaona? (CHOOSE FROM OPTIONS ON THE RIGHT)	D12 [JINA] aliona matatizo gani yoyote wakati alipoenda kupata huduma hii? (CHOOSE FROM OPTIONS ON THE RIGHT) (YOU MAY MARK MORE THAN ONE ANSWER) > NEXT PERSON	D13 Je, ni kwa nini [JINA] hakutumia huduma za afya katika kipindi cha wiki 4 zilizopita? (CHOOSE FROM OPTIONS ON THE RIGHT) (YOU MAY MARK MORE THAN ONE ANSWER)	D8 CHOICES: 1=Homa/Malaria 2=Kuhara 3=Ajali 4=Meno 5=Ugonjwa wa ngozi 6=Macho 7=Masikio,Pua au koo 8=Ugonjwa wa muda mrefu/sugu 9=Mengineyo D11 CHOICES: 1= Zahanati/hospitali ya binafsi 2=Zahanati/hospitali ya umma 3=Kituo cha afya cha jamii 4=Daktari binafsi/wa meno 5=Mganga wa jadi 6=Hospitali ya Mkoa 7=Zahanati/hospitali ya misheni 8=Duka la dawa 9=Nyingine D12 CHOICES: 1=Hakuna tatizo(inaridhisha) 2=Vifaa/huduma hazikuwa safi 3=Kusubiri kwa muda mrefu 4=Ukosefu wa wataalamu waliosomea 5=Ghali sana 6=Hakuna/kutopatikana madawa 7=Kushindwa /kutofanikiwa kwa tiba 8=Hakuna vifaa/vifaa havitoshi 9=Nyingine D13 CHOICES: 1=Hakuna haja 2=Ni ghali mno 3=Ni mbali sana 4=Nyingine
01							
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Kumbukumbu Na | | | | | | | | |

E – EMPLOYMENT

ID CODE	E1 IS (NAME) 5 YEARS OR OLDER? 1=Yes 2=No (> NEXT PERSON)	E2 Je, [JINA] alifanya kazi yeyote katika kipindi cha siku 7 zilizopita? 1=Ndiyo (> E5) 2=Hapana	E3 Je, [JINA] alifanya kazi yoyote ile katika wiki 4 zilizopita? 1=Ndiyo (> E5) 2=Hapana	E4 Kwa nini [JINA] hakufanya kazi katika wiki 4 zilizopita? 1=Mgonjwa 2=Mlemavu 3=Mzee sana/mtoto sana 4=Mwafunzi 5=Hakuna kazi 6=Nyingine > NEXT PERSON	E5 Je,[JINA] alikuwa analipwaje kwa kazi yake kuu/muhimu? 1=Mshahara au Posho 2=Kibarua (kwa saa au kwa siku) 3=Kujiajiri mwenyewe (> E7) 4=Kujitolea 5=Nyingine (SPECIFY)	E6 Je, hiyo kazi/muhimu [JINA] alikuwa anamfanyia nani? 1=Serikali 2=Ajira isiyo ya serikali (yennye mkataba)/rasmi 3=Ajira isiyo ya serikali (bila mkataba)/isiyorasmi 4=Nyingine > E8	E7 Je, [JINA] amekuwa akifanya kazi gani? 1=Kilimo cha kibiashara 2=Kilimo cha kukidhi mahitaji ya chakula 3=Uchuuzi 4=Utaalam wa kusomea 5=Nyingine	E8 Juu ya kazi aliyo nayo [JINA] sasa, anaweza kufanya kazi nyingine zaidi? 1=Ndiyo 2=Hapana
01								
02								
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09								
10								

Kumbukumbu Na | | | | | | | | |

F – HOUSEHOLD ASSETS

F1 Je, mwanakaya au kaya hii inamiliki makazi? 1=Ina/anamiliki makazi/nyumba 2=Ina/anapanga makazi/nyumba 3=Ina/anatumia bila kulipa 4=Makazi ya muda	F2 Je, makazi yenu yana vyumba vingapi?	F3 Ekari ngapi za ardhi zinamilikiwa na kaya? (WITH ONE DECIMAL, E.G. 24.7) __ __ . __
F4 Kiasi hiki cha ardhi kinalinganishwje na kile mlichokuwa nacho miezi 12 iliyopita? 1=Ni pungufu kwa sasa 2=Kiasi kile kile 3=Ni zaidi kwa sasa 4=Sijui	F5 Je, kaya hutumia ardhi isiyoimiliki? 1=Hapana (> F7) 2=Ndiyo, ya kukodi 3=Ndiyo, ya kushirikiana 4=Ndiyo, ardhi binafsi ya bure 5=Ndiyo, maliya umma	F6 Je, ni ekari ngapi za ardhi nyingine zisizomilikiwa ambazo hutumiwa na kaya hii? (WITH ONE DECIMAL, E.G. 24.7) __ __ . __
F7 Kiasi hiki cha ardhi kinalinganishwaje na kile mlichokuwa nacho miezi 12 iliyopita? 1=Ni pungufu kwa sasa 2=Kiasi kilekile 3=Ni zaidi kwa sasa 4=Sijui	F8 Je, ni mifugo mikubwa (ng'ombe….) mingapi inayomilikiwa na kaya kwa sasa?	F9 Idadi hii ya mifugo inalinganishwaje na ile mliyokuwa nayo miezi 12 iliyopita? 1=Ni pungufu kwa sasa 2=Kiasi kile kile 3=Ni zaidi kwa sasa 4=Sijui
F10 Je, ni kondoo, mbuzi, ngurue, pamoja na mifugo mingine kama hii mingapi amabayo inamilikiwa na kaya kwa sasa?	F11 Idadi hii ya mifugo inalinganishwaje na ile mliyokuwa nayo miezi 12 iliyopita? 1=Ni pungufu kwa sasa 2=Kiasi kile kile 3=Ni zaidi kwa sasa 4=Sijui	F12 Je, kaya inamiliki chochote kati ya hivi vitu vifuatavyo? 1=Gari au lori 4=Pikipiki 7=Televisheni 10=Vitabu 2=Baiskeli 5=Redio 8=Kitanda 11=Pasi 3=Simu 6=Saa 9=Choo

Kumbukumbu Na | | | | | | | | |

F – HOUSEHOLD ASSETS

F13 Je, nyumba hii ina umeme? 1=Ndiyo 2=Hapana	F14 Je, mara ngapi katika miezi 12 iliyopita mmekuwa na matatizo ya kutosheleza mahitaji ya chakula kwa kaya hii? 1=Hata mara moja 2=Mara chache 3=Wakati mwingine 4=Mara nyingi 5=Nyakati zote	F15 Je, kwa ujumla unalinganishaje hali ya uchumi wa kaya kwa mwaka huu na ile ya mwaka (1) uliopita? 1=Mbaya zaidi sasa 2=Mbaya kidogo sasa 3=Ni ile ile 4=Kiasi ni nzuri sasa 5=Nzuri sana sasa 6=Sijui
F16 Je, kwa ujumla unalinganishaje hali ya uchumi wa jamii na mwaka mmoja (1) uliopita? 1=Mbaya zaidi sasa 2=Mbaya kidogo sasa 3=Ni ile ile 4=Kiasi ni nzuri sasa 5=Nzuri sana sasa 6=Sijui	F17 Je, ni nani anayechangia zaidi katika pato la kaya ? (RECORD ID NUMBER)	F18 IS THIS A POLYGAMOUS HOUSEHOLD IN WHICH THE HEAD OF HOUSEHOLD LIVES IN A SPEPARATE HOUSEHOLD BUT CONTRIBUTES TO THE INCOME OF THIS HOUSEHOLD? 1=Yes 2=No (> SECTION G)
F19 Ekari ngapi za ardhi zinamilikiwa na kaya ya mkuwa kaya? (WITH ONE DECIMAL, E.G. 24.7) __ __ . __	F20 Je, ni mifugo mikubwa (ng'ombe….) mingapi inayomilikiwa na kaya ya mkuwa kaya kwa sasa?	F21 Je, ni kondoo, mbuzi, nguruwe, pamoja na mifugo mingine kama hii mingapi amabayo inamilikiwa na kaya ya mkuwa kaya kwa sasa?
F22 Je, kaya ya mkuu wa kaya inamiliki chochote kati ya hivi vitu vifuatavyo? 1=Gari au lori 4=Pikipiki 7=Televisheni 10=Vitabu 2=Baiskeli 5=Redio 8=Kitanda 11=Pasi 3=Simu 6=Saa 9=Choo		

Kumbukumbu Na | | | | | | | | |

G – HOUSEHOLD AMENITIES

G1 JE, NYUMBA HII IMEEZEKWA KWA KUTUMIA NINI?	G2 JE, KUTA ZA NYUMBA HII ZIMEJENGWA KWA KUTUMIA NINI?	G3 JE, SAKAFU YA NYUMBAHII NI YA AINA GANI?
1=MATOPE 2=MAKUTI/NYASI 3=MBAO 4=MABATI 5=SARUJI/ZEGE 6=VIGAE 7=MABATI YA SARUJI (ASBESTOS) 8=NYINGINE	1=MATOPE/MATOFALI YA UDONGO 2=MAWE 3=MATOFALI YA KUCHOMA 4=SARUJI/ZEGE 5=MBAO/MIANZI 6=MABATI 7=MBAOLAINI (CARDBOARD) 8=NYINGINE	1=SARUJI 2=TOPE 3=NYINGINEZO
G4 Je, ni aina gani ya choo hutumiwa na kaya hii?	G5 Je, ni nishati gani kuu itumikayo kwa ajili ya kupikia?	G6 Je, ni nishati gani kuu itumikayo kwa mwanga?
1=Hakuna choo 2=Choo cha kuflashi kwenye mifereji ya maji machafu 3=Choo cha kuflashi kwenye tangi/shimo 4=Ndoo 5=Choo cha shimo kilichofunikiwa 6=Choo cha shimo kisichofunikwa 7=Choo cha shimo chenye bomba la kutolea hewa chafu 8=Nyingine	1=Kuni 2=Mkaa 3=Mafuta ya taa 4=Gesi 5=Umeme 6=Mabaki ya mimea/unga wa mbao 7=Kinyesi cha wanyama 8=Nyingine	1=Mafuta taa 2=Gesi 3=Umeme 4=Genereta 5=Mishumaa 6=Beteri 7=Kuni 8=Nyingine
G7 Je,ni nini chanzo kikuu cha maji ya kunywa?		
1=Bomba kwenye makazi 2=Bomba la jirani 3=Bomba la nje la umma 4=Kisima kisichojengewa,maji ya mvua 5=Mto, ziwa, bwawa 6=Mbebaji anayepitisha, gari 7=Nyingine		

Kumbukumbu Na | | | | | | | | |

G – HOUSEHOLD AMENITIES

HUDUMA	G8 Je, ni muda gani kwa dakika unatumika kutoka hapa hadi kufika kwenye [HUDUMA] iliyo karibu? 1=0-14, 2=15-29 3=30-44 4=45-59 5=60+	G9 Ni aina gain ya usafiri mnayotumia kufika kwenye [HUDUMA]? 1=Gari/dala dala 2=Baiskel 3=Pikipiki 4=Kwa miguu	G10 Ni kama umbali gain kutoka hapa kwa kilomita kufika kwenye [HUDUMA]?
Chanzo cha maji hasa ya kunywa			____ ____ . ____
Soko la vyakula			____ ____ . ____
Usafiri wa umma (kama basi, daladala,…)			____ ____ . ____
Shule ya msingi			____ ____ . ____
Shule ya Sekondari			____ ____ . ____
Zahanati, kituo cha afya au hospitali			____ ____ . ____

G11 Je kuna muhudumu wa afya katika kijiji hiki?	G12 Je kaya hii inafaidikaje na kuwepo kwa mhudumu wa afya wa kijiji?
1=Ndiyo 2=Hapana (> NEXT SECTION) ☐	1=Hakuna manufaa 2=Ushauri 3=Mafunzo 4=Vifaa (kama vile vyandarua, ..) 5=Kingine(SPECIFY)_____ ☐

Kumbukumbu Na ☐☐☐☐☐☐☐☐

H – PLANNING AND PARTICIPATION

H1 Kwa kawaida ni mara ngapi **kitongoji** kinahitisha mikutano ya hadhara? (ENTER NUMBER OF TIMES PER YEAR) (DON'T KNOW = 99) ☐	H2 Katika kipindi cha miezi 12 iliyopita ni mikutano mingapi ya kitongoji ilifanyika? (DON'T KNOW = 99) ☐	H3 Je, katika kipindi cha miezi 12 iliyopita umehudhuria mikutano mingapi kati ya hiyo? ☐ (IF= 0 > H5)
H4 Kati ya mikutano uliyohudhuria katika kipindi cha miezi 12 iliyopita ni mingapi ulitoa maoni yako? ☐	H5 Kwa kawaida ni mara ngapi **kijiji** kinahitisha mikutano ya hadhara? (ENTER NUMBER OF TIMES PER YEAR) (DON'T KNOW = 99) ☐	H6 Katika kipindi cha miezi 12 iliyopita ni mikutano mingapi ya kijiji ilifanyika? (DON'T KNOW = 99) ☐
H7 Je, katika kipindi cha miezi 12 iliyopita umehudhuria mikutano mingapi kati ya hiyo? ☐ (IF=0 > H9)	H8 Kati ya mikutano uliyohudhuria katika kipindi cha miezi 12 iliyopita ni mingapi ulitoa maoni yako? ☐	H9 Katika kipindi cha miezi 12 iliyopita kaya yako ilishiriki katika shughuri za jamii za jumla kwa kuchangia nguvukazi, fedha au vitu vyovyote visivyo vya kifedha? ☐ 1=Ndiyo 2=Hapana (> H11)
H10 Je shughuri gani kaya yako ilishiriki kati ya hizi zifuatazo? (MORE THAN ONE ANSWER POSSIBLE) 1=Shule 2=Afya 3=Barabara 4=Maji ☐☐☐ 5=KulinDa mali za kijiji 6=Nyingine (SPECIFY) _____	H11 Katika kipindi cha miezi 12 iliyopita kuna mwanakaya yeyote yule aliyewahi kunufaika na shughuri za Bw./Bibi shamba? 1=Ndiyo 2=Hapana ☐	H12 Katika kipindi cha miezi 12 iliyopita kuna mwanakaya yeyote yule aliyewahi kunufaika na mashirika yoyote yasiyo ya jamii hii? 1=Ndiyo 2=Hapana (> H14) ☐
H13 Je, kaya yako imefaidika na mashirika gani? (USE CODESHEET TO WRITE DOWN APPROPRIATE CODE. IF NOT ON CODESHEET, WRITE NAME) ☐☐☐☐☐ OTHER (SPECIFY) _____		

Kumbukumbu Na | | | | | | | | |

H – PLANNING AND PARTICIPATION

KIONGOZI	H14 Katika kipindi cha miezi 12 iliyopita wewe au mwanakaya yeyote alimuona rasmi [KIONGOZI]? 1=Ndiyo 2=Hapana (> NEXT OFFICER) 3=NOT APPLICABLE (> NEXT OFFICER)	H15 Ni kwa nini wewe/mwanakaya alimuona rasmi [KIONGOZI]? 1=Kumsalamia tu 2=Shida zako binfasi 3=Maendeleo ya jamii kwa ujumla 4=Nyingine (SPECIFY)
Mjumbe (10-cell leader)		
Mwenyekiti wa Kitongoji		
Mwenyekiti wa Kijiji		
Diwani		
Mwenyekiti wa madiwani		

KAMATI	H16 Je kijiji chako kina [KAMATI]? 1=Ndiyo 2=Hapana (> NEXT COMMITTEE) 3=Sijui (> NEXT COMMITTEE) 99 = NOT APPLICABLE (> NEXT COMMITTEE)	H17 Una ufahamu gani kuhusu shughuri za [KAMATI]? 1=Sijui chochote 2=Najua Kidogo 3=Najua mengi	H18 Ungeweza kufaham zaidi kama ungetaka? 1=Ndyo, kirahisi 2=Ndiyo, japo kuna ugumu 3=Haiwezekani	H19 Je katika kipindi cha miezi 12 iliyopita umehudhuria mkutano ulioandaliwa na [KAMATI]? 1=Ndiyo 2=Hapana
Kamati ya hudma za jamii				
Kamati ya fedha na mipango				
Kamati ya ulinzi na usalama				

H20 Kuna mwanakaya yeyote anayeshiriki katika vikundi/vyama vya majirani au marafiki vinavyotoa msaada wakati wa kuugua, msiba, wakati mugumu au matukio mengine? 1=Ndiyo ☐ 2=Hapana (> H22)	H21 Kwa ujumula kaya yako inashiriki katika vikundi vingapi kati ya hivi? (SUM ACCROSS MEMBERS) ☐	H22 Mbali na vyama hivyo kuna mwanakaya yeyote anayeshiriki katika vikundi/vyama vingine vya majirani au marafiki? 1=Ndiyo ☐ 2=Hapana (> NEXT SECTION)	H23 Kwa ujumla ni vyama/vikundi vingine vingapi kaya yako/wanakaya wanashiriki? ☐

Kumbukumbu Na ☐☐☐☐☐☐☐☐

I – POVERTY PREDICTORS

I1 Je, kaya hii ina vyumba vingapi vya kulala? ☐	I2 Je, kwa kawaida kaya yako inapata milo mingapi kwa siku? ☐	I3 Je, katika siku saba zilizopita (wiki moja) kaya hii ilikula mlo wenye nyama kwa siku ngapi? ☐
I4 Je, katika kaya hii kuna mwanakaya anayemiliki akaunti katika benki? 1=Ndiyo 2=Hapana ☐		

J - CHILDREN UNDER 5

J1 FOR EACH CHILD UNDER THE AGE OF 5 ENTER THE CHILD AND MOTHER'S ID CODE FROM THE LIST OF HOUSEHOLD MEMBERS. ENTER 00 IF THE CHILD'S MOTHER IS DECEASED OR IS NOT A MEMBER OF THE HOUSEHOLD			J2 ENTER THE CHILD'S DATE OF BIRTH			J3 Mtoto huyu amezaliwa wapi?	J4 Je, ni nani aliyemhudumia wakati wa kuzaliwa kwa mtoto huyu?	J5 RECORD EACH CHILD'S WEIGHT (*KG* WITH ONE DECIMAL, E.G. 04.6 KG)	J6 RECORD EACH CHILD'S HEIGHT (*CM* WITH ONE DECIMAL, E.G. 51.3 CM)	J7 Je, mtoto alishiriki katika mpango wa lishe au upimaji uzito?
CHILD NAME	CHILD ID	MOTHER ID	DAY	MONTH	YEAR	1=Hospitali 2=Nyumbani 3=Kwingineko	1=Daktari 2=Nesi 3=Mkunga 4=Mkunga wa jadi 5=Mwingine			1=Ndiyo 2=Hapana
								___ ___ . ___	___ ___ . ___	
								___ ___ . ___	___ ___ . ___	
								___ ___ . ___	___ ___ . ___	
								___ ___ . ___	___ ___ . ___	

Kumbukumbu Na | | | | | | | | |

K – COMMENTS

ANNEX E
Community Questionnaire

SNV-CWIQ COMMUNITY QUESTIONNAIRE

SNV-TANZANIA

A1 District Name: _____

A2 District Number: [ ]

A3 Village Name: _____

A4 Cluster Name(s) (enter the cluster(s) to be surveyed in this village):

_____

_____

_____

A5 Cluster Number(s) (enter the cluster(s) to be surveyed in this village):

[|] [|] [|]

A6 Supervisor's Name: _____

A7 Supervisor's ID: [|]

A8 Date: [|] / [|] / [|]

B - GENERAL INFORMATION

B1 Position of Respondent:

1. Chairman
2. Retired Chairman
3. Village Extension Officer
4. More than one (enter codes)_____

B2 How many people live in this village?

B3 How many households are there in this village?

B4 How many people live in the kitongoji/vitongoji that we are visiting?
(IF WE ARE VISITING MORE THAN ONE KITONGOJI IN THIS VILLAGE – GET POPULATION DATA FOR EACH ONE)

Cluster Number	*Number of People*

B5 How many households are there in the kitongoji/vitongoji that we are visiting?
(IF WE ARE VISITING MORE THAN ONE KITONGOJI IN THIS VILLAGE – GET HOUSEHOLD DATA FOR EACH ONE)

Cluster Number	*Number of Households*

Please give me a break-down of the village population by tribe

B6 Name of Tribe	B7 % of Population

Please give me a break-down of the village population by religion

Religion	B8 % of Population
Muslim	
Roman Catholic	
Lutheran	
Other Protestant	
Hindu	
Other Pagan	
Other (Specify_____)	

C - DEMOCRATIC PROCESSES IN THE VILLAGE

C1 How often are there public village meetings in this village?

/Year

C2 How are the villagers informed about an upcoming meeting?
(MORE THAN ONE OPTION ALLOWED)

1=Through the wajumbe (10-cell leaders)
2=Through the wajumbe (members of the village council)
3=Announcements in social gatherings
4=Written notices in public places
5=Tum Tums
6=Other (specify)_____

C3 *Usually*, what proportion of the villagers who are eligible to vote attends the regular public village meetings?

1=0-25%
2=25-50%
3=50-75%
4=75-100%

Group	C4 Do [GROUP] ever attend public village meetings 1=Yes 2=No (> NEXT GROUP)	C5 How often do [GROUP] attend the public village meetings 1=Often 2=Sometimes 3=Rare 4=Only once
Ward level representatives		
District level representatives		
Representatives of outside organizations working in the area		

Please give me a break-down of those who attended the last regular public village meetings

Group	C6 % of those who attend the meeting
Men	
Women	
Young people (teenagers)	
Old people (65+)	

C7 When was the last council election held?

Months ago

C8 What proportion of the villagers who are eligible to vote voted in the last council election?

1=0-25%
2=25-50%
3=50-75%
4=75-100%

C9 Does this village have a Village Health Worker?

1=Yes (CONDUCT SECTION A OF *Village Health Worker* QUESTIONNAIRE AFTER COMPLETING SECTION D & REQUEST AN INTERVIEW WITH THE VILLAGE HEALTH WORKER – SECTION B OF *Village Health Worker* QUESTIONNAIRE)

2=No

D – PLANNING AND PARTICIPATION

D1 Does this village receive support in planning from a Village Facilitation Team?

1=Yes
2=No ☐

D2 What plans are there currently in the village?	D3 How was the need for [PLAN] identified? 1=Kitongoji chairman 2=Village Chairman 3=Village public meeting 4=Village Council 5=Village/Kitongoji Committee (SPECIFY) 6=District Directive 7=Outside organisation (SPECIFY – USE CODESHEET) 8=Other (SPECIFY)	D4 Were any planning groups formed specifically to work on [PLAN]? 1=Yes 2=No (> D6)	D5 What kind of planning groups were formed? 1=Specialists 2=Women 3=Minorities (SPECIFY) 4=Respected villagers 5=Beneficiaries (SPECIFY) 6=Benefactors (SPECIFY) 7=Council members 8=Other (SPECIFY) (MORE THAN ONE OPTION ALLOWED)	D6 What outside organizations were involved in the planning of [PLAN]? 1=None 2=Church-based 3=NGO 4=CBO 5=Traditional institutions 6=Private companies 7=Other (SPECIFY) (USE CODESHEET / WRITE DOWN NAME OF ORGANISATION NEXT TO CODE) (MORE THAN ONE OPTION ALLOWED)	D7 In what year was this plan made?	

D8 Is there a document in which all the plans [READ FROM D2] are recorded with the budget, implementation strategy and time-frame for each of the projects?

1=Yes
2=No (> D10) [ ]

D9 How often is this plan revised?

[ ] /Year

D10 Which of the following information is available in the village?

Type of data	1=Yes 2=No
Village Population Register	
Village revenue and expenditure data	
Strategic District Development Plan	
National Development Vision 2025	
A list of district/national development priorities	

D11 In the past 12 months have there been any community wide development projects in this village?

1. Yes
2. No (Specify_____)

D12 Project name & description (USE COMMENTS SPACE IF NECESSARY)	D13 When was this project started? Month	Year	D14 How was the [PROJECT] prioritized? 1=Directive (> D16) 2=Villagers' Vote (> D16) 3=Verbal agreement by Villagers 4=Ranking by Villagers 5=Other (SPECIFY)	D15 What were the criteria used for agreement/ranking? 1=Most felt need 2=Most beneficial to community 3=Quick result 4=Low risk 5=Low cost 6=Funding available 7=Simple to implement 8=Local resources available 9=Other (SPECIFY) (MORE THAN ONE OPTION ALLOWED)	D16 Who is implementing the project? 1=Kitongoji 2=Villagers from this village 3=Neighbouring villages 4=Non-government organisation (SPECIFY - CODESHEET) 5=Private companies (SPECIFY) 6=Hired labour 7=District 8=Other(SPECIFY) (MORE THAN ONE OPTION ALLOWED)	D17 Who is funding the project? 1=Kitongoji 2=Village 3=Neighbouring villages 4=Non-government organisation (SPECIFY - CODESHEET) 5=Private companies (SPECIFY) 6=District 7=Other (SPECIFY) (MORE THAN ONE OPTION ALLOWED)	D18 Who is directly benefiting from the project? 1=Kitongoji 2=Village 3=Neighbouring villages 4=Specific groups in the community (SPECIFY) 5=Other (SPECIFY)

We would like to find out which non-government organisations are *currently* having an impact on this community.

D19 Name of organisation	Code	D20 Project Description	Code

D21 Did your ward councilor assist you in formulating the plans for the village?

1=Yes
2=No

D22 Does the ward councilor live in this village?

1=Yes
2=No

D23 When was the last time the ward councilor looked into village matters?

Weeks ago

D24 How often does the ward councilor *usually* visit the village/look into village matters?

/Year

D25 Has the village councilor been involved in village matters as much as you would expect?

1=Yes
2=Less
3=More

E – PLANNING AND FINANCE COMMITTEE

PART 1: SUPERVISOR – ACQUIRE A LIST OF ALL MEMBERS ON THE VILLAGE *PLANNING AND FINANCE COMMITTEE*. WRITE DOWN THE NAMES OF ALL THE MEMBERS OF THIS COMMITTEE

E1 Names of Committee members
1.
2.
3.
4.
5.
6.
7.
8.
9.
10.
11. .
12.
13.
14.
15.

Part 2 – Interview with the Chairman/Secretary of the Finance and Planning Committee

E2 What is the name of the respondent:_____

E3 What is the respondent's position on the Finance and Planning Committee?

1=Committee Chairman
2=Committee Secretary
3=Both
4=Other (SPECIFY)_____

E4 When was the last time the Finance and Planning Committee met?

` weeks ago

E5 How many members of the Committee were at the last meeting?

E6 How many non-members were present at the last meeting of the Finance and Planning Committee?

E7 In the past 12 months how many times were the activities of this Committee discussed at village public meetings?

E8 How are the members of the Committee (s)elected?

1=Appointed by village council
2=Appointed by the village chairman
3=Appointed by the District Council
4=Appointed at public village meeting
5=Appointed by a majority vote of villagers
6=Appointed by an existing member
7=Other (SPECIFY)_____

(MORE THAN ONE OPTION ALLOWED)

E9 How often are the members of the Committee re(s)elected?

Years

We would now like to collect some information about every member of the committee

E10 Name (Copy from E1)	E11 Sex 1=Male 2=Female	E12 Age	E13 How many Development Committees is this person in?	E14 What political party does (NAME) belong to? 1=CCM 2=Other 3=None 4=Don't Know	E15 What is (NAME's) main activity? 1=Government/Parastatal 2=Private Formal (with contract) 3=Private Informal (without contract) 4=Self – subsistence farming 5=Self – commercial farming 6=Self – Trading 7=Self – Professional 8=Other (SPECIFY)	E16 What is the highest grade [NAME] attained at school? 00=Nursery/none 01=P1 02=P2 03=P3 04=P4 05=P5 06=P6 07=P7 08=Form 1 09=Form 2 10=Form 3 11=Form 4 12=Form 5 13=Form 6 14=University:	E17 Which of the following assets does [NAME] own? 1=Bicycle 2=Pikipiki 3=Car / truck / tractor 4=Large livestock 5=Medium livestock (ENTER CODE) (MORE THAN ONE OPTION ALLOWED)						

F – SECURITY COMMITTEE

Part 1: Supervisor – Acquire a list of all members on the village *Security Committee*. Write down the names of all the members of this committee

F1 Names of Committee members
1.
2.
3.
4.
5.
6.
7.
8.
9.
10.
11. .
12.
13.
14.
15.

Part 2 – Interview with the Chairman/Secretary of the Security Committee

F2 Name of the respondent: _____

F3 What is the respondent's position on the Security Committee?

1=Committee Chairman
2=Committee Secretary
3=Both
4=Other (SPECIFY)_____

F4 When was the last time the Security Committee met?

` weeks ago

F5 How many members of the Committee were at the last meeting?

F6 How many non-members were present at the last meeting of the Security Committee?

F7 In the past 12 months how many times were the activities of this Committee discussed at a public meeting?

F8 How are the members of the Committee (s)elected?

1=Appointed by village council
2=Appointed by the village chairman
3=Appointed by the District Council
4=Appointed at public village meeting
5=Appointed by a majority vote of villagers
6=Appointed by an existing member
7=Other (SPECIFY)_____

F9 How often are the members of the Committee re(s)elected?

Years

We would now like to collect some information about every member of the committee

F10 Name (Copy from F1)	F11 Sex 1=Male 2=Female	F12 Age	F13 How many Development Committees is this person in?	F14 What political party does (NAME) belong to? 1=CCM 2=Other 3=None 4=Don't Know	F15 What is (NAME's) main activity? 1=Government/Parastatal 2=Private Formal (with contract) 3=Private Informal (without contract) 4=Self – subsistence farming 5=Self – commercial farming 6=Self – Trading 7=Self – Professional 8=Other (SPECIFY)	F16 What is the highest grade [NAME] attained at school? 00=Nursery/none 01=P1 02=P2 03=P3 04=P4 05=P5 06=P6 07=P7 08=Form 1 09=Form 2 10=Form 3 11=Form 4 12=Form 5 13=Form 6 14=University:	F17 Which of the following assets does [NAME] own? 1=Bicycle 2=Pikipiki 3=Car / truck / tractor 4=Large livestock 5=Medium livestock (ENTER CODE) (MORE THAN OPTION ALLOWED)						

G – FACILITY COORDINATES

SUPERVISOR:

1. Please find out where the nearest of each of the following facilities is located
2. Please travel to each of the facilities and record its location

Facility	GPS Co-ordinate	Comments from supervisor on location
G1 Nearest health facility where one can get tested for malaria	° °	
G2 Nearest Primary school	° °	
G3 Nearest Public transport (any *daily* daladala)	° °	

H - COMMENTS

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